



## The Sleeping & Waking Experience



**Background:** A facility's care routines can sometimes unwittingly deprive residents of deep restful sleep. These care routines are at the heart of the nursing home's culture. All work and assignments are organized around these routines. To change them will have an impact on the facility as a whole. The care routines continue because staff is not aware of the iatrogenic affects of sleep deprivation.

**Typical Issues:** Residents are awakened and put to bed according to the facility's schedule. To ease the burden on the in-coming day staff, the night shift awakens some residents and gets them ready for the day. Sleeping residents are awakened during the night to take temperatures, give medications, monitor for incontinence, insert suppositories, or even to hydrate them. Some homes have gone so far as to have the night staff provide care such as clipping toenails. Sleep, for many residents, is compromised by bed alarms. Facility floors are cleaned and shined with noisy machinery during the night when hallways are clear.

Residents who are sleep deprived experience a range of typical effects of sleep deprivation including: lethargy, loss of appetite, depression,

anxiety, agitation combative behavior, and other declines. Medications given in response to these effects, or to help residents sleep, often times exacerbate the situation.

**Barriers:** There are many "organizational efficiencies" that prevent organizations from providing residents with a good, full, restful night's sleep. Providing a climate where residents can sleep through the night and awakening based on their biological clock would require a great deal of rethinking about common ingrained institutional behavior. The changes have been successfully managed by many organizations that began the dialogue with the question, "What would it take to sleep through the night here?" People realized that the nightly skin checks, floor buffing schedules, and suppository schedules, to name just a few organizational efficiencies, would need to be redesigned.

**Regulatory Support:** *OBRA '87* fully supports this area of change. The regulatory interpretive guidelines for **F240 Quality of Life**, found in *OBRA '87* states, "The intention of the quality of life requirements specify the facility's responsibilities toward creating and sustaining an environment that humanizes and individualizes each resident." **F242 Self-Determination and Participation** includes language that gives the resident the right to "choose activities, schedules, and health care consistent with his or her interests, assessments and plans of care..." It also provides the resident the right to, "make choices about aspects of his or her life in the facility that are significant to the resident." **F246 Accommodation of Needs** also has language in the interpretive guidelines that states, "The facility should

*attempt to adapt such things as schedules, call systems, and room arrangements to accommodate residents' preferences, desires and unique needs.*" Implementing care schedules around the natural rhythms of a resident's waking and sleeping routines are clearly supported by these regulatory requirements.

Additionally, the resident assessment process and requirements outlined in **F272 Resident Assessment** also provide support for structuring care giving around the preferences and routines of each individual resident. This regulation requires nursing homes to use the Minimum Data Set (MDS) assessment to gather information necessary to develop a resident's care plan. Section AC. Customary Routines of the MDS includes three areas regarding a resident's sleeping routine that should be assessed and considered when developing a care plan:

### **Section AC. Customary Routine**

1. Stays up late at night (e.g., after 9 pm)
2. Naps regularly during the day (at least 1 hour)
3. Wakens to toilet all or most nights

Centers for Medicare & Medicaid Services (CMS) Resident Assessment Instrument (RAI) Version 2.0 Manual includes the following language to explain the intent of gathering this information from residents upon their admission to a nursing home:

*"...The resident's responses to these items also provide the interviewer with "clues" to understanding other areas of the resident's function. These clues can be further explored in other sections of the MDS that focus on particular functional domains. Taken in their entirety, the data gathered will be extremely useful in designing an individualized plan of care."*

Implementing care schedules that support the natural rhythms of each resident's waking and sleeping preferences often impact other facility

practices/routines. Many residents are awakened or put to bed due to a facility's internal routines for medication administration and mealtimes. There are no regulatory requirements for nursing homes to have routine medication times (i.e. TID medications routinely administered at 6:00 am, 12:00 pm, and 6:00 pm). Adjusting medication orders from routine frequencies such as BID and TID to, "upon arising, before lunch, before dinner, and at bedtime" can enable staff to support residents' preferences for waking and sleeping times. For more information in creating individualized caregiving schedules in relation to medication times, view the CMS broadcast, "From Institutional to Individualized Care, Part III" at <http://cms.internetstreaming.com/>.

Some nursing homes have voiced concerns that the requirement for frequency of meals served to residents is a barrier to implementing care schedules based on a resident's customary waking and sleeping routines. **F368 - §483.35(f) Frequency of Meals** requires each resident to receive and the facility to provide at least three meals daily. It also includes that there must be no more than 14 hours between a substantial evening meal and breakfast the following day. Some providers have interpreted this language to mean that all residents must actually eat promptly by the 14<sup>th</sup> hour, which makes it difficult to honor a specific resident's request to refuse a night snack and then sleep late. Based on this interpretation, nursing homes are often hesitant to implement an individualized, resident-centered approach to waking and sleeping for fear of being noncompliant with this regulation. However, this interpretation is not necessarily intended by the regulation.

In December 2006, CMS provided the following language clarification regarding frequency of meals:

*The regulation language is in place to prevent facilities from offering less than 3 meals per day and to prevent facilities from serving supper so early in the afternoon*

*that a significant period of time elapses until residents receive their next meal. The language was not intended to diminish the right of any resident to refuse any particular meal or snack, nor to diminish the right of a resident over their sleeping and waking time. These rights are described at **Tag F242, Self-determination and Participation**. It is correct in assuming that the regulation language at F368 means that the facility must be offering meals and snacks as specified, but that each resident maintains the right to refuse the food offered. If surveyors encounter a situation in which a resident or residents are refusing snacks routinely, they would ask the resident(s) the reason for their customary refusal and would continue to investigate this issue only if the resident(s) complains about the food*

*items provided. If a resident is sleeping late and misses breakfast, surveyors would want to know if the facility has anything for the resident to eat when they awaken (such as continental breakfast items) if they desire any food before lunchtime begins.*

This clarification clearly promotes a resident's right to choose and to exercise his or her autonomy. It also provides nursing home providers with some assurances that the regulations and regulatory agencies are supportive of individualized care that provides options for resident choice of waking and sleeping routines and meal times. To view the entire CMS clarification go to CMS's website at:

<http://www.cms.hhs.gov/SurveyCertificationGenInfo/downloads/SCLetter07-07.pdf>

For more information in creating individualized care-giving schedules, see the CMS broadcast, "From Institutional to Individualized Care, Parts I and III" at <http://cms.internetstreaming.com>.

**Goal:** To support residents' health and well being by helping them have deep sleep through the night, by shifting from institutionally driven routines to routines that follow people's natural rhythms of sleeping and waking. Another goal is to support better relationships between residents and their caregivers by allowing caregivers to respect people's individual routines and set their care giving schedules around what works for each resident.

**Infrastructure Helpful to Support the Change:** Establish a work group with staff from all departments to identify and implement the changes needed in order for residents to return to their natural patterns for sleeping and waking. Adjust clinical care, staffing schedules, and routines for food service, housekeeping and maintenance to accommodate individual residents' needs and preferences related to sleeping

and waking routines. Establish a system for learning about people's patterns as part of the welcoming in to the nursing home for new residents.

**Making the Change:** There are many ways to undergo the change process. A good start is to think about who can help and to plan in a systematic way the necessary steps. Ensuring that its not a top-down edict but a shared commitment on the part of the community based on need creates a climate ripe for change. With your committees and groups ask:

- Number of residents who sleep through the night
- Number of residents who wake of their own accord
- Pre and post data on agitated behavior; anxiety meds; bowel and bladder continence; UTIs; skin care; weight change; mobility; social engagement; staff-resident relationships; staff workload.

**PDSA Cycles:** The Plan – Do – Study – Act Cycle is a way to systematically go through quality improvement in a thoughtful way.

With your committees and groups ask:

1. What are we trying to accomplish?  
(Example: Greater choice for residents, better sleep hygiene, a less institutionalized setting, resident choice over their desire to stay in bed, go to bed late)  
Naming and articulating what it is that you are trying to accomplish will help you months from now (when you are in the thick of things!) to remember the original intention of the change.
2. How will we know a change is an improvement? This is the question that begs a measurement response.  
(Example: We had low satisfaction in the area of resident choice and now look! As a result of this change we have more people able to ask for things and have their needs met! Our resident feel more rested, there are fewer combative incidences and less frequent falls.)
3. What changes can we make that will result in an improvement? (*Eliminating a harsh bed-check process in the night with lights on etc; Implementing a “gentle awakening process”; changing the way we think about breakfast to allow people to sleep. Go study your subject-find out what others have done, take a road trip, phone a friend, go to a Pioneer conference, talk with experts-ask others to do the same.*)

Sometime, after having this conversation a committee will be energized and ready to try everything. After all, they are all great ideas that will benefit residents and staff in the long run. It's also a homegrown solution to a problem or challenge faced by the organization. Though tempting, it is important not to try all

of these ideas at once. Try one idea, roll it out on a small sample or pilot, test it, measure it. If it's not working tweak it. This process is called a PDSA cycle. It looks like this.

**Plan:** Each PDSA cycle has an objective and a measure. In this phase, create it.

**Do:** Activate the plan and collect data using the method the team decided upon to measure your success. As much as possible do this on a small scale. Don't try the change on the whole home; try it on a few people or a wing, unit or neighborhood. Small is better. You can keep tweaking and adding to your sample as you see success.

Many teams go as far as Plan-Do. Some teams become very involved in the doing but sometimes find themselves in the midst of many failures without knowing what went wrong or why. The process invites the team to study their activity to ensure they are heading in the right direction. Even finding that one is heading in the wrong direction can offer valuable feedback to a committed team. The next step then, is the study phase.

**Study:** Test the hypothesis out. Stay open to the possibilities. There are many things you might find happen that you didn't expect. Be sure to note these unexpected gains.

**Act:** Once you have completed the process identified above you have a more complete understanding of the challenge or problem. Now armed with very specific information and data you have three options:

- Adapt the change
- Adopt the change
- Abort the change

This entire process can be done in a very public way by using storyboards to journey the process. Remembering to celebrate the success of

the process is an important feature of the story, helping staff, families and resident alike to witness the ongoing efforts made to improve the home.

**Plan:** Engage a committed group of people to consider, discuss and explore better sleep hygiene for residents based on residents obvious sleep deprivation and associated problems.

**Do:** Track the sleep of five resident volunteers who have minimal medical, hydration or treatment needs. These volunteers will be given the opportunity to awaken by their own natural body clock for two weeks.

**Study:** What time they awaken over the two weeks, mood, and appetite using simple tools. Determine if residents have a greater sense of rest and peace.

**Act:** Consider a small group of people who have incontinence to initiate the next cycle. Explore how to maintain skin integrity while allowing for better sleep.

### **Innovative Change Ideas:**

Homes that have undergone change in the domain of waking and sleeping considered these questions in their change process:

- Would you be comfortable sleeping here? With this bed and pillow?
- How can sleep be made comfortable?
- Where could you start your change process?
- What are all the factors that must be considered from each department in order to make this change?
- What could be improved in the following: lighting, noise, bed comfort, privacy and clinical care to help with sleep?
- What evening activity and food do people who like to stay up want available?
- If it the process changed how would staff and residents benefit?

- What are the medical consequences of sleep deprivation on health and well-being?
- What negative outcomes are we causing by constantly interrupting the sleep of our residents?
- How would residents and staff benefit from how awakening happens?
- What is the importance of sleep hygiene for physical and mental well-being?

### **Resources:**

1. Cruise PA, Schnelle JF, Alessi CA, Simmons SF, Ouslander JG. The nighttime environment and incontinence care practices in nursing homes. *J Am Geriatr Soc* 1998 Feb; 46 (2): 181-6.
2. Esser S., Wiles A., Taylor H., et al. The sleep of older people in hospital and nursing homes. *J Clin Nurs* 1999; 8: 360-8.
3. O'Rourke DJ, Klaasen KS, Sloan JA. Redesigning nighttime care for personal care residents. *J Gerontol Nurs* 2001 Jul; 27 (7): 30-7.

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