



Complete Summary

GUIDELINE TITLE

Urinary incontinence (UI) in older adults admitted to acute care. In: Evidence-based geriatric nursing protocols for best practice.

BIBLIOGRAPHIC SOURCE(S)

Dowling-Castronovo A, Bradway C. Urinary incontinence (UI) in older adults admitted to acute care. In: Capezuti E, Zwicker D, Mezey M, Fulmer T, editor(s). Evidence-based geriatric nursing protocols for best practice. 3rd ed. New York (NY): Springer Publishing Company; 2008. p. 309-36. [45 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Dowling-Castronovo A, Bradway C. Urinary incontinence. In: Mezey M, Fulmer T, Abraham I, Zwicker DA, editor(s). Geriatric nursing protocols for best practice. 2nd ed. New York (NY): Springer Publishing Company, Inc.; 2003. p. 83-98. [26 references]

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SCOPE

DISEASE/CONDITION(S)

Urinary incontinence

GUIDELINE CATEGORY

Evaluation
Management
Prevention

Risk Assessment
Treatment

CLINICAL SPECIALTY

Geriatrics
Nursing
Urology

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Hospitals
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

To provide a standard of practice protocol for management of urinary incontinence by nurses in practice settings

TARGET POPULATION

Older adults hospitalized for acute care

INTERVENTIONS AND PRACTICES CONSIDERED

Evaluation

1. Documentation of presence/absence of urinary incontinence (UI) on admission
2. Determination of presence/absence of indwelling catheter and appropriate catheter use
3. Assessment for type of UI and its possible etiologies

Treatment/Management

1. General prevention and management
 - Identification and treatment of causes
 - Individualized plan of care
 - Avoidance of contributing factors: medications, indwelling urinary catheters, bladder irritants, hydration status, overweight, environmental factors
 - Prevent skin breakdown
2. Strategies for specific problems (stress, urge, overflow, and functional UI)
 - Pelvic floor muscle exercises (PFMEs)
 - Toileting assistance and bladder training

- Referral for pharmacological, surgical, or physical therapies
 - Bladder training
 - Information on urge inhibition
 - Sufficient voiding time
 - Double voiding and Crede's maneuver
 - Sterile intermittent catheterization
 - Scheduled or prompted voiding
 - Adequate fluid intake
3. Patient education regarding urinary incontinence
 4. Follow-up monitoring

MAJOR OUTCOMES CONSIDERED

- Episodes of urinary incontinence
- Urinary tract infection

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
 Hand-searches of Published Literature (Secondary Sources)
 Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Although the AGREE instrument (which is described in Chapter 1 of the original guideline document) was created to critically appraise clinical practice guidelines, the process and criteria can also be applied to the development and evaluation of clinical practice protocols. Thus the AGREE instrument has been expanded for that purpose to standardize the creation and revision of the geriatric nursing practice guidelines.

The Search for Evidence Process

Locating the best evidence in the published research is dependent on framing a focused, searchable clinical question. The PICO format—an acronym for population, intervention (or occurrence or risk factor), comparison (or control), and outcome—can frame an effective literature search. The editors enlisted the assistance of the New York University Health Sciences librarian to ensure a standardized and efficient approach to collecting evidence on clinical topics. A literature search was conducted to find the best available evidence for each clinical question addressed. The results were rated for level of evidence and sent to the respective chapter author(s) to provide possible substantiation for the nursing practice protocol being developed.

In addition to rating each literature citation to its level of evidence, each citation was given a general classification, coded as "Risks," "Assessment," "Prevention," "Management," "Evaluation/Follow-up," or "Comprehensive." The citations were organized in a searchable database for later retrieval and output to chapter

authors. All authors had to review the evidence and decide on its quality and relevance for inclusion in their chapter or protocol. They had the option, of course, to reject or not use the evidence provided as a result of the search or to dispute the applied level of evidence.

Developing a Search Strategy

Development of a search strategy to capture best evidence begins with database selection and translation of search terms into the controlled vocabulary of the database, if possible. In descending order of importance, the three major databases for finding the best primary evidence for most clinical nursing questions are the Cochrane Database of Systematic Reviews, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Medline or PubMed. In addition, the PsycINFO database was used to ensure capture of relevant evidence in the psychology and behavioral sciences literature for many of the topics. Synthesis sources such as UpToDate® and British Medical Journal (BMJ) Clinical Evidence and abstract journals such as Evidence Based Nursing supplemented the initial searches. Searching of other specialty databases may have to be warranted depending on the clinical question.

It bears noting that the database architecture can be exploited to limit the search to articles tagged with the publication type "meta-analysis" in Medline or "systematic review" in CINAHL. Filtering by standard age groups such as "65 and over" is another standard categorical limit for narrowing for relevance. A literature search retrieves the initial citations that begin to provide evidence. Appraisal of the initial literature retrieved may lead the searcher to other cited articles, triggering new ideas for expanding or narrowing the literature search with related descriptors or terms in the article abstract.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level I: Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

Level II: Single experimental study (randomized controlled trials [RCTs])

Level III: Quasi-experimental studies

Level IV: Non-experimental studies

Level V: Care report/program evaluation/narrative literature reviews

Level VI: Opinions of respected authorities/Consensus panels

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METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Levels of evidence (**I – VI**) are defined at the end of the "Major Recommendations" field.

Parameters of Assessment

- Document the presence/absence of urinary incontinence (UI) for all patients on admission ("Assessment," 2000 [**Level VI**]).
- Document the presence/absence of an indwelling urinary catheter.
 - Determine appropriate indwelling catheter use: severely ill patients, patient with Stage III to IV pressure ulcers of the trunk, urinary retention unresolved by other interventions (Wound Ostomy Continence Nurse's Society, 1996 [**Level VI**]).
- For patients with presence of UI:

The nurse collaborates with interdisciplinary team members to:

- Determine whether the problem is transient, established (stress/urge/mixed/overflow/functional), or both and document (Fantl et al., 1996 [**Level I**]; "Assessment," 2000 [**Level VI**]); Johnson et al., 2001 [**Level VI**]).
- Identify and document the possible etiologies of the UI (Fantl et al., 1996 [**Level I**]; "Assessment," 2000 [**Level VI**]).

Nursing Care Strategies

- General principles that apply to prevention and management of all forms of UI:
 - Identify and treat causes of transient UI ("Assessment," 2000 [**Level VI**]).
 - Identify and continue successful pre-hospital management strategies for established UI.
 - Develop an individualized plan of care using data obtained from the history and physical examination, and in collaboration with other team members.
 - Avoid medications that may contribute to UI (Kane, Ouslander, & Abrass, 2004 [**Level VI**]).
 - Avoid indwelling urinary catheters whenever possible to avoid risk for urinary tract infection (UTI) (Dowd & Campbell, 1995 [**Level IV**]; Bouza et al., 2001 [**Level IV**]; Madigan & Neff, 2003 [**Level I**]; Zimakoff et al., 1996 [**Level IV**]; Wong, 1981 [**Level VI**]).
 - Monitor fluid intake and maintain an appropriate hydration schedule.
 - Limit dietary bladder irritants (Gray & Haas, 2000 [**Level VI**]).
 - Consider adding weight loss as a long-term goal in discharge planning for those with a body mass index (BMI) greater than 27 (Subak et al., 2005 [**Level II**]).
 - Modify the environment to facilitate continence (Fantl et al., 1996 [**Level I**]; Jirovec, 2000 [**Level VI**]; Palmer, 1996 [**Level VI**]).
 - Provide patients with usual undergarments in expectation of continence, if possible.
 - Prevent skin breakdown by providing immediate cleansing after an incontinent episode and utilizing barrier ointments (Ersser et al., 2005 [**Level I**]).
 - Pilot test absorbent products to best meet patient, staff, and institutional preferences (Dunn et al., 2002 [**Level I**]), bearing in

mind that diapers have been associated with UTIs (Zimakoff et al., 1996 **[Level IV]**).

- Strategies for specific problems:

Stress UI

- Teach pelvic floor muscle exercises (PFMEs) (Bo, Talseth, & Holme, 1999 **[Level II]**; Hay-Smith & Dumoulin, 2006 **[Level I]**; "Assessment," 2000 **[Level VI]**).
- Provide toileting assistance and bladder training as needed ("Assessment," 2000 **[Level VI]**).
- Consider referral to other team members if pharmacologic or surgical therapies are warranted.

Urge UI

- Implement bladder training (retraining) ("Assessment," 2000 **[Level VI]**; Teunissen et al., 2004 **[Level I]**).
- If patient is cognitively intact and is motivated, provide information on urge inhibition (Gray, 2005 **[Level VI]**; Smith, 2000 **[Level VI]**).
- Teach PFMEs to be used in conjunction with bladder training or retraining (Flynn, Cell, & Luisi, 1994 **[Level IV]**).
- Collaborate with prescribing team members if pharmacologic therapy is warranted.
- Initiate referrals for those patients who do not respond to the above.

Overflow UI

- Allow sufficient time for voiding.
- Discuss with interdisciplinary team the need for determining a post-void residual (PVR) ("Assessment," 2000 **[Level VI]**; Shinoplous, 2000 **[Level VI]**; Weiss, 1998 **[Level VI]**) (see Figure 13.1 in the original guideline document)
- Instruct patients in double voiding and Crede's maneuver (Doughty, 2000 **[Level VI]**).
- Sterile intermittent is preferred over indwelling catheterization as needed (Saint et al., 2006 **[Level II]**; Terpenning, Allada, & Kauffman, 1989 **[Level IV]**; Warren, 1997 **[Level VI]**).
- Initiate referrals to other team members for those patients requiring pharmacologic or surgical intervention.

Functional UI

- Provide individualized, scheduled toileting or prompted voiding (Eustice, Roe, & Paterson, 2005 **[Level I]**; Jirovec, 2000 **[Level VI]**; Ostaszkiwicz, Johnston, & Roe, 2005 **[Level I]**).
- Provide adequate fluid intake.
- Refer for physical and occupational therapy as needed.
- Modify environment to be conducive to maintaining independence with continence (Fantl et al., 1996 **[Level I]**; Jirovec, 2000 **[Level VI]**; Jirovec, Brink, & Wells, 1988 **[Level VI]**); Palmer, 1996 **[Level VI]**).

Follow-up Monitoring of Condition

- Provide patient/caregiver discharge teaching regarding outpatient referral and management.
- Incorporate continuous quality improvement (CQI) criteria into existing program.
- Identify areas for improvement and enlist multidisciplinary assistance in devising strategies for improvement.

Definitions:

Levels of Evidence

Level I: Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

Level II: Single experimental study (randomized controlled trials [RCTs])

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Level IV: Non-experimental studies

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CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for selected recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Patient

- Fewer or no episodes of urinary incontinence (UI) or complications associated with UI

Nurse

- Documentation of assessment of continence status at admission and throughout hospital stay. If UI is identified, documentation and determination of type of UI
- Use of interdisciplinary expertise and interventions to assess and manage UI during hospitalizations
- Inclusion of UI in discharge planning needs and referral as needed

Institution

- Decreased incidence and prevalence of transient UI
- Hospital policies that require assessment and documentation of continence status
- Improved administrative support and ongoing education regarding assessment and management of UI for staff

POTENTIAL HARMS

Indwelling urinary catheters are associated with the risk of urinary tract infection (UTI).

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Resources

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 (revised 2008)

GUIDELINE DEVELOPER(S)

Hartford Institute for Geriatric Nursing - Academic Institution

GUIDELINE DEVELOPER COMMENT

The guidelines were developed by a group of nursing experts from across the country as part of the Nurses Improving Care for Health System Elders (NICHE) project, under sponsorship of The John A. Hartford Foundation Institute for Geriatric Nursing.

SOURCE(S) OF FUNDING

Supported by a grant from The John A. Hartford Foundation

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Primary Authors: Annemarie Dowling-Castronovo, Christine Bradway

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

Electronic copies: Available from the [Hartford Institute for Geriatric Nursing Web site](#).

Copies of the book *Geriatric Nursing Protocols for Best Practice*, 3rd edition: Available from Springer Publishing Company, 536 Broadway, New York, NY 10012; Phone: (212) 431-4370; Fax: (212) 941-7842; Web: www.springerpub.com.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Urinary incontinence assessment in older adults part I—transient urinary incontinence. Try this: best practices in nursing care to older adults. 2007. Electronic copies available from the [Hartford Institute for Geriatric Nursing Web site](#).
- Urinary incontinence assessment in older adults part II—established urinary incontinence. Try this: best practices in nursing care to older adults. 2007. Electronic copies available from the [Hartford Institute for Geriatric Nursing Web site](#).

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on February 2, 2004. The information was verified by the guideline developer on February 26, 2004. This NGC summary was updated by ECRI Institute on November 13, 2008. The updated information was verified by the guideline developer on November 20, 2008.

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