INCONTINENCE MANAGEMENT

Prepared by
The Anna and Harry Borun Center for
Gerontological Research,
a joint program of the
UCLA Medical Center and
the Jewish Home for the Aging
of Greater Los Angeles
ABOUT THE BORUN CENTER

This training manual presents the work of researchers at the Anna and Harry Borun Center for Gerontological Research, a joint venture between the UCLA School of Medicine and the Jewish Home for the Aging (JHA) of Greater Los Angeles in Reseda.

Established in 1989 and housed at JHA, the Borun Center is an interdisciplinary center for applied research that focuses on creating, testing, and promoting the adoption of behavioral interventions to improve daily care and quality of life in nursing homes. The Center’s mission encompasses three objectives:

- Identify factors that affect the quality of life of frail nursing home residents.
- Develop and test interventions to improve life quality for this population.
- Disseminate these interventions via a website, http://borun.medsch.ucla.edu, as well as through publications, conferences, and collaboration, and ensure their adoption by providing a system of training and expert support.

The Center’s work, designed to help nursing homes make the most of the resources they have on hand to enhance patient care and improve clinical outcomes, is exceptional for several reasons:

- The Center’s interventions address everyday nursing home routines that profoundly impact quality of life for residents, including incontinence management, weight loss prevention, pain assessment, mobility decline prevention, quality-of-life assessment, and pressure ulcer prevention.
- Center interventions in each of these areas have proven effective in research trials, and most were evaluated in randomized controlled trials, the gold standard for research studies.
- The Center’s work has yielded validated, reliable protocols that serve as easy-to-follow step-by-step instructions for implementing resident assessments and daily care interventions. These self-explanatory protocols enable nursing home staff to readily implement the assessments and interventions with minimal need for outside assistance.
- The Center also has developed quality control protocols for managing interventions and ensuring quality of care over time.

To the best of our knowledge, no other research center in the nation can lay claim to a body of work of comparable breadth, depth, and quality.

Under the direction of John F. Schnelle, Ph.D., Borun Center researchers have won wide acclaim for their non-invasive, cost-conscious, and effective methods for enhancing nursing home management and improving quality of life for frail residents. Their work has been funded by 18 grants from the highly selective National Institutes of Health and reported in more than 160 publications in professional books and journals. Ω

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In this training module, we present instructions and protocols for accomplishing each of the four steps required to implement an effective prompted voiding program. The module starts with a list of learning objectives, followed by an overview of prompted voiding.

Next, we present the four implementation steps:

1. Conduct a basic resident evaluation
2. Assess resident responsiveness to prompted voiding
3. Implement time-saving strategies to maintain prompted voiding programs
4. Conduct periodic control checks to help ensure incontinence care quality

Plan on spending about 20-30 minutes reading through this “how to” portion of the module.

Elsewhere in the module--Links, FAQs, Related Studies--we provide guidance and referrals to other resources that can help you improve incontinence care in your facility.

And via our discussion board you can chat with other long-term-care providers about the topic. Go to http://borun.medsch.ucla.edu/.

CONTACT US

We've tried to be comprehensive, but if there is something you can't find, or if you have unanswered questions, comments, or concerns, please feel free to contact us at the Borun Center, 7150 Tampa Ave., Reseda, CA 91335. Telephone: (818) 774-3347; Fax: (818) 774-3346; Email: rahmananna@yahoo.com.
At the end of this training module, you will be able to:

- Demonstrate knowledge of the importance of conducting a comprehensive evaluation of residents who are incontinent of urine.
- Demonstrate knowledge of the benefits of prompted voiding for incontinent nursing home residents.
- Compare and contrast prompted voiding to other treatment and management options for incontinent nursing home residents.
- Describe and implement the prompted voiding procedure with incontinent residents.
- Assess a resident’s responsiveness to prompted voiding.
- Demonstrate knowledge of the management options for incontinent residents who are not responsive to prompted voiding.
- List at least three modifications that can make a prompted voiding program potentially more feasible to implement.
- Create a control chart for use in monitoring a prompted voiding program.
- Describe and implement the procedure for conducting control checks as a means of evaluating a prompted voiding program.

All procedures presented in this module are in accordance with the federal regulations that govern nursing home care and best practice guidelines for incontinence care. Ω
BETTER INCONTINENCE CARE NEEDED IN NURSING HOMES

Incontinent nursing home residents are among the frailest of the frail. Most have physical impairments that restrict their mobility and many suffer from dementia. Given the profound functional and cognitive losses they’ve experienced, you might think these residents would be poor candidates for prompted voiding programs that improve continence. Not so. A significant proportion of these severely impaired residents are motivated to stay dry. And that fact dramatically demonstrates how important this personal care area is to nursing home residents. It restores a shred of dignity to lives that increasingly are insulted by loss.

Nursing home staff, on the other hand, view incontinence care as one of the most “onerous and difficult” aspects of their job, for reasons all of us can too easily imagine (1). It is also, they say, inordinately time consuming if done properly, which goes a long way—but not all the way—toward explaining why most nursing homes do it poorly.

Consider the facts:
- More than 50% of nursing home residents suffer from urinary
incontinence, and most of them have both physical and cognitive problems that prevent them from independently using the toilet (2).

- The vast majority of these residents, 80%-90%, use diapers and some form of staff toileting assistance to manage incontinence (3).
- Incontinent residents need toileting assistance three to four times within a 12-hour period to stay dry (4-6).
- Studies show, however, that they are rarely toileted and are not changed after every wet episode (5,7). Staff normally change residents an average of 1.34 times per 12 hours and provide toileting assistance an average of .5 times, and very rarely more than twice a day.

Lack of staff time partly explains the latter findings, but lack of staff knowledge is another, often un-credited culprit. To make matters worse, this overlooked second problem can exacerbate the first.

PROMPTED VOIDING PROGRAMS IMPROVE CONTINENCE

What knowledge do nursing home staff lack? Many seem unaware of key findings from more than 10 years of research on prompted voiding programs, the most extensively evaluated toileting assistance intervention for nursing home residents. Prompted voiding programs are designed to create awareness among residents of their continence status (i.e., whether they are wet or dry) and to encourage them to ask for toileting assistance. When implemented properly, the programs work. Here’s what the findings show:

- Prompted voiding results in a 40% to 50% overall reduction in the frequency of daytime urinary incontinence (4, 8).
- Between 25% and 40% of incontinent residents will respond to prompted voiding, with a reduction in their incontinence frequency from three to four episodes per day to one per day (8-9).
- Residents who are most responsive to prompted voiding can be easily identified in a two-day trial of the intervention (10).
- Even residents with severe cognitive and physical impairments have proven responsive to prompted voiding (10).

EFFECTIVE PROGRAMS LACKING IN NURSING HOMES

One obvious key to program success is assessment of resident responsiveness to the intervention. In the absence of these initial assessments, it is impossible to objectively determine who should receive toileting assistance and who should be diapered. Nevertheless, in a recent study of 14 nursing homes, we found that all the facilities failed to evaluate incontinent residents’ responsiveness to toileting assistance, a finding in keeping with those from other studies (1, 11).

The upshot of this widespread failure is as inevitable as it is clinically and ethically unjustifiable. In most nursing homes, all incontinent residents receive substandard toileting assistance. In some facilities, the system—or lack of it—discriminates in favor of the most able-bodied, clear-minded residents, reserving the poorest care for the frailest residents, those least able to tolerate it (11).

THE (MANY) BENEFITS OF PROMPTED VOIDING PROGRAMS

Clearly, corrective action is needed. Besides being “the right thing to do,” providing proper toileting assistance to residents makes sense clinically and
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BEFORE YOU START...

Three prerequisites are recommended before you start implementation of a prompted voiding program:

- Read through all four steps of the program so that, from beginning to end, you know what's needed to achieve success.
- Enlist top-level support from administrators and management staff to facilitate acceptance of the new program by direct care staff. One way to recruit help: Hand the likely champion a copy of this module and ask if you two can discuss it after he or she has read it. Have you considered that you yourself might be the champion?
- Allow extra time at the beginning not only to climb the learning curve, but also to assess all eligible residents and get them on board the program. Trust us--the intervention consumes less staff time the longer you administer it.

YOUR ASSIGNMENT

Find out how often incontinent residents in your facility receive incontinence care. Ask between five and ten incontinent residents how often they were checked and changed that day or received help to the toilet from staff. Be sure to interview some residents with moderate to severe cognitive impairments. (We have found that cognitively impaired residents usually give reliable reports of their daily care.)

Were the residents you interviewed on-schedule to receive toileting assistance three to four times that day, the amount needed for them to stay dry? Share your findings with us via our website, http://borun.medsch.ucla.edu/. We'll report your feedback in updates to the site.

Additionally, prompted voiding programs can contribute to better scores on publicly reported quality measures for nursing homes. The Centers for Medicare and Medicaid Services now publishes nursing home “report cards” on its consumer website, www.medicare.gov. Among the quality measures reported are the percentage of residents in a facility with infection and the percentage with loss of ability in basic daily tasks, which includes using the toilet. By improving continence among residents, prompted voiding programs may produce better “grades” on a facility’s report card.

Prompted voiding programs also offer enormous PR value. In one consumer survey, we asked family members and older board-and-care residents to compare the value of an intervention that improves continence to other nursing home perks such as improved meals or moving from a three- or two-person room to a single. By wide margins, the respondents rated the incontinence prevention program higher than the other, more customary options (5).

Economically. Urinary incontinence is estimated to cost nursing homes close to $5 billion annually, including costs for laundry, staff time, and supplies (12). Some of these costs are ill-directed due to staff failure to identify residents responsive to toileting assistance. This oversight often means that staff will waste time trying to toilet some residents who are unresponsive to their help while better candidates go without proper assistance. Urinary incontinence also is associated with a high rate of infection, requiring costly medical treatment both in the hospital and within the nursing home. Prevention programs such as prompted voiding address both problems, enhancing clinical outcomes for residents while possibly improving the facility’s bottom line.

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REFERENCES

STEP 1: CONDUCT A BASIC RESIDENT EVALUATION

COMPREHENSIVE ASSESSMENT IDENTIFIES CAUSE OF AND TREATMENT FOR URINARY INCONTINENCE

There are many potential causes of urinary incontinence. Consequently, there are many potential treatments. Determining the first so that you can decide upon the second is the primary goal of a basic resident evaluation, a first step recommended in all best-practice guidelines for managing urinary incontinence.

Though this first step is clearly a cornerstone for effectively managing incontinence, even nursing homes that purportedly provide quality services in this area often fail to follow through with recommended assessment procedures (1). In one study conducted in 30 nursing homes, we found that the staff (and here we include physicians) had obtained targeted histories for most incontinent residents, but had performed comprehensive physical exams for less than 14% of these residents (1). Rarer still were recommended dip stick urinalyses, post-void residual measurements, and 24-hour voiding records. Perhaps most surprising of all is that half of the participating nursing homes had what are considered “good” scores on two widely used quality indicators for incontinence care (1).
BENEFITS OF COMPREHENSIVE ASSESSMENT

There may be several reasons for skipping critical assessment tasks, including lack of time, staff inexperience, and unfamiliarity with recommended guidelines, but none of them qualifies as a legitimate excuse for substandard care.

Besides, if you give this first step the attention it deserves, your facility, residents, and staff will reap the benefits:

- Residents with reversible causes of urinary incontinence will get proper treatment, which in turn will help them maintain their independence.
- Staff will be able to better target time-consuming toileting assistance to residents who truly need it.
- And your facility may score better on publicly reported quality measures that reflect the quality of incontinence care.

INDICATORS OF A QUALITY ASSESSMENT

What exactly does a basic resident assessment of urinary incontinence entail? We at the Borun Center worked with other UCLA colleagues and researchers at RAND, a southern California think tank, to develop a series of quality indicators (QI) related to incontinence care for nursing home residents. Of the nine QIs we generated, three pertain to the assessment process. Presented as a series of if/then statements (so there’s no mistaking your obligations), these QIs outline the assessment process:

1. **IF** a nursing home resident has urinary incontinence on admission or the new onset of urinary incontinence that persists for over one month, **THEN** a targeted history should be obtained that documents each of the following:
   - Mental status
   - Characteristics of voiding
   - Ability to get to the toilet
   - Prior treatment for urinary incontinence
   - Importance of the problem to the residents

2. **IF** a nursing home resident has new urinary incontinence that persists for over one month or urinary incontinence on initial assessment, **THEN** a targeted physical should be performed that documents:
   - Rectal exam
   - Skin exam
   - Genital system exam (including a pelvic exam for women)

3. **IF** a nursing home resident has new urinary incontinence that persists for over one month or urinary incontinence on initial assessment, **THEN** the following tests should be obtained or there should be documentation explaining why the test was not completed:
   - Dipstick urinalysis
   - Post-void residual
   - 24-hour voiding record

It should be noted that these QIs are not, technically speaking, practice guidelines, though they are based closely on existing guidelines. Practice guidelines, such as those available from the American Medical Directors Association, “aim to define optimal or ideal care in the..."
context of complex decision-making,” writes RAND. In most nursing homes, however, optimal care is virtually synonymous with impossible care: it almost always requires more resources—time and money—than nursing homes can spare and, thus, simply cannot—and almost certainly will not—be implemented under usual conditions. So with a nod to real life, the QIs lower the bar. Explains RAND: They “set a minimal standard for acceptable care—standards that, if not met, almost ensure that the care is of poor quality (emphasis is ours).”

Based on expert opinion and existing best-practice guidelines, all of our QI-associated assessment tasks are both related to positive outcomes for residents and feasible for nursing home staff to implement. There should be no excuse for not accomplishing them.

**TREATMENTS FOR URINARY INCONTINENCE**

Depending on the outcomes of the basic evaluation, four broad types of treatment and several combinations of treatments may be justified. These include:

- **Drug Therapy**

- **Surgery**
  - Bladder neck suspension and repair of the pelvic prolapse for women with stress incontinence
  - Insertion of artificial urinary sphincters
  - Removal of anatomical obstructions

- **Behavioral Interventions**
  - Bladder retraining
  - Pelvic muscle rehabilitation (Kegel exercises)
  - Biofeedback
  - Vaginal weights to strengthen pelvic muscles

- **Toileting assistance protocols**, including prompted voiding

- **Other interventions**
  - Electrical stimulation
  - Intermittent catheterization
  - Chronic indwelling catheters
diapers—only prompted voiding has been shown in a controlled trial—the gold standard for research studies—to significantly improve continence. And the only way to reliably identify the 40% to 60% of incontinent residents who respond well to prompted voiding is to offer all otherwise untreated incontinent residents a trial run of the intervention (4). The next step presents procedures for this run-in trial.

REFERENCES


STEP 2: CONDUCT A BRIEF TRIAL OF PROMPTED VOIDING

A brief trial of prompted voiding is the best predictor of responsiveness to the intervention. Follow our procedures to conduct this trial and target services more effectively.

WHO RESPONDS TO PROMPTED VOIDING? MYTHS AND REALITIES

Prompted voiding has been touted in nursing homes for more than a decade, yet misconceptions still abound about which residents respond best to this highly effective intervention. It’s time for a reality check.

- **Myth:** Only the most cognitively intact incontinent residents respond well to prompted voiding.

  **Reality:** Many incontinent residents with severe cognitive impairments have proven responsive to prompted voiding, with significant reductions in their wet episodes. Indeed, in a study designed to identify predictors of successful prompted voiding, we found no significant differences on Mini-Mental State scores between responders and non-responders (1). In short, cognitive status is *not* a reliable predictor of responsiveness to prompted voiding.

- **Myth:** Able-bodied incontinent residents are the best candidates for prompted voiding.

  **Reality:** Ability to ambulate and other measures of a resident’s functional status are not good predictors of responsiveness to prompted voiding (1). The reason why the most physically fit residents are usually the most likely to receive prompted voiding is that it less time consuming for the staff to assist these residents to the toilet. More impaired residents often respond just as well.
but are not given the chance.

- **Myth:** There is no reliable and feasible protocol that accurately predicts a resident’s responsiveness to prompted voiding.

- **Reality:** There is such a protocol (1), and it works like this: Provide prompted voiding to incontinent residents for a few days, and then analyze the results. Those who use the toilet appropriately at least two-thirds of the time are “responsive” to the intervention; those who don’t are “unresponsive.” The rationale behind this “run-in” approach is simple common sense: Residents either respond to prompted voiding or they don’t, and there is no reason to expect different results unless there is a significant change—for better or worse—in the resident’s condition.

### BRIEF TRIAL OF PROMPTED VOIDING IS BEST PREDICTOR OF SUCCESS

Results from our study on predictors of successful prompted voiding prove the point. Findings showed that a resident’s appropriate toileting rate during the first three days of the intervention was a better predictor of longer term responsiveness than either the resident’s cognitive status or functional ability (1). Functional status measures failed to identify a substantial proportion of residents who were responsive, and in a finding that bears repeating, cognitive status was not at all related to responsiveness. By comparison, an appropriate toileting rate higher than 66% accurately identified the most responders while screening out the most non-responders.

We recognize that translating this finding into daily practice is more challenging than simply writing off the most cognitively and functionally impaired residents. On the other hand, if you have ever imagined yourself in the slippers of one of these frail residents, you’ll see something to celebrate here. Our findings suggest that the human spirit is so resilient that it can manage to triumph—in unpredictable fashion—over the most severe bodily onslaughts. So in one of the last places many of us would have thought to look for it, we find dramatic evidence of what could be called hope for a better life.

### PROCEDURES FOR THE PROMPTED VOIDING TRIAL

Nursing home staff can honor this hope by conducting a trial run with incontinent residents. Here’s how:

- **Assess motivation.**

Before starting the trial, a licensed nurse should interview participating residents to assess their motivation to toilet and to identify their preferences for toileting assistance. Use our Toileting Motivation and Preference Assessment form on page 41 to guide this six-question interview and record responses. The same six questions with the addition of a seventh (also included on the assessment form) should be asked again upon completion of the three-day trial. Our research shows that residents who score two or more on the Minimum Data Set (MDS) Recall subscale (see page 44) are capable
of providing reliable and meaningful responses to these interview questions. Residents who fail this cognitive screen should be excluded from interviews but should still undergo the prompted voiding trial.

Conduct a three-day trial of prompted voiding for each resident.

Prompted voiding affects behavior by heightening residents’ awareness of their continence status and encouraging them to ask for toileting assistance. Five steps describe the protocol, which nurse aides should implement for three days, recording results on our Prompted Voiding Trial form on page 42:

**Prompted Voiding Protocol**

1. Contact each resident every two hours from 8 a.m. to 4 pm (i.e., four times per day).
2. Focus the resident's attention on voiding by asking whether he or she is wet or dry.
3. Check resident for wetness and give feedback on whether the resident’s self-report was correct or incorrect (e.g., “Yes, Mrs. Jones, you are dry.”)
4. Whether wet or dry, ask the resident if he or she would like to use the toilet (or urinal).

   a. If yes:
      1. Assist him/her with toileting.
      2. Record the results on the bladder record.
      3. Give the resident positive reinforcement by spending an extra minute or two conversing with him or her.

   b. If no:
      1. In the event the residents has not attempted to void in the last four hours, repeat the request to use the toilet once or twice before leaving, and follow step 4(a) if an affirmative response is received.
      2. Inform the resident that you will be back in two hours and request that the resident try to delay voiding until then.

5. Record results of each wet check and toileting attempt on our Prompted Voiding Trial form.

After the trial is completed, remember to re-interview residents using our Toileting Motivation and Preference Assessment form (see page 41).

**TIME-SAVING TIP**

Shorten the prompted voiding trial to two days. Three days is ideal; two days is an acceptable minimum; however...a third day of prompted voiding should be offered to all residents who fall short of appropriately toileting 66% of the time but who show behavioral and verbal evidence that they are motivated to stay dry.

“Prompted voiding affects behavior by heightening residents’ awareness of their continence status and encouraging them to ask for toileting assistance.”
DOUBLE DUTY ASSESSMENT

The prompted voiding trial is an opportune time to complete any urinary incontinence assessment tests that are still outstanding. If you haven’t already done so, take this time to:

- Collect urine for analysis
- Measure a resident’s post-void residual
- Conduct a pad test for stress incontinence

CALCULATE APPROPRIATE TOILETING RATE TO DETERMINE RESPONSIVENESS

A resident’s appropriate toileting rate during the trial period determines whether he or she is “responsive” to prompted voiding. To calculate this rate:

- Divide the total number of successful toilets by the total number of toilets plus the number of incontinent voids.
  Multiply the quotient by 100 to convert it to a percentage.

For example, a resident who appropriately toileted during six of the prompts on three days and was wet on six of the prompts has an appropriate toileting rate of 50%.

Two separate major trials have determined that residents with appropriate toileting percentages above 66% will very likely continue to be continent if offered prompted voiding over longer periods (3, 4). These residents—between 25% and 40% of all incontinent residents—should continue to receive prompted voiding. In the next section, Step 3, we discuss staffing and time-saving strategies for maintaining prompted voiding programs.

TREATMENT OPTIONS FOR NON-RESPONDERS

Residents with appropriate toileting rates at or below 66% seldom show responsiveness with longer term applications of prompted voiding. Treatment options for these “non-responders” should be based on their pre- and post-trial answers to the Toileting Motivation and Preference Assessment questions on page 41 and their behavior during the trial.

Non-responsive residents who express a willingness to improve continence should be further evaluated to identify all problems that are potentially treatable by other interventions. As a general rule, any resident who attempts to toilet two times a day, even if unsuccessfully, should be considered motivated to stay dry and should thus receive a follow-up evaluation and after that, another prompted voiding trial.

About 10%-20% of non-responders will show no willingness to improve continence. In interviews, they express no desire to be either changed or toileted more frequently. In prompted voiding trials, they show or verbalize that toileting assistance is unwanted. These residents should be placed on a check-and-change program. No research findings to date suggest that other treatments will be more successful.

REFERENCES


**STEP 3: IMPLEMENT TIME-SAVING STRATEGIES**

**Consider these time-saving strategies to help your facility maintain its prompted voiding program and maximize benefits for incontinent residents.**

**WORK SMARTER NOT HARDER TO OFFER PROMPTED VOIDING PROGRAMS**

Having completed basic evaluations of incontinent residents and determined who among them is most responsive to prompted voiding, you are now in a position to make informed decisions about how to efficiently use what may be your facility’s most valuable resource: staff time.

Lack of staff time is one of, if not THE biggest barrier to implementing prompted voiding programs. The problem is not that prompted voiding consumes more time per episode than regular toileting assistance. We timed both interventions; on average, the first took just 12 seconds longer per episode to implement than the second (1). But toileting assistance in any form is more time-consuming to provide than checking and changing (5.5 minutes per episode), the usual care given to incontinent residents. In addition, prompted voiding must be offered every two hours, preferably between 7 am and 7 pm every day, if residents are to stay dry. By comparison, most nursing home staff provide toileting assistance less than twice a day to residents (1, 2).

We estimate that nursing homes need a staffing
ratio of five residents to one nurse aide to effectively provide prompted voiding to all responsive residents (1). But the ratio in most facilities is 10 or more residents to one nurse aide. With such severely restricted staff resources, nursing homes must work smarter in order to wring the most out of what they have. The recommendations that follow can help.

Keep in mind that not every recommendation will work well in every facility. You should decide which to implement based on your residents’ needs and your facility’s staff resources. And please note: We’ve started our list with the least restrictive recommendations. You should consider implementing these first.

**INTEGRATE PROMPTED VOIDING WITH INTERVENTIONS THAT ENHANCE RESIDENTS’ MOBILITY.**

An integrated intervention—one that combines prompted voiding with a low-intensity exercise program—offers two major advantages:

- By improving or preventing decline in residents’ ability to walk or wheel themselves, it helps enhance their ability to use the toilet independently or with minimal staff assistance. This, in turn, may reduce the amount of staff time needed to provide toileting assistance while it improves residents’ continence.
- Combining programs uses staff time more efficiently. For starters, it cuts in half the travel time needed to locate residents (an estimated 3.4 minutes for a single trip), because only one (integrated) intervention is being provided, not two separate programs. For the same reason, it also reduces orientation time—the time it takes to introduce the service to a resident whenever it is provided.

To help you implement such a program, our training module on mobility decline prevention presents procedures for the FIT intervention, which combines prompted voiding with an exercise program. You can access this module from our website, http://borun.medsch.ucla.edu/. In addition to improving continence, FIT (for functional incidental training) has led to increases in residents’ physical activity and their ability to stand, walk, and wheel themselves.

Briefly, FIT requires nursing home staff to provide prompted voiding to incontinent residents. Before or after this incontinence care, staff encourage residents to walk or, if nonambulatory, to wheel their chairs and to repeat sit-to-stands up to eight times using the minimum level of staff assistance possible. During one episode per day, each resident, usually while in bed, is given upper body resistance training (arm curls or arm raises). Before and after each care episode, residents are offered beverages to increase their fluid intake.

**FOREGO EVENING AND NIGHTTIME PROMPTED VOIDING.**

In the only study of its kind to date, we showed that prompted voiding does not improve continence at night (3). So don’t bother to offer it. Instead, nighttime care should be individualized, with the goals of minimizing sleep disruption and protecting at-risk incontinent residents from skin problems. Prompted voiding and other toileting assistance interventions should be reserved for those
residents who are bothered by nighttime incontinence and who demonstrate their willingness to toilet at night. In our study, we attempted a nighttime toileting assistance program with 61 incontinent nursing home residents. Wetness rates remained relatively high at night—49%—while appropriate toileting rates were low—18%. Ideally, wetness rates should drop below 20% and appropriate toileting rates should be above 66%. The poorest response rate was primarily observed between 10 pm and 6 am. Even residents who responded well to daytime prompted voiding showed poor results at night.

**REDUCE NURSE AIDE WORKLOADS IN OTHER AREAS.**

Assign time-consuming tasks that are typically the responsibility of nurse aides to non-traditional care providers, including volunteers, social service staff, even administrative personnel, so that nurse aides have more time to provide prompted voiding. Some mealtime chores and between-meal snack deliveries, for example, can be handled by non-traditional staff. See our weight loss prevention module (available on our website, http://borun.medsch.ucla.edu/) for tips on redeploying staff at mealtimes.

**REDUCE THE NUMBER OF HOURS DURING WHICH STAFF PROVIDE PROMPTED VOIDING.**

Ideally, incontinent residents should be offered prompted voiding every two hours between 7 am and 7 pm. Realistically? Between 8 am to 4 pm will do. With this schedule, residents will receive toileting assistance four times a day, enough to stay dry for that period. They are also more likely to receive the assistance they need because nursing homes are typically better staffed during the day shift than the evening and graveyard shifts.

**RAISE THE APPROPRIATE TOILETING RATE TO MORE NARROWLY TARGET SERVICES.**

As a last resort, use more restrictive criteria to target the prompted voiding intervention to the most responsive residents. Instead of using an appropriate toileting rate of 66% or higher, raise the rate to above 75%, for example. (Step 2 explains how to calculate this rate.) This targeting approach, unfortunately, will exclude some residents who could benefit from prompted voiding. Nevertheless, despite this serious drawback, it is ethically and clinically preferable to providing sub-optimal assistance to all incontinent residents or targeting assistance based on invalid resident characteristics such as cognitive status, both of which are common practices in nursing homes.

**A WORD OF CAUTION: DO NOT RESTRICT FLUIDS TO IMPROVE CONTINENCE.**

Some residents will purposely restrict their fluid intake in an attempt to improve their continence. For the same reason, some nursing homes will do the same for residents. In both cases, it’s a bad idea, potentially harmful to a resident’s health. Studies show that the majority of nursing home residents are at high risk for dehydration, a condition associated with numerous adverse clinical outcomes for residents, including the ultimate: death (4).

Far from an opportune time to limit fluids, the start of a prompted voiding program is the ideal time to offer *extra* fluids to residents. Incontinent residents may be more likely to drink more if they know they can count on help to the
toilet. And it will take staff next to no extra time to offer the extra care because they have to attend to the residents in any case.

Experts recommend that nursing home staff offer all residents extra fluids between meals, as many as 4-8 times a day. For more information about strategies to increase residents’ fluid intake, check out our weight loss prevention training module on our website, www.medsch.ucla.edu/borunter/.

REFERENCES

CONDUCT QUALITY ASSESSMENTS HELP ENSURE PROGRAM SUCCESS

By the time you get this far in implementing a prompted voiding program, you'll feel the major work is behind you, so you'll be sorely tempted to skip this last step. Our advice? Resist the temptation.

Here's why: Having accomplished Steps 1 (basic evaluation), 2 (prompted voiding trial), and 3 (program implementation), your facility now has a significant investment in improving the quality of incontinence care for residents. All that time and money will go to waste, however, unless supervisors conduct regular “wet” checks to make sure nurse aides continue to provide quality care. Most nursing homes forego this step only to pay a price for their negligence: studies show that in the absence of quality control assessment, nurse aides backslide and fail to consistently implement prompted voiding with incontinent residents (1).

Evidently, old habits are hard to break and new ones are hard to maintain if you don’t get timely feedback about how you’re doing, including
reinforcement for doing things right and recommendations for improvement if you’re doing things wrong. This feedback loop is a hallmark of continuous quality improvement programs. Commenting on the proven effectiveness of these programs, geriatrician John Morley and his colleagues observe (2): “It does not take the wizardry of Harry Potter to curb errors, but rather the ‘magic’ of data collection, analysis, and self-correction in a timely way (2003; pg. 809).” Step 4 is all about this kind of magic.

START BY SETTING WETNESS WARNING LIMITS

The primary tool used to monitor prompted voiding programs is a control chart, which graphically displays expected versus actual outcomes. This chart compares the percentage of incontinent residents found wet at any given point in time to the percentage who should be wet if the prompted voiding program is working as expected. If the “actual” percentage exceeds the “expected” percentage, then there’s a problem, and it needs further analysis if you intend to resolve it. Typical problems stem from changes in a resident’s status or break-downs in the prompted voiding work process.

Before you can construct a control chart, you need to establish your program’s performance goals; that is, you need to calculate the percentage of residents who should be wet if the program is working well. This calculation is based on data collected during the prompted voiding trial (Step 2).

Only the data for “responsive” residents is used. Recall that during the assessment trial, these residents were checked for wetness four times a day for two or three days. These 8 or 12 “data points” per resident, recorded on the Prompted Voiding Trial form, can now be used to establish program performance goals as follows:

1. Calculate the wetness rate for each responsive resident: Divide the total number of checks on which the resident was found wet or had a bowel movement by the total number of checks in all (8 for a two-day trial; 12 for a three-day trial), then multiply by 100 to convert to a percentage.

2. Calculate the average wetness rate for all residents and the standard deviation by using a simple program at this web address: www.physics.csbsju.edu/stats/cstats_NR_OW_form.html. (Alternatively, some calculators can also compute averages and standard deviations.) Where this web-based program prompts you to enter the “Number of Items,” enter the number of residents for which you have wetness rates, then click “Submit.” In the boxes that appear next, enter the wetness rates for residents, one per box. Then click “Calculate Now.”

3. The program returns a “results” page (see the next page) that reports both the mean, or average, wetness rate for all residents and the standard deviation. Use these results to set a warning limit two standard deviations above the mean. In the example below, the mean wetness rate for five residents was 18.8% and the standard deviation was 2.86. With these
corrective action are needed to bring it back in line.

How do you calculate wetness rates? To start, supervisory nurses should randomly check at least 10 residents for wetness each week. Take the number of residents found wet and convert it to a percentage of the total checks conducted. This percentage is the wetness rate. If two of 10 residents are found wet, for example, then the wetness rate for that week is 20%. We estimate that supervisors will spend 15-20 minutes a week conducting control checks.

Let’s return to our previous example, where we set the wetness warning limit at 24.52% \[18.8 + 2(2.86)\].

Sample Results Page from Web-based Program

**Descriptive Statistics: Results**

The results of some basic statistical tests performed at 10:26 on 8-DEC-2003.

5 data points were entered:
15.0 17.0 19.0 21.0 22.0

Mean = 18.8

95% confidence interval for actual Mean: 15.24 thru 22.36

Standard Deviation = 2.86

Hi = 22.0 Low = 15.0

Median = 19.0

Average Absolute Deviation from Median = 2.20

**CONDUCT CONTROL CHECKS**

Control checks should be unpredictable and should sample the range of times that might be problematic because of staffing issues.

results, we would set the warning limit at 24.52% \[18.8 + 2(2.86)\].

**HOW TO SCHEDULE RANDOM CONTROL CHECKS**

Control checks should be unpredictable and should sample the range of times that might be problematic because of staffing issues. We have found in previous work, for example, that late afternoon on Saturday is a time of high wetness rates.

**CREATE A CONTROL CHART**

Creating a control chart, like the one on the next page, that displays your data graphically will help you analyze trends over time and facilitate improvement efforts.
As illustrated in the above example, the mean percentage of residents who were found wet on the most recent 36 control checks was 15%. Bars represent the percentage of residents who were found wet on each control check. On three occasions (checks number 12, 29, and 36), the percentage of residents who were wet exceeded the warning limit. This is a red flag to staff that corrective action may be needed.

Further analyses of control check results should help you pinpoint the problem. Consider, for example, whether out-of-control results indicate a change in a resident’s status, a breakdown in care during shift changes, or a staffing problem on a particular hallway. All these are common occurrences that can skew program results.

**SHARE RESULTS WITH STAFF, ELICIT THEIR HELP WITH IMPROVEMENTS**

To truly experience the “magic” of continuous quality improvement, you must share results of the control-check evaluations with the nurse aides who perform the lion’s share of the work for the prompted voiding program. As we noted at the start of this step, staff members need feedback—both good and bad—to help them establish new work routines. Simply posting an updated control chart each week, for example, will enable nurse aides to make connections between their work and the impact it has on residents. If these direct care providers can see tangible evidence of the prompted voiding program’s benefits, then they are less likely to view the intervention as an additional burden and more likely to work to sustain its positive effects.

Sharing performance results also gives nurse aides the opportunity to help supervisors correct any problems that arise. Often the aides are the first to know if a resident’s status has changed or if there’s been a break-down in the work process. Involving these staff members in improvement efforts will also help strengthen their commitment to the program.

In addition to posting control charts, you can complete the “circle of communication” by presenting and discussing program performance results at in-service trainings and during regular staff meetings. We have discovered in our recent work that brief meetings of about five minutes once a week that are focused specifically on the incontinence quality control data are effective for training and management purposes.
Consider rewarding the staff for consistently good results. The most powerful motivators are job advancements and salary increases. If these are beyond your budget, a staff pizza party every quarter for outstanding performance can’t hurt.

REFERENCES


INCONTINENCE MANAGEMENT QUIZ

Instructions: Check the best answer.

1. In order to stay dry, incontinent residents need toileting assistance how often within a 12-hour period?
   a. ____ 1-2 times   b. ____ 3-4 times
   c. ____ 5-6 times   d. ____ 7-8 times

2. On average, how often is toileting assistance usually offered during the daytime to incontinent nursing home residents?
   a. ____ Less than once during the day   b. ____ 1-2 times
   c. ____ 3-4 times   d. ____ 5-6 times

3. Which of the following has been shown to significantly improve continence?
   a. ____ Scheduled toileting   b. ____ Prompted voiding
   c. ____ Habit training   d. ____ Use of diapers

4. Prompted voiding works by:
   a. ____ Encouraging residents to ask for toileting assistance.
   b. ____ Offering toileting assistance every two hours during the daytime.
   c. ____ Heightening residents’ awareness of their continence status.
   d. ____ All of the above.

5. A resident’s responsiveness to prompted voiding can best be determined based on a:
   a. ____ Functional performance test   b. ____ Cognitive performance test
   c. ____ Brief trial of prompted voiding   d. ____ Any one of the above tests or trials

6. Residents who prove responsive to prompted voiding will use the toilet appropriately:
   a. ____ Less than a third of the time   b. ____ About half the time
   c. ____ More than two-thirds of the time   d. ____ Always

7. Which of the following strategies can make it more feasible for facilities to provide prompted voiding?
   a. ____ Forego offering prompted voiding at nighttime
   b. ____ Integrate prompted voiding with interventions that enhance residents’ mobility
   c. ____ Reduce the number of daytime hours during which prompted voiding is offered
   d. ____ All of the above

8. If your facility fails to monitor its prompted voiding program, then:
   a. ____ Federal surveyors may cite your facility.
   b. ____ Nurse aides may stop implementing the prompted voiding protocol consistently.
   c. ____ Residents will lose their ability to use the toilet appropriately.
   d. ____ All of the above.
9. **The purpose of a control chart is to:**
   a. ____ Compare a resident’s preferences for toileting assistance to the amount of toileting assistance actually provided.
   b. ____ Compare the number of times a resident toileted appropriately to the number of times the resident was asked to toilet.
   c. ____ Compare the percentage of residents found wet at any given time to the percentage who should be wet if the prompted voiding program is working as expected.
   d. ____ Compare the incidence of incontinence in a given facility to the incontinence incidence in all other nursing homes.

10. **Sharing the results of wet checks with your nurse aides can:**
   a. ____ Elicit their suggestions for resolving any problems that may arise in the prompted voiding program.
   b. ____ Help aides see a tangible connection between the work they do and the well-being of residents.
   c. ____ Motivate the aides to consistently implement the prompted voiding protocol.
   d. ____ All of the above.

Answers: 1. b; 2. a; 3. b; 4. d; 5. c; 6. c; 7. d; 8. b; 9. c; 10. d Ω
Q: Do the Minimum Data Set (MDS) urinary incontinence quality indicators show that some nursing homes provide better incontinence care?

A: In a recent study conducted in 14 nursing homes, we collected independent data that showed that the only two currently used MDS incontinence quality indicators (QIs)—revalence of incontinence" and "prevalence of incontinence without a toileting plan"—do not reflect real differences in the quality of incontinence care provided to residents (1). None of the facilities, for example, evaluated residents' responsiveness to toileting assistance (see Step 2 for instructions on how to do this). Residents who received toileting assistance were comparatively less cognitively and physically impaired, which suggests that staff used invalid resident characteristics to determine who received services. Although facilities with better scores on both MDS incontinence QIs were more likely to document in medical records that residents received toileting assistance, there were no differences between homes in resident reports of the assistance they actually received. Across all facilities, participants capable of accurately reporting care activity said they received an average of 1.8 toileting assists per day (range 1.6-2.0), which is insufficient to improve urinary incontinence. There also were no differences in reports of received assistance between residents noted in the MDS as being on scheduled toileting and those who were not. This finding points to disturbing discrepancies between care documented and care actually provided.

Q: Is prompted voiding an effective intervention for reducing nighttime urinary incontinence?

A: The short answer is no. In the only study of

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**FREQUENTLY ASKED QUESTIONS**

**Q: Do the Minimum Data Set (MDS) urinary incontinence quality indicators show that some nursing homes provide better incontinence care?**

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**Q: Is prompted voiding an effective intervention for reducing nighttime urinary incontinence?**

**A: The short answer is no. In the only study of**
its kind (2), we attempted a nighttime toileting assistance program with 61 incontinent nursing home residents. Wetness rates remained relatively high at night—49%—while appropriate toileting rates were low—18%. Ideally, wetness rates should drop below 20% and appropriate toileting rates should be above 66%. Even residents who responded well to daytime prompted voiding showed poor results at night. Prompted voiding is effective with most residents between 7:00 am and 10:00 pm. However, there are some residents who want to use the toilet during the night, and who can maintain dryness if given assistance.

Based on these findings, we recommend that nighttime incontinence care be individualized, with the goals of minimizing sleep disruption and protecting at-risk residents from skin problems. Prompted voiding and other toileting assistance interventions should be reserved for those residents who are bothered by nighttime incontinence and who demonstrate, through a two- or three-night trial, their willingness to toilet at night. (See Step 2 for procedures for conducting prompted voiding trials.)

In a related study (3), our research staff individualized nighttime incontinence care by conducting hourly rounds in four nursing homes and providing incontinence care only if participating residents were found awake during the round. Residents at low risk for skin problems were allowed to sleep for as many as four consecutive hourly checks, but were awakened on the fifth if asleep. Residents at high risk for skin problems were allowed to sleep for only two consecutive hourly checks and awakened on the third if asleep. There were no adverse, intervention-related changes in skin health or most other risk factors associated with skin. The intervention also proved no more labor intensive to provide than usual care.

We also recommend a noise and light abatement program to facilitate nighttime sleep. These programs feature common sense procedures such as closing doors to residents' rooms, fixing squeaky equipment, turning off unattended TVs and radios, and using table lamps instead of overhead lights when providing incontinence care.

**Q: What treatments for urinary incontinence do family members prefer?**

**A:** To find out, we surveyed three groups of respondents: frail older adults, family members of nursing home residents, and long-term-care nursing staff (4). Among all respondents, 85% "definitely" or "probably" preferred diapers, and 77% "definitely" or "probably" preferred prompted voiding to indwelling catheterization. There were, however, differences among the respondent groups. Nurses preferred prompted voiding to diapers more than did older adults or family members. Older adults, compared with family and nurse respondents, more strongly preferred medications to diapers. In open-ended responses, older adults (nine of them nursing home residents and 70 residential care residents) said they would choose a treatment based in part upon criteria of feeling dry, being natural, not causing embarrassment, being easy, and not resulting in dependence. The comments also indicated that older adults and families did not believe nursing home staff would provide prompted voiding often enough to improve continence (see Step 3 for time-saving strategies that help maintain prompted voiding programs). Because of the divergence of opinions among different proxy respondents, we recommend that, when possible, nursing home residents be asked first for their treatment preference.
**Q:** Some of our incontinent residents purposely restrict their intake of fluids to try to prevent wet episodes. Is this recommended?

**A:** No. Restricting fluids in an attempt to improve continence is potentially harmful to a resident's health. Studies show that the majority of nursing home residents are at high risk for dehydration, a condition associated with numerous adverse clinical outcomes for residents, including the ultimate: death (5).

Experts recommend that nursing home staff offer all residents extra fluids between meals, as many as 4-8 times a day (5). Incontinent residents may be more likely to drink more if they know they can count on help to the toilet. For this reason, we believe the start of a prompted voiding program is an ideal time to begin offering extra fluids to residents (see our introduction to this training module). Consider offering residents beverages to drink before or after assisting them to the toilet.

For more information about strategies to increase residents' fluid intake, check our weight loss prevention training module on our website, [http://borun.medsch.ucla.edu/](http://borun.medsch.ucla.edu/).

**Q:** Many of our residents suffer from constipation and fecal incontinence. Will a prompted voiding program help them?

**A:** Possibly, but only if prompted voiding is combined with interventions that increase mobility/exercise and prompt residents to drink more. When this type of integrated intervention is implemented, there is evidence that there will be a major increase in how often residents have a bowel movement in the toilet and a decrease in the frequency of incontinent bowel movements. Our training module on mobility decline prevention describes such an intervention. You can access the module from our website, [http://borun.medsch.ucla.edu/](http://borun.medsch.ucla.edu/). Constipation, however, remains a problem. Other intervention components will likely have to be included in a comprehensive program to improve constipation. Improving food intake and controlling medications with constipative side effects are two treatments that should supplement prompted voiding.

**REFERENCES**


- This report describes a simple, noninvasive assessment strategy that enables nursing home staff to identify incontinent residents who respond well to prompted voiding. Of the 191 residents in seven nursing homes who completed the demonstration trial, 41% were deemed responsive to the intervention. On average, their wet episodes dropped from 8.7 to 2.0 per day as a result of the intervention, during which research staff prompted them to use the toilet every two hours between 7 am and 7 pm.

The best predictors of responsiveness were the number of wet episodes and the appropriate toileting rate during the first three days of the trial. Residents who appropriately toileted 66% or more of the time or who were found wet on 20% or fewer daily checks maintained improved continence for an additional nine weeks of prompted voiding. The researchers recommend that nursing homes implement the three-day "run-in" trial to identify residents who are most responsive to prompted voiding. "Responders" should continue to receive toileting assistance, while the non-responders should be considered for further evaluation and alternative interventions.
Translating Clinical Research into Practice: A Randomized Controlled Trial of Exercise and Incontinence Care with Nursing Home Residents.

- An incontinence care and exercise intervention called FIT, for Functional Incidental Training, resulted in significant improvements in physical mobility and continence for most residents who received the intervention. The staffing requirements needed to implement the intervention, however, are high and exceed the resources available in most nursing homes.

In this randomized, controlled trial, research staff prompted each of 94 intervention residents to toilet every two hours, five days a week, between 8 am and 4:30 pm. Before or after providing incontinence care, staff encouraged the residents to walk or, if nonambulatory, to wheel their chairs and to repeat sit-to-stands up to eight times. Once a day, each resident was given upper body resistance training. Before and after each care episode, staff offered fluids to residents. After 32 weeks of FIT, intervention residents maintained or improved performance on 14 of 15 outcome measures, whereas the performance of the 96 residents in the control group declined.

The mean time required to implement the intervention each time care was provided was 20.7 minutes. Consequently, one nurse aide for every five residents would be needed to implement the intervention. Less than 10% of the nation's nursing homes are staffed at this level. The researchers conclude, "Fundamental changes in the staffing of most nursing homes will be necessary to translate efficacious clinical interventions into everyday practice."

Incontinence

- This chapter describes the prevalence of urinary incontinence among older adults, discusses treatment options, and presents detailed guidelines for assessing and managing urinary incontinence among nursing home residents. Particular attention is paid to prompted voiding programs, the most extensively evaluated toileting assistance program for nursing home residents. The role behavioral healthcare professionals can play in assessing and managing incontinence is highlighted. The author also identifies areas related to incontinence treatment that need further study.

The Minimum Data Set Urinary Incontinence Quality indicators: Do They Reflect Differences in Care Processes Related to Incontinence?

- Federal regulations require nursing homes to complete resident assessments periodically using the Minimum Data Set (MDS) assessment protocol. Results are used to generate quality indicators (QI) for each facility as a means of identifying poor outcomes in a number of clinical areas. But the use of QIs as a measure of quality of care is controversial due in part to concerns about the accuracy of staff-generated MDS data.
This study, conducted in 14 nursing homes, collected independent data that showed that the only two currently used MDS incontinence QIs—"prevalence of incontinence" and "prevalence of incontinence without a toileting plan"—do not reflect real differences in the quality of incontinence care provided to residents. None of the facilities, for example, evaluated residents' responsiveness to toileting assistance. Residents who received toileting assistance were comparatively less cognitively and physically impaired, which suggests that staff used invalid resident characteristics to determine who received services. Although facilities with better scores on both MDS incontinence QIs were more likely to document in medical records that residents received toileting assistance, there were no difference between homes in resident reports of the assistance they actually received. Across all facilities, participants capable of accurately reporting care activity said they received an average of 1.8 toileting assists per day (range 1.6-2.0), which is insufficient to improve urinary incontinence. There also were no differences in reports of received assistance between residents noted in the MDS as being on scheduled toileting and those who were not. This finding points to disturbing discrepancies between care documented and care actually provided.

Urinary Incontinence Treatment Preferences in Long-Term Care.

- What treatments for urinary incontinence are preferred for nursing home residents? This study asked this question of frail older adults, family members of nursing home residents, and long-term-care nursing staff. Among all respondents, 85% "definitely" or "probably" preferred diapers, and 77% "definitely" or "probably" preferred prompted voiding to indwelling catheterization. There were, however, differences among the respondent groups. Nurses preferred prompted voiding to diapers more than did older adults or family members. Older adults, compared with family and nurse respondents, more strongly preferred medications to diapers. In open-ended responses, older adults (nine of them nursing home residents and 70 residential care residents) said they would choose a treatment based in part upon criteria of feeling dry, being natural, not causing embarrassment, being easy, and not resulting in dependence. The comments also indicated that older adults and families did not believe nursing home staff would provide prompted voiding often enough to improve continence. Because of the divergence of opinions among different proxy respondents, the researchers recommend that, when possible, nursing home residents be asked first for their treatment preference.

Strategies to Measure Nursing Home Residents' Satisfaction and Preferences Related to Incontinence and Mobility Care: Implications for Evaluating Intervention Effects.

- This study compared four different interview strategies to measure 111 incontinent nursing home residents' "met need" related to incontinence and mobility care. In one method—perhaps the most commonly used strategy in
In this study, family members of nursing home residents and older board-and-care residents were asked in a written survey to compare the value of interventions that improve continence and mobility to other nursing home perks such as improved meals or moving to a more private room. By wide margins, the respondents rated the functional improvement programs higher than the other, more customary options. The top-rated programs were a physical therapy program that provides 15 additional minutes of supervised activity and exercise a day, an incontinence prevention program that cuts the number of wet episodes in half for a resident, and a program that improves the amount a resident can walk by a few minutes a day. These services were significantly preferred to any of the bottom-rated, non-rehabilitative services, which included having one additional nurse aide on the unit during the day shift, moving from a triple room to a single, from a triple room to a double, and from a double room to a single. The researchers point out that while nursing home consumers often complain about privacy and food issues, they rarely request services that improve continence and walking, most likely because they are unaware of such rehabilitative programs.
Prompted Voiding for Nighttime Incontinence in Nursing Homes: Is it Effective?

- Does prompted voiding improve continence at night? No, not according to this study, which attempted a nighttime toileting assistance program with 61 incontinent nursing home residents. Wetness rates remained relatively high at night—49%--while appropriate toileting rates were low—18%. Ideally, wetness rates should drop below 20% and appropriate toileting rates should be above 66%. Even residents who responded well to daytime prompted voiding showed poor results at night. The researchers recommend that night care be individualized, with the goals of minimizing sleep disruption and protecting at-risk residents from skin problems. Prompted voiding and other toileting assistance interventions should be reserved for those residents who are bothered by nighttime incontinence and who demonstrate, through a two- or three-night trial, their willingness to toilet at night.

Individualizing Nighttime Incontinence Care in Nursing Home Residents.

- An intervention that combined individualized nighttime incontinence care with a noise and light abatement program significantly reduced awakenings among 92 residents in four nursing homes. The intervention was developed in response to findings from an earlier nursing home study that found that 42% of nighttime waking episodes lasting four minutes or longer were associated with noise, light, or incontinence care activities.

For the intervention, incontinent residents were first assessed to determine their risk of developing skin problems. Nurses conducted hourly incontinence rounds and provided incontinence care only if a resident was found awake during the round. Residents at low risk for skin problems were allowed to sleep for as many as four consecutive hourly checks, but were awakened on the fifth if asleep. Residents at high risk for skin problems were allowed to sleep for only two consecutive hourly checks and awakened on the third if asleep.

The noise and light abatement program centered on common sense procedures such as closing doors to residents' rooms, fixing squeaky equipment, turning off unattended TVs and radios, and using table lamps instead of overhead lights when providing incontinence care. There were no adverse, intervention-related changes in skin health or most other risk factors associated with skin. The intervention also proved no more labor intensive to provide than usual care.
The Use of a Computer-Based Model to Implement an Incontinence Management Program.

- A computerized total quality management model was used to implement a prompted voiding incontinence intervention in eight nursing homes. Research staff measured resident wetness for one month, provided training in the implementation of the program in less than five days, and measured resident wetness for six months. Seven of the eight nursing homes significantly improved resident dryness for a six-month period. However, objective improvement in resident dryness was not a sufficient incentive for nursing home staff to maintain the program; extensive monitoring of the nursing home computers by modem and telephone feedback from the research staff was necessary to produce successful maintenance. The researchers cite frequent staff turnover in nursing homes as one impediment to maintaining the intervention. Lack of positive feedback for improved outcomes from both external surveyors and the residents themselves may also explain why nursing home staff backslide into old care routines. Ω
RELATED LINKS AND RESOURCES

RELATED LINKS

American Foundation for Urologic Disease
www.incontinence.org

National Institute of Diabetes and Digestive and Kidney Diseases
www.niddk.nih.gov/

National Institute on Aging
www.nia.nih.gov/

National Kidney and Urologic Diseases Information Clearinghouse
www.kidney.niddk.nih.gov/about/index.htm

Simon Foundation for Continence
www.simonfoundation.org/html/
FORMS QUALITY INDICATORS FOR INCONTINENCE CARE

We worked with researchers at RAND, a southern California think tank, to develop a series of nine quality indicators (QI) related to incontinence care for nursing home residents. Presented as a series of if/then statements, these QIs outline minimally acceptable care for the assessment and treatment of incontinent residents. QIs, writes RAND, “set a minimal standard for acceptable care—standards that, if not met, almost ensure that the care is of poor quality.”

Based on expert opinion and existing best-practice guidelines, all of our QI-associated assessment and treatment tasks are both related to positive outcomes for residents and feasible for nursing home staff to implement. Use the two QI forms listed at the left to evaluate incontinence care in your facility. Ω

FORMS FOR STEP 2—CONDUCTING A PROMPTED VOIDING TRIAL

- Toileting Motivation and Preference Assessment Survey, page 41
- Prompted Voiding Trial, page 42
- MDS Recall Subscale, page 44

FORMS FOR ASSESSING INCONTINENCE QUALITY INDICATORS—USE BOTH FORMS TOGETHER

- Medical Record Review, page 45
- Quality Indicator Data Sources and Scoring Rules, page 47
STEP 2: TOILETING MOTIVATION AND PREFERENCE ASSESSMENT

Instructions: For each resident assessed in the prompted voiding trial, ask the following questions both before and after the trial to assess his or her motivation to use the toilet and to identify preferences for toileting assistance. Our research shows that residents who score two or more on the Minimum Data Set (MDS) recall scale are capable of providing reliable and meaningful responses to these interview questions. Residents who fail this cognitive screen should be excluded from interviews but should still undergo the prompted voiding trial.

Resident Name:_______________________ Staff Interviewer:_________________________
Date of Interview:____/____/____

Check Response
DK=Don’t Know   NR=No Response or Nonsense Response   REF=Refusal to answer question

Interviewer: “I want to ask you some questions about help with using the toilet.”

1. Does it bother you to wet in your diaper?  ___yes ___no ___ DK/NR/REF
2. Do staff help you to the toilet as much as you would like?  ___yes ___no ___ DK/NR/REF
3. Do you want to be helped to the bathroom more often?  ___yes ___no ___ DK/NR/REF
   3a. If no, ask: Do you want to be helped to the toilet less often?  ___yes ___no ___ DK/NR/REF
4. Do you want to be changed more often?  ___yes ___no ___ DK/NR/REF
   4a. If no, ask: Do you want to be changed less often?  ___yes ___no ___ DK/NR/REF

After the prompted voiding trial, ask this question as well:

5. Do you like the amount of changing and toileting assistance you have received in the last three (or two) days?  ___yes ___no ___ DK/NR/REF

Scoring: A high motivation to toilet is indicated if a resident gives the answers in bold italics. A low motivation to toilet seems indicated if a resident responds no to questions 1, 3, 4, 5, and yes to questions 3a, 4a, and yes or no to question 2.
STEP 2: PROMPTED VOIDING TRIAL

**Instructions:** Use this form to record results of wet checks and prompted voiding attempts with one resident for one day of the assessment trial. Each resident should receive prompted voiding every two hours between 8 am and 4 pm, for a total of 4 times on each day of the assessment trial. There is space below to record results for 4 wet checks and prompted voiding attempts. You will need to complete 2 or 3 of these forms per resident depending on whether the prompted voiding trial extends for 2 or 3 days.

Resident Name:_____________________  Employee Name:_______________________  
Date:______________________________  Day of Trial: ___1\textsuperscript{st}___2\textsuperscript{nd}___3\textsuperscript{rd}  

Time: _____at 1\textsuperscript{st} check   ________at 2\textsuperscript{nd} check   ________at 3\textsuperscript{rd} check   ________at 4\textsuperscript{th} check

1. **Resident’s condition at check (circle one for each check):**

<table>
<thead>
<tr>
<th>1\textsuperscript{st} check</th>
<th>2\textsuperscript{nd} check</th>
<th>3\textsuperscript{rd} check</th>
<th>4\textsuperscript{th} check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry</td>
<td>Dry</td>
<td>Dry</td>
<td>Dry</td>
</tr>
<tr>
<td>Wet</td>
<td>Wet</td>
<td>Wet</td>
<td>Wet</td>
</tr>
<tr>
<td>Bowel</td>
<td>Bowel</td>
<td>Bowel</td>
<td>Bowel</td>
</tr>
<tr>
<td>Wet and bowel</td>
<td>Wet and bowel</td>
<td>Wet and bowel</td>
<td>Wet and bowel</td>
</tr>
</tbody>
</table>

2. **Toileting outcome (circle one for each check):**

<table>
<thead>
<tr>
<th>1\textsuperscript{st} check</th>
<th>2\textsuperscript{nd} check</th>
<th>3\textsuperscript{rd} check</th>
<th>4\textsuperscript{th} check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refused</td>
<td>Refused</td>
<td>Refused</td>
<td>Refused</td>
</tr>
<tr>
<td>Dry run*</td>
<td>Dry run</td>
<td>Dry run</td>
<td>Dry run</td>
</tr>
<tr>
<td>Urine</td>
<td>Urine</td>
<td>Urine</td>
<td>Urine</td>
</tr>
<tr>
<td>Bowel</td>
<td>Bowel</td>
<td>Bowel</td>
<td>Bowel</td>
</tr>
<tr>
<td>Urine and bowel</td>
<td>Urine and bowel</td>
<td>Urine and bowel</td>
<td>Urine and bowel</td>
</tr>
</tbody>
</table>

* A “dry run” means that the resident attempted to toilet but failed to void.

3. **Resident’s reaction to checks and prompts (circle one for each check):**

<table>
<thead>
<tr>
<th>1\textsuperscript{st} check</th>
<th>2\textsuperscript{nd} check</th>
<th>3\textsuperscript{rd} check</th>
<th>4\textsuperscript{th} check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-initiates</td>
<td>Self-initiates</td>
<td>Self-initiates</td>
<td>Self-initiates</td>
</tr>
<tr>
<td>Cooperates-neutral</td>
<td>Cooperates-neutral</td>
<td>Cooperates-neutral</td>
<td>Cooperates-neutral</td>
</tr>
<tr>
<td>Cooperates-reluctant</td>
<td>Cooperates-reluctant</td>
<td>Cooperates-reluctant</td>
<td>Cooperates-reluctant</td>
</tr>
<tr>
<td>Uncooperative</td>
<td>Uncooperative</td>
<td>Uncooperative</td>
<td>Uncooperative</td>
</tr>
</tbody>
</table>

4. **Level of assistance resident needed to toilet (circle one for each check):**

<table>
<thead>
<tr>
<th>1\textsuperscript{st} check</th>
<th>2\textsuperscript{nd} check</th>
<th>3\textsuperscript{rd} check</th>
<th>4\textsuperscript{th} check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>Independent</td>
<td>Independent</td>
<td>Independent</td>
</tr>
<tr>
<td>Stand-by asst.</td>
<td>Stand-by asst.</td>
<td>Stand-by asst.</td>
<td>Stand-by asst.</td>
</tr>
<tr>
<td>Needs help of 1 person</td>
<td>Needs help of 1 person</td>
<td>Needs help of 1 person</td>
<td>Needs help of 1 person</td>
</tr>
<tr>
<td>Needs help of 2 persons</td>
<td>Needs help of 2 persons</td>
<td>Needs help of 2 persons</td>
<td>Needs help of 2 persons</td>
</tr>
</tbody>
</table>
ANALYZE RESULTS

When the prompted voiding trial is complete, calculate the following for each resident:

- **Appropriate toileting rate**: Divide the total number of successful toilets by the total number of toileting attempts, typically 8 for a two-day trial or 12 for a three-day trial. Multiply the quotient by 100 for a percentage.

  Use this chart to guide interpretation of results:
  - 76%-100% Excellent ability to toilet
  - 66%-75% Good ability to toilet
  - 50%-65% Fair ability to toilet
  - 0%-49% Poor ability to toilet

  **Residents with an appropriate toileting rate above 66% should continue to receive prompted voiding.**

  Residents with appropriate toileting rates below 66% seldom show responsiveness with longer term applications of prompted voiding. Treatment options for these “non-responders” should be based on their pre- and post-trial answers to the *Toileting Motivation and Preference Assessment questions* (see our Forms page for this survey instrument) and their behavior during the trial.

  Non-responsive residents who express a willingness to improve continence should be further evaluated to identify all problems that are potentially treatable by other interventions. As a general rule, any resident who attempts to toilet two times a day, even if unsuccessfully, should be considered motivated to stay dry and should thus receive a follow-up evaluation and after that, another prompted voiding trial.

  About 10%-20% of non-responders will show no willingness to improve continence. In interviews, they express no desire to be either changed or toileted more frequently. In prompted voiding trials, they show or verbalize that toileting assistance is unwanted. These residents should be placed on a check-and-change program. No research findings to date suggest that other treatments will be more successful.

- **Wet rate**: Divide the total number of checks on which the resident was found wet by the total number of checks, then multiply by 100 to convert to a percentage. Use the wet rate to help construct a control chart for monitoring the prompted voiding program (see Step 4 of the incontinence management training module).

- **Calculate the resident’s “average” reaction to checks and prompts and his or her “average” level of assistance needed to toilet to create a profile that can help you develop an appropriate plan of care for the resident.**
### MDS Recall Subscale

Resident’s name: ______________________________________

Check all that the resident was able to accurately recall (in last 7 days):

- **a.** Current season: ____

- **b.** Location of own room: ____

- **c.** Staff names and/or faces: ____

- **d.** He/she is in a nursing home: ____

**OR**

**e.** None of the Above: ____

Resident receives 1 point for each item (a-d) checked.

Application: As a general rule, you should conduct interviews for quality improvement purposes with all residents who score 2 or higher on the MDS Recall subscale. Our research shows these residents consistently provide reliable information useful for quality improvement efforts. If your questions ask about services or care processes that occur *daily*, as opposed to less frequently, then you should also interview residents who score 1 (or more) on the MDS Recall subscale.
## Medical Record Review Form

### MEDICAL RECORD REVIEW FORM

<table>
<thead>
<tr>
<th>Location of data in Medical Record</th>
<th>YES</th>
<th>NO/N D</th>
<th>DATE (If YES)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCREENING FORM (ALL RESIDENTS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Was the presence or absence of urinary incontinence documented at admission? (<em>Yes</em> if Licensed Nurse documents within 2 weeks and/or MD documents within 1 month)</td>
<td>Admission Nursing Assessment Or Admission H&amp;P (MD, NP)</td>
<td></td>
<td></td>
<td>If yes, check all that apply: □ Licensed Nurse documented UI □ Licensed Nurse documented no UI □ MD documented UI □ MD documented no UI □ Indwelling catheter documented</td>
</tr>
<tr>
<td>2. Did the resident have an indwelling catheter?</td>
<td></td>
<td></td>
<td>If yes, was a reason stated? □ NO □ YES</td>
<td></td>
</tr>
<tr>
<td>3. Urinary Incontinence RAP triggered? (MDS Form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. MDS H1b = 2 or 3 (Occasionally or Frequently Incontinent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. MDS H1b = 4 (Multiple, daily incontinent episodes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. MDS H3a (scheduled toileting plan) ✓ OR H3b (Bladder retraining Program) ✓</td>
<td></td>
<td></td>
<td>If yes, circle item(s) ✓: H3a H3b</td>
<td></td>
</tr>
<tr>
<td>7. MDS G1i&gt;0 (toileting assistance)</td>
<td></td>
<td></td>
<td>If yes, circle score: 1 2 3 4</td>
<td></td>
</tr>
</tbody>
</table>

### TARGETED INCONTINENCE REVIEW

<p>| 8. Were any of the following done within 1 month after UI identified? | Nurse Assessment, Progress notes (MD, Nurse) | | | |
| a. Mental status evaluation | Nurse Assessment, Progress notes (MD, Nurse) | | | |
| b. Characteristics of voiding | Nurse Assessment, Progress notes (MD, Nurse) | | | |
| c. Ability to get to the toilet | Nurse Assessment, Progress notes (MD, Nurse, PT) | | | |
| d. Prior treatment for incontinence | Progress notes (MD, Nurse) | | | |
| e. Importance of problem to resident | Progress notes (MD, Nurse, Psychologist) | | | |
| f. Rectal Exam | Admit H &amp; P, Progress notes (MD, NP, Nurse) | | Accept documentation of bowel moves if in primary provider notes for a rectal exam: | |
| g. Genital/pelvic Exam | Admit H &amp; P, Progress notes (MD, NP) | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>h. Skin Exam</td>
<td>Nurse Assessment, Admit H &amp; P, Progress notes (MD, Nurse)</td>
<td></td>
</tr>
<tr>
<td>i. Dipstick urinalysis</td>
<td><strong>LAB</strong></td>
<td></td>
</tr>
<tr>
<td>j. Post-void residual</td>
<td>Progress notes (Nurse, MD)</td>
<td></td>
</tr>
<tr>
<td>k. 24 hour voiding record</td>
<td>C.N.A. or Licensed Nurse Notes or Nurse Assessment</td>
<td></td>
</tr>
</tbody>
</table>
| 9. Was a 3-5 day toileting assistance trial done? | C.N.A. Flowsheet or Licensed Nurse notes or Nurse Assessment | **If YES, Answer Q 10 – 11**  
**If NO, Answer Q 11**  
*Accept any description of toileting assistance trial even if no note about outcomes is made*
| 10. During the trial, was the resident capable of using the toilet appropriately over 65% of the time? | C.N.A. Flowsheet or licensed RN notes or RN assessment |   |
| 11. Was resident placed on a toileting assistance program? | MD Orders Progress notes (Licensed Nurse, MD)  
C.N.A. flowsheet | **Accept documentation of toileting program even if specific frequency is not noted (e.g., “toileting as needed”)** |
## URINARY INCONTINENCE

<table>
<thead>
<tr>
<th>Quality Indicator</th>
<th>Data Source and Scoring Rules</th>
</tr>
</thead>
</table>
| **1. ** ALL N. Home Residents should have documentation of the presence or absence of urinary incontinence (UI) at the time of admission. | *Medical Record*  
screening form #1  
*Scoring*  
PASS: screening form urinary incontinence #1  
√’d “yes” |
| **2. ** IF a N. Home Resident has UI on admission or the new onset of UI that persists for over 1 month,  
THEN a targeted history should be obtained that documents each of the following:  
• Mental status,  
• Characteristics of voiding,  
• Ability to get to toilet,  
• Prior treatment for urinary incontinence, and  
• Importance of the problem to the resident. | *Medical Record*  
IF = screen form #4 or #5 is “yes”  
THEN = #8a - e  
*Scoring*  
PASS: at least 2 of items #8a - e  
√’d “yes” |
| **3. ** IF a N. Home Resident has new UI that persists for over 1 month or UI on initial assessment,  
THEN a targeted physical should be performed that documents:  
• Rectal exam,  
• Skin exam, and  
• Genital system exam (including a pelvic exam for women). | *Medical Record*  
IF = screen form #4 or #5 is “yes”  
THEN = #8f - h  
*Scoring*  
PASS: all of the items #8f - h  
√’d “yes” |
| **4. ** IF a N. Home Resident has new UI that persists for over 1 month or UI on initial assessment,  
THEN the following tests should be obtained or there should be documentation explaining why the test was not completed:  
• Dipstick urinalysis,  
• Post void residual, and 24 hour voiding record. | *Medical Record*  
IF = scoring form #4 or #5 is yes  
THEN = #8I - k  
*Scoring*  
PASS: at least 2 of items #8I - k  
√’d “yes” |
5. **IF** a N. Home Resident remains incontinent after transient causes are treated,  
   **THEN** the resident should be placed on a 3 to 5 day toileting assistance trial.  

   **Medical Record**  
   IF = scoring form #4 or #5 is “yes”  
   THEN = #9  
   **Scoring**  
   PASS: urinary incontinence checklist #9 √’d “yes”

6. **IF** a N. Home Resident who is incapable of independent toileting is found on a toileting assistance trial to be capable of appropriately using the toilet over 65% of the time,  
   **THEN** the resident should be placed on a toilet assistance program.  

   **Medical Record**  
   IF = urinary incontinence checklist #7 and #9 are “yes”  
   THEN = #10  
   **Scoring**  
   PASS: items #10 and #11 √’d “yes”  
   *Not applicable when #10 √’d “no”*

7. **IF** the MDS documents that a resident’s self-performance of toileting is level 1 (supervision), level 2 (limited assistance), level 3 (extensive assistance) or level 4 (total dependence),  
   **THEN** the resident should be offered assistance with toileting:  
   - every 2 hours while awake or  
   - a schedule based on formal need assessment (24 hour voiding record or pad test), or  
   - whenever requested.  

   **Medical Record + Interview**  
   IF = #7 is “yes”  
   THEN = check #11 and ask preference questions  
   **Interview Preference Questions**  
   *How many times would you like toileting assistance during the day?*  
   *How many times do you receive toileting assistance during the day?*  
   **Scoring A- Interview**  
   PASS: If the answer to question (the # of times during the day staff helps resident use toilet) is greater than or equal to the answer to question (the # of times during the day the resident would like to be helped to use the toilet)  
   **Scoring B-Medical Record**  
   PASS: #11 √’d “yes”
8. **IF** the MDS documents that a resident’s self-performance of toileting is level 1 (supervision), level 2 (limited assistance), level 3 (extensive assistance) or level 4 (total dependence), or the resident or proxy reports needing assistance with toileting,  
   **THEN** the resident should report that they receive verbal notification or cueing before the assistance is given, are not rushed to complete the task and are not afraid to request assistance when needed.

   **Interviewer:** If #7 “yes” **THEN** ask: 
   Are you afraid to ask the staff to help you use the toilet?  
   **Scoring:** PASS if the answer is “no”

9. **IF** the N. Home Resident or proxy reports requesting assistance with any ADL (toileting),  
   **THEN** the resident should report that s/he is satisfied with the timeliness of staff response to their request.

   **Interviewer:** If resident reports they ask for assistance **THEN** ask: 
   Do you have to wait a long time for them to help you?  
   **Scoring:** PASS if answer is “no”