implementing change in long-term care

a practical guide to transformation

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I. Introduction

A. Purpose

We all want to provide the highest quality of care possible for residents. But despite our desires and efforts, serious quality issues continue to plague long-term care. When we look closely, most of us can find care quality problems in our own facilities that we would like to correct. This manual was designed to assist organizations, and the staff who work there, to implement changes that will improve care quality. Whether you are contemplating a comprehensive, organization-wide culture change, or implementing a best-practice protocol in a single clinical area, knowing something about how to implement and manage change will help you achieve your goal. You will find suggestions about preparing your organization for change, assisting your staff to gain a sense of ownership over the changes, and sustaining the changes over time. Not all sections of this manual will be useful to everyone. Look for what you think is the most useful, and start there.

You will notice that each section considers how to involve staff throughout your organization, suggesting a wider involvement than is often the case. We know that lasting change is much more likely when it is understood and supported across the organization. Focusing only on the staff that will be directly involved in carrying out the new practice is generally insufficient to achieve sustained change. You will find suggestions and exercises throughout the manual that are intended to engage staff from across your organization in the changes.

Each section begins with a brief discussion of the topic, followed by practical suggestions and exercises. It is important for you and your organization to decide how to use the information in the manual to best align with your needs and goals. The topics may be covered out of order to suit a particular focus. For example, if you have already decided on a model of culture change, you may want to go directly to the section on developing teams. Additionally, the exercises and tools should be adapted to fit the needs of your organization. Encourage staff to read the relevant sections and discuss how examples in the manual can be adjusted to reflect your organization. Think of the manual as a guide, and modify portions appropriately.

The manual is based largely on feedback from staff in many organizations that have implemented significant practice and/or organizational changes. Their experience, insights, and wisdom guided the development of the manual and provide the examples of real change experiences.

B. Key Assumptions

Three key assumptions are reflected throughout the manual. They are that:

- Most nursing home staff are committed, intelligent, and hardworking. They are supportive of efforts that improve care quality, quality of life for residents, and quality of the work environment.

- Educational programs for nursing home workers will only be effective when they are guided by principles of adult education and supported by the environment.

- Achieving and sustaining clinical practice changes require changes in the knowledge and skill of individual care providers as well as organizational processes that support them. Successful change is more likely to occur, and be sustained, when organizational structures and processes are aligned to support the change.

C. Key Recommendations

Key recommendations for implementing and sustaining practice and organizational changes are summarized below. Details will be found in the various sections throughout the manual:

- Include middle- and upper-level managers directly in the organizational and practice change initiatives.

- Create strategies to introduce changes that engage staff at all levels, across departments and shifts, reaching most staff in the facility.

- Design changes with active, ongoing input from staff who will be involved in work process changes.

- Ensure active engagement of unit nurses and department heads in planning and supporting educational programs and practice changes involving frontline staff.

- Explore and address the organizational influences on planned practice changes.

- Acknowledge and address organizational, as well as clinical, barriers to clinical practice change.

- Support the development of problem-solving skills among staff involved in practice or organizational changes.

- Create accountability systems that will provide timely and effective feedback about the changes.

- Be sure roles of participating staff are clear and consistent with the goals of implementation.

D. Use of the Manual

This manual is not a recipe for change. Any significant change must reflect the particular mission, goals, culture, and internal relationships of individual organizations. Acknowledging that each organization has its own personality, history, commitments, and challenges, the manual is intended to guide you as you consider the changes you wish to implement by introducing you to what is known about change in general and about change in long-term care. It offers suggestions and includes exercises intended to bring

this knowledge to your particular change process, maintaining what is precious and unique about your organization while considering changes that will improve some aspect of the care or work environment. You are encouraged to consider what it is you value in your organization and to consider how to maintain those things while engaging in change. Mostly, the manual is intended to stimulate discussions and engage a wide range of staff within your organization as you plan, implement, and embrace important new initiatives.

E. Topics

Person-Centered Care and Culture-Change Models

Choosing a model of care can be a pivotal step in initiating change efforts. The principles, implementation, and outcomes of well-established models are described to facilitate decisions of a care model that will best suit the values of your facility. Even if you have chosen a model of culture change to pursue, this section will assist you in avoiding common pitfalls when deciding on a model and illustrates practical examples of how change has been accomplished.

Leadership

Strong leadership is an important ingredient to any successful practice or organizational change. The more extensive the change, the more important leadership becomes. Taking on the role of change champion, leaders often make the difference between success and failure. This section addresses the qualities and actions of strong and effective leaders.

Developing Teams

Many practice and organizational changes use teams of staff to plan, implement, and oversee the changes. Strong, inclusive teams are commonly seen as a vital element in successful change. This section will guide you in developing and using effective teams.

Developing Staff

Most significant changes require some skill development among staff. Many practice and organizational changes require staff to think in new ways, to engage in new behaviors, and to form new relationships within the organization. This often means significant staff development effort will be needed. This section suggests ways you can assist and support staff to develop the skills, approaches, and relationships that will lead to successful and sustained change.

Preparation Activities and Conducting Organizational Assessments

The previous sections are primarily intended to give you information that can be used to prime the climate in which changes will occur and be sustained. This section takes you to the next step, preparing you to critically look at your organization and where it stands now, while forming a picture of where you want to be. By doing several assessments in the assessment section, you will identify your strengths, weaknesses, and other needs as an organization.

Sustaining Change and Developing Accountability Systems

This section is intended to reinforce the idea of developing systems around the changes you are implementing and provide ideas for how to sustain changes.

Attachments

Clinical Care Training Materials

After you complete several preparation activities and form your teams, you may begin to identify clinical areas you'd like to improve upon. In Attachment 1 we have provided case studies and readings that may assist you in developing staff to meet your needs.

Organizational Assessment Worksheets

These worksheets accompany the material in section VIII and will be useful as you conduct your review of the organization.

Appendix

Several tools related to the above topics are included to assist in planning and conducting changes.

II. Background

For quite some time now, it has been generally recognized that there are problems in the nursing home industry with both the quality of care and the quality of work life. Efforts to improve the situation have included initiatives originating from outside the industry, as well as initiating from within the industry. State and federal legislation has been targeted at improving the quality of care. Some examples include: 1) the creation of public accountability systems for individual nursing homes; 2) linking reimbursement to nursing home performance (specifically the achievement of selected resident-outcome criteria); and 3) mandating training hours and content for certified nursing assistants (CNAs).

The nursing home industry has also been searching for ways to enhance the quality of care and the quality of nursing home work. As a result, several initiatives have been implemented by individual nursing homes and by networks of homes working collaboratively. Some of these initiatives have focused on the physical environment of long-term care settings, some on improved worker training, some on developing new and more positive workplace climates, and some on creating more resident-responsive communities. Some of these initiatives are targeted at specific activities, such as dining, while others are much more sweeping and comprehensive. In many instances, it has been difficult to sustain the changes over time.

A. What Does the Research in Long-Term Care Tell Us?

To build a better long-term care industry, it is important to be clear about what we have learned from what others have done. Some of the things we have learned are:

- Care quality problems usually continue unless there is a systematic, organizational-level commitment to change practice. Focusing only on the direct care delivery makes practice change difficult to achieve and difficult to sustain.

- When problems with care quality are not addressed, they often become less visible because residents, families, and staff alike become accustomed. This means we often miss serious quality problems that are right in front of us.

- Residents and families often have a much less positive view than staff, administrators, and managers about the level of care quality in a facility. This is partly because families and residents generally have a broader view of quality than staff have.

- Workers, especially frontline workers, frequently have a more negative view of their work environment than administrators have. Repeatedly, administrators and managers overestimate the level of staff satisfaction and the quality of the work environment. This is one of the areas that we know the most about. For over 30 years, researchers have been documenting the relationship between management practices and quality of work life for frontline staff. Research has repeatedly revealed that frontline workers do not feel respected by their direct supervisors. In addition, the observations and insights of frontline staff about the residents they care for are not routinely reflected in the residents' care plans. There seems to be a range of barriers preventing frontline staff from participating actively in planning the resident care they will be delivering. These workers often feel unacknowledged for their skills and commitment, and staff turnover has been consistently related to these factors rather than to the difficulty of the work or the characteristics of the workers.

- Many facilities that proudly point to good annual survey results, few formal complaints, and acceptable resident outcome scores are unable to see beyond these parameters to the residents' experiences. These positive objective outcomes can, unfortunately, coexist quite easily with a poor quality of life for residents and a poor quality of work life for staff.

- Many nursing home staff have reported difficulty in making effective use of the data generated by the Minimum Data Set (MDS). As a result, care problems reflected by an organization's MDS/QI scores are often not adequately addressed, even after they have been acknowledged.

- While available resources are undoubtedly important to care quality, research has confirmed that similar levels of resources across facilities (such as staffing) are associated with widely varying levels of care quality and staff turnover. While important, this suggests that increasing resources is not the solution to the problem of care quality or work life quality.

- Research has documented that frontline staff perception of work life quality is highly related to the degree of collaboration between frontline workers and their direct supervisors (the unit nurses). We also know that frontline workers routinely feel left out of decision-making and do not feel as if they are listened to or that their observations about residents are taken seriously by the unit nurses. Frontline workers want to be part of the team that makes decisions about resident care. They want their knowledge, skills, observations, and insights to be considered. In situations where frontline workers feel as if they are true collaborators, they find much more enjoyment and satisfaction in their work. It is vital that unit nurses and managers in long-term care understand that in almost every setting where these perceptions have been investigated, frontline staff and managers (including unit nurses) have very discrepant views on how much collaboration is occurring. Managers and unit nurses consistently claim a much higher level of collaboration with frontline workers than is validated by the perceptions of frontline workers in the same settings. There is no indication that this is a deliberate deception. Instead, there appears to be a real and significant difference in how frontline workers and managers interpret the significance of particular activities, what it means to be included in decision-making, and what activities constitute real participation. Administrators and unit nurses are likely continue to do what they believe is collaborative work, while frontline workers continue to feel disenfranchised from collaborative decision-making.

B. Nursing Home Culture Change: Industry Initiatives to Address Care and Work Life Quality

You likely know about at least some of the industry-initiated efforts to address the quality problems described above. Collectively referred to as nursing home culture change, the Eden Alternative, the Pioneer Movement, and the Wellspring Model are some of the better-known examples of systematic attempts within the industry to improve quality. Although there are important differences among these initiatives, they have much in common. First, each of these initiatives has recognized the necessity for improvement in both care quality and work life quality in long-term care, and each explicitly recognizes the important link between these. Second, each of these initiatives acknowledges the vital role of frontline workers in providing high-quality care, and the importance of "empowering" these staff to improve the quality of their work experience, including the effectiveness of their work. Finally, each of these initiatives explicitly identifies organizational culture as a significant part of the current quality problem and, as such, a necessary focus of change. This explicit recognition that staff training and education are not adequate for improving practice and/or work life quality sets culture-change initiatives apart from many other practice and quality improvement efforts in the industry.

C. Replicating Practice and Organizational Change Initiatives

While many of the organizations engaged in culture change have flourished, transferring culture change from successful programs to new settings has been much more difficult than anticipated. Many organizations involved in culture-change initiatives (even homes with the best intentions and considerable resources) have failed to achieve and/or sustain significant improvement in either care quality or quality of work life. There are many reasons for this. First, replication efforts may be difficult because organizations that have successfully transformed their cultures are often unable to tell others exactly what they did and how they achieved the transformation. In addition, individuals engaged in these initiatives are often so busy attending to the daily demands of keeping the organization going, while also transforming the way things are done, that they often don't have time to track and document either what they are doing or how they are doing it. Consequently, there is very little useful documentation available about how culture-change initiatives have actually been implemented and achieved. Vague suggestions about "empowering your staff," "supporting critical thinking," "promoting innovation," and "increasing collaboration" are not useful to organizations wanting to replicate the changes.

What does one actually do to empower staff? How does one support critical thinking or cross-departmental collaboration? What specifically is a strategy to achieve this? To compound the difficulty, each organization is unique. So now there is the added problem of trying to figure out what strategies are likely to work across organizations, and where these strategies need to be tailored for a particular organization or organizational type.

To further the challenge of successful replication, when trying to reconstruct what happened and account for successful transformation of an organization, individuals are most often able to describe only those events that were closest to their own daily activities. Each person who explains the change and how it was achieved can only describe the corner of the world that is visible from his or her vantage point. As a consequence, important players, processes, and systems are missed in any such account. When these

important factors do not become part of the story and are therefore not incorporated into subsequent efforts to replicate the organizational change, this minimizes chances for successful replication. This may also lead to a perception that culture change is mostly about having a charismatic leader at any level of an organization and not about the hard (often tedious) work of constructing new systems or improving existing systems. Charismatic leaders do not always appreciate the importance of creating systems to support organizational changes. This will leave the organization totally dependent on the continuing presence and effectiveness of a single person to encourage (and thus sustain) a new practice or new model of care. When the leader moves on or, for some reason, does not continue to command the same level of commitment from staff, implementation will often falter and fail.

Finally, an important challenge to replicating culture-change initiatives is that people leave. Organizational history is easily lost in an industry with turnover rates like those found in the nursing home industry. People with important information may be gone when efforts are made to reconstruct or evaluate the paths taken toward change.

Important questions for you to explore in an effort to consider some of the above challenges include:

- What is it about our systems that allow (or encourage) these problems to continue?

- Can we create systems to support the new initiatives that do not rely on individuals to remember and that integrate the changes into work routines at all levels?

- Can we create a system where ongoing learning is built into the daily routine, and good practice is automatically reinforced, rather than relying solely on sending workers to training programs and hoping they will learn, absorb, remember, and follow through?

Effectively addressing the above questions requires internal systems that can provide: 1) ongoing monitoring of residents and staff; 2) timely retrieval of data; 3) accurate interpretations of data; and 4) ongoing, timely, and appropriate feedback telling us whether our efforts are successful. In most nursing homes, these things are simply not done.

Working with many facilities that have implemented simple, or more comprehensive changes in their organizations, we have learned how important it is for all to understand and feel some commitment to the desired outcomes and to clearly understand the role they will play in achieving the outcome. This is actually much more difficult than it sounds. Staff come and go. Staff work different shifts and are too busy to attend informational programs on something they may not see as relevant to their own situation. Even administrators in some homes stumbled when trying to explain 1) the nature of the new initiative; 2) the organizational changes needed to implement the initiative; and 3) how they themselves would participate in the program.

III. Person-Centered Care

Is your facility providing person-centered care? Are you unsure if you are really providing it? What does person-centered care actually mean?

Person-centered care is a term that many people are familiar with, and many people say they already practice it in their facilities. However, when people are asked what it is or how they do it, they often have trouble putting it into words. The definitions and examples they give may be very different from one person to the next. One person may see it as meeting a resident's request, another may see it as adapting a standard treatment or care plan to individual needs, and others may believe it requires letting a resident decide how they receive their care. Some of the things nursing homes might do to implement person-centered care include:

- Neighborhood designs that make spaces feel more like "home" for residents;

- Choices in mealtimes;

- Expanding activity choices;

- Choices in bathing preferences;

- Letting residents take more risks by occasionally refusing medications or avoiding dietary restrictions;

- Encouraging families to bring in familiar items from home to decorate; and

- Inviting residents and families to participate in care planning meetings.

Each of these has an element of "person centeredness." As you can see, however, there are varying degrees to which a facility and/or staff members can embrace the person-centered concept. In a facility where they have fully integrated person-centered care, no decision is made without asking: "Has the resident (or residents) participated in this decision?" In most instances, for a fully person-centered care environment, the answer should be "YES!" or "No? Well, we'd better go talk with them!" Notice the important language of talking "with" them … not "at" them. Showing residents a presentation of how things will change is quite different than engaging them in the process of change and decision-making.

This section of the guide will help you focus your thinking about being a person-centered facility and broadening your applications. You will want to consider how to infuse your standards of person centeredness throughout the organization, providing staff with practical examples and clear expectations.

A. What Is Person-Centered Care, and How Is It Different from Traditional Care?

In traditional nursing home care:

• Decision control over daily practices is held tightly by management staff;

• Residents and direct-care workers are largely excluded from decision-making about care and daily routines; and

• Care is organized around a medical model in which care practices are driven by diagnoses, organized by tasks, and carried out by specifically trained personnel, rather than by resident preferences.

As an example, imagine a resident requests a bowl of soup in between meals because he was not hungry at his scheduled 6:55 a.m. breakfast. Knowing the resident has diabetes, the CNA seeks out a nurse to ensure the unscheduled snack is not contraindicated. The nurse says the resident's blood sugars have been fluctuating widely and delegates checking it to the certified medical assistant (CMA). The CMA reports back that the result was within normal limits, and the nurse approves the snack. While the CNA is assisting the resident with the soup, the soup spills. The CNA is about to go to the kitchen for more when the resident says, "Don't bother. It's lunchtime now anyway." The CNA then takes the dirty shirt to the laundry department and contacts housekeeping to clean up the spill. In this example, the soup request engaged an assembly line of tasks that would be completed by several staff members. Fulfilling the request became a medical task related to the resident's diagnosis of diabetes, and the resident was not engaged about the request or even asked what soup he preferred. Little needed to be known about this resident, except his diagnosis, to meet his request. The sequence of events is very unlike what would naturally occur in someone's own home.

In a facility that has incorporated principles of person-centered care, the resident would have a different experience. The resident would get up and eat breakfast whenever he wanted. A more universal worker role would eliminate the assembly line approach, allowing the CNA to prepare and clean up the soup. The medical diagnosis would inform, not dictate, the resident's request. The CNA would have the authority to support the resident's choice, avoiding the extensive and off-putting series of events required to produce the soup. Finally, fulfilling the request for soup would be an opportunity for CNA-resident interaction rather than a major frustration for both worker and resident

Person-centered nursing home care:

• Seeks to eliminate the assembly line approach to care and embraces a philosophy of residents as individuals;

• Seeks to improve quality of care and quality of life for residents and leads to a more satisfied life;

• Means residents are given choices and are able to make decisions;

• Requires staff to alter work routines to accommodate resident preferences; and

• Requires staff to have relevant knowledge and decision-making authority.

B. Approaches to Person-Centered Care: "Culture-Change" Models

Some of the most widely recognized clinical and household approaches to change are described in Appendix A. The table lists when each model was developed, their guiding principles, how each one is implemented, and significant outcomes expected for each. The table gives a means of quick comparison across approaches of major differences. It is by no means exhaustive and comprehensive but serves as an introduction. Choosing a model should not be based on the information in the table alone.

Choosing a Model

With the range of options for person-centered care, how is one chosen or created? Assessing your organization using the tools in the manual to understand the current state of the work and care environment is a good place to start. Honest and open discussions with staff, families, and residents about the nursing home environment—how it is now and how people would like it to be—will help you clarify your values and lead you to the option that is right for you. Once the facility's communal values have been made explicit, a model can be chosen that most closely aligns with those values.

If your intent is to closely imitate the original model (Eden, Wellspring) it will be very helpful to speak with staff from facilities that have implemented that model, to consult with organizations that are at different phases of implementation, and to use the tools that were designed for that particular model. By choosing an established model, there is benefit of assistance from experienced participants, the opportunity to learn from real-life examples, and the evidence that real sustained change can occur.

C. Practical Examples

Below are examples of person-centered care initiatives.

Resident-directed routines

Resident-directed routines allow residents to continue patterns of daily life they had outside the facility. This is often interpreted as allowing residents to decide when they will get up and when they will go to bed at night. These are important elements of resident-directed routines, but certainly not sufficient. Flexibility in dining, bathing, activities, care workers, tablemates for meals, new treatments, and whether or when to take medications are all places for residents to have some say-so. A more homelike environment exists when residents are able to follow long-established routines and choice is fostered by increased options and attention to preferences. Allowing residents to choose what, when, and with whom they will eat is not a simple matter. It requires considerable change in the organization of work routines for kitchen staff, volunteers, CNAs, nurses, activities staff, and others. Successfully implementing this demands careful attention to all the systems involved in the change. A mistake that is often made is to simply tell the staff to give residents more choices while forgetting to change all the systems that will be working against them if they attempt the change. These changes often do not occur simultaneously in facilities, but rather in phases allowing time for each one to be accepted and revised as needed to function well.

Dining

Traditionally, nursing home meals are served at scheduled times on hospital trays. Staff is expected to bring residents to the dining room in a timely fashion. Food is distributed by table and within a short time

to prevent temperature loss. Often, few options outside of the planned menu are available. Residents are rarely asked who they wish to sit with. Instead, residents are clustered with staff efficiency in mind. Dining has changed significantly in nursing homes across the United States. Some examples are described below:

Buffet and family-style dining

- Residents can arrive when they want to find hot food and open seating available.

- Food may be placed in warmers allowing longer distribution times, such as two-hour windows. Several types of foods are offered, and staff assist residents with selecting food. Special diets may be emulated with example plates.

Snacks

- Snacks are made available upon request rather than at predetermined intervals.

- Residents may have access to the kitchen.

- Snacks are purchased and stocked according to what residents like and prefer.

Central kitchens

- Continental breakfast can be prepared directly in central kitchens by staff or residents whenever residents arrive for breakfast.

- Lunch and dinner may be prepped by dietary service and sent to households or units to be finished and served to residents. Or dietary staff may place food in steam tables to be plated for residents in a manner similar to buffet dining.

- Residents and CNAs are able to directly plan and prepare meals together in a central kitchen.

Bathing

Bathing schedules in traditional facilities are organized to enhance the efficiency of the work and to ensure that residents are bathed on a schedule. Some facilities have tub rooms that double as storage facilities, not the most relaxing environment. In many facilities, residents are transported through the halls to the showers, naked, covered by a blanket. Bathing should be an enjoyable and relaxing time, not something to fear or endure. Many nursing homes have targeted bathing for improvement. Some of the common changes that have been made are:

Spas

- Residents are asked to choose when, how often, and in what manner they bathe. For more information, please refer to www.bathingwithoutabattle.unc.edu/

- Spa rooms are created that are warm and aesthetically pleasing, sometimes with music the resident selects, and have candles, soft fluffy towels, and soft lighting.

- Rooms are redecorated to resemble spas. They are large enough—or are remodeled to be large enough—for a shower, tub, toilet, and dressing area to enhance privacy.

- An aide is assigned to do only baths, avoiding the rush that results when there are other residents waiting for assistance.

Private baths
- Some facilities, such as Green House, have provided private baths for each resident as part of the physical design of the facility.

Bedtime schedules
Commonly, resident bedtimes are determined by the work schedule. Residents are assisted to bed when workers have time, often starting directly after the last meal and lasting until nearly shift change. Similarly, residents are awakened in the morning in a manner that assures the most number of residents are up in time for breakfast in the dining room. These expectations and systems will interfere with the provision of person-centered care, seriously limiting residents' ability to make choices. Person-centered systems are different in that they support the following:

- Residents go to bed and get up according to what they prefer or did at home. Snacks are available for residents who may prefer to go to bed or wake up at a time such that 14 hours are exceeded between meals.

- Residents may have more time to do for themselves what they can, rather than resign themselves to fast-moving staff.

- Shift schedules for frontline staff can be rearranged to accommodate resident schedules.

Activities
In many nursing homes, activities are regimented. There is a predetermined schedule of activities and events. The only choice residents have is whether they wish to attend. The activity starts and stops as planned. Interaction and participation are considered therapy. For example, a resident who listens to music tapes in his or her room is having music therapy, and pets brought into the facility are a way of offering pet therapy. Turning usual, daily activities into "therapy" makes resident choice seem less important. Activities become treatments, not desired activities. Seeing this as a quality-of-life issue, rather than treatment, is a good starting point. Culture-change facilities seek to embrace spontaneity and variety with activities in addition to scheduled events. An attempt is made to make the facility feel more homelike as well.

Pets and children
- Pets and children become a part of the facility.

- Their care becomes the shared responsibility of the residents.

Groups and community
- Groups, such as community learning circles, meet to discuss daily life in the past, present, and future. Ideas are heard during these circles, and an opportunity presents to gain insight into the lives of the residents.

- Decisions for activities may occur at a household level and may include bake sales, fundraisers, or other group projects.

- Death is no longer silently addressed, but is embraced. In some facilities, a bell is rung when someone dies, and anyone who would like may come to that resident's room to say good-byes and reminisce about the person's life. Both staff and residents are included.

- Neighborhoods can be created in traditional double-loaded corridor nursing homes for sense of community. Small numbers of residents are grouped into a single community, based on room proximity. This group is staffed with permanently assigned workers and shares communal activities.

- Households can be developed in renovated or newly built nursing homes by physically designing them to only house a small number of residents. Some households or rooms are designed to resemble actual homes with front porches and doorbells, reflecting a more homelike environment. These small settings allow residents the opportunity to really get to know one another and develop a sense of family or community with others. These models often have a town square at the center of the households in which a general store, movie theater, or chapel may exist for additional opportunities for activities.

Spontaneous resident-directed activities

Resident preferences for entertainment, outings, and activities are considered seriously and effort is made to make it happen. These activities, for example, may be an unplanned fishing trip in the middle of the day, a trip to the county fair, or a random decision to bake pie.

Relationships

In a traditional nursing home, staff are often expected to keep relationships with residents at a distance, being warned not to "get too attached." Time is spent on task completion, and engaging socially with residents is often perceived as idle time. Opportunities to get to know residents personally are sporadic, rotating assignments are common, and acknowledging residents by room number or diagnosis can become a widespread practice. Culture change values and nurtures the relationships that can naturally occur between residents and their closest direct-care workers.

Staff-resident relationships

- Frontline staff are supported in discovering the likes and dislikes of residents and have the authority to do something about the residents' preferences.

- It is acceptable for frontline staff to share aspects of their own life with the residents, as well forming reciprocal, meaningful relationships.

- Staff members are given permanent assignments to ensure development of long-standing, close relationships with the residents.

- Staff members are allowed time to sit with residents and partake in meaningful conversation and activity, such as sharing a lunch with them or joining them in an activity.

Resident-resident and resident-other relationships

- Intimate household and neighborhood or unit settings are conducive to developing bonds among residents, as well as gatherings in common areas that are homelike and warm. For example, in a setting that groups only perhaps eight residents together, as opposed to 30, there is better opportunity for each person to get to know others well. Open seating in dining rooms also gives opportunity for residents to get to know others. Beautiful hearth rooms draw residents out of their rooms together in one area.

- Residents continue other everyday relationships, such as with pets and children, as some places have live-in pets and on-site day-care centers. One of the most difficult experiences for residents is leaving cherished pets behind. Some nursing homes allow residents to bring pets with them from home.

Medication administration

Medications typically are administered at predetermined times and according to the medication nurse's routine. Medication carts assist nurses in delivering medications to different locations in the facility, depending on where residents may be during administration times. Some nursing homes have attempted to bring more flexibility to medication administration and to make it seem less institutional.

Administration times

- Changing administration times simply to a.m., p.m., or bedtime is one way in which facilities have restructured the medication pass to enhance flexibility in administration and accommodate residents who prefer to stay in bed longer in the morning or attend activities.

- When medication timing is more important (maintaining blood levels), nurses discuss flexibility with residents, ensuring that they understand the importance of timing while still allowing residents to choose. Conversations with the prescriber are also important so that all providers are working together to honor resident preferences.

Administration location

- Some facilities have eliminated medication carts and have medications placed in a locked cabinet in resident rooms. This is seen as less institutional and as increasing flexibility.

Universal Worker

Many nursing homes have developed a universal worker policy in their facility. This gives workers greater flexibility in how they can respond to residents. Adding dietary duties to the CNA's work adds flexibility by reducing the number of people who are involved in each task (for example, getting a bowl of soup). To ensure accountability for duties, each staff member is permanently assigned to a household or unit. The members of each household are responsible for completing all the work. Staff members often do not spend the entire day in one job. Some staff members will spend four hours as homemaker for a household and then finish the last four as a CNA. A coordinator in each household, typically a department manager, may spend two hours in the morning in the manager role, the next four in the household as coordinator, and the final two again as manager. Work hours are not increased for the facility, but are redistributed, and pay for staff is based on their primary department. The universal worker is accomplished in three ways.

1. **All staff become nursing assistant certified.**
   All department heads and other staff become certified nursing assistants, even maintenance staff. This may be something the facility requires of everyone all at once or slowly over time. This allows all staff to function in response to residents' direct-care needs. CNAs may continue to do the bulk of hands-on direct care, but all staff are able to assist when needed, and it is an expectation that everyone will carry out direct-care duties.

2. **All staff become cross trained.**
   Department heads and frontline workers become cross-trained in dietary, housekeeping, laundry, and activities. Staff are assigned a primary job function, such as dietary, in which role they spend the most time. All staff members are expected to complete the routine dietary, housekeeping, and laundry tasks for the households, as well as plan and carry out activities with the residents.

3. **Homemaker role integrated.**
   A general homemaker role for staff is the most integrated role. The homemaker is responsible for all homemaking duties, such as preparing meals, doing dishes, laundry, housekeeping, and activities. This position requires the heaviest use of cross-training skills.

Suggested Readings: Person-Centered Care

Boise, L., and White, D. (2004). The family's role in person-centered care: Practice considerations. *Journal of Psychosocial Nursing and Mental Health Services*, 42(5), 12-20.

Campbell, S. L. (2003). Empowering nursing staff and residents in long-term care. *Geriatric Nursing*, 24(3), 170-175.

Krasnausky, P. (2004). Being who we say we are: "culture change" helps two long-term care centers align practice with their sponsors' values. *Health Progress*, 85(3), 50-54.

Misiorski, S. (2003). Pioneering culture change. *Nursing Homes: Long Term Care Management*, 24-31.

Misiorski, S., and Kahn, K. (2005). Changing the culture of long-term care: moving beyond programmatic change. *Journal of Social Work in Long-Term Care*, 3(3/4), 137-146.

Robinson, S. B., and Rosher, R. B. (2006). Tangling with the barriers to culture change: creating a resident-centered nursing home environment. *Journal of Gerontological Nursing*, 32(10), 19.

Sampsell, B. G. (2003). The promise, practice, and problems of the Eden Alternative. *Nursing Homes: Long Term Care Management*, 52(12), 41-44.

Scalzi, C. C., Evans, L. K., Barstow, A., and Hostvedt, K. (2006). Barriers and enablers to changing organizational culture in nursing homes. *Nursing Administration Quarterly*, 30(4), 368-372.

Weiner, A. S., and Ronch, J. L. (Eds). (2003). Culture change in long-term care. New York: Haworth Social Work Practice Press.

Traditional Nursing Home Care versus Person-Centered Care

Traditional Care	Person-Centered Care
Decision control over daily practices is held tightly by management staff	An environment in which residents are given choices and are able to make decisions. Staff are encouraged to alter work routines to accommodate preferences of residents.
Direct-care workers are often excluded from decision-making about care practices and work environment.	Staff are empowered with relevant knowledge and decision-making authority, enabling them to change care practices.
Organized around a medical model in which care practices are driven by diagnoses, organized by tasks, and carried out by specifically trained personnel.	Seeks to eliminate the assembly line approach to care and embraces a philosophy of residents as individuals with their own preferences.

Examples: Resident-Directed Routines

Dining

Buffet and family-style dining
Snacks
Unit kitchens that give more flexibility

Bathing

Spas
Private baths

Bedtime Schedules
Waking
Bedtime
Snacks

Activities

Pets and children
Groups and community
Spontaneous

Relationships

Resident to staff
Resident to resident
Resident to pets
Resident to children
Resident to community
Resident to family

Medication Administration

Administration times
Medication location

IV. Leadership

While not the only important factor, a strong leader is essential for successful organizational change. Fortunately, quite a bit is known about good leadership and how to become an effective leader. While many people believe that you must be born with good leadership skills, we know that people in leadership positions can do many things to increase their effectiveness as leaders. The following section is designed to help you think about your own leadership skills and where you might want to develop or build on the skills you have.

A. Introduction: The Leadership Challenge

Over and over we heard the following statements from long-term care staff:

- "Management doesn't support us."

- "They never get rid of bad employees."

- "They make decisions without consulting us, and we deal with the fallout."

- "If I say something, nothing changes anyway, so why bother?"

This doesn't always mean the statements are true. Sure, sometimes they are, but often the case is that management isn't deliberate and transparent enough. When embarking on changes in an organization, it is more important than ever to be deliberate and transparent in your actions as a leader. By doing both, you can naturally increase inclusiveness and staff buy-in.

Some of the important traits for leading an organization successfully through the change process include:

- Engaging in strategic planning and systems thinking;

- Constant assessment of the environment, both internal and external;

- Surrounding yourself with the right people for the job;

- Building trust among staff and management;

- Making communication a priority;

- Engaging staff, families, and residents in key decision–making;

- Empowering staff; and

- Providing tangible support to staff when needed.

These concepts are particularly important for leaders encountering a period of change in their organizations. Whether it be a culture-change initiative, new policies, or other major change, considering the above elements before you dive in can increase the likelihood that your initiative will succeed.

B. Qualities of Good Leaders

Definitions of what constitutes good leadership vary, but there are several core qualities that leaders should try to embrace during times of change. This Web site contains the following list, as well as a self-assessment around these qualities: *http://www.leadershipthatworks.com*

Leaders …

- **Provide Direction.**
  - Foster development of common vision.
  - Define priorities and plan strategically.
  - Clarify roles and responsibilities.

- **Lead Courageously.**
  - Take a stand for your values.
  - Confront issues and concerns promptly.
  - Challenge others to make tough choices.

- **Influence Others.**
  - Win support to broaden your impact.
  - Provide feedback that inspires action.
  - Negotiate and get others to act.

- **Foster Teamwork.**
  - Build team spirit and get results.
  - Encourage interaction among members.
  - Celebrate team accomplishments.

- **Champion Change.**
  - Assess readiness and resistance to change.
  - Involve others in the change process.
  - Motivate people to embrace change.

- **Coach and Develop Others.**
  - Identify and groom talent.
  - Offer developmental challenges.
  - Develop leaders at all levels.

- **Motivate and Inspire Others.**
  - Establish high performance standards.
  - Trust in people's competence.
  - Inspire people to excel.

- **Build Relationships.**
  - Leverage networks.
  - Embrace diversity.
  - Manage conflict.

C. What Can Leaders Do in Times of Change?

There are several important things you can do during times of change that may help facility leadership implement changes in a way that anticipates needs and shows concern for all employee positions.

1. **Be clear about why a change is being implemented.**
   For every action you consider, be sure you understand why that particular action is indicated, and clearly communicate these reasons to your staff. The reasons may seem obvious to you but may not be so obvious to others. Share your thinking with the people around you and the people affected by the change. You want to strike a balance between overwhelming people with information that might not pertain to them and making sure everything is communicated to the right people. This will take practice and feeling out your staff's reactions to communication. A safe rule of thumb is to target communication of new processes or information to the key players, but make sure the new information is available at some point to everyone. This can be done via a newsletter or regular policy and procedure updates that are clearly visible

2. **Understand what your staff are experiencing by actively participating in the change.**
   While having a good idea about what you are trying to achieve, leaders often don't understand what "implementing" is actually like for the staff in their organization. It is important that leaders understand what they have asked employees to do, and that employees see that the leader understands. A good way to do this is to participate actively, visibly, over time, and in different ways with different staff.

3. **What you do is more important than what you say.**
   Telling employees that you welcome suggestions from them is not sufficient. Showing employees that you are listening to and trying out   their suggestions is much more effective. Telling employees that it is safe to speak out will breed cynicism unless you take meaningful steps to ensure that the environment is safe. That means, for example, that leaders need to assess all the possible risks to speaking out and address them before telling people it is safe. A single experience to the contrary will generally be enough to convince people that the leader cannot be trusted.

4. **Anticipate and address staff responses.**
   New ways of doing things often make people anxious. Knowing this and addressing it up front, allowing people to express their concerns, and encouraging them to give it a try, help staff remain calm. It is also important, however, not to be dismissive of staff concerns. False assurance will likely make things more difficult and undermine efforts to change. It is important to understand that if the leaders are feeling anxious, the staff will feel anxious as well.

5. **Decide how you will determine whether you have been successful.**
   Every long-term care setting collects many forms of data. Look at what you already collect and decide whether these data will help you determine your success. Be careful to find measures that actually reflect the changes. For example, if your goal is to increase residents' feeling of a sense of community, the Minimum Data Set (MDS) and Quality Improvements (QIs) will not provide you with any useful outcome data. You may want to develop a new set of data to monitor how you are doing. If you predict that your practice or organizational change will result in a particular outcome, be sure to measure before and after the change. If you only measure after the change, you will have no basis for

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comparison. For example, if you think staff will feel more in control of their work after a change in policy, measure this before and after the change so you can say whether there was any difference. You might consider contacting your quality improvement organization (QIO), local university, or other consultant to establish an appropriate measure to determine the success of your change. Measurement can be quite complicated. It is always a disappointment to discover, after the change, that there is no way to measure whether it has been successful.

6. **Look at whether your daily activities are consistent with the changes you are implementing.**
If you are trying to make staff more involved in problem solving, be sure that the mechanisms you use to solve problems are inclusive. You are the role model. Your staff will be watching your behavior. When you see staff in your organization engaging in behavior that is inconsistent with the direction of change, it is important to address that behavior. It is important for others to watch facility leadership in regards to this. For example, if the administrator continues to engage in very top-down decision-making, while the director of nursing is trying to encourage staff participation and shared decision-making, it's important to bring this to the administrator's attention.

7. **Respond to challenges that occur during change implementation by helping staff clarify the problem.**
People often jump to a solution without really understanding the problem. This undermines effective problem solving and often leads to a deadlock among staff with differing opinions. If the problem is initially identified as "not getting our work done" or "residents are waiting a long time for help," it would be easy to define the problem as "we need more staff." Asking questions about the nature of a problem and tracing the problem back to its source will lead to a comprehensive understanding of the problem. For example, in the following situation, the problem—"a resident fell"—can be traced back to a system-level issue. Trying to solve the problem without including the system level would likely result in continued falls and frustrated staff.

Focus on Problem Solving

The Five Whys is a common way to practice problem solving. By asking yourself "Why?" at least five times, you are more likely to get to the root of the problem.

Example:

1. "He was looking for a gait belt to transfer a resident. **Why?**"

2. "He knew it was important to use a gait belt and couldn't find one. **Why?**"

3. "There are only a few gait belts on the floor. **Why?**"

4. "They keep disappearing. **Why?**"

5. "We don't have a clear system in place for where gait belts should be located."

At this point, solving the problem involves considering several possibilities that might lead to a satisfactory resolution. For example:

- There needs to be a larger supply of gait belts in the facility.

- There aren't central places on each unit for storage.

- Frontline staff aren't aware of where to put gait belts after using them.

One common mistake that leaders make is to either solve the problem by themselves or determine a solution with input from a limited range of people and without making their deliberations visible to the staff who will be affected. Identifying the key players and including them in the discussions about both the nature of the problem and the possible solutions will increase the commitment of staff to implementing the change identified. Some important questions to ask are:

- Who needs to be involved in determining the problem?

- Who needs to be involved in determining the solution?

- How does the issue, or the proposed change, affect each department?

- Who can help?

- Who needs to know about the change?

One useful strategy might be to make a master list of each department and the workers in those departments (don't forget things like human resources and groundskeeping staff). Go through the list and think about how each would be affected by the proposed change. Be sure to include people from each of those areas as you consider the effects of change.

D. Systems Thinking

All behavior in organizations is affected by the system in which the behavior occurs. For example, when the staff is trying to be more responsive to residents who are experiencing pain, there will be many "system" factors that influence success of that effort. The pharmacy system, the policies concerning medication passes, the mechanisms for contacting physicians, the general staff knowledge, and the systems of accountability for responding to residents are only a few of the systems issues that influence management of resident pain. Looking only at the responsiveness of a particular nurse or the ability of a particular CNA to identify resident pain will not go very far to address the problem. It might improve the situation for one resident, at one time, but is unlikely to have any impact beyond that. Implementing an accountability system for pain management will, on the other hand, affect many residents and influence all shifts and all levels of staff.

While it is ideal if all staff can learn to think about the system influences on how they provide care and how the work gets done, the leaders in the organization are the ones who need to take the lead. First, it is important that leaders respond (and are seen to respond) to problems by looking at system contributors as well as other more local factors.

- **A useful Web site: Innovation Associates Organizational Learning:** *http://www.innovationassociatesol.com/index.htm* The site lists several readings and courses on this and other useful topics.

E. Strategic Planning: The Proactive Leader's Tool

A surprising number of directors of nursing have told us that they are not involved in their organization's strategic planning. A surprising number have even indicated that they see strategic planning as a formal process, distant from and irrelevant to their work. This is an unfortunate situation. Strategic planning, first of all, has in important impact on how the overall system operates and what priorities drive decision-making and resource allocation, and are, therefore, relevant to the core work of the organization.

> "Strategic planning determines where an organization is going over the next year or more (Vision, Purpose), how it is going to get there (Direction), and how it'll know if it got there or not."
>
> —Carter McNamara, *Field Guide to Nonprofit Strategic Planning and Facilitation (2003)*

Strategic planning is proactive, long-range planning that addresses an issue that concerns the entire organization. Strategic planning can:

- Help address external and internal factors during times of change and turbulence;

- Help plan and use staff and other resources most effectively and efficiently;

- Help focus the organization's culture and its customer base; and

- Build consensus about where an organization is going.

Strategic planning is an opportunity to be a proactive leader. As a long-term care leader, you can look at what you want your organization's culture to be like and who you want your customers to be. By involving multiple levels of staff in the planning phase, you tend to maximize communication, buy-in, and dissemination of efforts across the organization.

Models of strategic planning

Generally, all models of strategic planning have the following steps:

- Assess the current state of the organization or unit;

- Develop a vision (purpose) of where to go;

- Determine the "gap" between current state and the vision;

- Set a direction, including baseline goals, to close the "gap";

- Implement the strategic plan; and

- Evaluate the strategic plan periodically.

The SWOT Analysis and Environmental Scan models are two tools that are useful to assess the current state of your organization. A sample of the SWOT model is included in Appendix D. It is important to engage in continuous assessment of the organization, not just once during strategic planning. Build those assessments into your work routine.

Measurement

A way of measuring the effectiveness of the strategic plan is needed and must be initiated at the time the strategic plan is implemented. Evaluation measures must be reviewed and adjusted each time the strategic plan is adjusted. Measures might include:

- Clinical indicators (Quality Improvements, Quality Measures, etc.);

- Risk management indicators (e.g., events reported, insurance claims, lawsuits);

- Customer satisfaction (e.g., customer satisfaction survey scores, hotline complaints);

- Human resource indicators (e.g., staff turnover and retention, staff complaints and grievances, staff satisfaction survey scores);

- Financial indicators (e.g., census, profit and loss data)

- Timing measures (e.g., are strategic plan goals being met according to plan?)

Can you think of others?

F. The Right People for the Right Job

Long-term care has a few unique challenges that can lead to poor hiring techniques.With nursing shortages, high rates of turnover, and tight budgets, hiring and retaining the best staff can be difficult. It is easy to become desperate and take all the "warm bodies" you can find, even if the employee is not the best match for the position.There is considerable research documenting the negative impact of hiring the wrong person, especially in long-term care.

While making changes in your organization, you'll want to ask yourself, "Are the right people employed in key positions?" For frontline workers, do they have the right skills and attitudes to move forward with the spirit your change requires? By asking these questions early in the change process, you can develop a plan to build your staff into an aligned, effective workforce. Enacting a thorough recruitment and interview plan can help guide future staff selection. According to *Right Person, Right Job: Guess or Know—The Breakthrough Technologies of Performance Information* (Russell, 2003), there are three "matches" that employers need to look for when screening applicants:

- **Skill match**

  - Education
  - Work history
  - Skills testing
  - Background check

- **Job match**

  - Demonstration of complex, critical-thinking skills
  - Interest of applicant
  - Personality
  - Comfort

- **Organization match**

  - Demonstration of matching values
  - Demonstration of integrity
  - Interviewer and interviewee comfort

You've probably focused on getting a warm body with the right skills in the past. Often, you will get lucky and get a good employee by looking for the right skill match and checking references. With a little more effort and consideration, you can minimize luck and take fate into your own hands.

Strategies to Hire the Right Employees

- **Plan**

  Don't wait until you are desperate for a body to start the hiring process. Encourage current employees to give ample notice. It can take many months to find the right applicant pool for the job, so any lead time you can get is desirable. If someone quits with little notice, it's important to remain calm and begin planning the search for the right person for the job.

- **Network**

  Sometimes traditional methods of advertising don't result in the best pool of applicants. As the employer, it's also important who you know. Talk   to the people you do business with. Let them know you are searching. Let the staff know you are searching, and encourage them to get the word out. If you have a local college or university in your area, find faculty with whom you can form relationships. Sometimes they can recommend new graduates for positions.

- **Consider your needs**

  With all the changes you are planning in the organization, consider the skills required for the position beyond the usual duties. Are there personality traits you desire or functions you hope a new person can fill? Are you looking for someone that will help you lead the change?

- **Consider new ways of screening**

  There are several free tools on the Internet to help you screen applicants. Resources may help you develop better prescreening tools, interview questions, and assessment techniques (see link at the end of this section). There are also several professional services that, for a fee, will provide skill, personality, and other assessment tools and scoring. You may find this is a worthy investment if you've struggled with high employee turnover and other problems in the past.

- **Rely on feedback from many**

  Have potential employees meet with a variety of staff in your organization. A panel of interviewers is one way to obtain multiple perspectives. An alternate method is to offer a second interview in the form of having the candidate meet one-on-one with key staff. Each person should plan casual conversations about the job and facility and convey their feedback to human resources.

- **Appraisal of applicants**

  Once you have several pieces of data to work with (interview notes, resume, feedback from others, references) you can complete a full appraisal. Consider the following areas when ranking applicants, deciding which are of most value to your organization:[1]

  - Skills and knowledge
  - Responsibility
  - Communication
  - Initiative
  - Commitment
  - Motivation
  - Flexibility
  - Creativity
  - Leadership potential

A good Web site, with several tools to help you reshape your employee selection procedures, is ***http:// hiring.inc.com/tools.html***.

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[1] From ***www.employeradvisornetwork.com***

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Dealing with Problem Employees

So you've made some hiring mistakes in the past and are still sorting through the resulting problems. Now what? Hoping the problem will soon go away (the person quits, or everyone else finds a way to work around this person) won't get you very far. Sure, sometimes you get lucky and the person leaves, but the more likely result is that everyone tries to work around this person, creating more work and resulting in less communication and more confusion. The person can drain the morale and energy from even your best staff. The worst-case scenario, and often the most common, is that the good staff leave, and you are left with the problem. Nurse aides have identified this as one of the most demoralizing problems in their work setting, having to work with an aide who is not a good worker or not a good coworker. When a nurse aide sees an employee providing bad care to residents, they can become frustrated, angry, and disaffected. This leads to turnover.

Adding to the difficulty of dealing with problem employees, it is common for supervisors to overlook the importance of certain skills if an employee is skilled in another important area. For example, supervisory skills, as well as clinician skills, are vital for nurses who oversee nurse aides on their unit. Nurses often have no supervisory training and may be ineffective at this very important part of their work. It's never a good idea to accept low skill in an important area. Lack of attention to that area, especially supervision skills, can have a serious negative effect on other employees. Assess the skills needed and come up with a plan to raise the level of skill in one area, while acknowledging the existing skills in other areas.

Another very common problem in long-term care settings is for unit staff to "go around" the charge nurse, directly to the director of nursing or other manager to express concerns or suggest changes that need to be made. Working around the frontline supervisor can create serious, long-standing problems for everyone. First, it prevents the employees working together on a unit from learning to solve their problems together. Second, it prevents the charge nurse from knowing what is going on with the staff she is supervising and from seeing how the unit is operating. Finally, if you are trying to develop supervisory skills in your charge nurses, this will quickly send the message that you don't really think they can do it.

There are several resources to help you deal with problem employees or problems brought to you by employees. Nolo publishes several books on human resources that are reasonably priced and well-respected:

- Delpo, A., and Guerin, L. (2007). *Dealing with Problem Employees: A Legal Guide*. Berkeley, CA: Nolo.

- Mader-Clark, M., and Guerin, L. (2007). *The Progressive Discipline Handbook: Smart Strategies for Coaching Employees*. Berkeley, CA: Nolo.

G. Building Trust Between Management and Staff

During times of change, employee trust is an essential ingredient for retaining employees and engaging them as reciprocal partners in change efforts. In *Building Trust in the Workplace*, by Amy Lyman, the author shares the example of Continental Airlines:

> *"At Continental, employees in the baggage reclamation department were faced with the possibility of layoffs in 2003. When this news reached employees, they did an interesting thing. They met and came up with a plan for all full-timers to move to part-time status so that no one would need to be laid off. They took the proposal to managers and waited to see what would happen."*

What could some of the other outcomes have been? You can certainly guess: employee turnover, greater suspicion of management actions, fear, rebellion. Certainly, you'd prefer the proactive approach of Continental employees. How did management elicit that response? Trust makes a difference. Employees who perceive management as credible, fair, and respectful of employees will often spend more energy working with management in a positive manner. You may need to lay the groundwork of trust before employees will be willing partners in implementing change.

Credibility

Assuring management has credibility with staff can mean deliberate change in systems and leadership practices. Be *honest* and *open*. Leadership in the organization needs to make it excessively clear to all staff what will be openly and honestly communicated. Consider an "everything is everyone's business" approach. Of course, there are some things that need to be kept confidential, but be clear to employees in the beginning what you must keep confidential and why. Leadership should talk to supervisors about how to handle sensitive information in a way that can keep employees in the loop, yet not give any confidential details. If a crisis within the organization occurs, bringing employees into the communication loop early, even if it's to give minimal information, can build enormous amounts of trust. In *Building Trust in the Workplace*, Lyman shares the story of Griffin Hospital. Griffin was the site of an anthrax death after the 9/11 tragedy:

> *"Griffin president, Patrick Charmel, came under significant pressure from the FBI to withhold information from employees about the patient and her subsequent death. Yet, he decided to inform 200 day-shift employees about the case, recognizing that it would result in making the issue public…. 'My decision to tell employees was never in doubt … I could not violate or put in jeopardy the trust relationship Griffin and I have with our employees and the community.'"*

Of note, Griffin Hospital was number 21 on the 2007 Fortune Magazine "100 Best Companies to Work For" list and enjoys a consistently low turnover rate of less than 15 percent.

Showing respect

Engaging in collaborative activities with staff is an excellent way to show you respect their work and input. A time of significant change in the organization can provide many opportunities to collaborate with a variety of staff. This will allow staff to participate in identifying priority issues, developing solutions, and leading change. Leaders should be prepared to acknowledge employee participation in the process and give specific feedback on how the employees made a clear difference. A simple "thank you" is somewhat meaningful, but a specific thank you, made public, can have significantly larger impact.

Fairness

There is an inconsistency in how managers and employees can perceive fairness. A stringent policy that leaves little room for negotiation can be seen as fair by some, but often doesn't acknowledge there are different circumstances and degrees of action leading to discipline or even positive works. Thus, employees can feel unfairly punished or unequally rewarded. Enlisting employees' help in designing guidelines can be a useful way to increase fairness and show respect.

Communicating clear expectations to staff can also lead to perceived fairness. Examine the expectations you have for employees, and consider their fairness. Are you expecting more of some, and if so, are they being fairly compensated (financially or otherwise) for the extra responsibility? Are you unfairly holding a problem employee to a lower standard of expectations because you are frustrated and unsure how to handle it? All leaders within your facility need to examine their expectations. Additionally, encouraging employees to communicate their expectations of managers can be a very useful tool to guide changes in your facility.

H. Employee Empowerment

Employee empowerment can be a rather ambiguous term in long-term care. Many leaders are unsure what constitutes empowering their staff. To some, they consider verbal encouragement for decision-making the equivalent of empowerment. While verbal support is important, structures for providing coaching and encouragement at all levels are essential. In 1997, Harvard business professor and author Rosabeth M. Kanter defined organizational factors influencing employee empowerment as:

- Structures for advancement opportunities;

- Awareness of worker contributions; and

- Access to resources, information, and support.

Amount and types of delegated activities, reward systems, career ladders, committee participation, and job enhancement opportunities are all things organizations can examine to enhance employee empowerment.

Several instruments are available to measure staff empowerment in long-term care at *http://aspe.hhs.gov/ daltcp/reports/dcwguide.htm#empowerment*. Consider gathering this data before you begin to implement changes and after changes have been sustained.

Empowering Frontline Staff

While statements about the importance of empowering staff in long-term care settings are almost universal and almost everyone claims to be doing so, what this means is only vaguely understood. During change, it is important that direct-care staff:

- Understand changes and the reasoning behind them;

- Have numerous opportunities to increase their knowledge about clinical care areas;

- Have numerous opportunities to learn about how the organization operates and how resources are allocated;

- Understand how to apply and be actively involved in implementing best practices at an individual resident level;

- Understand how best practices can be implemented and supported at a unit and facility level;

- Understand how to assess the influence of organizational processes on clinical practice and be actively involved in such assessments;

- Be actively involved in the evaluation of practice intervention at an individual and an organizational level; and

- Be comfortable participating in all of the above activities.

Research on frontline staff tells us that most nursing homes do not have an environment where these eight things are likely to occur. Instead, frontline staff are often excluded from important opportunities to learn about clinical care, information sharing, and problem-solving activities at both an individual resident and organizational level, and they are generally not comfortable offering their opinions. Organizational change can be designed to change that. Frontline staff empowerment can create an expectation that frontline staff can achieve fairly high levels of clinical knowledge and that they will be encouraged and supported to do so. In addition, empowerment assumes that frontline staff will be allowed—and encouraged—to use the information, participating in clinical practice changes. While acquiring and using the information are related, they involve separate processes. This is an important distinction since, in many instances, frontline staff have an opportunity to acquire the new clinical information, but have little or no opportunity to use it (the organizational structure to do so is often lacking).

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I. Providing Support for Employees

Leaders can sometimes become distanced from actual change implementation. They often see themselves as "big picture" people who are only there to generate the big idea, oversee architectural changes, or work on the budget. This distancing can be detrimental to the success of change implementation and can deeply color employee perception of support for change.

Listening

There is a desperate need in management across industries to move beyond "I tell staff my door is always open," and "I tell them I'll provide resources." No matter how close to the frontline managers are, there is still a power relationship that exists and needs to be addressed. Management will need to create clear mechanisms for soliciting ideas, input, and requests for resources. In addition, managers will need to consider all requests and input, being careful not to provide the answer to staff before considering options. For example, unit nurses often feel they should be part of staffing decisions. Management sees that as a budget issue and often thinks they know the request will be, "We need more staff." Providing clear information on how resources are being allocated and budget realities can often produce creative thinking by unit staff. They might have ideas for redesigning their work that wouldn't have occurred to you, or even to the director of nursing. Sometimes it's not just providing more money, but rather encouraging staff to use information to come up with creative solutions.

Providing resources

The changes you desire to implement will result in a variety of resource needs. Some examples of items often mentioned by staff and management during change implementation:

- More or redesigned space for facility operations;

- Incentive programs for employees;

- Career ladders;

- Redesign of resident living and social environments;

- Staff training or education in primary areas of concern;

- Technology to help staff do jobs efficiently; and

- Alternate staffing models that create efficiency.

Remember, a variety of staff can help address these issues. Leaders need not approach these in isolation. Teams using systems thinking are great ways to begin to look at these issues. Teams can also function to identify resource needs in advance by critically thinking and soliciting input from staff. Anticipating needs can create smoother implementation of change.

J. Making Communication a Priority

Throughout this guide, there are suggestions for enhancing communication in your organization. It cannot be emphasized enough that clear, constant communication at all levels will help implement any changes you might be considering. Consider having a team examine current information flow in the facility and pull together a new communication plan that encompasses communication at multiple levels. Look at an accurate organizational chart for your facility and consider all the places within and outside of the organizational chart that information flows:

- All departments and staff;

- Residents;

- Families;

- Board of directors;

- Corporate staff;

- Public and potential consumers; and

- Trade associations.

Look at how information currently flows to each of these facets. Consider how you might improve the consistency of information and encourage it to flow in both directions.

Encouraging two-way communication between management and staff

Most managers will say they wish employees would bring up issues and discuss solutions more often. Getting employees to give constructive feedback or raise issues can be challenging. It may take trial and error to have workable systems in place.

Planning forums for regular two-way communication with staff can be useful. Many staff report that meetings with leadership are "intimidating" or "unwelcoming of their comments." The environment often doesn't feel safe for employees to share concerns or even positive updates. They are unsure what management wants to hear and sometimes feel uncomfortable speaking in front of other staff. There are a few ways to approach this, and you may develop ideas of your own. Some suggestions:

- **Provide a clear venue for all staff to share their positive works.**
  Unit meetings can be a time for those staff to develop a three-minute presentation for the monthly "all staff meeting" where time will be set aside for everyone to share. Staff can take turns being the presenters. Make it an expectation that everyone shares something at each all-staff meeting. Encouraging staff to celebrate accomplishments can help avoid the perception of meetings being complaint sessions and can help increase communication and morale.

- **Consider systems that can safely solicit concerns before the staff meetings.**
  Secure boxes for anonymous topic suggestions can sometimes work, if management pays careful consideration to items submitted, and staff feel very safe inserting their comments. However, staff

often forget about the box or feel wary of being the only one with something to say. Enlisting the help of supervisors to discuss the issues in a smaller group or soliciting concerns on a one-on-one basis can sometimes lead to a better picture of what is going on in the frontlines. Supervisors need to build trust with the employees and assure anonymity. This may take some significant work with supervisory staff and will often take time to see the system working. Management should take care to not push supervisors to use names and will sometimes need to stop supervisors from accidentally providing names. Managers will also need to be ready to respond to all concerns. Consider whether it is most appropriate to respond at all-staff meetings, in writing (via a newsletter or memo), or in meetings with a small group of affected staff.

K. Addressing Stumbling Blocks During Implementation

It is essential for leaders to engage in understanding the issues faced by staff and to help them solve problems during implementation. Truly seeing firsthand the daily work of staff is important at all levels. Only then can everyone understand each other's jobs and how their own actions impact others. It will also help each unit consider implications for other units of implementing new processes.

As a leader, it is your job to help evaluate failures and turn them into learning opportunities. Disseminating this philosophy throughout the facility begins at the top. Being careful to practice this philosophy along the way is key to moving forward in the implementation process.

When implementation activities hit a stumbling block, it's useful to assemble a team of involved individuals (consider including others as "outside perspective") or to invite involved individuals to work with the team that generated the new idea and implementation process. Guide them through systems thinking (see section D, above) to problem solve. Remember to use the stumbling block as a learning opportunity and evaluate the solution.

Suggested Readings and Tools: Leadership

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Leadership assessment Web sites:

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http://www.optimalthinking.com/leader-assessment.asp
http://www.pib.net/assessment.php

Leading Through Change

- Engaging in strategic planning and systems thinking

- Constantly assessing the environment—internal and external

- Surrounding yourself with the right people for the job

- Building trust among staff and management

- Making communication a priority

- Engaging staff, families, and residents in key decision-making

- Empowering staff

- Providing tangible support to staff when needed

Systems Thinking

1. Define the problem

2. Explore the "Five Whys"

3. List key factors

4. Gather information

5. Brainstorm solutions

6. Identify key players

7. Communicate results and changes

Strategic Planning

Steps

✔ Assess the current state of the organization or unit

✔ Develop a vision (purpose) of where to go

✔ Determine the "gap" between current state and the vision

✔ Set a direction, including baseline goals, to close the "gap"

✔ Implement the strategic plan

✔ Evaluate the strategic plan periodically

Action Guidelines*

1. Address the "why" before the "how"

2. Knowing comes from doing and teaching

3. Actions speak louder than plans and concepts

4. There will be mistakes

5. Drive out fear

6. Avoid fighting within

7. Measure what matters

8. Spend your time wisely and provide resources

*Based on *The Knowing-Doing Gap* by Pfeffer and Sutton

Strategic Planning: Employees

The Right People

Skill match

Job match

Organizational match

The Right Hiring Plan

Plan for the hire

Network with others

Consider your needs carefully

Consider new ways of screening

Rely on others' feedback

Carefully appraise applicants

Building Trust Between Management and Employees

Be credible

Show respect

Be fair

Employee Empowerment

✔ Clear advancement opportunities

✔ Awareness of worker contributions

✔ Access to resources, information, and support

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V. Developing Teams

Changes in work practices, even when focused on a limited area, generally affect the work routines and information requirements of many workers. A common mistake in implementing change is to overlook the effects of change on the people who are indirectly involved. For example, when residents are given choices about the time they get up in the morning, there may be an impact on the schedules and work routines of housekeeping staff, nurses, nurse aides, therapy staff, and others. An important thing to remember is that workers are often affected by changes in ways that others cannot anticipate. It is always preferable to include affected departments or staff as the changes are implemented. Finding out after the decisions have been made put employees in a reactive position, often leading to resentment, making future collaboration more difficult. Creating teams to plan for change and to communicate these plans to their coworkers is an effective way to improve your chances of success and prevent problems. Keep in mind that significant practice and organizational change does not simply disseminate itself through an organization. Organizational uptake of change relies on concerted, skillful, and sustained effort. This section will help guide formation of teams and shape team missions.

Teams come in many forms. Teams can be formal or informal, permanent or only in operation to complete a particular project. The membership of a team might vary or remain constant over time. Sometimes membership is mandated by statute or policy, and sometimes you are free to select membership. Teams should be created for a purpose and designed to serve that purpose. For example, nurses and CNAs might see themselves as a "team" to organize and provide direct care to residents. An informal team might convene each day, at each shift change, to transfer important information about residents to the incoming staff. A team might be specifically formed to do such things as: 1) recommend which new bathtub the facility should purchase for residents; 2) decide how to reduce falls on a unit; or 3) plan the annual Christmas party. In each case, the composition, longevity, meeting frequency, time and place, and level of formality is guided by the particular purpose. If you decide to form a new team or teams to assist you in implementing the change you are planning, you might hear staff say, "We already have teams. We don't need another one." This may reflect a lack of understanding about how important it is to design teams for a particular purpose.

The following section addresses the development of teams specifically created to assist you in implementing change. These teams will guide planning and implementation throughout the change process. A useful way to think about formal teams created for a specific purpose is:

"A team is a small number of consistent people with a relevant, shared purpose, common performance goals, complementary and overlapping skills and a common approach to its collective work. Team members hold themselves mutually accountable for the team's results and outcomes."

—Katzenbach and Smith (1993)

Consider teams you've been part of in the past. Did they succeed or fail? Why do you think they succeeded or failed?

You might think about people on the teams who were a driving or detrimental force. Did they keep things going and make others feel good about participating? Were timelines too rigorous or slow, or maybe the mission of the team was unclear? Thoughtful preparation needs to occur in choosing which teams to introduce and when, choosing participants for those teams, setting goals and expectations for the teams, and providing information and resources for teams. The following pages will help guide you through this process.

Note: Your facility will no doubt already have teams with specific functions. If they are well-established, well-functioning teams, and are working on issues that are relevant to the change you are planning to implement, you might think about ways to link those teams explicitly to the planning and change implementation process. A few questions to ask about existing teams are:

- Has this team functioned well in the past?

- Will the change affect the work that this team has been doing? If so, how can the work be integrated?

- What contribution can this team make toward our new goal?

- What changes will need to occur within this team to fit with our new expectations?

- How does this team fit in the overall structure of other proposed teams?

A. The Basics of Teams

Care should be put into deciding how teams will be formed and into creating the right environment for teams to practice in.

Forming Teams

Depending on the purpose of the team, there may be certain people who are pivotal to the team's work and should be included. These may be appointed by the organization's leadership. Other members might be included because they can represent parts of the organization that should be represented. These members might be volunteers, nominated by their coworkers, or selected and invited by leaders in the organization. Others may be included because they are personally excited about the change, are respected by their peers, have expertise in a relevant area, or are interested in developing their skills or expanding their roles within the organization.

A common concern of managers is whether to select members or ask for volunteers. As a manager or leader in the organization, you may have a good idea about which of your staff have the most potential to develop into leaders or experts. Some of these individuals may be reluctant to join the team, not yet having the confidence to see how they can contribute. Encouraging these people to join the team may be just the opportunity they need to develop their skills, expand their roles, and become important resources for the organization. There will be others with potential who may not have come to your attention. Sometimes these people express interest in participating, but they may also need encouragement to join the team. Sometimes managers select staff who have been "restless" or have agitated for change, even seen as troublemakers. While this is sometimes a wonderful way to channel negative energy in a productive way, it should be done with caution. Most importantly, consider the perceptions of coworkers and their response to such a person on a planning and implementation team. Regardless of what you decide, staff who are accustomed to being in a role of agitator may need some direction in channeling their energy and efforts in a more positive direction. Whatever you decide as a strategy to select team members, be sure to bring diversity in staff type, location, and perspective.

Ways to Enlist Participants	Pros	Cons
Solicit volunteers	• Members bring enthusiasm to the team • Members will likely be prepared to commit to the work and mission • Anyone can participate; less chance of peer hostility • Diversity among representation • Uncovering hidden talent • Fresh ideas	• Most vocal may be the only ones to volunteer • May not have enough volunteers • May have too many volunteers • Participant group skills may be lacking (communication, conflict resolution, focus) • Some departments may not be represented
Appoint members	• Selecting those with the right skills set • Encouraging those with potential to expand their roles • Assuring diversity	• Might be viewed as "more work" • Tendency to rely on the same people who have succeeded in the past; can lead to feeling overburdened, stale ideas • Others' resentment of not being chosen
Nominations and voting	• Assures fairness • Can require a nomination from each department, ensuring diversity	• Tension between those voted in and those not chosen • Those not chosen might fight implementation of team recommendations or plans • Cumbersome, time- consuming process

Implementing Change in Long-Term Care

Consider your organization's stages of planning and implementation and which method would best fit the needs of the organization and the staff. Be prepared to deal with any of the cons that may arise during the process.

How many members?

Literature on the subject generally agrees that 6 to 10 members is an ideal number of team participants. Too few members and each will feel overwhelmed, and tasks will take longer. Too many members and it becomes more difficult to reach consensus and run effective meetings.

You will want to consider the number of departments your facility has and worker levels you would like to involve in your teams. If you have eight departments and would like a manager and frontline staff from each to participate, you can justify a larger group.

Integrating members from across the organization and ensuring management participation

Think broadly because it is valuable to include perspectives from across the organization, across shifts, and at multiple levels. A common decision when creating work teams is to put managers only on teams that deal with management decisions. This effectively isolates managers from important conversations with staff as they consider alternatives, discuss how the change will affect their work, and design their approach. Having managers on teams at all levels also increases the access that teams have to information that is relevant to their work. At the same time, it may become clear to managers and staff on the team what new information they will need to continue their work and to develop ways to gain ongoing access to that information.

Management Recommendations to the Team: Mission, goals, timelines

Management must walk a careful line between dictating the direction of the team and making recommendations. While a team's mission will largely be dictated by management's charge, there might be room for the team to help further shape the mission. Team input can be very valuable and potentially essential to the team's commitment to success.

Goals may also be partially shaped by management, but this can be a collaborative process. Management may have a few concrete goals that must be accomplished as part of a facility-wide project. However, the team will certainly want to understand why those goals are important and may have more goals to add to the list.

It is generally recommended that the team create most of its own deadlines and timelines, though there may be certain timelines for projects that have little room for negotiation. It is important for management to be clear up front why those are firm dates and carefully consider how much leeway they are able to give the group. Management can collaborate with the team to ensure enough time is allotted for activities and that timelines are reasonable. A common problem for new teams is being overly ambitious or allowing insufficient time to achieve goals. If the team suggests a timeline that seems too ambitious or too slow, it's important to refrain from judgment until you understand the team's rationale. Then you may suggest they give themselves a bit of flexibility. A conversation with the team can sometimes lead to both sides negotiating the most reasonable outcome. Working backward from goals, through all the changes that need to be made, the time for education and communication, meetings with different staff that will have input, and the need to develop new ways of working, will yield a more reasonable timeline.

Skills of team members

Regardless of how teams are formed, it's important to reflect on skills present in the team. If management is selecting team members, these skills can be sought when scanning the field. If the team is volunteer or election based, the team can still assess itself and discover areas of weakness. A guide to these skills is found in Appendix B.

Participation policies

It may be useful for management to create formal team policies that would apply to all teams in the facility. Uniform policies can lead to less uncertainty and more time spent on productive work, rather than figuring out what to do when something troublesome occurs within the team. It can also minimize potential pitfalls, such as lack of communication throughout the organization and tension among members. The issues policies might address are:

- **Attendance:** Is this a requirement? What are the acceptable reasons for missing meetings and how do you inform the team of absences? How will formal policies support the expectations?

- **Rewards or incentives:** Are there rewards or incentives? How will those be implemented?

- **Tracking work of the team:** Are progress reports expected? When, to whom, and in what form?

- **Communication expectations:** Will the team have a mechanism to communicate to everyone at the facility, including families of residents? What is the expectation of how often this will occur and in what form?

- **Length of service:** A one-year commitment is ideal. Will members be asked to continue longer if they wish or will there automatically be replacement at one year (or other determined date)?

- **Consensus versus unanimous decisions:** Consensus is a good method to make decisions when time dictates moving forward with plans, however, there can be "buy-in" benefits from making sure everyone agrees with a decision.

- **Resignation of team members:** What will happen when a team member resigns or quits the facility? How will a replacement be chosen?

- **Dismissal of team members:** What are the reasons a team member may be asked to resign? Who participates in that decision and is there a formal process to follow? How will a replacement be chosen?

Creating the Right Environment

- **Define and model norms and acceptable behavior**
  Teams also might need assistance from management in outlining acceptable behaviors and norms for the team. For example, discussing how conflicts will be handled within the team before they arise and creating a system to ensure all voices will be heard will increase the effectiveness of the team.

- **Develop the skills your staff will need**

  Many employees will have little or no experience running or even participating on teams and may need training or coaching in things such as running meetings, taking minutes, resolving conflict, or managing projects. There are many books and resources available for staff to learn these things (see list at the end of this section).

- **Ensure a nonhostile environment for teams**

  Teams may encounter hostility for their mission, their role as change agents, or even just time spent in meetings and working on projects. It is not enough for managers to verbalize support for teams. It is likely that team members will also need support finding time for meetings and project work. This support is generally more forthcoming from coworkers when they understand what the team is doing, see the staff member as their representative on the team, and appreciate the importance of the outcome the team is working toward. Understanding the goal and the work involved will also help alleviate feelings by coworkers that team members are "getting out of work" by joining the team. Little is more important to team members than the support of their peers. Even if coworkers understand and appreciate the team and its work, there are times when the staff member's absence from their usual work may create a hardship for coworkers. Finding a way to help "pick up the slack" will be appreciated by everyone and is a clear message about the importance of the team.

- **Creating templates**

  There are many ways an organization can help decrease team uncertainty and prevent chaos. Creating templates or guides for each team to use can help organize the work and increase the efficiency of the team. Suggested templates include:

  - Mission, goals, and tasks;
  - Agendas and meeting minutes*; and
  - Project outlines, including how it will impact various departments, residents, and families.

*Samples can be found in Appendix B.

Team Empowerment

Just like individual employees, teams work best when they are empowered to do their work. Managers often express concern that teams might make the "wrong" decision, come up with "unreasonable" solutions to problems, and create problems for the organization. Some things to keep in mind to support your teams:

- Grant the team some decision-making authority. You might start small to see how they are doing, increasing their authority as they grow into their role.

- Act as a coach to the team, not as a manager. One way to quickly undermine the effectiveness of teams is to usurp their authority, direct them in their discussions and decision-making, and worst of all, take the position of approving or disapproving all of their decisions.

- Allocate resources of time and money. Help team members find the time they need to attend meetings. Help them identify the resources they need and determine how to manage resources they control.

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- Support and coach the team to become more effective, rather than instructing them or telling them how to proceed.

Occasionally, managers may feel they are able to support a decision made by a team. Making it clear from the beginning just what decisions the team has authority over and the extent of resources available to them will often prevent this from occurring. Even when the manager has reservations about the decision, they should carefully consider the options and thoughtfully (and supportively) respond to the suggestions. Consider the following distinctions between managing and coaching, between "bossing" and "guiding."

Coaching	Managing
Exploring	Telling
Facilitating	Directing
Partnering	Keeping the authority
Focusing on long-term improvement	Focusing on the short term
Being open to many possible outcomes	Seeking or forcing a specific outcome
Seeing the team as a unit, as colleagues	Sees members as subordinates rather than colleagues

Derived from: Harvard Business School. (2004). *Harvard business essentials: Creating teams with an edge: The complete skill set to build powerful and influential teams*. Boston, MA: Harvard Business School Press.

Team Success
When setting up a team, there are several factors to consider that will increase the likelihood of team success:

- The right people to do the job are involved; consider skills necessary and additional training, such as "how to run meetings";

- The mission and tasks are clearly understood by the group;

- The team must combine their abilities to complete tasks;

- The organization, including peers, must be supportive of the team's work; and

- The team will have a sponsor at the administration level to act as an advisor and advocate.

There are several characteristics team members should have to increase team success:

- **Embracing change.** This doesn't mean everything must change, but it means the team members will need to have open minds about changes that may occur and challenge themselves to think about the positive aspects of change.

- **Becoming communicators in the organization.** Teams are key to disseminating information about activities, plans, and progress across the facility, thus it is important to tailor their communication to various audiences. For example, the amount of information and language used can be quite different when speaking to families versus CNAs or activity assistants versus administrators.

- **Choosing a good leader and creating clear roles for team members.** Voting on a leader and deciding who will be responsible for tasks such as taking meeting minutes and reserving meeting space are important. Assuming someone will become the natural leader and that the team will be happy with that outcome doesn't always work. Using a democratic process during the first meeting or having a leader appointed before the first team meeting sometimes helps prevent tension among team members and might result in the best person taking the leadership role. Team leadership also can be done on a rotating basis. This can help spread the workload and help staff develop "on the job." For staff who might be initially uncomfortable in a leadership role, this can be a valuable opportunity for them to see behaviors modeled and give them time to boost their confidence as a participating group member. It is important to avoid the pitfall of having the lowest paid or ranked employee take meeting minutes each time. Sharing this task is as important as sharing the leadership. Using a template, this tedious task can easily be rotated each meeting.

Developing Team Mission and Functions

While each team will have a different mission, there are elements that will be important for every team to consider as part of its charge.

- Teams will agree to evaluate their successes and failures and have clear parameters to do so,

- Teams will solicit input outside of the team when appropriate.

- Teams will reflect effective communication.

There are several ingredients that will need to be generally defined by leaders in the organization and will then be further refined by each team. Leaders should be ready to have a core set of expectations in each of these areas and work with teams to connect team mission, goals, and objectives to each:

- **Values** What are the core organizational values related to residents, families, staff and community? How does management expect each team to connect to these values?

- **Mission** What is the mission of the organization? What does it broadly hope to achieve? How will each team reflect the mission and form a connection to the larger mission of the organization?

- **Vision** What are the overall goals of the organization? How do they relate to the values of the organization and of the team? How is each team expected to contribute to the goals?

- **Philosophy** The philosophy is the organization's connection of values, mission, and vision. Teams may wish to develop their own philosophy in line with the organization's, yet related directly to their charge.

- **Goals** What the organization wishes to achieve should result in an extensive list of specific goals. The goals of teams should very carefully relate to the goals of the organization.

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- **Objectives** The organization may not have specific objectives related to the team goals, as those may all rest within teams. If the use of teams is minimal, more work on objectives may need to come from the top. Teams will need guidance on creation of objectives, however, the team will need relative autonomy in shaping those objectives, which should be carefully crafted. More on objectives is presented   later in this chapter.

B. Which Teams Are of Primary Importance?

Two types of teams can impact the likelihood of successful implementation of change in organization:

- **A team of leaders to shape the direction** of the projects or change within the facility, be a primary information source, and establish a firm link to administration; and

- **A team connected to frontline care**, linking initiatives directly to resident care.

Although there is not a cookie-cutter approach to what these teams should look like in each facility, there are a few important ingredients and processes you'll wish to consider. For the ease of consistent terminology in this guide, the two suggested teams have been titled the "Implementation Leadership Team" and "Care Team." **These are not to suggest a "model" of implementation with specific terminology, but rather names that are reflective of their general activities.**

Implementation Leadership Team (LT)

The role of upper management, and in particular, the role of the facility CEO or administrator, has been one of the least understood and least formally developed roles in some change models. Administrators have sometimes had a difficult time figuring out how to support implementation efforts. Many administrators have seen their role as primarily providing the resources for frontline staff to improve their skills and alter some of the direct care processes. For example, when asked about their role in change implementation, a typical response from an administrator might be:

> "My role is to support the staff to go to the trainings, and to provide resources that the staff asks for."

Providing resources and verbally expressing support for the program is important, but that alone is not sufficient for successful and sustainable implementation. Comprehensive knowledge about current organizational structures, processes, and information flow within the facility, and whether and how these are compatible with implementing a best-practice or staff empowerment program are imperative for the administrator to have.

The administrator and other management staff (director of nursing, maintenance director, dietary director, etc.), must be directly involved with implementation if change is to succeed. This greater involvement often requires altering communication systems and information flow, decision-making processes, and accountability systems. Additionally, the top management team members, including the administrator, will likely need to learn more about direct-care processes to assist supervisors in becoming leaders in the implementation effort in their specific areas and to alter authority structures to be more consistent with an empowered staff model.

When asked to reflect on what they might do differently or how they might advise another administrator just starting out with culture-change implementation, top management staff from the Wellspring Charter alliance suggested that administrators need to be involved in every level and facet of change implementation efforts. Their comments included:

"One of the biggest mistakes I have made, and continue to make as an administrator, is assuming that by talking to managers … and the changes our home needs to make—that they understand what it is I want to do. When they don't ask questions, I assume they understand. I assume they will ask questions if they don't understand!"

"I think you have to have the climate for improvement and making changes, even if it's just a matter of getting to the point of saying, 'We have to change things,' without knowing what it is you're going to change—I see a role for the administrator in doing that."

"Administrators have to be familiar enough with the details to know what it is people are trying to change.…"

"(You) have to remember it's not just nursing … (the) administrator has to pull together social services and dietary and whoever else and say, 'whatever we're changing, it cuts across all systems here.'"

Who Is Involved on the Leadership Team?

Membership of the leadership team should include, at a minimum:

- Facility administrator;

- Director of nursing;

- Department heads;

- Frontline care workers (CNAs, activity aides, etc.);

- Mid-level managers and supervisors;

- Unit nurses;

- Change facilitator (see below); and

- Both new staff and those that bring years of experience in the facility.

The makeup of the LT is purposeful and important. Membership is designed to include employees with authority to access and distribute resources and who have knowledge about the organization, direct care practices, and the work environment. LT membership is also designed to encourage commitment from all corners of the organization. Consider the following: If the implementation team only includes representatives from management, how will frontline staff be empowered? If the LT is only representative of nursing, how can cross-discipline collaboration occur? If the LT includes only long-term, experienced staff, how can new ideas and energy in your organization be tapped? If the LT includes only frontline workers, how can organizational change be expected?

A Useful Member: The Change Facilitator

Facilities should consider designating a change facilitator to oversee implementation activities. This person is at the hub of the action, staying connected on a daily basis to every aspect of the change initiative by linking all teams in the facility. The change facilitator assists with creating and sustaining teams, working with members of teams to identify and prepare for carrying out pre- and post-module implementation plans, and assisting teams to work effectively with each unit. The facilitator also will work with department and management representatives to develop support and accountability systems for implementation purposes. The facilitator requires an individual who is a savvy organizational worker. Consider seeking someone with many of the skills listed in Appendix B. Some of the activities the change facilitator may be engaged in include:

1. Identifying the skills and knowledge that teams and individual team members need to be successful;

2. Arranging for opportunities to gain any missing skills and knowledge;

3. Promoting a supportive environment for team activities;

4. Preparing staff with clear information from the LT;

5. Serving as a liaison between the LT and other teams; and

6. Managing the logistics of staffing teams.

The most successful facilitators will possess sophisticated organizational knowledge; interact effectively with staff at all levels of the organization including leadership and garner respect from staff. Successful facilitators also remain vigilant for ways to support implementation of plans; carefully anticipate how implementation plans will impact all levels of staff in the facility; and be able to assist staff in their implementation efforts rather than doing it for them.

If you designate a current employee to be the facilitator, consider how they will manage other duties. You will want to assure this person has time to do an adequate job of coordinating activities across the facility. While some facilities have joined together to hire a new position to undertake these duties, it may not be necessary or feasible in every facility. Consider your staff resources and how you can reallocate work to allow for the asset of a facilitator.

Mission

The LT will, at minimum:

• Set the strategic direction for change at the facility;

• Be a strong resource for staff;

• Define a uniform stance on how they envision change taking shape at the facility;

• Assure clear communication of implementation vision, tasks, and progress to all staff in the facility;

• Listen to staff comments and concerns, taking time to consider all feedback and respond;

- Perform assessments and gather necessary data related to the proposed changes, such as performing surveys, interviews, and staffing trends; looking at MDS data; and reviewing budget structures;

- Set benchmarks for the organization as a whole in meeting change goals;

- Define imperative support structures (teams, information sources) that need to be in place for change implementation; and

- Create formal accountability systems for implementation of changes.

A facility LT could address several common barriers or challenges to change implementation including:

- Insufficient awareness across the facility about the change in philosophy or practice;

- Uncertainty of administrative and supervisory staff about their roles in the operation and implementation of new philosophy or practices;

- Inconsistent implementation across units and departments;

- Difficulty in creating and sustaining teams;

- Lack of accountability;

- Challenges related to team implementation ideas (too costly, unrealistic, etc.);

- Inability of team members to access or understand facility data sources; and

- Communication and information flow that is inconsistent with the needs of teams, staff, families, and residents.

If you are planning to join or have joined a culture-change network, you will have access to expertise and experience that will help guide you through the implementation process. However, it is critically important to understand that no organization can be transformed by outsiders. When organizations rely only on outside consultants, educational programs, and/or the introduction of specific structures to change their organization, the implementation is less likely to be successful. The facility LT will have a lead role in preparing an assessment of the organization and identifying things to be done to make the organization fertile ground for the changes being implemented.

Assessment work by the LT will include:

- Ease of staff access to relevant data;

- Effectiveness of communication and targeted information flow;

- Focus of performance evaluations and link to desired behaviors;

- Link between staff development activities and care outcomes;

- Work environment quality; and

- Resident quality of life.

Time Commitment

Many have underestimated the importance of regular, prescheduled meetings in implementing major changes within organizations. LT members are seen as the primary staff resource for all change information, as well as role models. Having consistent, frequent meetings will assure the LT has current information at their fingertips and energy is sustained. Frequent meetings will help "keep the ball rolling" and will serve as a model to other teams in your facility. You will want to set up meetings well in advance to avoid scheduling conflicts. Decide early in the process how you will support attendance via backup staff or possibly a reward system. If conflicts should arise, it is important to decide how to handle those. If one person is absent, consider passing on careful notes, with tailored messages to that individual. If multiple people are absent, decide how to update other members of the LT about change activities in each department over the recent time period and any pressing issues that need to be dealt with immediately. One barrier that teams frequently encounter is pushing off starting tasks because all team members are not present. A suggested strategy: Get the absent team members' input before the meeting if possible. If you cannot obtain that input prior to the meeting: 1) Create a plan to start the task without that team member's input, but do not yet move ahead with that plan; 2) Engage one present LT member as a liaison for the absent member; 3) Have that person meet privately with the absent member as soon as possible to discuss the task and proposed plan and gather input; 4) Require immediate report of the results of that communication to the whole LT; 5) Decide if, given the input, you can all move forward with the plan or if you will need to revisit it at the next LT meeting.

Care Team: Linking Change to the Frontline

The care team (CT), again, is a generic term used to describe any team that is primarily concerned with linking project implementation directly to the frontline. It is not indicative of a particular model but is a team to consider assembling for the purpose of engaging important staff and assuring projects link to resident care.

The prominent industry trends of person-centered care and culture change is primarily about increasing:

- Care quality and consistency;

- The degree of collaboration across departments;

- The participation of workers across levels of the organization; and

- Organizational development to promote greater collaboration and follow-through.

As a consequence, workers at all levels become much more adept organizational workers. This extensive involvement of workers at all levels of the organization addresses one of the most significant causes of frontline worker turnover: the inability to participate in planning of resident care. It is not surprising that promoting such collaboration has resulted in a reduction of frontline staff turnover in many nursing homes.

The collaboration that is required for change implementation across organizational levels and creating a decision-making structure that engages frontline workers, mid-level managers, and upper management is what leads to a sense of worker empowerment. As collaborative decision-making proceeds, it becomes apparent that each worker has a vital part to play in both identifying the problems and devising solutions to those problems. This will clearly help link change activities to frontline work.

Mission

The purpose of the CT is to work collaboratively to:

- Identify problems in a particular area of resident care;

- Determine the source(s) of these problems;

- Select problems to address;

- Define the problems clearly;

- Identify the people who need to be involved;

- Develop a plan to address the problem (you may want to create a separate team to work on the issue);

- Mobilize the resources needed to carry out the plans;

- Anticipate and address any organizational challenges to implementing the plans; and

- Evaluate whether and how well the plans ultimately worked.

The efforts required to manage a facility's CT and its effective engagement in the organization are considerable. The change facilitator (described under "Leadership Team" above) could be designated to manage the CT.

Who Is Involved?

Because most clinical problems experienced in long-term care involve multiple worker types, multiple levels of the organization, multiple departments, and cross shifts, teams must model and direct the practice changes in the organization that will allow each organization to enhance clinical outcomes and improve the work environment. As such, an effective CT will include representatives from all the worker groups that will be involved in implementing practice changes. This will necessarily include: frontline workers, department heads, and professional staff from nursing, dietary, the therapies, maintenance, human resources, purchasing, housekeeping, activities staff, and management/administration.

Time Commitment

The CT should allow ample time for communication via meetings, yet also have time to progress with projects. Many have found that a biweekly meeting structure can accomplish these two goals. Meeting less frequently often dilutes the impact of the team and puts them in a position to catch up or put out fires, rather than being proactive. This also allows time to for the change facilitator to share and disseminate

communication between the LT and CT. You will want to set clear expectations for participation because floor staff might find it difficult to get away from their work. Try scheduling meetings when team members are not expected to be on the floor and work to minimize interruptions. Given that many CT members do not have an administrative component to their jobs, administration may need to clarify to the team member and their colleagues the necessary time commitment and provide support to colleagues who might be short- staffed. Additionally, the team member participating in the CT might feel guilt or fear of not being on the floor. Verbal support to that person from administration and other CT members and the support their colleagues remaining on the floor cannot be overlooked.

C. Linking the Care Team to the Leadership Team

It is important to integrate change structures and processes with the rest of the organization. A change facilitator plays a significant role in linking all the teams, however, leadership team (LT) members need to engage in other team membership within the facility. This achieves two things. First, it keeps managers informed about and connected to the changes that are taking place, preventing managers from unknowingly undermining what CT members are attempting to do. It is important to move forward together, not at odds. In some culture-change initiatives, managers were making decisions that were counter to what a CT had decided to move forward with. This can result in frustration of the CT members and create needless tension between managers and staff. This is most likely to occur when managers make decisions in the complete absence of knowledge about what the CTs are doing and how the managers' decisions might affect the team's plans. This can be avoided when the managers are familiar with the CT's plans and the logic and thinking behind the plans.

Note: Managers involved in culture change expressed concern that any involvement on their part might disempower CT members. To the contrary, evidence supports the importance of ongoing involvement of managers. It is important to remember that empowerment cannot occur when frontline staff are simply left alone to make decisions and carry out plans. This is a mistaken perception that can seriously undermine any change initiative. Empowerment requires information and resources. This will only happen when managers who are knowledgeable about the organization and the systems and processes within the organization are involved.

D. Other Teams

Together, the LT and CT may provide a strong backbone to your organizational change implementation, but these two teams will need more support to successfully research, plan, and roll out initiatives. Once you have chosen key changes and know how you would like to proceed in your facility, the supporting teams you'll need to form will become clearer. If you are undertaking a clinical-care focus, you can consider forming teams based on areas of clinical practice such as pain, incontinence, pressure ulcers, and similar categories. These teams could operate under the CT. Be selective in the number of teams you form, as having too many teams can become unwieldy and too few can be too taxing on each team. It is important to make sure the teams fit within a clear organizational plan and communicate with each other. The key changes, size of your facility, and pace at which you wish to roll out implementation will help you determine the number of teams you need. The change facilitator should be part of each team, assuring smooth operation and communication.

For each team created, it is important to include representatives from the departments that will likely be most affected, those that will be required to make significant changes in their work routines, those that have the most relevant experiential information about the issue, and those most likely to be opposed to the recommended changes. In addition, membership on the CTs offers a great opportunity to promote career advancement. Individuals, who have no obvious vital link to the processes that will need to be altered, but who express an interest in the area, are often very effective CT members. They bring enthusiasm and energy to the process and should be included, nurtured, and supported.

E. Involving Unit Nurses and Department Heads

The unit nurse plays a pivotal role in the success of the change. On units where nurses were involved directly in the implementation of changes and were well-informed and deliberately supportive of changes, implementation was likely to both succeed and be sustained over time. Conversely, on units where nurses were not interested or informed, implementation was likely to be weak and intermittent. In addition to being well- informed about what each of the teams is attempting to achieve, some unit nurses can become coaches and mentors for frontline staff on their units, supporting implementation plans and finding ways to help staff attend resource team meetings. This will increase the level of staff excitement and support for improving practice and a much greater likelihood for success.

Department heads of dietary, housekeeping, activities, and therapies have a similar impact on change implementation. Department heads making an effort to understand how their staff can be involved and actively supporting these efforts and assisting them to integrate the implementation activities into their daily work routines will dramatically increase the effectiveness of implementation. Trying to change without the active and well-informed support of a supervisor consistently led to disappointment and failure. When staff engaged in change attempt to "work around" unsupportive department heads or unit nurses, frontline staff become frustrated and often give up. For many staff, this has long-term consequences. They are unlikely to participate in future quality improvement efforts, and lose their excitement for practice change. They are also more likely to leave a facility.

It is important to include supervisory and mentoring activities in the performance evaluations of unit nurses, other supervisors, and department heads. Specific training in leadership, coaching, and mentoring is also recommended for this same group. Several nursing homes are now engaged in such training. Often the unit nurses, supervisors, and department heads who participate in these training programs express surprise at how helpful the programs are in their daily work.

F. Evaluating Team Progress

Think about what happens when a staff person goes to a training seminar. The person gathers new ideas, get excited, and returns to work, eager to share those ideas. A few hours into the day and those plans have been forgotten or dismissed by the person. The folder of information often goes on the bookshelf, and as the days get busier, nothing is put into action. What would help change that?

Any number of factors can influence the likelihood of moving from an idea to an outcome. Things that can assist teams and individuals moving forward include:

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- Removing barriers;

- Creating precise objectives;

- Measuring outcomes; and

- Providing direct, tangible, visible support for the change.

Removing barriers

As has been discussed in this section and the section on leadership, it is important for leaders to do more than just verbalize commitment. Removing barriers to participation in change initiatives and assisting teams in removing barriers to implementation are vital. For example:

> A team has decided CNAs on the night shift can assist housekeeping staff by doing residents' laundry during the overnight hours. There can be a number of barriers to consider. The CNAs might reject the idea as "not their job." How can you help encourage CNAs to see this as their job? Are you prepared to adjust job descriptions and enforce the new duty? Where is the laundry facility? Will it take CNAs off the unit if they do laundry? Can laundry facilities be moved so CNAs can stay on the unit? If washers and dryers are on the unit, will there be a noise problem? How can you eliminate that problem? The team and leadership will need to consider problems and clarify where management will need to take action to support the implementation.

Creating precise objectives

Team objectives should be carefully stated in writing. When a team is clear on a specific task they must accomplish, the likelihood of planning and implementation will increase. The team should develop its own goals, with management acting in a consultant role.

While team goals might be broad, objectives should be something that can be easily measured. For example, a broad goal for a care team might be to decrease staff turnover, leading to more consistent caregivers for residents. While facility data can measure this, over the long term it doesn't necessarily reflect why turnover happened or the work of the team in the short term. Objectives should clearly reflect steps the team is taking to reduce turnover. For example:

Objective 1: Create and administer a survey for staff to share reasons they might consider leaving their jobs.

Objective 2: Work with human resources to compile and review exit-interview data from staff who have left in the last 24 months. If exit interviews do not exist, perhaps the team objective could be to work with human resources to implement an exit interview process.

Objective 3: Identify the most common factors related to turnover and create a plan to address those factors. Create new team objectives based on the collected data and analysis.

These three objectives have identified short-term steps for the team to take, and progress on those objectives can be easily tracked by administration, peers, and the team itself. Broad team goals will be less overwhelming when objectives are precise and measurable.

Measuring Outcomes

If team objectives have been carefully identified and progress has been clearly tracked, it can be a relatively easy task to measure outcomes. The LT should develop clear and consistent criteria for how team success will be measured. Consider creating a measurement template. The items you address will be specific to initiatives and priorities in your facility and might include:

- Has the team created goals relevant to change initiatives?

- Has the team created goals relevant to resident quality of life?

- Has the team met consistently?

- Has the team maintained a diverse membership?

- Has the team communicated its mission, goals, and objectives to all facility staff, residents, and family?

- Has the team communicated plans and progress to all facility staff, residents, and family as appropriate?

- Has the team developed specific, measurable objectives?

- Has the team completed any of its objectives?

- Is the team making satisfactory progress in completing its objectives and identifying new objectives?

- Has the team's mission been completed, or is it addressing an ongoing need?

- Are there reasons to revisit the team's mission, goals, objectives, composition, or work plans?

Measuring outcomes can often be less daunting than interpreting and acting on outcome data. Each issue many not be best captured in a "yes" or "no" answer format. Measuring a team's success is complex and should incorporate the "big picture." The LT should carefully review team progress and discuss any action it would like to take regarding the team. The LT should work with teams to assure these reviews are not punitive, but are a tool to assure initiatives stay focused and continue moving forward at a reasonable pace. The LT should remember to treat the reviews as such. Outcomes of the team reviews should be discussed with the team in a nonthreatening manner, soliciting feedback on barriers that may be issues for the team. Consider developing plans for addressing LT concerns with the team. This may decrease team frustration and increase team buy-in.

Suggested Readings: Teams

Harvard Business School. (2004). *Harvard Business Essentials: Creating Teams with an Edge: The Complete Skill Set to Build Powerful and Influential Teams*. Boston, MA: Harvard Business School Press.

Katzenbach, J. R., and Smith, D. K. (1993). The discipline of teams. *Harvard Business Review*, 71(2), 111-120.

Katzenbach, J. R., and Smith, D. K. (1993). *The Wisdom of Teams: Creating the High-Performance Organization.* Boston: Harvard Business School Press.

Levi, D. (2001) *Group Dynamics for Teams*. California: Sage Publications, Inc.

Building Skills of Team Members:

Bens, I. (2005). *Facilitating with Ease! Core Skills for Facilitators, Team Leaders and Members, Managers, Consultants, and Trainer*s. San Francisco: Jossey-Bass.

George, J. A., and Wilson, J. M. (1997). *The Team Member's Survival Guide.* New York: McGraw-Hill.

SUGGESTED TEAMS AND POSSIBLE MEMBERS

Leadership Team (LT)

Leading the Change

CEO/Administrator

Director of Nursing

Director of Dietary

Human Resources

Director of Staff Development/Education

Director of Housekeeping

Director of Maintenance/Engineering

Change Facilitator

Medical Director

Care Team:

Bringing Organizational Change to the Frontline

Change Facilitator

Director of Staff Development/Education

Director of Nursing

Dietary Aide

Housekeeper

Unit Nurse

CNA

Social Worker

Activities Facilitator

Pharmacist

*Consider adding family members and residents to all teams in your facility.

Other Teams?

Fill in the blanks with other teams you might desire or need:

_____

_____

_____

_____

_____

_____

_____

Setting Up Teams for Success

- The right people to do the job are involved; consider skills necessary and additional training, such as "how to run meetings."

- The mission and tasks are appropriate to the group.

- The team must combine its abilities to complete tasks.

- The organization, including peers, must be supportive of the team's work.

- The team will have a sponsor at the administration level to act as an advisor and advocate.

Organizational Support of Teamwork

- Encourage employee participation.

- Integrate members from across the organization and ensure management participation.

- Define and model norms and acceptable behavior.

- Believe people are assets and should be developed.

- Ensure a nonhostile environment for teams.

- Create templates of tools for your teams.

Team Empowerment

- Grant the team decision-making authority.

- Act as a coach to the team, not as a manager.

- Allocate resources of time and money.

VI. Staff Education and Development

A. Effective Staff Development

All culture-change initiatives rely on change occurring at multiple levels of the organization to be successful. This requires staff to learn new things and to go about their work in new ways. As we all know, changing the way we work is not easy. The most common strategy to achieve this involves training, education, or staff development. Unfortunately, the degree of change that results from staff education or training programs is often disappointing. Despite well-planned and skillfully delivered training programs, real practice change has been difficult to achieve and even more difficult to sustain. This can be quite frustrating and can also cause conflicts and bad feelings among staff. When staff attend training programs and then seem to ignore what they have learned, continuing to work as they had in the past, we often interpret this as not caring or as deliberately undermining the effort. Typical responses to this lack of change or lack of sustained change include: reminding people of the change they agreed to implement; becoming angry that they are not cooperative; and finding ways to keep reeducating staff about the same things.

What's wrong with this? Research on continuing education and practice change in long-term care suggests that much of the current effort is destined to fail, that current staff development efforts are not consistent with what we know about how adults learn and how work practices change.

First, it is important to understand the difference between learning something new and using that new knowledge to change the way we do something. Clearly, not all new knowledge leads to change (new practice). We all have knowledge that we don't use, often to our own detriment (we all know that we would be healthier if we exercised every day, but most of us don't). The relationship between acquisition (acquiring new knowledge) and knowledge implementation (or practice change) is complex. Many things can prevent people from using knowledge they have, even when they want to use it and intend to use it. Fortunately, we know quite a bit about the things that promote (or block) knowledge use.

Experts in staff development and adult learning generally break down learning into three areas. These are:

- characteristics of the learn he knowledge is intended to be used.

- characteristics of the educational program; and

- characteristics of the work environment where the knowledge is intended to be used.

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B. Learner Characteristics

Learner characteristics include: demographic characteristics such as age or gender, motivation, and intelligence or ability. For many years, it was believed that these were the most important determinants of how well people learned. We know now that, while these have some influence on learning, they are not the most important. Research has demonstrated that, although there may be differences in how people learn, demographic characteristics do not affect someone's ability to learn. It is well established, for example, that adults learn differently from (but not generally less than) children and that older adults learn somewhat differently than younger adults, although they are still highly capable of learning new things. The important thing is to match the way people learn best with the learning environment. (More will be said about this match in the discussion about the learning environment.)

Personal motivation has also been seen as a very important personal characteristic that influences whether or how well someone learns. When someone attends a training program and doesn't seem to have learned much or isn't using what they learned, we often believe they are simply "not very motivated." If only they were more motivated, they would have learned what they needed and put it into practice. Two things are important to understand about motivation. First, many people who are highly motivated, who really want to make improvements in their work, do not actually change much of their practice. To say that again, people who are highly motivated, who learn well and intend to use that knowledge, often continue to practice the "old way." This is frustrating for everyone.

There are some important things to know about motivation. We generally think of motivation as something within a person. She or he is motivated or not. We know from research that motivation is more influenced by the environment than it is by a personal characteristic of the learner. This means that someone who seems unmotivated will become quite motivated under the right circumstances. One of the most important influences on personal motivation for learning is the attitude of the learner's direct supervisor. A supervisor's interest in the learner, explicit recognition of the efforts made by the learner, and encouragement to learn new things and bring them back to the unit all have quite an impact on the motivation of the learner to attend educational sessions and to use what is learned. Recognition encouragement and support from peers and subordinates also affect motivation to learn. Workers who feel they will be chided or ridiculed or simply not appreciated for what they have learned and what they can bring back to the work setting are unlikely to feel very motivated about attending an educational session. These issues are all related to the work setting, not the learner or even the educational program.

It seems that personal confidence is one characteristic of a person that can influence learning. Sometimes this is a long-standing personal trait and does not respond significantly to the work environment. However, it has been shown that personal confidence can be maintained, increased, or undermined by the work environment, particularly by the direct supervisor. Therefore, finding ways to bolster a learner's confidence about learning the new material and being able to share it and use it upon return will increase motivation to learn.

Obviously, the supervisor and others in the work environment are important determinants in whether the staff learn, how well they learn, and whether they are able to make the desired practice improvements. Let's look at some ways that supervisors, in particular, influence workers' ability to learn. Supervisors can

identify staff who they believe will be able to take a lead role, or an important supporting role, in practice change. Hearing that your supervisor believes you would be good at something and would like you to help the unit make some changes can be both confidence-building and motivating. Supportive supervisors can also anticipate negative reactions from peers or other obstacles to implementing new practice or using new knowledge, heading off disappointments. Supervisors play an important role in assessing whether work routines will be disrupted by implementing a new practice and can work with the learner and other staff to prevent this—to find ways the environment can adapt to be supportive of the change.

C. Training or Educational Environment

The method of delivery and the educational setting also are very important for effective learning. Environment includes both the physical setting and the way the program is conducted. For example, the physical environment must be comfortable and free from distractions and competing demands for the staff attending an educational program. In terms of the teaching methods used with adults, we know a considerable amount about how adults learn best, assuming they are in an environment conducive to learning. Some things to remember about adult learning are: Adults learn best when the relevance of what they are learning is clear or is made clear. Information that is assessed as not relevant is unlikely to be retained. Adults are generally very goal directed, especially in work-related learning experiences. This is similar to the requirement for relevance because adults learn best when they know why they are learning something and can see a clear goal that might result from using the new information or skill. Adults are also likely to come to an educational situation with a wealth of experience and often a familiarity with the topic of instruction. As adults learn, they are constantly thinking about the new information in the context of what they already know, in the context of their own experiences. Acknowledging what adult learners bring to an educational program, what they already know, and what they are concerned about, and relating these things explicitly to what they are learning will increase their ability to integrate the new information effectively.

D. Supporting Learning in the Work Environment

Probably most important and certainly most often ignored is the impact of the work climate that the worker will return to after the training session. Very often there is little or no explicit mention of what the staff member learned or even acknowledgment that they attended an educational program. What happens when the worker returns to the work setting determines, to a large extent, whether the new information will be used at all, used temporarily, or will actually lead to sustained change. There are several things that influence the use and sustainability of new learning. One of the most important factors is recognition (preferably by supervisor and peers) that the staff member attended a program and that the new information is valuable to everyone. In addition to recognition, providing opportunities for the staff member to use the new learning and to have opportunities to practice what they have learned is an extremely important factor in sustaining practice change. Practice opportunities help to integrate the new knowledge with old routines, allowing the learner to figure out how to change the way they work most effectively. Practice opportunities, ideally with oversight from the supervisor, allow the learner to identify how to adapt what they have learned to the many varying circumstances encountered in daily practice. It is discouraging to try out new ways of doing things only to find that the situation is different from that discussed during the

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educational session, and it is not clear how to proceed. Supervisors can help immensely in this situation. Together the supervisor and the learner can determine how the knowledge might be adapted to each situation until the learner is comfortable doing that on his or her own.

Effective staff development requires careful planning, attention to the needs of the learner, and a high level of integration between the training and everyday practice. Learning that takes place in isolation from the daily work or that is not supported by organizational policy, access to information, and acceptance from peers and supervisors is destined to fade away.

E. Mentoring

Recent data places the turnover rate for direct-care workers in Wisconsin nursing facilities between 99 percent and 127 percent (Dresser et al. 1999), and the Governor's Health Care Worker Shortage Committee reported a turnover rate of 72 percent in 2000. A study by Sager (2002) estimated that it costs approximately $2,500 to replace one certified nursing assistant while a study by Dawson and Surpin (2001) placed the estimate at between $1,400 and $4,300 when the increased managerial expenses, lost productivity, and recruitment and training costs are figured in.

High staff turnover has been associated with higher levels of federal deficiencies, more resident pressure sores, and increased complaints filed against facilities—all of which translate into negative quality of life for residents (Dresser et al. 1999). High turnover also affects the employees who remain with a facility. As less staff is available, those who stay are often moved from one unit to another to provide necessary coverage. Many CNAs feel that they need to establish and maintain relationships with residents to provide "good caregiving" (Bowers, Esmond, and Jacobson, 2002). When CNAs are moved from unit to unit, establishing and maintaining any relationships with residents is difficult, if not impossible.

Reasons for Turnover

A number of studies have tried to identify the primary reasons for turnover of direct-care workers in all settings, including nursing homes, assisted living, and home health care settings (Banaszak-Holl and Hines, 1996; Dawson and Surpin, 2000; Dresser et al. 1999; Wilner and Wyatt, 1998; Bowers, Esmond, and Jacobson, 2003). Primary sources of staff dissatisfaction and turnover include:

- Lack of opportunity for career advancement;

- Lack of respect and support from administrators and direct supervisors;

- Lack of permanent and predictable client assignments;

- Lack of autonomy or involvement in decision-making;

- Unreasonable work loads;

- Inadequate or poor training;

- Low pay; and

- Limited benefits.

Though low pay has been identified as a primary reason for job dissatisfaction among CNAs, issues that are related to what the Wisconsin Governor's Health Care Workforce Shortage Committee (2002) referred to as "the internal employment culture" appear to influence the decision to seek other employment. One of the recommendations outlined in the committee's report was to "transform the internal employment culture to a culture where health care staff are valued." Initial attention, it further stated, was to be given to such "internal culture" elements as: creating mentoring programs; increasing employee satisfaction; improving internal employee relationships; developing collaborative work models; and increasing leadership, professional, and occupational development opportunities. The Certified Nursing Assistant Recruitment and Retention Pilot Project in Iowa in 2000 surveyed CNAs and found inadequate job orientation and levels of training as the top CNA concerns. Nurse supervisors, in the same study, reported having similar concerns, citing a lack of authority to see that CNAs get the training they need.

F. What Is Mentoring?

A mentor is defined in the dictionary as "a wise, trusted advisor … a teacher or coach." A mentor is someone who helps someone else learn something the learner would otherwise have learned less well, more slowly, or not at all.

Historically, mentoring has been seen as an oftentimes older, more experienced, and wiser person guiding a younger and untested person through a life passage. It is often a long-term relationship in which the protégé is guided, counseled, and assisted in mastering the skills and gathering the knowledge necessary to assure success in a particular endeavor. A healthy and successful mentor/protégé relationship will move from one of relative protégé dependence at the beginning of the relationship, to one of autonomy and self-reliance as the protégé grows into a colleague and peer.

From the mentor's perspective, being identified as a mentor often provides a sense of accomplishment and value. Staff who are chosen or choose to mentor are often respected for their skills and leadership abilities and have a sense of commitment to the career that they have chosen, as well as to the facility where they are employed. Though the mentee or protégé is seen as the main beneficiary of the relationship, the mentor can gain satisfaction knowing that he or she has contributed to and influenced the next generation of workers. Mentors often report a deep sense of fulfillment and accomplishment as a protégé succeeds. The protégé or mentee can look upon this relationship as one that can be beneficial in the long-term and short-term, as skills are honed and helping relationships are established. The protégé can be assisted and supported to understand the informal systems of an organization and receive guidance in how to be successful in the organization.

Benefits to Successful Mentoring
According to Stone (1999), there are 10 benefits to mentoring your own employees:

- Faster learning curves;

- Increased communication of organizational values;

- Reduced turnover at a time when new recruits may be hard to find;

- Increased loyalty;

- Improved one-on-one communication and a sense of team within the work group;

- Increased employee productivity;

- More time for yourself;

- Additional corporate information;

- Creation of an innovative environment; and

- Allies for the future.

G. Successful Mentoring Programs

Several groups have successfully designed and implemented mentoring programs for certified nursing assistants. Though the approaches vary, the goal of addressing inadequate or poor training and a lack of opportunity for career advancement is the focus.

The Certified Nursing Assistant Recruitment and Retention Pilot Project (2000), coordinated by the Iowa Caregivers Association (iowacaregivers.org), was initiated to help with the retention of CNAs, as well as to attract new workers to the field in specific counties in Northwest Iowa. The Iowa Lakes Community College Continuing Education Department developed a CNA Mentor Training curriculum. This was piloted by a qualified CNA instructor to assist current CNAs in developing skills as mentors to new CNAs. The CNA mentor program reported three positive outcomes from this initiative: 1) CNAs report enhanced professionalism; 2) Providers reported retaining workers longer; and 3) Patients and consumers receive increased quality of care provided by a more stable workforce.

A second successful CNA mentoring program was developed in 1997 by Mark S. Noble, the executive director of Luther Manor in Dubuque, Iowa (***www.luthermanor.com***). Train the Mentor: A Training Program for Long-Term Care Workers was designed to reduce CNA turnover rates, establish a CNA career ladder, and improve the training and support of new nursing assistant staff. During the first year, the CNA turnover rate dropped from 102 percent to 39 percent, and this rate has almost consistently remained under 40 percent since then, according to personal correspondence from the retirement community. Train the Mentor has been published (Simon & Kolz Publishing) and is available for purchase for those interested in implementing a complete mentoring program within their own facilities.

Masonic Home of New Jersey implemented a long-term care preceptor program in 1989. This same facility received a 1997 National Gerontological Nursing Association Innovations in Practice Award in recognition of its efforts. "The Preceptor Program" has decreased overall staff turnover from 53.4 percent in 1988 to the current level of 19 to 20 percent. Additional benefits have included: positive new employee comments regarding the program; an increase in morale as turnover rates decreased; and a reported increase in job satisfaction and self-esteem among preceptors, according to Cindy Shemansky, director of education for Masonic Home. New Jersey Department of Health survey results also revealed an increase in

compliance with state and federal regulations since 1989, as well as savings of thousands of dollars each year with decreased expenses related to turnover. See Appendix C for an outline of Masonic Home's "The Preceptor Program."

These three programs have successfully addressed two issues that CNAs have identified as reasons for leaving: 1) A lack of opportunity for career advancement; and 2) Inadequate or poor training. During the development and subsequent implementation of these programs, several additional elements were identified as critical to the success of the mentoring initiatives:

- **Management must believe in the idea and demonstrate support for a mentoring program.**
  Training programs for administrative or management staff and supervisors will ensure that there is a smooth transition for the newly trained mentors and reflect the commitment that the facility has to CNA development.

- **Incentives, such as title changes, wage increases, opportunities for additional training, and increased involvement in care planning and various aspects of staff development are recommended.**
  By creating a mentoring program that offers advancement opportunities and additional pay, employers demonstrate that they value the skills and experience of mentors and frontline workers.

- **A combined process of formal application and interview is suggested for selecting mentor candidates.**
  The application process will allow those with an interest in mentoring to step forward, while the interview process can be flattering and serve as a bonding process between mentors and management. Providing a self-assessment tool such as The Mentor Scale (see Appendix C) will help prospective mentors evaluate their gifts as well as their "blind spots." Knox and McGovern (1988) identified six important characteristics of a mentor:

  - A willingness to share knowledge;
  - Honesty;
  - Competency;
  - A willingness to allow growth;
  - A willingness to give positive and critical feedback; and
  - Directness in dealings with a mentee.

- **Mentors need to receive proper training on how to mentor and train new employees.**
  Whether an in-facility training program is provided, as in Train the Mentor, or training is provided off site, such as that used in the Iowa Caregivers pilot project, guidance must be provided to those who are expected to guide and mentor others. Mentor training skills to build supportive relationships include: leadership skills, interpersonal communication skills, teaching and coaching skills, as well as problem solving skills.

- **Facility leadership must provide opportunities for CNA mentors to meet regularly encourage sharing of experiences during the mentoring process.**
  Creating and supporting a mentor support group will ensure that mentors will have a "safe" environment to verbalize concerns about their positions, as well as to receive advice and emotional support from their colleagues.

- **Effective mentoring programs reflect content that considers the developmental tasks that both the mentor and the protégé are facing.**
  The protégé often is in early adulthood where the primary task is one of initiation into the workplace while dealing with personal developmental issues related to identity and intimacy. The mentor, by comparison, may be addressing professional reappraisal, assessing life accomplishments, and readjusting lifetime goals, while responding to opportunities for passing on accumulated wisdom and skill. Failure to consider the developmental levels of the mentor and the protégé will certainly lessen the effectiveness of the mentoring experience and may even be detrimental (Head, Reiman, and Thies-Sprinthall, 1992).

- **A common pitfall of the mentoring process is the failure of one, or both, of those involved to allow the relationship to evolve or change over time.**
  For example, after a mentor/protégé relationship has been established, encouraging a protégé to develop a "mentor mosaic," or a network of secondary mentors, will lessen dependence on the primary mentor and assist the protégé in developing self-reliance, as the protégé learns to assess needs and utilize multiple resources are available.

- **Care should be taken when matching the mentee with a mentor.**
  Attention should be given not only to a proper skills fit, but also to compatible outlooks between the mentor and mentee. The mentee should understand the mentor's role, expectations, and length of time that the relationship will be formally supported by the facility. This will allow for informal relationships to occur and continue.

The Paraprofessional Healthcare Institute Web site (paraprofessional.org) identified an additional key program design element that needs to be addressed before a mentoring program begins. Workforce Strategies, No. 2, May 2003, issue says that a specific job description should be developed to guide the responsibilities that the new mentor will need to fulfill. Appendix C contains a copy of its recommended Certified Nursing Assistant Peer Mentor job description. Appendix C provides an example of a job description for CNAs participating in a CNA peer mentoring program, provided by the National Direct Clearinghouse on Direct Care Workforce Web site (directcareclearinghouse.org/practices).

Several other tools for mentoring, such as mentor skills, a mentor scale, and sample program can be found in Appendix C.

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Avoiding Turnover

✔ Provide career advancement opportunities

✔ Show respect

✔ Consider permanent and predictable assignments

✔ Support worker autonomy and involvement in decision-making

✔ Support reasonable workloads

✔ Provide sufficient training and coaching

✔ Consider pay scales

✔ Consider employee benefits

Why Use Mentoring?

- Faster learning curves
- Increased communication of organizational values
- Reduced turnover at a time when new recruits may be hard to find
- Increased loyalty
- Improved one-on-one communication
- Sense of team within the work group
- Increased employee productivity
- More time for yourself
- Additional corporate information
- Creation of an innovative environment
- Allies for the future

Why Become a Mentor?

- Sense of accomplishment
- Sense of value
- Respect
- Develop leadership abilities
- Build relationships
- Potential to impact greater good

VII. Preparing for Change

A. Introducing Change in Your Facility

As an initial step to implementing change in your facility, it is important to create a general awareness about what the key philosophy is and why you have decided to embark on the changes. Based on conversations with many care staff and managers involved in change, this initial step is not always done as carefully as it could be. Reasons for this seem to include lack of clarity on the part of managers about just what the philosophy and changes are and inadequate planning for facility-wide inclusion in the startup process. This has important consequences. When there is insufficient awareness about the program, staff may be left wondering what the new initiative is all about, or worse, not knowing about it at all. Being clear that there is a commitment from the top of the organization, and that the program is neither short-term nor confined to isolated areas of the organization, is necessary for staff in the organization to take change seriously. Unless this is done carefully, there is a risk that most staff will see the program as "someone else's concern" or "just a passing fad."

B. Anticipating Questions from Staff

Successful implementation seems to be dependent on creating a facility-wide belief that organizational change is everyone's concern and that, importantly, there is a role for everyone to play in its implementation. Promoting the belief that everyone has a role to play relies on a clear understanding of just what those roles are. It is crucial for the facility Leadership Team (LT) to have a clear understanding of these roles and to be able to describe them in a way that staff, across the organization, can see themselves in the program. Questions from staff that the LT can expect and must be prepared to respond to include:

- What exactly are we trying to achieve?

- What is wrong with the way we are currently doing things?

- Does this mean I will have additional responsibilities?

- What are the systems that will be used to communicate as the program is implemented?

- What exactly will be different for me?

- Will this ultimately make the care we provide here better? If so, how?

- Will this affect my relationships with coworkers? If so, how?

- What if I don't have the skills or knowledge to do this?

- Will I relate differently to those above and below me in the organization? If so, in what ways?

- Will I or others be held accountable? If so, how?

These are questions that the LT must think carefully about and be prepared to discuss as the changes are initiated. It is assumed that the LT will engage in considerable discussion about these questions before presenting the changes to the organization. It is not necessary that the LT be able to answer each of these questions for every worker in great detail, particularly in the early phase of introducing commitment to change. However, it is vital that these questions be addressed and considered and that the LT understands that, eventually, these questions need to be addressed for all workers in the organization. Otherwise, organizational change will be seen as something "extra" to do, something that is added to—rather than integrated into—daily work. When change is viewed by facility staff, and especially direct-care workers, as something that is "added on," it has little chance of being successfully implemented or sustained.

C. Specific Strategies to Introduce Changes

Some strategies that can be used for introducing new philosophies and changes include:

Public discussions and educational session about the need for changes in care delivery and hoped-for outcomes. Discussions must be held at multiple times and in multiple places to be effective. This means all three shifts, each unit and department, resident and family councils, and any formal gatherings of staff, residents, and family. It might also be helpful to include physicians, medical directors, and nurse practitioners who attend residents in your nursing home. Physicians and nurse practitioners can be an important source of information regarding the impact of implementation on resident outcomes. They can also provide insight into the quality and comprehensiveness of reports and documentation on resident conditions, which should be positively influenced by the implementation of the changes.

Scheduled forums to discuss expected changes in staff roles and relationships. Such forums could be used to make expectations clear, while also allowing staff to ask questions and make suggestions about the evolution of their roles. This will be slightly different in each organization and will likely evolve over time.

Regular reporting from the Leadership Team on findings from its ongoing organizational assessments. Success of implementation relies heavily on the accuracy of data about resident outcomes and staff work environment, the effective use of information about the organization, and how well the staff is able to use data about resident care outcomes. It is important to remember that the work of the LT must be integrated with the evolution of the organizational change. This means the LT's findings must be made available to staff, and the implications of its findings must be discussed, at a minimum, with those who will be using the information.

Examine the systems of communication used in the organization. Assess whether and how these systems will serve the implementation plan, and identify places where these systems need to be modified. In particular, this should include discussions about what information is needed, by whom, and when, so that systems are established that will automatically do what needs to be done (rather than relying on an individual staff to remember). Points at which information flow is blocked or tends to be delayed should be identified and addressed. It is helpful to create a checklist or information flow chart whenever long-established communication systems are being examined or altered.

Create a system to determine whether follow-through on each of the above areas is occurring. There is often a significant difference between perception and reality on how well goals are being achieved and how well staff are following through. This is true for both direct care and organizational practices. Objective accountability systems that provide actual evidence for degree of follow-through are extremely helpful to identify.

Can you identify clear and convincing evidence that what you perceive is occurring in your facility related to communication and follow-through actually is occurring? If you are able to do this, the likelihood of successfully implementing change in your facility increases significantly.

D. Prior to Engaging in Organizational Assessments

Undertaking change requires a careful organizational assessment to be clear about your starting point and create a reference point for later comparison. An organizational assessment will yield crucial information about how your organization works and what structures and processes might need to be altered to reduce frustration during implementation, maximizing your chances of success. Direct-care staff and management staff alike can quickly become impatient with the assessment component of change implementation. In short, there is a tendency to jump to solutions before accurately determining the nature of the problems and to base conclusions on superficial impressions that may or may not be supported by hard evidence. For this reason, a comprehensive assessment, led by the LT and requiring direct observation rather than relying on reporting of others, is suggested as a starting point for change implementation (this manual includes exercises designed to facilitate this process).

Undertaking major organizational change, implementing successfully, and transforming your organization will require your organization and its staff to work hard. Assessing items within your organization will require significant commitment on the part of the LT. Prior to conducting an organizational assessment, your LT members must be familiar with challenges associated with long-term care quality, particularly with regard to the following areas:

- **Ability of CNAs to participate in care planning.** Probably the most consistent research finding is that CNAs feel left out of care planning for the residents they care for. As with other issues already discussed, CNAs and other staff seem to have different views about what it means to "participate in care planning." Nurses often point to the important information that is brought to them by CNAs and how that information is important for care planning. This is viewed as "participation in care planning." CNAs on the other hand do not see this as adequate. Providing information for someone else to make a decision is not the same as being involved in the decision. This is an important distinction that, unfortunately, is often not appreciated by unit nurses and other managers.

A Practical Guide to Transformation

- **Questions for the LT to consider:** In addition to providing information to the nurses, how are the CNAs in your facility participating in the resident care planning process? Do they feel as if they are true participants? How do you know?

- **Effectiveness of communication across shifts.** Cross-shift communication is a challenge in almost every health care environment. In long-term care settings, lack of effective communication across shifts is a source of anxiety and frustration for families and residents and undermines carefully designed clinical interventions. Families and residents frequently report that important information about their loved one, as well as simple requests made to staff, are not transferred from one shift to the next. These "simple" things are often important quality-of-life issues for residents and family members. Vital information about clinical practice interventions frequently suffers the same fate, leading to interruptions and delays in care.

- **Questions for the LT to consider:** What is done to prevent such information from being lost? If information related to a family member or resident request or related to clinical practice change were given to someone on the staff and you tracked what happened to it for three days, what would you expect to find?

- **Care provider access to and use of data about unit level outcomes.** Staff are quite good at describing what has happened to a particular resident in a particular care area. However, most staff would not be able to say how their unit is doing overall or over time in any of several care areas. This would include an inability to describe trends over time on their unit in functional ability, continence, weight gain, or participation in activities. It is important to appreciate the distinction between understanding an individual resident and understanding the resident population on a unit.

  What happens to an individual resident can always be explained by particular circumstances, idiosyncrasies of one resident, or staffing problems that occur during a particular time. When confronted with data indicating a poor outcome for a particular resident, staff often see this situation as "unusual." They will often say (and believe) that the situation has been corrected or that it is so unusual as not to merit any corrective action. Not seeing the proverbial forest leads to inaction, while allowing the staff to maintain the belief that nothing needs to be done. For this reason, it is vital to provide staff with data about how their local environment (unit/shift/department) is doing and how the residents receiving care in that local area are faring. It is quite difficult to dismiss data that shows trends over time, that defies what may appear to be the case, and that cannot be explained away by unusual circumstances or residents.

- **Questions for the LT to consider:** Can staff on a selected unit tell you what trends have been over the last month? Last year? What about trends in weight loss for low-risk residents? What about depression without treatment? What about other care outcomes? Can they tell you how they compare to other units? To the United States as a whole?

- **Unit nurses' supervisory skills.** For 25 years, research in long-term care has suggested that the supervisory skills of the unit nurses are crucial determinants of CNA work life quality. Despite this, there has been little attention paid to this important area. While some nursing homes have attended to the development of supervisory skills in their RNs, most facilities have neither assessed nor promoted this

area of skill development. The collective wisdom of available research would suggest that this may be the single most important factor in frontline staff turnover.

- **Questions for the LT to consider:** What training have nurses in your facility had on supervision, delegation, collaboration, and leadership? How important do nurses think these skills are in the work life quality of CNAs? Do nurses in your facility enjoy supervising? Are they comfortable with it? Are they evaluated, in part, on their effectiveness as supervisors? Do they have mentors to help them develop these skills?

- **Link between actual work and staff development.** Frontline staff have identified their lack of preparation in several areas as a source of frustration and work stress. While in-service programs are often interesting and sometimes helpful, frontline staff often find little or no link between what they are learning and what they need to know to do their work. Sometimes this is as simple as making the link more explicit. Many times, it also involves assisting the frontline worker to develop new care approaches that would allow them to integrate the new learning. Changing approaches to care would, necessarily, involve others who also care for the same resident. Only with collaborative decision-making and a change in the way the group approaches care can new skills and knowledge be put to use. CNAs have identified the inability to use new skills and knowledge as a negative aspect of their work.

- **Questions for the LT to consider:** What happens on each unit or each department when a frontline worker—or other worker—returns from an in-service program? What, if anything, is done beyond information sharing? Are the implications for care delivery routinely discussed? What does the department head or supervisor do, explicitly, to promote the integration of new learning into the care or service? How successful has this been?

Many care quality and work life quality problems can be prevented. Unfortunately, the quality systems necessary to do this are often not in place. The questions above were provided in an effort to get LT members thinking about the quality systems that currently exist, or are lacking, in your facility. Interestingly, research continues to identify the same issues (like those above) as obstacles to quality in long-term care. The good news is that the apparent obstacles are largely limited to a set of issues that is well recognized. The bad news is that we have done little about these issues in the 30 years since they were first documented.

NOTE: Keep in mind that the majority of nursing homes do not have effective quality- improvement systems in place. Consequently, maintaining and sustaining quality- improvement initiatives becomes difficult, if not impossible. As in other health care settings, failure to achieve or sustain desired changes in care practice is often seen as a problem with individual care providers (they forget what they are told; they don't believe that it's important; they become distracted and fail to follow through; they leave and new workers must be taught). The usual remedy, therefore, is to educate and train the staff. Repeatedly, this approach effectively prevents many organizations from making the system-level changes that would lead to improved outcomes. An important departure from this is the appearance of nursing home change initiatives.

Strategies to Introduce Change

- Public discussions and educational sessions about the need for changes in care delivery and hopes for outcomes

- Scheduled forums to discuss expected changes in staff roles and relationships

- Regular reporting from the LT on findings from its ongoing organizational assessments

- Examination of the systems of communication used in the organization

- Creation of a system to determine whether follow-through on each of the above areas is actually occurring

VIII. Conducting Organizational Assessments

Introduction

It is recommended that the LT conduct a number of organizational assessments intended to address overall quality of care and how care practices enhance resident quality of life, overall quality of work life for staff, and the basic clinical knowledge of staff. A number of questions have already been put forth for the LTs consideration (see Preparation Activities, Section IV), to encourage team members to think about how systems and processes in their facility support these important quality areas.

To further explore how your organization is addressing quality assurance and quality improvement, LT members are encouraged to discuss the following questions early in their work, as a group, in an effort to assess their own general understanding of the facility:

- What sort of objective accountability do units have to the next level of management?

- Is there a way to know how each shift/unit/department is doing in a clinical area, or is there only facility-level data available?

- Are there quality-improvement activities occurring in each department? What are these, what have they revealed, and what has been done about them?

- What generally happens to areas identified for quality improvement? How well and how long are corrective interventions usually sustained? Why have they succeeded or failed?

- Are departments or units expected to honor resident preferences? How is this expectation made clear to staff? What happens when resident preferences are not honored?

- How do educational or staff development programs address the needs of frontline staff? What involvement do these staff have in selection of topics? How do unit routines assist staff to use what they have learned?

- Identify three staff development efforts that have come directly out of practice problem areas identified by either staff, families, or the MDS database (or one from each).

- How many of your management staff have participated in trainings related to conflict resolution, coaching and mentoring, delegation, and other areas? Name two ways this training has been utilized in your facility.

- What do present CNAs, as well as those who have left the facility recently, think about the work environment? Do you have systems in place to find this out? What specifically has been done with the information?

- Do you have mechanisms to elicit resident feedback, and what has been done with the feedback? Who has access to this information?

As you review the above questions, ask yourself: Do I know the answers to these? Do I know without looking them up or asking someone else? Does anyone know? What could be done to increase the effectiveness of these processes? If you discover you are unable to respond to these questions, do you know whom in your facility to ask? Do you know how to find the answer? If you don't know the answer and don't know who has the answer, this raises important questions about how well your organization is set up to respond to best-practice changes that come with change implementation. It suggests that systems will need to be created so that, in the future, you and many of your employees will know the answers to questions like these.

These are some areas you may wish to assess:

1. Clinical care quality

2. Resident quality of life

3. Workplace quality

4. Clinical knowledge

Assessment packets for each of these four areas are provided below. Accompanying worksheets (Attachment 2) and reading guides (Attachment 1) can be found as companions with this guide. Keep in mind that conducting assessments in any of these areas provides an opportunity to formally—and organizationally—connect management staff on the LT with CT activities related to implementation.

A. How the Organizational Assessment Packets Are Formatted

The following sections provide the LT with the tools to begin an organizational assessment. For each of the four assessment areas (clinical care quality, resident quality of life, workplace quality, and basic clinical knowledge) there are worksheets, a series of questions for consideration, and some recommendations provided in this manual. It is recommended that LT members approach each of the four assessment areas in two distinct phases: Phase I and Phase II. These are described in detail below and are suggested as a means to organize and guide assessment work in the first three assessment areas and to provide an opportunity for management staff on the LT, and others, to take a lead role in collecting and analyzing data related to care quality and in teaching CT members how to do this. The fourth assessment packet, Assessing Basic Clinical Knowledge (C.6), is slightly different in structure.

Phase I:

Guided by worksheets found in the Appendices, LT members are instructed to locate specific sources of data and answer specific questions (included on each worksheet) about the data source. It is important that during Phase I, LT members take note of how difficult or easy the data source information is to obtain. Think about whether staff in your organization will need to access these data, and whether they will be able to do so quickly and easily. If not, what needs to be done in your organization to make these data more accessible and usable? The LT, either on its own or in collaboration with the CT, has two key tasks to keep in mind as part of Phase I:

First, make sure the data needed by the CT are collected and analyzed regularly and are easily accessible to staff; second, act as a resource to the CT by explaining the data and relevant data sources to each CT (that is, this is what this data means, this is where it's kept, this is how it's collected).

Addressing these two tasks up front will make implementation much more enjoyable by ensuring that key data sources are accessible to staff and ready to use (prior to staff trying to use the data during planning). This will prevent needless confusion and frustration for staff trying to make data-based decisions.

What if your facility does not have a database or data source noted on a worksheet? If you do not have a database for this information, it is important for the LT to take the lead in figuring out how to collect, analyze, and make the data available. Experience suggests that a CT without access to relevant data will not make the wisest decisions about problem areas to focus on or strategies to discern whether or not an implementation plan has been successful.

Phase II:

Three of the four assessment packets include a Phase II section with suggested activities that LT members can engage in to learn more about their organization and what needs to be done to prepare for change implementation. These exercises are designed primarily for administrators and management staff to become more familiar with: 1) the frontline staff and their work environment; and 2) with the views of residents and staff that are not generally shared with them. These exercises are intended to guide LT members to see for themselves—rather than relying on others to assess—the state of care and services being provided in the facility. While at first glance, these exercises may seem wide-ranging or too general to be helpful, these suggested activities will not only provide you with firsthand knowledge about your facility, but will also make LT members visible to facility staff. Demonstrating the LT's commitment to changing practice is critically important. In fact, many staff who have engaged in these sorts of exercises have reported learning a great deal of new and surprising information about their facility and staff and actually enjoyed the process as well.

It is not expected that all of the exercises described will be completed as part of the organizational assessment processes. The exercises are intended as suggestions to help you address some of the common problem areas that have been identified in many facilities implementing organizational change. Our recommendation, however, is that every LT member participate in these exercises, sharing the results of their efforts with the rest of the LT at weekly meetings.

Important Phase II Caveat:

In almost every nursing home we have visited, administrators and managers claim to be intimately familiar with the experiences, views, frustrations, and joys of frontline workers. In these same facilities, we heard repeatedly from frontline workers how frustrated and disappointed they were that they were not listened to, and that organizational policies continued to miss what these staff think is most important about resident care. The exercises proposed under Phase II in each assessment packet are designed to bring you closer to the experiences of your staff and residents. Much of the success of these exercises will depend on how you chose to carry out these exercises and whether you take this as an opportunity to learn more about your organization, your staff, and residents, or whether you see these exercises as not very useful. Whatever you decide will be clearly conveyed to the staff you interact with.

B. Clinical Care Quality Assessment

Introduction

Fieldwork opportunities with culture-change facilities revealed that team members continue to experience difficulties related to accessing, understanding, and utilizing clinical data. It also suggests that some organizations have difficulty seeing the complete picture. That is, some nursing home staff tend to focus on individual residents in their care area assessments, missing the bigger picture of how a care area is approached throughout the facility and how well systems have been developed to maintain organization-wide quality practices for each clinical care area.

Phase I

Review the "Assessing the Clinical Quality of Care" worksheet in Attachment 2. The worksheet is constructed to provide you with both an overview of all the data sources available to a CT to assess clinical quality and guiding questions for use in assessing whether these data sources are being used, and, if so, how effectively, how consistently, and by whom.

Phase II: Unit Exercises to Assess the Quality of Clinical Care

In consultation with the staff who work most closely with the clinical quality data sources noted on the worksheet (MDS, etc.), select a clinical focus area to investigate. Select a clinical area that the data suggest may be a problem in your organization (for example, high levels of incontinence or poor follow-through on turning and repositioning).

The clinical focus area (care problem) you have chosen to investigate is: _____.

Go to two or three units in your facility and explain to staff you are investigating the above care problem. Sit down with staff from that unit and talk about how this problem is being approached. Below, you have been provided with Suggested General Questions for Use with Unit Staff to assist you with exploring any clinical problem area including the one you have noted above. You have also been provided specific follow-up questions for use with the clinical care problem of high incontinence, in an effort to illustrate the nature of information LT members are expected to collect from unit staff for a specific care focus area like incontinence.

Suggested General Questions for Use with Unit Staff

- Is there a perception among the staff that a problem exists?

- Is anything being done to address the problem? If so, what?

- Is the problem defined only at the level of the individual resident?

- Can staff define the problem as a system problem?

- Is the problem being monitored?

- What sort of success have they had addressing this problem?

- What accountability systems are in place to determine whether or not practice plans in this clinical area are being implemented or achieved?

- What assistance have they had in dealing with the problem?

Suggested Follow-Up Questions for Specific Care Problem: High levels of incontinence

If incontinence levels are high, what do staff say about the incidence of incontinence on their unit?

- Do staff think that anything should be changed to address the issue?

- Is there any leadership in addressing the issue?

- Is there a unit plan in place to assess and address the plan, or is it just focused on individual residents?

- Do staff have adequate knowledge about what the plan is and why the plan was developed?

- Can staff tell you how well they have been following the plan?

- If there are barriers to implementation, have they been addressed effectively?

- If the plan was abandoned, what were the precipitating events and how do staff feel about it?

- Do staff have suggestions for what might be tried next?

- Have staff assessed the situation or have they just seized the first idea to come along?

- Should the in-service educator or other staff be involved in resolving the problem?

- Do current documentation systems need to be developed?

- Does the unit nurse know of follow-through on the plans: Worker-to-worker? Shift-to-shift? Across departments?

- Who are the staff involved in making the plans work? What communication system is used to communicate across all of these staff? Do these staff hold one another accountable? If so, how?

One of the common challenges you can anticipate facing is that staff generally focus on solving clinical problems for individual residents. When there is inadequate assessment or follow-through, the solution to this is often focused on fixing a particular problem for a particular resident. This results in very little transfer of learning to new situations. It is helpful to demonstrate this transfer of learning by asking staff explicitly how information and problem solving related to one resident can be used to address a clinical area for the entire unit or facility. Staff will often benefit from discussion that includes carefully walking through what this means for a population of residents with similar care needs. This will help everyone think more about creating systems to improve care. The following case example illustrates this.

Case Example

A resident with continuing skin breakdown has been placed on a high-vigilance program. Each day someone inspects his skin closely. On days when he has a bath, a thorough skin assessment is done. When he is dressed in the morning and undressed at night, his skin is carefully inspected. In the meantime, two more residents are discovered to have a stage II pressure ulcer. They, in turn, are placed on a high-vigilance program.

The CT examined this situation, and noted that pressure ulcers are sometimes not discovered until they reach a stage II. The CT identified a goal of developing a system that would make discovery of pressure ulcers much more likely to occur at stage I. A plan was developed for the entire facility. First, all staff would attend an in-service program on pressure ulcer prevention. Second, a simple form would be developed for pressure ulcer documentation. They decided to use the outline of a human body, front and back, where an X would be placed to indicate the presence of a pressure ulcer and to carefully track progression.

The team spent one meeting describing all the barriers they could anticipate to successful implementation. These included:

- Poor attendance at the in-service program

- High turnover

- Inconsistent staff giving baths

- Lack of involvement from non-nursing staff

- Forgetting to bring the forms into the tub room

- Running out of forms

- Failure to transfer the information into the resident care plan

Each of these barriers was addressed by the CT, and strategies to deal with them were included in the final plan. One CNA on each unit was sought to be in charge of ensuring that forms were always where they could be used. On some units, the same CNA was designated to ensure that the information was transferred to the resident plan of care, and that frequent follow-up was used to track the progression of the pressure ulcer. On other units a second CNA volunteered to do this. A third staff member was selected to evaluate the new program at the end of one week, three weeks, and two months. The CT developed

a standard, but brief, form for each of these CNAs to use in the evaluation. At the same time, a group of therapy and dietary staff was convened to identify what their department staff could do to contribute to the prevention of pressure ulcers. Their recommendations were implemented, and the plan was added to the evaluation. Nurses on each unit were recruited to present the plan to their staff and to encourage questions, discussions, and additional ideas.

C. Resident Quality of Life Assessment

Introduction

Quality of life (QOL) for residents has been addressed in culture-change models through improving care outcomes or focusing on resident participation in care planning and decision-making as a formal component to the culture-change initiative. For example, in a model that focuses on improving care outcomes, increasing resident functioning, increasing continence, and decreasing pain are all considered important quality of life issues. Residents are more likely to go out with family when they are continent. Residents are more mobile and able to engage in activities when they are functioning at higher levels.

One challenge to collecting data on resident quality of life is the reluctance of many residents to appear as though they are making complaints. Another obstacle is that residents (and staff) often come to accept the situations that they live and work in. Residents quickly stop expecting to have interesting lives, to maintain relationships, or to chose the activities they will engage in during the day. Staff often see only the resident clinical outcomes and not the quality of life that might be possible. Once this occurs, it is very difficult to even think about how quality of life can be improved. At the very least, it is important to find out about resident preferences, activities they once enjoyed, and things they would enjoy doing now. At the very least, quality of life requires considerable resident input into determining daily routines, schedules, and activities.

It is important to remember that resident expectations for quality of life may be artificially low. They may have developed a sense of futility, which in turn, greatly decreases expectations for quality of life.

Phase I

Attachment 2 includes the "Assessing Resident Quality of Life" worksheet. It provides a beginning point for developing a quality of life database and a structure for improving resident quality of life. The LT will need to look at whether the data sources necessary to do this work are already being maintained. If these data have been collected, it is likely they are not systematically collated and reviewed as a set of QOL indicators. A system will need to be established that determines:

- Which data are currently available;

- What other data are desirable, but not currently available;

- A mechanism to organize and interpret these multiple databases;

- A process to review the current databases to see if alternatives or additions would be useful;

- How residents and family can participate in the development and use of these databases; and

- What currently available data already reveal.

The worksheet in Attachment 2 contains some ideas for data sources that can be used to assess and promote resident quality of life.

Phase II: Unit Exercises for Assessing Resident Quality of Life

In most facilities, there will not be a system in place to systematically collect data from residents about the quality of their lives, their preferences, and what might be done to improve overall quality of their daily lives. It is often difficult to elicit uncensored input from residents about the quality of their lives. The following recommendations are based on research with nursing home residents and other vulnerable groups. They should assist you in developing a plan for collecting these data from residents in your facility.

Collecting Quality-of-Life Data From Residents

The best way to promote honest feedback from residents about their experiences in your facility is to eliminate the following:

Resident and Family Fear of Retribution. This fear should not be minimized, especially as you go about collecting data on resident perceptions of care. Even in situations where caregivers are seen as kind and caring, there is often some fear about retribution if family or residents are seen as ungrateful or complainers. Families, in particular, express concern that staff may even, unwittingly, neglect or be impatient with residents whose families have complained. Even though staff often have difficulty accepting this, the majority of family members are concerned about staff retribution and are quite careful about what they say.

Hurting the Feelings of the Staff. Residents, in particular, are generally quite concerned about how their comments will be heard by their direct care providers. Despite assurances to the contrary, residents often fear that comments they make could be used against their caregivers, that staff will be reprimanded, treated badly, or even fired if residents express displeasure with some aspect of their work. Acknowledging short staffing, lack of resources for the staff, or inadequate training is much more acceptable to residents than is a negative comment about a particular caregiver's performance. In addition, when responding to questions about care, if the relationship with a particular staff person is important to the resident, he or she will generally focus on the quality of the relationship instead of the quality of the care they receive.

Resident Fear of Being Seen as Ungrateful. Many residents are reluctant to complain for fear of being perceived (by self or others) as ungrateful for the care they receive. This is particularly the case when residents see staff working hard, believe the facility or shift is short-staffed, or see the caregivers as vulnerable or overworked. Many residents prefer to focus on what is done well, avoiding conversations about what is not done well or not done at all.

Given the preceding caveats, quality-of-life data must be very carefully and thoughtfully collected. The following recommendations will help you to collect these data in your facility.

Recommendations for Collecting Quality-of-Life Data from Residents

Resident and Family Interviews: It is a good idea to try several of the following strategies. No single method will work in all instances. It might be a good idea to develop a questionnaire with several questions, using each of the following strategies.

Try a vague, general question. This allows residents to name the issues that are important to them, rather than responding to what someone else has identified as important:

- Can you tell me what it's like to live here?

- Can you tell me about a typical day here?

Craft a few questions that depersonalize the response. That is, ask a question that does not require the resident to comment about *this* place, but rather asks about nursing homes in general:

- If you had a friend who was looking for a nursing home, what advice would you give? What should he or she look for in a nursing home?

- If you were building or planning a nursing home, what would it be like? What would a typical day be like for residents?

- If you had the job of nursing home inspector, what would you look for in the homes you inspected? What sorts of things might suggest that a place is likely to be very good or not very good? Can you tell this with a quick inspection, or is it necessary to look more deeply? What are some of the superficial things to look for? How about some of the deeper things to look for?

Ask directly what the resident would change. What would a resident do if he or she could change anything about the organization, the activities, the staff, the routines, the food, the care, or life in general. Managers and administrators often avoid these questions, fearing that residents will ask for things that are totally unreasonable. However, experience with other programs (including other nursing home culture-change initiatives) suggests that this is not the case. Residents generally ask for very reasonable things that could be provided quite easily and that would make a real difference in the quality of their lives. Some examples include:

- A newspaper in the morning;

- A beer on Saturday night;

- A dinner table companion who can carry on a conversation;

- A later time to get out of bed in the morning;

- A second cup of coffee;

- A cold glass of water every afternoon;

- A chance to attend church services on Sunday morning; and

- A particular type of music.

You might consider combining these approaches by using a combination of very open and very structured questions. It is also important to be sure that the person asking the questions is not a direct caregiver. It is ideal if the person collecting the data is seen to be neutral, but with enough authority to actually use the information to improve resident quality of life. It is also important that the resident be told exactly who will have access to the data, and what will be done with it. It is quite important to follow up with residents and families to let them know what has been learned and what will be done in response. Again, this latter step is often neglected. Sometimes it's because administrators and managers are reluctant to share "negative" information with other residents, family members, or staff. Often there is a fear that the comments of one resident might "get something started," leading to more negative perceptions and comments.

In reality, what usually occurs is nothing like this. Residents and families are often relieved to hear that the staff is interested in learning about things that residents are concerned about and using resident insights to improve care. As well, the feedback is often quite similar to what others are already thinking but have been unwilling to share. In fact, in some instances, residents and family members object to negative comments by others, offering much more positive feedback in response. Often, some combination of these things will occur. Whatever the strategy for sharing comments of residents and family members with staff and other residents, openly acknowledging problems generally leads to greater improvements than does hiding or avoiding discussions about resident perceptions.

Some additional things to keep in mind:

- Ask residents about their experiences.

- Avoid questions that ask residents to directly comment on the adequacy of care.

- Be careful not to ask residents to judge their care providers.

- Consider asking someone who knows the resident well, who has established a close relationship with the resident, to ask the resident for feedback.

- Consider asking a family member for assistance, but make sure the family member is asking the resident for feedback, rather than providing their own opinion of what the resident thinks.

- Consider asking unit staff who care for a resident about the resident. You could ask staff:

  - Are there things this resident has asked for?
  - Are there things this resident has asked for that over time he or she has stopped asking for?
  - Think back over your time caring for this resident. When the resident asks for something, how do you respond? Do you explain why something the resident asks for can or can't be provided? Do you tell the resident you will do something about what they've asked for? How often have you not been able to follow through?
  - Do you know of things the resident would like, or how the resident would like things done, that are different than the way things are?

- Explore the resident care plan: Assess the balance of information related to quality of care versus resident quality of life. For example, if a resident reports a preference about developing relationships with other residents or indicates a favorite activity (reading, writing letters, hobbies), how does the resident care plan in place reflect supporting the resident's ability to do these things?

The team overseeing resident quality of life (the LT, a CT, or some combination of these) can look at both quality of care and quality of life. The team can work directly with other teams, building on the work of the other CTs or choose to work on quality-of-life issues that are not directly related to care practices.

The worksheet in Attachment 2 has identified several sources of data for determining resident quality of life. While most facilities will have some of these data and will use some of these data sources, most organizations do not have a systematic way to use them. The questions listed in the second column are designed to assist you in putting a useful system together.

Note: Family satisfaction and resident satisfaction surveys are useful ways to collect data on quality of life. However, it is important to keep in mind that many of these surveys ask residents to judge the staff who provide their care. It is usual for residents to rate their care as high quality no matter what they really think. The caveat here is not to rely too heavily on these surveys and not to think everything is fine because a resident survey revealed a high level of satisfaction.

Also, letters from families are not a common source of data for quality-improvement initiatives. In fact, they are not generally used in any systematic way. Instead, the issue being written about is usually dealt with only as it relates to a single resident. This is an important missed opportunity for quality improvement and for improving resident quality of life. In combination, family letters, satisfaction surveys, and interviews with residents and family members can provide a valuable source of information for system-level quality-improvement efforts.

D. Workplace Environment Assessment

Introduction

Many culture-change models have their greatest impact on the quality of work experiences for staff. For example, in many Wellspring homes, turnover rates have dropped, and many workers have expressed real excitement over their work, enthusiasm for new roles, and a new appreciation for the importance of their work. The specific (and common) problems in long-term care settings that change has had a positive effect on include:

- Frontline workers' beliefs that they are not respected by the managers of the organization;

- CNAs' beliefs that they are not respected by the unit nurses;

- Nurses' and department heads' lack of interest or lack of skill in supervising and mentoring frontline workers;

- CNAs' inability to participate in work schedules, work design, care planning, and evaluation for residents;

- Lack of advancement opportunity for staff at many levels; and

- Inability of staff to use what they learn in educational programs.

Phase I

The "Assessing the Quality of the Work Environment" worksheet provided in Attachment 2 is laid out exactly as the other assessment worksheets, providing a starting place for assessing the quality of your work environment. It reflects several important sources of data that can tell you something about the workplace. Some organizations may find that the data sources reflected in Attachment 2 are not systematically collected. If that is the case in your organization, the place to start is creating the systems that will support the collection and review of these data.

Below are a few thoughts and recommendations specific to workplace environment data sources identified in Attachment 2:

Exit interviews are a relatively uncommon source of data in most nursing homes. However, knowing why employees are leaving is vital to any organization that wishes to maintain a stable workforce. It is often wise to hire someone to conduct exit interviews who is not on the staff or, at least, someone on the staff who is seen as relatively neutral or sympathetic. Staff participating in exit interviews also need reassurance that their comments will not be shared with someone who could negatively affect their ability to find work in the future. Exit interviews often dismissed are as unimportant. Administrators often say they don't do them because they already know why staff are leaving. In practice, this has not been borne out. Organizations often learn a great deal about the work environment through carefully conducted exit interviews.

Performance reviews of peers, as well as of the staff being supervised by the person being evaluated, is another source of information that is not often utilized in nursing home settings. While performance evaluation data is standard in many other industries, nursing homes rarely engage in evaluations such as these. As with other types of data, collecting this data must be done carefully. Care should be taken to maximize the usefulness of the evaluations while minimizing any negative impact that could result. Questions should be specific, relevant to the work, and easy to respond to. For example, questions that are vague and highly judgmental will not provide useful information, and worse, can lead to hurt, blame, and generally bad feelings among staff. Consider the distinct wording, for example, of the following common evaluation criteria:

- "Creates opportunities for me to put new learning to use" is preferable to "Is helpful or supportive."

- "Provides the level of feedback that I need" is preferable to "Effectively provides feedback."

While these different approaches may seem minor, it is much more effective to tell a supervisor that her or his staff feel they need more feedback than they are getting rather than to tell the supervisor that she or he does not give feedback effectively. If constructed well, evaluation criteria and survey questions such as these can provide quite detailed information on what staff would like from their supervisors.

Staff advancement programs and how well they are working can also tell you a lot about your organization and what it might be like to work there. Gaining a new title that has little or no practical impact is mostly frustrating for staff. Therefore, it is important to discover how real your staff advancement programs are and whether they lead to personal growth.

Satisfaction surveys come with the same caveat noted above (concerning resident satisfaction surveys), and it is worth repeating here: Satisfaction surveys often suggest a more positive view than is actually the case. On the other hand, anonymous staff satisfaction surveys may tell you quite a bit about how staff are feeling.

Staff focus groups, similarly, are a valuable source of information about the workplace. Focus groups must be done carefully and by someone who is experienced with doing this sort of thing. Without such expertise, focus groups can turn into unproductive gripe sessions, can leave some staff vulnerable to attacks from other staff, or can generate rumors that create problems in the organization. Done well, they can generate valuable insights into the work environment and can assist the organization to take advantage of good ideas that staff members may have about improving the workplace.

In addition to these suggestions, a guide[2] has been developed by the Institute for the Future of Aging Services (IFAS) at the American Association of Homes and Services for the Aging (AAHSA). The guide is intended to help long-term care organizations use tools effectively and appropriately to increase their understanding of the direct-care workforce in their organizations. The introduction to the guide notes:

> "Research has shown that employees' feelings about certain aspects of their jobs often affect their commitment, their overall job satisfaction, and the likelihood that they'll remain with their employer."[3]

The guide is available for anyone to use and can be accessed at: ***http://aspe.hhs.gov/daltcp/reports/dcwguide.htm***.

Phase II: Unit Level Exercises for Assessing Workplace Environment

The unit-level exercises for assessing the quality of your workplace have been organized around a number of elements (for example, communication flow, decision-making processes, and leadership and supervision). Together, they make up the workplace environment. The exercises were designed primarily for the LT to learn about how staff experience the organization, and what it is like to be an employee there. These exercises are suggestions for strategies you might use to take a closer look at how your organization operates and how that influences the work environment. As with the other unit-level exercises

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[2] Measuring Long-Term Care Work: A Guide to Selected Instruments to Examine Direct Care Worker Experience and Outcome, April 2005; Institute for the Future of Aging Services: Washington, DC.

[3] Measuring Long-Term Care Work: A Guide to Selected Instruments to Examine Direct Care Worker Experience and Outcomes, April 2005; Institute for the Future of Aging Services: Washington, DC, p. 1.

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provided, there are many other ways to approach these as well. Whatever strategies you choose to use, it is important for the LT to collect the data on its own and to remain as close as possible to the processes it is exploring (don't rely on others to assess for you).

Assessing Communication Flow

Understanding how communication flows within units, across units, across shifts, and across departments is vital to any practice changes. You might explore what mechanism nurses use to share information across shifts. It is easy to make unwarranted assumptions about the nature or effectiveness of communications. When practice change plans are based on these assumptions, they are very likely to fail.

- Pick a unit, listen to report, review the charts of three residents on that unit, and talk to the residents and/or their families. Identify something about the residents that you think needs to be carried through to all staff. Provide this information to a staff member, and see whether it shows up during report.

  1. Does the information stay with the resident and the resident plan of care? Or is it lost along the way?
  2. How are decisions made about what information is important enough to pass on?
  3. What communication strategies are used that are not working well?
  4. What seems to prevent these strategies from working well? (Avoid personalizing this, such as, "It's Mary's fault.") Look at systems that promote communication and how they can be enhanced.

Assessing Decision-Making Processes

- Identify a decision that the director of nursing or a department head has recently made. Find something that directly affects care practices (for example, everyone out of bed by 9 a.m.; all residents who are able, will walk to the dining room, etc.). Pick a couple of units, and talk with staff to find out what's been done since the decision was made.

  1. Looking back, can you think of people who should have been involved in that decision and weren't? Are there things that could have been anticipated that weren't?
  2. Identify two or three aspects of the decision-making and communication process that could have been done more effectively. (Involve the director of nursing or department head in this process.) What prevented this from being more effective? Is it likely that decision-making or communication will be any different in the future? Will differences result from this experience?

- Ask one of the department directors to identify a recent decision that affects the department in general, as opposed to a single worker.

  1. What was the decision in response to (for example, a family complaint, a citation on a survey, a need for new equipment, or other)?
  2. What was the problem being addressed?
  3. What leads you to believe the problem will not recur?
  4. What information was needed to make the decision?
  5. Who participated in the decision-making, and how did each person participate?
  6. Does the solution rely on people remembering, or is there a system change to support the new way of doing things? How exactly will the system support the desired change?

7. Describe in detail how this decision directly affected the daily routines of two workers.
8. Looking over your responses to questions one through seven, were you surprised by any aspect of this assessment process?

Assessing Support for Staff Development

- Locate three staff in your organization who have participated in a continuing education program sometime during the past year. Ask them the following questions:

  1. What was their reason for attending the program (personal interest, requirement, or other)?
  2. Was the program one they would have chosen if they could choose anything to attend?
  3. Did they return to the organization with any ideas about new ways to provide care?
  4. Were they able to implement new care practices? If not, what prevented this? If yes, what did they find helpful?
  5. Have they been able to follow up with other educational programs? What specifically? Have follow-up programs built on the previous programs?
  6. Have these staff shared this program and what they learned with anyone else in the organization? What was the consequence? What else could have been done?

- Ask unit staff: Can you share two examples of how your immediate supervisor demonstrates support for you and your work, the promotion of your skills, or your education? If the staff member can't think of anything, report that.

Assessing Supervisory and Leadership Skills

- Investigate the following: Do all nurses on staff have skills or formal training in mentoring, delegation, and supervision of frontline staff? Are these skills assessed as part of nurse performance reviews? If so, what evidence is collected to make this assessment? If not, what might be done to make this

- Think about your own style as a leader. What development do you need? Ask two peers what areas they would suggest you focus on. (Some organizations bring in consultants for this. If resources are available, it is quite helpful to bring in someone who is an experienced management coach.)

- Either individually or within the LT, name three reasons why you think a CNA would want to work here or continue working here. Be sure that identify things related to the environment rather than to characteristics of the CNAs. For example, you might believe that CNAs work here because they feel like they are part of a team or that they have opportunities to learn or that their coworkers are good friends. Find two CNAs who you believe will speak openly. Ask them why they continue to work here. Try to find a CNA who has been with the organization for a long time and someone who is newer. Ask them to comment on what you have identified as reasons to stay.

- Either individually or within the LT, try to identify two reasons why you think a nurse and someone from another department would want to work here or continue working here. Ask these staff members directly why they continue to work here and whether your assumptions match their perspectives. Following your conversation with each of these individuals:

  - Describe something you plan to do that will alter working conditions in your facility, in response to what you have learned.

- Meet with the LT and compare what you have each learned and whether there are some common themes. What organizational changes are in order, and how will you evaluate the effectiveness of the changes?

Note: It is not adequate for anyone on the LT to delegate these exercises or to simply accept someone else's view. It is crucial that each member of the LT talk directly with staff at every level to collect the information needed. Each team member must find his or her own evidence for any conclusions. This evidence should include specific details on how systems and individuals operate, what works and what doesn't work, and who (focus on position rather than person) is following through and who is not.

Assessing Accountability

- Pick two departments. What has each department head done to promote the following:

- Quality of work life and workplace for the staff. Find specific examples in each department. Examine how the department heads have identified workplace problems, how they have thought about the nature of the problems, what information they have collected to learn more about the problems, what has been done to address the problems, and how the effectiveness of the solutions have been evaluated.

- In each department, look for any examples of how systems have been altered in response to the problems identified. Look at whether system problems are addressed as individual staff problems.

- Look at how these problems and the solutions arrived at have been communicated across shifts and with other departments.

- In each of the same departments, collect information from both department heads and staff regarding how performance is evaluated and how staff are rewarded. Do rewards seem to be related to performance? Are staff clear about what is expected of them?

- Do staff who are promoted to supervisory positions receive the supervisory training they need?

- In each of these departments, what happens when workers are not performing adequately? Is substandard work or performance accepted or ignored? What are the consequences of inadequate performance? Be specific.

As the LT meets to discuss what each member has discovered, it is important to identify what organizational issues the LT will focus on and to think about how the implementation of change will be affected by the organizational context. Are there themes across the organization? Can you think of any organization-wide training or staff development programs that need to be supported? For example, what have you learned about information flow that may influence how staff learn about the new program, how practice changes will be communicated throughout the organization, and how staff will access the information they need?

E. Basic Clinical Knowledge Assessment

Introduction

Another important component of the implementation team's organizational assessment work is to determine the level of basic clinical knowledge in the organization. From available research, it is clear that many organizations overestimate the level of clinical knowledge achieved by staff. In fact, managers in long-term care organizations often believe that their staff are better informed about clinical care than they actually are. Additionally, organizational practices in many long-term care facilities prevent staff from effectively using at least some of the clinical knowledge they possess. Previous sections in this manual have addressed the organizational processes related to implementing best practices. This section focuses on the assessment and development of clinical knowledge and skills.

Much of what is contained in this "Assessing Basic Clinical Knowledge" section is based on the Wellspring Evaluation and the follow-up data collection that occurred as part of the program development initiative.

Key Assumptions:

- For clinical changes to succeed, all staff must have basic clinical proficiency. This means that any training or implementation program must include some plan for the entire organization to be clinically proficient at a basic level. In other words, clinical change cannot be "carried" by a few individuals.

- It is assumed that all clinical staff need basic, up-to-date, technical knowledge about the clinical care areas that the change focuses on. Further, it is not reasonable to expect a few designated staff to acquire such knowledge at a seminar or be responsible for raising the clinical knowledge level of the entire organization. An important role for the CT, therefore, could be to provide a leadership role in addressing any deficiencies after the assessment.

- Educational programs are most effective when they simulate the situation that staff will face when carrying out their daily work. Therefore, the exercises suggested in the "Assessing Basic Clinical Knowledge Tools" attachment (No. 1) following this section are designed to model real-life scenarios. For example, they are designed to foster collaborative problem solving, to examine both individual care practices and the systems created to support these, and to promote both staff quality of work life and resident quality of care.

- Making staff aware that clinical practice needs some improvement is not sufficient. Staff need to be guided in their problem-solving efforts, and individuals need to develop a range of skills (not just clinical) to be effective.

- Similar to any other quality-improvement program, effective staff development work proceeds based on information about what is needed and what is already in place.

Educational Materials for Addressing Clinical Knowledge

Some organizations will wish to incorporate increased clinical expertise in their facilities. While some culture-change models address this quite in-depth (See Appendix A for a description of models), you may wish to focus on other changes, but don't want to leave out a clinical piece. There are tools in this guide that may be useful as templates for addressing clinical areas of:

- Pain;

- Skin problems;

- Elimination;

- Psychosocial well-being;

- Falls and restorative care; and

- Nutrition.

Using the Assessing Basic Clinical Knowledge Materials

In many service industries, including long-term care, where the education and training of staff is critical to good performance, there is often a great deal of attention paid to the information staff need, while principles of adult learning are not well integrated into the processes of transmitting that information. Both of these must be attended to for educational programs to result in effective learning and practice change. Ineffective learning strategies and programs lead to frustration among staff and rarely achieve any sustained behavior changes. Following this logic, it is not sufficient for facility staff involved in staff education or development efforts to be knowledgeable only in clinical content areas. They must also have knowledge in adult education and be effective educators, coaches, and mentors.

The materials contained in this section can be used to assess clinical knowledge in the organization prior to or early on during culture-change implementation. However, they can also be used any time during implementation to examine the level of clinical knowledge in a particular area. In addition, the materials contained here are intended to serve as templates for culture-change homes to use in developing their own educational materials. This is a place to begin.

The Assessing Basic Clinical Knowledge section includes the following information:

1. An explanation of how the materials were developed and organized;

2. Reading questions or quizzes in each culture-change clinical area designed specifically for basic, intermediate, and advanced levels of readers;

3. Options for using the reading guides; and

4. Logistical considerations when using the guides.

Development of These Materials

Materials to assess basic clinical knowledge were developed to accommodate a wide range of staff abilities. These materials acknowledge that: staff in all organizations have achieved various levels of competence; staff come with a range of skills, knowledge and experience; and effective educational programs acknowledge these differences. First, literature in each of the targeted clinical areas was carefully reviewed. Articles were then selected for inclusion in clinical reading guides reflecting basic, intermediate, and advanced reading levels. For example, in each clinical area there are some very basic articles, some more advanced articles, and some articles that only experienced clinicians would likely find useful.

Rationale. Leveling of clinical reading is rarely done. In most educational programs, all staff are given the same materials. Inevitably, some staff find the materials too difficult, while others find the same materials too simple. This experience tends to discourage both these groups from continued participation. This issue is particularly relevant in a program such as culture change, where there is a sincere effort to support collaboration across levels and staff types.

It has also become clear that nonclinical staff must be actively included in the educational processes to create facility-wide awareness surrounding clinical-care changes. For this reason, articles were included that are appropriate for administrative and other nonclinical staff.[4] Some of these articles provide basic insights into the reasons for specific clinical practices, the organizational benefits that may accrue from such practice changes, and financial implications of clinical practice changes. Meeting learners at their own levels and in ways that seems relevant to their work is an important starting place and should be continued as culture-change staff take over the development of further educational materials. Research points to the frustration that occurs when staff are given materials that are not at the appropriate level.

Reading Guides and Quizzes

A series of reading guides and quizzes were developed from each of the articles included in the reading packets. The reading guides are intended to assess the general knowledge of staff throughout the organization and to provide a sense of whether there are particular groups of staff who are more in need of staff development than others (specific options for using the reading questions are provided below).

The reading guides are intended to be used with groups—to assess the knowledge levels of groups—rather than to target individual staff. However, you may wish to ask staff using the reading guides to identify their unit, shift, or department to better assess and target educational interventions.

Each reading guide includes a "Basic Questions" section and a section labeled "Specialty/Discussion Questions." The Basic Questions were designed to test the readers' knowledge about article content at a basic level. The Specialty/Discussion Questions were created to be applicable to particular groups of staff who might team up with a reader to answer these questions or to participate in a larger discussion group with colleagues. **Note:** Following each Specialty/Discussion Question, in parenthesis, is a page number on

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[4] Basic readings for all modules are appropriate for any reader (clinical care providers or administrative support staff); the skin module reading packet includes articles specifically selected for administrative staff and are marked as such.

which the answer to the question can be found in the article. and, also, suggested facility staff who might team up with a reader to explore these questions or take part in a discussion group focused on these questions (see "Options for Using the Reading Guides," below, where this is discussed in more detail).

The reading guides can be used to monitor the success of targeted clinical staff-development programs. For example, when a new care practice is implemented and a facility-wide educational program is developed, how will an organization determine if staff are learning what they need to learn to carry out the new plan? Using the reading guide questions, you can start to assess whether staff have benefited or if educational programs have affected staff differently.

No matter how you choose to utilize the reading guides, the following questions are important to keep in mind:

- Through using the reading guides, do data suggest a lack of competence in some specific clinical area? Has a plan been developed to address this?

- Do the quizzes suggest that the problem is a lack of knowledge? Is the knowledge deficit with any particular staff? It is the continual integration of multiple data sources that will lead to the best results.

Every attempt should be made to avoid compartmentalizing efforts. For example, in many nursing homes there is no link between these various forms of feedback and staff development programs. It is the responsibility of the LT to ensure that these efforts are carefully linked. Are survey results considered when plans are developed? Are turnover data and exit interviews used in decisions about work environment?

Options for Using the Reading Guides

Option A: Staff will be asked to read one or two articles (leveled appropriately) and respond, individually, to 5 to 10 questions. This could be used to provide staff with feedback on their own knowledge level. Some staff might want to read several of the articles, increasing the level of difficulty as a self-directed learning program. Some staff might simply be curious about where they stand. The quiz results could be compiled to provide an overall assessment of specific types of staff or the organization as a whole.

Option B: Staff will be asked to read one or two articles (leveled appropriately) and answer the quiz questions as a group of four or five. This option will not provide you with an assessment of knowledge level achieved by individual staff or groups of staff. However, it is an effective way to begin to model collaborative problem solving. In this scenario, different staff bring different knowledge that must be used to answer quiz questions. It becomes clear from this exercise that all staff are necessary, all have important input, and working together is the only way to solve clinical problems. This option requires some instruction in how to work collaboratively.

Option C: Staff will be asked to read one or two articles (leveled appropriately) and answer the quiz questions as a team of two (nurse and CNA, for example). There is some evidence that frontline staff (as well as others) learn best from individual mentoring. This might be seen as a logical precursor to option B, a way to prepare frontline staff to participate more actively in group problem solving. In this option, it is important to prepare nurses or other supervisors for mentoring, teaching, and collaborative

problem solving. One recommendation is that the supervisor/mentor relationship be established only after completing a training program in mentoring.

Option D: Examine the data sources available to see whether there is a correspondence between problems identified through other means and the answers to reading guides and quizzes. For example, do citations from surveyors or complaints from family members correspond to an area where staff have not scored well? If this is not the case, it is important to think about why the organization would perform poorly in an area that staff have adequate knowledge about. This suggests some organizational-level problems that might need to be addressed.

Option E: CT members read suggested articles (leveled appropriately) and pull "Top Ten" important elements that staff need to know. This is seen as the least useful option and is not recommended. It is included here primarily because it is the strategy that is most often used in homes that are not successful at achieving or sustaining successful implementation of culture change. Use of this option should be carefully targeted for very specific goals that, for some clearly identified reason, cannot be achieved by any of the options noted above.

Whichever of the above options are selected, the results can be used by the LT when developing an implementation plan. Additionally, whenever available, it would be quite useful for the results to be shared with the facilitator of the related module. In this way, a facilitator can assist the CT members attending a module to think about how the data can be most effectively used. Another important use of quiz data, either before or after reading the leveled articles, is to share quiz results with the in-service educator in the facility. Again, it is vital to ensure that these assessments and implementation processes are all integrated with each other. That will clearly yield the best results. Consider developing a network of colleagues available to assist with problem solving. Sharing the quiz results with your network will make it clear where there are common challenges that the entire alliance might wish to address. It will also reveal organizations that have been able to solve problems that others are struggling with, creating a useful cross-network collaboration.

Logistical Considerations When Using the Guides
Staff in culture-change homes will be able to identify questions of their own that can guide the use of the reading guides and other knowledge-assessment efforts. Some additional questions that are important to consider include logistics related to reading guide use:

- Will you quiz all staff in the organization at one time? Or by unit? Or by worker type? Think carefully about your purpose in using the guide. The answer to these questions should be directly in service of some particular goal. What are you trying to achieve? What will give you the information you need?

- What will you do with the assessment of management staff knowledge about the clinical area? Think about what managers need to know. Is this only knowledge related to organizational processes? Is it important for managers to know basic clinical knowledge? What do managers need to know to be sufficiently supportive of interventions developed by the Care Teams?

- How will the quizzes be administered? By whom and how will the quizzes be explained to staff? Some staff will be anxious about taking a quiz. Some will not be able to complete a quiz without assistance. Staff who think the quiz will be used to assess their personal performance might also be quite anxious about taking the quiz. Staff could be frightened about a quiz administered by their direct supervisor or embarrassed over having a peer administering the quiz. All of these questions need to be considered when administering the quizzes.

- How will you raise awareness in the facility about the competency effort? Will this be a mandatory activity for all staff? Will there be a timeline in which the readings and quizzes will be expected to be completed?

- How will you know whether staff have taken part? Are there consequences for staff who do not take part? What are these?

Role of the Leadership Team

The LT plays a very important role in overseeing the above processes. The CTs can benefit significantly from the LTs experience and authority as it develops facility plans to enhance performance in a specific clinical area. Specifically, the LT oversees how all the components discussed in the manual come together. Remember, the questions that the LT will need to address in the beginning of implementation, as well as during the ongoing implementation, include the following:

1. Do staff have access to the information they need to do their work?

2. Does this organization respond appropriately to challenges or problematic issues, or are our interventions not clearly linked to the problems we have?

3. Do we train staff on what they need to know?

4. Do we build systems that work toward improving staff skill and capacity?

5. Do we have systems of correction that work at odds to one another?

6. Are staff at all levels encouraged to take initiative?

7. Do we use the data we have effectively?

8. Do we need additional data?

9. Are we accountable for what we say we're doing?

10. Are we accountable for what we say we're going to do?

11. Based on your assessments, what do LT members see as the needs of staff in this facility?

12. Where are places that decisions are being made without appropriate amounts of relevant data?

13. Where does practice seem to be institutionalized, and where does it rely on individuals to follow through?

14. Where is there insufficient follow-through?

15. Is there an adequate transition for new employees? Do orientation activities prepare staff for actual work or tasks associated with the position?

16. Is there follow-up to orientation sessions?

17. Does ongoing, learning occur on the job? If so, how?

18. What is the role of other unit staff in relationship to a new employee?

For each of the above questions, the LT must be able to provide clear evidence for the conclusions arrived at. Impressions and hearsay must be carefully avoided. It is generally a good idea to follow each answer with, "How do I (you) know this?"

To address clinical problem areas, a facility might choose to focus on:

- Improving linkages between a clinical problem area and staff development;

- Improving mechanisms to access and use clinical data to enhance care and improve decision–making;

- Developing accountability systems at unit and shift levels; and/or

- Creating staff-development opportunities to increase ability of staff to advance, specialize, and develop skills and competencies in care areas of particular interest.

Another outcome might be to focus on strategies for improving the quality of the work environment. The CT and LT plans could focus on:

- Improving linkages between work quality environment problems and work structure or processes;

- Establishing mechanisms to access and use reliable information about work quality (performance reviews that reflect facility goals, exit interviews, quality indicators of positive work environment); and/or

- Creating an internal mentoring system to increase worker skill and capacity.

Please see Attachment 1 for materials related to Assessing Basic Clinical Knowledge.

A Practical Guide to Transformation

IX. Sustaining Practice Change and Developing Accountability Systems

Introduction

Many of the preceding sections have dealt with sustaining change. In particular, there has been considerable attention paid to the organizational structure and systems that are required to alter care practices and sustain the changes that have been made. This section is a brief summary of how change can be implemented so that sustained change is likely to occur. Some of this has already been stated elsewhere, and some of this is new.

A. Data Systems

It should be clear from preceding discussions that successful change implementation is dependent on data systems that are:

- Current;

- Reliable;

- Relevant to resident care;

- Useful for planning and evaluating care;

- Accessible; and

- Provided in a useful form.

The more current the data, the more useful. Data that are three months old or older (which is the case with MDS quarterly data) are not always taken seriously by the staff and can be easily dismissed as "no longer a problem." Data from last week, however, is typically taken much more seriously. It is quite useful, consequently, to design your system so that data are compiled, analyzed, and provided to those who can use it as often as possible. Facilities that were able to do this on a weekly basis had the greatest success with staff taking ownership of the outcomes. This is vital for accountability.

B. Accountability Systems

Units, departments, or homes that used clear accountability systems are much more likely to be successful than those that relied only on monthly or quarterly reports. The most successful implementation can be facilitated by an accountability system that is *integrated into the unit or department's routine*. For example, in one culture-change evaluation, units that integrated daily assignment sheets with the new toileting plan or new walking program and also integrated documentation that the plan had been carried out with daily reporting were considerably more likely to follow through. Another important outcome of building accountability systems at this level is that lack of follow-through or lack of desired results from follow-through become quickly apparent and can therefore be addressed sooner. Seeing at the end of the shift or the end of the day that a plan was not carried through has a much stronger impact on changing behavior than did discoveries that follow-through had not been done over the past month. This also allows staff to more clearly see the relationship between their actions and resident outcomes.

Another advantage is that data collected at the level of the unit, department, or shift is much more useful in determining the source of a problem with implementation. For example, in one evaluation, discovering that "toileting is not being done" or that "incontinence has not changed much" had little impact on individual staff and the way they went about their work. On the other hand, specifying that Unit C evening shift did not seem to be toileting residents and that incontinence figures were significantly affected by this led to a different approach to addressing the problem and much greater accountability. In such cases, it was quite difficult for staff to dismiss undesirable resident outcomes as someone else's problem or as not related to their actions.

Another obstacle to maximizing accountability can be the willingness of staff and their supervisors to accept impressions as evidence of follow-through (or achievement of outcomes) rather than insisting on data. For example, administrators can sometimes suggest that a change is being implemented throughout the facility because the director of nursing assures the administrator that it was being implemented. In turn, the nursing director is willing to accept the impressions and assurances of the unit nurses and other staff that implementation is being carried out. In most instances, everyone involved actually believed that this was the case. Evidence collected to confirm these impressions can surprise everyone. Staff can discover their impressions were not correct. Insisting on evidence, importantly, provides objective data for everyone to refer to and does not require supervisors to question what staff are reporting to them. Such questioning might be construed as a lack of trust when, in fact, the issue is more often a misperception that was never intended to deceive.

Effective accountability systems, ideally, contain the following elements:

1. Specificity at the unit, shift, and department level. For example:
   a. A data collection system that can distinguish one unit from another;
   b. A data collection system that includes data from departments involved in the implementation plan; and
   c. A data collection system that can distinguish processes and/or outcomes by shift.

2. Specificity to the daily or weekly level. For example:

   a. A data collection system that can provide data noted in No. 1 at weekly intervals where relevant; and

   b. A data collection system that can provide data noted in No. 1 at daily intervals when appropriate.

3. Objective outcome or process indicators. For example:

   a. Each implementation plan should have expected outcomes clearly specified in advance, the more discrete the more useful (number of incontinence episodes per shift).

   b. Each implementation plan should have clearly defined process indicators to monitor implementation. These will be obvious prior to changes in resident outcomes. Both process and outcome indicators must be easily identified with a high level of agreement among data collectors (inter-rater reliability).

4. Clear links between indicators and practice initiatives. For example:

   a. Careful thought should go into the identification of process and outcome indicators that are reliably linked to the implementation being initiated. (Staff sometimes become frustrated over selecting indicators that are not necessarily, or reliably, linked to the implementation.)

5. Clear designation of responsibilities. For example:

   a. Responsibilities for each aspect of implementation should be carefully spelled out so everyone knows who is expected to do what.

   b. Responsibilities for implementation can vary by departments and units but should be very clear and recorded and communicated in a way that is clear to all staff. Monitoring and evaluation responsibilities should also be clearly specified.

6. Systematic data and evidence collection on a regular basis. Specifically:

   a. Data collection systems should be used at predetermined intervals.

   b. Data collection for evidence of successful implementation should be collected as part of daily work, not added on.

   c. A predetermined plan should be developed to guide use of data collected (who will use it, when, and how).

   d. Clear link to Quality Improvement systems should be established from the onset.

A team could be constructed to deal with many of these issues. The team could provide the mechanism by which practice improvements are institutionalized, supported, and sustained. The responsibilities of this team suggest a high level and a broad range of skills among the members.

Appendix

Appendix A: Culture-Change Models

Appendix B: Tools for Teams

Appendix C: Tools for Mentoring

Appendix D: Tools for Leaders

Appendix A: Culture-Change Models

| | CLINICAL APPROACH | |
	Wellspring	Eden
Why it got started	Initially a proactive response to an increasingly competitive environment of managed care and consumer demand for quality	In direct response to the loneliness, boredom, and helplessness that elders experience in the institutional setting of a nursing home
Principles	Clinical focus that seeks to improve the quality of care for residents and quality of work life for staff resulting in reduced turnover Uses interdisciplinary clinical modules to improve knowledge of best-care practices for all staff, especially frontline workers Empowers frontline staff to use knowledge to create practice change that will improve care Relies on collaboration within and across facilities for improved care	Attending to the social needs of an individual will improve physical health Creates a community that encourages the development of meaningful relationships, spontaneous interactions, and variety in life Medical treatment is a supplement to genuine caring
Implementation	Has at the heart of the model interdisciplinary care resource teams based on clinical modules for problem solving Use of evidenced-based best practices CNAs put in position of authority in decision-making about work practice Nurse practitioner serves as a consultant to alliance and individual facilities at a systems level; also acts as a liaison between frontline staff and management staff	Creation of small groups of residents into neighborhoods to encourage relationships Inclusion of plants, animals, and children in everyday practices to foster spontaneity Staff are encouraged to get to know residents' likes and dislikes and allow residents to direct their own care needs Trained Eden Associates teach staff principles of the Eden Alternative
Outcomes	Facilities have shown improved clinical outcomes and higher staff retention rates than comparison facilities	Enhanced staff retention rates Reduction in number of resident medications and infections Anecdotal evidence suggests residents and staff are more highly satisfied with their environment after implementation of the Eden Alternative
For more information	*www.wellspringis.org*	*www.edenalt.org*

HOUSEHOLD APPROACHES		ORGANIZATIONS
Greenhouse	**PersonFirst**	**Pioneer Network**
Created to further deinstitutionalize care Realization of Eden in design	Started in order to train staff to understand how to know and care for a person with dementia	Umbrella organization for the culture-change movement Transformation of the current culture of aging in which elders experience loss of control, loss of choice, and loss of relationships to a culture that is life-affirming, satisfying, humane, and meaningful
Focuses on social settings and relationships rather than assistance with activities of daily living and clinical care Changes facility size, interior design, staffing patterns, and delivery of skilled services Houses 6–10 elders in a home that blends with neighboring houses Houses are smart, warm, and green with inclusion of computers, wireless, paging, fireplaces, private baths, and outdoor spaces	Focuses on allowing control in daily care by accepting risk as a part of everyday life and allowing residents to direct routines Believes honoring a person through the physical, social, and psychological environment may allow the resident to regain a sense of self otherwise lost Create a meaningful life for residents by getting to know the person's values no matter what their abilities are	Value knowing each person and putting the person before the task Accept risk as a normal part of life Emphasize community living and promote household living environments Anyone is eligible to join the Pioneer Network regardless of facility, position, or person-centered care approach. The Pioneer Network provides resources and information about change as well as serves as a networking outlet
Professional nurses, physical therapy, and other skilled services are visiting services at the home Direct-care staff called Shahbazim carry out day-to- day activities including cooking meals, laundry, and light maintenance tasks Construction has been funded for some facilities using tax credits or grants	Staff training emphasizes learning about the resident and getting to know daily habits, practices, and routines Daily pleasures interviews are used to understand residents' habits, and care cards include information about residents' preferences	Staff members develop personal relationships with residents Community meetings offer opportunity for developing relationships and exploring common interests and goals Routines are individualized
In one study, residents reported a higher quality of life, were more satisfied, and had a better emotional well-being than residents in a comparison nursing home. QIs that are as good or better than comparison homes with fewer declines in late-loss activities of daily living (ADLs) as a notable finding in the study	Residents described a better quality of life and an increase in meaningful activities in an evaluation of PersonFirst. Turnover for CNAs and RNs reduced significantly Data on QIs is mixed	An unpublished study found Pioneer nursing homes have better quality-of-care outcomes than nonparticipant homes
www.ncbcapitalimpact.org/default.aspx?id=146	**_www.actionpact.com_**	**_www.pioneernetwork.net_**

It is important that the organizational culture and the culture-change model are compatible. When organizations attempt to implement culture change without carefully considering how their organization operates and whether that is compatible with the operation of the culture-change model, frustration and failure can result. In particular, it is important to examine the culture-change requirements for information flow, decision-making, resource utilization, staffing, scheduling, promotions, access to data, problem solving, and disciplinary actions to determine whether these are consistent or inconsistent with how the organization operates. Maintaining a reward system for frontline staff that is entirely based on absenteeism, for example, is incompatible with sustaining culture-change models. It is too narrow and will undermine the implementation. Avoiding corrective action and possibly dismissal when department heads or unit nurses actively undermine culture change or simply refuse to support it will also undermine the program.

Based on interviews with culture-change staff, the following areas are some of the organizational and program compatibilities that deserve scrutiny:

1. Is culture-change participation included in performance evaluations?

2. Is there enough staff and enough staff consistency to carry out implementation plans?

3. Is turnover too high to implement programs requiring follow-through?

4. Are staff nurses able to participate in the program?

5. Do department heads and charge nurses integrate CT plans into their decision-making about their areas?

6. Are staff throughout the organization supported to attend CT and other meetings related to culture change?

7. Is necessary information shared easily?

8. Are problems addressed quickly or left to simmer?

9. Do staff feel appreciated?

10. Does each level of the organization have a clear view of what the level just above and just below is doing?

11. Is staff development clearly related to the work and what the staff need?

Appendix B: Tools for Teams

Conducting Effective Meetings

Meeting Minutes Template

Skills for Team Members

Conducting Effective Meetings

Many common implementation challenges surround meetings. Those described by culture-change facilities include:

- Invited team members did not respond or attend;

- Team members attended meetings but didn't participate much in the meeting discussions; and

- Team members attended and participated in meetings, but follow-through on meeting decisions or work plans varied significantly.

Each of these challenges, and certainly any combination of them, left some people carrying the weight of the team, or lead to team ineffectiveness.

There are several strategies that can assist teams in keeping organized and on task. These strategies are described in this section.

A. Create a Meeting Statement

A meeting statement is a clear statement of purpose drafted before a meeting takes place. Writing a meeting statement may sound like an unnecessary or excessive step in the direction of more productive meeting time but preparing a meeting statement can help a meeting facilitator and meeting participants focus and prepare for targeted meeting discussions. An effective meeting statement will include the following information:

a. Any materials (including data) needed for a meeting;

b. The location and the length of time of the meeting; and

c. The identification of the participants taking part in the meeting.

Meeting statements should be very specific. See the examples below.

Sample Meeting Statements

Appropriate: The Care Team on Activities will meet on September 21, 2007, from 1 to 2:30 p.m. in meeting room XX to: 1) report back on work assignments from the August 18 meeting; 2) discuss activity participation data collected during July and August; 3) discuss this data and link it to our next implementation steps; 4) identify work assignments for each team member; and 5) schedule our next meeting.

Inappropriate: The purpose of the September 21, 2007, the Care Team on Activities meeting is to discuss an implementation plan.

In addition to bringing focus to a meeting, creating and using meeting statements can assist with tracking the progression of a team in their efforts, since meeting purpose statements often appear on meeting agendas and meeting minutes.

A meeting statement can assist some participants with determining what type of meeting will occur. For example:

- **Information-giving,** in which the meeting facilitator or a guest speaker presents to the group about a particular topic. The purpose of an information-giving meeting is to provide clear and complete information to meeting participants. These meetings are characterized by opportunities to ask short, clarifying questions with very brief discussion time allocated.

- **Information-taking,** in which there is open discussion among participants. The meeting facilitator in this type of meeting is expected to facilitate discussion or information sharing, returning the discussion back to main ideas, as needed. The facilitator may also ask open-ended questions of participants. In an information-taking meeting, the meeting participants are initiating most of the discussion, with one person facilitating the discussion.

- **Problem solving,** in which communication occurs between the facilitator and participants. The meeting facilitator or guest speaker typically provided background information (the question or problem to be addressed at the meeting) to meeting participants, and team members provide suggestions and generate ideas toward problem solving. Like an information-taking meeting, the meeting facilitator keeps the meeting discussion moving toward the goal of identifying solutions to a particular problem.

Many times these different meeting types or focus areas are blended in a single meeting agenda. However, appreciating the distinctions between the types of discussion is important when considering what to address in a meeting and how to direct participants with regard to preparation. For example, for a meeting or discussion on problem solving, you may want to consider posing the question at hand to meeting attendants for their thoughtful consideration ahead of the actual meeting time. If it's an information-providing meeting, you may want to solicit requests from the meeting participants for particular content areas they wish to be covered.

B. Creating an Agenda

Creating an agenda is a key element of a productive meeting. The agenda reflects essential information of importance to meeting attendees (including topics for discussion, identification of facilitators who will lead a discussion or topic area, and the time allotted for each topic); provides an outline for the meeting time (how much time will be spent on each topic); provides a checklist to ensure all information is covered; gives meeting participants an opportunity to prepare for discussions or decisions; and lastly, but importantly, provides a focus for the meeting.

It is recommended that the meeting facilitator request agenda items from participants well in advance of the meeting date. Make sure each person indicates how much time he or she expects to use for the agenda item. Make sure you are clear on what each presenter (those leading a discussion or presenting information to the group) will be presenting on. This latter point is critically important for two reasons: 1) it is your responsibility to make sure each agenda item directly relates to the goals of the meeting (the goals

laid out in your meeting statement), and 2) it will allow you to set realistic amounts of time for each person who will be presenting. In other words, don't schedule more than 50 minutes worth of material in an hour-long meeting—if you end a meeting early, participants will be pleased!

A template for a meeting agenda is included at the end of this section.

C. Notifying Meeting Participants

Meeting participants should be reminded of the time, duration, and place of an upcoming meeting in advance. To determine an appropriate amount of advanced notice, consider how much time is needed by participants to prepare for the meeting (Do they need to review relevant materials? Create documents? Brainstorm or conduct research to prepare?). Advance notice could range from three days to two weeks or longer. It is recommended that "same day" meetings only be called in the case of an emergency.

Ask those invited to the meeting to accept or decline the meeting invitation. It should be clear that once an invitee has accepted the invitation, the person will be expected to be there.

Consider how to most effectively deliver meeting information to colleagues ahead of time. Is a meeting announcement posted somewhere in your facility likely to be seen by all meeting invitees? If you consider using staff mailboxes, have you allowed enough time to ensure that mailboxes will be checked by staff prior to the meeting date? If the meeting involves a small group, is it possible to hand-deliver the meeting materials to each participant? This provides an opportunity for you to provide any additional information and answer questions personally.

It is also useful when you are sharing meeting materials with participants to have sorted out and identified ahead of time any specific roles meeting attendees will have. For example, whose turn is it to take minutes? Does this person know that he or she will be expected to do that?

D. Selecting a Meeting Setting

The meeting setting should be determined by the purpose of your meeting. Selection of the meeting space requires consideration of several important environmental factors. For example, is the room you have chosen appropriate for the size group you expect? Are all participants who are attending able to sit together at the meeting table? It is also important that the function of the room doesn't interfere with purpose of the meeting. For example, meeting in a board room or an administrator's office may be intimidating or anxiety inducing to some participants. By the same token, meeting in a lunchroom or employee break room may be too informal a setting, or may allow interruptions from visitors.

Think about the room arrangement as well. Rows of seats with the facilitator or guest speaker in the front of the room works well for information-giving meetings, although it is a bit formal. U-shaped chair arrangements around a table works well for problem-solving meetings, particularly if the ideas being generated need to be noted for view by meeting participants.

E. Conducting the Meeting

This next section describes several aspects of meeting coordination that are recommended to occur at the meeting being held.

Starting a Meeting

a. Inform the building receptionist and/or overhead speaker operator of the meeting start and end time and provide that person with a list of the meeting participants, so that messages can be taken for these individuals.

b. Arrive in the meeting room early to arrange the space and to greet and introduce new participants.

c. Ask participants to turn off their pagers and phones for the duration of the meeting.

d. Start the meeting on time. This sets an expectation about timeliness and the value of an individual's time in the organization (don't punish those who are punctual).

e. Some facilitators are successful with starting meetings with a statement or story that is dramatic, novel, or humorous to get the attention of the group and focus participants on the purpose of the gathering. At a minimum, welcome everyone, thank them for coming, recognize special guests, and identify the meeting minutes taker.

f. Update participants: refer to the meeting statement of purpose and briefly fill in any background information necessary so all participants are on the same page to start.

g. Remember to remind participants what time the meeting will end

Facilitating a Meeting

To facilitate participation in the meeting discussion, try these techniques:

a. State your need for others' opinions on the meeting topic.

b. Don't be afraid to ask for help; state that you can't solve the problem alone: *"I have some thoughts on this, but I'm wondering what others are thinking."*

c. Call on experience; recognize those who have been through similar problems: *"Everyone here brings a unique perspective on this, so I'm excited to hear what each of you think about this."*

d. Compliment people on work or achievements so far: *"You've done some excellent work on this topic. Thank you for bringing the information you have to this meeting."*

e. Use prior information, such as earlier discussions about the topic with participants: *"If you recall, the last time we met, we determined A. Can you help me to understand how A relates to what we're currently discussing?"*

f. Question the need for other sources of data:

- *"Has everyone we need to hear from on this subject weighed in? Who are we forgetting?"*
- *"Are there other data sources we need to be considering at this point?"*
- *"Who is most likely to be affected by what we're concluding?"*

To keep the meeting discussion flowing, try to listen supportively to all opinions, encouraging those who speak to finish their thoughts. Avoid asking for too many details at the beginning of any discussion. Let the group decide how the conversation will flow and encourage participation (see tips above to facilitate participation).

Here are five strategies (initiate, orient, clarify, integrate, and test possibilities) for a facilitator to guide and unify the meeting discussion:

1. **To initiate**, start conversation by stating the problems for the group to address or solve, suggest new ideas, and/or state new activities:
   "I heard from Sue in education that they're planning a new in-service on X. Is this something we might want to ask about getting involved with?"

2. **To orient**, keep participants focused on the meeting purpose by restating it, as needed, and reminding participants of their role at the meeting. Don't hesitate to question whether a goal or objective has been identified:
   "In an effort to orient myself and the group, I believe we've identified several ideas to this point and raised several questions including a, b, c. Is that an accurate assessment of where we are?

   If the goal has been identified, have specific strategies to address the goal been identified?
   "We've decided as a group that our goal is X. Have we identified how we anticipate meeting this goal? What strategies will we use to reach X? How will we know if or when we've succeeded?"

   Remember to use data as a resource. Encourage the group to clarify how the discussion or suggested plans for implementation reflect data-based conclusions.

3. **To clarify**, make sure meeting participants understand the information that has been covered.
   "We've covered a lot of ground here today. Does anyone have questions about what's being presented or the data that's been shared?"

   Also make certain that timelines and assignments that are being discussed eventually get linked to individuals for completion and that this information is being recorded in the minutes.

4. **To inform**, provide facts or information to facilitate decision-making while also noting facts or information that still needs to be gathered.
   "It seems we have a clear understanding of rates of falls on unit X, but are we in agreement that we still need to gather data on where and how these fall are occurring and if there are any variations across shifts?"

5. **To test possible solutions**, raise questions about the areas or issues being suggested that could potentially be problematic, identifying implications for others (residents, other staff, the organization in general). Central questions for the facilitator to stay focused around include:

- What is our timeline?
- Who will be doing what?
- Will residents or other staff be affected by our proceeding with this? If so, how?
- How will we assess our progress? What evidence will we use to know whether we're making progress?

Ending a Meeting

- Watch the meeting time so the purpose of meeting is addressed during the time allocated.

- **Ten minutes out from the meeting end time:** Remind the group that the meeting is about to end, and encourage participants to vocalize any final important thoughts.

- **Five minutes out:** Summarize points addressed at the meeting, including what was accomplished. Provide specific instructions for any action that is to occur before the next meeting. Review the group's work plan and work assignments and deadlines. Confirm that the minutes taker has documented this information in the minutes.

- Inform participants when the minutes or summary document of the meeting will be sent out and how this will occur, such as e-mail, hard copies posted, or copies in mailboxes.

- Announce future meeting date, time, and location, and thank participants for coming.

- Try to close your meetings with strong, positive statements:
  "I know we can solve this problem together."

F. Meeting Challenges

This next section provides information in several common challenge areas associated with meeting participants.

Challenge: People who talk too much

Suggestion: Try to interrupt the participant without offending him or her:
"Excuse me, Sarah, I was still speaking. Will you hold your comments for just a minute? Thank you."

Suggestion: Summarize what the person has said, then ask others for opinions:
"I'm sorry to interrupt you. It sounds like you're frustrated with this situation, but we need to be sure the perspectives of all team members get addressed on this topic. How does someone else feel about this issue?"

Challenge: People who don't participate

Suggestion: Individuals may be nervous about speaking in front of others. Assure the person that it's a friendly group, and participation get easier each time. Inquire about any specific needs.

Suggestion: Individual may not be prepared for the meeting discussion. Try to check ahead of time that meeting materials have been received and reviewed.

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Challenge: People who stray from the meeting purpose

Suggestion: Remind the person of the meeting purpose.

Suggestion: Use the agenda items to refocus discussion:
"I apologize for interrupting this discussion, but it seems we're a bit off topic. According to the agenda, I think we've designated this time for discussion about X."

Suggestion: State that all new items of interest will be addressed at the end of the meeting, if time allows.

SAMPLE AGENDA

Care Team on Activities
Meeting Agenda
September 21, 2007
1–2:30 p.m.

Conference Room, 3rd Floor, Room 318
Meeting Purpose: 1) report back on work assignments from the August 18 meeting; 2) discuss activity participation data collected during July and August; 3) discuss this data and link it to our next implementation steps; 4) identify work assignments for each team member; and 5) schedule our next meeting.

Invited: Participants:	Facilitator: Anne Calloway; Minutes: Jenni Klein, Terry Lever, Mary Troy, Kim Jensen, Chris Temple, Stacie Newman	
TIME	**ITEM**	**LEADER(S)**
1:00	Attendance and Restatement of Meeting Purpose	Anne
1:05	Review of Work Assignments from August 18 Meeting	Anne
1:10	Individual Reports from Work Assignments	Terry Mary Stacie
1:40	Discussion of Data from Work Assignments	All
2:15	Discussion of Next Steps	All
2:20	Work Assignments and Issues for Next Meeting Next Meeting Facilitator and Minute Taker	Anne Jenni
2:30	Adjourn	Anne

A Practical Guide to Transformation

Meeting Minutes Template

1. Meeting Information
Team Name:
Date of Meeting:
Minutes Prepared By:
Purpose of Meeting:

2. Attendance at Meeting	
Name	Department

3. Agenda/Discussion Items

I. Old Business (Be sure to follow up on previous action items.)
 	
  Notes:
 	
  Outcomes

II. Agenda Item
 	
  Notes:
 	
  Outcomes

III. Agenda Item
 	
  Notes:
 	
  Outcomes

4. Action Items			
Action	*Assigned to*	*Due Date*	*Status*
Item 1:			
Item 2:			
Item 3:			

5. Nest Meeting		
Target Date:	Time:	Location:
Objectives:		
Send Agenda Items to:		

Skills for Team Members

It is not important for each team member to have all of these skills. Collectively, a team must bring or cultivate all of these skills and abilities in order to develop, implement, and sustain their practice improvements. It is important, consequently, that management and teams make the effort to assess the capacity of their team and team members and that they quickly identify which skills are missing and which are present but may need further development. It is important that this assessment be done early and repeatedly. This assessment can be used to inform the selection of new committee members and to determine where committee development needs to be done. This clearly has implications for staff development activities at the individual and alliance levels. Given the level of staff turnover in most long-term care settings, it is important to have some depth in the above skills. That is, it would be unwise for only one team member to be skilled in any particular area. Many of these skills can be developed over time:

- Knowledge about accessing, interpreting, and using multiple types of data;

- Familiarity with the work routines of multiple groups, departments, units, and shifts;

- An understanding of information flow, lines of authority, and decision-making processes in the organization;

- An understanding of the quality improvement systems in the organization;

- Familiarity with staff development and orientation programs;

- An understanding of employee performance evaluation processes;

- Familiarity with the usual problem-solving mechanisms used throughout the organization;

- An ability to assess organizational aspects of or contributions to events or incidents that occur;

- The ability to develop a detailed plan with a timeline;

- The ability to collaborate;

- The ability to participate in and run effective and efficient meetings;

- The ability to hear, appreciate, and consider multiple perspectives;

- The ability to generate multiple approaches to each problem identified, anticipate the likely outcomes of each approach, and make decisions based on such an assessment;

- The ability to identify resources needed;

- The ability to identify learning needs of self and other committee members; and

- The ability to work with others to develop the above skills in new team members.

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Skills and Characteristics of the Change Facilitator

For cost-effectiveness, you may wish to look internally and consider work reallocation for the change facilitator position. No single person brings all of these skills. Different staff will bring very different levels of confidence, skills, and experiences in each of these areas, however, it is recommended that when interviewing and selecting a staff person for the facilitator position, discussion about skills and experiences with these areas are included:

- Problem identification;

- Problem solving;

- Collaboration;

- Listening;

- Facilitating the development of others;

- Locating resources;

- Coaching and mentoring;

- Analyzing organizational challenges;

- Negotiating;

- Willingness to ask for help or delegate;

- Assertiveness;

- Critical, creative thinking;

- Teaching skills (taking advantage of teachable moments); and

- Clinical knowledge.

Appendix C: Tools for Mentoring

New Staff Orientation Program: Preceptor Model

Mentor Scale

Recommended Job Description: Certified Nursing Assistant Peer Mentor

New Staff Orientation Program: Preceptor Model

The Masonic Home of New Jersey has published one example of how a Preceptor Program might work. This program was specifically designed to increase the effectiveness of orientation programs for new staff. It is included here to provide an example of how such a program might work and what it could include.

A. Purpose

The Preceptor Program provides increased effectiveness in the orientation of new nursing staff.

B. Definition

A preceptor is a registered nurse, licensed practical nurse, or certified nursing assistant, who has been judged experienced enough to assist in the orientation of new nursing personnel to our organization, policies, and procedures. The preceptor is responsible for providing orientees with an environment conducive to learning and growth. The preceptor assists orientees during the transition to our nursing service roles. The preceptor serves as a clinical role model following the orientation given by the education directors.

C. Preceptor Selection and Qualifications

Selection of the preceptors will be performed by Nursing Administration and Education. Selection will be based on the following criteria:

1. Minimum of one year employment;
2. An above-average or outstanding performance evaluation;
3. Demonstrated knowledge of our policies and procedures; and
4. Active participation in continuing education.

The preceptor must attend a one-day orientation program with the Education Department prior to the beginning of preceptor duties.

The preceptor position will be offered for a 12-month period. The preceptor will be evaluated for overall effectiveness and may or may not be reinstated for an additional year.

D. Preceptor Responsibilities

1. Performs regular staff duties as assigned.
2. Orients new nursing staff to the unit:
    a. Identifies and meets learning needs;
    b. Acts as a clinical resource;
    c. Aids in the socialization of the new staff member;
    d. Makes educational opportunities available (in-service programs, unit in-service training, staff meetings); and
    e. Assures that policies and procedures of the home are followed.
1. Ensures quality resident care during orientation.
2. Assesses performance by providing positive feedback as well as suggestions for improvement.
3. Reviews skills checklist and orientation sheets and reports progress by orientees to education directors.
4. Meets with education directors as required.
5. Assists in the operation of the Geriatric Nurse Extern Pr ogram.

E. Evaluations

1. The preceptor will be evaluated by each new staff member at the end of orientation.
2. The preceptor will receive one yearly performance evaluation rated by the nursing supervisors and education director.
3. The Preceptor Program will be evaluated by each preceptor and the education director on a yearly basis.

F. Termination of Preceptor Position

Termination of a preceptor position will occur if the employee:

1. Fails to maintain preceptor responsibilities; and/or
2. Violates Masonic Home policies and procedures; and/or
3. Has excessive absenteeism.

G. Compensation

1. During the period of time that the employee is a designated preceptor, he or she will be compensated at the extra rate of $0.50 per hour.

Mentor Scale

Source: *Managers as Mentors: Building Partnerships for Learning* **by Chip R. Bell**

1. People probably see me as	a. a soft touch	b. hard-nosed
2. Workdays I like the most are	a. unpredictable	b. planned
3. When it comes to celebrations, most organizations need	a. fewer	b. more
4. When I evaluate people, my decisions are based on	a. mercy	b. justice
5. My approach to planning my personal activities is	a. easygoing	b. orderly
6. People generally see me as a person who is	a. formal	b. personable
7. When it comes to social situations, I tend to	a. hold back	b. jump in
8. I like to spend my leisure time in ways that are fairly	a. spontaneous	b. routine
9. I believe leaders should be more concerned about employee	a. rights	b. feelings
10. When I encounter people in need of help, I'm more likely to	a. avoid	b. pitch in
11. When I am in a group, I typically	a. follow	b. lead
12. Most people see me as	a. private	b. open
13. My friends know that I am	a. gentle	b. firm
14. If I were in a group of strangers, people would most likely remember me as a	a. listener	b. leader
15. When it comes to expressing my feelings, most people probably see me as	a. guarded	b. comfortable
16. When people I depend on make mistakes, I am typically	a. patient	b. impatient
17. When I eat out, I generally order food that	a. sounds unique	b. I know I like
18. In general, I prefer	a. the theater	b. a party
19. In a conflict, when anger is involved, my emotional fuse is usually	a. long	b. short
20. In an emergency situation, I would likely be	a. calm	b. anxious
21. I prefer to express myself to others in ways that are	a. indirect	b. direct
22. I am likely to be ruled by	a. emotion	b. logic
23. When in new and unfamiliar situations, I am usually	a. carefree	b. careful
24. In a festive social situation, I am usually	a. passive	b. active
25. When I am blamed for something I did not cause, my initial reaction is to	a. listen	b. defend
26. If I am in a situation in which I lose or am left disappointed, I get	a. sad	b. mad
27. If someone came to me in tears, I would probably feel	a. awkward	b. at home
28. Most people see me as	a. an optimist	b. a pessimist
29. People usually see me as	a. uncritical	b. critical
30. If people were given a forced choice, they would say I was	a. too quiet	b. too loud
31. At the end of a long party, I usually find myself	a. exhausted	b. energized
32. When I work on projects, I am best at getting them	a. started	b. completed
33. I believe people should approach their work with	a. dedication	b. inspiration
34. My social blunders typically leave me	a. embarrassed	b. amused
35. When my organization announces a major change, I get	a. excited	b. concerned
36. People are likely to see me as	a. firm	b. warm
37. After a tough day, I like to unwind	a. alone	b. with others
38. Change is most often your	a. friend	b. adversary
39. My work and social life	a. are separate	b. often overlap

THE SCORING FORM

Sociability

Using simple hash marks, tally your A's and B's for the 13 sociability items.

		As	**B**s
1, 4, 7, 10, 13, 16, 19,			
22, 25, 28, 31, 34, 37	Totals	_____	_____

Dominance

Do the same for the 13 dominance items.

		As	**B**s
2, 5, 8, 11, 14, 17, 20,			
23, 26, 29, 32, 35, 38	Totals	_____	_____

Openness

Do the same for the 13 openness items.

		As	**B**s
3, 6, 9, 12, 15, 18, 21			
24, 27, 30, 33, 36, 39	Totals	_____	_____

Interpretation

The Mentor Scale measures—at one point in time—a mentor's need for sociability, dominance, and openness, all crucial components of an effective mentoring relationship.

Sociability has to do with your preference for being with or apart from others. People with high column-A scores in sociability tend to be reserved loners; those with high column-B scores tend to be outgoing joiners. People with similar numbers of As and Bs are neither highly sociable nor highly reserved; they can be moderately sociable or moderately reserved, depending on the situation.

What does sociability have to do with mentoring? People who have high sociability scores will find the rapport-building and dialogue-leading dimensions of mentoring easier. They will have to work hard to avoid dominating discussions. Low sociability scores are found among people whose reserve may make them a bit unapproachable. These people will need to work harder at helping protégés open up and communicate.

Dominance is about your preference regarding being in charge. People with high column-A scores are comfortable having someone else do the leading and often prefer it. People with high column-B scores tend to like being in control and often assert that need. Low dominance scores can also indicate a high need for independence. People with balanced scores are neither highly dominant nor highly submissive. They can control moderately or not at all, depending on the situation.

Dominance is a major issue in mentoring with a partnering philosophy. The whole concept of mentoring today is based on a relationship of shared power. High dominance scorers are reluctant either to give up control or to share control of the relationship; they have to work hard to listen rather than talk. Low dominance scorers, on the other hand, may need to work to assume leadership of the relationship. They may take such a low-key, laissez-faire approach that the protégé feels insecure and without guidance.

Openness refers to how easily you trust others. High column-A scores are found among people who are cautious, guarded, and reluctant to show feelings. High column-B scores are typical of people with many close relationships, who are comfortable being vulnerable and tend to express their feelings easily. People with similar A and B scores are moderately open or moderately cautious, depending on the situation.

High openness scorers will find it easy to reveal themselves in a mentoring relationship. In fact, their challenge is to be candid and open enough to encourage the protégé to do likewise, while not being so aggressive as to overwhelm or intimidate the protégé. Low openness scorers, however, will need to work at overcoming their caution in order to take early emotional and interpersonal risks with the protégé; their instinctive guardedness can make the protégé feel that mistakes might have dire consequences.

Remember, the Mentor Scale gives you a reading at a moment in time, one that may change with the circumstances. Keep in mind also that the scale assesses only three aspects of your leadership personality. Don't generalize the results beyond their intent.

Recommended Job Description:
Certified Nursing Assistant Peer Mentor

Purpose:

- To reduce turnover in the direct-care workforce by giving new employees a personal introduction to the work and the role of the nursing assistant;
- To support newly hired nursing assistants to become a caring member of the team; and
- To serve as a resource to other nursing assistants in the organization.

Job responsibilities:

- Provide on-the-job training for new, rehired, and existing employees.
- Support newly hired aides for a minimum of five shifts, increasing the mentees' caseloads as their progress and experiences allow.
- Train or educate all newly hired or existing staff regarding departmental procedures, safety and health issues, and other information.
- Complete an orientation check on all new hires upon the completion of the orientation period and a competency evaluation within two weeks of hire.
- Provide constructive feedback to the new aide.
- Serve as a liaison to the administrative staff and the new employee.
- Participate in the interviewing of nursing assistant applicants.
- Be an active member of the peer mentor team.

Skills, abilities, and qualities pertinent to the position:

- Strong connection to the work of direct-care service
  * Demonstrates an ability to do the work of a CNA
  * Shows a positive attitude about being a CNA

- Good assessment and observation skills
  * Demonstrates ability to be nonjudgmental of staff and other aides
  * Sees many sides of a situation

- Good interpersonal, relational, and communication skills
  * Shows ability to learn and use problem-solving skills
  * Displays good listening skills
  * Asks for help or assistance
  * Demonstrates the ability to be self-reflective

- Ability to work as a member of a team
  * Maintains a good relationship with other staff and other aides
  * Receives positive feedback from residents and/or family members
  * Understands confidentiality and will discuss issues only with those who have a "need to know"

- Flexibility
  * Able to respond in emergency situations
  * Willing to be on call

- Knowledge of company policy, procedures, and culture
  * Has exemplary work history
  * Demonstrates knowledge of policies and procedures
  * Understands how to access resources and explore options

- Ability to work independently and in potentially stressful situations
  * Able to handle self in a calm manner in stressful situations
  * Self-directed and able to follow directions
  * Demonstrates good organizational and time-management skills

Minimum qualifications:

- Six months experience
- Familiarity with agency policies and procedures
- Ability to speak, read, and write functional English

Appendix D: Tools for Leaders

SWOT Analysis

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

SWOT Questions	Answers
Strengths What do you do well? What unique resources do you have? What do others see as your strengths?	
Weaknesses What could you improve? What resources do you lack? What might others see as a weakness?	
Opportunities What opportunities are open to you? What upcoming changes could you take advantage of? What trends can you take advantage of? How can you turn your strengths into opportunities?	
Threats What trends, or upcoming changes, could harm you? What is your competition doing? What do your weaknesses expose you to?	

Based on SWOT tool at *http://www.mindtools.com/pages/article/newTMC_05.htm*
Mind Tools is an excellent resource for leadership tools and short articles.

Authors and Contributors

Authors

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Attachment 1

A Practical Guide to Transformation

System-Level Questions:

Clinical Care

Elimination

Skin

Falls/Restorative

Nutrition

Psychosocial Well-Being

System-Level Questions: Clinical Care

Introduction

This section reflects the serious commitment of an organization to sustain changes. It is clear that system-level change is necessary to sustain practice change, and that clinicians are much less likely to address the systems issues than they are the clinical issues. This attention to systems issues is most often the source of failure to sustain clinical practice changes. The questions provided here are examples of the types of system-level questions that are important to consider.

Format of the System-Level Questions

The system-level questions below correspond to the five clinical practice areas targeted by some culture-change programs. The questions for each clinical area reflect slightly varying formats so that each organization can determine, for itself, how it will approach suggested systems issues associated with different clinical practice areas. There are a number of initial questions for consideration, in bold font, with numerous related follow-up questions for consideration. The Wellspring Evaluation, and fieldwork conducted for this study, indicated that different worker types will have important contributions to make regarding particular clinical and systems issues being explored. To build on that finding, many of the questions provided below suggest worker types (in parentheses following a question) identified as those most likely to be interested and able to address a particular question.

How to Use the System-Level Question Guides

In each of these five areas, there are many more questions than one team could possibly use to create an implementation plan. Which ones are relevant and how many need to be considered depend on the facility problem or focus area being addressed. Specific staff, for example, could be assigned the task of reading through the system-level questions for a particular clinical area, thinking about which ones might be most relevant to the facility, identifying others that might be important, but not a priority, and bringing their findings to the team meeting for discussion. Overall, this will help staff members identify ways to systematically alter the environment to support practice changes.

The questions could also be used by the module facilitator to generate discussion at the module and to assist and support units having difficulty getting started on an implementation plan.

Remember: These selected questions are by no means intended to be an inclusive list of questions to consider. There are many more system-level questions that are relevant. Some of the questions included below will be relevant only to a particular organization or to a few organizations. Many, however, are relevant to most long-term care settings.

One of the greatest mistakes made by organizations engaged in practice change is to see themselves as mostly different from other organizations in an industry. In general, there is more shared among facilities than not. It is also vital that the Leadership Team be thinking about these system-level issues and be prepared to assist frontline staff with the implementation plans that incorporate them.

System-Level Questions Clinical Area

ELIMINATION

How does the physical environment affect continence? What environmental barriers exist in the facility that may contribute to incontinence?

- Is access to bathrooms blocked? (Maintenance, housekeeping)

- Are hallways cluttered? Are hallways more cluttered at certain times of the day? Are the hallways on certain units more cluttered than others? (Maintenance, housekeeping)

- Are bedrooms cluttered? (Maintenance, housekeeping)

- Are handrails accessible and secure? (Maintenance)

- Are residents able to see well enough to get to the bathroom? (Maintenance, residents)

- Are night-lights in use at night, and are they helpful? (CNAs, residents)

- Are bathrooms adequately marked so that residents can find them easily? (Maintenance, residents)

- Is there adequate color contrast in bathrooms so that residents can see toilets, grab bars, etc.? (Maintenance, residents)

- Are chairs, wheelchairs, beds, toilet seats, and commodes at a height to help residents transfer independently? (Therapy, residents)

- Are bathrooms large enough so that residents with canes, walkers, or wheelchairs can get into the bathroom? (Maintenance, residents)

- How many residents routinely use common bathrooms? (CNAs, residents)

- What bathrooms do residents use during the day? (CNAs, residents)

- Are bathrooms close enough to daytime and nighttime activities? (Activities staff, CNAs, residents)

- Do residents have adequate privacy? (Administrator, social services)

- Do all residents who need grab bars have easy access to bathrooms with grab bars? (Maintenance, therapy)

- How many residents use commodes, urinals? (CNAs)

- How many commodes, urinals are available? (Housekeeping, central supply staff, CNAs)

- How many residents use Hoyer lifts or other transfer aids for toileting? (Nurses, CNAs, therapists, restorative assistants)

- How many transfer aids are available? (Maintenance)

- Are transfer aids always available, or does staff have to wait for availability? (CNAs)

How does staffing and communication affect continence?

- Does staff have the education they want or need to meet elimination needs of residents? (CNAs, nurses, staff development coordinator [SDC])

- What misperceptions about incontinence does staff have? (SDC, CNAs)

- When working short-staffed, are CNAs able to toilet residents? (CNAs, residents, administrator)

- How many residents on toileting protocols (prompted voiding, scheduled toileting, etc.) can a CNA handle on a shift? (CNAs)

- How many residents on toileting protocols are assigned to a given CNA? (Director of Nursing [DON]/ Assistant Director of Nursing [ADON], nurses)

- How long does it take to assist each resident who is toileted? (CNAs)

- How long does it take to provide incontinence care for each resident who is incontinent? (CNAs) What routine "usual practice" incontinence care is provided? (CNAs)

- Is the routine incontinence care provided both comprehensive and based on current standards of practice? (Nurses, DON/ADON,)

- How often are CNA assignments changed so that there is not consistent staff working with residents who are on toileting programs? (DON, nurses)

- Regarding incontinence, what information is reported to the nurse by CNAs? (CNAs, nurses)

- Does all staff understand information to be recorded so that documentation is consistent from one staff member to another, from one shift to another? (DON/ADON, medical records manager, nurses, CNAs)

- How is information about elimination needs shared with pool/agency staff? (DON/ADON, nurses, CNAs)

- Are there instances when residents have to wait so long for call lights to be answered that an incontinence episode occurs? How long does it take staff to answer call lights? Are there certain times of the day when more call lights go on? Are there certain times of the day when residents have to wait longer for their call light to be answered? (Administrator, nursing management/supervisory staff, nurses, CNAs, social worker)

How does the assessment and care planning process affect continence? How is the type of urinary incontinence and related interventions determined for incontinent residents?

- Is continence assessed when a change in clinical status occurs? (DON/ADON, Minimum data set (MDS) facilitator, nurses)

- When developing incontinence assessments and care plans, are RNs directly available to consult with direct care staff on all units and all shifts? (DON/ADON, nurses)

- What disciplines are involved in identifying risk or causal factors for incontinence (such as activities, social services, dietary, therapy, physicians, etc.)? (Administrator, nurses, department managers)

- Does the pharmacist review medications looking for medications that may cause incontinence? (Pharmacist, DON/ADON)

- Does the current screening process to identify residents at risk for incontinence meet current standards of practice? (Nurses, DON/ADON)

- Does the current process to identify residents appropriate for bladder retraining or bladder programs represent current standards of practice? (Nurses, DON/ADON)

- Does the facility have a current policy in place addressing evaluation of incontinence, and does the policy reflect current standards of practice? (DON/ADON, nurses)

- Are residents with mobility limitations that affect independent toileting assessed to determine if therapy or restorative services might improve walking, transfer, or dressing ability? (Restorative staff, nurses, therapy)

- Do all incontinent residents have an incontinence diagnosis with the type of incontinence identified? (DON/ADON, nurses, medical director)

- Are all physicians caring for residents in the facility following the policy addressing evaluation of incontinence? (Medical Director, DON/ADON, nurses)

- How many residents have each type of incontinence (stress, urge, overflow, functional)? (Nurses)

- How are CNAs involved in the development of care plans? (Nursing management/supervisory staff, nurses, CNAs)

- Do interventions on care plans reflect the type of urinary incontinence? (Nurses, CNAs, DON, physician)

- How does the nurse report changes in the care plan to CNAs? Is the same process used on each unit and each shift? (Nurses, DON/ADON, CNAs)

- What criteria are used to determine if a resident is a candidate for specific therapies or treatments for stress or urge incontinence? (Physician, nurses, DON/ADON)

- What is the process for collecting a voiding history or diary? (Nurses, CNAs)

- What criteria are used to determine if a prompted voiding or scheduled toileting are appropriate management strategies? (Nurses, DON/ADON)

A Practical Guide to Transformation

What facility-wide interventions are in place to prevent incontinence?

- What kinds of behavioral interventions are used (Kegel exercises, prompted voiding, mobility aids, adaptive clothing, etc.)? (Nurses, CNAs, DON/ADON, physician)

- How many residents with cognitive impairment are on scheduled toileting programs? (Nurses, CNAs, DON/ADON)

- How many residents with functional incontinence related to weakness and immobility are receiving therapy or restorative services? (Nurses, restorative staff, therapy, CNAs)

- What medications to treat incontinence are used in the facility? (DON, nurses)

- Are any residents with urinary incontinence (UI) being treated with medications that are not recommended for the elderly? (DON, pharmacist)

- If bladder ultrasound is being used to evaluate post-void residual (PVR), is it being done correctly? (Nurses, SDC, CNAs)

- Who educates residents about treatment options? (Social worker, nurses)

- Who educates family members about UI treatment options? (Social worker, nurses)

- Who asks residents about what UI treatment options they would prefer? (Social worker, nurses)

- How is the physician involved in determining treatment options? (Physician, nurses, DON)

- How are nurses involved in incontinence programs? (Nurses, CNAs, DON/ADON)

- How is the administrator involved in incontinence programs? (Administrator, DON/ADON, CNAs)

- How many residents who are incontinent drink caffeinated beverages? (Dietary, nurses, CNAs)

- How many residents who are incontinent drink 8 to 12 cups of fluid a day? (Dietary, nurses, CNAs)

How does the facility monitor for success of programs to reduce or eliminate incontinence?

- How many residents on scheduled toileting programs have shown some improvement? (Nurses, CNAs, DON/ADON)

- How many residents on prompted voiding programs have shown some improvement? (Nurses, CNAs, DON/ADON)

- How many residents with UI are on a bowel regimen to prevent constipation? (Nurses, DON/ADON)

- How many residents on pharmacological management have experienced an improvement in continence? (Nurses, CNAs, pharmacist)

- Are interventions reevaluated as appropriate and additional interventions identified when needed? (Nurses, DON/ADON)

How many urinary catheters are used? Is there an appropriate diagnosis for each catheter in use?

- How many residents have indwelling catheters? (Nurses, CNAs)

- What diagnoses are present for residents with catheters? (Nurses)

- Based on current standard of practice, how many residents have catheters that are for unjustifiable reasons? (Nurses, physician, DON/ADON)

System-Level Questions Clinical Area

SKIN

How are initial assessments upon admission conducted?

- Who is responsible for assessing patients on admission?

- What system is in place to ensure that admission assessments are completed?

- What assessment tool is used to determine if a resident is at increased risk for pressure ulcer development?

- Are all residents' risks for pressure ulcer development assessed on admission?

- Who is responsible for doing initial skin assessments on each resident?

Think about bathing and hygiene schedules in your facility:

- Is there a system in place that ensures patients are bathed regularly and on schedule?

- Are patient preferences such as time of day and day of week considered when scheduling bathing times?

- What system is in place to ensure that schedules are followed?

- How are dressing changes coordinated with bathing times?

How are "at risk" patients identified, and how are interventions for these patients developed?

- Who is responsible for continuing skin assessments on each resident?

- How often are thorough skin assessments done on each resident?

- Is there a system in place to ensure that periodic skin assessments are done and that all "at-risk" residents are easily identifiable to all care-providing staff? Does the system work? How do you know this?

- Are there policies and procedures for addressing interventions for individuals who are identified as at-risk? Are they followed consistently? Who is responsible for implementing the interventions?

- What interventions are implemented for residents who are considered at increased risk for developing a pressure ulcer? Are those guidelines readily available to the individuals who are responsible for treatment? Who is responsible for implementing the treatment?

- What system is in place to ensure implementation of interventions?

- What is the procedure for reporting a resident who has developed a skin condition? What system is in place to ensure that the appropriate staff members are being notified? Who is responsible for notifying physicians of skin conditions?

Treatment, measurement progress, and costs of developed ulcers:

- What system is in place to ensure that pressure ulcer treatments are effective?

- What tool is used to measure pressure ulcer healing progress?

- Who is responsible for staging the ulcer?

- How often is the progress of a resident's ulcer evaluated?

- Who is responsible for evaluating the progress of the ulcer?

- Who is responsible for evaluating the effectiveness of the treatment plan?

- What steps are taken if a treatment plan is determined to be ineffective?

- What system is in place to ensure that information regarding a resident's healing progress is communicated to nurses, physicians, and CNAs?

- What is the total dollars per year spent in your facility for pressure ulcer treatment?

- Who is responsible for tracking the total costs for pressure ulcer treatment?

- Is there a system in place to address reducing the dollars spent on pressure ulcer treatment? What mechanism is in place to implement changes necessary to reduce treatment dollars?

- Are staff made aware of all costs associated with the use of various types of dressings and treatments?

Treatment guidelines, protocols, and care plans:

- Are there guidelines or protocols in place to provide information on wound dressings?

- Who is responsible for updating the guidelines or protocols?

- Who is responsible for making sure all staff are aware of guidelines or protocols?

- How is information on new guidelines or protocols disseminated to all staff members?

- What system is in place to ensure notification of new practices to all staff?

- How are physicians notified about changes in practice?

- What system is in place to ensure that all staff receive the information?

- What system is in place to ensure that physicians are aware of updates to dressing guidelines or protocols?

- How do you choose what dressing to use?

- Who decides what dressing products will be purchased?

- What criteria are used to determine the cost-effectiveness of each dressing?

- Does the criteria include nursing costs, such as the time it takes to perform a dressing change and the number of changes required a day?

- Are dressing changes coordinated with other resident cares, such as bathing? If so, how?

- What system is in place to ensure that dressings are changed according to schedule?

- Are appropriate soaps and lotions readily available and used properly?

- What system is in place to ensure proper resident positioning occurs in the facility?

- What system is in place to ensure that individual care plans, based on protocols, are written for each resident?

- Who is responsible for writing the care plans?

- What mechanism is in place to ensure that all staff members are aware of the resident's care plan?

- Are care plans written so that licensed and non-licensed personnel understand and interpret the information correctly?

Pressure ulcer facts, statistics, and data on prevalence of pressure ulcers in your facility:

- Are pressure ulcer fact sheets and leaflets readily available for staff?

- Are facility data on pressure ulcer incidence and prevention collected? Who is responsible for data collection? Who is responsible for interpreting the data? Is there a mechanism in place to make use of the information obtained from the interpretation of the data?

- How are staff members notified of the results of the data?

- Are statistics available regarding:

  - The number of residents acquiring a pressure ulcer while at the facility;
  - The number of residents who have a pressure ulcer at one time;
  - The number of residents with pressure ulcers that are nosocomial;
  - The number of residents who had a pressure ulcer on admission to the facility; and
  - The cost of prevention and treatment of pressure ulcers.

Staff training and orientation to pressure ulcers:

- How often are pressure ulcer training sessions or workshops made available to the staff?

- Who is responsible for scheduling the training sessions?

- Which staff members are included in the training or workshop sessions?

- Are newly hired CNAs given information about skin care products, prevention interventions, and treatment products?

- What type of information on pressure ulcer prevention and treatment are available to new CNAs?

- How is this information provided to the CNAs?

- Is the information given in a timely manner at the beginning of employment?

- Who is responsible for disseminating the information?

- What system is in place to ensure that CNAs understand the information that they are given?

- What system is in place to ensure that CNAs are using the information?

Committee structures:

- Is there a quality assurance committee in place?

- If so, is a representative from the nursing staff a part of the committee?

- Does this committee address issues of quality that affect resident care?

- Is this committee responsible for updating the organization's pressure ulcer policies and procedures? If so, when was this last done?

Systems in place for follow-through:

- What system is in place to address staff that does not follow the notification procedure for reporting a resident who has developed a skin condition?

- What system is in place to address individuals who do not adhere to the skin care policies and procedures?

- What system is in place to address staff who do not communicate skin assessment findings to other staff members?

System-Level Questions Clinical Area

FALLS/RESTORATIVE

How does the assessment process affect restorative services?

- How is the risk for falls assessed when a change in clinical status occurs? (DON, nurses)

- How is the risk for falls assessed for new admissions? (DON, nurses)

- When developing falls assessments and care plans, are RNs directly available to consult with direct-care staff on all units and all shifts? (Nurses)

- What disciplines are involved in identifying risk or causal factors for falls (such as activities, social services, dietary, therapy, nursing, physicians, etc.)? (Administrator, nurses)

- Does the pharmacist review medications looking for medications that may cause gait problems, sedation, and other symptoms potentially leading to falls? (Pharmacist, DON)

- How are the pharmacist's recommendations shared with other staff? (Pharmacist, DON)

- Does the current screening process to identify residents at risk for falls meet current standards of practice? How? (Nurses, DON)

- Does the current process to identify residents appropriate for restorative programs represent current standards of practice? (Nurses, DON, therapists)

- How are residents with mobility limitations assessed to determine if therapy or restorative services might improve walking or transfer ability? (Restorative staff, nurses, therapy)

- Are there any residents who did not have a falls assessment completed at admission? (MDS facilitator, nurses)

- What fall risk factors are routinely looked at during the admission process? (Nurses)

- How many residents have a fear of falling? (Social worker, CNA, nurses)

- How does the physician participate in the falls risk assessment process? (Physician, DON, Nurses) Are all physicians reviewing their patients who have repeat falls or have a fall with an injury? (Physician, DON)

- What potential contributing factors are reviewed at the time of a fall? (DON, nurses)

- Is all staff completing a review of the same factors at the time of a fall? (DON, nurses)

- How many residents at risk for falls have had a medical evaluation by a physician to look for potential causal or contributing factors? (DON, nurses)

- How does the pharmacist share information about risk for falls with the team? (Pharmacist)

How does staffing, training, and communication affect falls?

- Does staff have the education they want to meet restorative needs of residents? (CNAs, restorative assistants, therapists, nurses)

- Are staff confident in their abilities and knowledge related to providing restorative care? (CNAs, restorative assistants, therapists, nurses)

- Does all staff that provide direct assistance have transfer and ambulation training? (SDC)

- What misperceptions about falls does staff have? (SDC)

- How are nurses involved in restorative programs? (Nurses, CNAs, DON)

- How are residents involved in planning restorative programs? (Residents, DON, nurses, social work)

- How is the administrator involved in restorative programs? (Administrator, DON, CNAs)

- When working short-staffed, are CNAs able to walk residents and provide other restorative services? (CNAs, residents, administrator)

What interventions are implemented? What facility-wide interventions are in place to prevent falls?

- How many residents who had a recent fall (in the last three months) actively participate in gait and transfer training by a therapist? By a restorative assistant? (Restorative, therapists)

- How many residents who had a fall in the last three months actively participate in an exercise program to improve muscle weakness? (Restorative, therapists, activities)

- Who educates residents about fall risk factors? (Social worker, nurses)

- Who educates family members about fall risk factors? (Social worker, nurses)

- Is staff using correct transfer techniques? (Therapists)

- Have all residents with visual problems received vision screening and corrective eye care? (Nurses)

- Have all residents with hearing impairments received hearing screenings and corrective hearing devices? (Nurses)

- Do all ambulatory residents wear nonskid or nonslip footwear? (All staff)

- How many residents have side rails that prevent residents from voluntarily getting out of bed? Of these

residents, how many side rails are said to be used to prevent falling out of bed? Of these residents, how many have fallen out of bed with the side rails up? (Social worker, DON, ADON, administrator)

- How are residents identified as high risk for falls monitored by staff? (All staff)

- How does staff decide how often a resident at risk for falls should be checked at night? (DON, ADON, nurses, CNAs)

What environmental modifications have been made to reduce falls within the facility?

- Are all handrails at proper height and located in all resident access areas? (Maintenance, administrator)

- Do residents feel there is adequate light day and night? (Residents, social worker)

- Are grab bars available at toilets and tubs? (Maintenance)

- Are high toilet seats available for all residents who need assistance with transfer to or from the toilet? (Therapy, maintenance)

- Are all ambulation devices in proper working order? (Therapists, maintenance)

- Is there adequate adaptive equipment available to assist with transfer, ambulation, and other activities of daily living (ADL) activities? (Administrator, therapist)

- Is furniture placed in non-obstructing patterns? (Administrator, housekeeping)

- What environmental modifications are used to prevent injuries from falls from beds (i.e., how many low beds, mats on the floor, etc.)? (DON, ADON)

How does the facility monitor for success of programs to reduce or eliminate falls?

- Are accident reports always filled out for all falls so that accidents can be monitored? (DON)

- What data is tracked about falls over time, and how is the information shared? (DON, administrator, falls team, quality assurance [QA] committee)

- Is there ongoing review of resident falls to determine if any changes are needed in the facility-wide systems or environment? (DON, administrator, nurses)

- How do residents with side rails feel about having the side rails? (Residents, social worker)

- Are residents or their representatives able to identify potential adverse effects of side rails or other restraint use? (Social worker)

System-Level Questions Clinical Area

NUTRITION

Are residents offered a variety of foods on a regular basis?

- How are menus determined? (Dietary)

- How often does the menu change? (Dietary)

- Are seasonal foods incorporated into the menu? (Residents, dietary)

- What factors influence menu changes? (Dietary)

- How often does the menu have to be changed at the last minute (same day)? (Administrator)

- Are residents able to make menu recommendations? (Residents, social services)

- Do residents feel comfortable making menu suggestions? Do residents feel that staff listens to their menu suggestions? (Residents)

- How often are resident mealtime recommendations actually followed? (Administrator, social services)

- How many supplements are offered at mealtime? For residents receiving supplements at mealtime, how many residents are not finishing the food offered them? (Dietary, nurses)

Are residents offered a variety of fluids on a regular basis?

- Is fresh water easily accessible to the residents? (CNAs, residents)

- Which residents cannot reach the water? (CNAs, residents)

- How often is this checked? (CNAs, nurses)

- What fluids are offered residents? (CNAs, residents)

- Are beverage choices given when beverages are offered? (CNAs, residents)

- Are they offered the fluids they prefer? (CNAs, residents)

- How are beverage preferences assessed? (Dietary)

- Where are beverage preferences recorded? (Dietary, CNAs, nurses)

- Who ensures that residents receive the beverages they prefer? (Administrator, dietary, social services)

- What beverages are available on the unit? (Nurses, dietary, CNAs)

- Are residents satisfied with the fluid choices offered? (Residents, dietary, social services)

- How do you know if residents are satisfied with the beverage choices they are offered? (CNAs, nurses)

- Are beverage preferences followed during mealtimes and snack times? (CNAs, residents)

- Are there certain times of the day (in the 24-hour period) that fluids are offered to residents? (CNAs, residents)

- Are these times convenient to staff and resident schedules? (CNAs, nurses)

- Are between-meal fluids offered to all residents? If not, who decides which residents will be offered fluids? (Dietary, nurses)

- What fluid options are available through the dietary department? Are there budget constraints? (Dietary, administrator)

- Are residents consuming the fluids placed on meal trays? (CNAs, residents, nurses)

- What percentage of fluids is being consumed? (CNAs, nurses, dietary)

- When and how often is this information reviewed? (CNAs, nurses, dietary)

- How does staff know which residents have fluid restrictions? (Dietary, nursing, CNAs)

- Are all staff who offer fluids aware of all fluid restrictions? (CNAs, nurses)

- Are alternate approaches used if fluid intake is difficult to maintain (i.e., Popsicles, ice cream)? (Nurses, dietary)

- Who is responsible for ensuring each resident consumes adequate fluids? (Nurses, dietary)

- How many residents are drinking less than 1,000 cc/day (review data)? (Nurses, dietary)

Do residents receive the assistance they need with food and fluid intake when eating in the dining room?

- How is staffing varied to accommodate residents who need assistance? (CNAs)

- What happens when there are not enough people are available to assist? (DON, administrator)

- How do staff helping in the dining room know who needs assistance? (DON, CNAs)

- How does staff learn of the specific ways to feed individual residents? (Restorative staff, CNAs)

- Is there a system in place to monitor independence levels of residents to determine who should be encouraged to be independent, who needs assistive devices, and who needs complete assistance from supportive staff? (DON, nurses, occupational therapy, restorative services)

- How might licensed nurses provide more effective supervision and assistance during mealtimes? (Nurses)

- Do all staff know how to position residents correctly? (SDC, DON, nurses, restorative staff)

- Do CNAs feel they are adequately trained? (CNAs, SDC)

- How do nurses determine that staff feed residents correctly? (Nurses, DON)

- How are non-direct care staff who assist in the dining room trained to feed residents correctly? (SDC, administrator)

- If all residents are given as much time as they need and want to be as independent as possible, how long does mealtime take? (Dietary, administrator)

- Does staff continue to provide assistance until the meal is entirely consumed or the resident refuses to eat more? (Administrator, DON, nurses)

- When staff is pressed for time, what actions are taken to shorten mealtime? (CNAs)

- What is the effect of this action and how is this information used? (CNAs, residents)

- How many residents need total assistance, extensive assistance, limited assistance, or are independent with eating (review data)? (CNAs, MDS coordinator)

- How many residents needing complete assistance does one CNA need to feed at a given mealtime? (CNAs, DON)

- Do families feel that they are welcome to assist at mealtime? (Social services, administrator)

- What training do family members receive to be able to safely assist a resident with eating? (Family/friends/significant others, SDC, nurses)

Do residents receive the assistance they need with food and fluid intake when eating in their rooms or when receiving between meal snacks or nourishments?

- Why do some residents remain in their rooms? (Residents, CNAs, family members)

- How is it decided if a staff person needs to be present while a resident eats or drinks in his or her bedroom? (Nurses, dietary)

- How is this assessed? (Nurses)

- How many residents eat in their bedroom for breakfast? Lunch? Supper? (Nurses, CNAs, dietary)

- Are residents who eat in their rooms given the assistance they need to be able to sit in an upright position to assist with swallowing and independence in eating? Are residents positioned correctly when eating while in bed? (Residents, nurses, dietary)

- Does it take more time to have residents eat in their rooms during meals compared to eating in the dining room? (Dietary, nurses, administrator, CNAs)

- How many residents prefer to eat in their rooms and why? (Residents, administrator)

- Does staff continue to provide assistance until the meal is entirely consumed or the resident refuses to eat more? (Administrator, DON, nurses)

- Are other facility staff cross-trained to provide assistance with eating, if needed? (Administrator, DON)

- Are residents who are offered between-meal supplements consuming more food than residents receiving mealtime supplements? (Dietary, nurses)

Is there a system in place to ensure that food preferences, including ethnic choices, are offered?

- Do residents who have special diet orders (other than regular diet) receive the foods that they prefer? (Dietary, DON)

- If a resident does not like a food item served at mealtime, how many alternative choices are available at any given meal? (Dietary)

- Who is responsible for offering a mealtime substitute? (Dietary, nurses)

- How does dining room staff communicate this information to the kitchen? (Dietary, CNAs)

- Are alternatives always available at every meal? (Dietary, CNAs)

- Do all staff assisting in the dining room offer alternatives if a resident is not eating food items on the meal tray? (Dietary, residents)

- Do food alternatives offer similar nutritive value? (Dietary)

- Would residents prefer more choice at mealtime? (Social services, residents)

- How could meal service be improved to provide more choice? (Residents, CNAs, nurses, dietary)

- Is there an active Resident Council? Who would a resident contact about a food-related complaint? (Administrator, social services, residents)

- Do residents know whom they would contact with a food-related concern? (Administrator, social services, residents)

Residents on restricted diets:

- Do certain doctors order more restricted diets than other doctors? (Nurses)

- Are physicians who provide services to residents in favor of liberalized diets? (Nurses, dietary, physicians)

- Are residents who are on restricted diets experiencing weight loss and indications of malnutrition? (Dietary, nurses)

- What dietary restrictions are being placed on residents with diabetes? (Physician, dietary, nurses)

- What dietary restrictions are being placed on residents with cardiac disease and hypertension? (Nurses, dietary, physicians)

- Are residents being served the least restricted diet? (Dietary, nurses)

Are residents receiving good oral care?

- For residents who are not eating well, what assessments are done? (Nurses, CNAs, dietary)

- How many residents have abnormal lab values (review data)? (dietary)

- Who monitors nutritional lab values? How often? (Dietary, nurses)

- How are physicians made aware of lab values? (Nurses)

- How is information communicated between dietary, nursing, and the physician? (Dietary, nurses, DON)

Is there a system in place for accurately recording food and fluid intake?

- Are all foods and fluids consumed recorded 24 hours a day? (CNAs)

- How are foods and fluids measured, and are all staff using the same system of measure? (CNAs)

- Is the measuring system used valid and based on current standard of practice? (DON, nurses)

- How is staff trained to measure food and fluids? (Dietary, DON, nurses)

- How many staff are trained to measure food and fluids? (Dietary)

- Who is responsible for ensuring that food and fluids are measured? (Nurses)

- Are all staff recording food and fluid intake in the same place (i.e., the same forms)? (Dietary, CNAs, nurses)

- Does the food and fluid intake recorded in the residents' chart match what they actually consumed? (Dietary, nurses)

- Do all nurses review intake records? Who else reviews the intake records? (Nurses)

- Are intake records reviewed for accuracy? How is this done, and who does it? (Nurses)

Are swallowing difficulties promptly recognized?

- How many residents have had swallowing assessments? (Speech therapy, nurses)

- How many residents with weight loss have had swallowing assessments? (Speech therapy, nurses)

- How many CNAs or licensed nurses have received training about residents with swallowing difficulties? (CNAs, nurses, SDC)

- Are pureed foods prepared and served in a manner to make food look more appealing? (Residents, family/friends/significant others, administrator, social services)

- What do residents who consume pureed foods think about the food and its presentation? (Residents)

- Does staff know how to recognize signs of swallowing problems? (Nurses, DON)

- Is there a system in place to ensure that staff assisting in the dining room are aware of any swallowing difficulties and the related individualized interventions? (Nurses, DON)

Are residents satisfied with the dining experience?

- Are residents satisfied with the quality of food (taste and texture)? (Residents, family/friends/significant others)

- What is done to make the food attractive and presentable? (Dietary)

- How are food complaints brought to the attention of dietary staff? (Dietary, residents)

- Who is responsible for following up if food complaints are raised? (Administrator, dietary)

- Are the residents involved in choosing the times that meals are served or what meal setting they attend (i.e., first or second seating)? (Residents, social services)

Are the food trays/meals served on time? Is the food attractively prepared and served?

- Who delivers the trays/meals from dietary? (Dietary, DON)

- When the trays/meals arrive for distribution, what happens? How long does it take for all meals to be served in the dining room and out on the floor? (CNAs, dietary, residents)

- Who ensures meals are delivered on time? (Dietary, DON)

- How is the food transported to the dining room and resident rooms? (Dietary, CNAs)

- Are hot foods hot enough and cold foods cold enough? Are residents satisfied with food temperatures? (Residents, CNAs)

- Does the dining room smell good at mealtime? (CNAs, residents, family/friends/significant others, other staff assisting at mealtimes)

- Are residents visibly enjoying their meals? (Residents, family/friends/significant others, CNAs)

- Does the food look appetizing? (Residents, family/friends/significant others, CNAs)

Does the dining room environment promote mealtime socialization?

• What is the dining room sound level during mealtimes? (Dietary, CNAs, social services, administrator)

• Can residents comfortably converse with each? (Residents, family/friends/significant others, CNAs, administrator)

• How are the tables and chairs set up in your facility's dining room? Is the seating arrangement conducive to resident interaction? (Dietary, social services, CNAs, housekeeping)

• Do residents feel rushed? Do staff give residents enough time and assistance to promote a pleasant dining experience? (Residents, family/friends/significant others)

• Do family members enjoy being present at mealtime? (Family/friends/significant others, residents)

• If residents choose to eat in their own rooms, why do they make that choice? (Residents)

• Are residents and family members satisfied with the current method of meal service? (Residents, family/friends/significant others)

• Are there ways the dining room could be made more homelike or attractive? (Residents, family/friends/significant others, social services, activities)

• How is the dining room decorated? (Residents, family/friends/significant others)

• What do residents like or dislike about the dining room? (Residents)

A Practical Guide to Transformation

System-Level Questions Clinical Area

PSYCHOSOCIAL WELL-BEING

How does staffing and communication affect psychosocial services?

- How do residents and their families describe consistent care? (Residents, social worker, DON/ADON, nursing supervisor)

- How often are CNA assignments changed? (Charge nurses, nursing supervisors, DON/ADON, scheduler)

- How often are staff nurse assignments changed? (Nursing supervisor, DON/ADON, scheduler)

- What input do CNAs have into assignments? (CNAs, scheduler)

- How do residents describe their relationships with CNAs, nurses, and other staff having direct access to the resident care environment? (Residents, social worker, DON/ADON)

- What actions by charge nurses, supervisors, and administrative staff help CNAs and staff nurses feel supported? (APN, administrator, charge nurses, supervisors, CNAs)

- Does direct-care staff feel that supervisors are out on the floor enough to be supportive? (CNAs, staff nurses)

- How do families describe their relationship with CNAs, nurses, administration, non-direct care staff? (Social worker, administrator, DON/ADON, department managers, CNAs, family members)

- Are CNAs able to provide information about some history or life experiences of each resident they care for? (CNAs, social worker)

- What descriptive terms does staff use to describe elderly people? (Social worker, SDC)

- How do the work schedule and staff assignments facilitate resident participation in activities? (Social worker, activities, recreation therapy, nursing)

How does the assessment process and care planning process affect psychosocial well-being?

- How is information about a resident's life history and experiences communicated to staff? (Social worker, CNAs, charge nurses, unit or department supervisors)

- How are cultural preferences identified? (Administrator, social worker, dietary manager/dietitian)

- Who gathers information about hobbies and personal interests so that activities can be tailored to meet individual needs? (Activities)

- What training do direct and non-direct care staff receive regarding the importance of residents' activity preferences? (SDC, nurses, activities, social worker, CNAs)

- How does the pharmacist share information related to psychosocial status and review of medications? (Pharmacist, DON/ADON)

- How many residents have had a medical evaluation to look for potential causal or contributing factors to psychosocial status? (Nurses, physician, DON/ADON)

What facility-wide interventions are in place to promote psychosocial well-being?

- What interventions are in place to make the general environment calmer? (Activities staff, social worker, residents, administrator)

- When do residents prefer to have activities offered? (Residents, activities)

- Do residents feel there are an adequate variety of activities offered? (Residents, activities)

- How are residents encouraged and supported to develop social relationships with other residents? (Social worker, activities, CNAs)

- Who educates residents (and their representatives) about activity options? (Social worker, activities)

- What actions does the facility take to promote meaningful family visits? (Social worker, administrator)

- What actions does each department take to allow residents the opportunity for personal decision-making? (Department representatives)

- What training does staff from each department receive to assist in recognizing a change in resident mood? (SDC, DON/ADON, nurses, department representatives)

- How does staff from different departments report a change in resident mood or behavior? Who is the information reported to? (CNAs, department heads/representatives, DON/ADON, SDC, nurses)

- Do residents feel that staff listen to them? (Residents, social worker)

- What kinds of nonpharmacologic interventions are used in the facility? (DON, nurses, CNAs, social services, activities)

How does the facility monitor for success of programs to meet psychosocial needs?

- How do supervisors determine if a staff person needs a break from caring for a challenging resident? (DON, nurses, nursing unit managers)

- How are staff–resident interactions monitored? (Social worker, DON/ADON)

- How is activity involvement tracked? (Activities)

- How are behavior symptoms monitored and evaluated? (DON/ADON, social worker, nursing)

- How many residents with care plans related to behavior symptoms have shown improvement? (DON, nurses, social worker, administrator)

- Is there an ongoing review of residents' psychosocial needs to determine if any changes are needed in the facility-wide systems or environment? (QA committee, DON, nurses, administrator)

Reading Guides

Nutrition

Elimination

Skin

Psychosocial Well-Being

Restoration

Pain

Reading Packets for Each Clinical Module

Introduction

The reading packets are module specific and intended to address the wide variety of needs, skills, and experiences among different kinds of nursing home staff.

The selected reading materials are not representative of a complete knowledge base; rather they can be used in a variety of ways to meet a variety of needs.

Packet Format

The readings have been leveled to basic, intermediate and advanced readers.[1]

Readings for basic readers are intended to provide fundamental information about the clinical area covered by the module. The readers of the basic articles could include any staff member from the nursing home. The articles tend to be more general to accommodate a range of disciplines, and use less clinically complex terminology. Potential sources might include CNA textbooks, nursing or therapy journals, or Web-based resources that are designed for the health care consumers.

Note: During the process of developing the reading packet templates, the identification and selection of articles presented some unforeseen challenges. For example, it was sometimes difficult to predict if an article selected for basic reading would work for a wide range of nursing home staff. One of the "checks" we developed for an article selected as "basic" was to ask several additional staff (with clinical and/or nonclinical backgrounds) to review the article and accompanying questions for appropriateness and understandability. This led to (1) revision of questions; (2) elimination of the article from the reading packet; (3) placement of the article within a different level, such as moving it from the basic level to the level for licensed staff; or (4) adding a recommendation that the "basic" article be read by licensed staff at the same time to facilitate an understanding of clinical terms and content.

Readings for intermediate readers are intended to provide more in-depth or detailed information about the clinical area covered by the module (with the understanding that, in general, readers of these articles had received specific training and education, i.e., are likely in licensed positions). The articles focus on practical application of current clinical developments, innovations, and standards of practice. Potential sources of these readings include direct clinical practice nursing and other health practitioner journals and Web-based resources designed for the health care professional.

The advanced readings provide not only in-depth information about a clinical area, but also, when possible, more information that's useful when thinking about system- or organizational-level considerations

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1   The Skin reading packet also includes readings for administrative staff.

related to changing practices. Articles focus on advanced competencies including direct clinical practice, systems review, and research. Potential sources of these articles include peer-reviewed nursing research and advanced practice journals and Web-based resources for the advanced practice clinician.

Each reading packet includes basic quiz questions, specialty quiz questions, and questions to facilitate discussion of the article content. The "basic quiz questions" are provided to assist the reader in the process of extracting specific information. The page number is included for reference to the relevant article content. The "specialty quiz" or "discussion questions" include examples of questions that are relevant, or more specific, to particular positions or departments (positions and or departments are noted) and questions intended to facilitate discussion. The specialty quiz or discussion questions can be used by a "team" of staff who read and review the article together. For each discussion question, the group of staff to consider including in discussion is identified for each question, as well as page number references; however, the questions can be integrated as they fit best based on each nursing home's resources and staff.

Nutrition Reading Questions

BASIC READER

Dorner, B. Promoting an Easier Swallow. *Provider*. 2002 Sep; 28(9): 69-70, 73-4.

Basic Questions

1. Who is most vulnerable to dysphagia? *p.69*

2. List four (out of eight) warning signs of dysphagia. *p.69*

3. What is the biggest challenge to the pureed diet? *p.70*

4. True or False. Thin liquids are usually the most difficult to swallow. *p.70*

5. True or False. Thin liquids include broth, plain gelatin, milk, and anything that will liquefy in the mouth within a few seconds. *p.70*

6. Why is positioning at mealtime so important for people with dysphagia? *p.73*

7. Unless individualized recommendations state otherwise, positioning at mealtime should include the following: The torso should be at a _____ degree angle from the lap. *p.73*

8. The head should be prevented from _____ at any time during the meal. *p.74*

9. The individual should remain upright for at least __ minutes after eating. *p.74*

10. Why might the use of straws be an unsafe practice for some individuals with dysphagia? *p.74*

Specialty/Discussion Questions

1. What is the biggest challenge to the pureed diet? *p.70* (Registered dietitian, dietary staff/supervisor)

2. List one treatment option that may be used, in addition to food and fluid consistency, for treatment of dysphagia. *p.74* (Therapists, DON, APN, registered dietitian)

3. Why is it important to identify residents with or at risk of swallowing problems at your facility? *p.69* (Administrator, DON, department heads)

4. What are some of the special needs for residents with dysphagia? *p.70* (Administrator, DON, department heads)

5. In general, how should residents with swallowing difficulties be positioned during meals? *p.73* (Administrator, DON, department heads)

Nutrition Reading Questions

BASIC READER

Dimant, J. Delivery of Nutrition and Hydration Care in Nursing Homes: Assessment and Interventions to Prevent and Treat Dehydration, Malnutrition, and Weight Loss. *Journal of the American Medical Directors Association*. 2001;2(4):175-182.

Basic Questions

1. List two goals of nutrition and hydration care. (Improve nutritional status; prevent and/or treat weight loss, malnutrition, and dehydration; and improve quality of life related to eating and drinking). *p.175*

2. What is the first step in establishing a resident weight-monitoring system? *p.176*

3. Why should residents' food and fluid intake be monitored regularly? *p.176*

4. Identify two ways to provide preventive interventions for dehydration. *p.177, 181*

5. Identify two factors that put a resident at risk for malnutrition. *p.177*

6. Identify two activities to include in the assessment, care planning, and intervention systems/processes:

   - Assess current nutritional status and identify and immediately address malnutrition/dehydration;
   - Identify and address risk factors for malnutrition and dehydration;
   - Immediately detect, identify, and aggressively treat the cause of weight loss, food and fluid intake reduction, and deterioration of nutritional status. *p.175*

Specialty/Discussion Questions

1. How can the nursing home resident's dining experience/environment be enhanced? p*p.175*-176 (Housekeeping staff/supervisor, maintenance staff/supervisor, social services)

2. Why is it important to assess and monitor residents' nutritional status? p*p.175*-177 (Administrator, department heads, DON)

3. What are some approaches for identifying risk and preventing weight loss, malnutrition, and dehydration? p*p.177*-181 (DON, nursing supervisors, registered dietitian, therapists)

4. What are some approaches for treating weight loss, malnutrition, and dehydration? p*p.170-182* (DON, nursing supervisors, registered dietitian, therapists)

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INTERMEDIATE READER

Kayser-Jones, J. Starved for Attention. *Reflections on Nursing Leadership*. 2001;27(1):10-14,45.

Basic Questions

1. What are the three most significant factors that influence residents nutritional intake? *p.12*

2. List two other factors that influence how much food residents consume. *p.12*

3. Identify a potential disadvantage identified by the author with the use of supplements. *p.13*

Specialty/Discussion Questions

1. How is food and fluid intake monitored at your facility? *p.14* (Dietary staff/supervisors, CNAs, dietitian)

2. Discuss facility policies, procedures, and protocols related to malnutrition, weight loss, and dehydration. *p.14* (Administrator, DON, department heads, staff development coordinator, nurses)

Nutrition Reading Questions

INTERMEDIATE READER

American Dietetics Association. Position of the American Dietetics Association: Liberalized diets for older adults in long-term care. *Journal of the American Dietetic Association*. 2002 Sep;102(9):1316-1323.

Basic Questions

1. List three (out of seven) common physical problems that affect nutritional status. *p.131*8

2. List three potential disadvantages of a restricted diet. *p.131*9

3. True or False. It is preferable to make medication changes rather than implement food restrictions to control blood glucose. *p.132*0

4. Why is the appropriateness of a low-cholesterol diet of questionable value? *p.132*0

5. List three potential side effects of a low-sodium diet. *p.132*0

6. Identify the two main advantages of a liberalized diet. *p.132*2

Specialty/Discussion Questions

1. Identify the five steps that outline the role of the dietetics professional in the management of medical nutrition therapy. *p.132*1 (Registered dietitian, dietary staff, dietary manager)

2. Identify three issues that need to be addressed by the dietetics professional. *p.132*2 (Registered dietitian, dietary staff, dietary manager)

3. Discuss in what ways a more liberalized nutrition intervention may impact on a resident's quality of life. *p.131*6 (Administrator, department heads, DON)

ADVANCED READER

Remsburg, R., Luking, A., Baran, P., Radu, C., Pineda, D., Bennett, R., and Tayback, M. Impact of a buffet-style dining program on weight and biochemical indicators of nutritional status in nursing home residents: A pilot study. *Research and professional briefs*. 2001 Dec;101(12): 460-1463.

Basic Questions

1. What are some modifiable causes of poor intake that residents might be experiencing? *p.146*0

2. What would be some possible advantages and disadvantages of a buffet-style dining program? *p.146*1

Specialty/Discussion Questions

1. In light of the design of the buffet-style dining program described, would it be feasible or desirable to implement a buffet-style dining program for residents in your facility? *p.146*1 (Registered dietitian, dietary staff, dietary manager, nurses)

2. What costs might be accrued if a buffet-style dining program were implemented? *p.146*2 (CEO, administrator, purchasing department)

Nutrition Reading Questions

ADVANCED READER

Simmons, S. F., Alessi, C., and Schnelle, J. F. An intervention to increase fluid intake in nursing home residents: prompting and preference compliance. *Journal of American Geriatrics Society*. 2001;49:926-933.

Basic Questions

1. What is the recommended daily fluid requirement for nursing home residents (with consideration for body weight, energy expenditure, and medical status)? *p.926*

2. Identify three behavioral factors that may contribute to poor fluid intake. *p.926*

Specialty/Discussion Questions

1. Describe one technique used by the research team to gather information about residents' fluid intake. How does the facility you work in gather this information? *p.928* (registered dietitian, dietary staff/ managers, activities staff/managers)

2. What did the study findings indicate about interventions for increasing fluid intake among the cognitively impaired? p*p.931*-932 (DON, NURSES, administrator, nursing supervisors)

Elimination Reading Questions

BASIC READER

Johnson, T. Nonpharmacological Treatments for Urinary Incontinence in Long Term Care Residents. *Journal of the American Medical Directors Association*. January/ February 2002;Supplement:S25-S30.

Basic Questions

1. True or False. The long-term care resident with urinary incontinence also frequently has other impairments such as limitations in movement and cognition. *p.S25*

2. List three toileting interventions that require that staff assist the resident to manage the incontinence (caregiver-dependent). *p.S26*

3. True or False. Habit training involves finding out the resident's own individual timetable for voiding. *p.S26*

4. Identify two barriers to successful implementation of a (behavioral) treatment program for urinary incontinence. *p.S26*

5. True or False. Prompted voiding should only be used with residents who do not have any cognitive impairment. *p.S27*

6. What are the disadvantages of an indwelling catheter? *p.S28*

7. According to AMDA guidelines, what are some acceptable reasons for using an indwelling catheter? *p.S28*

8. True or False. Behavioral interventions such as pelvic muscle exercises (Kegel exercises), prompted voiding, and scheduled toileting should be attempted before catheters, diapers, and surgical interventions. *p.S29*

Specialty/Discussion Questions

1. Discuss the role therapy or restorative staff can play in promoting continence. *p.S25* (Therapists, restorative staff)

2. Why is it important to consider a resident's mobility, cognition, and overall functional status in developing approaches for treating incontinence? p.S25 (CNAs, licensed nurses, APNs, therapists, activities staff, restorative staff)

3. What kinds of barriers might hinder the success of a behavioral treatment program in your facility? p.S26 (CNAs, licensed nurses, staff development coordinator, APNs, DON/ADON)

4. Discuss the principles of indwelling catheter care. *p.S28* Table 5 (Licensed nurses, CNAs, staff development coordinator)

Elimination Reading Questions

BASIC READER

Mueller, C., and Cain, H. Comprehensive management of urinary incontinence through quality improvement efforts. *Geriatric Nursing*. 2002;23(2):82-87.

Basic Questions

1. Why is a comprehensive assessment of urinary incontinence (UI) necessary? *p.83*

2. List five (out of seven) problems associated with UI assessments. *p.84* table

3. True or False. Medications do not contribute of UI. *p.84*

4. Who should be involved in identifying residents at risk for UI? *p.84*

5. List three environmental factors that might contribute to UI? *p.84*

6. List three strategies to address environmental issues contributing to UI. *p.84*

7. True or False. UI is a normal part of aging. *p.84*

8. True or False. To prevent incontinence, fluids should be decreased. *p.85*

9. According to the author, what is probably the most significant issue in reducing the prevalence of UI? *p.85*

10. List three communication problems that might contribute to the prevalence of UI. *p.86*

11. True or False. A crucial element is the involvement of CNAs in the development of residents' care plans to address UI. *p.86*

Specialty/Discussion Questions

1. How do environmental factors in your facility contribute to urinary incontinence? *p.84* (Housekeeping staff, maintenance staff)

2. What kinds of problems are associated with assessing UI? *p.84* (Nurse managers, DON/ADON, administrator, APN, CEO)

3. How might staff from various departments contribute to the identification and treatment of UI? *p.85* (Department managers)

4. In what ways do communication problems affect the identification and treatment of residents' urinary incontinence? *p.86* (Administrator, DON/ADON, department heads)

INTERMEDIATE READER

Klausner, A. P., and Vapnek J. M. Urinary Incontinence in the Geriatric Population. *Mount Sinai Journal of Medicine.* **January 2003;70(1):54-61.**

Basic Questions

1. True or False. Elderly women are three times more predisposed to incontinence than elderly men. *p.55*

2. Identify the five classifications of incontinence. *p.55*

3. Leakage of urine that occurs with increases in intra-abdominal pressure is called _____ incontinence. *p.55*

4. Identify at least five reversible causes of geriatric incontinence. *p.56*

5. How is the information provided from a voiding diary used by staff? *p.56*

6. True or False. In general, asymptomatic pyuria or bacteriuria should not be treated. *p.58*

7. Define and describe the purpose of Kegel exercises. *p.58*

8. Identify two medications that may be used for treating geriatric incontinence. *p.59*

9. True or False. High post-void residual volume (>200 cc), severely limited bladder capacity (<100 cc), recent pelvic surgery or irradiation, frequent UTIs, hematuria, and marked pelvic prolapse should be referred to a urologist. *p.60*

Specialty/Discussion Questions

1. How can a voiding/incontinence record help facility staff identify appropriate interventions? *p.56* (DON/ADON, SDC, administrator, activities, social service, therapies)

2. What are the types of incontinence experienced by residents in your facility? For example, how many residents have urge incontinence? Stress incontinence? p*p.55*-56 (Administrator, DON/ADON)

3. What products/interventions are recommended for the different types of incontinence, and how might this affect staffing , training, and facility costs? p*p.55*-56 (Administrator, purchasing director, SDC)

Elimination Reading Questions

INTERMEDIATE READER

Smith, D. Evaluation of Urinary Incontinence. *Journal of the American Medical Directors Association.* Nursing. 2002. January/February Supplement.

Basic Questions

1. List eight causes of temporary or reversible UI. *p.S3*

2. What is the most common type of incontinence? *p.S3*

3. List three conditions very often associated with urge incontinence. *p.S4*

4. What are the symptoms of stress incontinence? *p.S4*

5. What are some common causes of overflow incontinence? *p.S4*

6. What are the symptoms of overflow incontinence? *p.S4*

7. List eight causal or contributing factors to functional incontinence. *p.S4*

8. List six interventions to prevent functional urinary incontinence. *p.S6*

9. List seven components of a good incontinence history. *p.S7*

10. List eight foods or fluids that may contribute to bladder incontinence by functioning

as bladder irritants or diuretics. *p.S8*-table

11. List five conditions associated with urinary retention. *p.S9*

Specialty/Discussion Questions

1. What situations call for a referral to a urology specialist? *p.S10* (Nursing supervisors, DON/ADON, administrator)

2. List eight foods or fluids that may contribute to bladder incontinence by functioning as bladder irritants or diuretics. *p.S8*-table (Dietary staff)

3. Which interventions could help prevent functional urinary incontinence in your facility? *p.S6* (DON/ADON, SDC, administrator)

ADVANCED READER

Palmer, M. H. Helping Residents Stay Dry. *Nursing Homes*. **June 2003:p***p.70***-73.**

Basic Questions

1. Several components identified for a successful incontinence-management program included support from administration and understanding the program's goals. What other components would contribute to success in the facility where you work? p*p.70*-71

2. Toileting schedules are commonly used every two hours. Based on the assessments of residents you care for, identify why a more or less frequent toileting schedule would be appropriate. *p.71*

3. List three indicators that prompted voiding might be successful for a resident. *p.71*

4. List the pros and cons of using medications for treating incontinence. *pp.71*-72

5. Why is it important to monitor bowel function for incontinent residents? *p.73*

Specialty/Discussion Questions

1. It is important that residents do not stop drinking fluids (mistakenly thinking this will help them avoid accidents). How might dietary and activities staff assist in monitoring fluid intake? *p.72* (Activities, Dietary, CNAs)

2. How can administration in your facility support incontinence-management programs? *p.70* (CEO, administrator, DON/ADON, department supervisors)

Elimination Reading Questions

ADVANCED READER

Holroyd-Leduc, J. M., Lyder, C. H. and Tannenbaum, C. Practical Management of Urinary Incontinence in the Long-Term Care Setting. *Annals of Long-Term Care.* **2006; 14(2): 30-37.**

Basic Questions

1. What are some of the characteristics of nursing home residents, combined with economic and personnel constraints, that are impacting management of urinary incontinence in nursing facilities? *pp.30*-31

2. What are some of the issues that must be considered when using pharmacological therapies to treat urinary incontinence? *p.35*

3. What factors help predict the success of different interventions to treat urinary incontinence (reflecting on the algorithms described in the article)? *pp.* 32-33

Specialty/Discussion Questions

1. What kinds of environmental risk factors for incontinence might be present in your facility? *p.31* (Social services, housekeeping supervisor/staff, maintenance supervisor/staff, therapists)

2. In your facility, how might targeted incontinence care programs impact costs, staffing, and morale? *pp*. 30-31 (Administrator, DON/ADON, purchasing director)

3. What process do you have in place at your facility to learn about a resident's (or resident representative's) preferences for treatment of urinary Incontinence? *p.36* (Social services, DON/ADON, nursing supervisors, physician)

BASIC READER

Norman, R. A. Caring for aging skin: A geriatric dermatologist's expert advice on skin care for LTC residents. *Nursing Home Magazine*. 2003.

Basic Quiz Questions

1. Name two important issues related to healthy skin that LTC facility staff should consider when determining how to prevent pressure ulcers. *p.1*

2. True or False. Pressure ulcers present as an itchy, acne-like rash. *p.1*

3. True or False. Methods of preventing skin disorders are expensive and difficult to implement. *p.1*

4. True or False. It is necessary to bathe long-term care facility residents every day. *p.1*

5. True or False. After bathing residents, it is best to rub the skin vigorously to ensure that the skin is completely dry. *p.1*

6. What type of lotion is recommended for moderate to severely dry skin? *p.1*

7. Why is it necessary to wash your hands after you apply lotion to a resident's skin? *p.1*

8. True or False. Perfumed soaps should be used on residents whenever available. *p.1*

9. What are the two most important factors in preventing pressure ulcers? *p.2*

10. Identify two reasons why CNAs are crucial to the pressure ulcer prevention process. *p.2*

11. Name three things CNAs can do for incontinent residents to help prevent pressure ulcer development. *p.2*

12. Name two reasons why preventable skin conditions are often more severe in nursing home residents compared to elders living in the community. *p.2*

Specialty Quiz or Discussion Questions

1. True or False. It is necessary to bathe long-term care facility residents each day. *p.1* (Administrator, gerontologic advanced practice nurses [GAPNs], RNs)

2. Identify two ways dietitians can prevent pressure ulcer development in LTC facility residents. What specifically can a dietitian do? *p.1* (Administrator, dietary)

3. Moving residents regularly helps to prevent skin breakdown by preventing the buildup of what three substances? *p.1* (GAPNs, RNs)

4. What type of moisturizing lotion is best for moderately to severely dry skin? *p.1* (Administrator, RNs, GAPNs)

Skin Reading Questions

BASIC READER

5. True or False. Malnutrition has no effect on the development of skin conditions. *p.1* (Administrator, GAPNs, RNs, dietary)

6. Name two types of soap that do not dry or irritate aging skin. *p.1* (Administrator, RNs)

7. Discuss the important role CNAs play in pressure ulcer prevention. *p.2* (Administrator, GAPNs, RNs)

8. Name three things CNAs can do for incontinent residents to help prevent pressure ulcer development. *p.2* (Administrator, GAPNs, RNs)

A Practical Guide to Transformation

BASIC READER

Zulkowski, K. Protecting your patient's aging skin, *Nursing*. 2003;33(1):84.

Basic Quiz Questions

1. Name four normal skin changes of aging that contribute to an elder's increased risk for skin breakdown. *p.84*

2. Name two of the four changes in aging skin that contribute to thinner, more fragile skin. *p.84*

3. Circulatory problems can contribute to impaired skin conditions. Why is this? *p.84*

4. True or False. Blood thinning medications place elders at a greater risk for bruising. *p.84*

5. How does decreased collagen production contribute to the effects seen in aging skin? *p.84*

6. True or False. As the body ages, fat is redistributed to the buttocks area. *p.84*

7. Discuss the association between the aging body's redistribution of fat and pressure ulcer development. *p.84*

8. How do decreases in an elder's ability to feel sensations contribute to an elder's increased risk for skin breakdown? *p.84*

9. Name three reasons why an elderly adult might not feel the need to shift his weight as often as a younger adult. *p.84*

10. How does decreased sweat gland production contribute to skin breakdown? *p.84*

11. True or False. Repositioning every two hours is sufficient for a resident who is sitting in a chair. *p.84*

12. What product can be applied to a resident's skin to help keep the skin dry and clean? *p.84*

13. True or False. To prevent pressure ulcer development, plastic bed padding should be used on beds of all incontinent patients. *p.84*

14. Explain the association between a lack of protein and reduced rates of pressure ulcer healing. *p.84*

Specialty Quiz or Discussion Questions

1. Name four factors that contribute to age-related skin changes. *p.84* (GAPNs, RNs)

2. Choose one of the factors mentioned above and discuss what processes cause the age-related skin changes. *p.84* (GAPNs, RNs)

3. True or False. The feet of all residents should be checked once a week for skin changes. *p.84* (Administrator, GAPNs, RNs)

4. True or False. Two-hour turning schedules are sufficient for all residents. *p.84* (Administrator, GAPNs, RNs)

Skin Reading Questions

BASIC READER

5. How often should a resident who is sitting in a chair be repositioned? *p.84* (Administrator, GAPNs, RNs)

6. Discuss the association between the aging body's redistribution of fat and pressure ulcer development. *p.84* (GAPNs, RNs)

7. What are the skin-related consequences for a resident who does not consume enough protein? *p.84* (Administrator, GAPNs, RNs)

8. True or False. To prevent pressure ulcer development, plastic bed padding should be used on beds of all incontinent patients. *p.84* (Administrator, housekeeping)

9. Explain the association between a lack of protein and reduced rates of pressure ulcer healing. *p.84* (Administrator, dietary)

INTERMEDIATE READER

Carter, A. M., Olsen, C. G. Pressure ulcers: An interdisciplinary approach. *JAAPA.* **1998;11(1):49-58.**

Basic Quiz Questions

1. Explain the term "reactive hyperemia," and discuss how this process leads to pressure ulcer formation. *p.50*

2. True or False. Hyperemia may exist for as long as 24 hours without causing ulceration. *p.50*

3. How many hours of unrelieved pressure—on a bony prominence—will result in irreversible ischemic tissue damage? *p.50*

4. Which is more significant in the development of pressure ulcers: the length of time pressure is applied or the amount of pressure applied? *p.50*

5. Intervention within how many hours can prevent a hyperemic area from ulcerating? *p.50*

6. True or False. According to the Shea Scale, a stage I pressure ulcer is indicated if the skin is broken or blistered. *p.50*

7. True or False. It is possible to adequately stage a wound that has eschar covering the ulcer. *p.51*

8. Name the four most significant conditions that increase a resident's risk for pressure ulcer development. *p.52*

9. Explain the association between malnutrition and pressure ulcers. Discuss how abnormal lab findings might indicate a resident is at increased risk for pressure ulcer development. *p.52*

10. True or False. Prevention is the most important aspect of managing pressure ulcers. *p.55*

11. True or False. The nurse is solely responsible for assessing the resident at risk for a pressure ulcer. *p.55*

12. Describe the difference between static pressure ulcer devices and dynamic pressure ulcer devices. *p.55*

13. What type of pressure-relieving device is contraindicated for use on patients with pressure ulcers? *p.55*

14. Name the four principles of treating a pressure ulcer. *p.57*

15. Name four of the key points to successfully managing pressure ulcers. *p.58*

Skin Reading Questions

INTERMEDIATE READER

Specialty Quiz or Discussion Questions

1. Pressure ulcers increase resident nursing time by _____%. *p.49* (Administrator)

2. True or False. The amount of pressure applied affects the development of a pressure ulcer more than the length of time pressure is applied. *p.49* (Administrator)

3. What changes in the aging skin increase a resident's risk of developing a pressure ulcer? *p.50* (CNAs)

4. Name four conditions that increase a resident's risk for pressure ulcer development. *p.52* (Administrator, GAPNs, CNAs)

5. Discuss the association between malnutrition and pressure sores. *p.52* (Administrator, GAPNs, CNAs, dietary)

6. Why is assessing daily food and fluid intake important for residents with pressure ulcers? *p.52* (Administrator, GAPNs, CNAs, dietary)

7. True or False. Adult undergarments aid in keeping the skin dry and therefore should be used whenever possible? *p.52* (CNAs)

8. What is the difference between using the Sessing Scale to evaluate pressure ulcers and using the Shea Scale? p. 51 (GAPNS, CNAs)

9. Describe changes that can be made to a wheelchair that reduce a resident's risk of developing a pressure ulcer. *p.55* (Administrator, CNAs, housekeeping)

10. True or False. Bedridden patients should be positioned in their beds at a 90-degree angle whenever possible to reduce the risk of pressure ulcer development. *p.55* (Administrator, CNAs)

11. Why are doughnut-shaped, pressure-relieving devices not appropriated for use on residents with pressure ulcers? *p.55* (Administrators, CNAs, housekeeping)

12. Describe three types of pressure-reducing devices that reduce a resident's risk for developing a pressure ulcer. *p.55* (Administrator, CNAs, housekeeping)

13. What device should be used when a bedridden resident's head must be elevated? *p.55* (Administrator, CNAs, housekeeping)

14. True or False. Sheepskin bedding increases a resident's risk of developing a pressure ulcer. *p.56* (Administrator, CNAs, housekeeping)

15. Name two lifting devices that should be used when a resident is being transferred. *p.55* (CNAs, housekeeping)

16. Name the four principles of treating a pressure ulcer. *p.57* (Administrators, GAPNs, social worker)

17. Name four key points to managing pressure ulcers. *p.58* (Administrator, GAPNs, CNAs, social worker)

INTERMEDIATE READER

Whitney, J. D., Salvadalena, G., Higa, L., Mich, M. Treatment of pressure ulcers with noncontact normothermic wound therapy: Healing and warming effects. *Journal of Wound, Ostomy, and Continence Nursing.* **2001;28(5):244-252.**

Basic Quiz Questions

1. True or False. Wounds epithelialize faster when kept dry using an occlusive dressing. *p.245*

2. Name two important factors necessary for successful wound healing. *p.245*

3. What two changes would occur in the wound environment as a result of delivering heat to the area? *p.245*

4. Describe three instruments used to document pressure ulcer characteristics. p*p.246-247*

5. Describe the noncontact normothermic wound dressing. How often are these dressings changed? *p.247*

6. True or False. A heating pad should be secured over a wound for one hour, TID, to warm the wound environment to 38 degrees C. *p.247*

7. True or False. One unique aspect of this therapy is that warming of the area takes place without the dressing contacting the wound surface. *p.250*

8. True or False. Noncontact normothermic wound therapy should be administered by licensed nursing personnel only. *p.248*

9. True or False. Warming the wound environment does not increase the rate of wound healing. *p.250*

10. True or False. Periwound temperatures are normally 3 to 4 degrees above normal core temperatures. *p.250*

11. Discuss how low periwound temperatures are associated with increased risk of skin breakdown. *p.250*

12. Describe the "environmental" differences seen in the chronic wound vs. the acute wound. *p.250*

13. True or False. Warming has no effect on decreased numbers and decreased growth of fibroblasts in chronic wounds. *p.250*

14. What effect does warming a chronic wound have on the growth of newborn fibroblasts? *p.250*

15. True or False. Noncontact normothermic wound therapy accelerates the rate of healing pressure ulcers. *p.250*

16. Discuss the study findings regarding stage IV pressure ulcers using standard care measures vs. using noncontact normothermic wound therapy. *p.250*

Skin Reading Questions

INTERMEDIATE READER

Specialty Quiz or Discussion Questions

1. True or False. Hospital stays increase by four days for individuals who develop a pressure ulcer. *p.244* (Administrator, GAPNs)

2. True or False. Hospital costs more than double for individuals who develop a pressure while in the hospital. *p.244* (Administrator)

3. What effect does heating the wound environment have on healing ulcers? *p.245* (Administrator, GAPNs, CNAs)

4. True or False. Heating the wound environment has an inhibitory effect on fibroblast growth. *p.245* (GAPNs)

5. True or False. Noncontact normothermic therapy inhibits the rate of pressure ulcer wound healing. *p.250* (Administrator, GAPNs, CNAs)

6. True or False. The noncontact normothermic treatment is difficult to administer and must be done by trained professionals. *p.251* (Administrator, GAPNs, CNAs)

7. Discuss the study findings regarding healing of stage III pressure ulcers using standard care measures vs. using noncontact normothermic wound therapy. *p.250* (Administrator, GAPNs, CNAs)

8. Discuss how dressings are applied and how heat is delivered to the wound environment using the noncontact normothermic therapy. *p.247* (GAPNs, CNAs)

INTERMEDIATE READER

Graumlich, J. F., Blough, L. S., McLaughlin, R. G., Milbrandt, J. C., Claderon, C. L., Agha, S. A., Scheibel, L. W. Healing pressure ulcers with collagen or hydrocolloid: A randomized, controlled trial. *Journal of American Geriatrics Society*. 2003;51(2):147-154.

Basic Quiz Questions

1. What is the annual cost of pressure ulcer care in the United States? *p.147*

2. What is the standard treatment for a clean, full/partial-thickness pressure ulcer? *p.147*

3. Name three advantages of using a hydrocolloid dressing on a superficial pressure ulcer wound. *p.147*

4. Name a major disadvantage to using hydrocolloids for stage II and III pressure ulcers. *p.147*

5. Name two or more advantages to using a collagen wound dressing. *p.148*

6. True or False. Deep wounds treated with collagen granules heal better than deep wounds treated with occlusive dressings. *p.148*

7. True or False. Statistically speaking, there was a significant difference in time to completed healing between collagen and hydrocolloid treatments. *p.152*, Table

8. Which treatment—collagen or hydrocolloid dressings—require more nursing interventions per week? *p.152*

9. True or False. Using collagen to treat pressure ulcers costs less per person than using hydrocolloid dressings. *p.152*

10. According to the findings of this study, what was the most important indicator of a healing outcome? *p.153*

11. True or False: The findings of this study indicate a strong association between at-risk residents (according to Braden Scale scores) and pressure ulcer healing. *p.153*

12. Discuss the study findings regarding healing rates for hydrocolloid dressings and collagen. *p.152*

Specialty Quiz or Discussion Questions

1. What is the annual cost of pressure ulcer care in the United States? *p.147* (Administrator)

2. Describe the standard treatment for a clean, full/partial-thickness pressure ulcer. *p.147* (Administrator, GAPNs, CNAs)

3. Discuss the advantages and disadvantages associated with using hydrocolloid dressings on superficial and deep pressure ulcer wounds. *p.147* (Administrators, GAPNs, CNAs)

Skin Reading Questions

INTERMEDIATE READER

4. True or False. Using collagen to treat pressure ulcers is more cost-effective than using a hydrocolloid dressing. *p.152* (Administrator, GAPNs, CNAs)

5. Describe the cost model used in this study to determine total treatment costs. *p.152* (Administrator, GAPNs)

6. True or False. Using a collagen treatment instead of a hydrocolloid dressing on a pressure ulcer significantly increases rates of healing. *p.152* (Administrator, GAPNs, CNAs)

7. True or False. Collagen treatments require more nursing interventions per week than hydrocolloids. *p.152* (Administrator, GAPNs, CNAs)

8. True or False. The findings of this study indicate there is a strong association between at-risk residents (according to Braden Scale scores) and pressure ulcer healing. *p.153* (Administrator, GAPNs)

9. True or False. Hydrocolloids are the best choice for deep stage II ulcers due to their cost-effectiveness. *p.152* (Administrator, GAPNs, CNAs)

A Practical Guide to Transformation

INTERMEDIATE READER

Lyder, C. H. Pressure ulcer prevention and management, *JAMA*. 2003;289(2):223-225.

Basic Quiz Questions

1. True or False. Pressure ulcer prevalence is considered to be an indicator of quality of care. *p.223*

2. How quickly can pressure ulcers develop?

   A. 2 to 6 hours
   B. 12 to 24 hours
   C. 1 to 2 hours *p.223*

3. What is the key to preventing pressure ulcers? *p.223*

4. Name five physiologic risk factors that place individuals at increased risk for developing a pressure ulcer. *p.223*

5. Identify two to three reasons why ill individuals are more susceptible to pressure ulcer development than others? *p.223*

6. Name the six clinical categories evaluated using the Braden Scale. *p.223*

7. True or False. The Braden Scale is known for overpredicting individuals at risk for pressure ulcers. *p.223*

8. What is the minimal turning interval for residents at risk for pressure ulcer development? *p.223*

9. True or False. Implementation of pressure ulcer prevention strategies for at-risk residents should begin 48 hours after admission. *p.224*

10. A wet/dry wound environment is the primary goal when choosing a pressure ulcer dressing? *p 224*

11. True or False. Antiseptic solutions should be used to clean pressure ulcer wounds. *p.224*

12. Identify two instruments used to assess the healing of pressure ulcers. Name one advantage to using each instrument. *p.224*

13. True or False. Gauze dressings are the most cost-effective over time. *p.224*

14. True or False. Residents who are at increased risk for pressure ulcers due to malnutrition should be encourage to increase their carbohydrate intake. *p.225*

15. True or False: Wet-to-dry gauze dressings should be used on ulcers with good granulation tissue. *p.225*

Skin Reading Questions

INTERMEDIATE READER

Specialty Quiz or Discussion Questions

1. What is the estimated cost of healing a pressure ulcer? *p.223* (Administrator, GAPNs, RNs)

2. A pressure ulcer can develop within _____ hours; therefore, a _____hour repositioning schedule should be used for at-risk individuals. *p.223* (Administrator, GAPNs, RNs, Basic-CNAs)

3. True or False. A score of 21 on the Braden Scale indicates a resident is at high risk for developing a pressure ulcer. *p.223* (Administrator, GAPNs, RNs)

4. True or False. "Group I support surface devices" consist of air-fluidized beds and are used on low- to moderate-risk residents. *p.223* (Administrator, RNs, GAPNs)

5. What is the recommended thickness for static foam devices? *p.223* (RNs, housekeeping)

6. Under what condition should a resident be switched from static devices to dynamic devices? *p.223* (Administrator, GAPNs, RNs)

7. Name two assessment tools used to evaluate resident's risk potential for developing pressure ulcers. *p.223* (Administrator, GAPNs, RNs)

8. Under what conditions should a resident be placed on an air-fluidized bed? *p.223* (Administrator, GAPNs, RNs)

9. True or False. Implementation of prevention strategies for at-risk residents should begin immediately upon admission to a long-term care facility. *p.224* (Administrator, GAPNs, RNs)

10. (Fill in the blanks) Pressure ulcers should be cleaned with _____ solution. However, use of_____ solutions should always be avoided. *p.224* (RNs, GAPNs)

11. True or False. Photographing the wound is an important part of the wound care assessment process. *p.224* (RNs)

12. Name three reasons why non-gauze dressings are less expensive to use over time. *p.224* (Administrator, RNs, GAPNs)

13. What type of dressing should not be used on ulcers with good granulation tissue? *p.225* (GAPNs, RNs)

14. True or False. All residents with pressure ulcers should be placed on vitamin and mineral supplements. *p.225* (Administration, GAPNs, dietary)

INTERMEDIATE READER

Smith, P. W., Black, J. M., Black, S. B. Infected pressure ulcers in the long-term—care facility. *Infection Control and Hospital Epidemiology.* **1999;20(5):358-361.**

Basic Quiz Questions

1. Name the four most common sites for pressure ulcers. Which is the most common site? *p.358*

2. True or False. Stage II pressure ulcers are considered reversible with appropriate interventions. *p.358*

3. With skilled-care nursing home residents, do incidence rates of pressure ulcers typically increase or decrease over time? *p.358*

4. True or False. A diet high in carbohydrates is an important part of the healing process for a resident with a pressure ulcer. *p.358*

5. Name the three pressure ulcer risk factor subcategories and give three examples of each. *p.359*

6. Guidelines for stage I pressure ulcers indicate non-blanchable or blanchable (pick one) redness of intact skin. *p.359*

7. True or False. Swabbing the surface of an infected pressure ulcer is the most effective way to obtain a culture. *p.359*

8. Name three to four skin condition changes around a pressure ulcer that would indicate the wound had become infected. *p.360*

9. What is the essential element in the development of pressure ulcers? *p.360*

10. Name at least four preventable problems that can be associated with pressure ulcer formation? *p.360*

Specialty Quiz or Discussion Questions

1. Name the four most common sites for pressure ulcers. Which is the most common site? *p.358* (Administrator, Basic CNAs)

2. What is the incidence rate of pressure ulcers for nursing home residents who have been residents between 12 and 18 months? *p.358* (Administrator, GAPNs, RNs)

3. What type of diet is necessary to aid in the healing of pressure ulcers? *p.360* (Administrator, Basic CNAs, dietary).

4. True or False. The total national costs for treating pressure ulcers were estimated to be several million dollars a year. *p.359* (Administrator)

5. What is the average Medicare charge per pressure ulcer case? *p.359* (Administrator)

Skin Reading Questions

INTERMEDIATE READER

6. True or False. A stage II pressure ulcer is full thickness skin loss with damage down to the fascia. *p.359* (GAPNs, RNs)

7. True or False. Using a cotton swab is the most efficient and effective way to collect a culture from an infected pressure ulcer. *p.359* (Administrator, GAPNs, RNs)

8. Name two tests that should be performed on a patient who has an infected pressure ulcer. *p.360* (GAPNs, RNs)

9. Name four criteria necessary for diagnosing an infected pressure ulcer. *p.360* (GAPNs, RNs)

10. True or False. Residents with pressure ulcers who use low airbeds are 2.5 times more likely to heal. *p.360* (Administrator, GAPNs, RNs)

A Practical Guide to Transformation

Skin Reading Questions

ADVANCED READER

Xakellis, G. C., Frantz, R. A., Lewis, A., Harvey, P. Translating pressure ulcer guidelines into practice: It's harder than it sounds. *Advances in Skin and Wound Care*. 2001;14:249-56, 258.

Basic Quiz Questions

1. True or False. Pressure ulcer incidence rates improved as a result of publicized practice guidelines by the Agency for Health Care Policy and Research (AHCPR). *p.249*

2. What are the four "barrier-domains" Shortell suggests must be addressed before clinical integration of practice guidelines can be successful? *p.250*

3. True or False. All four "domains" must be addressed simultaneously to achieve successful integration of guidelines. *p.250*

4. Discuss the initial results of implementing a pressure ulcer prevention protocol in this particular long-term facility. *p.250*

5. Name three techniques the director of nursing employed to address the structural and technical barriers to successful integration of clinical practice. *p.251*

6. Name three ways the director of nursing addressed the cultural barrier to successful integration of clinical practice. *p.251*

7. Explain why the initial results were not sustained overtime. What situation established the initial incentive for establishing pressure ulcer prevention strategies? *p.254*

8. Discuss changes in the implementation strategy that might have ensured lasting results. *p.254*

9. True or False. Protocol implementation dramatically increased treatment supply and labor costs. p. 255

10. Discuss the association between decreasing the numbers of CNAs and pressure ulcer prevalence. *p.255*

11. True or False. After protocol implementation, prevention costs decreased and continued to decline. *p.258*

12. Give two or more reasons why treatment integration was sustained long-term and prevention integration was not. *p.258*

ADVANCED READER

Specialty Quiz or Discussion Questions

1. Name four barriers to integrating new practices into existing care delivery systems. p. 250 (Administrator, RNs)

2. True or False. To successfully integrate new practices into existing systems, two of the four barriers mentioned above must be addressed simultaneously. *p.250* (Administrator, RNs)

3. Explain how direct and indirect nursing costs were figured. How were nursing administration costs figured? p*p.251*-252 (Administrator)

3. Discuss the possible reasons why the positive prevention outcomes were not sustained over time. *p.254* (Administrator)

4. Name four strategies, which—if implemented—would have helped maintain clinical integration of prevention measures over time. *p.254* (Administrator)

5. Explain why positive treatment outcomes were sustained over time. *p.255* (Administrator)

6. Discuss the association between decreasing the numbers of CNAs and pressure ulcer prevalence. *p.255* (Administrator)

Skin Reading Questions

ADVANCED READER

Basic Quiz Questions

1. What percentage of direct care to residents of LTC facilities is given by CNAs? *p.40*

2. What purpose does a protocol or a critical pathway serve? What is the difference between the two? *p.41*

3. Name four of the general learning objectives established for the long-term care facility staff. *p.42*

4. What two basic roles did the GAPNs assume? Name two or three strategies the GAPNs used to develop these two roles. *p.42*

5. Discuss why the GAPNs felt it was vitally important for the staff to see them as consultants and educators. *p.42*

6. Describe several ways GAPNs were able to secure their role as consultants. p*p.42*-44

7. Explain how GAPNs were able to secure their roles as educators. p*p.44*-45

8. What steps did the GAPNS take to ensure that CNAs understood and had easy access to written care plans? *p.43*

9. Copies of written care plans were:

   A. only provided to the RN or GAPN
   B. included in the CNA assignment book
   C. posted in the resident's room
   D. kept simple and easy to read
   E. B, C, and D
   F. A, C, and D *p.43*

10. True or False. One-on-one, informal education sessions were implemented as part of the educator role. *p.44*

11. Discuss the importance of in-service presentations. How were the presentations structured to ensure that participants understood the information given? *p.44*

12. How should important information be delivered to ensure knowledge retention? *p.45*

13. True or False. The best way to ensure knowledge retention is to present information in a "structured" classroom setting. *p.45*

Skin Reading Questions

ADVANCED READER

Specialty Quiz or Discussion Questions

1. Name four factors that contribute to the continuing problems found in nursing homes. *p.40* (Administrator, RNs)

2. True or False. Twenty to 25 percent of direct care to residents in nursing homes is given by CNAs. *p.40* (Administrator, RNs)

3. True or False. One factor that contributes to problems found in nursing homes is the fact that facilities are organized using a medical model. *p.40* (Administrator)

4. Name four departments represented on the Wound and Skin Care Committee and discuss the importance of having a representative from each of these departments. *p.43* (Administrator, RNs)

5. True or False. It is not important for CNAs to have access to copies of resident's care plans. *p.43* (Administrator, RNs)

6. Who were the members of the quality assurance committee and what was their purpose? *p.44* (Administrator)

7. Compare the "traditional" roles of GAPNs in nursing home facilities with the new roles suggested by the authors of this article. p*p.45*-46 (Administrator, RNs)

8. Discuss how changing the role of a nursing home GAPN affects resident care outcomes. *p.46* (Administrator, RNs)

ADMINISTRATIVE READER

Fenner, S. P. Developing and implementing a wound care program in long-term care. *WOCN*. 1999;26(5):254-259.

Basic Quiz Questions

1. The prevalence of pressure ulcers in long-term care facilities is between ___ percent and ___percent. *p.254*

2. True or False. The services provided by a wound, ostomy, and continence (WOC) nurse are vitally important to the success of a wound care program. *p.254*

3. The incidence of new pressure ulcers over six months is approximately? _____

   A. 2 percent
   B. 25 percent
   C 12 percent *p.254*

4. True or False. It is the director of nursing's responsibility to collect data on chronic wound causes. *p.255*

5. What two statistics should be available before implementation of a wound care program? Discuss the importance of tracking these two before starting a wound care program. *p.255*

6. True or False. Data collected on wounds should be grouped according to wound etiology. *p.255*

7. What tool should be used to measure wound healing progress? *p.255*

8. Besides the Braden Scale, name two assessment tools used to predict possible pressure ulcer development. *p.256*

9. Which staff members should be included in a "wound care team?" *p.255*

10. Who should be considered the "leader" of the team, and how often should team members make rounds and/or hold team meetings? *p.255*

11. Name three or four responsibilities of the WOC nurse in a long-term facility. p*p.256*-257)

12. Discuss the importance of "wound care rounds." Why is it important for nursing assistants to make rounds with the WOC nurse? *p.256*

13. Discuss the importance of having physical or occupational therapists make wound care rounds with the wound care team. *p.256*

14. True or False. It is best to use generic wound care policies and procedures provided by a parent LTC facilities for newly established LTC facilities. *p.257*

15. Discuss three or four advantages of hiring a WOC nurse to address wound care issues in a long-term care facility. *p.257*

ADMINISTRATIVE READER

Specialty Quiz or Discussion Questions

1. True or False. The services provided by a WOC nurse are vitally important to the success of a wound care program. *p.254* (GAPNs, RNs)

2. True or False. Pressure ulcer stages should be reversed as they begin to heal. *p.255* (GAPNs, RNs)

3. Discuss the importance of tracking the incidence and prevalence of pressure ulcers before starting a new wound care program. *p.255* (GAPNs, RNs)

4. True or False. It is important to keep all types of chronic wounds grouped together when reporting prevalence and incidence data. *p.255* (GAPNs, RNs)

5. True or False: The PUSH is a tool used to measure wound-healing progress. *p.255* (GAPNs, RNs)

6. Who is responsible for specific pressure ulcer treatments such as hydrotherapy and electric stimulation? *p.256* (GAPNs, RNs)

7. What lab test has been found to be predictive of pressure ulcer development? *p.256* (GAPNs, RNs)

8. What two assessment tools—besides the Braden Scale—can be used to predict possible pressure ulcer development? What lab result is missing in each of these tools? *p.256* (GAPNs, RNs)

9. Discuss several reasons why nursing assistants are invaluable to the wound care team. What are some advantages to having nursing assistants make rounds with the wound care team? *p.256* (GAPNs, RNs, CNAs)

10. True or False. The WOCN is responsible for issuing change treatment orders on a resident who has a chronic wound. *p.257* (GAPNs, RNs)

Skin Reading Questions

ADMINISTRATIVE READER

Kerstein, M. D., Gemmen, E. vanRijswijk, L., Lyder, C. H., Phillips, T., Xakellis, G., Golden, K., Harrington, C. Cost and cost effectiveness of venous and pressure ulcer protocols of care. Disease Management & Health Outcomes. 2001:9(11):636-651.

Basic Quiz Questions

1. Traditionally, which of the following is used to figure pressure ulcer costs of care?

A. Labor costs

B. Product costs

C. Labor and product costs *p.3*

2. In this study, which of the following costs was not included in the total cost of care?

A. Hospital or nursing home costs

B. Physician costs

C. Nursing costs

D. Dressing costs *p.4*

3. True or False. On average, physicians visit residents with pressure ulcers once every week. *p.6*

4. True or False. Nursing time to assess a pressure ulcer wound and change a dressing averages 15 minutes. *p.6*

5. What is the minimum time required for most pressure ulcers to heal? What percentage of pressure ulcers heals within this timeframe? *p.6*

6. Name three supportive care measures required for all individuals with pressure ulcers. *p.6*

7. Compare and discuss the cost differences between treating a pressure ulcer with a hydrocolloid dressing and treating a pressure ulcer with a plain gauze dressing. p*p.7*-8

8. True or False. To provide an optimal environment for healing, a wound dressing should be chosen that promotes a dry wound environment. *p.8*

9. True or False. Despite the low purchase cost of gauze dressings, the overall cost of using these dressing is quite high. *p.9*

10.   True or False. The cheaper the cost of the dressing product, the cheaper the total cost of treating the wound. *p.9*

2. On average, how often do physicians visit residents for pressure ulcer evaluation?

Skin Reading Questions

ADMINISTRATIVE READER

Specialty Quiz or Discussion Questions

1. What is the average nursing time for changing a dressing and assessing a pressure ulcer wound? *p.6* (GAPNs, RNs)

3. What percentage of pressure ulcers requires treatment for infection? *p.6* (GAPNs, RNs, CNAs)

4. What is the most common treatment for an infected wound? *p.6* (GAPNs, RNs, CNAs)

5. What percentage of pressure ulcer wounds is expected to heal within 12 weeks?

   A. 98 percent
   B. 25 percent
   C. 50 percent
   D. 15 percent *p.6* (GAPNs, RNs, CNAs)

6. Name three supportive-care measures required for all individuals with pressure ulcers. *p.6* (GAPNs, RNs, CNAs)

7. True or False. Wounds managed in a dry dressing environment heal more quickly than those managed in a moist dressing environment. *p.8* (GAPNs, RNs, CNAs)

8. True or False. Using saline gauze dressings for pressure ulcers is the most cost-effective method of treatment. *p.8* (GAPNs, RNs, CNAs)

A Practical Guide to Transformation

BASIC READER

Connell, B. R. Why residents wander—and what you can do about it. *Nursing Homes.* **April 2003:50-55.**

Basic Questions

1. Describe two types of wanderers. *p.50*

2. List two kinds of environmental considerations that are described in the article. *p.50*

3. True or False. When designing solutions to unwanted exiting, it is important not to rely on just one approach. *p.53*

4. Why is some level of programming related to the use of outdoor space needed? *p.54*

Specialty/Discussion Questions

1. What are your facility's needs related to designing and designating fire exits? *p.53*

(Environmental manager, DON, administrator)

2. What steps might your facility take in a multidimensional approach to wandering prevention? *p.55* (Administrator, department heads, staff development coordinator, APNs, DON)

Psychosocial Reading Questions

BASIC READER

Tyson, S. *Gerontological Nursing Care*. 1999. Philadelphia: W. B. Saunders Company, 468-471.

Basic Questions

1. List six factors that contribute to successful aging. *p.468*

2. As people grow older, what is a primary characteristic of successful living? *p.468*

3. True or False. Changes of aging occur in virtually every body system, but aging occurs at an individualized pace, and some changes can be modified or delayed. p*p.468,*469

4. True or False. Intellectual functioning does not decline with age, but the length of time required for learning increases. *p.469*

5. True or False. Most older adults view aging as a negative event for themselves. *p.470*

6. What is "bereavement overload"? *p.470*

7. What are some possible psychosocial responses to aging and the losses that might be associated with aging? *p.470*

8. True or False. A psychosocial assessment should focus on the strengths of the older adult. *p.470*, see Box 24-1

9. List three (out of seven) special considerations for health maintenance in older adults. *p.471*

Specialty/Discussion Questions

1. How does your facility address special considerations for health maintenance in older adults? *p.471* (DON, administrator, department heads)

A Practical Guide to Transformation

INTERMEDIATE READER

Piven, M. Detection of Depression in the Cognitively Intact Older Adult Protocol. *Journal of Gerontological Nursing* **2001;27(6):8-14.**

Basic Questions

1. True or False. The definition of major depression includes specific symptoms that must be present most of the day, nearly daily, for at least two weeks. *p.8*

2. List six (out of nine) risk factors for major depression. *p.9*

3. List four categories (with one example from each category) of medications that can cause symptoms of depression. *p.9*, Table

4. Why might depression be more difficult to detect in the elderly? *p.9*

5. List three clinical diseases or conditions associated with a higher likelihood of depression. *p.10*, Table

6. Describe the three steps of the depression detection protocol outlined in this article. *p.10*

7. Name two instruments identified in the article that can be used to assess depression among older individuals with cognitive impairment. *p.10*

Specialty/Discussion Questions

1. How might the three steps of the depression detection protocol outlined in this article be used in staff education activities? *p.10* (Staff development coordinator)

2. Discuss reasons for underdiagnosis and undertreatment of depression in medically ill patients. How might this information be used in your facility? *p.9* (DON, administrator, staff development coordinator, APNs, department heads)

Psychosocial Reading Questions

INTERMEDIATE READER

Van Haitsma, K., and Ruckdeschel, K. Special care for dementia in nursing homes: overview of innovations in programs and activities. *Alzheimer's Care Quarterly*. 2001;2(3):49-56.

Basic Questions

1. The unifying goal of psychosocial interventions in nursing homes is _____. *p.49*

2. True or False. Interventions individualized with one-to-one activities may be especially beneficial to residents with mid- to late-stage dementia who may not be able to tolerate the stimulation of a group activity. *p.50*

3. Who might be included in designing an individualized plan for a resident? *p.50*

4. Describe ways in which a program designed to promote functional independence may improve a resident's ADL and psychosocial status. *p.51*

5. Technology-based interventions have been identified as potentially beneficial. What are some implementation limitations? *p.52*

6. Name two types of programs that utilize alternative therapies, as identified by the authors. *p.52*

Specialty/Discussion Questions

1. How might information presented on programs related to individualized care, improving functional independence, technology-based interventions, and alternative therapies be used in your facility? p*p.50*-53. (Activities staff, therapies, nursing)

2. How can collaboration between facility clinicians/staff, policy makers, and researchers contribute toward understanding and providing appropriate psychosocial interventions for persons with dementia? *p.54* (APNs, administrator, CEO, DON, staff development coordinator)

ADVANCED READER

Cohen-Mansfield, J. Nonpharmacologic interventions for inappropriate behaviors in dementia: a review, summary and critique. *American Journal of Geriatric Psychiatry*. **2001;9(4):361-381.**

Basic Questions

1. Inappropriate behaviors have been divided into what four main subtypes? *p.361*

2. Three theoretical frameworks have been applied in much of the research on inappropriate behaviors. Describe the three models. *p.362*

3. What are the advantages of nonpharmacologic interventions? *p.363*

4. Describe two sensory enhancement/relaxation methods. p*p.370*-371

5. Describe the findings related to social contact (real or simulated). *p.371*

6. Describe the findings related to behavioral interventions. p*p.371*-372

7. What did the findings suggest about environmental design? p*p.372*-373

8. Medical/nursing interventions identified in the review included pain management. How might residents in your facility benefit from this research? *p.373*

9. List three (of the six) principles that could be considered primary targets for future nonpharmacologic interventions. *p.375*

10. Identify two barriers to utilization of nonpharmacologic interventions in practice. *p.377*

Specialty/Discussion Questions

1. Findings suggest that repeated ongoing training is needed to affect staff behavior. How does this relate to the teaching that occurs in your facility? *p.372* (Staff development coordinator, DON, APNs)

2. The author recommends that as knowledge about nonpharmacologic interventions is gained, concomitant changes in reimbursement and the structure of system-of-care need to take place. What steps might you take in your own facility? *p.378*. (Administrator, department heads, DON)

Psychosocial Reading Questions

ADVANCED READER

McGilton, K. Enhancing relationships between care providers and residents in long-term care. *Journal of Gerontological Nursing*. 2002;28(12):13-21.

Basic Questions

1. How are reliability, empathy, and consistency in approach described in caring for vulnerable elders? p*p.14*-16

2. How might staff in supervisory (including charge nurse) positions create supportive environments for other staff in care providing positions? *p.16*

3. Based on research, what are some of the benefits of consistently assigning the same staff to residents? *p.16*

4. Identify one potential disadvantage of a continuous assignment system. *p.17*

5. Based on research discussed in this article, how might knowing a resident better improve care? p*p.17*-18

6. Describe two studies that suggest a link between supportive management practices and positive perceptions of residents and/or positive staff-resident interactions. p*p.18*-19

Specialty/Discussion Questions

1. What are some of the benefits of consistently assigning the same staff to residents? *p.16* (DON, schedulers)

2. Identify one potential disadvantage of a continuous assignment system. *p.17* (DON, schedulers)

3. How might administrators and staff in supervisory positions create supportive environments for care

A Practical Guide to Transformation

Restoration Reading Questions

BASIC READER

Henkel, G. Beyond the MDS: Team Approach to Falls Assessment Prevention, and Management. *Caring for the Ages*. **April 2002;3(4). Available at: http://www.amda.com/caring/april2002/falls.**

Basic Questions

1. List eight risk factors for falls. *p.2*

2. True or False. All falls can be prevented. *p.2*

3. List three outmoded beliefs about falls. *p.3*

4. As described in the article, what is the difference between an interdisciplinary approach to preventing falls and a "transdisciplinary" approach? *p.3*

5. When should fall assessments be done? *p.3*

6. Caregivers need to balance the dual need of protecting the resident from harm while_____ ____. *p.4*

7. Interventions to prevent falls either address resident characteristics or modifications of the _____ __. *p.5*

8. How does the fear of falling put a resident at risk of falls? *p.4*

Specialty/Discussion Questions

1. What is the physician's role in the assessment process? p*p.2*-3 (DON/ADON, physician, nursing supervisors, PT, Medical Director)

2. List interventions or services to help prevent falls that could be offered by various departments in your facility. *p.5* (administration, department heads, nursing supervisors, housekeeping, maintenance, CNAs, staff development coordinator)

3. When instituting fall prevention programs, why is it important to have buy-in from "all levels of caregivers, from medical director to pharmacist, and from nursing to the housekeeping staff"? *p.3* (Administrator, department heads, CEO, staff development coordinator)

Restoration Reading Questions

BASIC READER

Curry, L.C., and Hogstel, M.O. Nursing Assessment and Intervention: Preventing Fall-Related Injuries in Long-Term Care Facilities. *Annals of Long Term Care*. **January 2002;10(1):29-35.**

Basic Questions

1. What are some characteristics of residents who are at risk for falls? *p.30*

2. Why should a resident not be moved after a fall until an initial assessment can be performed? *p.30*

3. What is osteoporosis? *p.32*

4. List two complications of osteoporosis. *p.32*

5. What can be done to prevent osteoporosis? *p.32* and table on *p.34*

6. True or False. There are new medications that can be used to help restore bone mass and prevent further bone loss. *p.33*

7. Identify eight measures (interventions) to prevent falls. *p.33*

Specialty/Discussion Questions

1. What are potential clinical complications for a resident who experiences a fall with a fracture? *p.29* (Nurse managers, physical therapist, restorative nursing)

2. If you reviewed your facility's environment for safety concerns, where might improvements be made? *p.31* (Maintenance staff, housekeeping)

3. What kinds of information would you like to include in planning an osteoporosis inservice? *p.34* (Staff development coordinator)

4. Why should the resident's diet be routinely reviewed? What would you be looking for? *p.34* (Dietitian)

5. Discuss potential financial and legal implications related to falls with injuries. *p.29* (Administrator, DON, department heads, CEO, staff development coordinator)

6. How does your facility identify and implement preventive measures related to osteoporosis? *p.32* (Staff development coordinator, administrator, DON, medical director)

INTERMEDIATE READER

Eakman, A. M., Havens, M. D., Ager, S. J., Buchanan, R. L., Fee, N. J., Gollick, S. G., Michels, M. J., Olson, L. L., Satterfield, K. M., and Stevenson, K. A. Fall prevention in long-term care: an in-house interdisciplinary team approach. *Topics in Geriatric Rehabilitation*. **2002;17(3):29-39.**

Basic Questions

1. List three reasons why falls in nursing home residents are a concern. p*p.29*-30

2. How was information from the MDS utilized in this study to look at a resident's functional and cognitive status? *p.30*

3. When were residents referred to the falls team? *p.31*

4. Who was included in the falls team? *p.31*

5. The falls team made intervention recommendations after all evaluations were completed. The interventions were divided into four classes, please list them. *p.32*

6. For one class of interventions, list the most frequently recommended interventions. *p.32*

7. True or False. Both falls and injuries decreased after the falls team's interventions were implemented. *p.32*

Specialty/Discussion Questions

1. Each discipline conducted an evaluation within five days of receiving the falls team intervention orders. Briefly describe what the evaluation addressed for each disciplines. *p.31* (Activities, nursing, occupational therapy, pharmacy, physical therapy, speech therapy, social services)

2. Which disciplines or services are represented on your facility's falls team? How do you support the role of each member on the falls team? *p.31* (CEO, administrator, department heads, staff development coordinator)

Restoration Reading Questions

INTERMEDIATE READER

Basic Questions

1. Four studies reviewed showed that falls increased when a resident took ___ or more medications. *p.79*

2. What three classifications of medications were cited most frequently as contributing to the increase or occurrence of a fall? *p.79*

3. Studies suggest that deconditioning plays a role in the occurrence of falls. Deconditioning was operationalized to include what three conditions (risk factors)? *p.79*

4. When do falls most commonly occur? *p.80*

5. True of False. The removal or restraints as well as use of restraints are associated with risk of falls. *p.91*

6. List five diagnostic conditions associated with an increased rate of falls (an interaction of diagnostic conditions and increased rates of falling). *p.81*

7. List three characteristics of residents associated with an increase in falls. *p.82*

Specialty/Discussion Questions

1. What issues regarding falls did the article identify for therapy practitioners? Are these of concern in your facility? *p.81* (Physical therapist, occupational therapist, restorative nursing)

2. Discuss your facility's program for the identification of risk for falls and fall prevention. Is it working? Are any changes needed? (Administrator, CEO, QA committee, department heads)

ADVANCED READER

Ourania, M., Yvoni, H., Christos, K., and Ionannis. T. Effects of a Physical Activity Program—The Study of Selected Physical Abilities Among Elderly Women. *Journal of Gerontological Nursing*. 2003;29(7):50-55.

Basic Questions

1. For old or very old adults, what are the specific effects of increased muscle strength on mobility? *p.50*

2. For older women, what selected physical abilities might be expected to improve after participating in a 10-week exercise program? *p.54*

3. What are the physical health benefits for older women who participate in an exercise program three times a week versus only once a week? *p.54*

Specialty/Discussion Questions

1. What tests might be used to assess the functional fitness of older adults? *p.51* (Physical therapist, occupational therapist)

2. What issues need staff consideration if planning or revising an exercise program for a group of residents or individual residents? (Occupational therapist, physical therapist, activities staff, social services, CNAs, nurses)

Restoration Reading Questions

ADVANCED READER

Harrison, B., Booth, D. and Algase, D. Studying fall risk factors among nursing home residents who fell. *Journal of Gerontological Nursing*. 2001;27(10):26-34.

Basic Questions

1. Identify three intrinsic fall risk factors for elderly individuals. *p.26*

2. What is the relationship between restraint use and falls, as described in the article literature review? *p.27*

Specialty/Discussion Questions

1. What information is collected on your facility's incident reports? How can you use this information? *p.28* (DON, nursing supervisors, staff development coordinator)

2. Review and discuss the recommendations to improve assessment at the end of the article. How might your facility make improvements? *p.33* (Administrator, DON, APNs, department heads, nursing supervisors, staff development coordinator)

BASIC READER

Phillips, S. L., Southworth, A., Myers, M., and Shea, C. J. Pain management in a long term care setting: an interdisciplinary approach. *Annals of Long-Term Care*. 2005;13(6):34-36.

Basic Questions

1. True or False. Chronic pain is always constant. *p.34*

2. True of False. Adequate assessment and treatment of pain has been associated with improvement of activities of daily living. *p.34*

3. List two of the most common causes of chronic pain in nursing facility residents. *p.35*

4. List three conditions that can interfere with assessment and management of pain. *p.35*

5. What are some nonspecific indicators of pain? *p.35*

6. True or False. Pain is a normal part of aging. *p.36*

7. Who would be good choices for members of an interdisciplinary pain team? p*p.34*, 36

8. What is the role of the direct care worker in pain? *p.36*

Specialty/Discussion Questions

1. What steps might your facility take in developing an interdisciplinary approach to pain management? p*p.34*-35 (Administrator, DON, APNs, SDC, department heads)

2. Why might close monitoring of pain be necessary and beneficial? *p.36* (DON, administrator, SDC, APNs)

Pain Reading Questions

BASIC READER

Siciliano, P. and Burrage, R. Chronic pain in the elderly: a continuing education program for certified nursing assistants. *Geriatric Nursing*. 2005;26(4):252-258.

Basic Questions

1. True or False. Pain is whatever the patient says it is. *p.253*

2. List three ways that age-related changes may impact pain. *p.254*

3. What may result in misunderstandings about expressions of pain? *p.254*

4. What are some common reactions to pain? List four. *p.255*

5. What are some alternative and complementary therapies for pain? *p.256*

6. Name some things that can be done to decrease environmental stressors for residents with dementia when assessing for pain. *p.256*

7. How does your own personal experience with pain influence how you recognize residents' pain? *p.257*

8. Describe four ways specific interventions can alleviate pain. *p.257*

Specialty/Discussion Questions

1. What is the current level of knowledge of staff members about pain in your facility? How might you find out? (DON, administrator, SDC, department heads)

2. Would the program described in this article work for your facility? What might you do to personalize it to the facility needs? (Administrator, SDC, DON)

3. What could you do to empower CNAs to adequately assess residents for pain and respond appropriately? (DON, SDC)

INTERMEDIATE READER

Ferrell, B. A. The management of pain in long-term care. *Clinical Journal of Pain*. 2004;20(4):240-243.

Intermediate Questions

1. What are some possible consequences of pain in the long-term care resident? *p.241*

2. True or False. Even though many chronic conditions residents have are not curable, the discomfort or disability they produce can often be modified. *p.241*

3. What complicates initial assessment of acute and chronic pain? *p.242*

4. List three ways you can facilitate pain assessments of residents. *p.242*

5. What are some of the problems of pharmacologic approaches to pain management in the elderly? *p.242*

6. What is a contingency plan used for? What might one look like? *p.243*

Specialty/Discussion Questions

1. What are your current policies about pain management? How might policies be made better? Who should be involved in changing them? (DON, CNAs, nurses)

INTERMEDIATE READER

Schofield, P. Pain management of older people in care homes: a pilot study. *British Journal of Nursing*. 2006;15(9):509-514.

Intermediate Questions

1. What are some factors that have contributed to improved pain management over time? *p.509*

2. What are four reasons residents may not have good pain management or voice complaints of pain? *p.511*

3. What was the primary way staff determined whether residents were in pain? *p.512*

4. Staff recognized two things they would like to see happen in order to provide better pain treatment. What were they? *p.512*

5. What are some ways to get started in developing a person-centered approach to pain management? *p.513*

Specialty/Discussion Questions

1. What might staff need to do in addition to traditional pain assessments to adequately treat and manage residents' pain? (DON, nurses, SDC)

2. What can be done at the facility level to reduce misconceptions among staff and residents about pain and pain treatments? (Administrator, DON, SDC, department heads)

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ADVANCED READER

Cipher, D. J., Clifford, P. A., Roper, K. D. Behavioral manifestations of pain in the demented elderly. *Journal of the American Medical Directors Association*. 2005;7:355-365.

Advanced Questions

1. How are acute pain and chronic pain effectively treated? p*p.355*-356

2. What has research shown, in general, about the connection between pain and behavioral disturbances? *p.355*

3. Describe the relationship between the intensity, frequency, and duration of pain with behavioral disturbances in the mildly, moderately, and severely demented residents. *p.358*

4. Which behaviors did recently injured, mildly impaired residents exhibit, and which ones did recently injured, moderately and severely impaired resident exhibit overall? *p.359*

5. What types of behaviors were related to chronic pain in mildly, moderately, and severely impaired residents? *p.361*

6. What is the overall finding about the relationship between intensity, frequency, and duration of pain on behavior? *p.363*

7. What type of resident should be targeted for a multidisciplinary approach to pain management? *p.363*

8. What types of behaviors may indicate a recent injury in a severely impaired resident? *p.364*

9. What are signs that residents may need a thorough pain assessment and perhaps comprehensive psychological and multidisciplinary evaluations of pain? *p.364*

Specialty/Discussion Questions

1. In light of the complex findings, how might your facility improve methods of pain assessment currently in use in your facility? (Administrator, DON, PT, SDC, department heads, APNs, medical director)

2. What systems can be put into place to monitor behaviors across departments in order to communicate possible pain needs? (Administrator, DON, department heads)

Pain Reading Questions

ADVANCED READER

Lin, W., Lum, T. Y., Mehr, D. R., Kane, R. L. Measuring pain presence and intensity in nursing home residents. *Journal of the American Medical Directors Association*. 2006;7:147-153.

Advanced Questions

1. What is inadequately treated pain associated with? *p.147*

2. How much more often was pain reported on the questionnaire than on the MDS? *p.149*

3. Which respondent (resident, family proxy, or staff proxy) reported the highest percentage of pain presence? *p.149*

4. Which respondent (resident, family proxy, or staff proxy) was most likely to agree with the MDS? *p.150*

5. What compounds the issue of using staff proxies when completing the MDS? *p.150*

6. What is the major finding related to the perception of pain? *p.152*

Specialty/Discussion Questions

1. What might the findings of this study suggest for the way your facility completes MDS assessments? (Administrator, DON, MDS coordinator)

2. The article suggests that care providers must have appropriate training to assess pain intensity and judgment of nonverbal signs of pain and pain behaviors. What might your facility do to address this? (DON, department heads, SDC)

A Practical Guide to Transformation

Case Studies

Outline

Nutrition

Elimination

Skin

Psychosocial Well-Being

Restoration

Case Studies

Introduction

This section includes studies that were developed from interviews conducted in several facilities undergoing culture change. The studies are designed to reflect, primarily, successful implementation plans and strategies. Each case study includes a series of questions (called Facilitator Questions) that can be considered to assist staff in thinking about developing implementation plans. The questions are numbered and correspond to numbered sections of the case study narrative.

The case studies provided here can be used in several ways. First, they can be used during the modules to simulate the kind of problem solving that CTs will want to engage in once they return home. Second, the case studies can be used by CTs and Leadership Teams to identify strategies for developing, implementing, and evaluating CT plans. Third, the case studies can be used as self-study modules for staff interested in becoming more effective problem solvers. Fourth, staff development personnel may find these case studies useful when organizing in-service education programs to support change implementation.

At the end of the section is a Case Study Template. This can be used as a guide to develop new case studies or to review implementation plans as they are developed.

Case Study Outline

Introduction

The case study outline, below, was developed as a tool to assist Care Teams (CTs) in constructing implementation plans. It reflects the general elements contained in the case studies developed for Section VI.

Using the Outline

The case study outline could be used by CTs as a guide to determining what facility problem area to focus on. It could be used as a checklist or as a worksheet to remind CT members of relevant considerations in constructing an implementation plan. It is not intended to be a "recipe," but rather a guide to assist CTs and others in thinking about how to approach and address challenging resident care issues. The case study outline might also be used to create new case studies for use at modules or to assist CTs that are having some difficulty identifying a problem or initiating or developing an implementation plan.

The Outline

I. USING DATA TO IDENTIFY A PROBLEM

List possible data sources, including resident, family, survey, and formal data collection (See Attachment 2)

a. Name/type of data

b. Location of data

c. Access to data (Who collects it? Who has access to it?)

d. Extracting data (How is it collected? Interpreted?)

e. Conclusions (What does it tell you? Are there multiple possible interpretations? How will you know which is correct?)

f. Evaluating the data:

   i.   What doesn't the data tell you? Is this important?
   ii. What other supplemental data might you need? How will you obtain it? What is the role of the Leadership Team in this?
   iii. Who has expertise in the facility to interpret or address the problem? Can the LT help with this?
   iv. What implications are there for resident care? What exactly would be different if the problem was solved?
   v.   What implications are there for resident quality of life? How do you know this will improve quality of life?

vi. What system-level implications are there? What sort of system would need to be put in place to assure sustainability?

vii. Who is likely to be most affected? How should they be involved? When? (Department, unit, worker group, administration)

viii. What role can staff development play in implementing or sustaining the change?

ix. How do performance evaluations reinforce the changes proposed or implemented?

x. Are the plans supported by the data initially collected?

Common Challenges Associated with Using Data:

- If you don't know where the data are, or how to access them, what is your plan for addressing this? How can the Leadership Team contribute to this? Short-term? Long-term?

- The workers most likely to be affected by the plan are not involved in planning.

- The supervisors of the workers most likely to be affected by the plan are not involved in planning.

- There is no clear plan for evaluating the success of the plan (data used as evidence) along the way.

II. WRITING A PROBLEM STATEMENT

In one sentence, identify the problem or challenge you are trying to address. Consult the case studies in Attachment 1 regarding level of specificity. Try to consider different levels of the organization (see a., b., and c., below) when doing this.

a. Resident care level:

1. How does this problem affect resident quality of care?
2. Which residents are affected? How many resident are affected?
3. How does this affect resident quality of life?
4. How important is it to address this problem?
5. Is the problem easily identified?

b. System level:

1. Has the problem been previously identified?
2. What has been done in the past to address the problem?
3. What systems have been used to address the problem?
4. Are they still in place?
5. If not, what happened?
6. If they are, how well do the systems operate? Where are breakdowns? Where are the strengths?
7. How are these systems maintained?

c. Worker level

    1. What is the impact of this problem on workers?
    2. Which workers are most affected?
    3. Will the proposed change alter workers' experiences? If so, how?

Problem Statement: _____

III. ASSESSING THE PROBLEM STATEMENT

a. How significant is the problem you have identified in the organization?

b. Does it affect many parts of the organization?

- Does it affect many residents?
- Does it affect many workers (by shift, type)?

c. After responding to a. and b.*, above, is your CT still committed to addressing the problem you identified, or do you want to alter your problem statement?

* Instead of answering simply Yes or No, provide an explanation for each of your responses. See if your responses are similar for different units, departments, shifts, and worker groups.

IV. IDENTIFYING GOALS

What would you or your team like to see as a result of your efforts?

1) Identify resident-level goals:

    a. What specifically will change for residents if this problem is addressed?
    b. What resident-level indicators will you use to determine whether you have succeeded?

*RESIDENT-LEVEL GOAL(S):*_____

2) Identify system-level goals:

    a. How, specifically, will the new structure alter or address the problem?
    b. Whose role in the organization will change with the new structure or system? And how are they involved?
    c. How will the organization prepare for this change?
    d. Will authority, reporting, information flow, or decision-making be different? How will you prepare for this?
    e. How, specifically, will change alter the structure?
    f. How will change be sustained?

*SYSTEM-LEVEL GOAL(S):*_____

V. SELECT ONE SYSTEM-LEVEL GOAL

Select one of the system-level goals you have identified above to be the focus of the CT's Implementation Plan. Keep in mind: Successful implementation of a system-level plan should have a clear impact on residents. If it doesn't, why does it matter? Also, if your plan for practice change is being implemented at a system-level, it has a greater chance of being sustained in the organization over time.

VI. DETERMINE HOW YOU WILL MEASURE SUCCESS IN MEETING YOUR GOALS

a. Evaluating along the way

    i. Do you have a timeline with markers along the way?
    ii. How will the markers be established?
    iii. How will data be collected along the way?
    iv. What exactly are you hoping for and when?

b. Evaluating change

    i. How will the markers for success be established?
    ii. Who should be involved in determining this?

Case Study

NUTRITION

Introduction

The team members of the Nutrition CT include the registered dietitian, dietary manager (team leader), social worker, a night shift LPN, an evening shift RN, a CNA from the evening shift, and a CNA from the day shift. The team has been meeting biweekly and the director of nursing (DON) often attends the meetings as well.

Identifying a problem

The team members discussed the management of nutritional concerns in their facility and wanted to identify a problem to work on that had a short-term goal. To assist them in this process, several sources of data were reviewed:

- The RN discussed the Quality Indicator reports and her concerns that the QI on Prevalence of Weight Loss in their facility had been consistently higher than the comparison group over the last two quarters. **(#1)**

- The DON collected data on the nutritional status of residents. Data indicated that five residents identified as being at low risk for nutritional status concerns lost weight over the last quarter. Only one resident at low risk had experienced weight loss the previous quarter. Additionally, data showed an increase in the number of residents with weight gain. **(#2)**

- The registered dietitian concurred that weight loss was a potential concern in their facility. She described her system for tracking weights over time and outlined for the team how she uses this information to quickly identify significant resident weight loss or gain for individual residents.

- The dietary manager stated that her review of the weekly weight logs suggests that weights might be inaccurate. Over the past month, 15 of the 40 residents requiring weekly weights had to be reweighed because there was more than a five-pound variance from the week before. In some cases weights obtained on the same day, for the same resident, showed both weight loss and then weight gain.

- The social worker explained that she attempts to talk to family members, at least briefly, during every family visit. Recently two families said staff told them that their parent (resident) had gained weight, but this seemed questionable to them because the resident did not appear to have gained any weight.

The team leader led the discussion by asking, "Is there an actual concern with weight loss, or are weights obtained that are inaccurate?" The team decided to gather information to answer the following questions as a way to determine the actual problem.

- How often are scales checked to ensure they are properly calibrated and functioning?

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- When does staff weigh residents, and what are they wearing, that is, are they weighed at the same time of day and with the same type of clothing?

- Are weight fluctuations noted on all units?

- Are weight fluctuations most prevalent for residents who are weighed on a certain scale (upright scale, chair scale, or mechanical lift with scale)?

- Are residents consistently weighed on the same scale? **(#3)**

The team divided up the interviewing, observation, and record review activities that would help answer the above questions:

- The social worker agreed to talk with the environmental manager to determine when and how each scale is calibrated and checked to ensure proper functioning.

- The two CNAs on the team volunteered to randomly observe five staff on their shift to determine if residents were being weighed properly. Directly after an observation of a resident being weighed, interviews with these staff would be conducted asking: (1) When is this resident usually weighed? (2) Is the same scale used every time the resident is weighed? (3) What does this resident usually wear when being weighed? **(#4)**

- The LPN on the team would review and compare weight logs from all units to determine if questionable weight fluctuations occurred throughout the facility and whether weight fluctuations related to a particular type of scale. **(#5)**

Over the next week, the team members completed the above tasks. The following information was gathered:

- After talking with the environmental manager, the social worker determined that the facility did not have a policy in place that identified how often each scale was to be checked to ensure proper functioning. The environmental manager followed up and tested each scale and determined that the mechanical lift scale was old and not functioning properly. The scale did not provide identical weights when weighing the same object several times in a row. It was the environmental manager's opinion, after talking with the manufacturer, that the scale could not be fixed and needed to be replaced.

- Staff members on all units were weighing residents at the same time of day each time. Staff followed the facility policy that stated residents were to be weighed before their bath or shower, after voiding (if possible), and wearing a lightweight gown. Staff consistently used the same scale every time a resident was weighed. **(#6)**

- Weight fluctuations occurred on all units on the first floor but were limited to those residents being weighed using the mechanical lift scale. All 15 residents who needed to be reweighed over the past month had been weighed on the mechanical lift scale.

After all information was collected, the team analyzed the data and determined that inaccurate weights were obtained for residents from the first floor who needed to be weighed using the mechanical lift scale. The team concluded that before it could be said that a weight loss problem existed, it would be necessary to ensure that all weights were accurate.

- **Problem Statement:** Fifteen residents from the first floor had to be reweighed over the past month due to a weight fluctuation of more than five pounds from the previous weight. All 15 of the residents had been weighed using the mechanical lift scale on the first floor. Because the mechanical lift scale was not functioning properly, accurate weights were not consistently obtained for residents whose weight must be obtained using this scale. The mechanical lift scale needed to be replaced, and staff needed to be taught how to use the new scale.

- **Goals:** (1) All residents whose weight must be obtained by mechanical lift scale will have an accurate weight obtained within seven days. (2) A new mechanical lift scale would be purchased within 30 days.

- **Measures to Evaluate Success:** (1) The CNAs on the team set up a plan to observe all direct-care staff on first floor that would be using the new mechanical lift scale once it arrived. This was to ensure that the procedure for weighing residents would be properly implemented. (2) Once the new scale arrived, the RN and LPN on the team agreed to review the weekly weight logs from first floor on a daily basis for 30 days looking for any weights that demonstrated a questionable fluctuation of five pounds or more. (3) The dietary manager would continue her usual practice of reviewing the weight logs on a weekly basis.

Developing the plan

The team identified the following tasks for team members to complete:

- A subcommittee of team members—the RN, LPN, and evening shift CNA—would begin immediate review of care for the 15 residents who used the first floor mechanical lift scale and determine if another method of weighing the resident could temporarily be used until the scale could be replaced.

  - If the above subcommittee determined that an alternative method of weighing could not be safely used, the RN would promptly contact the physician to review the resident's condition and discuss options. **(#7)**
  - The dietary manager would take responsibility for ensuring that the old scale was removed from the floor and post a note indicating that staff should report to nursing for instructions related to weighing those residents who used the mechanical lift scale. **(#8)**
  - The subcommittee would develop and post a list at the nurses' station on first floor identifying all temporary instructions for staff to follow for those residents weighed using the mechanical lift scale. **(#9)**

- The team leader would inform the administrator and the DON of the problem and the temporary plan and gain permission to gather information about various scales that could be purchased.

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- Once permission was obtained, the dietitian, the social worker, and the day shift CNA would meet with the purchasing director to review product catalogs and put together a list of options, with cost information provided. **(#10)**

- The CNAs on the team would contact CNAs from other alliance homes for recommendations about potential mechanical lift scale replacements.

- The LPN would interview a total of five in-house CNAs, asking, "What did you like or not like about the mechanical lift scale used by the facility, and what would you like to see in a replacement model?"

The team met again in one week. The administrator, DON, and the team leader from the restorative care team were invited to attend the CT meeting since it was believed that their input would be important. It was reported that the temporary plan for obtaining weights for the 15 residents was in effect and being monitored by the subcommittee of the RN, LPN, and CNA. **(#11)**

All team members shared what they had learned about mechanical lift scales. After determining desirable criteria, the team chose three preferred mechanical lift scales that met the criteria and parameters provided by the team and approved by the administrator.

Introducing the plan

The team decided to contact the three scale manufacturers and see if representatives from each company could visit the facility and bring a model for demonstration. The administrator suggested the facility hold a luncheon or pizza party for staff and residents, with company representatives invited. After the meal, demonstrations and opportunities to work with the three scales could be provided, and staff and residents could then vote on which mechanical lift scale they liked best.

Implementing the plan

- The administrator offered to write up an invitation to the luncheon, along with an explanation of the purpose, to go into the mailboxes of all staff.

- The dietitian offered to contact each company and invite them to the luncheon. Each company had to agree to provide a demonstration and then give staff an opportunity to try the scales. Each company was asked to send information that could be posted for staff consideration before the luncheon and demonstration.

- Once the companies agreed to attend, the social worker attended a resident council meeting and invited residents to the luncheon and encouraged them to read about the mechanical lift scales ahead of time and vote after the demonstration.

- "Cast your vote" posters were placed around the facility in common use areas to peak interest and encourage staff involvement in deciding what was the best mechanical lift scale.

Before the luncheon, team members talked with other staff, residents, and families and encouraged them to actively participate in voting for the mechanical lift scale of their choice. (#12-13)

The luncheon was held 20 days after the problem was identified. All three companies brought mechanical lift scales with them, and both staff and residents volunteered to be positioned and weighed in the various scales. Ballots were handed out directly after the demonstrations, and the results were reported the following morning. The purchasing director placed the order for the new mechanical lift scale.

Evidence the plan is successful

The new scale arrived the following week. Prior to the scale arriving, the subcommittee (RN, LPN, and CNA) reviewed the list of first-floor residents who required the mechanical lift scale to ensure the list was up to date.

- The first floor direct-care staff, staff development coordinator, and all CNAs on the team received training directly from the manufacturer on how to correctly use the scale. After this initial training, the CNAs on the team instituted their plan to observe all direct-care staff on the first floor using the new mechanical lift scale to ensure that the procedure for weighing residents was properly implemented. **(#14)**

- The environmental manager also received information from the manufacturer and drafted a facility policy regarding the checking of accuracy for all facility scales. The team reviewed the draft policy and forwarded it to the DON and administrator for final approval. **(#15)**

- The RN and LPN on the team began their review of the weekly weight logs from the first floor on a daily basis looking for any weights that demonstrated a questionable fluctuation of five pounds or more.

Two weeks after the scale arrived, the team met to review data and determine if accurate weights were being obtained. Although two residents from the first floor were identified as having either a five-pound weight gain or five-pound weight loss within a week, neither of these residents was weighed on the new mechanical lift scale. The dietary manager or the dietitian provided insight into the clinical nutritional status of the two residents and believed the weights to be accurate. The team agreed to continue to monitor data on weight loss and weight gain for all residents in the facility, but recent data suggested there was not an actual facility-level concern with unplanned weight loss or weight gain

Facilitator Questions

1) At this point, several CT members would like to implement a program to increase caloric intake of residents. They are convinced that the CNAs are simply not following through with snacks, and that dietary staff have been careless about resident food preferences. Other CT members believe the weight loss is mostly related to the number of residents on palliative programs and end-of-life care. What can you say to convince the team that they need more information before deciding what the problem is? Why shouldn't they be able to act now, based on what they have learned?

2) You have convinced the team to collect more data, and this is what they have come back with. Some team members believe that this new information supports the explanation about more residents on palliative care and are ready to proceed based on that view. Others suggest that, on the whole, there is no problem. Some residents have gained weight, and others have lost weight. What sort of a protocol would guide the team to continue collecting information until they had enough to accurately define the problem?

3) How would you obtain the answers to these questions? How would you approach each unit to gather the data you need?

4) What if many of the CNAs cannot answer this question? What does that suggest? What recommendations could you make from this observation alone? Will your recommendation endure beyond the staff remembering? How might you formalize the recommendation so that it endures beyond individuals remembering?

5) What sort of information should the LPN bring back to the team? What format would you recommend the LPN use to collect the information? What evidence about weights would you need to convince the team that there is or is not a problem?

6) Can you anticipate any quality-of-life problems that might be created by your plan? How might you prevent each of these from occurring? (Identify at least two quality-of-life problems that might result from this plan.)

7) Who would you identify as high risk, whether or not the physician agreed? What other measures would you recommend until accurate weights could be obtained?

8) Can you think of any other approaches to this temporary problem that might be more effective or equally effective?

9) Would you consider the communication plan adequate? What else could be done to increase the effectiveness of communication?

10) Is this the right group to make this decision? Who else, if anyone, should be involved? Why? What are some important considerations in making this decision?

11) How should this monitoring be done? Be specific.

12) What should be done prior to setting up this luncheon to make sure the plan goes smoothly? (What information is needed? Who should be involved? What needs to be agreed on up front? With whom?)

13) What if there are significant price differences among the scales? Does this make a difference in your plan?

14) Can you anticipate challenges to maintaining accurate weights over time? (Name at least two.) What will you recommend to address these challenges?

15) How could this policy be implemented?

Case Study

ELIMINATION

Introduction

The Elimination Care Team (CT) is composed of one CNA from each shift, a day shift LPN, an activities assistant, a dietary assistant, an evening shift RN, the housekeeping/laundry services department manager, the social worker, and the restorative services manager. The team leader is the night shift CNA. Because the night shift CNA is not yet comfortable leading CT meetings but is very comfortable leading and monitoring activities out on the floor, team meetings are co-led by the night shift CNA and the day shift LPN. This arrangement has worked very well for this team. **(#1)** The night shift CNA is described as being very knowledgeable and a leader among her peers. The LPN is described as a "good listener" and comes across as interested in what every team member has to say. **(#2)**

Identifying a problem

Members of the Elimination Care Team (CT) were asked to attend two, one-hour pretraining meetings led by the DON. **(#3)** To prepare for the first meeting, each team member was given an article about incontinence to read. At the first pretraining meeting, the coordinator explained what to expect at the training. **(#4)** Next, the team discussed the article about incontinence. The DON divided the team into three groups **(#5)** for the discussion, with a licensed nurse in each group to help answer clinical questions. The team also discussed why being continent is important from the perspective of the resident, family, staff, and the organization. For example, they talked about what problems incontinence might create for a resident (embarrassment, skin breakdown, odors, falls related to attempts to get to the bathroom quickly, etc.). **(#6)**

The second pretraining meeting was held a week later after team members had an opportunity to read a second article about elimination needs. **(#7)** The DON led a discussion about the types of incontinence and general information about the function and structure of the elimination system. It was at this meeting that the team began to review different sources of data to identify potential resident and system-wide facility problems with managing incontinence. **(#8)**

- The DON provided copies of the facility's most recent Quality Indicator reports to the team members and helped the team interpret the results. As the CT reviewed these reports, it was noted that the prevalence of bladder or bowel incontinence was at the 87th percentile. The facility was higher than the comparison group.

- The DON also discussed the information about specific resident toileting needs. **(#9)** It was noted that the number of residents dependent on staff for toileting had increased throughout the facility over the last quarter.

- The restorative services manager said that based on observations she made while on the units, staff did not consistently implement bladder training programs as they were written. **(#10)**

- The evening CNA remarked that Mrs. Brown's daughter recently approached her and asked about the urine odors she had detected in her mother's room during her last three visits. The daughter said she was concerned that staff were not taking her mother to the bathroom at the times listed on the care plan.

- The activities assistant verified that urine odors were identified as a problem during the last Resident Council meeting.

- The social worker said that during a recent care plan meeting a resident complained that staff were not taking her to the bathroom at the times she was told they would.

- The housekeeping manager said her logs showed a recent increase in use of incontinence pads.

- The DON said that on their last survey, the facility was cited because three residents did not have programs in place to restore as much normal bladder function as possible. The surveyors believed that Mr. Smith should have been toileted, but instead he receives incontinence care, and Mrs. Jones and Mr. Morgan were not toileted according to their care plans.

Based on discussion and review of the above information, the team decided that further investigation was needed to structure the identification of problems related to managing or improving bladder function in the facility. They decided to focus initially on the care planning process. (The team anticipated that working on the care plan process may help them address additional concerns identified with incontinence management.) The team identified the following questions: **(#11)**

- Who is responsible for updating care plans when changes in residents' bladder function occur?

- How is care plan information communicated to direct-care nurses and CNAs?

- Does staff know who is responsible for what?

- Does staff understand the interventions listed on the care plan?

- Do the daily worksheets used by CNAs match the care plan?

- Does the environment support implementation of the bladder function care plan?

- Who monitors to make sure care plan interventions to manage or promote bladder function are implemented?

- Are staff members adequately trained?

- Does staff have enough time to implement care plan interventions? **(#12)**

Following the training session to address elimination needs, the team collected information to address the above questions through chart review, observation, and interview.

- The social worker and LPN completed 10 sample chart reviews for each unit. Care plans appeared to be updated and revised to reflect current bladder function. However, in the area of services to address bladder function, 6 of 10 CNA daily worksheets did not match the care plans. **(#13)**

- The restorative services manager and DON reviewed another sample of 10 resident care plans. After care plan review, they conducted observations of the provision of resident care related to incontinence. They noted that CNAs followed specific interventions to address bladder function in only 9 of 15 cases. This validated one of the concerns initially identified by the team.

- The team CNAs interviewed CNAs on their units about individual resident interventions, such as toileting schedules, use of incontinence products, etc. **(#14)**. CNAs reported they had adequate time to get their work done, but they were receiving mixed messages due to discrepancies between information provided by charge nurses, information provided by the restorative services manager, and what was written on the care plan. CNAs said that because there was no formal report between the nurses and CNAs, they oftentimes heard of changes from other CNAs who had been implementing an intervention for several weeks already.

- The LPN interviewed the unit charge nurses about their role in revising care plans. The charge nurses reported that they shared changes in resident bladder function with the MDS coordinator so that the care plan could be updated on the computer and a hard copy printed out to be placed in the resident's chart. However, there was no formal process for communicating this information to frontline staff.

After all information was collected, the team gathered and analyzed the data. The team agreed that the facility did not have a formal communication system to ensure that accurate information related to elimination needs would be promptly communicated to CNAs. They developed the following problem statement and goal:

- **Problem Statement:** Discrepancies were identified between what was written on the care plan regarding interventions for incontinent residents, what was written on the CNA daily worksheets, and verbal instructions provided to CNAs by charge nurses or restorative staff. There was no formal process for communicating care plan changes to frontline staff. This led to inconsistent follow-through of care plan interventions to address the promotion of continence or management of incontinence. **(#15)**

- **Goal:** Interventions to promote continence or to address incontinence as outlined in a random sample of 15 residents' care plans will be consistently implemented by staff assigned to these residents within 60 days

- **Measures to Evaluate Success:** (1) A pre- and post–in-service test would be utilized to evaluate comprehension of information about incontinence interventions and the importance of communicating between staff and across shifts. (2) A questionnaire would be developed to determine if staff perceived that communication about incontinence interventions had improved. (3) A sample of 15 residents with incontinence identified as a concern would be chosen. The daily CNA worksheets and care plans would be compared to evaluate consistency. Additionally, observations across shifts would be made with care plan comparisons completed to determine if CNAs consistently implemented specific interventions to address incontinence.

Developing the plan

To accomplish their goal within 60 days, the team needed to be efficient in organizing its plan. The team identified the following tasks:

Each CNA on the team would call one facility in the alliance and make arrangements to interview three CNAs, one from each shift. The CNA would gather information about the facility's formal communication system between nurses and CNAs, including how formal shift-to-shift reports were conducted. The CNA would ask general questions to determine what staff liked and didn't like and what worked and didn't work about their formal report system. Secondly, the CNA would interview staff to determine what, where, how, and when information about a resident's bladder function, including change in bladder function status, is shared between nurse, CNA, and restorative services.

- The DON agreed to call an additional three facilities in the alliance and talk with DONs about the same issues as above. Additionally, the DON would review any facility policies and procedures that addressed formal reporting system practices.

- The social worker agreed to talk with the SDC. The team believed the SDC could help in the following manner: (1) Assist staff in learning what information related to elimination needs requires prompt reporting and what types of interventions related to bladder function need to be included in a care plan; and (2) assist with implementation of the formal communication system.

- The LPN agreed to interview an in-house nurse and two CNAs from each shift to gather suggestions for a formal report system and to determine what information about bladder function staff thought should be reported between the nurse and CNA and what should be recorded on the care plan.

The team met again in one week and reviewed all information gathered. As the team members talked, the team leader recorded information on a chart showing similarities and differences and the strengths and weaknesses of each formal communication system described by staff from other facilities. This information was compared to suggestions provided by in-house staff and to the current policy. The team decided to construct a communication system based on this information that included an overlap of shifts and a formal report of daily events for residents, attended by both nurses and CNAs and led by the outgoing shift nurse. Additionally, the team looked specifically at bladder function and developed a plan that identified the following:

- What information should be included on the care plan regarding interventions for incontinent residents?

- Who would be responsible for updating CNA worksheets to reflect care plan changes?

- Who would be responsible for verbally informing CNAs of bladder programs or any changes to interventions on the care plan that addressed bladder function?

Introducing the plan

After the team leader reviewed the plan with administrative staff and received approval and support, the team began preparations for introducing the plan. The team decided to carefully develop a mandatory in-service for all staff within the facility that would identify the problem, explain how the team went about gathering information about possible solutions, and address the new communication system recommended by the team. Secondly, the team decided to provide facility staff with clinical information related to promoting continence and managing incontinence. The team believed that if staff understood why specific interventions were important, it was more likely that follow-through would occur. **(#16)**

A subgroup of team members developed a one-page flyer and posters describing the upcoming in-service. The flyer and posters described the purpose of the in-service including the goal of consistent follow-through on care plan interventions. **(#17)** Each team member was responsible for talking with coworkers on their shifts about the upcoming in-service. Information was posted in the staff break room and included with staff paychecks. Whenever possible, residents and resident representatives were informed or reminded of the in-service during care conferences and through communications with the social worker.

- The staff development coordinator agreed to assist the team in planning the in-service. She would be available to share teaching techniques and strategies and to provide assistance in organizing the in-service agenda.

- The DON enthusiastically volunteered to teach communication strategies and to assist the team in developing a pre- and post-test to assess the effectiveness of the in-service. Additionally, the DON agreed to work with the restorative manager and a CNA to develop a questionnaire that included questions about incontinence interventions and staff perceptions of changes (for better or worse) in communication about interventions among staff and across shifts.

- Several team members agreed to review current clinical information resources and wanted to conduct part of the teaching activities. The LPN and DON would act as consultants and reviewers of the proposed content. The DON would also provide input related to facility policies and state and federal regulations.

- The restorative services manager volunteered to develop an example of a care plan with interventions to promote continence as a way to facilitate a discussion between staff attending the in-service. The restorative services manager would develop discussion questions about how staff could ensure successful communication among nurses and CNAs and across shifts.

- The in-service would be conducted at three times to provide an opportunity for staff from all shifts to attend. **(#18)**

Implementing the plan

All direct-care staff were responsible for implementing the plan; however, CT members were available to promote and monitor implementation.

- Working from a list of residents identified as incontinent, the CT reviewed the care plan schedule for the following two months and assigned a team member to attend scheduled care plan meetings for residents with incontinence. This CT member was responsible for ensuring that the care plan team addressed incontinence and updated the care plan accordingly.

- The activities and dietary staff on the CT were assigned responsibility to compare CNA daily worksheets to care plans for those residents with incontinence. This task was to occur weekly.

- The SDC and DON agreed to rotate between units during formal shift-to-shift reports over a three-week period following the in-service to provide immediate reinforcement of information provided during the in-service. The SDC also agreed to spend time each day working directly with CNAs, not only to reinforce care plan implementation, but to ensure that staff knew how to perform care in a manner to promote quality and resident comfort. This provided an opportunity for the SDC to talk one-to-one with staff about information related to bladder function that needed to be reported to nursing staff.

- Between two and three weeks after the in-service was completed, the RN and LPN would conduct random observations of the provision of resident care related to incontinence for 15 residents and then compare their observations with the resident care plans. If discrepancies were noted between what was observed and the interventions outlined in the care plan, a brief follow-up interview would be conducted with the observed staff member to determine why the discrepancy occurred.

- The housekeeping/laundry department supervisor ensured that the questionnaire was passed out to all direct-care staff 30 days after the new communication system was implemented.

Evidence the plan is successful

At the end of 60 days, the team had accomplished the following:

- Ninety-five percent of the facility's staff attended the in-service. Pre- and post-test results indicated substantial improvement in participants' knowledge about incontinence interventions and the importance of communication among staff and across shifts.

- The post in-service questionnaire results showed that 80 percent of the participants perceived that communication about incontinence interventions had improved (15 percent reported no change and 5 percent indicated communication was worse).

- Comparisons between actual care provided related to incontinence and care plan interventions showed improvement. Observations and record review comparisons indicated that CNAs were consistently implementing the interventions as recorded on the care plan in 13 of 15 cases. **(#19)**

Facilitator Questions

1) What are some other strategies that could be used to support the CNAs in developing team-leading skills. What can be done if the LPN, to assist the CNA, takes over most of the meetings? In addition to coleading the team, what can be done to assist the CNA to develop these skills?

2) How can these personal characteristics of the LPN and the CNA be used effectively to develop the CNA's team-leading skills? What is a reasonable goal and timeline for moving the CNA into a team-leading role?

3) What might you do to increase the likelihood that staff will attend these pretraining meetings? What could you do if only two staff members had read the articles?

3) What would you tell people to expect at the training that would help them prepare?

4) What instructions would you give to each group (and specifically to the licensed nurses) to guide the discussion? What can you tell the groups so that they can determine how well they are doing? What are some strategies they might use to promote group problem solving?

5) How can you keep the group from focusing on individual residents and how to solve their individual problems, rather then addressing all affected residents in the organization or on a unit?

6) How will you guide team members in their selection of articles? What will you do to assist them to read the articles? What will you do for staff who cannot read? How will you avoid embarrassing staff who cannot read?

7) How will you promote staff taking responsibility for finding the data they need? What will you do if one team member volunteers to do everything?

8) After receiving this information, the team members sit in silence, looking at the DON for guidance. Can you think of three or four suggestions to get them started? What are the implications for each of your suggestions in terms of the team learning and becoming independent?

9) Regardless of which training you are working with, what are some questions the team should think about when unit staff are not implementing the plan. List five or six questions.

10) Do you think this is the best place to start? Why? Or why not? Where else might the group start to problem solve? Where is this focus likely to take the group? Which problems identified above are unlikely to be addressed with the current focus?

11) Should the team do all of these things at once? How could they divide the labor? What are some specific strategies to carry out their investigation? What resources or record-keeping might they need? Who could be accountable for each aspect of the plan?

12) Stop and think about each of these bullet points. How will you prioritize actions? What additional information will you need about each of these?

13) What specifically can they ask CNAs? Will you standardize this questioning process? Think of some reasons why standardizing would be a good idea and how it might create problems. How will you deal with this? How could you standardize in a way that would address some of the challenges?

14) What can you suggest to remedy the situation? How standardized should this be? What will you use to determine how standardized this should be across units? Shifts?

15) Is this an effective approach to the problem? Why and why not?

16) Develop a plan to cover the entire facility (all units, departments, and shifts) and a reasonable timeline.

17) What are some ways you could promote more consistent follow-through?

18) What will you include in your in-service program? What will your focus be? How will you gain "buy in" from the staff? Can you anticipate where there may be problems in implementation and some things you can do to prevent or address them?

19) Do you agree with the plan for collecting evidence of success? What will you do to promote an adequate response to questionnaires? Can you think of other ways to collect this information? What are the time and work flow implications of each of the methods you identified?

Case Study

SKIN CARE

Introduction

The Skin Care Team (CT) is composed of a physical therapist, a CNA from the night shift, a CNA from the evening shift, an RN (nurse manager on day shift), an evening shift LPN, the resident accounts manager, and a social worker. **(#1)** There has recently been a reorganization of Care Teams in this facility. Several members are new to this team and the LPN has never been on a CT and really is not too sure she wants to be. The coordinator is working closely with this team to help encourage and reinforce the new members and to assist with structure and organization of meetings. **(#2)** The coordinator asked the evening shift CNA to be the team leader because of his strong leadership skills, organizational abilities, and credibility among his peers.

Identifying a problem

In preparation for the first monthly team meeting of this reorganized CT, the coordinator asked each team member to read a brief article about pressure ulcer prevention. **(#3)** The coordinator summarized the article at the meeting and asked questions to facilitate discussion. Next, the team leader asked for input and observations from team members about their facility practices related to pressure ulcer prevention and treatment.

- The coordinator provided each team member with a copy of a report based on data collected for pressure ulcers. As they reviewed and discussed the information, the team concluded that over the past quarter there was an increase in the number of facility-acquired pressure ulcers, particularly on the post-acute care wing. **(#4)**

- The RN nurse manager is responsible for conducting weekly skin rounds on residents with pressure ulcers. She presented the most recent skin rounds information to the team and noted that a resident admitted during the past three weeks developed a pressure ulcer within the first week following admission. The RN manager stated that all current pressure ulcers in the facility, both those present on admission and the facility-acquired ulcers, were showing signs of healing. **(#5)**

- The LPN had the monthly pressure ulcer logs with her and reviewed the status of the current facility-acquired pressure ulcers and determined that four of the six facility-acquired pressure ulcers developed within the first week of admission. All four of the ulcers were on the 300 wing (the wing for residents admitted from the hospital with post-acute care needs). **(#6)**

- The social worker stated that a family member had recently praised the facility about the care her mother was receiving. The family member visits every day and has noted that staff, as scheduled, consistently repositions her mother.

- The CNAs from both the night and evening shift remarked that residents are being turned within the appropriate timeframes, residents are being repositioned correctly with attention to shear and friction, and that pressure reduction surfaces are in place on their assigned units (including the 300 wing).

- The team also discussed the facility's survey history. At the time of the last survey (six months ago), the facility did not receive a deficiency related to pressure ulcer prevention and treatment. However, all team members agreed that in recent months this has become an area of concern based on the higher number of facility-acquired pressure ulcers. **(#7)**

The coordinator reminded the team that they needed to identify a specific problem. Review of the above data demonstrated an increase in facility-acquired pressure ulcers, primarily within the first week of admission, on the 300 wing. The team decided to gather more information about facility practices on the 300 wing related to pressure ulcer development. The team created a list of questions to answer in an attempt to narrow the problem: **(#8)**

- Are there facility policies and procedures in place to direct the skin assessment process at admission? **(#9)**

- Who completes the skin assessment at the time of admission on the 300 wing? What is included in the process, and how is the skin assessment conducted? **(#10)**

- What is the timeframe for completing the admission skin assessment?

- What happens to the admission skin assessment after it is completed?

- What is the staffing pattern on the 300 wing?

- Do staff on the 300 wing know about interventions to prevent the development of pressure ulcers? **(#11)**

- Are direct-care staff members on the 300 wing familiar with policies and procedures and specific care plan interventions? **(#12)**

- Are initial care plans being developed in a timely manner (within 24 hours)?

- Do the interventions implemented on the 300 wing reflect current standards of practice? **(#13)**

- Are direct-care staff members on the 300 wing implementing preventive interventions? **(#13)**

- Were there common clinical issues among the four residents who developed pressure ulcers (for example, moisture concerns, poor nutritional status) suggesting a specific area of care that was problematic? **(#14)**

The team divided up the interviewing, observation, and record review activities that would help answer the above questions and agreed to meet again in two weeks. **(#15)**

- The LPN agreed to review facility policies and procedures and then interview licensed nursing staff on the 300 wing to determine: (1) who completes the skin assessments; (2) what is included and how are the assessments conducted and documented; (3) when are the assessments completed in relation to time of admission; and (4) what happens to the assessment once they are completed (that is, who reviews them, when are they placed in the medical record, and by whom)?

- The two CNAs on the team agreed to review staff time cards for all shifts over the past week to determine actual staff-to-resident ratios on the 300 wing. Additionally, the CNAs would interview CNAs from the 300 wing (two from the day shift, two from the evening shift, and two from the night shift). The CNAs would ask the following general questions: (1) Do you have adequate time to care for residents, including time to turn and reposition residents according to care plan schedules? (2) Do you ever run short of time, and if so, what tasks do you set aside? (3) What interventions do you provide to help prevent the development of pressure ulcers? Questions would also be asked of the CNAs about the four residents identified with pressure ulcers within the first week of admission to determine if staff had access to initial care plan information and to learn more about the specific interventions on the initial care plans.

- The RN manager agreed to review the records of the four residents on the 300 wing who developed pressure ulcers within one week of admission. The RN manager would look for causal or risk factors and determine if there were common clinical issues present suggesting possible risk areas for focused facility review.

- The PT agreed to make rounds on the 300 wing two times a day for five days with observations of care on all three shifts. The therapist would look for use of pressure-reduction surfaces; determine if residents were adequately turned and positioned; observe toileting or incontinence care schedules to evaluate moisture reduction; observe services to promote mobility and activity; and observe a breakfast, lunch, and suppertime meal to gain some insight into potential nutritional status concerns.

- The resident accounts manager agreed to review Web sites looking for current information on care practices to prevent and treat pressure ulcers. The team felt it was important to do this to ensure that they were continuing to provide services based on current standards of practice. **(#16)**

At the next meeting, the team analyzed the information that had been collected. The team was surprised to discover the source of the problem. Facility policies and procedures stated that a skin assessment for pressure ulcers and other skin conditions was to be performed within eight hours of admission. Based on review of resident medical records and staff interviews, it was determined that an assessment of skin status was not routinely conducted within eight hours of admission to the 300 wing. Staff reported feeling overwhelmed during the admission process and had no way to track what was done and what still needed to be done. Further review of hospital discharge records indicated that three of the four residents reviewed were actually admitted with a pressure ulcer. Staff was inaccurately identifying ulcers as being facility-acquired because the ulcer was not identified and documented until 24 to 48 hours after admission. Although this specific problem was identified, the team was pleased on the whole with their findings that demonstrated: (1) staff implementation of standard practice interventions to prevent the development of pressure ulcers; and (2) care to promote healing of pressure ulcers. The team believed this would be an easy problem to rectify, and results would reflect positively on their facility. Based on their analysis, the CT developed the following problem statement, goal, and measures to evaluate success.

- **Problem Statement**: Staff is inaccurately identifying ulcers as being facility-acquired. Skin inspections for the identification of pressure ulcers and other skin conditions are not completed on the 300 unit within eight hours of resident admission, as per policy.

- **Goal:** Within 60 days, all records for newly admitted residents will identify skin status within eight hours of admission.

- **Measures to Evaluate Success:** The team agreed to meet weekly during the next two months to review the medical records of all new admissions to determine if staff identified skin status at admission by completing an initial skin inspection within eight hours of admission.

Developing a plan

Information gathered indicated that licensed staff felt overwhelmed during the admission process and had no way of tracking admission tasks. The team decided to develop an Admissions Checklist to assist with organization of admission procedures. The following activities would be completed:

- The resident accounts manager agreed to review the current admission procedures and within the next three days develop a list of all tasks to be completed at admission. The Admissions Checklist would include completion of a skin inspection within eight hours of admission.

- The RN manager, LPN, and evening shift CNA on the team would review the checklist once it was completed. This review would be completed within one to two days.

- Once the checklist met the approval of the above staff, then the checklist would be presented to the DON and ADON for their comments and approval.

Introducing the plan

After initial DON and ADON approval, the checklist was introduced to the 300 wing on a trial basis. Staff was asked to use the form during the next 14 admissions (based on admission history, this would be approximately three weeks). It was explained to staff that this was a way to ensure that all admission procedures would be completed, including the initial skin inspection, which was to be performed within eight hours of admission. The RN manager and the LPN from the CT set up a schedule to ensure that the 300 wing was visited by either of them at least once a shift for the first week of trial implementation to ask staff if the initial skin inspections were being completed within eight hours and to provide an opportunity for staff to give verbal feedback regarding the usefulness of the checklist as an organizational tool. After the first week, the RN or LPN stopped by the unit once a day to monitor implementation, with specific focus on determining if the initial skin inspection was completed and results recorded. **(#17)**

Implementing the plan

Once the Admission Checklist was revised to include all recommendations from the 300 wing licensed staff, the DON, and the administrator, a final version was distributed to all units for implementation.

- The RN manager from the CT announced the plan at the daily stand-up meeting. Additionally, the RN manager met individually with the other two RN managers (one from each shift) and reviewed the admissions policy and procedures, including use of the new Admissions Checklist and its intent to help organize the admission procedure so that requirements such as the initial skin inspection would not be missed.

- All licensed nursing staff from the remaining units were responsible for reviewing the checklist within three days. The checklist was posted on the bulletin board at the nurses' station and in the break room.

- Three days after the checklist was sent to all units, the RN manager went to each unit and talked with a sample of individual licensed staff to explain the intent of the checklist and see if there were any questions. Staff was reminded that the checklist included such tasks as the initial skin inspection to be performed within eight hours of admission.

- The CNAs on the team agreed to remind staff of the need to perform skin inspections within eight hours of admission. This verbal reminder would be offered at change-of-shift reports on the day the checklists were sent to the units and reiterated at change-of -shift reports for two days in a row. **(#18)**

Evidence the plan is successful

Once the checklist was distributed to all units, the team met weekly to review the medical records of newly admitted residents. At the second weekly meeting, the team noticed that the Admission Checklist was fully completed for only half of the new admissions. Initial skin inspections were not documented as completed for three out of 14 of the residents reviewed. The RN manager and the therapist followed up with the admitting nurse and interviewed other staff involved in completing the admission paperwork to determine why it was not complete. By their fourth weekly meeting, the Admission Checklist was consistently used by staff to keep track of the necessary admissions forms. All residents admitted during the fourth week of implementation had a completed Admission Checklist that demonstrated that skin inspections had been completed. To ensure that the initial skin inspections were accurate, when completing chart reviews the team members compared the initial skin inspection with preadmission paperwork such as hospital discharge papers and validated each written skin inspection with a staff interview.

Within 60 days, 38 out of 40 records of newly admitted residents identified skin status within eight hours of admission.

At the next quarterly meeting, the team again reviewed pressure ulcer data. There was an overall decrease in the number of pressure ulcers in the facility. Specifically, data showed a decrease in facility-acquired pressure ulcers. **(#19)**

Facilitator Questions

1) What else would you like to know about the composition of the skin care team?

2) In general, how do you think members should be recruited to these teams? When should you encourage someone to serve if he or she are unsure? How might you work with someone who is unsure about participating? Would this be any different than working with a group that had all volunteered? How will you deal with having a CNA as the lead on the team? What issues would you anticipate as a consequence, and how will you address these issues?

3) How will you help members decide on which articles they will read? Should they all read the same articles? Different articles? How will you guide them in their reading?

4) What are the implications of this for team membership?

5) What are the issues that are important to discuss after hearing what sounds like contradictory information?

6) What are the most effective ways to inform the 300 wing staff about this? What are some of the things you can do to address what seems like an isolated issue? What are the implications of each strategy?

7) What are some of the other possibilities? Where will you begin thinking about what might be going on?

8) How should team members approach the 300 wing staff to learn more about the problem? Who should they approach first? Does it matter? Why? What if the CT members just went to the charts and care plans to find what they were looking for? How should the team let this unit know that they are the focus of the CT activities? What assistance might the team need and from whom should they collect the information they need?

9) Where would you look for these? What else would be helpful to know about the policies and procedures?

10) How would you get the information? Who would you ask? What if you were told that the unit nurse always collects this information? What else might you want to know, or is this enough?

11) How would you find this information? What if you were told that all staff on this unit have been to a skin in-service? Would you assume this is sufficient? If not, what else do you need to know, and how would you find it?

12) How would you obtain this information? What if the charge nurse assured you that all staff are quite familiar with these policies and follow them well? Is this adequate for you to assure the CT that staff on this unit are knowledgeable and follow policies related to skin care? If you answered yes, explain how you came to this conclusion. If not, why not? What are some possible reasons for a discrepancy between what the charge nurse tells you and what is actually occurring? How would you proceed if there was such a discrepancy? What are some sources of information other than what the staff tell you that would let you know if there was a discrepancy between what the staff believe to be true and what

is happening?

13) How would you know this? Think of two or three strategies you might use to learn more.

14) How could you learn about this?

15) How will you decide who should be collecting the information needed (for above questions). Should anyone who volunteers from the CT be able to do this? How would you select the right person or people?

16) Do you think the division of labor among CT members was appropriate? Can you think of any other ways to assign staff that might be more effective?

17) Can you anticipate any challenges with this plan? What are some issues that might interfere with implementation? How will you address each?

   a. High turnover
   b. High use of agency nurses
   c. A less than enthusiastic charge nurse
   d. Short staffing
   e. Interrupted communication from shift to shift

18) Do you agree with the plan? Can you think of any other strategies to monitor the success of the implementation? If you saw no change after 60 days, what would you do next?

19) What can you put in place to promote sustainability of the implementation? What would ensure continued implementation that would not rely on staff remembering to complete the forms? Think of three or four strategies you might use.

A Practical Guide to Transformation

Case Study

PSYCHOSOCIAL WELL-BEING

Introduction

The Psychosocial Care Team (CT) is composed of a recreation therapy assistant, two social workers, a CNA from the day shift, a CNA from the evening shift, an LPN from the night shift, an occupational therapist (OT), and an administrative assistant. The administrative assistant was chosen by the team to be the team leader. The team felt the administrative assistant would be a good choice based on her excellent organizational skills and ability to listen and summarize what others say in a clear and concise fashion. **(#1)**

Identifying a problem

During the monthly Psychosocial CT meeting team members reviewed several sources of data about psychosocial concerns in their facility:

- The grievance file indicated that a family member complained to the social worker that despite informing staff that his wife (resident) loved classical music, direct-care staff continued to tune her personal radio to either a rock and roll or country music station when they were in her room assisting her with morning cares.

- The recreation therapy assistant reminded the team that the resident satisfaction survey completed by several members of the CT (including the recreation therapy assistant) the month before indicated that 8 out of 20 residents interviewed said they did not have other things of personal interest to do aside from the organized activities. **(#2)**

- The LPN shared with the team an observation made by the DON during the morning "stand-up" meeting. The DON noticed during rounds that at least four residents who had previously engaged in hobbies of personal interest were now napping in the morning and afternoon. **(#3)**

The team leader led the discussion by asking, "Are residents offered opportunities for personal preference activities outside of organized group activities?" The team wanted to determine if there was an actual problem with the provision or support of personal preference activities and to structure the identification of the problem. The team decided to gather information to answer the following questions about facility practice:

- Who gathers information about resident personal preferences and hobbies?

- What information is asked of residents or representatives regarding activity preferences?

- When are residents or representatives asked about personal activity and hobby preferences?

- Where are personal activity preferences recorded?

- How are personal activity preferences communicated to other staff, including CNAs and activity assistants?

- What training do direct- and non-direct–care staff receive regarding the importance of meeting individualized activity preferences? (#4 - #7)

- Who provides the supplies needed to support in-room pursuit of activity preferences?

The team divided up the interviewing and record review activities that would help answer the above questions:

- The recreation therapy assistant and a social worker would jointly interview the recreation therapy director to gain information about the current facility process to address resident activity preferences. **(#8)**

- The CNAs on the CT volunteered to interview five CNAs on both the day and evening shifts asking the following questions: (#9-12)

  - How are you informed of a resident's personal activity interests and preferences?
  - What training did you receive about your role in providing in-room activities of resident choice?
  - How are in-room activities incorporated into daily routines?
  - Are adequate supplies available?

- The occupational therapist volunteered to interview the staff development coordinator to determine if the current training program addressed individualized activity preferences, and if so, what was taught, and how was the information reinforced?

- The LPN stated she would compare the CNA care plan to the interdisciplinary care plan (of the 20 residents who participated in the resident satisfaction survey to determine if activity preferences were available to staff through the care planning system. **(#13)**

- A social worker and the administrative assistant would talk with 10 interviewable residents (they would not include residents who were already interviewed for the resident satisfaction survey) and four family members, asking the following questions: (1) Have you been asked about personal activity preferences and hobbies? (2) When were you asked? (3) Does staff provide the assistance and supplies for personal preference activities? (#14-15)

Over the next two weeks, the team members completed the above tasks. The following information was gathered:

- The recreation therapy director was able to describe the process used at admission and quarterly to gain information about resident activity preferences. The recreation therapy director also explained how personal preferences were incorporated into organized, large group activity programming, but said that with limited activities staff, it was necessary to depend on staff from other departments to help meet individualized in-room activity preferences. **(#16)**

- The OT described the current training process, indicating that the importance of personal activity preferences was addressed in the training curriculum, but the staff development coordinator did not know how personal activity preferences were communicated to staff and did not know who was

responsible for ensuring that personal preference activities, outside of organized group activities, were actually incorporated into daily life routines. (#17-20)

- As a result of the interviews with CNAs it was determined that only two of the five CNAs could identify resident-specific activity interests, and that was because the two CNAs had personally asked the residents. All five CNAs said that they did not feel comfortable looking through the medical record for information about personal activity preferences, and staff did not communicate resident activity preferences, hobbies, or interests to the CNAs. In general, the CNAs interviewed voiced an understanding of the importance of offering in-room activities of choice, but there was concern that current in-room activity options did not truly represent resident choice. **(#21)**

- The team LPN compared the CNA care plans to the interdisciplinary care plans and discovered that the CNA care plans did not include resident in-room activity preferences or hobbies. (#22-23)

- Resident and family interviews indicated that residents or representatives had been asked about personal activity preferences and hobbies at admission and at care plan meetings, but 7 of the 10 residents said that CNAs seemed unaware of personal activity preferences and offered in-room activities that did not support personal choice. **(#24)**

After all information was collected, the team gathered and analyzed the data. The team agreed that residents were not being offered opportunities for personal preference activities outside of organized group activities. The following problem statement and goal were developed: (#25-26)

- **Problem Statement**: Residents are not provided the assistance and encouragement needed to pursue in-room activities of choice. This is due to two identified problems: (1) Hobbies and personal activity preferences of residents are not communicated to direct-care staff; and (2) staff are not provided with the supplies needed to reinforce personal preference activities. **(#27)**

- **Goal:** Fifteen out of 20 residents interviewed will indicate that they are provided the assistance and supplies needed to pursue in-room activities of choice. **(#28)**

- **Measures to Evaluate Success:** (1) During twice-daily rounds, residents will be briefly interviewed about activity choices and preferences and whether or not these are met. (2) Brief interviews with all direct-care staff on all shifts will be conducted to determine if staff know resident preferences and hobbies, and if they use the scrapbook and hobby box to encourage and assist with in-room activities.

Developing a plan

Once the problem statement was written, the team identified the following initial tasks for team members to complete:

- The CNAs would each call one facility in the alliance to gain information about how the alliance facilities communicated activity preferences to staff.

- The recreation therapy director volunteered to review current literature for ideas on how to facilitate and support in-room activity preferences.

- The social worker stated she would talk to the Resident Council and explain what the team is trying to do and ask for input into ways to communicate personal activity preferences.

- The administrative assistant said she would talk with the therapy recreation director and the administrator to gather information related to costs and purchasing of personal choice activity supplies. **(#29)**

The team met again in one week. The social worker reported that during the Resident Council meeting several residents suggested a project to help staff know more about resident interests and hobbies. Based on their phone calls to two alliance facilities, the CNAs shared what they learned from activities and recreation staff. One of the ideas involved developing a scrapbook for each resident. The recreation therapy director pointed out the importance of interdisciplinary staff involvement, based on her review of the literature. The team decided to put together a scrapbook for each resident that described activity interests and hobbies—at present and before admission to the nursing home. The plan was that each resident could keep the scrapbook in their room to share with staff and visitors. It was decided that non-direct–care and management staff could also participate by stopping into resident rooms for a visit with residents during the process of collecting pictures and information for their scrapbooks.

- The LPN and social worker agreed to contact residents and family members to obtain pictures of residents engaged in hobbies or interests—fishing, gardening, pets, etc.

- The cost of materials to make the scrapbooks was covered by the facility. The administrator wanted to ensure that each resident would be provided with a scrapbook.

- A facility volunteer decided to donate the use of his scanner and printer so that pictures could be reproduced for use in the scrapbook and the originals returned to the resident or family member. The facility administrator and therapy recreation director agreed to cover the costs of purchasing the copy paper needed for scanning the pictures.

- Once the materials were purchased, the OT agreed to gather a group of residents to make the scrapbooks.

- The CNAs and social workers would work with individual residents to help fill the scrapbooks (for example, cut out pictures, paste photos, etc.)

- The recreation therapy assistant would provide lists of individual preferences for each resident to the CNAs and social workers working with individual residents.

(#30-32)

A Practical Guide to Transformation

Introducing the plan

The CT became so enthusiastic about the project that they willingly talked through the idea with other coworkers in their departments. Soon the team had additional volunteers offering to be part of the scrapbook assembly.

- Posters describing the scrapbooks were made by the administrative assistant and posted in the main lobby and at the elevators.

- A letter written by the social worker was mailed to resident representatives informing them of the project.

- The administrator agreed to a pizza luncheon for residents, family, and staff where the idea could be introduced and discussed as a group.

- The purchasing department offered to supply cardboard boxes to be turned into "hobby boxes." Although this was not part of the original plan, the team readily agreed to expand the project.

- A family member suggested that families bring in favorite movies, favorite music tapes, etc. to be placed into the "hobby boxes." **(#33)**

Implementing the plan

Due to the overall enthusiasm, scrapbooks were assembled and completed for all residents who wanted one in three weeks.

- The team, as a group, worked up a list of sample questions all staff could ask residents, including, "Can I look at your scrapbook? You liked to (fish, grow flowers, etc.). Tell me about this." The administrative assistant and recreation assistant printed the lists of conversational questions on wallet-sized laminated cards and made the arrangement with the administrator to have the cards provided with each staff person's paycheck.

- If acceptable to the resident, scrapbooks and hobby boxes would be kept on top of the resident's dresser. This information was communicated at the daily stand-up meeting and again at change-of-shift reports within departments.

- The social workers on the team took responsibility to keep contact with resident representatives to encourage family participation in updating and adding to the scrapbook.

- The recreation therapy assistant, with the support of the department director, agreed to keep the scrapbooks updated with new pictures of favorite flowers, favorite, foods, etc., as new pictures came in from families, and on a quarterly basis, at a minimum. (#34-35)

Evidence the plan is successful

- The team set up a schedule for making rounds once in the morning and once in the evening, seven days a week, with each team member having responsibility for completing rounds on a given day. Staff would briefly interview residents about activity choices and whether or not the resident's activity preferences were being met.

- Team CNAs agreed to interview the direct-care staff on their shifts to determine if staff knew resident preferences and hobbies, and if they used the scrapbook and hobby box to encourage and assist with in-room activities. **(#36)**

The team met again one month from the date of implementation and discussed both resident and staff perceptions about activities. The information gathered during the seven days of "activity" rounds showed that, in general, the residents were more satisfied with activity choices and support. In-depth interviews were conducted by the social worker, LPN, and OT with a total of 20 residents to determine if staff provided the assistance and supplies needed to pursue in-room activities of their choice. All but one of the residents interviewed expressed higher satisfaction with both the staffs' knowledge of their activity preferences and hobbies and with the support and assistance received to carry out those activities.

Facilitator Questions

1) Are the right people on the team? Why or why not?

2) What if resident satisfaction surveys showed a very high level of satisfaction? Would it be reasonable to determine that there is not a problem?

3) What if the OT said she had talked to these residents and they wanted to nap?

4) How would you collect these data? Who would you go to for each item?

5) What is your division of labor? How did you decide who will do what? Why?

6) Who else would you have to involve in data collection? Why?

7) What would it tell you if much of these data were not available?

8) What specific questions would you ask?

9) What do you think of these questions? How will they help? How are they limited?

10) Which CNAs would you interview? Why?

11) How would you record their answers? Why did you decide on that strategy?

12) What else would you ask them? What would that tell you and how would you use the new data?

13) Where would these care planning system data be kept? How would that facilitate your work?

14) What else would you collect? How would that be useful?

15) Who else might have something to contribute?

16) What else do you need to know?

17) What does this tell you? What are some places that communication could be changed to improve the tailoring of activities for residents?

18) What system could be put into place so you don't have to rely on people remembering?

19) How would the system(s) actually work?

20) Is it likely to be effective? Why or why not?

21) How specifically will you factor this knowledge into your system design? What will happen if you don't take this into consideration?

22) What does this tell you about the system currently used to communicate resident preferences?

23) What does it suggest about the system you will be developing to communicate resident preferences?

24) What is the most appropriate response to the CNAs who seemed unaware?

25) Do you agree with this problem statement? Why or why not?

26) Can you think of any others you might have used?

27) Can you state the problem in terms of the system (not individuals)?

28) Is this a reasonable goal? Is it feasible? Will it have an impact? What do you think the impact would be?

29) Is this the right information? Will it be useful in developing a plan? Can you think of anything else?

30) Does the plan include the development of a system or structure that will ensure success?

31) Is there a system in place that will tell you whether you are succeeding? If not, what will you do about that? What are some of the characteristics of a system that would be likely to work?

32) Can you suggest anything else?

33) Will these suggestions lead to successful implementation? Why or why not?

34) What will sustain this plan over time as staff turn over and the program is no longer new and exciting?

35) Can you suggest some strategies to increase the likelihood that this plan will succeed?

36) Is this feasible?

Case Study

FALLS/RESTORATIVE

Introduction

The Restorative Care Team (CT) is composed of the restorative coordinator, the activity director, an activities assistant, an evening shift RN, a night shift CNA, a day shift can, and the housekeeping supervisor. The team leader is the restorative coordinator. The restorative coordinator also sits on other CTs because the facility believes that a restorative influence is important in all areas of care. He or she assists with the coordination of plans from one CT to another. The staff development coordinator arranged for team dynamics training for all care planning and CT staff. This training improved team member ability to share ideas and problem solve.

The night shift CNA was recruited by another CNA after the module training, but all other team members attended the module and since then the team has been actively involved in developing and implementing plans. The team successfully picks very specific problems to work on, one at a time. This gives the team a sense of gratification as goals are met.

Identifying a problem

As part of the pre-module preparation, the team members, along with all other facility staff, read articles that addressed potential causes of falls. The team also reviewed several sources of data about falls in their facility: **(#1)**

- With the help of the activity director, also a member of the facility's performance improvement committee, the CT reviewed the Quality Indicator reports that showed the Quality Indicator, Prevalence of Falls, to be at the 70th percentile, demonstrating an increase in the prevalence of falls over the past two quarters. Along with addressing the needs of individual residents, the Restorative CT wanted to look for any facility-wide practices that may be putting residents at risk for falls. **(#2)**

- The DON tracks falls on a monthly basis, collecting information about why falls happen and when and where falls occur. The DON attended a CT meeting and helped the team identify significant patterns of falls reflected in the data and further described in incident reports. It was determined that a high number of unwitnessed falls—12 last month and 8 the month before— occurred after the supper meal, either in the hallway or in the bedroom or bathroom, when residents who needed transfer assistance attempted to ambulate independently to their rooms or attempted to transfer to the toilet, bed, or chair without needed assistance. **(#3)**

- The team looked through the resident and family grievance file and Resident Council minutes. There was one resident complaint of waiting 20 minutes after the supper meal for the call light to be answered. There had also recently been a family complaint identifying a 30-minute wait for staff to offer assistance to their family member after the supper meal. No other grievances were found that might suggest a reason for so many falls after supper. **(#4)**

Based on this data review, team members formulated the following question:

Why were residents—particularly those who needed some assistance—returning to their rooms independently after supper and attempting to transfer without assistance? **(#5)**

The team decided more information was needed to answer the question. To structure the identification of the problem, they developed further questions to collect data about facility practices that may be affecting the fall rate:

- How many staff members are in the dining room during and directly after the supper meal?

- What activities are staff members engaging in during and directly after the supper meal?

- Are afternoon toileting schedules being followed, and are they meeting resident needs?

- How long are residents waiting for call lights to be answered after the supper meal?

The team divided up the interviewing and observation activities that would help answer the above questions:

CNAs on all three units were interviewed by the restorative coordinator, and it was verified that staff understood that residents needing assistance were to be toileted within one hour of supper. **(#6)**

A CNA team member interviewed two residents from each hallway, including some residents who had fallen. The residents also said they had an opportunity to use the bathroom before the supper meal. Two of six residents said that staff were busy in the dining room during supper, and either they did not want to bother staff or staff were on the opposite side of the dining room and not accessible to offer assistance out of the dining room. **(#7)**

Three family members who visited during the supper hours were interviewed by the activity director to see if they thought there was adequate staff available before, during, and after the supper meal to help their family member and other residents. One family member said she overheard two residents talking together about the fact that staff in the dining room apparently could not see or hear resident attempts at gaining staff attention.

- The activities assistant, the housekeeping supervisor, and the evening shift RN observed and recorded the number of staff and staff activities over the next three supper meals, including the number of residents leaving the dining room unassisted. **(#8)** It was noted that residents who needed eating assistance were sitting at two tables at the back of the room, while residents who were more independent in eating sat at the front tables near the doorway. Residents who needed assistance received their supper trays last, and while staff was busy feeding these residents, the more independent residents finished their meals and wanted to leave the dining room. Two residents were observed to call for assistance from staff to leave the dining room but were not heard by staff on the other side of the dining room. One resident was overheard to say, "I don't want to sit here any longer," and attempted with some difficulty, to get out of the dining room chair without assistance. Although some residents had already left the dining room, all CNAs stayed in the dining room until everyone was fed. **(#9)**

Over the next week, the team members conducted interviews and observations. After all information was collected, the team analyzed the data. At the next CT meeting, the CT developed the following problem statement and goal:

- **Problem Statement**: Residents who are more independent with eating sit in the front of the dining room and are given their meals first. Staff are involved in feeding residents who need eating assistance and so are not available to help those residents who are done with the meal and need ambulation or transfer assistance. Lack of an effective evening mealtime structure, including seating arrangement and staff assignments, is leading to an increased number of unwitnessed falls occurring after the supper meal. (The mealtime structure, including the seating arrangement and staff assignments during and after the meal, that is effective at breakfast and lunch is not effective at supper because fewer staff are available to assist during and after the meal.)

- **Goal:** To decrease the number of falls occurring within one hour of the supper meal to four per month in 60 days. (#10-11)

- **Measures to Evaluate Success:** (1) Decrease in the number of residents leaving the dining room unassisted. Since the number of residents leaving the dining room was initially recorded when trying to determine the problem, a baseline was available to use as a measure of success. During the first two weeks of implementation, the evening CNA would record the number of residents leaving the dining room during the supper meals Monday through Friday, and the evening shift RN or CNA would record this information for Saturday and Sunday. (2) Decrease in the time residents waited for their call lights to be answered.

Within the first week of implementation, team CNAs and the housekeeping supervisor would interview residents to determine how long residents were waiting for call lights to be answered.

Developing a plan

Once the problem was identified, the team recorded possible strategies. Each team member assisted with problem solving by sharing plan suggestions. All team members agreed that due to the interconnectedness of the seating arrangement and mealtime staff assignments they could be combined into one overall mealtime plan for the supper meal. The team recognized that improvements in the supper mealtime plan may also contribute to improvements in the breakfast and lunch mealtime plans, but chose to focus on the supper meal first. **(#12)**

- The CT strongly believed the plan would not work without staff "buy in," so the team asked the administrator's permission to offer an open invitation for staff volunteers to join a subcommittee to design new mealtime staff assignments. **(#13)** Because the evening shift was staffed with six CNAs, six dining assignments were developed, with each CNA having responsibility for no more than five residents who needed complete assistance, along with responsibility for all other more independent residents within one of six areas of the dining room.

- The restorative coordinator identified two residents who were interested in volunteering to participate in the subcommittee to provide feedback and suggestions.

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- The housekeeping supervisor and team CNAs recruited the dietary manager to help coordinate dining room seating arrangements that would accommodate the residents' preferences along with the structure of the staff assignments. **(#14)**

- The mealtime role of the evening shift RN and shift supervisor was discussed. The facility did not have a formal process to ensure evening meal oversight. The team believed that the role of the evening shift floor nurse and supervisor needed to be formalized, including an active role in offering assistance to residents during the evening meal, thus freeing up two CNAs to work out on the floor once some residents were ready to leave the dining room. This would impact the workload of the evening nurse and supervisor, and so the evening shift RN took the lead on making recommendations to alter the evening nurse assignments to include assisting in the dining room. The evening shift RN talked with coworkers gaining their insight before presenting a plan to the CT.

- The DON, ADON, and evening shift supervisor reviewed the plan to ensure the changes met facility policies, safety rules, and any federal or state regulations.

(#15-19)

Introducing the plan

A mandatory in-service for all staff was held at the change of shift, with the CEO, administrator, and other administrative and management staff in attendance to show support and personal involvement in the program. It was decided that all staff should attend since it was likely that if the seating arrangement and mealtime staff assignments proved successful on the evening shift, it would be adopted for the breakfast and lunch meals also.

- During the in-service led by the CT team leader, the identified problem and goal were specifically stated before introducing the new suppertime changes.

- Team CNAs described specific staffing and seating assignments along with the rationale.

- CT members did some role-playing to teach staff techniques to use in various circumstances— for example, how to politely encourage residents to wait for assistance and to show staff how to handle potential situations that could occur while helping other residents eat. (#20 -21)

After the in-service, the written seating arrangement with accompanying staff responsibilities was posted in the CNA books and on the north wall of the dining room. The date of implementation was set for one week later, giving staff and residents time to become acquainted with the supper mealtime changes. **(#22)**

Implementing the plan

Since the problem and the plan were specific, it was easy to implement. Each team member had a specific task to complete either (1) during the week between in-service and implementation, or (2) was actively involved in the implementation of the plan on the evening shift, and/or (3) was involved in monitoring the plan to look for problems. **(#23)**

- The restorative team leader and housekeeping supervisor took responsibility for arranging dining room furniture, ensuring that tables were safely placed for easy exit in case of an emergency.

- The activity director and activity assistant talked with residents about the new seating arrangement during activity programming in an attempt to help residents adjust to the change. They explained that the goal of the change was to reduce the number of resident falls. Any residents who seemed distraught about the change were referred to the social worker.

- Each team CNA showed residents from his or her wing where they would be sitting when the change occurred.

- The administrator made daily rounds to promote the change and to gauge resident response. **(#24)**

Once implemented, the housekeeping supervisor and the evening shift RN monitored activities during and directly after the supper meal.

Evidence the plan is successful

CT members had a measurable goal to show progress or decline, but fall data would not be immediately available. In the meantime, CT members identified the following criteria to evaluate the more immediate impact of their plan: **(#25)**

- Decrease in the number of residents leaving the dining room unassisted.

Since the number of residents leaving the dining room was initially recorded when trying to determine the problem, a baseline was available to use as a measure of success. Since staff was more aware of which residents had a tendency to get up from the table and leave unassisted, staff in the dining room focused more on those residents, and, in turn, there were fewer attempts to leave the dining area without staff awareness. During the first two weeks of implementation, the evening CNA recorded the information during the supper meals Monday through Friday, and the evening shift RN or CNA recorded the information for Saturday and Sunday.

- Decrease in the time residents waited for their call lights to be answered.

Within the first week of implementation, team CNAs and the housekeeping supervisor interviewed residents to determine how long residents were waiting for call lights to be answered. Time was reduced to a wait of approximately 10 minutes.

- Decrease in the number of falls occurring after the supper hour.

Within 60 days, data showed there were seven falls occurring after the supper meal during the first month of implementation, and five falls the next month. Although the team did not meet its goal of four falls per month, data showed progress toward meeting the goal.

The plan will continue to be implemented, and data will continue to be reviewed at each monthly CT meeting. The CT intends to share its findings with all facility staff after three months of implementation. The team is also moving forward and is now focusing on the question, "How many residents who had a

recent fall actively participate in transfer training by a therapist or restorative aide?" Additionally, the team would like to gather information that might identify problems related to environmental modifications, such as, "Are grab bars available at toilets and tubs?" For those residents with transfer problems, "Are the toilet seats raised to a height that will make sitting and getting up easier?" The team has agreed that these are appropriate next steps toward identifying specific problems and are important as measures to reinforce the facility's strong orientation toward rehabilitation and restorative services

Facilitator Questions

1) Which of these data sources are most important to review? What other sources of data could you use? What would you do if there were no reports generated on falls? What would be helpful to see in these reports about falls?

2) Could you identify the activities most often associated with falls from the data you currently have? Units most likely to be involved? Individual staff most often involved? Training of staff caring for residents who fell? What the resident was doing at the time of the fall? Shift falls occur on most often?

3) Would you be able to learn all of this (above) from your incident reports?

4) Can you see a need for data collection about wait time after supper? How could you obtain these data systematically? How could data be made available? Who else might find it useful?

5) Is this a reasonable question? Is it based on data collected? What is another question that could have been generated from the same data:

    a) Were residents taken to the toilet before dinner?
    b) Were the residents who fell on bladder training programs?
    c) Were the residents who fell perceived as not needing assistance?

6) What does this suggest? What additional data collection would help here?

7) Why is it important to involve all these different types of workers?

    a) Give three reasons why.
    b) Anyone else who should be involved? Why?

8) Break this down into components. List five or six issues you might focus on. What implications could this have for cross-department collaboration? Can you think of several problems that could be identified and addressed? How will you determine which problem to start with?

    a) What additional data do you need?
    b) Which problem would you correct first?

9) Is this possible? Will it have an impact?

10) What makes it feasible? Or not feasible?

11) Why do you think it would (or would not) have an impact?

12) What will this accomplish? Do you think it's a good idea? Why?

13) What might happen if this person is not included in the planning?

14) Can you identify some ways to make this work?

15) What organizational process are you trying to change?

16) Who will be affected?

17) What will make this sustainable?

18) What do you need from management?

19) What skills do staff need to do this? Do they have them? If not, how will they develop these skills? Give three suggestions.

20) What will you do if staff resist?

21) What can you do in the meantime to help staff prepare?

22) Suggest three or four possible ways the implementation could be monitored. Which do you think will provide the most useful data? Why? How will you use the data collected? Give three examples.

23) What will you do if any of the people who are designated to do this don't follow through? Or do so intermittently? Will you know how well people are following through? How will you know? Does this require a lot of work? Remembering?

24) Will you be able to measure implementation? What data will allow you to do that?

Case Study

PAIN

Introduction

The Pain Team is composed of a physical therapist, a CNA from the day shift, a CNA from the night shift, an LPN from the evening shift, an RN from the day shift who assists with MDS assessments occasionally, an evening activities assistant who works on the dementia unit, and a social worker. The team leader is the day shift CNA because she demonstrates an ability to motivate others, is very knowledgeable, and has strong mentoring skills.

Identifying a problem

Team members were asked to prepare for their first monthly meeting by each reading an article about pain management in the elderly. **(#1)** The team began its meeting by first discussing the articles they read and identifying ways in which the information was similar to or different from current practices. **(#2)** Next, the team discussed any comments or concerns about current practices related to pain management.

- The team reviewed the latest QI report finding that there was a large percentage of residents who had pain daily. They compared the report to the two previous months' reports to find that the percent of residents that reported pain had not changed over time. **(#3)**

- The social worker said that a family member had voiced concern that her father frequently complained of pain in his back, but that after several requests for medication, he was told that he is already taking a medication for leg pain, and no intervention occurred.

- The activities assistant noted that at times residents on the dementia unit seemed to be in pain and agitated and would not participate in activities. At other times they appeared comfortable and engaged.

- The physical therapist noted that requests for pre-therapy dosing of pain medications was inconsistently occurring. Residents who did not receive pain meds before therapy often had a difficult time participating.

- A CNA remarked that all complaints of pain were reported promptly to the nurse, and that if the resident requested something such as a warm compress, the CNAs would get one.

- The RN commented that while she has been assisting with MDS assessments, she has seen pain assessments frequently indicate that residents have chronic pain and have a pain pill for treatment. **(#4)**

Based on this information, the team decided that it would need to further investigate what practices were occurring in relation to pain management to identify a specific problem. The team first wanted to address administration of pain treatments. **(#5)** They had the following questions:

- What information do nurses use to determine whether a resident is in pain?

- Who is responsible for completing pain assessments, and how are they done?

- What are standing orders for pain treatment?

- What types of pain treatments are ordered for residents, and do they reflect current standards of practice? **(#6)**

- What occurs when a resident has unrelieved pain or new pain?

- How are CNAs and other staff involved in requests for pain treatment?

- Do staff members have time to implement pain interventions?

The team members agreed to divide the interviewing, observations, and record reviews that would answer their questions:

- The LPN volunteered to review policies and procedures related to pain management and interview nursing staff regarding: (1) how they determined whether a resident was in pain; (2) who completes pain assessments and how is the information used; (3) what nurses do when a resident has complaints of unrelieved or new pain; and (4) do they feel they have enough time to implement pain interventions.

- The CNAs agreed to interview other CNAs about how they respond to complaints of pain and whether and how they are involved in any pain interventions. **(#7)**

- The RN planned to review medication records, treatment records, pain assessments, and nurses' notes for eight residents to determine what types of pain treatments are ordered and whether changes occurred when indicated.

- The social worker and activities assistant would each interview two residents who often had complaints of pain and two who did not to find out whether they felt their requests for pain treatments were recognized and carried out. **(#8)**

- The physical therapist agreed to talk with her staff to find out how they responded to resident complaints of pain and whether they were able to extend suggestions to nursing staff for interventions when appropriate.

At the next meeting, the team analyzed the information that the members had collected. **(#9)** They found that orders and assessments for residents were seemingly appropriate and accurate, but orders were inconsistently carried out, and there was a lack of changes to medications for residents who continued to have pain. They were surprised to find that the problem seemed to be in the way staff determined whether a resident was in pain. Interviews with staff and residents revealed mixed thoughts about whether residents needed or should be given pain medications. Some residents reported that they often ask for pain medication, and others said they never do because they are afraid they will become addicted. Staff reports were similarly mixed, with some staff reporting that pain is a normal aspect of aging, whereas others believed pain should be aggressively addressed. In addition, some staff reported that they often found it difficult to discern whether residents with dementia were experiencing pain. With this information, the team then formulated a problem statement, goals, and measures to evaluate success. **(#10)**

- **Problem Statement**: Staff and residents had inaccurate beliefs about pain management and demonstrated a lack of knowledge about pain treatments. **(#11)**

- **Goal:** To decrease the number of residents experiencing daily or unrelieved pain and increase consistency in implementation of pain interventions within 60 days.

- **Measures to Evaluate Success:** (1) During rounds, eight residents will be interviewed about pain needs and whether they are being met. (2) A pre- and post–in-service test will be given to staff to determine if attitudes and knowledge about pain management improved. **(#12)** (3) The percentage of residents experiencing daily pain as reported on the MDS will decrease.

Developing the plan

The team identified tasks for team members to complete:

- The physical therapist would contact the staff development coordinator about setting up two in-services about pain to include information about identifying pain in cognitively impaired residents, medical and nonpharmacological treatments for pain, acute versus chronic pain, and addiction and dependency. **(#13)**

- The LPN would develop an addendum to the pain assessment forms to include questions regarding residents' beliefs and knowledge about pain and develop an information sheet to review with residents who perceived inaccurate information about pain treatment.

- The RN would review the new pain assessment and information sheet. **(#14)**

Introducing the plan

The CNAs agreed to develop flyers to be displayed throughout the facility announcing the upcoming in-service series. Each team member was responsible for talking with their coworkers on their next shift to encourage them to come.

- The staff development coordinator agreed to assist the team in developing the in-services, development of pocket guides for staff, and development of pre- and post-tests.

- Several team members agreed to review current information about pain management and wanted to assist in teaching at in-service sessions. **(#15)**

- The in-services would be offered at shift changes and videotaped for those who were unable to attend. Quizzes would be given at the beginning and end of each in-service. **(#16)**

- One unit was given the new pain assessments and educational information sheet to complete with new admissions. **(#17)**

Implementing the plan

After the in-services, the pain assessment was revised to incorporate suggestions from staff on the pilot unit. A final version was distributed to all units for implementation to begin the following week.

- Rather than wait for each resident's next quarterly care plan update, the new pain assessment would be completed for each resident within the next two weeks. This would most quickly and efficiently address the knowledge deficits residents may have about pain. This would require nurse volunteers to help complete all the assessments and provide education for resident misconceptions about pain. Team CNAs recruited nurses **(#18)** willing to complete the new assessments and provide education to residents with a goal to be finished in two weeks.

- The LPN distributed new pocket guides containing pain scales, signs and symptoms of pain, and treatment options to staff.

- One month after completion of new assessments, the RN reviewed the QIs and percentage of residents experiencing daily pain. At this time, the physical therapist interviewed residents to discuss whether their pain needs were met.

Evidence the plan was successful

At the end of 60 days, the team had accomplished the following:

- Ninety-five percent of staff attended the in-service. Pre- and post-tests indicated substantial improvement in knowledge and attitudes about pain management.

- Sixty percent of residents reported better pain management and that their needs were met.

- The percentage of residents experiencing daily pain reduced dramatically, according to the MDS.

Facilitator Questions

1. How can team members use these articles to promote learning and discussion in the meeting? Are team members aware of these expectations? What else might you tell team members to help them prepare for the meeting?

2) How can this information be used, and how is it valuable? What else would be important for the discussion?

3) How could this information be interpreted? What are the possible explanations?

4) What other sources of data may be useful here?

5) Given the above information, is this the most logical place to begin? What other focus could the investigation take? Which problems identified above are unlikely to be addressed with this focus?

6) How would you know what the current standards of practices are? What source would you use?

A Practical Guide to Transformation

7) How should the CNAs approach staff to learn more about the problem? Should they interview all staff or just nursing staff? How might they interview different people in different departments? Would the questions be different?

8) Are these the most appropriate team members for the resident interviews? Why or why not? What kinds of questions would be most helpful? What information about the process should the interviewers give the residents when gathering data?

9) What are the various ways that this can be done? What form is the data coming in? What instructions were team members given to collect information? Written reports? Verbal? What are some potential problems with relying on team members to retell information in staff interviews?

10) Are there other ways to interpret this information? Is there enough information to develop a problem statement? What else may be useful to know?

11) Are team members qualified to make this judgment, or might they be misinterpreting information? How will the team approach the rest of staff with this problem statement? Are there potential problems with it?

12) Is this the best way to know if there is a change in attitudes or knowledge? How will this test be developed? How will you know if the right questions are being asked?

13) Are there any other topics that would be appropriate to cover? Are two in-services too many or not enough? How will you solicit staff for two in-services? How will you present your need for two in-services to management staff?

14) Is this plan complete? Are there other things that could be included or done to enhance the plan? What things should the team be considering when developing the plan?

15) How will these staff members be perceived by those attending the in-service? Will this affect how the information is used by those attending the in-service?

16) Is there anything to consider when giving the tests? Will participants be notified of their results? Will the information be kept confidential? What might the participants want to know about how the test will be handled?

17) Have residents been appropriately included in this plan? In what ways could they be included more?

18) Are the CNAs the best people for recruiting nurses to perform the extra assessments? What would you do if no one volunteers? How could you facilitate nurse involvement?

Suggested Readings

Nutrition

Elimination

Skin

Psychosocial Well-Being

Restorative/Falls

Pain

Nutrition Selected Articles 2001–2003

1. *Aggressive nutrition intervention. Staff training is key to ensuring positive outcomes. Health Care Food Nutr Focus. 2001 Feb;17(6):12.*

2. *Akner G., and Floistrup, H. Individual assessment of intake of energy, nutrients and water in 54 elderly multidiseased nursing-home residents. J Nutr Health Aging. 2003;7(1):1-12.*
Abstract: PURPOSE: Examination of the individual intake of energy, nutrients, and water in clinically stable multidiseased nursing-home residents. METHODS: Comprehensive clinical assessment of 54 elderly nursing-home residents (80 +/- 10 years, mean +/- SD). The intake of food and beverages was measured by the weighed food intake method during five consecutive weekdays followed by computerized transformation to energy, 21 different nutrients, dietary fiber, alcohol, and water. The resting energy expenditure was determined by indirect calorimetry. RESULTS: There was at least 2-3-fold, variation in intake of energy, nutrients, and water, present also when expressed per kg body weight. For some micronutrients the relative intake variation was more than 8-fold. The results are compared with the present Swedish recommended dietary allowances as well as with seven other studies of dietary intake in elderly using the weighed food intake method. The residents had on average 14.1 (range 6-31) different current clinical problems and were treated with a mean of 9.5 different drugs. The nursing staff spent 40% of the total daytime working hours (7 a.m. to 7 p.m.) on nutrition related issues. CONCLUSIONS: The nursing-home residents exhibited a large interindividual heterogeneity regarding intake of energy, nutrients, and water. More emphasis should be given to individualized nutrition assessment in clinical geriatric care as a more solid base for nutrition treatment programmes integrated with the regular medical management and evaluation.

3. *Amella, E. J. Resistance at mealtimes for persons with dementia. J Nutr Health Aging. 2002;6(2):117-22.*
Abstract: BACKGROUND: For persons unable to feed themselves, resistance to assistance with meals may result in increased morbidity and premature mortality because of inadequate nutritional intake. Additionally, unwillingness to accept food offered has social and ethical implications in all cultures and may influence caregiving. OBJECTIVE: As part of a larger study, this analysis sought to determine if resistance or willingness to accept assistance at meals by persons with dementia could be predicted by various personal interaction and contextual factors. DESIGN: Resistance was studied in a sample of 53 nursing home residents with late-stage dementia who were assisted at meals by CNAs. Using the EdFED-Q (Edinburgh Feeding Evaluation in Dementia Questionnaire), two groups of individuals who were being fed were identified: those who resisted assistance (n = 23) and those who accepted assistance (n = 30). Proportion of food consumed was determined by percentage of weight decrease in food offered. RESULTS: Differences between the two groups were identified. Although not differing in degree of cognitive impairment as measured by the MMSE or Body Mass Index, significant differences (P < .05) were found in level of functioning as measured by the Global Deterioration Scale, the proportion of food consumed and amount of time taken to assist with the meal. Resistors showed significantly different interaction behaviors in 8 of the 10 on the Interaction Behavior Measure-Modified when correlated with food consumed (r = .49 - .68, P < .02). CONCLUSION: When examining resistance to feeding, a variety of factors must be examined, including the quality of the interaction between the caregiver and the person being fed.

4. *Athas, B. M. (Older Americans Act Program Specialist, Utah State Division of Aging and Adult Services, 120 N. 200 W., Salt Lake City, UT 84103; bathas@state.ut.us). Nutrition management in long-term care and home health. Palliative care and nutrition intervention. Journal of Nutrition for the Elderly. 2001;20(4):53-60.*

Abstract: This is an introduction to provide the health care practitioner with basic information on palliative care and nutritional needs to help them better understand the dying process and simple concepts that can be done to make the patient more comfortable. It provides direction for nutrition professionals who interact with family members, caregivers, guardians, and friends of dying patients. Nutrition is a component part of end-of-life care. This is a crucial time for the registered dietitian to consider what is happening within the body, and how best to nourish the patient without causing further nausea, pain, and discomfort. It is valuable to the patient to be able to reflect upon special events. Family members, guardians, and friends need to make the time to share in these memories.

5. *Baldwin, C; Parsons, T.; and Logan, S. Dietary advice for illness-related malnutrition in adults. Cochrane Database of Systematic Reviews. 1, 2003.*

Abstract: BACKGROUND: Illness-related malnutrition has been reported in 10–55% of people in hospitals and in ill people in the community in areas of food sufficiency. It has been suggested that dietary counseling to encourage the use of energy- and protein-rich foods should be used in preference to oral nutritional supplements in the management of illness-related malnutrition. OBJECTIVES: To examine the evidence that dietary advice, to improve nutritional intake, in adults with illness-related malnutrition can improve survival, weight, and anthropometry and to estimate the size of any additional effect of whole protein nutritional supplements when given in combination with dietary advice. SEARCH STRATEGY: Relevant trials were identified by from the Cystic Fibrosis Specialised Register of Controlled Trials held at the editorial base of the Cochrane Cystic Fibrosis and Genetic Disorders Group. Additional studies were sought by contacting dietitians, clinicians, and the manufacturers of nutritional supplements. Date of the most recent search of the groups' specialised register: November 2001. SELECTION CRITERIA: All randomised controlled trials of dietary advice compared with no advice, oral nutritional supplements, and dietary advice plus oral nutritional supplements in people with illness-related malnutrition. DATA COLLECTION AND ANALYSIS: Two reviewers independently assessed the trial eligibility, methodological quality, and extracted the data. MAIN RESULTS: Fifteen trials (16 comparisons) met the inclusion criteria. An additional group of six trials were identified during searching which compared dietary advice plus supplements if required with no advice. These trials have been included in the review as an additional comparison. The review includes 1,185 randomised participants from a variety of clinical backgrounds. The duration of follow-up was from six weeks to 12 months. Nine trials reported clearly concealed randomisation and allocation and two trials reported blinding of outcome assessment. Nine trials reported outcomes in an unusable format. Gain in weight was significantly higher for groups consuming supplements with or without advice, compared with advice alone. Energy intake was significantly improved in those consuming supplements compared with those receiving advice alone. There was insufficient data on group differences in functional outcomes and mortality. CONCLUSIONS: This review highlights the lack of evidence for the provision of dietary advice in the management of illness-related malnutrition. The available data suggest that oral nutritional supplements have a greater role than dietary advice in the improvement of body weight

and energy intake. A large adequately powered randomised controlled trial is needed to compare the efficacy of different forms of therapy to increase dietary intake in people with illness-related malnutrition and to examine the impact of this on clinical function and survival.

6. **Beck, A. M., and Ovesen, L. Body mass index, weight loss and energy intake of old Danish nursing home residents and home-care clients. Scand J Caring Sci. 2002 Mar;16(1):86-90.**

Abstract: Low body mass index (BMI) and weight loss is common among old home-care clients and nursing home residents in many countries—often in spite of an apparent sufficient intake of energy. The aim of this study was to assess whether a similar problem exists in Denmark. Information regarding height, body weight, BMI, and energy intake was collected. Besides this, 24 residents were weighed regularly during 1 year. The study was carried out in five nursing homes and two home-care districts situated in the area of Copenhagen. A total of 180 residents and 200 clients 65+ years of age participated. Main outcome measures were prevalence of BMI < 20 kg/m2, BMI < 18.5 kg/m2, acute weight loss and median energy intake. Thirty-three and thirty percent of the residents and clients had a BMI < 20 kg/m2 and, 22 and 12% had a BMI < 18.5 kg/m2. Of the residents, who were weighed regularly, 38% had a weight loss above 5%. The median intake of energy was equal to or above the estimated median energy requirement. Hence, the prevalence of low BMI and weight loss among old Danish nursing home residents and home-care clients is high and similar to that found in other countries. There is a need for increased focus on nutritional state and risk factors in these settings.

7. **Beck, A. M.; Ovesen, L.; and Schroll, M. Validation of the Resident Assessment Instrument triggers in the detection of under-nutrition. Age Ageing. 2001 Mar;30(2):161-5.**

Abstract: OBJECTIVE: To test the validity of Resident Assessment Instrument triggers for people in Danish nursing homes and subjects receiving home care by exploring their ability to identify older people with insufficient energy and protein intake. DESIGN: Regression analysis of insufficient energy or protein intake on each of the Resident Assessment Instrument triggers alone or in combination. SUBJECTS: 38 people receiving home care and 41 living in nursing homes. METHODS: A 4 day estimated dietary record, assessment of energy and protein intake, calculation of body mass index. RESULTS: Food remaining on the plate, weight loss, and any trigger present significantly influenced the energy or protein intake of the nursing home subjects. No triggers reflected the energy or protein intake of the subjects at home. CONCLUSION: Observation of food intake seems to be the best way to detect which older Danish people living in nursing homes or receiving home care have insufficient energy or protein intake.

8. **Bernstein, M. A.; Tucker, K. L.; Ryan, N. D.; O'Neill, E. F.; Clements, K. M.; Nelson, M. E.; Evans, W. J.; and Fiatarone Singh, M. A. Higher dietary variety is associated with better nutritional status in frail elderly people. J Am Diet Assoc. 2002 Aug;102(8):1096-104.**

Abstract: OBJECTIVE: A narrow range of food choices may lead to dietary inadequacies, a particular concern in elderly people. We hypothesized that consumption of a more diverse diet would predict better nutritional status in frail elderly persons. SUBJECTS: Subjects included 98 frail nursing home residents (36 men, 62 women), mean age 87.1+/-5.5 (72 to 98) years. METHODS: 3-day dietary variety scores ranging from 23 to 48 and fruit and vegetable variety scores ranging from 5 to 20 were calculated from weighed 3-day food records as the number of different food or fruit and

vegetable choices consumed. A higher score indicates a more varied diet. Nutritional status was assessed by weight, height, body mass index (BMI), skinfold thickness, circumference measures, calculated mean arm muscle area, total body water, computerized tomography of the thigh, and total body potassium, as well as nutritional analysis, biochemical measures, and subject medical history. STATISTICAL METHODS: Univariate regression analyses were performed to investigate the relationship between clinical and nutrition variables. Multiple linear regressions were used to develop models relating dietary variety scores to possible etiologic factors as well as indicators of nutritional status. Models were controlled for age, BMI, and energy intake when appropriate. RESULTS: Mean dietary variety score was 35.2+/-4.5, and mean fruit and vegetable variety score was 11.3+/-3.0. Higher dietary variety score was associated with higher energy intake (= 20.5, P < .001) and both high dietary variety score and fruit and vegetable variety score were positively associated with intake for many nutrients (P < .05). High dietary variety score was related to high fruit and vegetable variety score and total intake of fruits and vegetables. In men, higher dietary variety score and fruit and vegetable variety score were associated with higher high-density lipoprotein (= 1.02), lower very-low-density lipoprotein (= -3.58) and triglycerol (= -3.51), and higher blood folate (= 4.72) concentrations in women (P < .05). In women, high dietary variety score was associated with higher BMI (= 0.34, P < .001) and higher total body potassium (= 1.30, P = .02); high fruit and vegetable variety score was associated with higher BMI (= 0.41), mid-arm circumference (= 0.34), and mid-arm muscle area (= 2.94) (P < .03). Dietary variety score was higher (mean 37.6+/-5.38 vs 34.6+/-4.14) in those who received assistance with feeding (= 2 .67, P = .01). History of cancer (= -2.04) and gastrointenstinal cancer (= -3.54) were associated with low dietary variety score (P < .05). CONCLUSIONS: The results of this study suggest that a highly varied diet in elderly nursing home residents is associated with better nutritional status as assessed by nutrient intake, biochemical measures, and body composition measures. Dietary variety score is a straightforward tool for screening and identifying people at nutritional risk, as well as a mechanism for monitoring response to nutritional, medical, and environmental interventions. Preventive measures to improve dietary variety, as measured by the dietary variety score, should be evaluated and introduced before nutrition and health complications arise.

9. **Budtz-Jorgensen, E.; Chung, J. P.; and Rapin, C. H. Nutrition and oral health. Best Pract Res Clin Gastroenterol. 2001 Dec;15(6):885-96.**
Abstract: Reduced chewing function in community-dwelling older people with adequate general health is linked to having fewer than 20 teeth present or to wearing removable dentures. By chewing for longer periods of time or swallowing larger food particles they are normally able to compensate for the impaired function. The masticatory function can be restored by adequate prosthetic therapy, which results in increased activity of the masticatory muscles during chewing and reduces the chewing time and the number of chewing strokes until swallowing. In frail or dependent elderly people, undernutrition is prevalent because of health problems, reduced appetite, and poor quality of life. Poor oral health and xerostomia are often associated with a reduced body mass index and serum albumin level and the avoidance of difficult-to-chew foods. Maintenance or reestablishment of masticatory function is an integral part of the medical health care of these patients, with the aim of improving their nutritional status and quality of life. Copyright 2001 Harcourt Publishers Ltd. [References: 75]

10. *Burger, S. G.; Kayser-Jones, J.; and Bell, J. P. Food for thought. Preventing/treating malnutrition and dehydration. Contemp Longterm Care. 2001 Apr;24(4):24-8.*

11. *Castellanos, V. H., and Andrews, Y. N. Inherent flaws in a method of estimating meal intake commonly used in long-term-care facilities. J Am Diet Assoc. 2002 Jun;102(6):826-30.*
Abstract: OBJECTIVE: To evaluate the accuracy of a method used to estimate nursing home residents' meal consumption, where the meal tray is assessed as a whole and assigned a value of 0%, 25%, 50%, 75%, or 100% consumed, under both routine and controlled conditions. SUBJECTS/SETTING: This study was conducted with certified nursing assistants at a 180-bed long-term-care facility in Miami, Fla. METHODS: Study 1 evaluated the method under routine conditions by comparing nursing assistants' estimates to actual meal consumption of 42 residents over 109 meals. A second study evaluated the method in a controlled setting where nursing assistants were free of disincentives and distractions that might contribute to inaccurate reporting. In a crossover design, nursing assistants estimated consumption on 4 manipulated trays under conditions of both immediate and delayed reporting. STATISTICAL ANALYSIS: An intraclass correlation coefficient and percent agreement were used to compare nursing assistants' estimates to weighed meal intakes. RESULTS: Under routine conditions, the intraclass correlation coefficient between nursing assistants' estimates and the actual resident meal consumption was weak at 0.464 (95% confidence interval = 0.146 to 0.664). The correct estimate was recorded 44% of the time. In the controlled setting, the nursing assistants' estimates for percent consumed agreed with weighed intakes 44% and 38% of the time with immediate and delayed recording, respectively. APPLICATIONS/CONCLUSIONS: This 1-step method of estimating meal consumption with an overall percentage is not sufficiently accurate to identify residents who are eating less than 75% of most meals.

12. *Clay, M. Nutritious, enjoyable food in nursing homes. Nurs Stand. 2001 Jan 24-2001 Jan 30;15(19):47-53; quiz 54-5.*
Abstract: Mary Clay describes ways in which nurses should ensure that patients in nursing homes receive appropriate dietary care.

13. *Cluskey, M., and Kim, Y. K. Use and perceived effectiveness of strategies for enhancing food and nutrient intakes among elderly persons in long-term care. J Am Diet Assoc. 2001 Jan;101(1):111-4.*

14. *Coleman, M. T.; Looney, S.; O'Brien, J.; Ziegler, C.; Pastorino, C. A.; and Turner, C. The Eden Alternative: findings after 1 year of implementation. J Gerontol A Biol Sci Med Sci. 2002 Jul;57(7):M422-7.*
Abstract: BACKGROUND: This study examines the effects of the Eden Alternative (EA), a systematic introduction of pets, plants, and children into a nursing home, on the quality of life of nursing home residents. METHODS: Two nursing homes run by the same organization participated. The study site began implementing the EA in November 1998. The control site continued traditional care. Patient-level data from the Minimum Data Set (MDS), Version 2.0, and aggregate data based on staff reports were used to compare the residents at the two sites in terms of cognition, survival, immune function, functional status, and cost of care after 1 year. RESULTS: After adjusting for baseline differences, follow-up MDS data indicated that the Eden site had significantly greater proportions

of residents who had fallen within the past 30 days (P =.011) and residents who were experiencing nutritional problems (P <.001). Staff report data indicated that, during the study period, the Eden site had significantly higher rates of residents requiring skilled nursing and hypnotic prescriptions, and more staff terminations and new hires. The control site had significantly higher rates of residents requiring anxiolytic prescriptions. CONCLUSIONS: The findings from this study indicate no beneficial effects of the EA in terms of cognition, functional status, survival, infection rate, or cost of care after 1 year. However, qualitative observations at the Eden site indicated that the change was positive for many staff as well as residents, suggesting that it may take longer than a year to demonstrate improvements attributable to the EA.

15. *Collins, N. (Nutrition Guidance Center, 18459 Pines Blvd., Suite 204, Pembroke Pines, FL 33029-1400; NCtheRD@aol.com). Involuntary weight loss in the long-term care setting: a suggested nutritional intervention treatment algorithm. Wounds—A Compendium of Clinical Research & Practice. 2001 Jul-2001 Aug 31;13(4):Suppl D: 32D-7D.*
Abstract: Involuntary weight loss (IWL) is defined as any unplanned weight loss from the usual adult body weight. This weight loss may occur slowly over time or have a rapid onset. The goal of nutrition intervention should be to maintain or replete lean body mass and meet the daily calorie (energy) and protein needs of the resident. Every long-term care facility should have a nutrition protocol in place to treat IWL. Protocols have also been called maps, pathways, treatment algorithms, and policies. Although the names may be slightly different, the goal remains the same—to have a well-defined plan in place to treat IWL promptly and efficiently. A protocol should be administratively manageable, cost effective, legally defensible, and current with the scientific developments in the field of nutrition. It begins with the least costly, least invasive nutrition interventions first and advances to the more costly and more invasive interventions as needed. Early interventions involve providing a suitable dining environment, proper positioning for meals, assistance, timing of meals and medications, and other similar factors. The next level of intervention utilizes a variety of medical nutrition supplements, vitamins, and minerals. If IWL persists, pharmaceutical intervention using an anabolic agent may be considered for appropriate residents. Oxandrolone (Oxandrin, BTG Pharmaceuticals, Iselin, NJ) is an oral anabolic agent approved by the Food and Drug Administration for the adjunctive treatment of IWL. This type of anabolic agent attenuates the catabolic state by decreasing protein breakdown and increasing protein synthesis. Tube feeding should be considered if all efforts to provide adequate oral nutrition fail.

16. *Corbett, C. F.; Crogan, N. L.; and Short, R. A. Using the minimum data set to predict weight loss in nursing home residents. Appl Nurs Res. 2002 Nov;15(4):249-53.*
Abstract: In this longitudinal exploratory study, items from the minimum data set (MDS) were used to predict resident weight changes in older adults (n = 77) from three nursing homes. At the end of the study period, three variables from the last available MDS were significant predictors of weight loss: 1) leaves 25% or more of food uneaten at most meals, 2) receiving an antianxiety medication, and 3) not having the ability to feed oneself independently. Copyright 2002, Elsevier Science (USA). All rights reserved.

17. *Critchlow, J., and Bauer-Wu, S. M. Dehydration in terminally ill patients: perceptions of long-term care nurses. Journal of Gerontological Nursing. 2002 Dec 9;28(12):31-9;48-9.*

Abstract: Dehydration in terminally ill patients has been found to be beneficial and to improve the quality of an individual's last few days of life. As the population continues to age, more individuals are cared for in long-term care (LTC) facilities, where they tend to spend their final days. Previous studies have examined the perceptions and attitudes of hospice nurses, acute care nurses, physicians, and caregivers; however, no such studies have evaluated LTC nurses. It is necessary to know LTC nurses' perceptions and attitudes so they can be offered the education needed to provide the best quality care for terminally ill patients. The purpose of this study was to describe how nurses working with elderly individuals in LTC perceived terminal dehydration (TD). Long-term care nurses (n = 64) were surveyed using a modified version of an established 10-item instrument. Significant findings included a positive correlation between age and positive perception of TD—as nurse age increased, a more positive view of TD was expressed. Also, the number of deaths witnessed was positively associated with the belief that TD was beneficial. In general, responses to the individual survey items were quite varied, representing inconsistencies in attitudes and care of dying LTC patients. The results of this descriptive study indicate the debate concerning the benefits of TD continues and remains an important topic for the LTC nurse.

18. **Crogan, N. L., and Corbett, C. F. Predicting malnutrition in nursing home residents using the minimum data set. Geriatr Nurs. 2002 Jul-2002 Aug 31;23(4):224-6.**
Abstract: This article describes the prevalence of protein/calorie malnutrition among newly admitted elderly nursing home residents and identifies the most significant predictors using Minimum Data Set (MDS) variables. This random selection, cross-sectional study included 266 residents, 65 and older, from three nursing homes. Malnutrition risk factors, indicators, and prevalence variables in the MDS were measured for each resident on admission to the nursing home. MDS data provide an opportunity for early identification of residents at risk for malnutrition and accompanying morbidity. Treating residents who are malnourished or at high risk for weight loss on admission could dramatically improve their quality of life.

19. **Crogan, N. L.; Corbett, C. F.; and Short, R. A. The minimum data set: predicting malnutrition in newly admitted nursing home residents. Clin Nurs Res. 2002 Aug;11(3):341-53.**
Abstract: The purpose of this study was to describe the prevalence of protein-calorie malnutrition (PCM) among newly admitted elderly nursing home residents and identify the most significant predictors of PCM using Minimum Data Set (MDS) variables. Using a cross-sectional design, the authors studied 306 nursing home residents. Malnutrition risk factors found on the MDS were measured for each resident. Overall, 118 (38.6%) residents met the Nutrition Screening Initiative Guidelines for PCM. MDS variables found to be significant predictors were weight loss, leaves 25% or more of food uneaten at most meals, psychiatric/mood diagnoses, deteriorated ability to participate in activities of daily living, and older age. Three additional variables (antidepressant use, diuretic use, therapeutic diet) were found to be protective—residents with these variables were more likely to have a normal body mass index. MDS data provide an opportunity for early identification of residents who are at risk for PCM and accompanying morbidity.

20. **Crogan, N. L., and Evans, B. C. Nutrition assessment: experience is not a predictor of knowledge. J Contin Educ Nurs. 2001 Sep-2001 Oct 31;32(5):219-22.**

Abstract: This study tested an evidence-based nutrition education program for licensed nurses working in nursing homes who scored an average of 56% on a pretest. Post-test scores averaged 66%, demonstrating a continuing deficit of basic nutritional knowledge despite the educational intervention. Statistical analysis revealed that less experienced nurses scored better on post-tests than more experienced nurses; more experienced nurses performed nutritional assessment more often than less experienced nurses; and more experienced nurses were usually charge nurses or nurses completing Minimum Data Sets. Although the education did not eliminate all deficits in nutrition knowledge, a decrease in the percentage of residents with significant weight loss was noted.

21. **---. Nutrition education for nursing assistants: an important strategy to improve long-term care. J Contin Educ Nurs. 2001 Sep-2001 Oct 31;32(5):216-8.**

22. **Crogan, N. L., and Pasvogel, A. The influence of protein-calorie malnutrition on quality of life in nursing homes. J Gerontol A Biol Sci Med Sci. 2003 Feb;58(2):159-64.**

Abstract: BACKGROUND: Up to 85% of the older adults living in our nation's nursing homes suffer from protein-calorie malnutrition (PCM). Early identification and treatment of PCM can reduce or prevent hospital stays, reduce complications, and decrease mortality. We describe the influence of PCM on quality of life in nursing homes, using archived data from the Minimum Data Set. METHODS: The study was guided by the Quality Nutrition Outcomes—Long-Term Care Model, which posits a pathway whereby organizational issues influence nutritional status, consisting of body mass index (BMI), serum albumin levels, and prealbumin levels, and subsequent quality of life, morbidity, and health care utilization. A cross-sectional design was used to analyze Minimum Data Set assessment data already collected from a previous study. The sample for this analysis was 311 nursing home residents, aged 65 years or older, who lived in three nursing homes in eastern Washington. RESULTS: Of the participants, 38.6% were malnourished. PCM (measured by BMI) influenced quality of life for these residents in that there was a significant relationship between BMI and functional status (eating, personal hygiene, and toilet use) and BMI and psychosocial well-being (initiative or involvement, unsettled relationships, and past roles). Depression was not a significant indicator of low BMI in these nursing home residents. CONCLUSIONS: Low BMI, indicating PCM, was found to negatively influence quality of life in this study. Understanding the relationship between quality of life and PCM could lead to improved quality of life for older adults in nursing homes and guide future innovative intervention studies aimed at preventing PCM.

23. **Crogan, N. L.; Shultz, J. A.; Adams, C. E.; and Massey, L. K. Barriers to nutrition care for nursing home residents. J Gerontol Nurs. 2001 Dec;27(12):25-31.**

Abstract: The prevalence of protein-calorie malnutrition (PCM) in nursing home residents has reached 85% in some nursing homes and is linked to increased mortality among residents. Separate survey questionnaires were developed and administered to 99 nursing assistants and 44 nurses (35 RNs, 9 LPNs) from five eastern Washington nursing homes. The purpose was to assess nurse (RN, LPN) and nursing assistant perceived beliefs and views related to nutritional needs of nursing home residents that have a potential impact on PCM of residents. Experienced nursing assistants did not

view the nurse as an active participant during mealtime. Specific barriers such as a lack of time and training, too many residents, working short staffed, poor food quality, and a lack of nurse-nursing-assistant teamwork may contribute to residents not getting enough food to eat. An education program addressing staff relationships and nutrition training of nursing assistants could improve the ability of nursing staff to ensure residents' food intake and improve the quality of life for residents in nursing homes.

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Abstract: BACKGROUND: The purpose of this study was to determine knowledge-based nutrition competencies of nurses and describe needed nutrition education relative to reducing protein-calorie malnutrition (PCM) in nursing home residents. METHOD: A sample of 44 nurses (35 RNs, 9 LPNs) from five eastern Washington nursing homes completed a 50-item questionnaire that measured nutrition knowledge based on Benner's Novice to Expert Model. RESULTS: Nurses scored an average 65% +/- 11% on the nutrition examination. CONCLUSION: An educational program addressing the identified deficient areas could improve the ability of nursing staff to assess and monitor resident food intake, thereby reducing the prevalence of PCM of residents in nursing homes.

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Abstract: It is the position of the American Dietetic Association (ADA) that the quality of life and nutritional status of older residents in long-term care facilities may be enhanced by a liberalized diet. The Association advocates the use of qualified dietetics professionals to assess and evaluate the need for medical nutrition therapy according to each person's individual medical condition, needs, desires, and rights. One of the major determinants among the predictive factors of successful aging is nutrition. Long-term care includes a continuum of health services ranging from rehabilitation to supportive care. Nutrition care for older adults in long-term settings must meet two goals: maintenance of health through medical care and maintenance of quality of life. However, these goals often seem to compete, resulting in the need for a unique approach to medical nutrition therapy (MNT). Typically, MNT includes assessment of nutritional status and development of an individualized nutrition intervention plan that frequently features a therapeutic diet appropriate for managing a disease or condition. MNT must always address medical needs and individual desires, yet for older adults in long-term care this balance is especially critical because of the focus on maintaining quality

of life. Dietetics professionals must help residents and health care team members assess the risks versus the benefits of therapeutic diets. For frail older adults, overall health goals may not warrant the use of a therapeutic diet because of its possible negative effect on quality of life. A diet that is not palatable or acceptable to the individual can lead to poor food and fluid intake, which results in weight loss and undernutrition, followed by a spiral of negative health effects. Often, a more liberalized nutrition intervention that allows an older adult to participate in his or her diet-related decisions can provide for the person's nutrient needs and allow alterations contingent on medical conditions while simultaneously increasing the desire to eat and enjoyment of food. This ultimately decreases the risks of weight loss, undernutrition, and other potential negative effects of poor nutrition and hydration. [References: 64]

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Abstract: OBJECTIVE: To compare the indications for and the outcome of long-term enteral feeding by nasogastric tube (NGT) with that of percutaneous endoscopic gastrostomy (PEG) tube. DESIGN: A prospective, multicenter cohort study. SETTING: Acute geriatric units and long-term care (LTC) hospitals in Jerusalem, Israel. PARTICIPANTS: 122 chronic patients aged 65 years and older for whom long-term enteral feeding was indicated as determined by the treating physician. Patients with acute medical conditions at the time of tube placement were excluded. MEASUREMENTS: We examined the indications for enteral feeding, nutritional status, outcome, and complications in all subjects. Subjects were followed for a minimum period of six months. RESULTS: Although the PEG patients were older and had a higher incidence of dementia, there was an improved survival in those patients with PEG as compared to NGT (hazard ratio [HR] = 0.41; 95% confidence interval [CI] 0.22-0.76; $P = 0.01$). Also, the patients with PEG had a lower rate of aspiration (HR = 0.48; 95% CI 0.26-0.89) and self-extubation (HR = 0.17; 95% CI 0.05-0.58) than those with NGT. Apart from a significant improvement in the serum albumin level at the 4-week follow-up assessment in the patients with PEG compared to those with NGT (adjusted mean 3.35 compared to 3.08; F = 4.982), nutritional status was otherwise similar in both groups. CONCLUSION: In long-term enteral feeding, in a selected group of non-acute patients, the use of PEG was associated with improved survival, was better tolerated by the patient, and was associated with a lower incidence of aspiration. A randomized controlled study is needed to determine whether PEG is truly superior to NGT. Copyright 2001 Harcourt Publishers Ltd.

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31. **Eberhardie, C. Nutrition and the older adult. Nurs Older People. 2002 Apr;14(2):22-7; quiz 28.**
Abstract: The importance of ensuring adequate nutrition in older people is often acknowledged but, the evidence suggests, theory is not always matched by practice. This article describes causes of malnutrition in older adults and discusses nursing strategies to prevent it occurring.

32. **Ekberg, O.; Hamdy, S.; Woisard, V.; Wuttge-Hannig, A.; and Ortega, P. (Reprint available from: Ekberg O Malmo Univ Hosp, Dept Diagnost Radiol SE-20502 Malmo Sweden). Social and psychological burden of dysphagia: Its impact on diagnosis and treatment. Dysphagia. 2002 Spring;17(2):139-146.**

Abstract: The social and psychological impact of dysphagia has not been routinely reported in large studies. We sought to determine the effects of dysphagia on broad measures of the quality of life of patients and to explore the relationship between the psychological handicaps of the condition and the frequency of diagnosis and treatment. A total of 360 patients selected on the basis of known subjective dysphagia complaints, regardless of origin, in nursing homes and clinics in Germany, France, Spain, and the United Kingdom were interviewed using an established questionnaire. Qualitative interviews with a total of 28 health professionals were conducted to improve understanding of the patient data in the context of each country. Over 50% of patients claimed that they were "eating less" with 44% reporting weight loss during the preceding 12 months. Thirty-six percent of patients acknowledged receiving a confirmed diagnosis of dysphagia; only 32% acknowledged receiving professional treatment for it. Most people with dysphagia believe their condition to be untreatable; only 39% of the sufferers believed that their swallowing difficulties could be treated. Eighty-four percent of patients felt that eating should be an enjoyable experience but only 45% actually found it so. Moreover, 41% of patients stated that they experienced anxiety or panic during mealtimes. Over one-third (36%) of patients reported that they avoided eating with others because of their dysphagia. In a largely elderly population that might accept dysphagia as an untreatable part of the aging process, clinicians need to be aware of the adverse effects of dysphagia on self-esteem, socialization, and enjoyment of life. Careful questioning should assess the impact of the condition on each patient's life, and patients should be educated on their choices for treatment in the context of any coexisting illness. Awareness of the condition, diagnostic procedures, and treatment options must be increased in society and among the medical profession. [References: 14]

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Abstract: This article describes ten dining room problems, identified in a nursing home study, that needed quality improvement, as well as six quality practices suggested for implementation. These six quality practices provide the basis for an excellent eating experience characterized by a home-like atmosphere, high levels of staff-resident interaction, and increased attention to safety and ethical issues. The six practices also could serve as the foundation for a facility-wide, cost-effective, quality improvement program.

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Abstract: With the increasing numbers of elderly in the population of all western countries and the increasing life expectancy at birth, many seniors spend the last period of their life with various afflictions that may require the need for long-term institutional care. During the last period of life, many seniors and their families face decisions that challenge ethical principles and may cause conflict among family members as well as healthcare professionals. The commonly used ethical principles of autonomy, beneficence, nonmaleficence and justice, although forming a useful

foundation for the evaluation of decision-making dilemmas, alone cannot resolve many clinically challenging situations. Healthcare professionals must clearly understand the clinical state of the patient for whom a difficult decision is being contemplated. Levels of function, clinical symptoms, the expected trajectory of change, and possible treatment options have to be balanced against the person's values and wishes, either self-expressed directly or through an advance directive, or communicated by surrogate decision makers. At times, physicians face difficult treatment dilemmas when patients or families request treatments that are not legally sanctioned, such as when physician-assisted suicide is requested by a suffering patient. At other times conflicts occur when patients or surrogates wish to continue with therapies that are no longer considered necessary or suitable by the physician. At the societal level, sometimes an expensive drug that is deemed necessary by the physicians is not covered by a government-sponsored or private health plan. The issue of distributive justice must be considered in a situation such as when long-term facilities or acute hospitals treating frail, cognitively impaired elders consider withholding or withdrawing various treatments because of poor clinical outcomes coupled with excessive costs. The often controversial issue of nutrition and hydration in the end-of-life period frequently causes treatment conflicts and dilemmas among surrogates and staff, as does the highly charged issue of cardiopulmonary resuscitation in this frail and very vulnerable population. The real challenge for health care providers in the field of geriatric long-term care is to balance compassionate and appropriate care with respect for the choices and wishes of patients and their families. This should be accomplished while at the same time safeguarding the professional standards and ethical integrity of health care providers responsible for this care.

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Abstract: In more than 10,000 elderly persons, the mean prevalence of malnutrition is 1% in community-healthy elderly persons, 4% in outpatients receiving home care, 5% in patients with Alzheimer's disease living at home, 20% in hospitalized patients, and 37% in institutionalized elderly persons. In community-dwelling elderly persons, the MNA detects risk of malnutrition and lifestyle characteristics associated with nutritional risk while albumin levels and the BMI are still in the normal range. In outpatients and in hospitalized patients, the MNA is predictive of outcome and cost of care. In home care patients and nursing home residents, the MNA is related to living conditions, meal patterns, and chronic medical conditions and allows targeted intervention. The MNA has been used successfully in follow-up evaluation of outcome, nutritional intervention, nutritional education programs, and physical intervention programs in elderly persons. The MNA-SF allows quick screening to determine a person's risk of malnutrition. Early detection of malnutrition is important to allow targeted nutritional intervention and should be a key component of the geriatric assessment. The MNA test is a simple, noninvasive, well-validated screening tool for malnutrition in elderly persons and is recommended for early detection of risk of malnutrition. The MNA, as a two-step procedure (screening with the MNA-SF followed by assessment, if needed, by the full MNA), is reliable and can be easily administered by general practitioners and by health professionals

at hospital or nursing home admission for early detection of risks of malnutrition. The MNA has the following characteristics: * The MNA is a two-step procedure: (1) the MNA-SF to screen for malnutrition and risk of malnutrition; (2) assessment of nutritional status with the full MNA. * The MNA is an 18-item questionnaire comprising anthropometric measurements (BMI, mid-arm and calf circumference, and weight loss) combined with a questionnaire regarding dietary intake (number of meals consumed, food and fluid intake, and feeding autonomy), a global assessment (lifestyle, medication, mobility, presence of acute stress, and presence of dementia or depression), and a self-assessment (self-perception of health and nutrition). The MNA-SF comprises 6 items from the 18. * The MNA is well validated. It correlates highly with clinical assessment and objective indicators of nutritional status (albumin level, BMI, energy intake, and vitamin status). * A low MNA score can predict hospital-say outcomes in older patients and can be used to follow up changes in nutritional status. * Because of its validity in screening and assessing the risk of malnutrition, the MNA should be integrated in the comprehensive geriatric assessment. * In more than 10,000 elderly persons, the prevalence of undernutrition assessed by the MNA is 1% to 5% in community-dwelling elderly persons and outpatients, 20% in hospitalized older patients, and 37% in institutionalized elderly patients.

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Abstract: A large body of evidence points to the harmful consequences of undernutrition in older persons. These consequences can include decline in anemia, sarcopenia, and decline in immune function, as well as decline in activities of daily living and increased risks of falls and fractures. Awareness of these dangers and identification of patients with undernutrition or at high risk for undernutrition is the first and most important step in correcting these conditions. Interventions include dietary advice, hypercaloric feedings, and nutritional supplements. This article focuses on enteral nutrition to enhance the nutritional status of elderly persons who are at risk or already are suffering from undernutrition and its consequences. [References: 54]

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Abstract: Older adults are at risk for malnutrition, which may contribute to their increased risk of infection. Nutritional supplementation strategies can reduce this risk and reverse some of the immune dysfunction associated with advanced age. This review discusses nutritional interventions that have been examined in clinical trials of older adults. The data support use of a daily multivitamin or trace-mineral supplement that includes zinc (elemental zinc, >20 mg/day) and selenium (100 microg/day), with additional vitamin E, to achieve a daily dosage of 200 mg/day. Specific syndromes may also be addressed by nutritional interventions (for example, cranberry juice consumption to reduce urinary tract infections) and may reduce antibiotic use in older adults, particularly those living in long-term care facilities. Drug- nutrient interactions are common in elderly individuals, and care

providers should be aware of these interactions. Future research should evaluate important clinical end points rather than merely surrogate markers of immunity.

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Abstract: Elderly patients with unintentional weight loss are at higher risk for infection, depression, and death. The leading causes of involuntary weight loss are depression (especially in residents of long-term care facilities), cancer (lung and gastrointestinal malignancies), cardiac disorders, and benign gastrointestinal diseases. Medications that may cause nausea and vomiting, dysphagia, dysgeusia, and anorexia have been implicated. Polypharmacy can cause unintended weight loss, as can psychotropic medication reduction (i.e., by unmasking problems such as anxiety). A specific cause is not identified in approximately one-quarter of elderly patients with unintentional weight loss. A reasonable work-up includes tests dictated by the history and physical examination, a fecal occult blood test, a complete blood count, a chemistry panel, an ultrasensitive thyroid-stimulating hormone test, and a urinalysis. Upper gastrointestinal studies have a reasonably high yield in selected patients. Management is directed at treating underlying causes and providing nutritional support. Consideration should be given to the patient's environment and interest in and ability to eat food, the amelioration of symptoms, and the provision of adequate nutrition. The U.S. Food and Drug Administration has labeled no appetite stimulants for the treatment of weight loss in the elderly. [References: 43]

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Abstract: OBJECTIVES: To determine whether body weight can be maintained or improved in dementia residents of special care units (SCUs) using a comprehensive intervention strategy. DESIGN: Quasi-experimental with an interventional site and a noninterventional site. SETTING: Four SCUs in two long-term care facilities in Ontario. PARTICIPANTS: The intervention site included 33 residents; the comparison site included 49 residents. MEASUREMENTS: Weight change over time was the primary outcome. Three time periods were compared: 9-month baseline period, 9-month intervention period (enhanced dietitian monitoring and menu changes at intervention site), and 12-month postintervention period (only menu changes at intervention site). Comparisons were made within and between sites. Full nutritional assessments were completed for the intervention group. Medical charts and basic anthropometric, behavioral, and cognitive measures were completed in both groups to determine baseline site differences. Weight change over time was analyzed with a repeated measures analysis, controlling for various covariates. Bivariate analyses were completed for other outcomes of death, number of infections, falls, and hospital days. RESULTS: The intervention period that included the dietitian time and menu changes significantly promoted weight gain,

compared with the standard treatment at the comparison facility. Other covariates of pacing, type of dementia, sex, age, number of comorbid conditions, and medications were also significant predictors of weight change. Weight gain or maintenance regardless of site was associated with survival. CONCLUSION: Body weight can be maintained in residents of SCUs regardless of pacing and other clinical characteristics. The comprehensive intervention of clinical dietitian time and an enhanced menu designed to be individualized for ambulatory people with dementia promoted significant gains in body weight. A minimum 5% weight gain is associated with survival in these residents of SCUs. [References: 39]

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Abstract: Presents guidelines on preventing weight loss in nursing home residents. Role of the facility administrator; Issues to consider in the dining room; Duties of the nurse in the dining room.

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Abstract: The purpose of this study was to explore eating, feeding, and nutrition among stroke patients in nursing homes as described by their nurses and by assessments. Registered nurses were interviewed about an individual stroke patient's state of health, care needs, and nursing care received, and nursing records were reviewed. Information on eating, feeding, and nutrition was extracted from the interviews and nursing records. A comprehensive instrument, the Resident Assessment Instrument, was also used to assess these patients' state of health. The domains of eating, feeding, and nutrition were focused on in this study. Manifest content analysis was used. The results showed that more than 80% of the stroke patients in nursing homes were assessed as having some sort of dependence in eating. According to the registered n nurses, 22 out of 40 patients demonstrated different eating disabilities. The number of eating disabilities in individual patients ranged from 1 to 7, which emphasized the complexity of eating disabilities in stroke patients. Dysphagia was reported in almost one-fourth of the patients, and 30% were described and/or assessed as having a poor food intake or poor appetite. The registered nurses' descriptions of the eating disabilities, nutritional problems, and their care were often vague and unspecific. Only six weights were documented in the nursing records, and there were no nutritional records. The findings highlight the importance of making careful observations and assessments, and of maintaining documentation about eating and nutrition early after a patient's arrival in the nursing home to enable appropriate care and promotion of health.

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Abstract: The purpose of nutrition screening is to identify individuals at high nutritional risk. Given that dietitians cannot always carry out screening in health-care facilities, tools should be simple and based on data obtained from the nursing admission questionnaire. This study was conducted to develop timely and valid tools for screening protein-energy malnutrition (PEM). A dietetic technician administered an initial screening tool to 160 subjects recruited from two settings. This tool comprised nine PEM risk factors. The sample included 54 adults in acute care, 57 elderly adults in acute care,

and 49 elderly adults in long-term care. Dietitians performed comprehensive nutritional assessments to determine the validity of this screening tool. Stepwise regression analysis revealed significant risk factors among those included in the initial screening. These risk factors were considered during development of the first simple screening tool, which encompassed body mass index (BMI) and percentage of weight loss, and classified subjects as having low or high PEM risk levels. A second tool using BMI and albumin level was tested in cases where an albumin measurement was available upon admission. These simple tools had validity indices of 75.9% or higher, except in adults in acute care; sensitivity was low in this group. The tools proved helpful in establishing dietitians' priorities for involvement and in initiating early nutritional care.

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Abstract: BACKGROUND: Taste and smell losses occur with aging. These changes may decrease the enjoyment of food and may subsequently reduce food consumption and negatively influence the nutritional status of elderly persons, especially those who are frail. The objective of this study was to determine if the addition of flavor enhancers to the cooked meals for elderly residents of a nursing home promotes food consumption and provides nutritional benefits. METHODS: We performed a 16-week parallel group intervention consisting of sprinkling flavor enhancers over the cooked meals of the "flavor" group (n = 36) and not over the meals of the control group (n = 31). Measurements of intake of the cooked meals were taken before and after 8 and 16 weeks of intervention. Appetite, daily dietary intake, and anthropometry were assessed before and after the intervention. RESULTS: On average, the body weight of the flavor group increased (+1.1 +/- 1.3 kg; P <.05) compared with that of the control group (-0.3 +/- 1.6 kg; p <.05). Daily dietary intake decreased in the control group (-485 +/- 1245 kJ; P <.05) but not in the flavor group (-208 +/- 1115 kJ; P =.28). Intake of the cooked meal increased in the flavor group (133 +/- 367 kJ; P <.05) but not in the control group (85 +/- 392 kJ). A similar trend was observed for hunger feelings, which increased only in the flavor group. CONCLUSION: Adding flavor enhancers to the cooked meals was an effective way to improve dietary intake and body weight in elderly nursing home residents.

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Abstract: This case study, in a Veterans Affairs Alzheimer's unit, was conducted to evaluate noise and lighting conditions at mealtimes and to assess the food intake of ambulatory dementia residents. The case study compared the noise, lighting, and nutritional intake of 16 Alzheimer's residents eating the same cycle menu in the extended-care (EC) dining room and the Alzheimer's unit (AU) dining room five weeks later. Noise was significantly lower in the EC (P < .02). Lighting was significantly higher in the EC (P < .001). Intake of calories and protein was slightly higher, with some days significantly higher, in the AU. Total five-day fluid intake at breakfast was significantly higher in the AU (P < .02). Although residents' total food and fluid intake was higher in the AU, the project identified a need to decrease noise and increase lighting in the AU. Lighting enhancement and noise reduction may further improve intake, which, in turn, may promote improved nutritional status.

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Abstract: OBJECTIVE: To guide national policy, Congress mandated the 1992 research evaluation of the Elderly Nutrition Program (ENP), the nation's oldest framework for providing community- and home-based preventive nutrition and health-related services to older persons. This article summarizes key findings on the program's influence on nutritional health, the targeting and costs of its nutrition services, and the study's policy implications. DESIGN: The research included a nationally representative sample of ambulatory and homebound ENP participants and a matched sample of nonparticipants drawn from the US Health Care Financing Administration's Medicare beneficiary listings. Interviews conducted in respondents' homes considered demographic and health characteristics and assessed anthropometry and physical functioning, nutrient intake and socialization patterns, and utilization of ENP program services (participants only). Administrative and service delivery data were gathered from all levels of the ENP infrastructure. RESULTS: The ENP program currently provides congregate and home-delivered meals and other nutrition- and health-related services to about 7% of the older population overall, including an estimated 20% of the nation's poor elders. Compared with nonparticipants, ambulatory and homebound ENP participants are better nourished (4% to 31% higher mean daily nutrient intakes; P < .001) and achieve higher levels of socialization (17% higher average monthly social contacts; P <. 001). Federal spending on ENP nutrition services is efficiently leveraged by funding from other public and private sources, allowing ENP to more than double the nutrition services it provides to program participants. CONCLUSIONS: ENP is a well-targeted, effective, and efficient federal program available to dietetics and other professionals for providing elderly persons with community-based and home-delivered nutrition and related services. The ENP infrastructure offers a potential model for preventive nutrition intervention programs in ambulatory and homebound at-risk older populations.

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Abstract: BACKGROUND: This review was carried out because evidence for the effectiveness of nutritional supplements containing protein and energy which are often prescribed for elderly people is limited. Furthermore malnutrition is more common in this age group and deterioration of nutritional status can occur during a stay in hospital. It is important to establish whether supplementing the diet with protein and energy is an effective way of improving outcomes for older people at risk from malnutrition. OBJECTIVES: This review examines the evidence from trials for improvement in nutritional status and clinical outcomes when extra protein and energy food were provided, usually in the form of commercial "sip-feeds." SEARCH STRATEGY: We searched The Cochrane Library (issue 1, 2001), MEDLINE (1966 to February 2001), EMBASE (1980 to March 2001), Health star (1975 to March 2001), CINAHL (1982 to Jan 2001), BIOSIS (1985 to March 2001) and CAB abstracts (1973 to March 2001). We also searched nutrition journals and reference lists and contacted "sip-feed"

manufacturers. Date of most recent search: March 2001. SELECTION CRITERIA: Randomised controlled trials and quasi-randomised controlled trials of oral protein and energy supplementation in older people with the exception of groups recovering from cancer treatment or in critical care. DATA COLLECTION AND ANALYSIS: Two reviewers independently assessed trials prior to inclusion and independently extracted data and assessed trial quality; any differences were resolved by reaching consensus. Authors of trials were contacted for further information as necessary. MAIN RESULTS: Thirty-one trials with 2,464 randomised participants have been included in the review. Most included trials had poor study quality. Mortality data were combined for meta-analysis from twenty-two trials (1,755 participants). The Relative Risk (RR) indicated a lower mortality in the supplemented group compared with the control group (0.67; 95% confidence interval [CI] 0.52 to 0.87). The risk of complications (total complications if available, otherwise for example the number of infections by the end of follow-up) from nine trials (608 participants) showed no significant difference (RR 0.93, 95% CI 0.77 to 1.13). We were unable to combine trials for meta-analyses of functional outcome, for example grip strength, walking distance, and Barthel Index, however there was little evidence of benefit to functional outcomes from individual studies. Data describing length of stay were available from seven trials (658 participants). There was some indication that mean length of stay was shorter for the supplemented groups (-3.4 days, 95% CI -6.12 to -0.69). CONCLUSIONS: Supplementation appears to produce a small but consistent weight gain. There was a statistically significant beneficial effect on mortality and a shorter length of hospital stay. Additional data from large-scale multi-centre trials are still required to provide clear evidence of benefit from protein and energy supplements on mortality and length of hospital stay. Too few data were reported and the time scale of most studies was too short to have a realistic chance of detecting differences in morbidity, functional status and quality of life. Furthermore, most trials do not address the organisational and practical challenges faced by practitioners trying to meet the individual needs and preferences of those at risk from malnutrition.

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     Abstract: OBJECTIVES: To identify nursing home factors associated with the use of tube feeding in advanced cognitive impairment. DESIGN: Descriptive study. SETTING: The On-line Survey Certification of Automated Records (OSCAR) was used to obtain facility characteristics from 1,057 licensed nursing homes in six states from 1995 to 1996. PARTICIPANTS: Residents aged 65 and older with advanced cognitive impairment who had a feeding tube placed over a 1-year period were identified using the Minimum Data Set. MEASUREMENTS: Nursing home characteristics independently associated with feeding tube placement were determined. RESULTS: Having a full-time speech therapist on staff, more licensed nurses and fewer nursing assistants were independently associated with greater use of tube feeding in severely cognitively impaired residents. Other features associated with tube feeding included larger facility size, higher proportion of

Medicaid beds, absence of an Alzheimer's disease unit, pressure ulcers in 10% or more of residents, and a higher proportion of residents lacking advance directives and with total functional dependency. CONCLUSIONS: Assessment by a speech therapist, staffing ratios, advance directives, fiscal considerations, and specialized dementia units are potentially modifiable factors in nursing homes that may influence the practice of tube feeding in advanced cognitive impairment.

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Abstract: One-half of the residents in nursing homes have some type of malnutrition. Unintentional weight loss of 5% in 30 days or 10% in 180 days or less should trigger an assessment. Causes may include the quality of the food that is served and the current medications that the patient is taking. The clinician must study the medical record, laboratory values, nurses' notes, and other data. He or she must also discuss the resident's condition with the certified nursing assistants and interview the resident. The "Clinical Guide to Prevent and Manage Malnutrition in Long-Term Care," included here, is a tool to help assess the patient and to deliver good care.

55. *Nordenram, G.; Ljunggren, G.; and Cederholm, T. Nutritional status and chewing capacity in nursing home residents. Aging (Milano). 2001 Oct;13(5):370-7.*
Abstract: Chronically ill elderly persons sustain a high risk for protein-energy malnutrition (PEM). In this study we explored some of the complex associations between nutritional status, dental health, and cognitive and physical function in 192 nursing home residents (mean age 84+/-8 years, 80% female). Nutrition-related data from the Resident Assessment Instrument (RAI) were compiled into a Nutrition Score (NuSc; 0-1 = non- PEM, 2 = risk for PEM, and 3-7 = PEM). Chewing capacity, according to number and condition of occlusal contacts, was determined by a Clinical Dental Functionality score (CDF). The Cognitive Performance Scale (CPS) and activities of daily living (ADL) were determined according to the RAI. Fifty percent of the residents had NuSc > 2, and 25% had NuSc > 3. One-third did not have the dental prerequisites for chewing. i.e., < 4 occlusal contacts. Almost half of the residents had severe cognitive dysfunction, and over two-thirds were severely limited in their ADL activities. Subjects with > 4 occlusal contacts, i.e., technical chewing capacity, had better NuSc (1.5+/-1.4) than those not able to chew (2.4+/-1.6, P = 0.0005). In univariate logistic regression, the odds for NuSc > 2 increased with reduced ADL functions, inability to chew, and poor cognition. In multivariate logistic regression, ADL and chewing capacity were significantly related to NuSc > 2. When NuSc > 3 was chosen as cut-off, only ADL was related to malnutrition. In conclusion, half of this group of nursing home residents appeared to be malnourished, or were at risk for PEM. Reduced physical function was the strongest predictor of PEM, while impaired chewing capacity was associated with risk for PEM.

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57. *Pagan, J. Mealtimes are a big deal. Contemp Longterm Care. 2001 Jan;24(1):18.*

58. *Paquet, C.; St-Arnaud-McKenzie, D.; Kergoat, M. J.; Ferland, G.; and Dube, L. Direct and indirect effects of everyday emotions on food intake of elderly patients in institutions. J Gerontol A Biol Sci Med Sci. 2003 Feb;58(2):153-8.*

Abstract: BACKGROUND: Decreased food intake is an important risk factor for malnutrition, which is highly prevalent among geriatric patients. The emotional nature of the hospitalization experience and the complex organizational setting involved in meal production and delivery services in institutions increase the risk for decreased food intake. Everyday emotions are known to have a particularly strong influence on decision-making and behavior in the elderly, and have also been shown, in younger populations, to influence food intake and its psychological antecedents, such as quality perception and satisfaction judgments. The objective of this paper is to study the direct impact of elderly patients' everyday emotions on food intake and their indirect effects mediated by quality perceptions and satisfaction judgments. METHODS: Thirty patients (20 women, 10 men, 65-92 age range) in a geriatric rehabilitation unit were observed on repeated meal episodes (average of 46 care episodes per patient) where they provided self-reports for emotions (positive emotions, anger, anxiety, and mild depressed feelings), perceived meal quality, and satisfaction. Food intake was measured in terms of energy and protein content. RESULTS: The impact on food intake was favorable, and both direct and indirect for positive emotions, direct and negative for anxiety, direct and positive for mild depressed feelings, and indirect and negative for anger. Indirect effects were mediated by quality perception judgments but not by satisfaction, which was not significantly related to food intake. CONCLUSION: Results suggest that, given their impact on food intake, measuring and monitoring patients' everyday emotions may be an important innovative strategy to improve food intake of elderly patients in institutions.

59. *Pasman, H. R.; The, B. A.; Onwuteaka-Philipsen, B. D.; Van Der Wal, G.; and Ribbe, M. W. Feeding nursing home patients with severe dementia: a qualitative study. J Adv Nurs. 2003 May;42(3):304-11.*

Abstract: AIM: To describe the nature of problems nurses face when feeding nursing home patients with severe dementia, and how they deal with these problems. BACKGROUND: In our study on starting or withholding artificial nutrition and hydration for nursing home patients with dementia, we found that many problems in feeding arose (long) before any decision was made about artificial feeding, namely from the first moment a patient needed help with meals. Because "ordinary feeding" was experienced as a daily recurring problem for nurses, we decided to investigate this within the study. METHODS: Participant observation by two researchers in two Dutch nursing homes. FINDINGS: Nurses interpreted the aversive behaviour of patients differently, and a link between interpretation and responses (stop or continue feeding) was observed. Differences in interpretation with regard to the same patient were observed in nurses in five of the seven units. Only in three units did nurses discuss their different interpretations in an attempt to find out why a patient avoided food and fluids and how to deal with these problems. CONCLUSIONS: Nurses' interpretations of aversive behaviour of patients differ. No definite conclusions can be drawn about the causes of the aversive behaviour observed, because they cannot be verified. We recommend that interpretations of the behaviour of particular patients should be discussed by nurses with physicians, other disciplines, and the patient's family to obtain more insight into all its possible causes and to determine together the most likely interpretation and appropriate way in which to deal with the aversive behaviour. This

would give nurses more confidence and improve the quality and continuity of care provided. To structure the search for possible causes of aversive behaviour, we developed a framework of causes of aversive behaviour and domains of functioning.

60. **Pearson, A.; Fitzgerald, M.; and Nay, R. (Professor of Nursing, School of Nursing and Midwifery, La Trobe University, Bundoora, Victoria 3083, Australia). Mealtimes in nursing homes: the role of nursing staff. Journal of Gerontological Nursing. 2003 Jun;29(6):40-7.**
Abstract: The literature suggests that food service largely has become identified as a non-nursing duty and as a task that should be completed as quickly as possible. This conflicts with the evidence that social interaction at mealtimes has the potential to promote well-being. Using observational and interview techniques, the social and functional context of meal service in 10 nursing homes was examined in this study. The findings from the observation of and interviews with staff are reported in this article. Three broad themes describing the cultural practices of nursing home staff during mealtimes are identified as follows: maintaining personal identity, assisting individuals to eat, and maintaining interaction. Alongside residents' general outward acquiescence to the service, nurses did not see problems and deficiencies with the service observed by the researchers or reported by the residents. Recommendations to improve mealtime service in nursing homes have been put forward in an effort to enlighten staff.

61. **Persson, M.; Elmstahl, S.; and Blabolil, V. The reproducibility of a new dietary record routine in geriatric patients. Clin Nutr. 2002 Feb;21(1):15-25.**
Abstract: BACKGROUND AND AIM: Malnutrition in nursing home residents is an important clinical and public health problem. Knowledge is lacking about the reproducibility of dietary recording in geriatric patients. Few studies have described water intake in this age group. The aim of this study was to test the reproducibility of a 7-day dietary record routine in a clinical setting. METHODS: The dietary intake of 81 geriatric patients was recorded for two discrete periods of 7 consecutive days by the ward staff. The dietary record routine, which assessed both food and fluid intake, was based on standardized portion sizes and household measurements. RESULTS: The mean daily energy intake during the first period was 7.07 MJ and 6.84 MJ during the second period, with a mean difference of 4%. Corresponding values and the mean difference for water intake from food and beverages were 1781 g, 1702 g, and 4% respectively. Age, gender, diagnosis, length of stay, diets, or ADL function did not influence the results. The correlation coefficient for fluid intake between the periods was 0.84 for women and 0.72 for men. CONCLUSION: The 7-day dietary record routine seems to have a good reproducibility in assessing the intake of energy and fluids in geriatric patients.

62. **Remsburg, R. E.; Luking, A.; Bara, P.; Radu, C.; Pineda, D.; Bennett, R. G.; and Tayback, M. Impact of a buffet-style dining program on weight and biochemical indicators of nutritional status in nursing home residents: a pilot study. J Am Diet Assoc. 2001 Dec;101(12):1460-3.**

63. **Rikkert, M. G., and Hoefnagels, W. H. Nutrition in the terminal stages of life in nursing-home patients. Age Ageing. 2001 Nov;30(6):436-8.**

64. **Robinson, S. B., and Rosher, R. B. (Gerontological Clinical Nurse Specialist, SIU School of Medicine, Springfield, Ill). Can a beverage cart help improve hydration? Geriatric Nursing. 2002 Jul-2002 Aug 31;23(4):208-11.**

Abstract: The purpose of this study was to determine the effectiveness of a hydration program to improve hydration and prevent conditions associated with dehydration (delirium, urinary tract infections, respiratory infections, falls, skin breakdown, and constipation). Data showed a significant increase in fluid in each body compartment, significant decrease in the number of laxatives, increase in the number of bowel movements, decline in the number of falls, and decrease in cost during the hydration period.

65. **Shatenstein, B.; Claveau, D.; and Ferland, G. Visual observation is a valid means of assessing dietary consumption among older adults with cognitive deficits in long-term care settings. J Am Diet Assoc. 2002 Feb;102(2):250-2.**

66. **Sheiham, A., and Steele, J. Does the condition of the mouth and teeth affect the ability to eat certain foods, nutrient and dietary intake and nutritional status amongst older people? Public Health Nutr. 2001 Jun;4(3):797-803.**

Abstract: OBJECTIVES: To assess how the dental status of older people affected their stated ability to eat common foods, their nutrient intake, and some nutrition-related blood analytes. DESIGN: Cross-sectional survey part of nationwide British National Diet and Nutrition Survey: people aged 65 years and older. Data from a questionnaire were linked to clinical data and data from four-day weighed dietary records. Two separate representative samples: a free-living and an institutional sample. Seven-hundred-and-fifty-three free-living and 196 institution subjects had a dental exam and interview. RESULTS: About one in five dentate (with natural teeth) free-living people had difficulty eating raw carrots, apples, well-done steak, or nuts. Foods such as nuts, apples, and raw carrots could not be eaten easily by over half edentate (without natural teeth but with dentures) people in institutions. In free-living, intakes of most nutrients and fruit and vegetables were significantly lower in edentate than dentate. Perceived chewing ability increased with increasing number of teeth. Daily intake of non-starch polysaccharides, protein, calcium, non-haem iron, niacin, vitamin C, and intrinsic and milk sugars were significantly lower in edentate. Plasma ascorbate and retinol were significantly lower in the edentate than dentate. Plasma ascorbate was significantly related to the number of teeth and posterior contacting pairs of teeth. CONCLUSIONS: The presence, number, and distribution of natural teeth are related to the ability to eat certain foods, affecting nutrient intakes and two biochemical measures of nutritional status.

67. **Simmons, S. F.; Babineau, S.; Garcia, E.; and Schnelle, J. F. Quality assessment in nursing homes by systematic direct observation: feeding assistance. J Gerontol A Biol Sci Med Sci. 2002 Oct;57(10):M665-71.**

Abstract: BACKGROUND: Direct observation of care is an important data source for nursing home (NH) quality assessment, especially in light of evidence that chart information is inaccurate or incomplete for many daily care areas. The purpose of this study was to describe a standardized feeding assistance observational protocol that is designed for routine use by external (survey teams) and internal (licensed NH staff) quality assurance personnel to (i) maximize the amount of useful information gained from relatively brief observational periods; (ii) provide specific rules of

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measurement, which allow for replication and valid comparisons between NHs; and (iii) provide specific scoring rules that allow defensible categorical statements to be made about feeding assistance care quality within the NH. Methods. Four feeding assistance care quality indicators (QIs) were defined and operationalized in this study for 302 long-term residents in 10 skilled NHs: (i) Staff ability to accurately identify residents with clinically significant low oral food and fluid intake during mealtime; (ii) Staff ability to provide feeding assistance to at-risk residents during mealtime; (iii) Staff ability to provide feeding assistance to residents identified by the Minimum Data Set as requiring staff assistance to eat; and (iv) Staff ability to provide a verbal prompt to residents who receive physical assistance at mealtimes. RESULTS: There were significant differences between facilities for three of the four QIs. The proportion of participants in each facility where staff "failed" the QIs ranged as follows: (Quality Indicator i) 42% to 91%; (ii) 25% to 73%; (iii) 11% to 82%; and (iv) 0% to 100%. CONCLUSIONS: A standardized observational protocol can be used to accurately measure the quality of feeding assistance care in NHs. This protocol is replicable and shows significant differences between facilities with respect to accuracy of oral intake documentation and the adequacy and quality of feeding assistance during mealtimes.

68. ***Simmons, S. F.; Lam, H. Y.; Rao, G.; and Schnelle, J. F. Family Members' Preferences for Nutrition Interventions to Improve Nursing Home Residents' Oral Food and Fluid Intake. J Am Geriatr Soc. 2003 Jan;51(1):69-74.***

Abstract: OBJECTIVES: To measure family members' preferences for nutrition interventions to improve the oral food and fluid intake of their relatives in a nursing home. DESIGN: Cross-sectional descriptive. SETTING: Three skilled nursing facilities in Southern California. PARTICIPANTS: One hundred five residents from the three skilled nursing facilities and their respective family members. MEASUREMENTS: A mailed questionnaire to family members that consisted of 15 forced-choice comparisons between six nutrition interventions. An assessment of oral food and fluid intake during mealtime for 3 days (nine meals) for each participant using direct observations and estimations of percentage consumed (0% to 100%) by trained research staff. RESULTS: In order of most to least desirable, the family members preferred the following interventions to improve their relative's oral food and fluid intake: (1) improve quality of food; (2) improve quality and quantity of feeding assistance; (3) provide multiple small meals and snacks throughout the day; (4) place resident in preferred dining location; (5) provide an oral liquid nutritional supplement between meals; and (6) provide a medication to stimulate appetite. The average +/- standard deviation total percentage intake for residents whose family members reported that they thought their relative had a problem with their intake was 50%+/- 16%. CONCLUSIONS: Family members prefer that other nutrition interventions be attempted before the use of oral supplements or pharmacological approaches. Family members perceive a need for interventions when residents consume, on average, only half of the food and fluid items provided during mealtime.

69. ***Soderhamn, U., and Soderhamn, O. Reliability and validity of the nutritional form for the elderly (NUFFE). J Adv Nurs. 2002 Jan;37(1):28-34.***

Abstract: AIM: The aim of this study was to test the reliability and validity of the Nutritional Form for the Elderly (NUFFE). BACKGROUND: The prevalence of undernutrition among older people in nursing homes and hospitals reaches high levels. Assessment of older patients' nutritional status is an important task for nurses in clinical care. To use a simple nutritional assessment instrument

for older people is one approach for nurses. Examples of such instruments are the well validated Mini Nutritional Assessment (MNA) and the newly developed NUFFE. METHODS: A total of 114 consecutively chosen, newly admitted older patients in an elder care rehabilitation ward in western Sweden were interviewed using the NUFFE and MNA. Arm and calf circumferences, body mass index (BMI), and presence of pressure sores and skin ulcers were noted as part of the MNA on admission. Weight was monitored and BMI calculated on discharge. Serum albumin levels on admission and discharge were used if these were available in the records. Reliability of the NUFFE was measured as homogeneity. Criterion related validity, concurrent validity, construct validity, and predictive validity were assessed with different statistical methods. The regional research ethics committee approved the study. RESULTS: The results showed that the NUFFE is a fairly reliable and valid instrument for identifying actual and potential undernutrition among older patients. CONCLUSION: The NUFFE is a simple tool for nurses to use to assess older patients with the aim of detecting undernourished individuals and those at risk for undernutrition. When doing a nutritional assessment with the NUFFE, the BMI ought also to be calculated. The assessment could also be combined with food intake recording for a period of time.

70. **Splett, P. L.; Roth-Yousey, L. L.; and Vogelzang, J. L. Medical nutrition therapy for the prevention and treatment of unintentional weight loss in residential healthcare facilities. Journal of the American Dietetic Association. 2003 Mar;103(3):352-362.**
Abstract: OBJECTIVES: To identify the rate of unintentional weight loss (UWL) in adults following their admission into residential health care facilities, assess the effectiveness of a new medical nutrition therapy (MNT) protocol for the prevention and treatment of UWL, and describe nutrition assessment and intervention activities of dietitians. DESIGN: Prospective intervention study in which volunteer dietitians were randomly assigned to usual nutrition care (UC) or MNT protocol care (MNT-PC) groups. Dietitians recruited newly admitted residents and tracked their weights for up to 6 months using standardized weighing procedures. Data on weight outcomes and nutrition care activities were abstracted from medical records and compared between study groups. SUBJECTS/SETTINGS: Thirty-one dietitians from 29 facilities completed the field test (16 MNT-PC, 13 VC). Medical record data were available for 394 residents (223 MNT-PC, 171 UC), and complete weight trend data were available for 364 residents (200 MNT-PC, 164 UC). INTERVENTION: The new MNT protocol for UWL in residential facilities emphasized assessment; intervention (including weighing frequency); communication with staff, medical doctor, family, and resident; and reassessment. MAIN OUTCOME MEASURES: Rate of UWL and weight status 90 days after admission and weight status 90 days after identification of UWL. STATISTICAL ANALYSES: X-3 Independent t test, analysis of variance, and multiple regression using the general linear model. RESULTS: Fourteen of 364 residents (4%) were admitted with significant preexisting weight loss, which was successfully treated in eight residents during the first 90 days. Substantial unintentional weight loss (greater than or equal to 5% in any 30 days) developed in 78 residents (21%). MNT-PC dietitians were more likely to identify UWL. When UWL was identified, and, after providing nutrition care to these residents for an additional 90 days, 32 of 61 residents (52%) maintained or gained weight. Dietitians in UC and MNT-PC groups were equally successful in treating preexisting or post admission unintentional weight loss when it was identified. Differences were found in nutrition care activities. MNT-PC dietitians reported more nutrition assessment activities, whereas UC dietitians reported more intervention activities.

CONCLUSIONS/APPLICATIONS: Nutrition care protocols with standardized weighing procedures can increase the identification of UWL in the residential health care environment. Improved identification supports the additional assessment activities, used by MNT-PC dietitians. Similar outcomes for UC and MNT-PC groups when UWL was identified indicate that usual nutrition care was already a high standard of care for intervention. [References: 50]

71. *Standards of practice. Standards for nutrition support for adult residents of long-term care facilities. Nutrition in Clinical Practice. 2001 Jun;16(3):189-98.*

72. *Teno, J. M.; Mor, V.; DeSilva, D.; Kabumoto, G.; Roy, J.; and Wetle, T. Use of feeding tubes in nursing home residents with severe cognitive impairment. JAMA. 2002 Jun 26;287(24):3211-2.*

73. *The, A. M.; Pasman, R.; Onwuteaka-Philipsen, B.; Ribbe, M.; and van der Wal, G. Withholding the artificial administration of fluids and food from elderly patients with dementia: ethnographic study. BMJ. 2002 Dec 7;325(7376):1326.*
Abstract: OBJECTIVE: To clarify the practice of withholding the artificial administration of fluids and food from elderly patients with dementia in nursing homes. DESIGN: Qualitative, ethnographic study in two phases. SETTING: 10 wards in two nursing homes in the Netherlands. PARTICIPANTS: 35 patients with dementia, eight doctors, 43 nurses, and 32 families. RESULTS: The clinical course of dementia was considered normal and was rarely reason to begin the artificial administration of fluids and food in advanced disease. Fluids and food seemed to be given mainly when there was an acute illness or a condition that needed medical treatment and which required hydration to be effective. The medical condition of the patient, the wishes of the family, and the interpretations of the patients' quality of life by their care providers were considered more important than living wills and policy agreements. CONCLUSIONS: Doctors' decisions about withholding the artificial administration of fluids and food from elderly patients with dementia are influenced more by the clinical course of the illness, the presumed quality of life of the patient, and the patient's medical condition than they are by advanced planning of care. In an attempt to understand the wishes of the patient doctors try to create the broadest possible basis for the decision making process and its outcome, mainly by involving the family.

74. *Troubleshooting your care plans. Improving the quality of nutrition care in LTC. Health Care Food Nutr Focus. 2002 Aug;18(12):1, 3-7.*

75. *van Staveren, W. A.; de Graaf, C.; and de Groot, L. C. Regulation of appetite in frail persons. Clin Geriatr Med. 2002 Nov;18(4):675-84.*
Abstract: Aging is often accompanied by anorexia of aging, described as a decline in appetite resulting in a lower dietary intake, followed by unexplained weight loss and adverse effects on health. This article discusses the main causes of a lack of appetite in frail elderly people. It is clear that appreciation of hedonic qualities of foods declines with age, as does the ability to regulate food intake. Carefully controlled studies, however, have shown favorable results with interventions that stimulate appetite in frail elderly people.

76. *Vogelzang, J. L., and Roth-Yousey, L. L. Standards of professional practice: measuring the beliefs and realities of Consultant Dietitians in Health Care Facilities. J Am Diet Assoc. 2001 Apr;101(4):473-80.*

Abstract: A dietetic practice group of the American Dietetic Association (ADA), Consultant Dietitians in Health Care Facilities (CD-HCF), surveyed members (n = 5,930) on agreement with the six standards of professional practice and frequency of completing indicators within each standard. Sampling approaches included placing a survey in the publication, The Consultant Dietitian, and disseminating at the following CD-HCF activities: the 1998 business meeting at ADA's Annual Meeting & Exhibition, a multi-state teleconference in December 1998, and conferences held between November 1998 to April 1999. Duplication was monitored using the RD or RD-eligible registration number. The final sample included 553 surveys and represented 10% of the membership. Of the survey responders, 50% were individual consultants and 43% were employees; 88% consulted to facilities providing skilled care (geriatrics/adults) and 48% consulted to intermediate care facilities. With the exception of one, all standards and indicators met acceptance criterion. The standard statement "participation in research to enhance practice" did not attain the validation criterion. Study findings indicated that consulting to a facility conducting nutrition research increased chances of agreement with the research participation standard. The Executive Committee approved all standards, indicators, and outcomes as a document defining quality consultation and business services conduct for consultant dietitians in health care facilities.

77. *Wang, S. Y. Weight loss and metabolic changes in dementia. J Nutr Health Aging. 2002 May;6(3):201-5.*

Abstract: Weight loss is common in elderly people with dementia, particularly those with Alzheimer's disease, and feeding difficulties are major issues in their care in the later stages of their disease. This review summarizes data from cross-sectional and longitudinal studies of weight changes with dementia, physiologic aspects of the metabolic and nutritional changes in dementia, and treatment strategies to minimize weight loss.

78. *Wendland, B. E.; Greenwood, C. E.; Weinberg, I.; and Young, K. W. H. (Kunin-Lunenfeld Applied Research Unit, Baycrest Center for Geriatric Care, Ontario, Canada). Malnutrition in institutionalized seniors: the iatrogenic component. Journal of the American Geriatrics Society. 2003 Jan;51(1):85-90.*

Abstract: OBJECTIVES: To provide practitioners with benchmarks for micronutrient supplementation policies for older residents of long-term care (LTC) facilities, based upon residents' usual energy intake. DESIGN: Retrospective secondary analysis of nutrient intake and delivery data, obtained from 21 consecutive collection days. SETTING: A fully accredited geriatric teaching facility, affiliated with the University of Toronto's Medical School, which includes a chronic care hospital and a home for the aged, housing more than 800 senior residents. PARTICIPANTS: Twenty-three cognitively impaired residents who retained the ability to feed themselves. MEASUREMENTS: Average daily micronutrient (vitamin and mineral) content of two common diet types—unrestricted diet as tolerated and lactose-free—were evaluated based upon all foods served during a 28-day cycle of menus, providing an estimate of total possible micronutrient intake. Energy intake needed to meet recommended intakes for each of the micronutrients was then determined and compared with actual dietary intakes. RESULTS: Even if entirely consumed, neither diet (providing approximately 2,000 kcal/d) supplied

sufficient quantities of vitamins (vitamin E, pantothenic acid) and minerals (calcium, zinc, copper and manganese) to enable residents to meet recommended intakes, making these deficiencies iatrogenic in nature. As projected intake levels fell to reflect ranges more consistently observed in LTC residents (1,000-1,500 kcal/d), the number and severity of risk nutrients increased. Similar predictions, based upon actual intake measurements, were made and confirmed. CONCLUSIONS: The traditional approach of developing LTC menus using resources such as Canada's Food Guide or the Food Guide Pyramid of the United States results in iatrogenic malnutrition. New guidelines are needed that are targeted toward the special needs of older adults who have low food intakes. In the interim, all older LTC residents require full-spectrum vitamin and mineral supplements.

79. *West, G. E.; Ouellet, D.; and Ouellette, S. (Reprint available from: West GE Univ Laval Quebec City PQ G1K 7P4 Canada). Resident and staff ratings of foodservices in long-term care: Implications for autonomy and quality of life. Journal of Applied Gerontology. 2003 Mar;22(1):57-75.*
Abstract: Foodservices contribute to the health status, quality of life, and autonomy of long-term care (LTC) residents, yet malnutrition is prevalent. To improve nutritional status, LTC facilities should determine which aspects of foodservices are important to residents and which provoke the most dissatisfaction. Because staff control foodservices, it is equally important to examine their beliefs. Data were collected from nine LTC facilities in Quebec. Means and t tests of differences between residents' (n = 69) and staff's (n = 52) mean importance and satisfaction rankings of 29 foodservice items are presented. Although residents rated foodservice choice and autonomy items lower in importance, these items were generally less satisfied. Staff consistently overrated both importance and satisfaction among residents. Specific recommendations for foodservice quality improvements are discussed in relation to residents' quality of life, autonomy, and nutritional status. [References: 38]

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Abstract: A Nursing Standard continuing professional development article helped Karen Williams to redefine her knowledge of nutrition

81. *Wouters-Wesseling, W.; Wouters, A. E.; Kleijer, C. N.; Bindels, J. G.; de Groot, C. P.; and van Staveren, W. A. Study of the effect of a liquid nutrition supplement on the nutritional status of psycho-geriatric nursing home patients. Eur J Clin Nutr. 2002 Mar;56(3):245-51.*
Abstract: OBJECTIVES: To evaluate the acceptance of a multinutrient liquid nutrition supplement in psycho-geriatric nursing home patients and the effect on weight, plasma nutrients, and activities of daily life. DESIGN: Double-blind, placebo-controlled 12-week intervention study. SETTING: Two nursing homes in Boxtel, The Netherlands. SUBJECTS: Forty-two (body mass index [BMI] <23 kg/m2 for men or <25 kg/m2 for women) psycho-geriatric nursing home patients aged 60 years or over. INTERVENTIONS: Provision with a complete micronutrient-enriched liquid nutrition supplement of 125 ml and 0.6 MJ (135 kcal) or placebo twice daily during daytime between main meals. Study parameters were assessed at 0, 6, and 12 weeks. MAIN OUTCOME FOR MEASURES: Weight, Barthel index of daily activities, several plasma values (albumin, C-reactive protein [CRP],

homocysteine, thiamine, thiamine diphosphate [TDF], vitamin B6, vitamin B12, folic acid, vitamin D), bowel function. RESULTS: The supplement was well accepted. Thirty-five patients completed the intervention period (16 control group; 19 supplement group). Baseline daily nutrient intake was low. A statistically significant improvement was observed for body weight (difference between groups 2.2 kg, P = 0.03), and homocysteine, vitamin B1, TDF, vitamin B6, vitamin B12, folate, and vitamin D in the supplement group compared to the placebo group. No significant difference was observed in the Barthel index (mean difference -0.3+/-1.1 for both groups). No difference in occurrence of diarrhea was observed. CONCLUSIONS: The study shows that nutritional supplementation is well accepted and can improve the nutritional status of psycho-geriatric nursing home patients. SPONSORSHIP: Numico Research BV.

82. **Yamashita, B. D.; Sullivan, D. H.; Morley, J. E.; Johnson, L. E.; Barber, A.; Olson, J. S.; Stevens, M. R.; Reinhart, S. P.; Trotter, J. P.; and Olave, X. E. The GAIN (Geriatric Anorexia Nutrition) Registry: The Impact of Appetite and Weight on Mortality in a Long-term Care Population. J Nutr Health Aging. 2002;6(4):275-81.**
Abstract: PURPOSE: To investigate nursing home residents at high nutritional risk to determine: 1) which baseline nutrition or health status indicators correlated with subsequent weight gain or appetite improvement; and, 2) whether a continued weight loss correlated with higher mortality. METHODS: At study entry, nutritional, health status, and demographic data were extracted from the nursing home chart or the MDS. Each subject was tracked for 6 months with survival, weight gain of 5%, and appetite improvement the primary outcome measures. RESULTS: During the 6-month study, younger age was the strongest correlate of appetite improvement. The odds of gaining weight were negatively correlated with BMI, age, and feeding dependency. Subjects who were receiving appetite stimulants (orexigenics) at study entry had a 70% greater probability of gaining weight than those who were not. A weight loss during the 6-month period was associated with a nearly two-fold increase in the likelihood of dying (adjusted RR: 1.95, 95% CI 1.43 to 2.66). CONCLUSION: The course of nutritional problems within nursing homes is highly variable. Continued weight loss, however, appears to have ominous implications for mortality. Younger residents who are not dependent on others for feeding assistance, and who receive orexigenics, tend to experience weight gain.

83. **Yen, P. K. Treating diabetes with diet. Geriatr Nurs. 2002 May-2002 Jun 30;23(3):175-6.**

84. **Young, J. and Fawcett, T. Artificial nutrition in older people with dementia: moral and ethical dilemmas. Nurs Older People. 2002 Jul-2002 Aug 31;14(5):19-21.**

85. **Young, K. W.; Binns, M. A.; and Greenwood, C. E. Meal delivery practices do not meet needs of Alzheimer patients with increased cognitive and behavioral difficulties in a long-term care facility. J Gerontol A Biol Sci Med Sci. 2001 Oct;56(10):M656-61.**
Abstract: BACKGROUND: Alterations in circadian rhythms and behavioral difficulties likely impact meal consumption patterns in elderly individuals with probable Alzheimer's disease (AD). Despite these known changes, the profile of meals provided in the institution parallels the needs of younger, free-living, healthy populations. This investigation examined the impact of food delivery patterns on achieved intakes in elderly individuals with probable AD in a long-term care facility and how

this relationship changes depending on time of day, body weight status, behavioral function, and cognitive ability. METHODS: Twenty-one consecutive days of investigator-weighed food intake and delivery collections were conducted on 25 elderly individuals with probable AD who maintained the ability to self-feed. RESULTS: Energy consumed was positively associated with energy delivered for the majority of subjects, although the strength of this relationship varied across subjects and throughout the day. Energy delivered had the greatest impact on energy consumed at breakfast and the least impact at dinner in those with the greatest behavioral difficulties and cognitive impairment. Although those with low body mass indexes (BMIs) were likely to be delivered more energy, the impact of delivery on intakes decreased as energy delivered increased. CONCLUSIONS: Delivering excess energy to patients with poor BMIs likely does not result in increased energy consumption. Behavioral and cognitive deterioration leads to a shift in the time of day that energy delivered has an impact on energy consumption, with the most progressed individuals being most impacted by foods delivered in the morning, suggesting that traditional meal practices are inappropriate for elderly individuals with AD.

86. ***Young, K. W., and Greenwood, C. E. Shift in diurnal feeding patterns in nursing home residents with Alzheimer's disease. J Gerontol A Biol Sci Med Sci. 2001 Nov;56(11):M700-6.***
Abstract: BACKGROUND: Individuals with Alzheimer's disease (AD) are highly susceptible to weight loss and malnutrition, which, to date, have not been associated with decreased food consumption. The current study examined food intake patterns and how they change in relation to body mass index (BMI), behavioral function, and cognitive status in institutionalized seniors with AD. METHODS: Twenty-one consecutive days of investigator-weighed food intake collections were conducted on 25 subjects with likely AD residing at a home for the aged. All subjects maintained the ability to self-feed. RESULTS: Eighty-eight percent of participants did not meet targeted energy needs, including an estimated 37% prevalence of protein inadequacy. Subjects with increased behavioral difficulties, based on the London Psychogeriatric Rating Scale, had reduced meal-related intakes that were highly associated with decreased energy consumption at dinner. With behavioral changes, particularly increased mental disorganization and confusion, there was a shift in circadian eating patterns such that the greatest proportion of daily energy was consumed at breakfast. Individuals with low BMIs tended to be those with more behavioral difficulties, such that BMI was also associated with the shift in overall eating patterns. CONCLUSIONS: Changes in behavioral function in seniors with AD result in a circadian shift in intake patterns with the preponderance of calories consumed at breakfast in those with increased behavioral difficulties. This shift in eating patterns associates both with poor overall intake and poor BMI.

Elimination Selected Articles 2001–2003

1. *Alessi, C. A.; Ouslander, J. G.; Maldague, S.; Al-Samarrai, N. R.; Saliba, D.; Osterweil, D.; Beck, J. C.; and Schnelle, J. F. (University of California at Los Angeles Multicampus Program in Geriatric Medicine and Gerontology, Los Angeles, CA, calessi@ucla.edu). Incidence and costs of acute medical conditions in long-stay incontinent nursing home residents. Journal of the American Medical Directors Association. 2002 Jul-2002 Aug 31;3(4):229-42.*

   Abstract: OBJECTIVES: To determine the incidence of acute medical conditions in incontinent nursing home residents, and associated costs of diagnostic testing and treatment. DESIGN: Prospective, cohort study. SETTING: Three community nursing homes. PARTICIPANTS: 161 long-stay residents with urinary incontinence in (mean age 86 years, 77% female, 92% white). MEASUREMENTS: Acute medical conditions were identified prospectively through medical record review based on standardized criteria. All diagnostic testing and treatment provided for these conditions were recorded, and related costs in the nursing home were assigned based on 1997-1998 Medicare and Medicaid reimbursement. RESULTS: The highest incidences of illness were for dermatological conditions (107 episodes per 1,000 patient-weeks, involving 70% of subjects), respiratory illnesses (29 per 1,000 patient-weeks, 47% of subjects) and gastrointestinal illnesses (24 per 1,000 patient-weeks, 36% of subjects). Among episodes with an incidence of at least 5 per 1,000 patient-weeks, the illness events with the highest median diagnostic testing and treatment costs per episode were pneumonia, acute bronchitis, and depression. Only 42 out of the total 1,071 episodes identified resulted in a hospitalization. Significant predictors of higher illness incidence included greater baseline comorbidity and higher number of routine medications (model adjusted R-square = 0.319, P = 0.021). CONCLUSION: Acute illness is very common among incontinent nursing home residents, and is generally diagnosed and treated at the nursing home site, with variation among conditions in associated costs. Important policy implications include resource allocation (including appropriate staffing patterns), educational and quality improvement activities, and future research and guideline development for the optimal management of medical conditions in the nursing home setting

2. *Bates-Jensen, B. M.; Alessi, C. A.; Al-Samarrai, N. R.; and Schnelle, J. F. The effects of an exercise and incontinence intervention on skin health outcomes in nursing home residents. J Am Geriatr Soc. 2003 Mar;51(3):348-55.*

   Abstract: OBJECTIVES: To examine skin health outcomes of an exercise and incontinence intervention. DESIGN: Randomized controlled trial with blinded assessments of outcomes at three points over 8 months. SETTING: Four nursing homes (NHs). PARTICIPANTS: One hundred ninety incontinent NH residents. INTERVENTION: In the intervention group, research staff provided exercise and incontinence care every 2 hours from 8:00 a.m. to 4:30 p.m. (total of four daily care episodes) 5 days a week for 32 weeks. The control group received usual care from NH staff. MEASUREMENTS: Perineal skin wetness and skin health outcomes (primarily blanchable erythema and pressure ulcers) as measured by direct assessments by research staff, urinary and fecal incontinence frequency, and percentage of behavioral observations with resident engaged in standing or walking. RESULTS:

Intervention subjects were significantly better in urinary and fecal incontinence, physical activity, and skin wetness outcome measures than the control group. However, despite these improvements, differences in skin health measures were limited to the back distal perineal area, which included the sacral and trochanter regions. There was no difference between groups in the incidence rate of pressure ulcers as measured by research staff, even though those residents who improved the most on fecal incontinence showed improvement in pressure ulcers in one area. CONCLUSION: A multifaceted intervention improved four risk factors related to skin health but did not translate into significant improvements in most measures of skin health. Even if they had adequate staffing resources, NHs might not be able to improve skin health quality indicators significantly if they attempt to implement preventive interventions on all residents who are judged at risk because of their incontinence status.

3. **Bean, J. F.; Kiely, D. K.; Cairns, K. D.; and Morris, J. N. Influence of poststroke urinary incontinence on disability: the nursing home setting. Am J Phys Med Rehabil. 2003 Mar;82(3):175-81.**

Abstract: OBJECTIVE: To characterize the association of poststroke urinary incontinence with disability progression in nursing home residents. DESIGN: In this prospective cohort study, the Minimum Data Set from the State of New York between 1994 and 1997 was utilized. From a pool of over 240,000 potential subjects, 500 met inclusion/exclusion criteria. Previously continent, first-time stroke survivors were classified as being continent or incontinent immediately after their stroke and were followed for changes in activities of daily living status (disability) at quarterly intervals for a 1 year. In addition, a post hoc analysis was performed examining changes in activities of daily living status from the prestroke condition and exploring the relationship between poststroke impairments in continence and limitations in mobility. RESULTS: An almost 2-fold difference in level of disability was noted poststroke among those who were incontinent those who were continent (P < 0.001). This difference in disability level remained unchanged for 1 year. Through the post hoc analysis, it was determined that, although the onset of stroke produced significant elevations in disability for both continent and incontinent stroke survivors (P < 0.001), the presence of an impairment in urinary continence was associated with a significantly greater increase (94% 13%) in disability (P < 0.001). In addition, incontinence occurred more frequently among those who had a loss in mobility function. CONCLUSION: Incontinence is a clinical factor after stroke that is associated with greater disability among nursing home residents. These findings have clinical implications for physiatrists and nursing home clinicians and provide a context in which future disability research can be conducted.

4. **Bland, D. R.; Dugan, E.; Cohen, S. J.; Preisser, J.; Davis, C. C.; McGann, P. E.; Suggs, P. K.; and Pearce, K. F. The effects of implementation of the Agency for Health Care Policy and Research urinary incontinence guidelines in primary care practices. J Am Geriatr Soc. 2003 Jul;51(7):979-84.**

Abstract: OBJECTIVES: To determine whether a multifaceted intervention based on the Agency for Health Care Policy and Research (AHCPR) Clinical Practice Guidelines for Urinary Incontinence would increase primary care physician screening for and management of urinary incontinence (UI). DESIGN: Group randomized trial, conducted from 1996 to 1997. SETTING: Internal medicine and family medicine community practices. PARTICIPANTS: Forty-one primary care practices, including 57 physicians and their staff and 1,145 patients aged 60 and older. INTERVENTION: Twenty of

the 41 primary care practices in North Carolina were randomized to a composite intervention that included a 3-hour continuing medical education accredited course, training in management of UI, patient educational materials, and on-site physician and office support. The remaining 21 practices served as "usual care" controls. Telephone surveys of UI status and quality of life were obtained from 1,145 patients before the intervention. At 1 year, patients and physicians were contacted by telephone and mail to determine the effect of the educational intervention. MEASUREMENTS: Patients completed telephone surveys to assess screening for UI, UI status, treatment interventions, and quality of life. Physicians completed surveys related to UI treatment and practice patterns. RESULTS: Baseline and endpoint telephone surveys were completed by 668 of 1,145 (58%) of patients, who were cared for by 45 physicians (10 internists, 35 family medicine). Physician screening rates for UI were 22% for those patients who did not report UI. UI was reported by 39.5% of patients at baseline, of whom 30% reported being asked about UI by their primary care physician during the study. Rates of assessment and management of existing UI were low in both the control and intervention groups. Additional historical questioning indicated that 54.2% reported that they had ever undergone assessment, including history, urinalysis, or testing, or had had management of their UI by any physician. CONCLUSION: Attempts at increasing screening and management of UI by primary care physicians using the AHCPR standardized guidelines using a multifaceted system of educational and logistical support were not successful. These guidelines may not be the best approach to treating UI in the primary care setting.

5. **Borrie, M. J.; Campbell, K.; Arcese, Z. A.; Bray, J.; Hart, P.; Labate, T.; and Hesch, P. Urinary retention in patients in a geriatric rehabilitation unit: prevalence, risk factors, and validity of bladder scan evaluation. Rehabil Nurs. 2001 Sep-2001 Oct 31;26(5):187-91.**
Abstract: The purpose of this study was to identify risk factors for urinary retention (UR) in frail, elderly patients, to determine its prevalence, and to assess the validity of the use of the BladderScan BVI 2500+ ultrasound scanner to measure postvoid residual urine volumes of > 150 ml. Probable UR was defined as two consecutive ultrasound scans with postvoid residual urine estimations of > 150 ml. The estimates were confirmed by in- and out-catheterization of actual postvoid residual urine (PVR). Risk factors for UR were the independent variables used in the regression analysis. Nineteen of the 167 people (11%) had UR. The risk of UR was greatest among patients who were older, or who were on anticholinergic medication, or who had diabetes of long standing, or who had fecal impaction. The correlation between paired scans and catheter volumes of > 150 ml was 0.87. The results suggest that the BladderScan BVI 2500+ ultrasound scanner, when used by trained nursing staff, provides conservative and valid estimates of PVR of > 150 ml in people undergoing geriatric rehabilitation.

6. **Brooks, V. Treat incontinence early. Nurs Stand. 2002 May 1-2002 May 7;16(33):22.**

7. **Colley, W. Continence services in a changing NHS. Nurs Times. 2002 Apr 23-2002 Apr 29;98(17):58-9.**

8. ***Cooper, P., and Gray, D. Comparison of two skin care regimes for incontinence. Br J Nurs. 2001 Mar;10(6 Suppl):S6, S8, S10 passim.***

Abstract: It is estimated that 30% of nursing home residents may be faecally incontinent, with those figures rising to 60% for patients in long-stay hospitals (Royal College of Physicians, 1995). Maintaining skin integrity for these patients can be complex. With little clinical information to support carers, choosing a skin care regime that maintains skin integrity for this high-risk group can be difficult. This study aims to compare two recognized skin care regimes, used in the cleansing of patients' skin following an episode of incontinence, and their impact on patients' skin integrity. A total of 93 patients were recruited to the trial from five care of the elderly or dependent service providers. The subjects were randomly allocated to either group A (soap and water; n = 49), or group B (Clinisan (Vernacare); n = 44). Initially, 33 patients in both groups started with healthy skin. However, the results of the final assessment identified only 17 subjects in group A remaining healthy, compared with 27 in group B.

9. ***Durrant, J., and Snape, J. Urinary incontinence in nursing homes for older people. Age Ageing. 2003 Jan;32(1):12-8.***

Abstract: At least 50% of nursing home residents in Britain and North America suffer from urinary incontinence. It is associated with resident and staff morbidity. The assessment and management of such residents will depend on the capacity of the care staff and the capability of the resident. The minimum data set and resident assessment protocol may have a role in the assessment of incontinent residents. Behavioural strategies are more likely to be beneficial than drug treatment.

10. ***Eustice, S.; Roe, B.; and Paterson, J. Prompted voiding for the management of urinary incontinence in adults. The Cochrane Library, (Oxford) ** (4):2002. 2002;(CD002113).***

Abstract: A substantive amendment to this systematic review was last made on 23 February 2000. Cochrane reviews are regularly checked and updated if necessary. BACKGROUND: Prompted voiding is a behavioural therapy used mainly in North American nursing homes. It aims to improve bladder control for people with or without dementia using verbal prompts and positive reinforcement. OBJECTIVES: To assess the effects of prompted voiding for the management of urinary incontinence in adults. SEARCH STRATEGY: We searched the Cochrane Incontinence Group trials register (to January 2002) and reference lists of relevant articles. We contacted investigators in the field to locate extra studies. Date of the most recent searches: January 2002. SELECTION CRITERIA: All randomised or quasi-randomised trials which addressed prompted voiding for the management of urinary incontinence. The trials included adult men and women, with or without cognitive impairment, diagnosed as having urinary incontinence as identified by the trialists, either by symptom classification or by urodynamic investigation. DATA COLLECTION AND ANALYSIS: The identified reports were assessed for eligibility. Two reviewers independently reviewed the selected studies for methodological quality. Data describing six pre-specified outcomes were extracted independently by each reviewer and consensus reached when there was disagreement. Trial investigators were consulted when clarification or further detail was required. A third reviewer was recruited to proofread the review at different stages. MAIN RESULTS: Five trials were included in the review. These involved 355 elderly people, most of whom were women. One other trial was excluded because no relevant outcome data were reported, and one trial is awaiting assessment. Prompted voiding was compared with no prompted voiding in four trials. The limited evidence suggested that prompted

voiding increased self-initiated voiding and decreased incontinent episodes in the short-term. There was no evidence about long-term effects. A single small trial suggested that adding the muscle relaxant, Oxybutinin, reduced the number of incontinent episodes in the short-term: This study used a cross-over design and so did not address long-term effects. REVIEWERS' CONCLUSIONS: There was insufficient evidence to reach firm conclusions for practice. There was suggestive, although inconclusive, evidence of short-term benefit from prompted voiding and from adding the muscle relaxant, Oxybutinin, to prompted voiding. [CINAHL Note: The Cochrane Collaboration systematic reviews contain interactive software that allows various calculations in the MetaView.]

11. *Frenchman, I. B. (President, Pharm Rx Consultants, Inc., Union, New Jersey). Cost of urinary incontinence in two skilled nursing facilities: a prospective study. Clinical Geriatrics. 2001 Jan;9(1):49-52.*
   Abstract: In this original prospective study, the unit costs of caring for incontinent patients in a long-term care facility are determined by observing certified nursing aides in two skilled nursing facilities in New Jersey and timing them during incontinence care episodes. Labor and material costs were calculated. The study population included 30 nursing facility residents who were incontinent of urine only. Costs of incontinence care totaled $17.21 per resident per day, or $6,281.65 per year. The author notes that the results of this study show the high cost of caring for a nursing home resident with urinary incontinence.

12. *Gammack, J. K. Use and management of chronic urinary catheters in long-term care: much controversy, little consensus. J Am Med Dir Assoc. 2003 Mar-2003 Apr 30;4(2 Suppl): S52-9.*
   Abstract: In long-term care facilities, 5% to 15% of residents have chronic urinary catheters in place. Catheters are commonly used for urinary retention, incontinence control, wound management, and patient comfort. The appropriate use and management of these devices continues to be studied and debated. Transurethral catheters are more common than suprapubic or condom-type devices, but no method has been proven superior for use in long-term care. Although some catheter management and infection control measures are well supported in the medical literature, clinical practices still vary widely. The accurate diagnosis of urinary tract infection can be especially challenging in this population. Many aspects of catheter care remain to be clarified, and further research based in chronic care settings is needed.

13. *Garely, A. D., and Burrows, L. J. Current pharmacotherapeutic strategies for overactive bladder. Expert Opin Pharmacother. 2002 Jul;3(7):827-33.*
   Abstract: Overactive bladder (OAB) is a chronic, distressing condition characterised by symptoms of urgency (sudden overwhelming urge to urinate) and frequency (urinating more than eight times daily), with or without urge urinary incontinence (sudden involuntary loss of urine). It affects millions of people of all ages and both sexes worldwide, with greater prevalence in women and the elderly. The treatment of OAB is aimed at reducing debilitating symptoms, which have a significant effect on all aspects of an individual's quality of life, including social, domestic, psychological, occupational, physical, and sexual functioning. Anticholinergic agents are currently recommended as first-line therapy for OAB. Their use results in significant clinical improvement in patients, although a lack of selectivity for receptors in the bladder may lead to troublesome side effects, including dry mouth,

blurred vision, somnolence, dizziness, and constipation. Recent research efforts have focused on developing drugs with a reduced propensity for causing these problems. Of the available anticholinergic agents, oxybutynin and tolterodine are the most widely used to treat OAB. Studies directly comparing tolterodine immediate-release (IR) with oxybutynin IR have shown that the two agents have similar efficacy. However, tolterodine IR is significantly better tolerated, particularly with respect to the incidence and severity of dry mouth. An extended-release formulation of tolterodine (4 mg capsules) has recently been developed to allow for once-daily dosing. In addition to greater convenience, tolterodine extended-release has shown enhanced efficacy and tolerability compared with tolterodine IR.

14. ***Georgiou, A.; Potter, J.; Brocklehurst, J. C.; Lowe, D.; and Pearson, M. Measuring the quality of urinary continence care in long-term care facilities: an analysis of outcome indicators. Age Ageing. 2001 Jan;30(1):63-6.***

Abstract: BACKGROUND: the National Centre for Health Outcomes Development has produced outcome indicators for the assessment of quality of care in the management of urinary incontinence. Three measures relate to the management of older people in long-term care: the prevalence of incontinence, the use of indwelling catheters, and clinical assessment rates. OBJECTIVE: to evaluate the recommended outcome measures in clinical practice. METHOD: participating centres included residential homes, nursing homes, and long-stay wards. We sent a structured questionnaire to each centre for qualitative assessment of the acceptability of the outcome indicators. We analysed data collected by nurses and other staff who used the urinary incontinence section of the Royal College of Physicians Continuous Assessment Review and Evaluation scheme audit tool for long-term care. RESULTS: there were 1,125 residents in 17 residential homes, 14 nursing homes, and five long-stay wards. The overall prevalence of urinary incontinence was 34% in residential homes (range 2-86%), 70% in nursing homes (38-100%), and 71% in long-stay wards (4-97%). Catheterization rates were 5% in residential homes (0-20%), 10% in nursing homes (0-44%), and 6% in long- stay wards (0-20%). Rates of full clinical assessment were 48%, 24%, and 36% respectively. CONCLUSION: there is great variability in these outcome measures within and between settings. Interpretation of outcome results requires more precise details on case-mix and the definition of outcome measures. Individual units found the audit tool helpful, but we advise caution with interpretation of outcomes between units.

15. ***Hu, T. W.; Wagner, T. H.; Bentkover, J. D.; LeBlanc, K.; Piancentini, A.; Stewart, W. F.; Corey, R.; Zhou, S. Z.; and Hunt, T. L. Estimated economic costs of overactive bladder in the United States. Urology. 2003 Jun;61(6):1123-8.***

Abstract: OBJECTIVES: To estimate the economic costs of overactive bladder (OAB), including community and nursing home residents, and to compare the costs in male versus female and older versus younger populations. METHODS: The National Overactive Bladder Evaluation Program included a representative telephone survey of 5,204 community-dwelling adults 18 years and older in the United States and a follow-up postal survey of all individuals with OAB identified and age and sex-matched controls. The postal survey asked respondents about bladder symptoms, self-care use, treatment use, work loss, and OAB-related health consequences. Survey data estimates were combined with year 2000 average cost data to calculate the cost of OAB in the community. Institutional costs were estimated from the costs of urinary incontinence in nursing homes, limited

to only those with urge incontinence or mixed incontinence (urge and stress). RESULTS: The estimated total economic cost of OAB was 12.02 billion dollars in 2000, with 9.17 and 2.85 billion dollars incurred in the community and institutions, respectively. Community female and male OAB costs totaled 7.37 and 1.79 billion dollars, respectively. The estimated total cost was sensitive to the estimated prevalence of OAB; therefore, we calculated the average cost per community-dwelling person with OAB, which was 267 dollars per year. CONCLUSIONS: By quantifying the total economic costs of OAB, this study—the first obtained from national survey data—provides an important perspective of this condition in society. The conservative estimates of the total cost of OAB were comparable to those of osteoporosis and gynecologic and breast cancer. Although this provides information on the direct and indirect costs of OAB, quality-of-life issues must be taken into account to gain a better understanding of this condition.

16. *Hvistendahl, G. M., and Djurhuus, J. C. (Institute of Experimental Clinical Research, Aarhus University Hospital—Skejby, Denmark). Female nocturia. [Review] [54 refs]. International Urology & Nephrology. 2002;33(1):179-86.*
Abstract: Many elderly experience nocturia to such a degree that it influences their quality of life. Different studies use equivocal definitions when trying to analyze data on nocturia. The literature on etiology of female nocturia is sparse, whereas male nocturia has been studied rather extensively because of the association with lower urinary tract symptoms (LUTS). At present the few studies on female nocturia questions the fact that male and female nocturia have identical etiologies. This review will go through the present reports on prevalence and etiology of nocturia among women with reference to the male situation. [References: 54]

17. *Jirovec, M. M., and Templin, T. (Wayne State University, College of Nursing, 5557 Cass Ave., Detroit, MI 48202). Predicting success using individualized scheduled toileting for memory-impaired elders at home. Research in Nursing & Health. 2001 Feb;24(1):1-8.*
Abstract: OBJECTIVE: The primary purpose of the study was to determine if functional incontinence (FI) could be reduced in memory-impaired incontinent elders who had an individualized scheduled toileting (IST) program. With an understanding of the burden IST places on caregivers, we were also interested in being able to predict which elders would be candidates for IST by their caregivers. DESIGN: A 2x2 mixed design analysis of variance (group by time) was used. SETTING: Research subjects' homes. POPULATION: Participants were recruited through announcements in newsletters, flyers on bulletin boards, and newspaper advertisements asking for volunteers who were caring for a memory-impaired elder. A total of 118 dyads participated at baseline and at the 6-month follow-up. There were 36 male patients and 82 female patients. There were 39 male caregivers and 82 female caregivers. Mean age of patients was 79.89; mean age of caregivers was 63.14. INTERVENTIONS: Incontinence was calculated as the percentage of time the patient was incontinent by dividing the incontinent episodes by the total number of voiding episodes, both continent and incontinent. Records were kept by caregivers. Mental status of the elder was measured using the Short Portable Mental Status Questionnaire (SPMSQ). The intervention group was taught an individualized scheduled toileting procedure that compensated for cognitive impairment by providing memory-impaired patients toileting reminders. MAIN OUTCOME MEASURE(S): The differences between the groups were examined at 6 months. The two groups were not found to differ in mobility and cognitive ability. Incontinence decreased in the experimental group with almost no change in the

control group. In the experimental group, 28 or the 44 participants still in the study at 6 months showed a decrease in incontinence. Of the 30 control participants, 15 showed some small decrease in incontinent episodes. RESULTS/CONCLUSIONS: The results are consistent with work conducted in nursing homes, where a large proportion of residents are cognitively impaired. In addition to the study describing an effective toileting intervention with cognitively impaired incontinent elders at home, it also identified elders who would become candidates for the toileting program. The decision to apply the IST protocol should be based on the cooperation potential of the patient, as well as on the feasibility of implementing the toileting by the caregiver. The ideal patient for the IST protocol is a patient in the early stages of memory difficulties, who is thus only moderately cognitively impaired. [CINAHL abstract]

18. *Johnson, T. (Acting Chief, Geriatrics and Extended Care, Atlanta VA Medical Center, Geriatrics and Extended Care Service Line/GRECC, 508/11B, 1670 Clairmont Road, Decatur, GA 30033). Nonpharmacological treatments for urinary incontinence in long-term care residents. Journal of the American Medical Directors Association. 2002 Jan-2002 Feb 28;3(1):Suppl:S25-30.*

19. *Johnson, T. M.; Ouslander, J. G.; Uman, G. C.; and Schnelle, J. F. Urinary incontinence treatment preferences in long-term care. J Am Geriatr Soc. 2001 Jun;49(6):710-8.*
Abstract: OBJECTIVE: To elicit preferences for different urinary incontinence (UI) treatments in long-term care (LTC) from groups likely to serve as proxy decision makers for LTC residents. DESIGN: A descriptive, comparative study of preference for UI treatments of frail older adults, family members of nursing home (NH) residents, and LTC nursing staff. Surveys were mailed to families and self-administered by staff. Older adults were interviewed. SETTING: Four LTC facilities and two residential-care facilities in Los Angeles. PARTICIPANTS: Four hundred and three family members of incontinent NH residents were mailed surveys. Sixty-six nursing staff caring for these incontinent residents and 79 older adult residents of care facilities (nine cognitively intact NH respondents and 70 residential care residents) answered surveys. MEASUREMENTS: Preference rankings between seven paired combinations of five different UI treatments were measured on an 11- point visual analog scale, with the verbal anchors "definitely prefer" this treatment, "probably prefer" this treatment, and "uncertain." Respondents gave open-ended comments as well. RESULTS: Forty-two percent of family members (171/ 403) returned the mailed survey. Of all respondents, 85% "definitely" or "probably" preferred diapers, and 77% "definitely" or "probably" preferred prompted voiding (PV) to indwelling catheterization. Respondent groups occasionally differed significantly in their preferences. In choosing between treatment pairs using a visual analogue scale, nurses preferred PV to diapers significantly more than did older adults or families (both of whom preferred diapers) (F $(2,295) = 13.11$, P $< .0001$). Older adults, compared with family and nurse respondents, showed a significantly stronger preference for medications over diapers (F $(2,296) = 41.54$, P $< .0001$). In open-ended responses, older adults stated that they would choose a UI treatment based in part upon criteria of feeling dry, being natural, not causing embarrassment, being easy, and not resulting in dependence. Nurses said that they would base their choice of UI treatment upon increasing self-esteem and avoiding infection. CONCLUSIONS: Although there was wide variation within and between groups about preferred UI treatment, most respondents preferred noninvasive strategies (diapers and PV) to invasive strategies (indwelling catheters and electrical stimulation).

Older adults preferred to a greater degree medications and electrical stimulation, therapies directed at the underlying cause of UI. Despite data documenting that diapering is a less time intensive way to manage UI and that toileting programs are difficult to maintain in LTC, nurses viewed PV as "natural" and strongly preferred it to diapering. Several family members and older adults viewed PV as "embarrassing" and "fostering dependence." These data highlight the need to elicit preferences for UI treatment among LTC residents and their families.

20. **Klausner, A. P., and Vapnek, J. M. (Department of Urology, Box 1272, Mount Sinai School of Medicine, One East 100th Street, New York, NY 10029, USA). Urinary incontinence in the geriatric population. [Review] [22 refs]. Mount Sinai Journal of Medicine. 2003 Jan;70(1):54-61.**

Abstract: BACKGROUND: Urinary incontinence is a widespread, yet potentially treatable, problem in the geriatric population. METHODS: We reviewed the geriatric and urologic literature to provide an update on the definition, diagnosis, and treatment of geriatric urinary incontinence. RESULTS: Urinary incontinence affects 15-30% of elderly individuals in the community and 50% of those living in nursing homes. Both age and gender affect bladder function, and incontinence affects females and males in a ratio of 2:1. Incontinence can be classified as urge, stress, overflow, functional, or mixed. There are many reversible causes of incontinence, and a thorough history and physical examination, including a complete voiding history and a tailored neuro-urologic examination, are required for accurate diagnosis. Treatment options include behavioral modification, medical therapy with anticholinergics or hormone replacement, and surgical intervention. CONCLUSIONS: Urinary incontinence, due to many causes, is a widespread problem among the elderly. Yet many of these causes are reversible with appropriate treatment, often by the primary care provider. Some patients may require urologic referral for sophisticated urodynamic studies and possible surgical intervention, in select cases. [References: 22]

21. **Lackner, T. E. (Professor and Director of Clinical Services, College of Pharmacy, University of Minnesota and The Institute for the Study of Geriatric Pharmacotherapy, 7-11E Weaver-Densford Hall, 308 Harvard Street SE, Minneapolis, MN 55455; lackn001@tc.umn.edu). Pharmacotherapy of urinary incontinence. Journal of the American Medical Directors Association. 2002 Jan-2002 Feb 28;3(1):Suppl:S16-24.**

22. **Lewis-Byers, K., and Thayer, D. An evaluation of two incontinence skin care protocols in a long-term care setting. Ostomy Wound Manage. 2002 Dec;48(12):44-51.**

Abstract: Caring for the skin of patients with incontinence is an essential activity in long-term care. A prospective descriptive study to compare the effect of two skin care protocols on skin condition, pain, and caregiver time was conducted. Thirty-two (32) skilled nursing facility residents with incontinence participated in the 3-week study. Patients were randomly assigned to a standard care regimen (soap and water cleansing after each incontinence episode, followed by application of a moisturizing lotion) or study care protocol (no-rinse skin cleanser after each episode and application of a barrier cream with durable properties after the first incontinence episode of each shift). Number and type of incontinence episodes, skin condition, pain, and caregiver time spent were assessed. Skin integrity was maintained in the majority of control (69%) and study group (72%) patients and improvement occurred in 8% of control and 17% of the study group (NS). Study protocol procedures

took less time to complete than control procedures (a savings of 79 minutes/patient/day). A positive correlation between pain intensity and level of skin impairment was observed (r = 0.88). The results of this study suggest that at this facility, use of soap, water, and a moisturizer may be less effective and more time-consuming than using a no-rinse cleanser and a durable barrier product.

23. **Mather, K. F., and Bakas, T. Nursing assistants' perceptions of their ability to provide continence care. Geriatr Nurs. 2002 Mar-2002 Apr 30;23(2):76-81.**
Abstract: More than 50% of all elderly nursing home residents suffer from urinary incontinence (UI). Although effective urinary continence programs exist, successful implementation continues to be a problem. This qualitative study involved seven focus groups of three to seven nursing assistants each (total n = 31) to examine their perceptions about factors that either promote or inhibit continence care. Better cooperation and increased communication emerged as factors that would improve teamwork and decrease workload. This article includes quotes from individual nursing assistants and a discussion of the factors most commonly identified as promoting or inhibiting care. Nursing assistants are valuable members of the health care team. Knowing their perceptions should allow professional nurses and facility administrators to develop continence programs that better meet the needs of both the nursing assistants who implement them and the residents for whom they care.

24. **McCliment, J. K. Non-invasive method overcomes incontinence. Program retrains residents to recognize the urge to void. Contemp Longterm Care. 2002 May;25(5):15.**

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26. **Morrow, L. Provision of absorbent garments. Nurs Times. 2003 Jan 7-2003 Jan 13;99(1):63.**

27. **Mueller, C., and Cain, H. Comprehensive management of urinary incontinence through quality improvement efforts. Geriatr Nurs. 2002 Mar-2002 Apr 30;23(2):82-7.**
Abstract: This article provides a comprehensive examination of eight factors to analyze the potential and contributing causes of urinary incontinence (UI) in long-term care facilities. These factors can guide quality improvement committees to reduce the prevalence of UI. The eight factors—evidence-based practice, assessment, environment, education, staffing, communication, involvement, and evaluation/feedback—were identified through an analysis of 70 quality improvement plans developed by Minnesota nursing facilities and substantiated by the research literature.

28. **Mukamel, D. B.; Watson, N. M.; Meng, H.; and Spector, W. D. Development of a risk-adjusted urinary incontinence outcome measure of quality for nursing homes. Med Care. 2003 Apr;41(4):467-78.**
Abstract: BACKGROUND: Quality of nursing home care is of ongoing concern. The availability of uniform, patient-level information—the Minimum Data Set (MDS)—offers the opportunity to assess quality based on risk-adjusted health outcomes. OBJECTIVE: To develop a risk-adjusted measure of quality based on urinary incontinence (UI) outcomes for nursing homes, derived from the MDS. RESEARCH DESIGN: A retrospective statistical analysis of individual resident level data. SUBJECTS: MDS+ data for 46,453 residents of 671 nursing homes in New York State during the 1995 to 1997 period. MEASURES: Improvement in UI status was defined based on the resident's UI status at

3 months post admission relative to status at admission. Individual risk factors were also defined at admission. Facility level quality indicators were developed. RESULTS: Facility-level indicators show substantial variation. An average facility, providing average quality care to a population of average risk, would experience improvement in UI outcomes for 11 of its 25 admissions in a year. The difference between the best and the worst facilities (two standard deviations above and below the average) is eight new residents with improvement in UI outcomes out of 25 annual admissions. CONCLUSIONS: This study demonstrates the feasibility of measuring quality of UI care based on nationally available MDS data. The measures presented can be used to support internal quality improvement efforts. Before such measures can be used externally, either in the survey process or in quality report cards, they should be further validated.

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Abstract: OBJECTIVES: This article reports the characteristics associated with fecal incontinence (FI) in a nursing home population that are also associated with urinary incontinence (UI). METHOD: A cross-sectional survey composed of data from the Wisconsin Center for Health Statistics' Annual Nursing Home Survey in 1992 and 1993. Demographic characteristics, functional status, and disease histories were correlated with UI. RESULTS: Data were available for 18,170 and 17,117 residents respectively, 56% of who were to varying degrees incontinent of urine in each year. Significant positive associations with UI included, in order of adjusted odds ratios: FI, truncal restraints, dementia, female gender, impaired vision, stroke, and constipation. Inverse associations were age, body mass index, tube feedings, and pressure ulcers. Diabetes, heart disease, arthritis, fecal impaction, and race were not associated with UI. CONCLUSIONS: UI frequently coexists with FI in nursing home residents. FI and UI differ in their association with age, body mass, and gender.

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31. *Newman, D. K., and Giovannini, D. (Codirector, Penn Center for Continence and Pelvic Health, Division of Urology, University of Pennsylvania Health System, Philadelphia). The overactive bladder: a nursing perspective. AJN, American Journal of Nursing. 2002 Jun;102(6):36-46.*
Abstract: It's more prevalent than diabetes, but many silently suffer for years with the symptoms of an overactive bladder before seeking treatment. Here's an overview of the assessment and treatment of the condition.

32. *Ouslander, J. G.; Ai-Samarrai, N.; and Schnelle, J. F. Prompted voiding for nighttime incontinence in nursing homes: is it effective? J Am Geriatr Soc. 2001 Jun;49(6):706-9.*
Abstract: OBJECTIVES: To determine whether prompted voiding (PV) is effective for nighttime urinary incontinence in nursing home (NH) residents and whether residents who respond well to daytime PV also respond well at night. DESIGN: Prospective case series. SETTING: Four community NHs. PARTICIPANTS: Sixty-one long-stay incontinent NH residents of mean age 88 years, 75% female. MEASUREMENTS: The percentage of hourly checks for wetness and the appropriate toileting rate

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(continent voids divided by total voids) were measured during 3 days (7 a.m.-7 p.m.) of PV, and for an average of 5 nights (7 p.m.-7 a.m.), during which a modified PV protocol, designed to be minimally disruptive to sleep, was carried out. RESULTS: Fourteen residents (23%) responded well to daytime PV, with average wetness and appropriate toileting rates of 5% and 73%, respectively. In the group as a whole, nighttime PV was not effective, with wetness and appropriate toileting rates of 49% and 18%, respectively. Among those who responded well to daytime PV, wetness rates during nighttime PV remained significantly higher than during the day (24% vs. 5%; P = .000), and nighttime appropriate toileting rates were significantly lower (39% vs. 73%; P = .002). The poor response rate at night was primarily observed between 10 p.m. and 6 a.m. CONCLUSIONS: In this sample of incontinent NH residents, nighttime PV, even when carried out so as to minimize sleep disruption, was not an effective intervention. Although residents who responded well to daytime PV responded better to nighttime PV than those who did not respond to daytime PV, their wetness rates remained relatively high and their appropriate toileting rates were low. These data suggest that routine nighttime toileting programs should not be carried out for the majority of incontinent NH residents. Instead, individualized care based on resident's preferences, willingness to toilet at night, and sleep patterns should be emphasized.

33. ***Ouslander, J. G.; Greendale, G. A.; Uman, G.; Lee, C.; Paul, W.; and Schnelle, J. Effects of oral estrogen and progestin on the lower urinary tract among female nursing home residents. J Am Geriatr Soc. 2001 Jun;49(6):803-7.***

Abstract: OBJECTIVE: To examine the effects of oral estrogen/progestin on incontinence and related lower urinary tract conditions among female nursing home (NH) residents. DESIGN: Randomized placebo-controlled trial. SETTING: Five NHs. PARTICIPANTS: Thirty-two incontinent female residents of average age 88. MEASUREMENTS: Subjects were randomized to receive either oral estrogen (0.625 mg) combined with progesterone (2.5 mg) or placebo, daily for 6 months. Measures of incontinence severity, the clinical appearance of the vagina, vaginal and urethral cytology, and urine and vaginal cultures were made at baseline, 3 months, and 6 months. In addition to active drug or placebo, all subjects received regular toileting assistance (prompted voiding) by trained research aides during 3-day data-collection periods to compensate for mobility and cognitive impairments. RESULTS: At 3 and 6 months there were no significant differences between the groups in the severity of incontinence, the prevalence of bacteriuria, or the results of vaginal cultures. Several clinical findings associated with atrophic vaginitis improved more in the active than the placebo group, and vaginal pH and vaginal and urethral cytology exhibited a partial estrogenic effect. CONCLUSIONS: Our results must be interpreted with caution because of the size and the select nature of our subject sample. Up to 6 months of oral estrogen had only a partial estrogenic effect on vaginal and urethral epithelium and no clinical effects in this patient population. We believe that future studies of estrogen for urinary incontinence in frail NH residents should utilize a topical preparation and consider targeting urinary tract infection as an additional outcome measure.

34. **Ouslander, J. G.; Maloney, C.; Grasela, T. H.; Rogers, L.; and Walawander, C. A. (Wesley Woods Center of Emory University, 1841 Clifton Road NE, Atlanta, GA 30329-5102). Implementation of a nursing home urinary incontinence management program with and without tolterodine. Journal of the American Medical Directors Association. 2001 Sep-2001 Oct 31;2(5):207-14.**

Abstract: OBJECTIVE: To evaluate the implementation of a nursing home urinary incontinence management program. DESIGN: A prospective field trial of the program incorporating practice guidelines and principles of continuous quality improvement. SETTING: Five nursing homes in New York, Virginia, and Georgia. PARTICIPANTS: One hundred fifty-one residents identified as being incontinent of urine and who met inclusion criteria for ongoing participation in the program. INTERVENTION: Key multidisciplinary staff from the five nursing homes were trained in the program and assumed responsibility for implementing it in their facilities. The program consisted of a clinical assessment, toileting protocols, and the addition of the antimuscarinic drug tolterodine in selected residents who did not respond well to toileting alone. Data on dryness rates during the 60-day toileting protocols, collected by nursing home staff, were analyzed on a weekly basis by an overall project coordinator who sent data back to the nursing homes in an easy-to-read graphical format. MEASURES: (1) The dryness rate, defined as the number of times the resident was dry divided by the number of times the resident was checked (every 2 hours from 7 a.m. to 7 p.m.); and (2) adverse events (e.g., dry mouth, increased confusion, need for dosage reduction). RESULTS: Of 645 residents in the 5 nursing homes, 377 (58%) were identified as incontinent of urine, of whom 151 (40%) were placed on an ongoing toileting program. Of these 151 residents, 48 (32%) were prescribed tolterodine, and 117 (78%) completed the 60-day trial. The initial dryness rate was 57%, and for the group as a whole remained essentially unchanged (increase in dryness 1%, P = 0.50). Among 50 clinically stable residents on a toileting program alone, the increase in the dryness rate was 16% (P = 0.001), and for 31 clinically stable residents prescribed tolterodine, the increase in the dryness rate was 29% (P = 0.012). Two residents had their dosage of tolterodine reduced because of dry mouth and nausea, and one resident was taken off the drug because of increased pain in the back and legs and increased confusion. CONCLUSIONS: Overall, this program resulted in significant increases in dryness rates for clinically stable incontinent nursing home residents. These residents represented 22% of the total number of residents identified as incontinent in the five participating nursing homes. Tolterodine was prescribed for approximately one-third of incontinent residents as a supplement to a toileting program, and was well tolerated. Nursing homes should be encouraged to implement similar urinary incontinence programs, target toileting protocols to the most responsive residents, and maintain the program using principles of continuous quality improvement

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Abstract: Primary prevention research on urinary incontinence in older adults is in its nascent phase. Most clinical research has focused on secondary, or tertiary prevention, that is, testing interventions to cure, improve, or manage incontinence. When urinary incontinence is recognized as a public health issue, resources become available to reduce the risk of incontinence and prevent its occurrence. Methodological issues that face nurse researchers desiring to conduct primary

prevention research include inadequate theory and outcome development, need for gender and culturally sensitive measurement instruments, and sampling and design issues. Rather than viewing primary prevention as a futile endeavor, nurse researchers must combine the roles of researcher and advocate, articulating the vision for primary prevention, and developing sound clinical studies to prevent urinary incontinence in the older adult population. [References: 58]

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Abstract: Interview with nursing professor Mary H. Palmer on caring for nursing home patients with urinary incontinence. Components of an indispensable incontinence-management program; common mistakes long-term care facilities make; methods for assessing residents with urinary incontinence.

38. *Prochoda, K. P. (Geriatrics and Extended Care, Atlanta VA Medical Center, Division of Geriatric Medicine and Gerontology, Emory University School of Medicine, Decatur, GA 30033). Medical director's review of urinary incontinence in long-term care. Journal of the American Medical Directors Association. 2002 Jan-2002 Feb 28;3(1):Suppl:S11-5.*

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Abstract: A relatively new term, overactive bladder, is used to describe urinary frequency, urgency, and nocturia with or without urinary incontinence. Normal micturition involves coordination among the nervous system, the bladder, and the sphincter. Theories about pathogenesis include disorders of the central and peripheral nervous system, lowered levels of neurotransmitters, and structural problems of the bladder and sphincter. Assessing the patient with overactive bladder incorporates a thorough history and focused physical exam. Current treatments for this condition include lifestyle changes, behavioral interventions, pharmacologic management, and neuromodulation therapy. Research into different medications and delivery systems proves promising for the patient with overactive bladder. [References: 22]

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Abstract: OBJECTIVE: To study age- and sex-specific use and costs of incontinence aids distributed free of charge in Sweden. SUBJECTS AND METHODS: The study was conducted in the county of Jamtland, Sweden (132,000 inhabitants). The use and cost of incontinence aids for people living in their homes and the total cost of incontinence aids for residents of special accommodation (e.g., nursing homes, homes for the elderly, and sheltered housing) was obtained from a central database constructed for the purpose. Individual usage of incontinence aids by those in special accommodation was studied in two districts of Jamtland, representing 18% of the population. RESULTS: Free incontinence products were used by 6.4% of all women and 2.4% of all men in the county. There was a sharp increase in usage from the age of 75 years. Of the users, 21% lived in special accommodation. If the data from Jamtland are extrapolated nationally, then 274,000 women and 93,000 men in Sweden (total population 8.8 million) are using free incontinence products. The total cost of incontinence aids for Jamtland during 1999 was 15.4 million Swedish krona (SK), and those in special accommodation accounted for 46% of these costs. This corresponds to an estimated total cost in Sweden of approximately 925 million SK. Although 75% of the users were women, women only contributed 61% of the total costs. The mean annual cost of incontinence aids for an incontinent man was twice that of an incontinent woman. More than half of the costs were attributable to those aged > 80 years. CONCLUSIONS: The estimated national costs of free incontinence aids accounts for 0.5% of the total costs of Swedish health care, including the care and nursing of older and disabled people, and for 0.05% of the gross national product

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Abstract: OBJECTIVES: To examine clinical outcomes and describe the staffing requirements of an incontinence and exercise intervention. DESIGN: Randomized controlled trial with blinded assessments of outcomes at three points over 8 months. SETTING: Four nursing homes. PARTICIPANTS: Two hundred fifty-six incontinent residents. INTERVENTION: Research staff provided the intervention, which integrated incontinence care and exercise every 2 hours from 8:00 a.m. to 4:00 p.m. 5 days a week. MEASUREMENTS: Average and maximum distance walked or wheeled, level of assistance required to stand, maximum pounds lifted by arms, fecal and urinary incontinence frequency, and time required to implement intervention. RESULTS: Intervention residents maintained or improved performance whereas the control group's performance declined on 14 of 15 outcome measures. Repeated measures analysis of variance group-by-time significance levels ranged from $P <.0001$ to.05. The mean time required to implement the intervention each time care was provided was 20.7 +/- 7.2 minutes. We estimate that a work assignment of approximately five residents to one aide would be necessary to provide this intervention. CONCLUSIONS: The incontinence care and exercise intervention resulted in significant improvement for most residents, and most who could be reliably interviewed expressed a preference for such care. Fundamental changes in the staffing of most nursing homes will be necessary to translate efficacious clinical interventions into everyday practice.

44. **Schnelle, J. F.; Kapur, K.; Alessi, C.; Osterweil, D.; Beck, J. G.; Al-Samarrai, N. R.; and Ouslander, J. G. (Veterans Administration Hospital, Sepulveda, California, USA. jschnelle@ ucla.edu). Does an exercise and incontinence intervention save healthcare costs in a nursing home population? [comment]. Journal of the American Geriatrics Society. 2003 Feb;51(2):161-8.**

Abstract: OBJECTIVES: To determine whether an intervention that combines low-intensity exercise and incontinence care offsets some of its costs by reducing the incidence of selected health conditions in nursing home residents. DESIGN: Randomized, controlled trial with the incidence and costs of selected, acute conditions compared between a 6-month baseline and an 8-month intervention phase. SETTING: Four nursing homes. PARTICIPANTS: One hundred ninety incontinent, long-stay nursing home residents. INTERVENTION: Low-intensity, functionally oriented exercise and incontinence care were provided every 2 hours from 8:00 a.m. to 4:00 p.m. for 5 days a week for 8 months. MEASUREMENTS: Predefined acute conditions hypothesized to be related to physical inactivity, incontinence, or immobility were abstracted from residents' medical records by blinded observers during a 6-month baseline period and throughout the 8-month intervention. Conditions included those in the dermatological, genitourinary, gastrointestinal, respiratory, and cardiovascular systems; falls; pain; and psychiatric and nutritional disturbances. Costs were determined using Current Procedural Terminology Center and Medicare allowable cost reimbursement at a rate of 80%. RESULTS: The intervention group had significantly better functional outcomes than the control group (strength, mobility endurance, urinary and fecal incontinence) and a reduction of 10% in the incidence of the acute conditions, which was not significant. There were no significant differences between groups in the cost of assessing and treating these acute conditions between baseline and intervention. CONCLUSION: The intervention, which is consistent with federal and clinical practice guidelines, significantly improved functional outcomes but did not reduce the incidence and costs of selected acute health conditions. The cost of implementing these labor-intensive interventions for frail nursing home residents will have to be justified based on functional and quality-of-life outcomes and are unlikely to be offset by savings in medical care costs in this population

45. **Schnelle, J. F.; Cadogan, M. P.; Yoshii, J.; Samarrai, N. R.; Osterweil, D; Bates-Jensen, B. M.; and Simmons, S. F. The Minimum Data Set Urinary Incontinence Quality Indicators: Do They Reflect Differences in Care Processes Related to Incontinence? Medical Care. 2003;41(8):909-922.**

PURPOSE: To determine if nursing homes that score in the lower 25th percentile (low prevalence) versus the upper 75th percentile (high prevalence) on each of two Minimum Data Set (MDS) incontinence quality indicators provide different incontinence care processes. DESIGN: Cross-sectional. SUBJECTS: 347 long-term residents in 14 skilled nursing facilities for the MDS "prevalence of incontinence" indicator and 432 residents in 16 skilled nursing facilities for the MDS "prevalence of incontinence without a toileting plan" indicator. MEASURES: Nine care processes related to incontinence were defined and operationalized into clinical indicators. Research staff assessed implementation of each care process on 3 consecutive 12-hour days (7 a.m. to 7 p.m.). The assessment included resident interviews, physical performance evaluations, and chart abstraction using standardized protocols. RESULTS: Homes with lower prevalence rates on both MDS incontinence quality indicators (good outcomes) had a significantly higher proportion

of participants with chart documentation of two relevant care processes: (1) an evaluation of the resident's incontinence history and (2) toileting assistance rendered by staff. However, interviews with incontinent residents capable of accurately reporting care activity occurrence showed no difference in toileting assistance frequency between homes in the upper and lower quartiles for either MDS incontinence indicator. Participants reported an average of 1.8 toileting assists per day across all homes with a narrow average frequency range between homes (1.6-2.0). These frequencies of toileting assistance are not sufficient to improve urinary incontinence. There was also no difference in the frequency of toileting assistance received by incontinent participants rated on the MDS as receiving scheduled toileting (n = 75, mean = 1.9 +/- 1.24) compared to incontinent residents rated on the MDS as not receiving scheduled toileting (n = 131, mean = 1.8 +/- 1.22). None of the homes provided chart documentation that supported staff decisions to place or not place a resident on a scheduled toileting program. CONCLUSIONS: The quality of incontinence assessment and treatment as documented by scheduled toileting interventions was poor across all homes, and the MDS incontinence quality indicators were not associated with clinically important differences in related care processes. Chart documentation that a resident was on a scheduled toileting program or received toileting assistance was not related to resident reports of the frequency of received assistance.

46. **Shekelle, P. G.; Ortiz, E.; Rhodes, S.; Morton, S. C.; Eccles, M. P.; Grimshaw, J. M.; and Woolf, S. H. Validity of the Agency for Healthcare Research and Quality clinical practice guidelines: how quickly do guidelines become outdated? JAMA. 2001 Sep 26;286(12):1461-7.**

Abstract: CONTEXT: Practice guidelines need to be up-to-date to be useful to clinicians. No published methods are available for assessing whether existing practice guidelines are still valid, nor does any empirical information exist regarding how often such assessments need to be made. OBJECTIVES: To assess the current validity of 17 clinical practice guidelines published by the US Agency for Healthcare Research and Quality (AHRQ) that are still in circulation, and to use this information to estimate how quickly guidelines become obsolete. DESIGN, SETTING, AND PARTICIPANTS: We developed criteria for defining when a guideline needs updating, mailed surveys to members of the original AHRQ guideline panels (n = 170; response rate, 71%), and searched the literature for evidence through March 2000 (n = 6994 titles yielding 173 articles plus 159 new guidelines on the same topics). MAIN OUTCOME MEASURES: Identification of new evidence calling for a major, minor, or no update of the 17 guidelines; survival analysis of the rate at which guidelines became outdated. RESULTS: For 7 guidelines, new evidence and expert judgment indicated that a major update is required; 6 were found to be in need of a minor update; 3 were judged as still valid; and for 1 guideline, we could reach no conclusion. Survival analysis indicated that about half the guidelines were outdated in 5.8 years (95% confidence interval [CI], 5.0-6.6 years). The point at which no more than 90% of the guidelines were still valid was 3.6 years (95% CI, 2.6-4.6 years). CONCLUSIONS: More than three quarters of the AHRQ guidelines need updating. As a general rule, guidelines should be reassessed for validity every 3 years.

47. *Simmons, S. F., and Schnelle, J. F. The identification of residents capable of accurately describing daily care: implications for evaluating nursing home care quality. Gerontologist. 2001 Oct;41(5):605-11.*
Abstract: PURPOSE: The goal of this study was to develop a method of identifying incontinent nursing home (NH) residents capable of providing accurate interview information about daily NH care. DESIGN AND METHODS: In 177 incontinent NH residents from four facilities, selected Minimum Data Set (MDS) ratings were compared with two standardized, performance-based, cognitive screening instruments to predict which residents could accurately answer questions concerning receipt of daily incontinence and mobility care practices. RESULTS: MDS ratings of activity of daily living performance and cognition significantly predicted residents' ability to accurately describe daily care practices. Performance-based measures of cognitive functioning did not outperform the MDS ratings. Selecting residents who scored two or more on four orientation items composing the MDS Recall subscale identified residents capable of accurately describing daily care practices with a sensitivity of 64% and a specificity of 75%. IMPLICATIONS: The MDS-based criteria identified are a promising, objective method for selecting incontinent NH residents for interview to verify the occurrence of specific daily care practices.

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51. *Specht, J. K.; Lyons, S. S.; and Maas, M. L. Patterns and treatments of urinary incontinence on special care units. J Gerontol Nurs. 2002 May;28(5):13-21.*

52. *Tannenbaum, C., and Lepage, C. (Division of Geriatric Medicine, Montreal General Hospital, 1650 Cedar Ave, Montreal, Quebec H3G 1A4, Canada; cara.tannenbaum@mcgill.ca). Practical management of urinary incontinence in the long-term care setting. Annals of Long-Term Care. 2002 Apr;10(4):26-34.*
Abstract: The heterogeneity of the nursing home population must be kept in mind when developing guidelines for the management of urinary incontinence (UI) in the long-term care setting. The nature and intensity of diagnostic and therapeutic interventions should depend on the overall cognitive and mobility status as well as the preferences of the individual resident. Cost and logistics considerations of effective interventions for incontinent residents point to the need for strategies that identify those residents most likely to benefit from UI evaluations. Algorithms for the implementation of effective management of UI in long-term care are presented in this review

53. **Thomas, S. Continence in older people: a priority for primary care. Nurs Stand. 2001 Mar 7-2001 Mar 13;15(25):45-50; quiz 52, 55.**
Abstract: Many older people experience some form of incontinence and, as a large proportion will respond well to treatment, the problem should not be ignored.

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Abstract: Recent national policies have created new frameworks and guidance on the assessment and treatment of continence problems. This article offers an update on new policy initiatives relevant to nurses working with older people and discusses the implications for primary care.

55. **Valk, M.; Moons, K. G. M.; Cools, H. J. M.; and Schrijvers, A. J. P. (Reprint available from: Valk M Univ Utrecht, Sch Med & Hosp, Julius Ctr General Practice & Patient Oriented Re Postbus 85500 NL-3508 GA Utrecht Netherlands). Classifying the probability of urinary incontinence in psychogeriatric nursing home patients. Archives of Gerontology & Geriatrics. 2002 Jan-2002 Feb 28;34(1):79-91.**
Abstract: Urinary incontinence (UI) frequently occurs in psychogeriatric nursing home patients. In general the personnel involved in the care for these patients act on incontinence noted. Patients are not monitored or classified according to likelihood or severity of incontinence. This study was conducted to develop and validate a model for the classification of the likelihood of UI in demented nursing home patients. A multi-center cross-sectional study was conducted using data on clinical and functional status of 692 subjects. Subjects were subdivided in a Derivation set of 532 patients and a Validation set of 160 patients. The data were ascertained with questionnaires completed by physicians and nursing staff. All psychogeriatric wards (25) of four Dutch nursing homes were included. Using univariate logistic regression analysis on the derivation set we identified correlates of UI among 22 clinical and functional patient characteristics. Subsequently, we developed a classification model for prevalent UI, including independent patient characteristics by means of multivariable logistic regression. Next, we stratified patients into groups with varying likelihood's of UI based on the model developed. Subsequently, we transformed the model to an easy applicable classification rule for the identification of patient subgroups with high or low likelihood on UI. Finally, the rule was validated on the validation set. The independent multivariate factors associated with urinary incontinence were impaired ADL and mobility, diminished alertness, and fecal impaction. After transforming the regression model to an easy classification rule, the scores ranged from 0 to 7. The area under the curve was 0.88 (95% Confidence Interval [CI]: 0.85-0.91) in the derivation set. In the validation set a similar area under the curve was obtained (0.90 (95% CI: 0.85-0.95)). Among subjects with none of the associated factors the rule classified 0.5% as incontinent patients. In case all associated factors were present the proportion classified as incontinent increased to 91%. In conclusion, the developed classification rule provides means to stratifying nursing home patients according to their likelyhood of being incontinent of urine. © 2002 Published by Elsevier Science Ireland Ltd. [References: 43]

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Abstract: Most of the 13 million Americans who have urinary incontinence are adults, and a significant number are never treated. Undertreatment is due in part to reluctance by patients and physicians to discuss an uncomfortable topic. Unmanaged incontinence restricts normal daily activity and fundamental human interactions. Intervention is important not only to control symptoms, prevent infection, and impede incontinence progression, but also to restore quality of life. In most cases, the physical exam and patient history provide the necessary information for diagnosis. Behavioral treatments are easy to implement and inexpensive, although patient nonadherence can undermine effectiveness.

57. *Vinsnes, A. G.; Harkless, G. E.; Haltbakk, J.; Bohm, J.; and Hunskaar, S. Healthcare personnel's attitudes towards patients with urinary incontinence. J Clin Nurs. 2001 Jul;10(4):455-62.*

Abstract: The aim of the study was to understand the variability of Norwegian staff's attitudes towards patients with urinary incontinence across years and place of work, age, and education levels. The Incontinence Stress Questionnaire—Staff Reaction (Norwegian version) (ISQ-SR-N) was used to measure staff's reactions and feelings towards patients with urinary incontinence. A cross-sectional survey design was used to gather self-reported data. The research sites were five nursing homes, three home care districts, and medical and surgical wards at a university hospital. Of the 745 staff invited, 535 (72%) returned the questionnaire. Staff members working in long-term care units were older than staff members working in acute care units. Most of the registered nurses worked in acute care, whilst most of the nursing assistants worked in long-term care. Stepwise regression analysis identified education, working in a medical/surgical units, and the interaction of education and working in a medical unit to be most predictive of attitudes. Nursing assistants had more positive attitudes than registered nurses. Working in medical/surgical units predicted the most negative attitudes. Only 15.2% of the variability of attitudes can be explained by the predictive variables.

58. *Wagner, T. H., and Subak, L. L. Evaluating an incontinence intervention in nursing home residents. J Am Geriatr Soc. 2003 Feb;51(2):275-6.*

59. *Wang, P. S.; Levin, R.; Zhao, S. Z.; and Avorn, J. Urinary antispasmodic use and the risks of ventricular arrhythmia and sudden death in older patients. Journal of the American Geriatrics Society. 2002 Jan;50(1):117-124.*

Abstract: OBJECTIVES: The introduction of new medications to treat overactive bladder has resulted in a significant increase in the number of individuals with this condition who use medications for symptoms. Formal epidemiological studies of the safety of these medications in typical patient populations are lacking, particularly studies of serious events. We sought to determine whether the use of urinary antispasmodics increases the risk of ventricular arrhythmias or sudden death. DESIGN: Retrospective cohort study. SETTING: Retrospective analysis of data of participants in community, hospital, or nursing home setting. PARTICIPANTS: Fourteen thousand six hundred thirty-eight subjects with a diagnosis of urinary incontinence made between January 1, 1991, and June 30, 1995; all were aged 65 and older and enrolled in Medicare and Medicaid or the

Pharmacy Assistance for the Aged and Disabled programs of New Jersey. MEASUREMENTS: Filled prescriptions for oxybutynin (Ditropan), flavoxate (Urispas), liyoscyamine (Cystospas), and hyoscyamine sulfate (Cystospas-M) were used to define days of exposure to these drugs. We also identified all use of nonsedating antihistamines and cytochrome P450 3A4 inhibitors, and their concurrent use, to serve as a positive control exposure. Two outcomes were then defined: a new diagnosis of ventricular arrhythmia combined with initiation of an antiarrhythmic medication and sudden death. Other covariates, including clinical, demographic, medication use, and healthcare utilization variables, were also assessed. Adjusted risk ratios of ventricular arrhythmia and sudden death were derived from multivariable Cox proportional hazards models. RESULTS: There was no significant association between periods of use of urinary antispasmodics and the development of ventricular arrhythmias (adjusted risk ratio (RR) = 1.23, 95% confidence interval [CI] = 0.87-1.75) or sudden death (adjusted RR = 0.70, 95% CI 0.28-1.74). A significantly increased risk of ventricular arrhythmia was observed for the positive control regimen, concurrent use of nonsedating antihistamines and cytochrome P450 3A4 inhibitors (adjusted RR = 5.47; 95% CI = 1.34-22.26), but not for use of either drug group alone. Concurrent use of nonsedating antihistamines and cytochrome P450 3A4 inhibitors was also associated with a significant increase in the risk of sudden death (adjusted RR = 21.50, 95% CI = 5.23-88.37). Other variables significantly associated with ventricular arrhythmia included ischemic heart disease and congestive heart failure, whereas nursing home use before the index date was associated with a decreased likelihood of receiving a diagnosis of and treatment for ventricular arrhythmia. Other variables significantly associated with sudden death included mate gender, black race, and congestive heart failure. CONCLUSIONS: Antimuscarinic urinary antispasmodics available before 1996 were not associated with an increased risk of ventricular arrhythmias and sudden death. Additional study will be required to confirm these results, exclude the possibility of unmeasured confounders contributing to any lack of an observed relationship, and extend these findings to newer agents such as tolterodine. [References: 49]

60. **Weiss, J. P., and Blaivas, J. G. (Weill/Cornell University Medical College, New York, New York, USA. urojock@aol.com). Nocturnal polyuria versus overactive bladder in nocturia. [Review] [38 refs]. Urology. 2002 Nov;60(5 Suppl 1):28-32; discussion 32.**
Abstract: The purpose of this article is to review the current state of knowledge on contributions of nocturnal urine overproduction and overactive bladder to the syndrome of nocturia. We review the recent literature and current state of the art in differential diagnosis, pathophysiology, and classification of nocturia. We found that multiple pathologic factors may result in nocturia, including cardiovascular disease, diabetes mellitus or insipidus, third spacing of fluid, sleep apnea, lower urinary tract obstruction, primary sleep disorders, and behavioral and environmental factors. Thus, nocturia may be attributed to nocturnal polyuria (nocturnal urine overproduction), diminished nocturnal bladder capacity, or both. Distinction between these conditions is made by a simple arithmetic analysis of the 24-hour voiding diary. Understanding the manifold origins of nocturia will lead to rational treatment of specific contributing pathophysiologic factors. [References: 38]

61. **Whitehead, W. E.; Wald, A.; and Norton, N. J. Treatment options for fecal incontinence. Dis Colon Rectum. 2001 Jan;44(1):131-42; discussion 142-4.**
Abstract: PURPOSE: Fecal incontinence is a socially devastating disorder, which affects at least 2.2 percent of community dwelling adults and 45 percent of nursing home residents. Most incontinent

patients can be helped, but physicians are poorly informed about treatment options. The aim of this study was to develop a consensus on treatment options by convening a conference of surgeons, gastroenterologists, nurses, psychologists, and patient advocates. METHOD: A 1-1/2 day conference was held in April 1999. Experts from different disciplines gave overviews, followed by extended discussions. Consensus statements were developed at the end of the conference. This summary statement was drafted, circulated to all participants, and revised based on their input. CONCLUSIONS: 1) Diarrhea is the most common aggravating factor for fecal incontinence, and antidiarrheal medications such as loperamide and diphenoxylate or bile acid binders may help. Fecal impaction, a common cause of fecal incontinence in children and elderly patients, responds to combinations of laxatives, education, and habit training in approximately 60 percent. These causes of fecal incontinence can usually be identified by history and physical examination alone. 2) In patients who fail medical management or have evidence of sphincter weakness, anorectal manometry and endoanal ultrasound are recommended as helpful in differentiating simple morphologic defects from afferent and efferent nerve injuries and from combined structural and neurologic injuries. 3) Biofeedback is a harmless and inexpensive treatment, which benefits approximately 75 percent of patients but cures only about 50 percent. It may be most appropriate when there is neurologic injury (i.e., partial denervation), but it has been reported to also benefit incontinent patients with minor structural defects. 4) External anal sphincter plication with or without pelvic floor repair is indicated when there is a known, repairable structural defect without significant neurologic injury. It is effective in approximately 68 percent. 5) Salvage operations are reserved for patients who cannot benefit from biofeedback or levator-sphincteroplasty. These include electrically stimulated gracilis muscle transpositions and colostomy. 6) Antegrade enemas delivered through stomas in the cecum or descending colon reduce or eliminate soiling in approximately 78 percent of children with myelomeningocele; this operation may come to be more widely applied. 7) Investigational treatments include implanted nerve stimulators, artificial sphincters, and anal plugs. 8) Patient characteristics which influence choice of treatment include mental status, mobility impairment, and typical bowel habits. 9) Additional research is needed to better define the mechanisms responsible for fecal incontinence, to assess the efficacy of these treatments, to develop better treatments for nursing home residents, and to identify predictors of outcome.

62. *Wieland, D. Urinary incontinence management in nursing homes: trials and tribulations ... Ouslander J. G., Maloney C. M., Grasela T. H., et al. Implementation of a nursing home urinary incontinence management program with and without tolterodine. J Am Med Dir Assoc 2001;2:000-000. Journal of the American Medical Directors Association. 2001 Sep-2001 Oct 31;2(5):269-70.*

63. *Wilde, M. H., and Cameron, B. L. Meanings and practical knowledge of people with long-term urinary catheters. J Wound Ostomy Continence Nurs. 2003 Jan;30(1):33-40; discussion 40-3.*
Abstract: The lived experience of people with long-term indwelling urethral catheters is described and interpreted. This hermeneutic (interpretive) phenomenologic study used Merleau-Ponty's philosophy and van Manen's methodology. Fourteen adults aged 35 to 95 years who had worn a catheter more than 4 months (range = 6 months to 18 years) comprised the purposive sample. Data were obtained through audiotaped and transcribed interviews conducted in the homes of

participants. The study provided both meanings and practical knowledge related to the experience of catheter use. Despite its drawbacks, participants recognized the device's value in their daily lives and weighed its positive features against concerns associated with long-term use. Individual meanings included making aesthetic harmony with a new catheter, the convenience of the catheter compared with the inconvenience of incontinence, and the catheter as a symbol and reminder of one's mortality. Practical knowledge related to participants' awareness of their catheter needs and practices, such as features of supplies, intervals for changes, catheter insertions, emptying the urine bag, and changes associated with sex. Knowledge of the lived experience with a urinary catheter can assist nurses in sensitive decision making about care and help them become better patient advocates.

64. **Wilson, L.; Brown, J. S.; Shin, G. P.; Luc, K. O.; and Subak, L. L. Annual direct cost of urinary incontinence. Obstet Gynecol. 2001 Sep;98(3):398-406.**
Abstract: OBJECTIVE: To estimate the annual direct cost of urinary incontinence in 1995 US dollars. METHODS: Epidemiologically based models using diagnostic and treatment algorithms from published clinical practice guidelines and current disease prevalence data were used to estimate direct costs of urinary incontinence. Prevalence and event probability estimates were obtained from literature sources, national data sets, small surveys, and expert opinion. Average national Medicare reimbursement was used to estimate costs, which were determined separately by gender, age group, and type of incontinence. Sensitivity analyses were performed on all variables. RESULTS: The annual direct cost of urinary incontinence in the United States (in 1995 dollars) was estimated at $16.3 billion, including $12.4 billion (76%) for women and $3.8 billion (24%) for men. Costs for community-dwelling women ($8.6 billion, 69% of costs for women) were greater than for institutionalized women ($3.8 billion, 31%). Costs for women over 65 years of age were more than twice the costs for those under 65 years ($7.6 and $3.6 billion, respectively). The largest cost category was routine care (70% of costs for women), followed by nursing home admissions (14%), treatment (9%), complications (6%), and diagnosis and evaluations (1%). Costs were most sensitive to changes in incontinence prevalence, routine care costs, and institutionalization rates and costs. CONCLUSION: Urinary incontinence is a very costly condition, with annual expenditures similar to other chronic diseases in women.

Skin Selected Readings 1998–2007

1. **Carter, A. M., and Olsen, C. G. Pressure ulcers: An interdisciplinary approach. JAAPA. 1998;11(1):49-58.**
   Since prevention is key, learn to assess and reduce an elderly patient's risk of developing pressure ulcers. When an ulcer does appear, work closely with nurses and other colleagues to prevent its progression to a higher stage.

2. **Graumlich, J. F.; Blough, L. S.; McLaughlin, R. G.; Milbrandt, J. C.; Claderon, C. L.; Agha, S. A.; et al. Healing pressure ulcers with collagen or hydrocolloid: A randomized, controlled trial. Journal of the American Geriatric Society. 2003;51(2);147-154.**
   OBJECTIVES: To compare the effects of topical collagen and hydrocolloid on pressure ulcer healing. DESIGN: Randomized (allocation concealed), single-blind (outcome assessors), controlled trial with 8-week follow-up. SETTING: Eleven nursing homes in central Illinois. PARTICIPANTS: Sixty-five patient-residents with Stage II or III pressure ulcers: median age 83.1, median Braden score 12, 63% female, 80% Stage II ulcers, and 20% Stage III ulcers. Exclusion criteria included cellulitis and osteomyelitis. INTERVENTION: Thirty-five patients were allocated to topical collagen daily, 30 to topical hydrocolloid twice weekly. MEASUREMENTS: The primary outcome was complete healing within 8 weeks. Secondary outcomes were time to heal, ulcer area healed per day, linear healing of wound edge, and cost of therapy. RESULTS: Analysis by intention to treat revealed similar complete ulcer healing within 8 weeks in collagen (51%) and hydrocolloid (50%) recipients (difference 1%, 95% confidence interval [CI] = 26-29%). Mean healing time was similar: collagen healed in 5 weeks (95% CI = 4-6), hydrocolloid healed in 6 weeks (95% CI = 5-7). Mean area healed per day was 6 mm(2)/d in both treatment groups. Mean linear healing of the wound edge was 3 mm in both groups. In multivariate analysis, baseline ulcer depth was the only independent predictor of complete ulcer healing within 8 weeks (odds ratio = 0.56, 95% CI = 0.38-0.81). Cost analysis favored hydrocolloid. CONCLUSIONS: There were no significant differences in healing outcome between collagen and hydrocolloid. Collagen was more expensive and offered no major benefits to patients otherwise eligible for hydrocolloid treatment.

3. **Krichbaum, K. E.; Peason, V.; and Hanscom, J. Better care in nursing homes: Advanced Practice Nurses' strategies for improving staff use of protocols. Clinical Nurse Specialist. 2002;14(1):40-46.**
   This article describes a set of strategies used by gerontologic advanced practice nurses (GAPNs) in three nursing homes to integrate the use of protocols into the daily care of residents. The protocols were developed as part of a larger study on the quality of care in nursing homes carried out by nurse researchers at the University of Minnesota and funded by the National Institute of Nursing Research (R01-NR03490). The GAPNs worked regularly with nursing home staff to incorporate aspects of protocols into daily care routines for residents with four specific problems common in elderly residents of nursing homes: pressure ulcers, incontinence, depression, and aggressive behavior. Outcomes of the larger study showed that residents with these four problems had better outcomes in the homes in which care was planned by the GAPNs using protocols that were integrated into the daily routines of staff.

4. **Lyder, C. H. Pressure ulcer prevention and management. Journal of the American Medical Association. 2003;289(2):223-225.**

This article reviews 218 published and unpublished research reports of pressure ulcer prevention and management by nurse researchers and researchers from other disciplines. The electronic databases MEDLINE (1966-July 2001), CINAHL (1982-June 2001), AMED (1985-July 2001), and EI Compedex Plus (1980-June 2001) were selected for the searches because of their focus on health and applied research. Moreover, evaluations of previous review articles and seminal studies that were published before 1966 are also included. Research conducted worldwide and published in English between 1930 and 2001 was included for review. Studies using descriptive, correlational, longitudinal, and randomized control trials were included. This review found that numerous gaps remain in our understanding of effective pressure ulcer prevention and management. Moreover, the majority of pressure ulcer care is derived from expert opinion rather than empirical evidence. Thus, additional research is needed to investigate pressure ulcer risk factors of ethnic minorities. Further studies are needed that examine the impact of specific preventive interventions (e.g., turning intervals based on risk stratification) and the cost-effectiveness of comprehensive prevention programs to prevent pressure ulcers. Finally, an evaluation is needed of various aspects of pressure ulcer management (e.g., use of support surfaces, use of adjunctive therapies) and healing of pressure ulcers.

5. **Norman, R. A. Caring for Aging Skin. Nursing Home Magazine. April 2003;22-24.**

The skin of the elderly is prone to a number of diseases and disorders because of its decreased elasticity, thickness, and resilience and because of certain diseases (e.g., diabetes mellitus, human immunodeficiency virus, and congestive heart failure) that have a negative effect on the skin's ability to heal.

6. **Smith, P. W.; Black, J. M.; and Black, S. B. Infected pressure ulcers in the long-term care facility. Infection Control and Hospital Epidemiology. 1999;20(5):358-361.**

Pressure ulcers occur with some frequency in the elderly, debilitated population in long-term-care facilities. Pressure ulcers cause morbidity and mortality and, by virtue of breaking the integumentary barrier, predispose to skin and soft-tissue infections. The latter often are deep and require lengthy medical and surgical therapy. Prevention depends on avoidance of pressure, as well as providing adequate nutrition and meticulous skin care.

7. **Whitney, J. D.; Salvadalena, G.; Higa, L.; and Mich, M. Treatment of pressure ulcers with noncontact northermic wound therapy: Healing and warming effects. Journal of Wound, Ostomy and Continence Nursing. 2001;28(5):244-252.**

OBJECTIVE: This study compared healing rates in stage III and IV pressure ulcers treated with noncontact normothermic wound therapy or moist dressings. Periwound temperature changes with noncontact normothermic wound therapy were evaluated. DESIGN: This 8-week, prospective, randomized clinical trial evaluated linear rate of healing of the wound edge and periwound temperature changes during the 1-hour warming treatment and for 15 minutes after warming. SETTING AND SUBJECTS: Forty subjects referred from primary care providers, home care providers, acute care facilities, and long-term care facilities were enrolled in the study. Twenty-nine subjects completed the trial (14 received standard care, and 15 received noncontact normothermic wound therapy). INSTRUMENTS: Ulcers were measured with acetate tracings, digital and

Polaroid photography, and Pressure Sore Status Tool evaluations. The linear rate of healing was determined with use of computerized planimetry. Periwound temperatures were recorded with use of a Cole Parmer thermometer YSI 400 series. METHODS: Subjects were evaluated weekly. Subjects randomly assigned to noncontact normothermic wound therapy received 3 treatments daily, during which the dressing was warmed to 38 degrees C for 1 hour. Subjects in the standard care group were treated with dressings that were moisture retentive and provided absorption as needed. RESULTS: The two groups were statistically similar with regard to baseline and wound characteristics. The linear rate of healing was significantly faster in the group treated with noncontact normothermic wound therapy (Mann-Whitney U test = 47, P =.01). On average, periwound temperatures increased 2.4 degrees C at the end of warming (1 hour), a significant increase above baseline values (P =.001). CONCLUSIONS: The healing rate was significantly increased with noncontact normothermic wound therapy treatment. Periwound temperature increased significantly after 1 hour of warming, achieving levels approximating normothermia. Healing effects associated with noncontact normothermic wound therapy may be related to several mechanisms, including improvements in perfusion, oxygen supply, and cellular activity in response to warming.

8. *Xakellis G. C.; Frantz, R. A.; Lewis, A.; and Harvey, P. Translating pressure ulcer guidelines into practice: It's harder than it sounds. Advances in Skin & Wound Care. 2001;14:249-258*
OBJECTIVE: To determine the cost-effectiveness of a guideline-based pressure ulcer prevention protocol over time. DESIGN: Retrospective and prospective quasi-experimental longitudinal design. Costs are presented from the long-term-care facility perspective. Data collection occurred for 3 periods: the first 6 months of 1994 (prior to protocol implementation), the first 6 months of 1995 (immediately following implementation) and the first 6 months of 1997 (2 years following implementation). SETTING: 77-bed long-term-care facility. PATIENTS/PARTICIPANTS: Subjects were ulcer-free facility residents at the start of each data collection period. There were 69 subjects in the 1994 sample, 63 in the 1995 sample, and 71 in the 1997 sample. INTERVENTIONS: A guideline-based pressure ulcer prevention protocol was implemented during the last 3 months of 1994. The protocol consisted of specific policies for pressure ulcer prevention and treatment, intensive staff education on pressure ulcer care, and monitoring with regular performance feedback to staff. MEASUREMENTS AND MAIN RESULTS: Time to ulcer development varied among the 3 groups (log rank = 8.81, P = .01), with longer time to ulcer development in 1995 compared with 1994; no difference was seen between 1997 and 1994. The time for ulcers to heal decreased over the 3 years (log rank = 9.49, P <.01), with ulcer healing time being shorter in 1995 and 1997 compared with 1994. Total costs were unchanged during the 3 years (F = 0.2, P =.81). Costs of treatment declined significantly from 1994 to 1995 and 1997 (F = 5.5, P <.01) and costs of prevention increased significantly from 1994 to 1995 and 1997(F = 15, P <.01). From 1994 to 1997, the cost for 1 day of ulcer-free life was $3.50. CONCLUSIONS: Implementation of a pressure ulcer prevention protocol showed mixed results. Initial reductions in pressure ulcer incidence were lost over time. Clinical results of ulcer treatment, however, improved and treatment costs fell during the 3 years. Implementation of preventive programs poses a major leadership challenge.

9. *Zulkowski, K. Protecting your patient's aging skin. Nursing. 2003;33(1):84.*
The normal changes of aging mean that elderly patients are more prone to interruptions in skin integrity, such as pressure ulcers, than younger patients. Elderly patients also need more time to

heal, and their skin problems can lead to additional medical complications. By examining an elderly patients' skin frequently and documenting and treating problem areas, you can help head off problems.

10. ***Quality Partners. Implementation Guide to Prevent and Minimize Pressure Ulcers. Advancing Excellence in America's Nursing Homes Campaign. 2007.*** *http://www. nhqualitycampaign.org/star_index.aspx?controls=nhTechAssist*
This document provides practical guidelines produced by a collaborative group of long-term care professionals. It seeks to help identify and manage the problems, risks, and health related conditions of nursing home residents and provide individualized care and improved outcomes.

Psychosocial Selected Articles 2001–2003

1. *Alexopoulos, G. S.; Buckwalter, K.; Olin, J.; Martinez, R.; Wainscott, C.; and Krishnan, K. R. (Weill Medical College of Cornell University, Cornell Institute of Geriatric Psychiatry, White Plains, New York 10605, USA). Comorbidity of late life depression: an opportunity for research on mechanisms and treatment. [Review] [189 refs]. Biological Psychiatry. 2002 Sep 15;52(6):543-58.*

   Abstract: Late life depression principally affects individuals with other medical and psychosocial problems, including cognitive dysfunction, disability, medical illnesses, and social isolation. The clinical associations of late life depression have guided the development of hypotheses on mechanisms predisposing, initiating, and perpetuating specific mood syndromes. Comorbidity studies have demonstrated a relationship between frontostriatal impairment and late life depression. Further research has the potential to identify dysfunctions of specific frontostriatal systems critical for antidepressant response and to lead to novel pharmacological treatments and targeted psychosocial interventions. The reciprocal interactions of depression with disability, medical illnesses, treatment adherence, and other psychosocial factors complicate the care of depressed older adults. Growing knowledge of the clinical complexity introduced by the comorbidity of late life depression can guide the development of comprehensive treatment models. Targeting the interacting clinical characteristics associated with poor outcomes has the potential to interrupt the spiral of deterioration of depressed elderly patients. Treatment models can be most effective if they focus on amelioration of depressive symptoms, but also on treatment adherence, prevention of relapse and recurrence, reduction of medical burden and disability, and improvement of the quality of life of patients and their families. [References: 189]

2. *Allen, R. S.; Thorn, B. E.; Fisher, S. E.; Gerstle, J.; Quarles, K.; Bourgeois, M. S.; Dijkstra, K.; and Burgio, L. D. Prescription and dosage of analgesic medication in relation to resident behaviors in the nursing home. J Am Geriatr Soc. 2003 Apr;51(4):534-8.*

   Abstract: OBJECTIVES: To examine correlates of analgesic medication prescription and administration in communicative, cognitively impaired nursing home residents. Residents' behaviors were assessed using computer-assisted real-time observations as potential adjunctive indicators of pain. DESIGN: Cross-sectional study over a 4-week period. SETTING: Five nursing homes in the greater Birmingham, Alabama, area. PARTICIPANTS: Ninety-two residents (mean age +/- standard deviation = 83.86 +/- 8.55) with a mean Mini-Mental State Examination (MMSE) score of 13.81 +/- 6.34. MEASUREMENTS: Data were obtained via chart review, resident assessments, questionnaire completion by certified nursing assistants familiar with residents' care, and direct observation of residents' daily behaviors. RESULTS: Receipt of analgesic medication was related to self-report of pain ($F_{2,89} = 9.89$, P =.0001), MMSE ($F_{2,88} = 3.98$, P =.022), and time spent inactive ($F_{2,89} = 3.04$, P =.053). Residents who received analgesic medication reported greater intensity of pain than other residents. Residents who received analgesics had higher MMSE scores than those who did not receive analgesics. Residents who received analgesics spent less time being inactive than those not prescribed analgesics. Receipt of higher dosage of opioid analgesic medication was associated with more time spent with others in verbal interaction (r =.22, P =.03). CONCLUSION: This study refines the methodology of measuring analgesic medication dosage and its effect on resident

behavior. Analgesic prescription and administration patterns are related to time residents spend being inactive. Results suggest that opioid analgesics may hold particular promise in alleviating pain, as indicated by resident behaviors.

3. **Beck, C. K.; Vogelpohl, T. S.; Rasin, J. H.; Uriri, J. T.; O'Sullivan, P.; Walls, R.; Phillips, R.; and Baldwin, B. Effects of behavioral interventions on disruptive behavior and affect in demented nursing home residents. Nurs Res. 2002 Jul-Aug;51(4):219-28.**

Abstract: BACKGROUND: Disruptive behaviors are prevalent in nursing home residents with dementia and often have negative consequences for the resident, caregiver, and others in the environment. Behavioral interventions might ameliorate them and have a positive effect on residents' mood (affect). OBJECTIVES: This study tested two interventions—an activities of daily living and a psychosocial activity intervention—and a combination of the two to determine their efficacy in reducing disruptive behaviors and improving affect in nursing home residents with dementia. METHODS: The study had three treatment groups (activities of daily living, psychosocial activity, and a combination) and two control groups (placebo and no intervention). Nursing assistants hired specifically for this study enacted the interventions under the direction of a master's prepared gerontological clinical nurse specialist. Nursing assistants employed at the nursing homes recorded the occurrence of disruptive behaviors. Raters analyzed videotapes filmed during the study to determine the interventions' influence on affect. RESULTS: Findings indicated significantly more positive affect but not reduced disruptive behaviors in treatment groups compared to control groups. CONCLUSIONS: The treatments did not specifically address the factors that may have been triggering disruptive behaviors. Interventions much more precisely designed than those employed in this study require development to quell disruptive behaviors. Nontargeted interventions might increase positive affect. Treatments that produce even a brief improvement in affect indicate improved quality of mental health as mandated by federal law.

4. **Bradley, E. H.; McGraw, S. A.; Curry, L.; Buckser, A.; King, K. L.; Kasl, S. V.; and Andersen, R. Expanding the Andersen model: the role of psychosocial factors in long-term care use. Health Serv Res. 2002 Oct;37(5):1221-42.**

Abstract: OBJECTIVE: To examine a prevailing conceptual model of health services use (Andersen 1995) and to suggest modifications that may enhance its explanatory power when applied to empirical studies of race/ethnicity and long-term care. STUDY SETTING: Twelve focus groups of African-American (five groups) and white (seven groups) individuals, aged 65 and older, residing in Connecticut during 2000. STUDY DESIGN: Using qualitative analysis, data were coded and analyzed in NUD-IST 4 software to facilitate the reporting of recurrent themes, supporting quotations, and links among the themes for developing the conceptual framework. Specific analysis was conducted to assess distinctions in common themes between African-American and white focus groups. DATA COLLECTION: Data were collected using a standardized discussion guide, augmented by prompts for clarification. Audio taped sessions were transcribed and independently coded by investigators and crosschecked to enhance coding validity. An audit trail was maintained to document analytic decisions during data analysis and interpretation. PRINCIPAL FINDINGS: Psychosocial factors (e.g., attitudes and knowledge, social norms, and perceived control) are identified as determinants of service use, thereby expanding the Andersen model (1995). African-American and white focus group members differed in their reported accessibility of information about

long-term care, social norms concerning caregiving expectations and burden, and concerns of privacy and self-determination. CONCLUSIONS: More comprehensive identification of psychosocial factors may enhance our understanding of the complex role of race/ethnicity in long-term care use as well as the effectiveness of policies and programs designed to address disparities in long-term care service use among minority and nonminority groups.

5. ***Brodaty, H.; Green, A.; and Koschera, A. Meta-analysis of psychosocial interventions for caregivers of people with dementia. J Am Geriatr Soc. 2003 May;51(5):657-64.***

Abstract: OBJECTIVES: To review published reports of interventions for caregivers (CGs) of persons with dementia, excluding respite care, and provide recommendations to clinicians. DESIGN: Meta-analytical review. Electronic databases and key articles were searched for controlled trials, preferably randomized, published in English from 1985 to 2001 inclusive. Thirty studies were located and scored according to set criteria, and the interventions' research quality and clinical significance were judged. SETTING: Home or noninstitutional environment. PARTICIPANTS: Informal CGs-persons providing unpaid care at home or in a noninstitutional setting. MEASUREMENTS: The primary measures were psychological morbidity and burden. Other varied outcome measures such as CG coping skills and social support were combined with measures of psychological distress and burden to form a main outcome measure. RESULTS: The quality of research increased over the 17 years. Results from 30 studies (34 interventions) indicated, at most-current follow-up, significant benefits in caregiver psychological distress (random effect size [ES] = 0.31; 95% confidence interval [CI] = 0.13-0.50), caregiver knowledge (ES = 0.51; CI = 0.05-0.98), any main caregiver outcome measure (ES = 0.32; CI = 0.15-0.48), and patient mood (ES = 0.68; CI = 0.30-1.06), but not caregiver burden (ES = 0.09; CI =   -0.09-0.26). There was considerable variability in outcome, partly because of differences in methodology and intervention technique. Elements of successful interventions could be identified. Success was more likely if, in addition to CGs, patients were involved. Four of seven studies indicated delayed nursing home admission. CONCLUSION: Some CG interventions can reduce CG psychological morbidity and help people with dementia stay at home longer. Programs that involve the patients and their families and are more intensive and modified to CGs' needs may be more successful. Future research should try to improve clinicians' abilities to prescribe interventions.

6. ***Brodaty, H., and Low, L. F. Aggression in the elderly. J Clin Psychiatry. 2003;64(Suppl 4):36-43.***

Abstract: Aggression is a common behavioral symptom of dementia. Aggression is associated with frontotemporal dementia, greater dementia severity, cognitive decline, and other behavioral and psychological disturbances. It is influenced by the environment and has been correlated with neuropathologic changes and certain polymorphisms. Aggression in dementia patients results in higher psychotropic use and distress to family caregivers and nursing home staff; it is predictive of institutionalization. There is empirical evidence for the efficacy of pharmacotherapy and more limited evidence for psychosocial interventions in the successful management of aggression in persons with dementia. Management of aggression should include comprehensive assessment of medical, psychological, and environmental variables.

7. *Burgio, L. D.; Scilley, K.; Hardin, J. M.; and Hsu, C. Temporal patterns of disruptive vocalization in elderly nursing home residents. Int J Geriatr Psychiatry. 2001 Apr;16(4):378-86.*

Abstract: This study used computer-assisted real-time data collection procedures to study temporal patterns of disruptive vocalization (DV) in demented nursing home residents. Residents (N = 68) were observed from 8 a.m. to 8 p.m. and total mean duration of DV within hourly blocks was calculated. Analysis of the temporal distribution of DV exhibited by the group of 68 residents indicated a significant cubic trend. Exploratory cluster analysis uncovered three distinct temporal patterns of DV; although two of the patterns are generally supportive of sundowning. Cluster 1 showed a relatively constant pattern of low rate DV. Clusters 2 and 3 showed cyclic trends. Peaks in DV were observed during noontime and in the evening for Cluster 2. Cluster 3 showed peaks in DV in the early morning hours and late afternoon. MANOVA was employed to examine any differences among clusters in age, cognitive status, and ADL status. Univariate analyses indicated that cognitive status was the only factor that differed significantly among clusters, with members of Cluster 1 (constant low rate DV) manifesting higher cognitive status scores than Clusters 2 and 3. A step-wise discriminant function analysis also showed cognitive status to be the only statistically significant predictor of cluster membership. The authors' note that the scientific literature on agitation is fraught with contradictory findings and assert that inconsistencies may be due to differences across studies in problem definition, method of measurement, and sample size. The results are discussed in relation to these methodological issues and clinical implications of the findings.

8. *Cody, M.; Beck, C.; and Svarstad, B. L. Challenges to the use of nonpharmacologic interventions in nursing homes. Psychiatr Serv. 2002 Nov;53(11):1402-6.*

Abstract: The Nursing Home Reform Act, part of the Omnibus Budget Reconciliation Act of 1987, stated that nursing homes should try nonpharmacologic interventions before resorting to pharmacologic agents when addressing problem behaviors among residents. Since that time, the use of pharmacologic agents has decreased, but there is little evidence to suggest that the use of nonpharmacologic interventions has increased. Psychosocial models describe problem behaviors as complex phenomena that require individualized strategies based on a resident's unique characteristics. Categories of intervention include social contact, behavior therapy, staff training, structured activities, environmental interventions, and a combination of therapies. This article discusses internal barriers to the use of nonpharmacologic interventions based on the Porras stream organization model: organizing arrangements, social factors, technology, and physical setting. Also, external barriers related to the regulatory, legal, and economic sectors are discussed. The authors offer recommendations for overcoming these barriers.

9. *Cohen-Mansfield, J. Nonpharmacologic interventions for inappropriate behaviors in dementia: a review, summary, and critique. Am J Geriatr Psychiatry. 2001 Fall;9(4):361-81.*

Abstract: Inappropriate behaviors are very common in dementia and impose an enormous toll both emotionally and financially. Three main psychosocial theoretical models have generally been utilized to explain inappropriate behaviors in dementia: the "unmet needs" model, a behavioral/learning model, and an environmental vulnerability/reduced stress-threshold model. A literature search yielded 83 nonpharmacological intervention studies, which utilized the following categories of interventions: sensory, social contact (real or simulated), behavior therapy, staff training, structured

activities, environmental interventions, medical/nursing care interventions, and combination therapies. The majority are reported to have a positive, albeit not always significant, impact. Better matching of the available interventions to patients' needs and capabilities may result in greater benefits to patients and their caregivers.

10. **Connell, Bettye Rose. Why Residents Wander—and What You Can Do About It. Nursing Homes Long Term Care Management. 2003 Apr;52(4):50.**

Abstract: Interviews with Bettye Rose Connell, a health research scientist with the Rehabilitation Research & Development Center on preventing wandering and elopement for long-term care residents. Design elements that can be put in place in long-term care facilities to discourage resident elopement; Programs for deterring wandering and unwanted exiting; Examples of environmental triggers for agitation and wandering behaviors.

11. **Ekberg, O.; Hamdy, S.; Woisard, V.; Wuttge-Hannig, A.; and Ortega, P. (Reprint available from: Ekberg O Malmo Univ Hosp, Dept Diagnost Radiol SE-20502 Malmo Sweden). Social and psychological burden of dysphagia: Its impact on diagnosis and treatment. Dysphagia. 2002 Spring;17(2):139-146.**

Abstract: The social and psychological impact of dysphagia has not been routinely reported in large studies. We sought to determine the effects of dysphagia on broad measures of the quality of life of patients and to explore the relationship between the psychological handicaps of the condition and the frequency of diagnosis and treatment. A total of 360 patients selected on the basis of known subjective dysphagia complaints, regardless of origin, in nursing homes and clinics in Germany, France, Spain, and the United Kingdom were interviewed using an established questionnaire. Qualitative interviews with a total of 28 health professionals were conducted to improve understanding of the patient data in the context of each country. Over 50% of patients claimed that they were "eating less" with 44% reporting weight loss during the preceding 12 months. Thirty-six percent of patients acknowledged receiving a confirmed diagnosis of dysphagia; only 32% acknowledged receiving professional treatment for it. Most people with dysphagia believe their condition to be untreatable; only 39% of the sufferers believed that their swallowing difficulties could be treated. Eighty-four percent of patients felt that eating should be an enjoyable experience but only 45% actually found it so. Moreover, 41% of patients stated that they experienced anxiety or panic during mealtimes. Over one-third (36%) of patients reported that they avoided eating with others because of their dysphagia. In a largely elderly population that might accept dysphagia as an untreatable part of the aging process, clinicians need to be aware of the adverse effects of dysphagia on self-esteem, socialization, and enjoyment of life. Careful questioning should assess the impact of the condition on each patient's life, and patients should be educated on their choices for treatment in the context of any coexisting illness. Awareness of the condition, diagnostic procedures, and treatment options must be increased in society and among the medical profession. [References: 14]

12. **Ersek, M., and Wilson, S. A. (Pain Research Department, Swedish Medical Center, and Department of Biobehavioral Nursing and Health Systems, School of Nursing, University of Washington, Seattle, Washington 98122, USA). The challenges and opportunities in providing end-of-life care in nursing homes. [Comment.] Journal of Palliative Medicine. 2003 Feb;6(1):45-57.**

Abstract: Approximately 20% of deaths in the United States occur in nursing homes. That percentage is expected to increase as the population continues to age. As a setting for end-of-life care, nursing homes provide both challenges and opportunities. This article examines factors that impede the delivery of high-quality end-of-life care in nursing homes, such as inadequate staff and physician training, regulatory and reimbursement issues, poor symptom management, and lack of psychosocial support for staff, residents, and families. In addition to discussing hindrances to providing end-of-life care, this article explores characteristics of nursing homes and their staff that support the care of terminally ill residents. Also included is an overview of models for delivering end-of-life care in nursing homes, including provision of hospice services, specialized palliative care units, and consultation services. Finally, this article discusses educational programs and current educational initiatives to enhance end-of-life care in nursing homes

13. **Gates, D. M.; Fitzwater, E.; and Deets, C. (Associate Professor, College of Nursing, University of Cincinnati, Cincinnati, OH 45221-0038). Development of instruments to assess assaultive behavior in nursing homes. Journal of Gerontological Nursing. 2003 Aug;29(8):37-45.**

Abstract: The use of psychometric techniques is not usually considered in the development of non-scale tools. In the development of these tools, both content validation and inter-rater reliability were assessed in an effort to produce better quality tools than would have occurred otherwise. The procedure employing content experts for content validation followed the usual protocol for both of the tools. In each case, valuable information about the tools was obtained, in addition to data supporting the content validity of the tools. The development of vignettes for the inter-rater assessment would probably not have occurred if the authors were not familiar with the different techniques for assessing inter-rater reliability. The only way data concerning inter-rater reliability could be obtained was by having each respondent view the same stimuli. Creating vignettes was the best way to accomplish this goal in a cost-effective manner. The additional data obtained from the respondents also provided invaluable information for the development of the tools. This pilot study was conducted to assess all aspects of the tools in the nursing home setting. Clarity of items and usability of the tools were major considerations. Because NAs were involved in the pilot study, both readability by most NAs and clarity of the items in the revised tool were assured. Considerable time was spent assessing these tools, but the completed tools are evidence that the time was well spent. The use of psychometric techniques resulted in objective evidence that led to quality improvement decisions. The revised tools have the potential for use in obtaining quality data for research projects, in policy development by an agency, and for training agency personnel.

14. **Haynes, RB; McDonald, H; Garg, AX; and Montague, P. Interventions for helping patients to follow prescriptions for medications. Cochrane Database of Systematic Reviews. 1, 2003.**

Abstract: BACKGROUND: People who are prescribed self-administered medications typically take less than half the prescribed doses. Efforts to assist patients with adherence to medications might improve the benefits and efficiency of health care, but also might increase its adverse effects. OBJECTIVES: To update a review summarising the results of randomised controlled trials (RCTs) of interventions to help patients follow prescriptions for medications for medical problems, focusing on trials that measured both adherence and clinical outcomes. Search strategy: Computerised searches to August 2001 in MEDLINE, CINAHL, The Cochrane Library, International Pharmaceutical Abstracts (IPA) PsychInfo, and Sociofile; bibliographies in articles on patient adherence; articles in the reviewers' personal collections; and contact with authors of original and review articles on the topic. SELECTION CRITERIA: Articles were selected if they reported an unconfounded RCT of an intervention to improve adherence with prescribed medications, measuring both medication adherence and treatment outcome, with at least 80% follow-up of each group studied and, for long-term treatments, at least six months follow-up for studies with positive initial findings. DATA COLLECTION AND ANALYSIS: Information on study design features, interventions and controls, and results were extracted by one reviewer and confirmed by at least one other reviewer. The studies were too disparate to warrant meta-analysis. MAIN RESULTS: For short-term treatments, one of three interventions reported in three RCTs showed an effect on both adherence and clinical outcome. Eighteen of 36 interventions for long-term treatments reported in 30 RCTs were associated with improvements in adherence, but only 16 interventions led to improvements in treatment outcomes. Almost all of the interventions that were effective for long-term care were complex, including combinations of more convenient care, information, reminders, self-monitoring, reinforcement, counseling, family therapy, and other forms of additional supervision or attention by a health care provider (physician, nurse, pharmacist, or other). Even the most effective interventions did not lead to large improvements in adherence and treatment outcomes. Two studies showed that telling patients about adverse effects of treatment did not affect their adherence. CONCLUSIONS: The full benefits of medications cannot be realised at currently achievable levels of adherence. Current methods of improving adherence for chronic health problems are mostly complex and not very effective. Innovations to assist patients to follow medication prescriptions are needed.

15. **Hoban, Sandra . Caring for Residents With Advanced Dementia. Nursing Homes Long Term Care Management. 2003 Apr;52(4):27.**

Abstract: Deals with the model of care implemented by Glencroft Care Center for advanced dementia care at its Purple Sage Unit in conjunction with Alzheimer's Association. Protocols developed on health care delivery; areas of success on health care delivery in the unit; ways in which staff on the unit have connected with residents.

16. **Howard, R.; Ballard, C.; O'Brien, J.; and Burns, A. Guidelines for the management of agitation in dementia. Int J Geriatr Psychiatry. 2001 Jul;16(7):714-7.**

17. *Iwasiw, C.; Goldenberg, D.; Bol, N.; and MacMaster, E. Resident and family perspectives. The first year in a long-term care facility. J Gerontol Nurs. 2003 Jan;29(1):45-54.*

Abstract: The purpose of this longitudinal study was to explore perspectives, needs, and expectations of residents (N = 6) and family members (N = 3) of the resident's first year in a long-term care facility. The narrative method and a semi-structured interview guide were used to obtain participants' views at 2 and 6 weeks, and 3, 6, 9, and 12 months after admission. During data analysis, six themes emerged, which suggest implications for gerontological nursing education and practice. The authors conclude that by listening to residents and family members, nurses can use this information to improve life for residents and dignify them as individuals.

18. *Kiely, D. K.; Bergmann, M. A.; Murphy, K. M.; Jones, R. N.; Orav, E. J.; and Marcantonio, E. R. Delirium among newly admitted postacute facility patients: prevalence, symptoms, and severity. J Gerontol A Biol Sci Med Sci. 2003 May;58(5):M441-5.*

Abstract: BACKGROUND: Delirium may persist for weeks or months, and discharging elderly patients quickly from acute care facilities is not uncommon. Therefore, the adverse impact of delirium on loss of independence may occur in the postacute setting rather than in the hospital. The purpose of this study is to describe the prevalence of delirium, delirium symptoms, and severity assessed at admission to postacute facilities. METHODS: Subjects were recruited from seven Boston-area skilled nursing facilities specializing in postacute care. Assessment instruments included the Mini-Mental Status Exam, Delirium Symptom Interview, Memorial Delirium Assessment Scale, and Confusion Assessment Method (CAM) Diagnostic Algorithm. Delirium status was categorized into four groups: full, two or more symptoms, one symptom, and no delirium. Descriptive statistics were calculated and chi-square analyses and an analysis-of-variance were used to examine delirium characteristics by delirium group. RESULTS: Among 2,158 subjects, approximately 16% had full CAM-defined delirium at admission to the postacute facility. In addition, nearly 13% of the subjects had two or more symptoms of delirium, approximately 40% had one delirium symptom, and 32% had no symptoms of delirium. In a comparison of the group with no symptoms of delirium with that with CAM-defined delirium, there was a significant trend toward (a) older age, (b) lower scores on the Mini-Mental Status Exam, (c) more Delirium Symptom Interview symptoms, and (d) higher Memorial Delirium Assessment Scale Scores. CONCLUSIONS: Results indicate that 16% of admissions to postacute facilities have CAM-defined delirium, and over two-thirds had at least one delirium symptom. It is not known whether or not postacute staff have the training necessary to detect or manage delirium. Managing delirium may require different strategies and techniques in a postacute setting, thereby requiring further research.

19. *Lindgren, C. L., and Murphy, A. M. Nurses' and family members'. Perceptions of nursing home residents' needs. J Gerontol Nurs. 2002 Aug;28(8):45-53.*

Abstract: The purpose of this study was to determine the degree of agreement between nursing home staff and families in assessing the needs of cognitively impaired nursing home residents. A convenience sample of 36 family members of nursing home residents with cognitive impairment and the nurses assigned to those patients was recruited from three nursing homes. The Nurse and Resident Perceptions Questionnaire, adapted from Lindgren and Linton (1991), was used to assess functioning in activities of daily living, physiologic, and psychosocial areas. Significant differences were found for eight items of physiologic and psychosocial functioning: difficulties with chewing,

swelling of feet, orthopnea, weakness, easy bruising, recognition of people, lack of privacy, and boredom. Nurses rated all these areas less problematic than did the family members. Collaborative efforts of family members and nurses are needed to develop effective plans of care for these problems of nursing home residents with cognitive impairment.

20. **Logue, R. M. Maintaining family connectedness in long-term care: an advanced practice approach to family-centered nursing homes. Journal of Gerontological Nursing. Jun 6- 2003 Jun 6;29(6):24-31; 55-6.**

Abstract: The decision to place a relative in a long-term care institution is one of the most difficult processes families can go through. Family members often experience conflicting feelings of stress, shock, anxiety, fear, resistance, and guilt. In addition, many individuals, regardless of the amount of previous nursing home experiences, possess misconceptions about nursing home care (Grove, 1997; Mastrian & Dellasega, 1996; Tickle & Hull, 1995). Even after the family realizes the necessity of nursing home placement, achieving a level of comfort with such a decision and maintaining family relationships is a difficult challenge. Unfortunately, family-centered nursing care in long-term care settings is hindered by multiple barriers, including resistance to institutional change, family members' fear and hesitation, institutional rules and protocols, lack of institutional encouragement of family involvement, insufficient programs and activities addressing the social and emotional needs of the family, and ineffective communication between the staff and families. To remedy these barriers, it is suggested the family advanced practice nurse (APN) view the families as clients and initiate family-centered policies to encourage family involvement in the caregiving experience. Ultimately, this will promote individualized care of elderly adults and encourage family processes within the walls of the nursing home.

21. **Marcantonio, E. R.; Simon, S. E.; Bergmann, M. A.; Jones, R. N.; Murphy, K. M.; and Morris, J. N. Delirium symptoms in post-acute care: prevalent, persistent, and associated with poor functional recovery. J Am Geriatr Soc. 2003 Jan;51(1):4-9.**

Abstract: OBJECTIVES: To determine the prevalence of delirium symptoms at the time of admission to post-acute facilities, the persistence of delirium symptoms in this setting, and the association of delirium symptoms with functional recovery. DESIGN: Prospective cohort study. SETTING: Eighty-five post-acute care facilities: 55 rehabilitation hospitals and 30 skilled nursing facilities in 29 states. PARTICIPANTS: Five hundred fifty-one consenting patients aged 65 and older newly admitted to participating facilities from acute care hospitals. MEASUREMENTS: Data were collected as part of a field study effort related to the Minimum Data Set (MDS). Basic demographic data, medical comorbidity, delirium symptoms, and functional status—activities of daily living (ADLs) and instrumental activities of daily living (IADLs)—were obtained from MDS assessments performed within 4 days of admission and again 1 week later by the patient's primary nurse. Six delirium symptoms (easily distracted, periods of altered perception, disorganized speech, periods of restlessness, periods of lethargy, and mental function varies over the course of a day) were assessed after appropriate training. RESULTS: Of the 551 patients (mean age +/- standard deviation 78 +/- 7, 64% women), 126 had delirium symptoms on post-acute admission, for an overall prevalence of 23%. In patients with delirium symptoms on the admission assessment, 1 week later, 14% had completely resolved, 22% had fewer delirium symptoms, 52% had the same number of symptoms, and 12% had more symptoms. Of those with no delirium symptoms on admission, 4% had new

symptoms 1 week later. Patients who had the same number of or more delirium symptoms at the second assessment had significantly worse ADL and IADL recovery than those with fewer or resolved delirium symptoms or those with no delirium symptoms at either assessment. Persistent delirium symptoms remained significantly associated with worse ADL and IADL recovery after adjusting for age, comorbidity, dementia, and baseline functional status. CONCLUSIONS: The data from this study provide strong preliminary evidence that, in patients newly admitted to post-acute care facilities from acute care hospitals, delirium symptoms are prevalent, persistent, and associated with poor functional recovery. Educational efforts are warranted to help post-acute facility staff recognize and manage this common and morbid condition.

22. *McGilton, K. S. Enhancing relationships between care providers and residents in long-term care. Designing a model of care. J Gerontol Nurs. 2002 Dec;28(12):13-21.*
Abstract: Research in three different areas was examined and several conclusions can be drawn. Continuity of care provider is critical to understanding the resident and to developing relationships with the resident over time (Patchner, 1987; Teresi et al., 1993a). The teaching of interactional skills is not enough; the care provider must be engaged in some way, such as learning about the person through life stories (Best, 1998; Caris-Verhallen et al., 2000; Coker et al., 1998; Heliker, 1999; McCallion et al., 1999; Pietrukowicz & Johnson, 1991; Williams & Tappen, 1999). If care providers are called to enhance relationships with residents, they too must be supported in their work environments (Hallberg & Norberg, 1993; Montegar et al., 1977; Kovach & Krejci, 1998). Finally, research confirmed positive secondary resident and care provider outcomes can be achieved following the development of holding relationships. Overall, preliminary empirical support for the capacities of the care provider—reliability, empathy, continuity—and for the requirement for support were established from a review of the literature. However, no intervention studies were found that incorporated the complete set of theoretical variables. Testing the combined influence of these variables, as conceptualized by Winnicott's (1970) theory of relationships, and the manner in which they affect the holding relationship for residents, and subsequently secondary care provider and resident outcomes, is essential to assess the usefulness of this theory to relationship building in LTC. Caregiving relationships involve all kinds of social interaction during the course of which the patient's sense of self-worth can either be enhanced or thwarted (Agich, 1990). Therefore, a milieu should be developed to accentuate care provider-resident relationships and lead to a systematic and encompassing framework of positive expectations on the part of all nursing personnel involved. A model of care focusing on relationships may be one means to this end.

23. *Moniz-Cook, E.; Stokes, G.; and Agar, S. (Reprint available from: Moniz-Cook E Univ Hull, Sch Med, Dept Clin Psychol Robert Blackburn Bldg,Cottingham Rd Kingston Upon Hull HU6 7RX N Humberside England). Difficult behaviour and dementia in nursing homes: Five cases of psychosocial intervention. Clinical Psychology & Psychotherapy. 2003 May-2003 Jun 30;10(3):197-208.*
Abstract: Psychosocial interventions in five people, who presented with uncooperative and difficult behaviour at mealtimes and during assistance with self-care tasks, are described. In four cases, a single case experimental design was used. The results are discussed in the context of "rementia" and a broadly defined functional analytic perspective to assessment and intervention. In contrast to the standard neurogenic-disease paradigm, a person-centred holistic model of dementia is

proposed for the understanding and amelioration of distress in people with dementia who are seen as difficult or "challenging." Copyright © 2003 John Wiley Sons, Ltd. [References: 87]

24. ***Norbergh, K. G.; Hellzen, O.; Sandman, P. O.; and Asplund, K. The relationship between organizational climate and the content of daily life for people with dementia living in a group-dwelling. Journal of Clinical Nursing. 2002 Mar;11(2):237-246.***

Abstract: One factor influencing the outcome of care may be nursing staffs experience of the organizational work climate. The aim of the study was to investigate how people with dementia spend their time in group-dwelling units (GD) with either a creative or less creative organizational climate. For the study, two GD units assessed as having a creative organizational climate and two units assessed as having a less creative climate were selected. Eighteen residents living in the units assessed as creative and 20 residents living in the units assessed as less creative participated in the study. For measuring the organizational climate the Creative Climate Questionnaire was used. Observations of residents' activities were classified according to the Patient Activity Classification. For measuring residents' functional ability the Multi-Dimensional Dementia Assessment Scale was used. Their cognitive capacity was measured with the Mini Mental State Examination. Residents living in the units assessed as having a creative organizational climate spent 45.2% of the time with nursing staff, while those in the less creative climate spent 25.6% (P < 0.001). Time spent with fellow residents in the creative climate was 13.9% and in the less creative climate 31.3% (P < 0.001). There was no significant difference between the units according time spent with relatives and time spent alone. Since the purpose of GD is to offer care adapted to the abilities and psychosocial needs of people suffering from dementia, a less creative climate can be a threat to the aims of GD. In order to maintain these, it is important for managers to be aware of the work climate and its impact on care for people with dementia. [References: 31]

25. ***Opie, J.; Doyle, C.; and O'Connor, D. W. Challenging behaviours in nursing home residents with dementia: a randomized controlled trial of multidisciplinary interventions. Int J Geriatr Psychiatry. 2002 Jan;17(1):6-13.***

Abstract: OBJECTIVES: To test the premise that individually tailored psychosocial, nursing, and medical interventions to nursing home residents with dementia will reduce the frequency and severity of behavioural symptoms. METHODS: A four-member team comprising a psychiatrist, psychologist, and nurses conducted detailed assessments of 99 nursing home residents with advanced dementia who were rated by staff as having frequent, severe behavioural disturbances. Residents were then randomly assigned to an "early" or "late" intervention group and observed for four weeks. Interventions encompassed psychosocial strategies, nursing approaches, psychotropic medications and management of pain. Outcome measures included the frequency and severity of disruptive behaviours and assessments of change by senior nursing home staff. RESULTS: While improvements in behaviour were noted in both groups from the outset of observations, pointing to a powerful Hawthorne effect, consultancies were associated with a modest but statistically significant decrease in challenging behaviours. Staff assessments of the interventions were highly favourable. CONCLUSIONS: The consultancies were effective and well received by staff. The change-inducing nature of any new endeavour is an integral part of research in a long-term setting.

26. *Piven, M. L. Detection of depression in the cognitively intact older adult protocol. J Gerontol Nurs. 2001 Jun;27(6):8-14.*

27. *Powers, B. A. The Significance of Losing Things for Nursing Home Residents with Dementia and Their Families. Journal of Gerontological Nursing. 2003 Nov;29(11):43-53.*

28. *Remington, R. Calming music and hand massage with agitated elderly. Nurs Res. 2002 Sep-2002 Oct 31;51(5):317-23.*
Abstract: BACKGROUND: Agitated behavior is a widespread problem that adversely affects the health of nursing home residents and increases the cost of their care. OBJECTIVE: To examine whether modifying environmental stimuli by the use of calming music and hand massage affects agitated behavior in persons with dementia. METHOD: A four group, repeated measures experimental design was used to test the effect of a 10-minute exposure to either calming music, hand massage, or calming music and hand massage simultaneously, or no intervention (control) on the frequency and type of agitated behaviors in nursing home residents with dementia (N = 68). A modified version of the Cohen-Mansfield Agitation Inventory was used to record agitated behaviors. RESULTS: Each of the experimental interventions reduced agitation more than no intervention. The benefit was sustained and increased up to one hour following the intervention (F = 6.47, P <.01). The increase in benefit over time was similar for each intervention group. When types of agitated behaviors were examined separately, none of the interventions significantly reduced physically aggressive behaviors (F = 1.93, P = .09), while physically nonaggressive behaviors decreased during each of the interventions (F = 3.78, P < 01). No additive benefit resulted from simultaneous exposure to calming music and hand massage. At one hour following any intervention, verbally agitated behavior decreased more than no intervention. CONCLUSION: Calming music and hand massage alter the immediate environment of agitated nursing home residents to a calm structured surrounding, offsetting disturbing stimuli, but no additive benefit was found by combining interventions simultaneously.

29. *Siccardi, A. H. (Director, Graduate Nursing Program, University of Indianapolis School of Nursing, Indianapolis, IN; nursing_ejournal@medscapeinc.com). Healthcare needs of the older adult and competencies of the advanced practice nurse. Topics in Advanced Practice Nursing. 2001 Fall;1(3):7p.*
Abstract: The challenge of meeting the healthcare needs of older adults will be tremendous during the next decades. Not only is the number of older adults increasing, but these patients often present with multiple chronic illnesses that require complex, integrated care. Because advanced practice nurses (APNs) have the skills to meet the physical, psychosocial, spiritual, and environmental healthcare needs of older adults, they fill a vital role in geriatric healthcare.

30. *Souder, E., and O'Sullivan, P. Disruptive behaviors of older adults in an institutional setting. Staff time required to manage disruptions. J Gerontol Nurs. 2003 Aug;29(8):31-6.*
Abstract: This study, as part of a larger project, examined the actual time recorded by nursing staff to manage 36 disruptive behaviors in older adults who are institutionalized. Disruptive behaviors were defined as socially unacceptable or isolating, observable actions with negative consequences. A prospective study was conducted using a sample of 153 patients in a Veterans Affairs institution

(mean age = 72.6, SD = 10.8). Data related to time to manage disruptive behaviors were collected during 21 consecutive shifts for each patient. Nursing staff did not always intervene in all disruptive behaviors that occurred. When they did intervene, total time to manage a disruptive behavior ranged from 5.7 to 201.5 minutes (mean = 23.1 minutes, SD = 31.9).

31. **Strang, S.; Strang, P.; and Ternestedt, B. M. (Department of Oncology, Sahlgrenska Academy, 413 45 Gothenburg, Sweden. susan_strang@hotmail.com). Spiritual needs as defined by Swedish nursing staff. Journal of Clinical Nursing. 2002 Jan;11(1):48-57.**

Abstract: A study was undertaken to describe how Swedish nursing staff at six different units characterize spiritual needs in a broad context, including both religious and existential issues. Another aim was to study whether there are any special groups of patients for whom these needs are considered to be of utmost importance. A questionnaire comprising two open-ended questions (the focus of the study) and six background questions was mailed to 191 nurses. Data were obtained from 141 nurses who worked on the oncology, palliative, neurological, neurosurgery, and psychiatric units or in nursing homes. Data from the open-ended questions were analysed using content analysis and classified into three categories: (i) (general) spiritual issues, (ii) religious issues, and (iii) existential issues. Sub-categories of the latter were (a) meaning, (b) freedom, (c) isolation, and (d) death, i.e., the four central issues in existentialism as previously defined by existential philosophers. A majority of the nurses only had limited theoretical knowledge about definitions. Nevertheless, their suggestions for improved spiritual and existential support contained essential elements that could be allocated to the three main categories. They had some difficulty distinguishing between spiritual and psychosocial care. According to the nurses, special groups of interest for spiritual and existential support were severely ill, dying persons, and immigrants who actively practiced their religion. We conclude that there is a willingness to pay attention to spiritual and existential needs, but nurses still have difficulty defining what such care should include. The study revealed that nursing staff needed, and also made inquiries about, more education in order to deepen their knowledge.

32. **Svarstad, B. L.; Mount, J. K.; and Bigelow, W. Variations in the treatment culture of nursing homes and responses to regulations to reduce drug use. Psychiatr Serv. 2001 May;52(5):666-72.**

Abstract: OBJECTIVE: The study examined the relationship between treatment cultures of nursing homes and their responses to regulations to reduce use of psychotropic drugs mandated by the 1987 Omnibus Budget Reconciliation Act. The authors hypothesized that reduction in use of antipsychotic drugs was more likely to occur in homes with a resident-centered culture emphasizing psychosocial care, avoidance of psychotropic drugs, pharmacist feedback, and involvement of mental health workers. The authors also predicted greater reductions in drug use in facilities with a less severe case mix and better capacity for change. METHODS: Data were collected in a stratified random sample of 16 skilled nursing facilities in Wisconsin. Participants included 1,181 residents in the baseline study and 1,650 residents in the follow-up study. Treatment culture was measured with a questionnaire for assessing nurses' beliefs and philosophies of care and their interactions with pharmacists and mental health workers. RESULTS: No significant change was observed in the use of benzodiazepines, antidepressants, or polymedicine (two or more psychotropic medications). However, use of antipsychotic drugs decreased significantly, from 24 percent to 16 percent. The

change in use varied dramatically across facilities, from an 85 percent reduction to a 19 percent increase. Findings also revealed significant variability in treatment cultures. Greater reductions in use of antipsychotic drugs were found in facilities with a resident-centered culture, a less severe case mix, and a higher nurse-to-resident staffing ratio. CONCLUSIONS: Future policy and quality improvement efforts must address treatment cultures, staffing, and other organizational barriers to nursing home reform.

33. **Van Haitsma, K., and Ruckdeschel, K. (Polisher Research Institute c/o Temple Continuing Care Center, 5301 Old York Road, Philadelphia, PA 19141). Special care for dementia in nursing homes: overview of innovations in programs and activities. Alzheimer's Care Quarterly. 2001 Summer;2(3):49-56.**

Abstract: The unifying goal of psychosocial interventions in nursing homes is to enhance quality of life. The paths taken to arrive at this goal are diverse and reflect the complex nature of providing care to persons with dementia. Some types of interventions have been rigorously studied, whereas others are compelling because of anecdotal reports of their efficacy. The authors provide examples of programs across the spectrum of care that fall into four general categories: (1) programs that focus on individualization of care; (2) programs designed to promote functional independence; (3) programs that utilize "technology"; and (4) programs that utilize alternative therapies. Copyright © 2001 by Aspen Publishers, Inc

34. **Washburn, A. M.; Sands, L. P.; and Walton, P. J. Assessment of social cognition in frail older adults and its association with social functioning in the nursing home. Gerontologist. 2003 Apr;43(2):203-12.**

Abstract: PURPOSE: The aims of this study were to reliably assess a range of social-cognitive functioning in frail seniors and to examine the association between measures of social cognition and nurses' ratings of residents' social functioning in a nursing home. DESIGN AND METHODS: Forty nursing home residents with and without cognitive impairment completed 11 social cognition tasks on two occasions after assessment of their cognitive functioning with the Cambridge Cognitive Examination-Revised (CAMCOG), CAMCOG Executive Function, and two tests of working memory. Staff on the nursing units completed two measures of social behavior. RESULTS: Participants completed the social cognition protocol without difficulty. The measures demonstrated good internal (median alpha =.75) and test-retest reliability (median correlation =.70). Four of the social cognition measures were significantly associated with the measures of cognitive functioning; three additional measures showed significant positive associations with subsets of the cognitive tests. Regression analyses revealed that measures of social cognition were significantly and independently associated with nurses' ratings of residents' social functioning after age, gender, education, and the four measures of cognitive functioning were controlled for. One measure of social cognition that assessed interpersonal problem-solving accounted for 45% of the variance in nurses' ratings of participants' social functioning (F = 41.35; df = 1,17; P <.001). IMPLICATIONS: Measures of social cognition assess a domain of functioning that is not evaluated by traditional tests of cognitive status. These measures are informative about frail, older adults' ability to understand and respond to others and could be used to predict patterns of social functioning in nursing homes and other naturalistic settings.

Falls/Restorative Selected Articles   2001–2003

1. ***Abdelhafiz, A. H., and Austin, C. A. (Reprint available from: Abdelhafiz AH No Gen Hosp, Dept Geriatr Med Herries Rd Sheffield S5 7AU S Yorkshire England). Visual factors should be assessed in older people presenting with falls or hip fracture [Review]. AGE AND AGEING. 2003 Jan;32(1):26-30.***

    Abstract: Visual impairment, although not routinely assessed, is an important risk factor for falls and hip fracture in older people. Impaired vision is highly prevalent and commonly unreported in the elderly population particularly in women and those living in nursing homes. Measurement of visual functions such as visual acuity, contrast sensitivity, and depth perception may identify older people at risk of falls and hip fracture. Visual loss in older people is correctable in most cases. Intervention strategies, for example, change of glasses or cataract extraction may have the potential of improving visual function and preventing falls in older people. [References: 49]

2. ***Anonymous. Guideline for the prevention of falls in older persons. American Geriatrics Society, British Geriatrics Society, and American Academy of Orthopaedic Surgeons Panel on Falls Prevention. [Comment.] Journal of the American Geriatrics Society. 2001 May;49(5):664-72.***

3. ***Arfken, C. L.; Wilson, J. G.; and Aronson, S. M. Retrospective review of selective serotonin reuptake inhibitors and falling in older nursing home residents. Int Psychogeriatr. 2001 Mar;13(1):85-91.***

    Abstract: We compared the rate of falling in older nursing home residents who had been prescribed selective serotonin reuptake inhibitors (SSRIs), other classes of antidepressants, and no antidepressants. Data were obtained from pharmacy records, medical records, fall logs, and incidence reports for one nursing home (1995 data). Older adults on SSRIs were more likely to fall than older adults not on antidepressants (P = .003) and were more likely to have an injurious fall (P = .03). The association with falling remained significant even when including potential confounders (P = .007). Older nursing home residents should be treated for depression. However, SSRIs may also carry an increased risk for falling.

4. ***Barry, E.; Laffoy, M.; Matthews, E.; and Carey, D. Preventing accidental falls among older people in long stay units. Ir Med J. 2001 Jun;94(6):172, 174-6.***

    Abstract: A fall prevention programme for older long-stay patients in a 95 bedded District Hospital was undertaken. Data on falls and resulting injuries for the year prior to the intervention were compared with equivalent data after one year (Year 1) and after two years (Year 2) of the intervention. In the pre-intervention year 25% of patients had at least one fall compared with 20.9% and 17.4% in Year 1 and Year 2 respectively. This difference was not statistically significant. However, there were 21% fewer falls in Year 1 and 49.3% fewer in Year 2 than in the pre-intervention year. This difference was significant in Year 2. In both intervention years, there was a significant reduction in the incidence of fracture from 20.5% of falls (pre-intervention) to 2.8% in Year 1 and no fractures occurred in Year 2. Significant reductions in soft tissue injuries occurred in Year 2 but not in Year 1, dropping from 38.5% (pre-intervention) to 36.1% and 15.4% respectively. The percentage of patients uninjured

after a fall increased from 41% to 61.1% to 84.6%. This intervention reduced falls and their adverse consequences for older people living in the long stay unit. The effect of the intervention escalated in Year 2. The intervention cost IR4,800 pounds. Fall prevention should be part of the routine care of older people in all types of long stay care.

5. **Basante, J.; Bentz, E.; Heck-Hackley, J.; Kenion, B.; Young, D.; and Holm, M. B. (Metropolitan Hospital, New York, NY). Falls risk among older adults in long-term care facilities: a focused literature review. Physical & Occupational Therapy in Geriatrics. 2001;19(2):63-85.**

Abstract: PURPOSE: To identify falls risk-factors relevant to practitioners in studies that examined the contributions of medications, deconditioning, and physical restraints to falls among long-term care facility residents. The literature review consolidates data from 21 studies into an easy to use format. METHOD: Twenty-one research articles published between 1990 and 1999 were reviewed by random assignment by a research team. A matrix was developed to allow for easy identification of risk factors and study designs. RESULTS: Studies indicated that use of medications (e.g., psychotropics, antidepressants, antihypertensives, and diuretics), deconditioning (e.g., lower extremity weakness, certain gait and balance disorders), and physical restraints (e.g., vests, pelvic restraints, and lap trays) all contributed to an increase in falls among long-term care facility residents. CONCLUSION: The rate of falls among older adults residing in long-term care facilities is substantially increased by the use of certain medications, deconditioning, physical restraints, or any combination of these factors. Practitioners need to recognize risk factors that may lead to falls and subsequent decreases in functional status and quality of life for older adults residing in long-term care facilities. Identification of these risk factors in individual residents and among all residents in a facility is the first step toward fall prevention.

6. **Becker, C.; Kron, M.; Lindemann, U.; Sturm, E.; Eichner, B.; Walter-Jung, B.; and Nikolaus, T. Effectiveness of a multifaceted intervention on falls in nursing home residents. J Am Geriatr Soc. 2003 Mar;51(3):306-13.**

Abstract: OBJECTIVES: To evaluate the effectiveness of a multifaceted, nonpharmaceutical intervention on incidence of falls and fallers. DESIGN: Prospective, cluster-randomized, controlled 12-month trial. SETTING: Six community nursing homes in Germany. PARTICIPANTS: Long-stay residents (n = 981) aged 60 and older; mean age 85; 79% female. INTERVENTIONS: Staff and resident education on fall prevention, advice on environmental adaptations, progressive balance and resistance training, and hip protectors. MEASUREMENTS: Falls, fallers, and fractures. RESULTS: The incidence density rate of falls per 1,000 resident years (RY) was 2,558 for the control group (CG) and 1,399 for the intervention group (IG) (relative risk [RR] = 0.55, 95% confidence interval [CI] = 0.41-0.73). Two hundred forty-seven (52.3%) fallers were detected in the CG and 188 (36.9%) in the IG (RR = 0.75, 95% CI = 0.57-0.98). The incidence density rate of frequent fallers (>2/year) was 115 (24.4%) for the CG and 66 (13.0%) for the IG (RR = 0.56, 95% CI = 0.35-0.89). The incidence density rate of hip fractures per 1,000 RY was 39 for the CG and 43 for the IG (RR = 1.11, 95% CI = 0.49-2.51). Other fractures were diagnosed with an incidence density rate of 52 per 1,000 RY for CG and 41 per 1,000 RY for IG (RR = 0.78, 95% CI = 0.57- 1.07). CONCLUSION: The incidence density rate of falls and fallers differed considerably between the control and intervention groups. The study was underpowered to demonstrate a significant difference of hip or nonhip fractures. Because

of a low fracture rate in both groups, the investigation of fracture rates would have required a larger sample size to detect an effect of the intervention.

7. **Bumin G.; Uyanik M.; Aki E.; and Kayihan H. (School of Physical Therapy and Rehabilitation, Hacettepe University, Samanpazan, Ankara, Turkey. gbumin@hacettepe. edu.tr). An investigation of risk factors for fails in elderly people in a Turkish rest home: a pilot study. Aging-Clinical & Experimental Research. 2002 Jun;14(3):192-6.**

Abstract: BACKGROUND AND AIMS: The aim of this pilot study was to determine risk factors for falls, and investigate whether there was a difference in balance and gait between elderly persons with and without a history of falling. METHODS: 33 elderly persons (16 fallers and 17 non-fallers) living in the Seyranba lari rest home in Ankara were included in this study. A questionnaire and a mental test were administered to the subjects in order to categorize them correctly as either fallers or non-fallers. Tinetti's performance oriented assessment balance and gait, the Abbreviated Mental State Test (AMST), and the Modified Barthel Index were performed. In addition, risk factors were investigated. RESULTS: The fallers (F) group had more impaired balance and mobility than the non-fallers (NF) group (P <0.05). The F group had more risk factors (postural hypotension, decreased knee strength, hearing problems, lower limb in-coordination, upper limb disability, and foot problems) than the NF group. CONCLUSIONS: The results of our pilot study showed that balance, gait, and other risk factors may contribute to falls in the elderly. It is pointed out that functional balance and gait together with risk factors must be addressed and evaluated in detail in faller subjects

8. **Capezuti, E.; Maislin, G.; Strumpf, N.; and Evans, L. K. Side rail use and bed-related fall outcomes among nursing home residents. J Am Geriatr Soc. 2002 Jan;50(1):90-6.**

Abstract: OBJECTIVES: To analyze the effect of physical restraint reduction on nighttime side rail use and to examine the relationship between bilateral side rail use and bed-related falls/injuries among nursing home residents. DESIGN: Secondary analysis of data collected in a longitudinal, prospective clinical trial designed to reduce restraint use. SETTING: Three nonprofit nursing homes. PARTICIPANTS: To examine the first question regarding the effect of physical restraint reduction on side rail usage, we included all nursing home residents who survived a 1-year data collection period (n = 463). To answer the second research question concerning the relationship between side rail status and bed-related falls, subjects' side rail status for each of the four data collection periods was compared. The sample for this analysis includes only those with consistent side rail status (n = 319) for the four observations periods: either 0/1 side rail (n = 188) or 2 (bilateral) side rails (n = 131). MEASUREMENTS: Side rail and restraint status was directly observed by two research assistants, twice each night shift (10 p.m.-6 a.m.) for three nights at each of four data collection points. Nighttime fall-related outcome data were obtained from a review of nursing home incident reports during the entire 1-year data collection period (T1 through T4). Cognitive status was measured using the Folstein Mini-Mental State Examination. Functional and behavioral status was obtained using subscales of the Psychogeriatric Dependency Rating Scale. RESULTS: Over a 1-year period, there was an increase in the proportion of bilateral side rail use for all three nursing homes. Based on the multiple logistic regression analysis, there was no indication of a decreased risk of falls or recurrent falls with bilateral side rail use, controlling for cognition and functional and behavioral status (adjusted odds ratio [AOR] = 1.13, 95% confidence interval [CI] = 0.45,2.03). Similarly, bilateral side rail use did not reduce the risk of recurrent falls, controlling for cognition and functional status (AOR = 1.25,

95% CI = 0.33,4.67). CONCLUSION: Despite high usage of bilateral side rails, they do not appear to significantly reduce the likelihood of falls, recurrent falls, or serious injuries. Bed-related falls remain clinically challenging. The data from this study, coupled with increasing reports of side rail-related injuries and deaths, compel us to seek and empirically test alternative interventions to prevent bed-related falls.

9. **Cattaneo, D.; De Nuzzo, C.; Fascia, T.; Macalli, M.; Pisoni, I.; and Cardini, R. (Neurological Rehabilitation Service, Don C. Gnocchi Foundation IRCCS ONLUS, Milan, Italy. cattaneo. davide@tin.it). Risks of falls in subjects with multiple sclerosis. Archives of Physical Medicine & Rehabilitation. 2002 Jun;83(6):864-7.**

Abstract: OBJECTIVES: To quantify fall risk among patients with multiple sclerosis (MS) and to report the importance of variables associated with falls. DESIGN: Retrospective case-control study design with a 2-group sample of convenience. SETTING: A hospital and home settings in Italy. PARTICIPANTS: A convenience sample of 50 people with MS divided into 2 groups according to their reports of falls. INTERVENTIONS: Not applicable. MAIN OUTCOME MEASURE: Subjects were assessed with questionnaires for cognitive ability and were measured on their ability to maintain balance, to walk, and to perform daily life activities. Data regarding patients' strength, spasticity, and transfer skills impairment were also collected. RESULTS: No statistical differences were found between groups of fallers and nonfallers using variables pertaining to years after onset, age, gender, and Mini-Mental State Examination. Near statistically significant differences were found in activities of daily living and transfer skills ($P < .05$). Three variables were associated with fall status: balance, ability to walk, and use of a cane ($P < .01$). Those variables were analyzed using a logistic regression. The model was able to predict fallers with a sensitivity of 90.9% and a specificity of 58.8%. CONCLUSIONS: Variables pertaining to balance skills, gait impairment, and use of a cane differed between fallers and nonfallers groups and the incidence of those variables can be used as a predictive model to quantify fall risk in patients suffering from MS. These findings emphasize the multifactorial nature of falls in this patient population. Assessment of different aspects of motor impairment and the accurate determination of factors contributing to falls are necessary for individual patient management and therapy and for the development of a prevention program for falls. Copyright 2002 by the American Congress of Rehabilitation Medicine and the American Academy of Physical Medicine and Rehabilitation

10. **Chiu, A. Y.; Au-Yeung, S. S.; and Lo, S. K. (Physiotherapy Department, Queen Mary Hospital, Hong Kong SAR, Peoples' Republic of China). A comparison of four functional tests in discriminating fallers from non-fallers in older people. Disability & Rehabilitation. 2003 Jan 7;25(1):45-50.**

Abstract: PURPOSE: Which functional tests on mobility and balance can better screen older people at risk of falls is unclear. This study aims to compare the Berg Balance Scale (BBS), Tinetti Mobility Score (TMS), Elderly Mobility Scale (EMS), and Timed Up and Go test (TUG) in discriminating fallers from non-fallers in older people. METHOD: This was a case-control study involving one rater who conducted a mobility and balance assessment on subjects using the four functional tests in random sequence. Subjects recruited included 17 and 22 older people with a history of single and multiple falls respectively from a public Falls Clinic, and 39 community-dwellers without fall history and whose age, sex, and BMI matched those of the fallers. All subjects underwent the mobility and balance

assessment within one day. RESULTS: Single fallers performed better than multiple fallers in all four functional tests but were worse than non-fallers in the BBS, TMS, and TUG. The BBS demonstrated the best discriminating ability, with high sensitivity and specificity. The BBS item "pick up an object from the floor" was the best at screening fallers. CONCLUSION: BBS was the most powerful functional test of the four in discriminating fallers from non-faller.

11. *Ciocon, D. G., and Ciocon, J. O. (Nurse Researcher, Veterans Affairs Medical Center, Miami, FL). The fall factor: understanding the causes of falls and a well-developed gait and balance program may prevent falls in older adults but more research needs to be done. Rehab Management: the Interdisciplinary Journal of Rehabilitation. Feb;15(1):40-2; 58.*

12. *Curry, L. C., and Hogstel, M. O. (Harris School of Nursing, Texas Christian University, TCU Box 298620, Fort Worth, TX 76129; l.curry@tcu.edu). Nursing assessment and intervention: preventing fall-related injuries in long-term care facilities. Annals of Long-Term Care. 2002 Jan;10(1):29-35.*

Abstract: Falls are a major problem in long-term care facilities. They may result in various serious complications or death, the implication of which is increased litigation. A number of medical diagnoses, medication side effects, equipment and/or environmental problems, and inadequate staffing of long-term care facilities are some of the factors that may cause falls. One of the medical diagnoses that should be considered in relation to fall-related fractures is osteoporosis—a chronic, yet pharmacologically preventable and reversible disease that occurs in many older women and men. The most dangerous complication of progressive osteoporosis is fracture of the hip caused by a fall. Therefore, the environment of long-term care facilities must be carefully assessed for safety, and all staff members as well as patients and their family members need to be educated on the prevention, diagnosis, and treatment of osteoporosis.

13. *Di Fabio, R. P.; Greany, J. F.; Emasithi, A.; and Wyman, J. F. (Department of Physical Medicine & Rehabilitation, School of Medicine, University of Minnesota, Minneapolis 55455, USA. difab001@tc.umn.edu). Eye-head coordination during postural perturbation as a predictor of falls in community-dwelling elderly women. Archives of Physical Medicine & Rehabilitation. 2002 Jul;83(7):942-51.*

Abstract: OBJECTIVES: To assess the functional significance of eye-head coordination during postural perturbations and to determine the contribution of angular vestibulo-ocular reflex (AVOR) suppression to the prediction of 1-year fall history in community-dwelling elderly women. DESIGN: Descriptive analysis of factors correlated with falls. SETTING: Community-based independent and senior assisted living facilities. PARTICIPANTS: Volunteer sample of 38 older women (mean age +/- standard deviation, 81.6+/-3.9y; range, 74-92y). INTERVENTIONS: Not applicable. MAIN OUTCOME MEASURES: Multiple and logistic regression variables (slope coefficients, partial R2, percent-correct fall history classifications) and fall prediction equations generated by using minimal sets of predictor variables. RESULTS: Instantaneous AVOR gain and sedative use were predictors of 1-year history of falls in all minimal sets of predictor variables. R2 for the prediction models varied from .47 to .62 and indicated substantial shared variance with the 1-year history of falling. Elderly women who failed to suppress the AVOR gain were 18 times more likely to have experienced a fall in the past year compared with elderly women who showed AVOR suppression (odds ratio = 18; 95%

confidence interval, 1.63-198.42). CONCLUSIONS: When controlling for all other variables in the model, instantaneous AVOR gain accounted for nearly 30% of the variance of fall history. The strong association between 1-year fall history, the use of sedatives, and changes in the AVOR gain supports a functional link between AVOR suppression and effective balance in elderly women. Copyright 2002 by the American Congress of Rehabilitation Medicine and the American Academy of Physical Medicine and Rehabilitation.

14. ***Dunn, K. S. The effect of physical restraints on fall rates in older adults who are institutionalized. J Gerontol Nurs. 2001 Oct;27(10):40-8.***
Abstract: Since the Omnibus Budget Reconciliation Act (OBRA) of 1987, there has been a significant reduction in the use of physical restraints to prevent falls in older adults who are institutionalized because of the developing awareness of the physical and psychological problems associated with them. The purpose of this ex post facto descriptive study was to determine if there is a difference in falls when physical restraints are allowed or prohibited in one older adult population. Data from incident reports from a purposive sample of 97 older adults in one long-term care facility were analyzed before and after the implementation of a restraint-free policy. The results indicated no significant difference in the number of falls before and after the policy change. However, there was a significantly lower number of falls with injuries and a significantly higher number of falls without injuries. These findings suggest older adults will continue to fall with or without the use of physical restraints because of changes associated with the aging process and risk factors. Removing physical barriers from older adults and allowing freedom of movement may decrease the severity of injury sustained in a fall.

15. ***Eakman, A. M.; Havens, M. D.; Ager, S. J.; Buchanan, R. L.; Fee, N. J.; Gollick, S. G.; Michels, M. J.; Olson, L. L.; Satterfield, K. M.; and Stevenson, K. A. (Occupational Therapist, St. John's Lutheran Ministries). Fall prevention in long-term care: an in-house interdisciplinary team approach. Topics in Geriatric Rehabilitation. 2002 Mar;17(3):29-39.***
Abstract: Older adults in long-term care are at great risk of injury from falling. An interdisciplinary fall prevention team recommended four classes of interventions for 25 long-term care residents with significant fall histories. Data were collected covering 90-day, pre- and post-intervention time frames. Resident falls evidenced a 39.8% decline (P = .0001). Resident injuries declined 49% consisting of mild (P = .05) and severe injuries (P = .04). The findings of this study suggest that an interdisciplinary fall team is an effective tool for reducing resident falls and fall-related injuries in a long-term care setting. Copyright © 2002 by Aspen Publishers, Inc

16. ***Ellis, A. A., and Trent, R. B. Do the risks and consequences of hospitalized fall injuries among older adults in California vary by type of fall? J Gerontol A Biol Sci Med Sci. 2001 Nov;56(11):M686-92.***
Abstract: BACKGROUND: Research on fall injuries in older persons generally does not examine different types of falls separately. (The main types are same level, from one level to another, and on or from stairs and steps.) There is no a priori reason to believe that various types of falls have similar demographic risk factors and consequences. Therefore, we examined patterns in types of falls, place of falls, and consequences of fall injuries as Californians move through their later decades. METHODS: We analyzed all computerized patient discharge records for all adults 20 years and

over hospitalized with a fall as the principal external cause of injury in California nonfederal acute care hospitals, from 1995 through 1997 (N = 242,166). Older-adult age groups were compared with all younger adults. Place of fall, hospital charges, and disposition at discharge were analyzed by type of fall. RESULTS: The three main types of fall injury increase with age, but each type shows variation by age and sex. Women have the highest rates for the main types but not for the less common types. Hospitalized falls vary by place of fall. Mean hospital charges ($17,086) vary by type of fall, with falls from one level to another having the largest mean hospital charge ($19,632). Disposition at discharge does not vary by type of fall. CONCLUSIONS: We found significant variation in demographic factors, place of fall, and mean hospital charges for falling by type of fall, suggesting that future research should focus on individual types of falls rather than on aggregated falls.

17. *Forster, A; Bailey, J; Smith, J; Young, J; Green, J; and Burns, E. Rehabilitation for older people in long-term care. Cochrane Database of Systematic Reviews. 3, 2003.*

18. *Gentleman, B., and Malozemoff, W. (Gerontological Nurse Practitioner, Charter Professional Services, Salem, MA). Falls and feelings: description of a psychosocial group nursing intervention. Journal of Gerontological Nursing. 2001 Oct;27(10):35-9, 54-5.*
     Abstract: Falling is a common problem among the institutionalized elderly population, with fear of falling as a common consequence posing a risk for future falls. Fear of falling can lead to a decline in function and social interaction as well as a diminished sense of life satisfaction and self-confidence. The nursing intervention in this study involved the group process, enabling the sharing of feelings related to falling experiences. It resulted in increased socialization, improved self-confidence, and sense of life-satisfaction among the elderly group members. Nurses are encouraged to include the group process as an intervention in the overall plan of care in promoting the health of older adults who are institutionalized.

19. *Gillespie, L. D.; Gillespie, W. J.; Robertson, M. C.; Lamb, S. E.; Cumming, R. G.; and Rowe, B. H. Interventions for preventing falls in elderly people. Cochrane Database of Systematic Reviews. 1, 2003.*
     Abstract: BACKGROUND: Approximately 30 percent of people over 65 years of age and living in the community fall each year; the number is higher in institutions. Although less than one fall in 10 results in a fracture, a fifth of fall incidents require medical attention. OBJECTIVES: To assess the effects of interventions designed to reduce the incidence of falls in elderly people (living in the community, or in institutional or hospital care). SEARCH STRATEGY: We searched the Cochrane Musculoskeletal Group specialised register (January 2001), Cochrane Controlled Trials Register (The Cochrane Library, Issue 1, 2001), MEDLINE (1966 to February 2001), EMBASE (1988 to 2001 Week 14), CINAHL (1982 to March 2001), The National Research Register, Issue 1, 2001, Current Controlled Trials (accessed 25 May 2001), and reference lists of articles. We also contacted researchers in the field. SELECTION CRITERIA: Randomised trials of interventions designed to minimise the effect of, or exposure to, risk factors for falling in elderly people. Main outcomes of interest were the number of fallers, or falls. Trials reporting only intermediate outcomes were excluded. DATA COLLECTION AND ANALYSIS: Two reviewers independently assessed trial quality and extracted data. Data were pooled using the fixed effect model where appropriate. MAIN RESULTS: Interventions likely to be beneficial: A programme of muscle strengthening and balance retraining, individually prescribed at

home by a trained health professional (3 trials, 566 participants, pooled relative risk [RR] 0.80, 95% confidence interval [95% CI] 0.66 to 0.98). A 15-week Tai Chi group exercise intervention (1 trial, 200 participants, risk ratio 0.51, 95% CI 0.36 to 0.73). Home hazard assessment and modification that is professionally prescribed for older people with a history of falling (1 trial, 530 participants, RR 0.64, 95% CI 0.49 to 0.84). A reduction in falls was seen both inside and outside the home. Withdrawal of psychotropic medication (1 trial, 93 participants, relative hazard 0.34, 95% CI 0.16 to 0.74). Multidisciplinary, multifactorial, health/environmental risk factor screening/intervention programmes, both for unselected community dwelling older people (data pooled from 3 trials, 1,973 participants, pooled RR 0.73, 95% CI 0.63 to 0.86), and for older people with a history of falling, or selected because of known risk factors (data pooled from 2 trials, 713 participants, pooled RR 0.79, 95% CI 0.67 to 0.94). Interventions of unknown effectiveness: Group-delivered exercise interventions (9 trials, 2,177 participants). Nutritional supplementation (1 trial, 50 participants). Vitamin D supplementation, with or without calcium (3 trials, 679 participants). Home hazard modification in association with advice on optimising medication (1 trial, 658 participants), or in association with an education package on exercise and reducing fall risk (1 trial, 3,182 participants). Pharmacological therapy (raubasine-dihydroergocristine, 1 trial, 95 participants). Fall prevention programmes in institutional settings. Interventions using a cognitive/behavioural approach alone (2 trials, 145 participants). Home hazard modification for older people without a history of falling (1 trial, 530 participants). Hormone replacement therapy (1 trial, 116 participants). Interventions unlikely to be beneficial: Brisk walking in women with an upper limb fracture in the previous two years (1 trial, 165 participants). CONCLUSIONS: Interventions to prevent falls that are likely to be effective are now available; less is known about their effectiveness in preventing fall-related injuries. Costs per fall prevented have been established for four of the interventions and careful economic modelling in the context of the local health care system is important. Some potential interventions are of unknown effectiveness and further research is indicated.
Publication Type: Systematic Review.

20. ***Girman, C. J.; Chandler, J. M.; Zimmerman, S. I.; Martin, A. R.; Hawkes, W.; Hebel, J. R.; Sloane, P. D.; and Magaziner, J. (Department of Epidemiology, BL1-7, Merck Research Laboratories, PO Box 4, 10 Sentry Parkway, BL 1-7, Blue Bell, PA 19422; girman@merck.com). Prediction of fracture in nursing home residents. Journal of the American Geriatrics Society. 2002 Aug;50(8):1341-7.***
Abstract: OBJECTIVES: To investigate cross-validated methods of identifying patients at increased risk of fracture in nursing homes using readily available data. DESIGN: Prospective cohort study with 18 months of follow-up. SETTING: Forty-seven randomly selected nursing homes in Maryland. PARTICIPANTS: One thousand four hundred twenty-seven white female nursing home residents aged 65 and older were followed for fracture for 18 months after baseline assessment. MEASUREMENTS: Fracture ascertained by physician note or x-ray from chart abstraction; demographic and baseline data extracted from the Minimum Data Set (MDS). RESULTS: Exploratory analyses on a random subset (67%) of the data (development sample) identified variables that might be important in predicting subsequent fracture and included variables for how the resident moved between locations in her room or adjacent corridor (mobility), age, weight, height, independence in eating and dressing, urinary incontinence, resistance to care, falls in the previous 6 months, a

dementia score, and other activities of daily living. A simple scoring algorithm derived from a subset of these MDS variables showed good sensitivity (.70) but low specificity (.39) in the random validation sample. CONCLUSION: A scoring algorithm developed in more than 1,400 white females from 47 nursing homes in the state of Maryland shows high sensitivity for identifying women at increased risk for fracture and may be useful in targeting fracture prevention programs

21. *Goodridge D., and Marr H. (Palliative Care Unit, Riverview Health Centre, Winnipeg, Manitoba, Canada). Factors associated with falls in an inpatient palliative care unit: an exploratory study. [Review] [49 refs]. International Journal of Palliative Nursing. 2002 Nov;8(11):548-56.*

Abstract: In one inpatient palliative care unit, falls were identified as a frequent and distressing, yet potentially avoidable, concern. The unit had the highest rate of falls in this long-term care setting, exceeding even that of dementia care units. No literature could be identified that examined falls in the palliative care population. The objective of the exploratory study was to examine factors associated with falls through retrospective archival data collection. Detailed information was collected on all 177 falls that occurred in the unit in 1999. Data were also gathered on patients who had not fallen for comparison. Analysis was conducted comparing risk factors of those patients who fell once and those who fell multiple times. It was found that advanced age, longer length of stay, and a previous history of falls might be risk factors for future falls. Patients who fell multiple times had less symptom distress than patients who fell once.

22. *Gowdy, M., and Godfrey, S. (NorthEast Medical Center, Concord, North Carolina, USA. mgowdy@northeastmedical.org). Using tools to assess and prevent inpatient falls. Joint Commission Journal on Quality & Safety. 2003 Jul;29(7):363-8.*

Abstract: BACKGROUND: Inpatient falls and fall-related injuries continue to be a complex challenge that health care organizations face. Protecting patients from falls and injury and ensuring a safe environment are fundamental to providing high-quality care. FACING THE PROBLEM: In June 2000 NorthEast Medical Center (Concord, North Carolina) experienced an inpatient fall rate (6.1 falls/1,000 patient days) that exceeded the internal benchmark (4.1 falls/1,000 patient days). The interdisciplinary Fall Team developed the Fall Risk Assessment tool. Patients were given a fall risk score and were categorized as either low or high risk. Interventions were chosen by the caregiver and became part of each patient's overall safety plan of care. THE NEXT STEP: Root cause analyses were performed for each inpatient fall to expose possible relationships between assessed fall risks and root causes. For example, approximately 80% of the patients who fell were confused, had gait disturbance, and were attempting to toilet alone. Through use of Failure Mode and Effects Analysis, the team was able to review the fall process in a prospective fashion. FOCUS ON HIGH-RISK INPATIENT POPULATIONS: In January 2001, the Fall Team began to focus on preventing falls in this patient population. An action plan for fall prevention was implemented, resulting in a decrease from 67 to 28 falls per 1,000 patient days. RESULTS: From the team's inception in June 2000 to the first quarter of 2003, the inpatient fall rate decreased from 6.1 to 2.6 falls per 1,000 patient days—a 43% decrease. With increased patient acuity and specialization in care of new and more challenging patient populations, health care organizations must quickly identify patients' fall risks and develop innovative methods to prevent falls.

23. **Greubel D. L.; Stokesberry C.; and Jelley M. J. (Department of Internal Medicine, The University of Oklahoma College of Medicine, Tulsa, USA). Preventing costly falls in long-term care. Nurse Practitioner. 2002 Mar;27(3):83-5.**

24. **Hall, G. R. Falls: a more personal look. Journal of Gerontological Nursing. 2001 Oct;27(10):5-6.**

25. **Handoll, H. H. G.; Parker, M. J.; and Sherrington, C. Mobilisation strategies after hip fracture surgery in adults. Cochrane Database of Systematic Reviews. 1, 2003.**
Abstract: BACKGROUND: Post-operative care programmes after hip fracture surgery include strategies for mobilisation, such as early weight bearing, gait retraining, and other physical therapy interventions. OBJECTIVES: To evaluate the effects of different mobilisation strategies and programmes after hip fracture surgery. SEARCH STRATEGY: We searched the Cochrane Musculoskeletal Injuries Group specialised register (to August 2002), MEDLINE (1966 to August week 5 2002), the National Research Register (Issue 2, 2002), Current Controlled Trials, conference proceedings, and reference lists of articles. SELECTION CRITERIA: All randomised or quasi-randomised trials comparing different mobilisation strategies/programmes after hip fracture surgery. DATA COLLECTION AND ANALYSIS: The reviewers independently assessed trial quality, using a 10 item scale, and extracted data. Wherever appropriate and possible, the data are presented graphically. MAIN RESULTS: Our second update included one new study. Only two of the six included trials involved a similar comparison. All trials had methodological limitations, including inadequate follow-up. Two trials, involving a total of 188 patients, compared a more intensive with a less intensive regimen of physiotherapy. One reported a lack of demonstrable difference in recovery of the two patient groups at nine weeks follow-up. The other found a higher level of drop-out in the more intensive group with no difference in length of hospital stay. Only limited outcome data were available for both trials. One trial of 80 patients evaluated a quadriceps muscle strengthening exercise programme. Improved mobility, leg extension power, and Barthel score were reported for the intervention group. A treadmill gait retraining programme was compared with a conventional gait retraining programme in 40 patients. More patients in the treadmill group had recovered their pre-fracture level of mobility by the time of hospital discharge, which tended to happen earlier than for the control group. Neither of these differences were statistically significant. One trial of 27 patients compared neuromuscular stimulation of the quadriceps muscle with placebo stimulation. More patients in the stimulation group had recovered their pre-fracture mobility at 13 weeks follow-up. One trial involving 273 patients with a displaced intracapsular fracture treated by internal fixation compared weight bearing at two weeks after surgery with delayed weight bearing at 12 weeks after surgery. From the limited data available, there were no statistically significant differences between the two methods of treatment for non-union, mortality, and overall unfavourable outcome at one year. CONCLUSIONS: There is insufficient evidence from randomised trials to determine the effects of more frequent or a more intensive programme of physiotherapy, quadriceps strengthening exercises, treadmill gait retraining, or neuromuscular stimulation after hip fracture surgery. There is also insufficient evidence to determine the effects of early weight bearing after the internal fixation of an intracapsular proximal femoral fracture.

26. Harrison, B.; Booth, D.; and Algase, D. Studying fall risk factors among nursing home residents who fell. *Journal of Gerontological Nursing. 2001 Oct;27(10):26-34.*

27. Hauer, K.; Rost, B.; Rutschle, K.; Opitz, H.; Specht, N.; Bartsch, P.; Oster, P.; and Schlierf, G. Exercise training for rehabilitation and secondary prevention of falls in geriatric patients with a history of injurious falls. *Journal of the American Geriatrics Society. 2001 Jan;49(1):10-20.* Abstract
OBJECTIVE: To determine the safety and efficacy of an exercise protocol designed to improve strength, mobility, and balance and to reduce subsequent falls in geriatric patients with a history of injurious falls. DESIGN: A randomized controlled 3-month intervention trial, with an additional 3-month follow-up. SETTING: Out-patient geriatric rehabilitation unit. PARTICIPANTS: Fifty-seven female geriatric patients (mean age 82 +/- 4.8 years; range 75-90) admitted to acute care or inpatient rehabilitation with a history of recurrent or injurious falls including patients with acute fall-related fracture. INTERVENTION: Ambulatory training of strength, functional performance, and balance 3 times per week for 3 months. Patients of the control group attended a placebo group 3 times a week for 3 months. Both groups received an identical physiotherapeutic treatment 2 times a week, in which strengthening and balance training were excluded. MEASUREMENTS: Strength, functional ability, motor function, psychological parameters, and fall rates were assessed by standardized protocols at the beginning (T1) and the end (T2) of intervention. Patients were followed up for 3 months after the intervention (T3). RESULTS: No training-related medical problems occurred in the study group. Forty-five patients (79%) completed all assessments after the intervention and follow-up period. Adherence was excellent in both groups (intervention 85.4 +/- 27.8% vs control 84.2 +/- 29.3%). The patients in the intervention group increased strength, functional motor performance, and balance significantly. Fall-related behavioral and emotional restrictions were reduced significantly. Improvements persisted during the 3-month follow-up with only moderate losses. For patients of the control group, no change in strength, functional performance, or emotional status could be documented during intervention and follow-up. Fall incidence was reduced nonsignificantly by 25% in the intervention group compared with the control group (RR:0.753 CI:0.455-1.245). CONCLUSIONS: Progressive resistance training and progressive functional training are safe and effective methods of increasing strength and functional performance and reducing fall-related behavioral and emotional restrictions during ambulant rehabilitation in frail, high-risk geriatric patients with a history of injurious falls.

28. Hauer, K.; Specht, N.; Schuler, M.; Bartsch, P.; and Oster, P. Intensive physical training in geriatric patients after severe falls and hip surgery. *Age Ageing. 2002 Jan;31(1):49-57.*
Abstract: BACKGROUND: Intensive exercise training can lead to improvement in strength and functional performance in older people living at home and nursing home residents. There is little information whether intensive physical exercise may be applicable and effective in elderly patients suffering from the acute sequelae of injurious falls or hip surgery. OBJECTIVE: To assess the feasibility, safety, and efficacy of intensive, progressive physical training in rehabilitation after hip surgery. DESIGN: Prospective, randomised, placebo-controlled intervention study of a 3-months' training intervention and a 3-months' follow-up. SETTING: Physical training 6-8 weeks after hip surgery. SUBJECTS: Twenty-eight (15 intervention, 13 control) elderly patients with a history of injurious falls admitted to acute care or inpatient rehabilitation because of acute fall-related hip

fracture or elective hip replacement. METHODS: Progressive resistance and functional training to improve strength and functional performance. RESULTS: No training-related medical problems occurred in the study group. Twenty-four patients (86%) completed all assessments during the intervention and follow-up period. Adherence was excellent in both groups (intervention: 93, 0+/-13, 5% versus control: 96, 7+/-6, 2%). Training significantly increased strength, functional motor performance, and balance and reduced fall-related behavioural and emotional problems. Some improvements in strength persisted during 3-months follow-up while other strength variables and functional performances were lost after cessation of training. Patients in the control group showed no change in strength, functional performance and emotional state during intervention and follow-up. CONCLUSIONS: Progressive resistance training and progressive functional training are safe and effective methods to increase strength and functional performance during rehabilitation in patients after hip surgery and a history of injurious falls. Because part of the training improvements were lost after stopping the training, a continuing training regime should be established.

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Abstract: The present study was designed to identify risk factors for injuries including falls and non fall-related injuries among adults with developmental disabilities. The following variables were examined as potential risk factors: age, gender, level of intellectual disability, health, seizures, ambulatory status, adaptive and maladaptive behaviours, use of antipsychotic drugs, and type of residential setting. The subjects were 268 adults with developmental disabilities greater than or equal to 30 years of age. A total of 30 participants (11%) were reported to have injuries. Over 50% of injuries were caused by falls. Individuals who had a higher frequency of seizures, had more destructive behaviour, and used antipsychotic drugs had the highest risk of injuries. A sub-analysis of fall-related injuries indicated that individuals who were greater than or equal to 70 years of age, ambulatory, and had a higher frequency of seizures had the highest risk of injurious falls. Adaptive behaviour, destructive behaviour, and physical health were positively related to non-fall-related injuries. Individuals with developmental disabilities who have better health and greater adaptive behaviour may be more active, and, therefore, at an increased risk of non-fall-related injuries. [References: 20]

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Abstract: The purpose of the present study was to identify risk factors for falls among

institutionalized elderly, using the standardized risk assessment tool developed by Izumi. We examined 746 patients from three types of facilities: rehabilitation wards in four general hospitals, three long-term care facilities, and three nursing homes, for up to three months. The incidence of falls within all facilities was 12.5%. Patterns of relative risks of falling differed among types of facilities. The highest relative risk of fall in long-term care facilities and nursing homes was nurses' prediction, followed by history of fall and altered mentation. In contrast, that in general hospitals was mobility. In long-term care facilities, history of falls (odds 3.68, 95 CI: 1.47-9.23) and interaction (history of falls and assistance with toileting) (odds 3.13, 95 CI: 1.48-6.64) showed significance on adjusted-odds ratios for fall. History of falls, altered mentation, and assistance with toileting may be used to screen patients at a high risk for fall at admission.

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Abstract: Unintentional injury, which almost always results from a fall, ranks as the sixth leading cause of death in the elderly population. Besides mortality, there is significant morbidity associated with falls. In the United States, 20% of older people who sustain a hip fracture from a fall will die within a year. Another 20% will be moved to an inpatient long-term care center for the first time. Of those who sustain hip fractures, 49% will die within 6 months. Elderly people who fall are ten times more likely to be hospitalized and are eight times more likely to die than are children who fall. Also, it is known that 75% of the deaths due to falls that occur each year occur in elderly people, who constitute 12% of the population. The cost of caring for the elderly people who fall has been estimated to be 10 to 12.4 billion dollars per year. Accordingly, falls in the elderly population are associated with significant morbidity, mortality, and expense to our health care system. It is possible that the human and monetary costs associated with falls could be managed if those at greatest risk for falling were identified ahead of time and measures were employed to reduce or eliminate the risks. These are the objectives of the Risk of Falls Assessment Clinic (RFAC) that we have developed and implemented at Henry Ford Hospital. In the RFAC, factors known to place elderly people at risk for falling are assessed systematically. Patient performance is evaluated against normative data. The product of the assessment is a description for the referring physician of those factors where the patient has demonstrated increased risk for falling and possible interventions to decrease the risk. This article describes this clinic, the assessment tools used, possible interventions, and provides a summary of our early experience.

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Abstract: BACKGROUND: Falls and resulting injuries are particularly common in older people living in residential care facilities, but knowledge about the prevention of falls is limited. OBJECTIVE: To investigate whether a multifactorial intervention program would reduce falls and fall-related injuries. DESIGN: A cluster randomized, controlled, nonblinded trial. SETTING: 9 residential care facilities located in a northern Swedish city. PATIENTS: 439 residents 65 years of age or older. INTERVENTION: An 11-week multidisciplinary program that included both general and resident-specific, tailored strategies. The strategies comprised educating staff, modifying the environment,

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implementing exercise programs, supplying and repairing aids, reviewing drug regimens, providing free hip protectors, having post-fall problem-solving conferences, and guiding staff. MEASUREMENTS: The primary outcomes were the number of residents sustaining a fall, the number of falls, and the time to occurrence of the first fall. A secondary outcome was the number of injuries resulting from falls. RESULTS: During the 34-week follow-up period, 82 residents (44%) in the intervention program sustained a fall compared with 109 residents (56%) in the control group (risk ratio, 0.78 [95% CI, 0.64 to 0.96]). The adjusted odds ratio was 0.49 (CI, 0.37 to 0.65), and the adjusted incidence rate ratio of falls was 0.60 (CI, 0.50 to 0.73). Each of 3 residents in the intervention group and 12 in the control group had 1 femoral fracture (adjusted odds ratio, 0.23 [CI, 0.06 to 0.94]). Clustering was considered in all regression models. CONCLUSION: An interdisciplinary and multifactorial prevention program targeting residents, staff, and the environment may reduce falls and femoral fractures.

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     Abstract: Falls and their consequences are serious health problems among older populations. To study predisposing and precipitating factors for falls among older people in residential care we used a cross-sectional study design with a prospective follow up for falls. Fifty-eight women and 25 men, with a mean age of 79.6 years, were included and prospectively followed up regarding falls for a period of 1 year after baseline assessments. All those who fell were assessed regarding factors that might have precipitated the fall. The incidence rate was 2.29 falls/person years. Antidepressants (selective serotonin reuptake inhibitors, SSRIs), impaired vision, and being unable to use stairs without assistance were independently associated with being a "faller." Twenty-eight (53.8%) of the fallers suffered injuries as a result of their falls, including 21 fractures. Twenty-seven percent of the falls were judged to be precipitated by an acute illness or disease and 8.6% by a side effect of a drug. Acute symptoms of diseases or drug side effects were associated with 58% of the falls, which resulted in fractures. We conclude that SSRIs seem to constitute one important factor that predisposes older people to fall, once or repeatedly. Since acute illnesses and drug side-effects were important precipitating factors, falls should be regarded as a possible symptom of disease or a side-effect of a drug until it is proven otherwise. [References: 44]

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     Abstract: OBJECTIVE: To identify risk factors for falls and injuries among seniors living in a long-term care facility. METHOD: Case-control study of 335 residents living at St. Joseph's Villa, Dundas, Ontario. Cases were defined as residents who fell between July 1, 1996, and June 30, 1997;

controls were those who did not fall. To identify risk factors for injury, cases were defined as those with completed incident injury forms and controls as those without. RESULTS: The most important risk factors for falls included: having fallen in the past three months; residing in a secured unit; living in the facility for two or more years; having the potential to cause injury to others; and having an illness, disease or behaviour that may cause a fall. The most important risk factor for injury among those who fell was altered mental state. CONCLUSION: The risk factors identified may be helpful to those planning falls prevention initiatives within long-term care settings.

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Abstract: OBJECTIVE: To determine whether a history of falls predicts functional decline, adverse health events, and hospitalization. STUDY DESIGN: Twelve-month prospective cohort study. PATIENTS AND METHODS: Participants were members of a Medicare managed care program. Outcomes were assessed each quarter and included functional status, healthcare utilization (hospitalization), and adverse events (hospitalizations, nursing home placement, or death). Subject healthcare utilization diaries were corroborated with health system data files. RESULTS: At baseline, 70% reported no falls (NF), 18% had 1 fall (F), and 12% reported 2 or more falls (RF). Fall status predicted functional decline; new ADL deficits were seen in 18% of NF, 28% of F, and 55% of RF (P < .0001). Following adjustment for baseline function, this association remained predictive (adjusted odds ratio [OR] for new ADL deficits: 3.5, P = .007; and for new ADL and IADL deficits: 12.0, P = .0001). Fall frequency was a univariate predictor of adverse events (hospitalizations, nursing home placement, or death) and of hospital utilization alone. One or more adverse event(s) occurred in 18% of NF, 22% of F, and 38% of RF (P = .049). Hospitalization occurred in 16% of NF, 22% in F, and 35% of RF (P = .03). Following adjustment for likelihood of future hospitalization (P(ra)), these associations remained predictive for RF (adjusted OR for one or more adverse event[s]: 2.4, P = .05; OR for hospitalization 2.4, P = .06). CONCLUSIONS: Fall history predicts decline in function, hospitalization, and adverse events among a Medicare managed care population and remains independently predictive of poor outcomes after controlling for baseline function and likelihood of future hospitalization.

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44. *Lockett D.; Aminzadeh F.; and Edwards N. (Community Health Research Unit, University of Ottawa, Ontario, Canada. dlockett@zeus.med.uottawa.ca). Development and evaluation of an instrument to measure seniors' attitudes toward the use of bathroom grab bars. Public Health Nursing. 2002 Sep-2002 Oct 31;19(5):390-7.*
Abstract: Bath grab bars can minimize the effects of many age-related deficits that may contribute to

bath-related falls. Despite their potential value, bathroom safety devices remain largely underutilized by many community-living older adults and knowledge concerning attitudinal factors that influence the use of grab bars is sparse. This void of knowledge is due, at least in part, to the lack of instruments to measure the psychosocial constructs influencing bathroom safety device use. This study examined the psychometric properties of a newly developed Grab Bar Use Attitude scale (GUAS). Instrument formation, including item generation, evaluation by a panel of experts, and pilot testing of the draft instrument to establish its face and content validity, was followed by instrument validation using 546 community-living seniors. Results of principal components analysis of the GUAS revealed a two-factor solution, explaining 56% of the variance. The two constructs may best be described as functional/safety and psychosocial consequences of using grab bars. Psychometric analyses of the 9-item scale provided empirical evidence of the internal consistency of the total scale and each subscale. Finally, the GUAS distinguished between regular grab bar users and nonregular users. Implications for use are discussed

45. **Lord, S. R.; Dayhew, J.; and Howland, A. (Prince of Wales Medical Research Institute, Randwick, University of New South Wales, Australia. S.Lord@unsw.edu.au). Multifocal glasses impair edge-contrast sensitivity and depth perception and increase the risk of falls in older people. Journal of the American Geriatrics Society. 2002 Nov;50(11):1760-6.**
Abstract: OBJECTIVES: To determine the extent to which multifocal glasses impair contrast sensitivity and depth perception at critical distances required for detecting hazards in the environment and whether multifocal glasses use increases the risk of falls in older people. DESIGN: One-year prospective cohort study. SETTING: Falls Laboratory, Prince of Wales Medical Research Institute. PARTICIPANTS: One hundred fifty-six community-dwelling people aged 63-90. MEASUREMENTS: Contrast sensitivity, depth perception, accidental falls. RESULTS: Eighty-seven subjects (55.8%) were regular wearers of multifocal (bifocal, trifocal, or progressive lens) glasses. These subjects performed significantly worse in the distant depth perception and distant edge-contrast sensitivity tests in conditions that forced them to view test stimuli through the lower segments of their glasses. Multifocal glasses wearers were more than twice as likely to fall in the follow-up period than nonmultifocal glasses wearers (odds ratio [OR] = 2.29, 95% confidence interval [CI] = 1.06-4.92), when adjusting for age, poor vision, reduced lower limb sensation and strength, slow reaction time, and increased postural sway. Multifocal glasses wearers were also more likely to fall because of a trip (OR = 2.79, 95% CI = 1.08-7.22), when outside their homes (OR = 2.55, 95% CI = 1.14-5.70), and when walking up or down stairs (P <.01). The population attributable risks of regular multifocal glasses use were 35.2% for any falls, 40.9% for falls due to a trip, and 40.9% for falls outside the home. CONCLUSIONS: The study findings indicate that multifocal glasses impair depth perception and edge-contrast sensitivity at critical distances for detecting obstacles in the environment. Older people may benefit from wearing nonmultifocal glasses when negotiating stairs and in unfamiliar settings outside the home.

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46. *Lord, S. R.; Menz, H. B.; and Tiedemann, A. (Prince of Wales Medical Research Institute, University of New South Wales, Barker Street, Randwick, New South Wales, 2031, Australia. S.Lord@unsw.edu.au). A physiological profile approach to falls risk assessment and prevention. [Review] [53 refs]. Physical Therapy. 2003 Mar;83(3):237-52.*

Abstract: The purpose of this perspective article is to describe the use of a physiological profile approach to falls risk assessment and prevention that has been developed by the Falls and Balance Research Group of the Prince of Wales Medical Research Institute, Sydney, Australia. The profile's use for people with a variety of factors that put them at risk for falls is discussed. The Physiological Profile Assessment (PPA) involves a series of simple tests of vision, peripheral sensation, muscle force, reaction time, and postural sway. The tests can be administered quickly, and all equipment needed is portable. The results can be used to differentiate people who are at risk for falls ("fallers") from people who are not at risk for falls ("nonfallers"). A computer program using data from the PPA can be used to assess an individual's performance in relation to a normative database so that deficits can be targeted for intervention. The PPA provides valid and reliable measurements that can be used for assessing falls risk and evaluating the effectiveness of interventions and is suitable for use in a range of physical therapy and health care settings. [References: 53]

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Abstract: BACKGROUND: A large proportion of falls in older people are caused by slipping. Previous occupational safety research suggests that inadequate footwear may contribute to slipping accidents; however, no studies have assessed the slip resistance of casual footwear. OBJECTIVE: To evaluate the slip resistance of different types of casual footwear over a range of common household surfaces. METHODS: The slip resistance of men's Oxford shoes and women's fashion shoes with different heel configurations was determined by measuring the dynamic coefficient of friction (DCoF) at heel contact (in both dry and wet conditions) on a bathroom tile, concrete, vinyl flooring, and a terra cotta tile using a specially-designed piezoelectric force plate apparatus. RESULTS: Analysis of variance revealed significant shoe, surface, and shoe-surface interaction effects. Men's Oxford shoes exhibited higher average DCoF values than the women's fashion shoes, however, none of the shoes could be considered safe on wet surfaces. Application of a textured sole material did not improve slip resistance of any of the shoes on wet surfaces. CONCLUSION: Heel geometry influences the slip resistance of casual footwear on common household surfaces. The suboptimal performance of all of the test shoes on wet surfaces suggests that a safety standard for casual footwear is required to assist in the development of safe footwear for older people. Copyright 2001 S. Karger AG, Basel.

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50. **Mion, L. C.; Fogel, J.; Sandhu, S.; Palmer, R. M.; Minnick, A. F.; Cranston, T.; Bethoux, F.; Merkel, C.; Berkman, C. S.; and Leipzig, R. Outcomes following physical restraint reduction programs in two acute care hospitals. Jt Comm J Qual Improv. 2001 Nov;27(11):605-18.**
Abstract: BACKGROUND: Physical restraint rates can be reduced safely in long-term care settings, but the strategies used to prevent wandering, falls, and patient aggression have not been tested for their effectiveness in preventing therapy disruption. A restraint reduction program (RRP) consisting of four core components (administrative, educational, consultative, and feedback) was implemented in 1998-1999 in 14 units at two acute care hospitals in geographically distant cities. METHODS: The RRP was targeted at units with prevalence rates of > 4% for non-intensive care units (non-ICUs) and > 25% for ICUs, as well as two additional units. The RRP was implemented by an interdisciplinary team consisting of geriatricians and nurse specialists. RESULTS: Of the 16,605 admissions to the RRP units, 2,772 cases received RRP consultations. Only six units (four of seven general units and two of six ICUs) demonstrated a relative reduction of > 20% in the physical restraint use rate. No increase in secondary outcomes of patient falls and therapy disruptions (patient-initiated discontinuation or dislodgment of therapeutic devices) occurred, injury rates were low, and no deaths occurred as a direct result of either a fall or therapy disruption event. DISCUSSION: Given the minimal success in the ICU settings, further studies are needed to determine effective nonrestraint strategies for critical care patients. ICU clinicians need to be persuaded of the favorable risk-to-benefit ratio of alternatives to physical restraint before they will change their practice patterns. SUMMARY: Efforts to identify more effective interventions that match patient needs and to identify non-clinician factors that affect physical restraint use are needed.

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Abstract: A prospective cohort study was used to determine the reliability and validity of two fall risk assessment tools and nurses' clinical judgement in predicting patient falls. The study wards comprised two aged care and rehabilitation wards within a 570 bed acute care tertiary teaching hospital in Western Australia. Instrument testing included test-retest reliability and calculations of sensitivity, specificity, positive predictive value, negative predictive value, and accuracy. The test retest reliability of all methods was good. In this setting, the three methods of assessing fall risk showed good sensitivity but poor specificity. Also, all methods had limited accuracy, and overall, exhibited an inability to adequately discriminate between patient populations at risk of falling and those not at risk of falling. Consequently, neither nurses' clinical judgement nor the fall risk assessment tools could be recommended for assessing fall risk in this clinical setting

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Abstract: A new method of evaluating the characteristics of postural transition (PT) and their correlation with falling risk in elderly people is described. The time of sit-to-stand and stand-to-sit transitions and their duration were measured using a miniature gyroscope attached to the chest and a portable recorder placed on the waist. Based on a simple model and the discrete wavelet transform, three parameters related to the PT were measured, namely, the average and standard deviation of transition duration and the occurrence of abnormal successive transitions (number of attempts to have a successful transition). The comparison between two groups of elderly subjects (with high and low fall-risk) showed that the computed parameters were significantly correlated with the falling risk as determined by the record of falls during the previous year, balance and gait disorders (Tinetti score), visual disorders, and cognitive and depressive disorders (P < 0.01). In this study, the wavelet transform has provided a powerful technique for enhancing the pattern of PT, which was mainly concentrated into the frequency range of 0.04-0.68 Hz. The system is especially adapted for long-term ambulatory monitoring of elderly people

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Abstract: OBJECTIVE: To use two different exercise programs over a 2-year period to reduce falls and their sequelae among residents of two long-term care facilities. DESIGN: Randomized, controlled trial. SETTING: The study took place at two long-term care facilities with services ranging from independent living to skilled nursing. PARTICIPANTS: One hundred and ten participants whose

average age was 84 and who were capable of ambulating with or without assistive devices and could follow simple directions. INTERVENTION: Participants were randomized to one of two exercise groups (resistance/endurance plus basic enhanced programming or tai chi plus basic enhanced programming) or to a control group (basic enhanced programming only). Exercise classes were held three times per week throughout the study. MEASUREMENTS: Participants were evaluated for cognitive and physical functioning at baseline and 6, 12, and 24 months. Falls were determined from incident reports filed by the nursing staffs at the facilities. RESULTS: Time to first fall, time to death, number of days hospitalized, and incidence of falls did not differ among the treatment and control groups (P >.05). Among all participants, those who fell had significantly lower baseline Folstein Mini-Mental State Examination and instrumental activities of daily living scores and experienced significantly greater declines in these measures over the 2-year program. CONCLUSION: There were no significant differences in falls among the two exercise groups and the control group. Lack of treatment differences and low adherence rates suggest that residents of long-term care facilities may require individualized exercise interventions that can be adapted to their changing needs.

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Abstract: OBJECTIVE: To investigate the incidence and costs of falls among the elderly in institutional care. DESIGN: A prospective study during the course of 1 year. SETTING: Four institutions in Finland. SUBJECTS: A total of 554 falls and 211 fall injuries among patients over 60 years of age. MAIN OUTCOME MEASURES: Falls and fall injuries were recorded prospectively. Treatment and the costs of injuries were analysed retrospectively. The incidence of falls and fall injuries was expressed per 1,000 person years. Costs of fall injuries treated outside the patient's own ward were calculated. RESULTS: The total incidence of falls was 1,398/1,000 person years. The incidence of fractures per 1,000 person years was 54 (95% CI; 25-83) in women and 10 (95% CI; 1-54) in men. Women fell on their hips or buttocks more often than men did (P < 0.01). Incidence of head injuries per 1,000 person years was 214 (95% CI; 160-267) in women and 433 (95% CI; 302-565) in men. The average costs were Euro 944 per fall. CONCLUSION: One-third of all falls resulted in an injury and every fifth injurious fall resulted in treatment outside the patient's own ward. The type of fall and the injury profile differed between men and women.

62. ***Perell, K. L.; Nelson, A.; Goldman, R. L.; Luther, S. L.; Prieto-Lewis, N.; and Rubenstein, L. Z. Fall risk assessment measures: an analytic review. J Gerontol A Biol Sci Med Sci. 2001 Dec;56(12):M761-6.***
Abstract: BACKGROUND: Clinicians are often unaware of the many existing scales for identifying fall risk and are uncertain about how to select an appropriate one. Our purpose was to summarize existing fall risk assessment scales to enable more informed choices regarding their use. METHODS: After a systematic literature search, 21 articles published from 1984 through 2000 describing 20 fall risk assessments were reviewed independently for content and validation by a panel of five reviewers using a standardized review form. Fourteen were institution-focused nursing assessment scales, and six were functional assessment scales. RESULTS: The majority of the scales were developed for elderly populations, mainly in hospital or nursing home settings. The patient characteristics assessed were quite similar across the nursing assessment forms. The time to complete the form varied from less than 1 minute to 80 minutes. For those scales with reported diagnostic accuracy, sensitivity

varied from 43% to 100% (median = 80%), and specificity varied from 38% to 96% (median = 75%). Several scales with superior diagnostic characteristics were identified. CONCLUSIONS: A substantial number of fall risk assessment tools are readily available and assess similar patient characteristics. Although their diagnostic accuracy and overall usefulness showed wide variability, there are several scales that can be used with confidence as part of an effective falls prevention program. Consequently, there should be little need for facilities to develop their own scales. To continue to develop fall risk assessments unique to individual facilities may be counterproductive because scores will not be comparable across facilities.

63. ***Protas, E. J.; Wang, C. Y.; and Harris, C. Usefulness of an individualized balance and gait intervention programme based on the problem-oriented assessment of mobility in nursing home residents. Disabil Rehabil. 2001 Mar 20;23(5):192-8.***
Abstract: PURPOSE: To examine the usefulness of an individualized balance and gait training proramme according to the specific problems identified from the problem-oriented assessment of mobility (POAM) in residents of a nursing home. METHOD: The clinical records of 74 NH residents (49 female, 25 male) who were consecutively referred to physical therapy for problems related to poor balance or gait or a recent fall in a 2-year period were reviewed retrospectively for the study. According to the medical charts, patients had received a four-week (20 sessions) problem-oriented exercise programme that specifically targeted balance and gait deficits identified from the POAM and the retest had been done after four weeks of training. RESULTS: The mean initial and final balance scores were 8.47+/-3.80. and 10.77+ /-3.37. respectively, and the mean gait scores were 6.73+/-2.30 initially and 7.71+/-1.95 finally. A Wilcoxon signed-rank comparison of the initial and final POAM indicated that significant improvement occurred in the balance scores (Z = 5.345, P < 0.0001) and the gait scale (Z = 3.589, P < 0.0001) in this group. Item analysis demonstrated the number of patients who improved or did not change on individual items. CONCLUSIONS: Both balance and gait were significantly improved after a four-week intervention programme based on the deficits identified by POAM. The POAM is a useful tool to guide the clinician to target specific balance and gait deficits for individual nursing home elders.

64. ***Rantz, M. J.; Popejoy, L.; Petroski, G. F.; Madsen, R. W.; Mehr, D. R.; Zwygart-Stauffacher, M.; Hicks, L. L.; Grando, V.; Wipke-Tevis, D. D.; Bostick, J.; Porter, R.; Conn, V. S.; and Maas, M. (Reprint available from: Rantz MJ Univ Missouri, Sinclair Sch Nursing S422 Nursing Sch Bldg Columbia, MO 65211 USA). Randomized clinical trial of a quality improvement intervention in nursing homes. Gerontologist. 2001 Aug;41(4):525-538.***
Abstract: PURPOSE: The purpose of the study was to determine if simply providing nursing facilities with comparative quality performance information and education about quality improvement would improve clinical practices and subsequently improve resident outcomes, or if a stronger intervention, expert clinical consultation with nursing facility staff, is needed. DESIGN AND METHODS: Nursing facilities (n = 113) were randomly assigned to one of three groups: workshop and feedback reports only, workshop and feedback reports with clinical consultation, and control. Minimum Data Set (MDS) Quality Indicator (QI) feedback reports were prepared and sent quarterly to each facility in intervention groups for a year. Clinical consultation by a gerontological clinical nurse specialist (GCNS) was offered to those in the second group. RESULTS: With the exception of MDS QI 27 (little or no activity), no significant differences in resident assessment measures were detected

between the groups of facilities. However, outcomes of residents in nursing homes that actually took advantage of the clinical consultation of the GCNS demonstrated trends in improvements in QIs measuring falls, behavioral symptoms, little or no activity, and pressure ulcers (overall and for low-risk residents). IMPLICATIONS: Simply providing comparative performance feedback is not enough to improve resident outcomes. It appears that only those nursing homes that sought the additional intensive support of the GCNS were able to effect enough change in clinical practice to improve resident outcomes significantly. [References: 80]

65. ***Review: Falls can be prevented in older persons, but interventions should be mutifaceted and targeted. ACP Journal Club. 2001 May-2001 Jun 30;v134(3):100.***

Abstract: QUESTION: What is the evidence that risk-factor modification and other interventions will reduce falls in persons >65 years of age? Data sources: Studies were identified by searching MED-LINE to March 1998 with the terms fall, falls, accidental falls, fracture, elderly, aged, older, and senior. Bibliographies of studies and reviews were scanned, and experts were contacted. STUDY SELECTION: Randomized controlled trials (RCTs) were selected if the interventions were designed to minimize or prevent exposure to risk factors for falling or fractures; participants were >65 years of age and living in the community or in residential care; and the number of falls, fractures, or persons who had fallen was reported. DATA EXTRACTION: Data were extracted on study quality, patient characteristics, settings, types of interventions (exercise and multifaceted), and outcomes. Recommendations were graded (A for evidence from multiple RCTs or meta-analyses; B for a single RCT or weak, inconsistent findings from multiple RCTs; and C for limited evidence). MAIN RESULTS: All trials were underpowered to detect differences in injurious falls. Eight trials evaluated an exercise intervention alone. Three of these studies included high-risk participants, and 2 showed a decreased risk for falling. In the 5 studies of unselected participants, only 1 trial of t'ai chi (balance training) showed a reduction in the number of falls (grade B evidence). Pooling of 4 of these trials did not show a reduction in falls. Another trial of brisk walking in women with osteoporosis showed that falls were increased in the walking group. Five published trials and 1 unpublished trial evaluated multifaceted interventions, and all showed decreased risks for falling (grade B evidence). Programs that combine interventions reduce falls (grade A evidence). Those that emphasize assessment of postural hypotension, number of drugs, balance, transfer, and gait are successful (grade B evidence). Reanalysis of some of the trials showed that home-based interventions were not as effective as programs in residential settings and did not reduce falls (grade A evidence). Patients who come to the emergency departments after falls have a lower frequency of subsequent falls after medical and occupational follow-up and referral (grade B evidence). Persons in residential settings also benefit from targeted interventions. For example, padded hip protectors reduce fractures in high-risk patients. No economic evaluations were available. CONCLUSIONS: Falls can be prevented in older persons. The most effective interventions are multifaceted and targeted to individuals in high-risk categories.

Commentary. One-third of community-dwelling elderly persons fall each year, and the incidence increases to one-half in those who are institutionalized. About 6% of falls result in fractures. Frail elderly persons, especially those with hip weakness, poor balance, urinary urge incontinence, and polypharmacy, are at high risk. Some falls occur in patients with risk factors that are easily detected, such as visual impairment, poor mobility, disturbed gait, and sedative use. Screening for these

factors can lead to early identification of risk and enable successful prevention programs. However, a recent systematic review identified > 400 risk factors for falls, which makes screening challenging. The current guideline by Feder and colleagues was developed from a systematic review of the literature through 1999. It delivers evidence-based recommendations for health care providers caring for elderly persons who are living in the community or in residential care. The guideline offers health care providers sound advice on preventing falls: We should not advocate exercise alone (with the exception of t'ai chi, which improves balance) as a means of preventing falls in unselected elderly persons. Rather, we should identify patients at increased risk for falling (and injuries from falls), such as patients who present to the emergency department with a fall and women over 80 years of age who have osteoporosis. These patients should be targeted for multidisciplinary assessment and interventions, including a medical evaluation that encompasses checks for postural hypotension, vision, gait and balance, and medication review, with adjustment or elimination of medications felt to contribute to fall risk. If indicated, I believe that these patients should be referred for occupational and physical therapy and a home safety evaluation. Findings from a recent RCT were not included in the analysis, but they add support to a recommendation advocating hip protectors for nursing home residents and other frail elderly persons.

66. **Rogers, M. E.; Rogers, N. L.; Takeshima, N.; and Islam, M. M. (Center for Physical Activity and Aging, Department of Kinesiology and Sport Studies, 1845 N. Fairmount, Wichita State University, KS 67260-0016, USA. michael.rogers@wichita.edu). Methods to assess and improve the physical parameters associated with fall risk in older adults. [Review] [55 refs]. Preventive Medicine. 2003 Mar;36(3):255-64.**
Abstract: BACKGROUND: Falls are common among older adults. Many physical parameters including reduced postural stability, decreased dynamic balance, gait disorders, strength deficits, difficulty standing from a chair, and other impairments have been shown to be strongly associated with fall risk in the elderly. ASSESSMENTS: To identify those at risk for falls, tools that accurately measure physical performance parameters associated with falls are essential. Several tools are available to measure these parameters including clinical evaluations, functional performance tests, and questionnaires. The article describes many of the tools that can be used to evaluate the physical parameters associated with fall risk in older adults. CONCLUSIONS: The described instruments can help in identifying those who are most likely to fall, and those who would benefit from targeted interventions. The final part of the article includes a brief discussion of the potential role of exercise training interventions to improve these physical parameters and prevent falls. [References: 55]

67. **Rubenstein, L. Z.; Powers, C. M.; and MacLean, C. H. Quality indicators for the management and prevention of falls and mobility problems in vulnerable elders. Ann Intern Med. 2001 Oct 16;135(8 Pt 2):686-93.**

68. **Ruchinskas, R. (Department of Physical Medicine and Rehabilitation, Temple University Hospital, Philadelphia, Pennsylvania 19140, USA). Clinical prediction of falls in the elderly. American Journal of Physical Medicine & Rehabilitation. 2003 Apr;82(4):273-8.**
Abstract: OBJECTIVE: To assess the ability of physical and occupational therapists engaged in rehabilitation of the elderly to predict posttreatment falls. DESIGN: Prospective cohort study of 15 months in duration at an urban academic medical center rehabilitation unit. A total of 165

consecutively admitted geriatric individuals were rated for fall risk by 14 physical and seven occupational therapists. Measurements included the Mini-Mental State Examination, Geriatric Depression Scale, FIM, and therapists' ratings of fall likelihood. RESULTS: Both disciplines evidenced an ability to predict who would fall in the 3 months after discharge. Clinical judgment regarding fall risk, however, added little value over two major predictors of future falls, fall history and the presence of a neurologic condition. CONCLUSION: Trying to predict an infrequent future event such as falls is inherently difficult. Education regarding known fall-risk factors and inclusion of standardized measurements of physical status are recommended to potentially improve rates of detection, along with adoption of a realistic attitude regarding our abilities to forecast infrequent events.

69. *Salladay, S. A. (Director, William Jennings Bryan Center for Excellence in Bioethics, BryanLGH Health System, Lincoln, Neb). Ethical problems. Patient falls: walk with me. Nursing. 2002 Mar;32(3):66.*

70. *Semin-Goossens, A.; van der Helm, J. M.; and Bossuyt, P. M. (Center for Clinical Practice Guidelines, Academic Medical Center at the University of Amsterdam, Amsterdam, The Netherlands. a.semin@amc.uva.nl). A failed model-based attempt to implement an evidence-based nursing guideline for fall prevention. Journal of Nursing Care Quality. 2003 Jul-2003 Sep 30;18(3):217-25.*
Abstract: BACKGROUND: An evidence-based nursing guideline had been locally developed in 1993 to reduce fall incidence rates, creating a 30% reduction. Implementation had failed though. Between 1999 and 2001 the guideline was updated. A multifaceted intervention was chosen based on a model for implementing change. METHOD: The study was performed in 2 wards. All recommendations of Grol's 5-step implementation model were followed. The aim was a reduction of 30% in fall incidence within a year. Data on falls were extracted from nursing records and Incidence Report Forms (IRFs). RESULTS: In a pilot study an average of 9 falls per 1,000 patients per day had been recorded in the department of internal medicine and 16 in the neurology ward. Given the desired reduction of 30%, the target averages were 6 and 11 falls respectively. During the intervention year the average incidences were 8 and 13 falls (95% CI: 6-11 and 10-15). There was a changeable pattern over time without any declining trend. The percentage filled in IRFs varied strongly, with an average of 52% in the department of internal medicine and 60% in the neurology department. CONCLUSION: There has been no durable decrease in monthly falls despite the use of a model-based procedure for implementing change. Neither did we observe any improvement in filling in IRFs. It can be questioned if the nurses themselves did experience patient falls to be troublesome enough. Investigating this is difficult though. Although the most successful strategy still appears to be changing attitudes of nurses in order to increase fall prevention, there is no clear strategy on how to create this successfully.

71. *Smyth, C.; Dubin, S.; Restrepo, A.; Nueva-Espana, H.; and Capezuti, E. Creating order out of chaos: models of GNP practice with hospitalized older adults. Clin Excell Nurse Pract. 2001 Mar;5(2):88-95.*
Abstract: It has been well documented that hospitalization of an older adult can trigger a cascade of events that negatively affect quality of life long after hospitalization. Three models of care directed

by hospital-based geriatric nurse practitioners (GNPs) are described. The GNPs' roles include primary care provider, consultant, educator, researcher, and/or administrator. In one model, the GNP collaborated with a multi- disciplinary team to create a clinical pathway, the Functional Recovery Pathway. In the second model, the GNP and nurse manager addressed the issue of fall risk with an education program for the staff. As a result, the fall rate decreased 5.8%. In a third model, the GNP coordinated care of hospitalized nursing home residents in a "scatter bed" program. Working synergistically with a case management program, the length of stay for this group of patients decreased from a median of 12 days to 9 days in the first year, to 6.8 days in the third year. All three models showed that the GNP facilitate change, improve resource utilization, and create innovative strategies to optimize care for hospitalized elders.

72. **Starr, D. S. The legal advisor. Transferring blame: an elderly patient falls when not enough aides are on staff at a nursing home. Clinical Advisor. 2002 Jul-2002 Aug 31;5(7/8):100-1.**

73. **Summaries for patients. Preventing falls in assisted living facilities. [Full report in Annals of Internal Medicine. 2002 May 21;136(10)733-741.] Annals of Internal Medicine. 2002 May 21;136(10):I50.**

74. **Trotto, N. E. They all fall down. Contemp Longterm Care. 2001 Apr;24(4):38-42.**

75. **Tammelleo, A. D. Unrestrained nursing home pt. falls from second floor. Nursing Law's Regan Report. 2003 Jan;43(8):1.**

76. **Unsworth, J. (Centre for Primary and Community Care Learning, Northumbria University. john.unsworth@unn.ac.uk). Falls in older people: the role of assessment in prevention and care. [Review] [24 refs]. British Journal of Community Nursing. 2003 Jun;8(6):256-62.**
Abstract: Falls among older people constitute a serious public health problem, which has a substantial impact on both the person and on healthcare services. Falls assessment can be divided into a number of types. Community nurses are well placed to use falls risk checklists to identify older people who may be at risk of falling and then offer these individuals a more in-depth assessment. In addition, community nurses have a role to play in assessing older people who have recently fallen to prevent future falls and potential injury. Falls prevention programmes centre on the identification of risk factors and the planning and delivery of interventions designed to eliminate or ameliorate these risks. A falls assessment should include a review of intrinsic factors such as mobility, lower extremity functioning, vision, medications, footwear, and past medical history. It is also important to consider extrinsic factors such as tripping, slipping, and other environmental hazards. [References: 24]

77. **Vassallo, M.; Sharma, J. C.; and Allen, S. C. Characteristics of single fallers and recurrent fallers among hospital in-patients. Gerontology. 2002 May-2002 Jun 30;48(3):147-50.**
Abstract: BACKGROUND: Recurrent fallers constitute a minority of patients who fall but contribute considerably to the total number of falls recorded. OBJECTIVE: To study the characteristics of recurrent fallers in a hospital setting. METHODS: In a prospective observational study we investigated the characteristics of 1,025 patients admitted to a geriatric non-acute hospital. Patients were followed until discharge and were classified as non-fallers, single fallers, or recurrent fallers. RESULTS: We identified 824 non-fallers, 136 single fallers, and 65 recurrent fallers contributing

175 falls. Compared to non-fallers, recurrent fallers were more likely to have pre-admission falls (P = 0.004), confusion (P < 0.0001), an unsafe gait (P = 0.0001) and be on tranquillisers (P = 0.018) and antidepressants (P = 0.006). They had longer stays in hospital (P < 0.0001) and more nursing home discharges (P = 0.0001). There was considerable overlap with risk factors for single fallers but compared to this group they were more likely to be confused (P = 0.027), and on antidepressant medication (P = 0.009). They also had a longer length of stay (P < 0.001) and more nursing home discharges (P = 0.03). Confusion (P = 0.0001), unsafe gait (P = 0.0006) and antidepressants (P = 0.018) were independently associated with recurrent falls. CONCLUSIONS: It is important to recognise the risk factors that prospectively identify a recurrent faller because of the significant contribution to total falls by a relatively small number of patients. This may be useful not only in trying to reduce total falls but also in trying to reduce injury.

78. **White, C. Rehabilitation therapy in skilled nursing facilities: Effects of Medicare's new prospective payment system. Health Affairs. 2003 May-2003 Jun 30;22(3):214-223.**
Abstract: In 1998, the Centers for Medicare and Medicaid Services (CMS) began phasing in a new prospective payment system (PPS) for Medicare payments to skilled nursing facilities (SNFs). I examine the effects of the new PPS on the level of rehabilitation therapy provided in SNFs. The percentage of residents of freestanding SNFs receiving extremely high levels of rehabilitation therapy dropped significantly, and the percentage receiving moderate levels increased. Freestanding SNFs, particularly for-profits, dramatically altered the services they provided in response to new financial incentives. This responsiveness underscores the importance of efforts now under way to refine the SNF PPS. [References: 8]

79. **Zochling, J.; Sitoh, Y. Y.; Lau, T. C.; Cameron, I. D.; Cumming, R. G.; Lord, S. R.; Schwarz, J.; Trube, A.; March, L. M.; and Sambrook, P. N. (Reprint available from: Sambrook PN Royal N Shore Hosp St Leonards NSW 2065 Australia). Quantitative ultrasound of the calcaneus and falls risk in the institutionalized elderly: Sex differences and relationship to vitamin D status. Osteoporosis International. 2002;13(11):882-887.**
Abstract: Very frail older people constitute an increasing proportion of aging populations and are likely to contribute substantially to costs due to osteoporosis. Quantitative ultrasound (QUS) of the calcaneus is potentially a simple method for assessing fracture risk in frail elderly, but there have been few studies of male/female differences in QUS or its relationship to falls risk or vitamin D status, which is often subnormal in this population. We studied QUS, falls risk, and serum 25(OH)-vitamin D in subjects living in institutional aged care facilities (hostels or nursing homes). The study sample comprised 294 men (mean age 81.2 years, range 65-102 years) and 899 women (mean age 86.7 years, range 65-104 years). Broadband ultrasound attenuation (BUA) and velocity of sound (VOS) were higher in men than women by approximately 30% and 2% respectively (P <0.0001) and this difference was maintained at all ages. Serum 25(OH)D levels were higher in men than women (P <0.001) but vitamin D deficiency was very common in both sexes and serum 25(OH)D was not associated with QUS in either sex. There was no significant decline in BUA or VOS with age in men; however, for women BUA declined by 2.8-4.7% per decade and VOS by 1% per decade (both P <0.001). Mean BUA T-scores were -1.55 and - 2.48 at age 90 years in men and women. Quadriceps strength and weight but not serum 25(OH)D were significantly associated with BUA. These data suggest only minor loss occurs at the calcaneal site in BU A and VOS with very old age in either sex. [References: 30]

Pain Selected Articles 2002–2007

1. **Black, B. S.; Finucane, T.; Baker, A.; Loreck, D.; Blass, D.; Fogarty, L.; Phillips, H.; Hovanec, L.; Steele, C.; and Rabins, P. Health problems and correlates of pain in nursing home residents with advanced dementia. Alzheimer's Disease Associative Disorder. 2006;20(4):283.**

   This study describes the health problems and comorbid illnesses of nursing home (NH) residents with advanced dementia (n=123) and identifies correlates of staff-identified pain. Study participants were residents of 3 NHs in Maryland, their surrogate decision makers and their physicians. Residents' cognitive function was assessed at study enrollment, and their medical records were reviewed to identify all health problems/illnesses and use of pain medications during the 6 months before their enrollment. The most prevalent health problems were skin problems (95%), nutrition/hydration problems (85%), psychiatric/behavioral problems (85%), gastrointestinal problems (81%) and infections (80%). Sixty-three percent of residents had recognized pain, and 95% of those residents received pain medications. In a multivariate regression analysis, staff-identified pain was associated with aspiration (P = 0.008), peripheral vascular disease (P = 0.021), musculoskeletal disorders (P = 0.032), higher cognitive function (P = 0.013), and use of pain medications, including non-opiates (P = 0.004) and the combination of opiates and non-opiates (P = 0.001). NH residents with advanced dementia experience a complex mixture of multiple chronic and acute comorbidities. These results suggest the need for clinicians in long-term care facilities to be vigilant in assessing and treating pain, particularly as cognitive function declines in those with advanced dementia.

2. **Buhr, G. T., and White, H. K. Quality improvement initiative for chronic pain assessment and management in the nursing home: a pilot study. Journal of the American Medical Directors Association. 2006;7:246-253.**

   Abstract: OBJECTIVES: To improve assessment and management of chronic pain in the nursing home through a method of continuous quality improvement. DESIGN: Quality improvement. SETTING: One nursing home in North Carolina as the primary site and 3 related facilities as secondary sites. INTERVENTION: Formation of a quality improvement team that reviewed current clinical practice guidelines, updated the policies and procedures, developed tools for pain assessment, and educated the staff in pain assessment and management principles. The "Plan-Do-Study-Act" (PDSA) paradigm was employed. MEASUREMENT: The staff's pain-related knowledge was measured with multiple-choice tests before and after an educational program. The completeness of the documentation and satisfaction of patients and families with pain assessment and management were also measured before and after the intervention. RESULTS: Before the intervention, the mean number of questions correct on the staff test was highest among the registered nurses (RN) (13.7 out of 16), intermediate among the licensed practical nurses (LPN) (12.4), and lowest among the certified nursing assistants (CNA) (9.4). After the intervention, the scores were 16 for the RNs, 12.9 for the LPNs, and 12.0 for the CNAs. In addition, 8 of 9 elements of a complete pain assessment showed improvement in documentation. The level of satisfaction for both the patients and families measured by interviews also increased. CONCLUSION: Education and

use of the PDSA paradigm improved staff knowledge and patient and family satisfaction with chronic pain assessment and management.

3. ***Clark, L.; Fink, R.; Pennington, K.; and Jones, K. Nurse's reflections on pain management in a nursing home setting. Pain Management in Nursing. 2006;7(2):71-77.***

    Achieving optimal and safe pain-management practices in the nursing home setting continues to challenge administrators, nurses, physicians, and other health care providers. Several factors in nursing home settings complicate the conduct of clinical process improvement research. The purpose of this qualitative study was to explore the perceptions of a sample of Colorado nursing home staff who participated in a study to develop and evaluate a multifaceted pain-management intervention. Semistructured interviews were conducted with 103 staff from treatment and control nursing homes, audiotaped, and content analyzed. Staff identified changes in their knowledge and attitudes about pain and their pain-assessment and management practices. Progressive solutions and suggestions for changing practice include establishing an internal pain team and incorporating nursing assistants into the care planning process. Quality improvement strategies can accommodate the special circumstances of nursing home care and build the capacity of the nursing homes to initiate and monitor their own process-improvement programs using a participatory research approach.

4. ***Clark, L.; Jones, K.; and Pennington, K. Pain assessment practices with nursing home residents. Western Journal of Nursing Research. 2004;2:1-18.***

    The purpose of this research was to describe the kinds of pain assessments nursing home staff use with nursing home residents and the characteristics and behaviors of residents that staff consider as they assess pain. Twenty-one focus groups were held in 12 nursing homes. Nurses and other nursing home staff attended the focus groups. Coding techniques consistent with ethnographic methodology were used for data analysis. Four themes identified an underlying uncertainty in assessing residents' pain, the staff relationship-centered approach to pain assessment, the resident cues that alert staff to pain, and residents' characteristics important to the nursing assessment. Composition of focus groups made a difference in participation of certified nursing assistants in focus group discussion. Urban and rural differences were noted across the focus groups. Research is needed to further refine pain assessment techniques specifically for nursing home settings.

5. ***Fisher, S. E.; Burgio, L. D.; Thorn, B. E.; Allen-Burge, R.; Gerstle, J.; Roth, D. L.; and Allen, S. J. Pain assessement and management in cognitively impaired nursing home residents: association of certified nursing assistant pain report, minimum data set pain report, and analgesic medication use. American Geriatrics Society. 2002;50(1):152-156.***

    Abstract: OBJECTIVES: The primary purpose of this preliminary study was to investigate the associations between certified nursing assistant (CNA) report of pain, Minimum Data Set (MDS) report of pain, and analgesic medication use in cognitively impaired nursing home residents. DESIGN: Correlational study. SETTING: Three nursing homes in the greater Birmingham, Alabama, area. PARTICIPANTS: Fifty-seven cognitively impaired nursing home residents with a mean Mini-Mental State Examination (MMSE) score of 11.1. MEASUREMENTS: Pain was assessed using a three-item proxy pain questionnaire (PPQ), developed by the researchers and administered to the residents' primary CNA. MDS and analgesic medication data corresponding with the time of

PPQ data collection were gathered from medical records. Cognitive status was measured with the MMSE. RESULTS: The PPQ elicited substantially higher estimates of pain prevalence than the MDS (48% versus 20%), and the PPQ and the MDS were not well correlated (pain frequency: r = .19, P = .18; pain intensity: r = .22, P = .11). The PPQ was also more strongly associated with analgesic medication use than the MDS. Cognitive status was significantly associated with pain report on the PPQ but not on the MDS. Test-retest reliability coefficients for the three items of the PPQ were excellent, ranging from .84 to .87 (P <.01). CONCLUSIONS: The CNA-generated PPQ was a more sensitive measure of pain than the MDS for this sample. Although the MDS represents an important step toward systematic and standardized assessment of pain, more emphasis should be placed on multimodal assessment, including CNAs' perceptions and observations about pain experienced by cognitively impaired nursing home residents.

6. **Horner, J. K.; Hanson, L. C.; Wood, D.; Silver, A. G.; and Reynolds, K. S. Using quality improvement to address pain management practices in nursing homes. Journal of Pain and Symptom Management. 2005;30(3):271-277.**

The objective of this study was to test whether a quality improvement intervention can improve pain management in nursing homes. Experts in quality improvement and clinical pain management provided nursing home staff leaders with feedback on pain quality indicator data, education in pain management, and technical assistance to apply the Plan-Do-Study-Act model of quality improvement. Trained abstractors completed structured chart audits at baseline and five months to capture quality indicator data related to pain assessment and treatment. Residents in pain who underwent pain assessments increased from 8% to 29% (P < 0.001). Residents receiving non-pharmacological pain treatments increased from 31% to 42% (P = 0.010), but pain medication use did not change. Among residents with daily moderate or excruciating pain, complete pain assessment was associated with increased probability of pain medication use. Quality improvement is a promising method to improve pain management in nursing homes.

7. **Snow, A. L.; Weber, J. B.; O'Malley, K. J.; Cody, M.; Beck, C.; Bruera, E.; Ashton, C.; Kunik, M. E. NOPPAIN: a nursing assistant-administered pain assessment instrument for use in dementia. Dementia and Geriatric Cognitive Disorders. 2003;17,240-246.**

The Non-Communicative Patient's Pain Assessment Instrument (NOPPAIN) is a nursing assistant-administered instrument for assessing pain behaviors in patients with dementia. This study investigated the validity of the NOPPAIN. Twenty-one nursing assistants (NAs) with no prior training in using the NOPPAIN watched six videos, each portraying a bed-bound patient with severe dementia receiving personal care from a nursing assistant and responding with a different level of pain intensity. The NAs completed a NOPPAIN rating for each video. The NAs were also presented with each possible pair of videos and asked to identify the video showing the most pain. Results indicated the NAs were quite accurate in their ratings of the videos, providing excellent preliminary evidence on the use of the NOPPAIN for detecting pain in nursing home patients with dementia.

8. **Wright, J.; Varholak, D.; and Costello, J. Voices from the margin: the nurse aide's role in pain management of institutionalized elders. American Journal of Alzheimer's Disease and Other Dementias. 2003;18:154-158.**

The training and function of Certified Nurse Aides (CNAs) has traditionally focused on safe, hygienic,

direct care and concrete, practical task completion. These two basic premises have directed training and job criteria and have evolved without much regard for the personal opinions, desires, and thoughts of the nurse aides themselves. However, CNA roles are expanding and changing daily, and what this expansion means in terms of patient care has ever-increasing relevance. How and what CNAs think and feel about their role and their training, and how both could be improved to meet the needs of patients and the demands of the health care system, are of vital interest to all those who rely upon their expertise.

9. ***Quality Partners. Implementation Guide to Improving Pain Management. Advancing Excellence in America's Nursing Homes Campaign. 2007.*** *http://www.nhqualitycampaign.org/ star_index.aspx?controls=nhTechAssist*
This document provides practical guidelines produced by a collaborative group of long-term care professionals. It seeks to help identify and manage the problems, risks, and health related conditions of nursing home residents, and provide individualized care and improved outcomes.

This selected bibliography is not comprehensive. Pertinent articles chosen to be included as informational resources were selected from abstracts, literature searches conducted in April 2003, with updates in August 2003. In addition, pertinent articles have been identified and selected by University of Wisconsin-Madison School of Nursing and Center for Health Systems Research and Analysis staff. Pain articles and minor updates to other topics were added in August 2007.

Attachment 2

Organizational Assessment Worksheets

Organizational Assessment

ASSESSING THE QUALITY OF CLINICAL CARE

Date: _____

Implementation Team Members:

_____   _____

_____   _____

_____   _____

This worksheet is divided into six sections, each referencing a different data source related to the quality of clinical care. Questions about each data source should be answered by the Implementation Team. There is a space for notes after each question and additional notes may be attached as needed.

The six data sources are as follows:

MDS QI

Wellspring Data

Annual Survey Data

Letters of Praise/Complaints

Resident Council Minutes/Recommendations

Family Council Minutes/Recommendations

Data Source: MDS QI	
Questions	**Notes**
Where is this data located?	
Who has access to the data?	
Who is responsible for collecting and maintaining this data?	
How is MDS data distributed (who/when/how often)?	
Do facility staff know how to access data?	
Have the data been used? Systematically? By whom?	
Is there general awareness of findings and what they suggest?	
Are data regularly interpreted for direct care staff?	
Have data been used in your organization's quality improvement activities?	
Are there consistencies/inconsistencies across databases?	
Are data, and what they suggest, reflected in resident care planning?	
Have these data been used to guide staff development programming?	
Can you find examples of care delivery practices and systems developed in response to these data?	
How is this database most effectively used?	
How can this database be made more useful?	

Implementing Change in Long-Term Care

Data Source: Annual Survey Data	
Questions	**Notes**
Where is this data located?	
Who has access to the data?	
Who is responsible for collecting and maintaining this data?	
How is Annual Survey data distributed (who/when/how often)?	
Do facility staff know how to access data?	
Have the data been used? Systematically? By whom?	
Is there general awareness of findings and what they suggest?	
Are data regularly interpreted for direct care staff?	
Have data been used in organization's quality improvement activities?	
Are there consistencies/inconsistencies with other databases?	
Are data, and what they suggest, reflected in resident care planning?	
Have these data been used to guide staff development programming?	
Can you find examples of care delivery practices and systems developed in response to these data?	
How is this database most effectively used?	
How can this database be made more useful?	

Worksheet: QUALITY OF CLINICAL CARE

A Practical Guide to Transformation

Data Source: Letters of Praise/Complaint

Questions	Notes
Do you have these?	
If not, are these important to collect and disseminate?	
If so, where are they located?	
Who is responsible collecting this information?	
What do these letters indicate?	
What systems have been developed in response to these (i.e., What kicks in when a complaint is filed? Who is involved in this? Are complaints an issue of staff skill and capacity of staff or something else? How do you know this?)?	

Data Source: Resident Council Minutes/Recommendations

Questions	Notes
Where is this data located?	
Who has access to the data?	
Who is responsible for collecting and maintaining this data?	
How are Resident Council minutes/ recommendations distributed (who/when/how often)?	
Do facility staff know how to access this data?	
Have the data been used? Systematically? By whom?	
Is there general awareness of what this data suggests?	
Are these data regularly interpreted for direct care staff?	
Are these data used in the organization's quality improvement activities?	
Are there consistencies/inconsistencies with other databases?	
Are these data, and what they suggest, reflected in resident care planning?	
Have these data been used to guide staff development programming?	
Can you find examples of care delivery practices and systems developed in response to these data?	
How are these minutes/recommendations most effectively used?	
How can these data be made more useful?	

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Data Source: Family Council Minutes/Recommendations

Questions	Notes
Where is this data located?	
Who has access to the data?	
Who is responsible for collecting and maintaining this data?	
How are Family Council minutes/recommendations distributed (who/when/how often)?	
Do facility staff know how to access this data?	
Have the data been used? Systematically? By whom?	
Is there general awareness of what this data suggests?	
Are these data regularly interpreted for direct care staff?	
Are these data used in the organization's quality improvement activities?	
Are there consistencies/inconsistencies with other databases?	
Are these data, and what they suggest, reflected in resident care planning?	
Have these data been used to guide staff development programming?	
Can you find examples of care delivery practices and systems developed in response to these data?	
How are these minutes/recommendations most effectively used?	
How can these data be made more useful?	

Implementing Change in Long-Term Care

"Assessing Resident Quality of Life" Worksheet

A Practical Guide to Transformation

Organizational Assessment

RESIDENT QUALITY OF LIFE

Date: _____

Implementation Team Members:

_____   _____

_____   _____

_____   _____

This worksheet is divided into three sections, each referencing a different data source related to resident quality of life. Questions about each data source should be answered by the Implementation Team. There is a space for notes after each question and additional notes may be attached as needed.

The three data sources are as follows:

Resident Satisfaction Surveys

Family Satisfaction Surveys

Letters of Praise/Complaint

Data Source: Resident Satisfaction Surveys

Questions	Notes
Do you have these data?	
If not, are these data that would be important to collect?	
If so, where are data located?	
Who is responsible for data?	
What do the data indicate?	
What systems have been developed in response to these data?	

Worksheet: RESIDENT QUALITY OF LIFE

A Practical Guide to Transformation

Data Source: Family Satisfaction Surveys

Questions	Notes
Do you have these data?	
If not, are these data that would be important to collect?	
If so, where are data located?	
Who is responsible for data?	
What do the data indicate?	
What systems have been developed in response to these data?	

Data Source: Letters of Praise/Complaint	
Questions	**Notes**
Do you have these?	
If not, are these important to collect and disseminate?	
If so, where are they located?	
Who is responsible collecting this information?	
What do these letters indicate?	
What systems have been developed in response to these (i.e., What kicks in when a complaint is filed? Who is involved in this? Are complaints an issue of staff skill and capacity of staff or something else? How do you know this?)?	

"Assessing the Quality of Workplace Environment" Worksheet

Organizational Assessment

QUALITY OF THE WORKPLACE ENVIRONMENT

Date: _____

Implementation Team Members:

_____   _____

_____   _____

_____   _____

This worksheet is divided into seven sections, each referencing a different data source related to the workplace environment. Questions about each data source should be answered by the Implementation Team. There is a space for notes after each question and additional notes may be attached as needed.

The seven data sources are as follows:

Staff Turnover/Retention Data

Exit Interviews

Performance Reviews of Supervisors

Performance Reviews of Peers

Staff Advancement Programs

Staff Satisfaction Survey Data

Staff Focus Groups

Data Source: Staff Turnover/Retention Data

Questions	Notes
Do you have these data?	
If not, are these data that would be important to collect?	
If so, where are data located?	
Who is responsible for data?	
When do staff leave?	
How long post-orientation do staff leave?	
Do you know what occurs prior to staff leaving?	
Where do staff go after leaving?	
Are there unit or shift specific data to focus on?	

Implementing Change in Long-Term Care

Data Source: Exit Interviews

Questions	Notes
Do you have these data?	
If not, are these data that would be important to collect?	
If so, what does the data indicate?	
What has been done as a consequence of what was learned from these interviews?	
Can you find three examples in your facility of utilizing information from staff exit interviews to improve the work experience?	
Do you know why employees leave your facility?	

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Worksheet: QUALITY OF THE WORKPLACE ENVIRONMENT

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Data Source: Performance Reviews of Supervisors

Questions	Notes
How/are performance reviews done?	
Do performance reviews reflect values of your organizational system? (i.e., are those in supervisory positions expected to have and use mentoring/coaching skills?)	
What are workers rewarded for?	
What are workers NOT rewarded for?	
How has staff performance review data been used to enhance the work environment?	

Data Source: Performance Reviews of Peers

Questions	Notes
How/are peer performance reviews done?	
Do performance reviews reflect values of your organizational system? (i.e., are those in supervisory positions expected to have and use mentoring/coaching skills?)	
What are workers rewarded for?	
What are workers NOT rewarded for?	
How has review data been used to enhance the work environment?	

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Data Source: Staff Advancement Programs

Questions	Notes
Do you have these data?	
If not, are these data that would be important to collect?	
If so, where are data located?	
Who is responsible for data?	
What does the data indicate?	
What systems have been developed in response to the data?	

Data Source: Staff Satisfaction Survey Data

Questions	Notes
Do you have these data?	
If not, are these data that would be important to collect?	
If so, where are data located?	
Who is responsible for data?	
What does the data indicate?	
What systems have been developed in response to the data?	

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Data Source: Staff Focus Groups

Questions	Notes
Have you ever conducted a focus group with staff?	
Do you have the data from the focus group discussion?	
If not, is staff focus group data something that would be important to collect?	
If so, what does the data indicate?	
What has been done as a consequence of what was learned in the focus group?	

If conducting a focus group with staff, suggested questions might be:

- What do you like best about your job?

- What two things would you change about your job, if you could?

- When you learn something new, who do you generally learn it from?

- If you learn something new, do you have an opportunity to use that knowledge?

- What are the rewards here? Where do these come from?

- If you know something about a resident here, do you see it reflected in the plan of care for that resident?