The University of North Carolina Chapel Hill School of Nursing; the Penn Center for Continence and Pelvic Health, Division of Urology, University of Pennsylvania Medical Center; and the American Journal of Nursing (AJN), in collaboration with the Center for Professional Development, University of Pennsylvania School of Nursing, held an invitational symposium in Philadelphia on July 12 and 13, 2002, to develop research priorities and clinical care and policy recommendations addressing the state of the art and science of continence promotion and the prevention, assessment, treatment, and management of urinary incontinence (UI) in adults, especially in vulnerable groups such as the elderly.

Supported by unrestricted grants from the Agency for Healthcare Research and Quality and companies that manufacture products and pharmaceuticals for urinary incontinence and overactive bladder (OAB), the symposium brought together leading nurse researchers, clinicians, educators, administrators, and industry stakeholders to address the following objectives:

• To critique the current state of urinary incontinence research in various clinical settings
• To review the state of the art of nursing care of incontinent adults
• To identify barriers to improved nursing management of UI
• To provide practical and strategic recommendations for future directions in incontinence research, clinical practice, education, and policy
• To disseminate the analysis and recommendations to nurse researchers, nurse educators, health care professionals, policymakers, and the public

Background

UI is one of the most prevalent and costly public health problems in this country. More than 20 million adults have UI or OAB (Abrams et al., 2002). Between 15% and 30% of adult women experience UI, and the prevalence is even greater in the elderly population (Fantl et al., 1996). UI is present in half of older adults in nursing homes and in 13% to 56% of homebound elders (Fantl et al., 1996; McDowell, Engberg, Rodriguez, Engberg, & Sereika, 1996). In 2000, more than a third of nursing home residents experienced UI all or most of the time (Department of Health and Human Services, 2000). As large segments of the U.S. population enter old age, the absolute numbers of people with incontinence and OAB will increase.

Despite evidence-based guidelines developed and widely disseminated by the Agency for Health Care Policy and Research (AHCPR) in the 1990s (AHCPR is now known as the Agency for Healthcare Research and Quality, or AHRQ), UI remains under-reported, underdiagnosed, and consequently, undertreated (Abrams et al., 2002). Some who have been diagnosed with UI don’t receive treatment, especially those with cognitive impairment and depression (Silverman et al., 1997). UI affects the quality of a patient’s life and may be associated with a greater need for assistance with activities of daily living and the need for formal and informal caregiving (McCallum, Moore, & Griffiths, 2001; Roe & Doll, 1999). It also carries a significant financial burden; at least $5.2 billion is spent on incontinence supplies and services in the institutional setting (Wagner & Hu, 1998). While research on assessing and managing incontinence, especially in adults, has proliferated, gaps remain in what can be applied across clinical settings. Little research on the efficacy of UI interventions in the acute care setting is available,
although it’s known that the prevalence of UI increases during hospitalization for some conditions (for example, hip fracture repair) (Palmer, Baumgarten, Langenberg, & Carson, 2002). In the long-term care setting, behavioral interventions have proven effective, but staff compliance with the interventions has been problematic (Colling, Ouslander, Hadley, Eisch, & Campbell, 1992; Fantl et al., 1996; Palmer, 1997). The Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration) is changing the procedure for surveying nursing homes for deficient nursing practices related to UI and indwelling urinary catheters.

Research on gender-specific interventions and on racial and ethnic minority groups is also lacking. Primary prevention research on UI is virtually nonexistent. It’s not known whether primary prevention strategies will reduce the incidence of UI. Evidence does exist, however, that consumer UI education programs improve help-seeking behavior and attitudes toward UI (Newman et al., 2002). Development of theoretical models to help organize data and research results has been slow. A public health perspective has been proposed (Palmer, 1994). Because UI has social, psychological, and physical antecedents and consequences, the medical model of a single causative agent and curative approach does not suffice. The Scientific Committee of the Second International Consultation on Incontinence called for randomized controlled trials to answer clinical questions, yet many methodolog-

### Table 1. Barriers to Optimal Continence Management

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<tr>
<th>Knowledge Deficits</th>
<th>Research</th>
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<tr>
<td>• Many believe, incorrectly, that urinary incontinence (UI) is normal in older adults, specifically older women.</td>
<td>• Third-party reimbursement is limited for screening, assessment, and counseling in primary care settings and nursing homes.</td>
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<td>• Nurses and physicians need information on UI and the effectiveness of behavioral interventions.</td>
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<tr>
<td>• The general public needs education on bladder health, prevention of incontinence, and the effectiveness of various treatments.</td>
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<tr>
<td>• Policymakers and payers need information on the effectiveness of nursing interventions.</td>
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<td>• Language for communicating about this sensitive subject is unclear and nonspecific.</td>
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<th>Clinical Practice</th>
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<td>• There is no standard terminology for describing UI and its severity.</td>
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<td>• There is a lack of routine screening for incontinence.</td>
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<td>• There is a lack of validated assessment and diagnostic tools that can be used across gender, race, and age groups.</td>
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<td>• There is a need to better understand the effects of various interventions on middle-age and older women.</td>
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<td>• Nursing homes lack multidisciplinary approaches to managing and sustaining continence programs.</td>
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<td>• Nurses and administrative staff need to “buy in” to behavioral strategies.</td>
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<td>• There is a lack of a full spectrum of devices and appliances for incontinent adults.</td>
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<td>• Busy staff in acute and long-term care settings have time constraints.</td>
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<td>• Providers and institutions fail to recognize the “right to toilet” as a critical activity of daily living.</td>
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<th>Administration, Organization, and Policy</th>
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<td>• Administrative and structural barriers interfere with promotion, screening, assessment, and counseling in primary care.</td>
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<td>• There is a shortage of well-prepared nurses for continence care in primary care.</td>
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<td>• There is a lack of qualified staff, and there is high turnover in long-term care facilities.</td>
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Table 2. Recommendations for Improving Continence Management

| General | • Assume ownership of “bladder health.”
|         | • Focus on continence, not incontinence.
|         | • Define urinary incontinence in a culturally appropriate way and determine which interventions are effective with various subgroups of incontinent people.
|         | • Advocate the right to continence, toileting, and access to toilet facilities.

| Public Awareness and Education | • Use a public health, population-based approach to continence education, in addition to individual one-on-one training.
|                               | • Teach bladder health by disseminating information on UI through radio, television, newspapers, and popular magazines.
|                               | • Develop a multipronged media campaign that uses social marketing techniques to change attitudes about incontinence and bladder health.
|                               | • Tailor education so that people in various ethnic groups learn through their leaders.
|                               | • Use a lifespan (or developmental) approach to educating the public on urinary dysfunction.
|                               | • Add bladder health content to existing health education curricula of middle school and high school students.

| Nursing Education | • Include content on bladder health, UI, and its evaluation and management in undergraduate and graduate curricula for nurses.
|                  | • Develop advanced educational and clinical programs that allows nurses to specialize in continence care across settings.
|                  | • Report research findings in journals read by practicing nurses.

| Clinical Care | • Routinely assess for incontinence in primary care and acute care settings.
|              | • Develop practice guidelines that are easy for clinicians to use.
|              | • Develop evidence-based guidelines on the selection of incontinence devices and products.

| Reimbursement | • Advocate improved reimbursement for evaluation, management, education, and behavioral interventions.
|              | • Advocate reimbursement for preventive education in the primary care setting.

| Research | • Design clinical trials to yield evidence-based findings that can be implemented in clinical practice.
|         | • Conduct research comparing various interventions (behavioral and pharmacologic interventions; products; and devices, including indwelling catheters) with regard to specific outcomes (efficacy, complication rates, patient preference, and patient satisfaction).
|         | • Conduct more research on incontinence in men, including postprostatectomy incontinence, and on how to ease its psychological effects.
|         | • Design research to study different cultural or ethnic groups (etiology, treatment efficacy, patient preferences) for various treatments.
|         | • Conduct research on behavioral interventions and pharmacotherapy in the frail elderly.
|         | • Include continence as a variable in large longitudinal studies (for example, add questions about incontinence to the Nurses Health Study) to develop normative data on bladder function, hygiene habits, prevention, and treatment of incontinence.
|         | • Use research teams comprising clinicians, health economists, gatekeepers, and opinion leaders from various ethnic groups to ensure clinically relevant research.
|         | • Conduct research on preventing incontinence in specific at-risk groups.
|         | • Develop research to convince providers and policymakers that continence care provided by nurses is cost-effective.

In 1996. This guideline summarized the available evidence and made recommendations about assessment, treatment, and education (Department of Health and Human Services, 1992; Fantl et al., 1996). The AHRQ has archived the guideline, and there are no plans to update it. In 1994 the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) held a workshop, “Barriers to Rehabilitation of Persons with End-Stage Renal Disease or Chronic UI,” and in 1998 sponsored a conference, “Urinary Incontinence: Research Issues and Opportunities,” which focused on UI in women. These events provided an opportunity to
discuss different modalities of treatment and areas for future research. There had not, however, been a recent gathering of leading nurse researchers, clinicians, and other interested parties in the prevention, treatment, and management of UI in diverse populations.

A symposium by and for nurses is important because nurses may be the only health care professionals who detect and begin assessment and treatment of UI. In most institutional settings, nurses not only provide direct patient care, they are also responsible for upholding the philosophy and standard of care and policy, as well as supervising the performance of other nursing staff (Gallo et al., 2001). Evidence-based nursing practice, then, is crucial to the delivery of that care.

Although a growing number of nurses in the United States are developing expertise in caring for incontinent patients, no academic or clinical proficiency requirements exist for a continence nurse practitioner or specialist, although such competencies have been advocated (Jirovec, Wyman, & Wells, 1998). The Society of Urologic Nurses and Associates’ certification of nurses and advanced practice nurses in urologic nursing includes incontinence care training (www.suna.org). In 1993 the Wound, Ostomy, and Continence Nurses Society developed the first certification program for continence care nurses in the United States. As of December 2002, only 230 nurses had been certified through this process (www.wocncb.org/pdf/newsletter802.pdf).

Most nurses obtain knowledge and skill through self-motivated activities. For example, those attending a national nursing conference in UI care were queried about their educational preparation in UI care. Fewer than half of the respondents (40%) reported receiving academic education related to UI, including course work in accredited postbaccalaureate or graduate programs. However, 76% of the respondents had obtained information and instruction through professional conferences, on-the-job training, self-study, in-service programs, or at continence clinics supervised by nurse practitioners or physicians (Jacobs, Wyman, Rowell, & Smith, 1998).

These findings supported an earlier national survey on nursing school curricula (Morishita, Uman, & Pierson, 1994). Faculty members of schools of nursing agreed that incontinence is an important condition, and 90% of curricula included it specifically, but undergraduate nursing programs devoted an average of just 2.1 hours of lecture time to this topic. In addition, there was no commitment to requiring clinical experience in this area, there was a lack of awareness of available educational resources, and there were few experts available to teach. The authors offered evidence that incontinence isn’t well-managed in clinical practice, suggesting that two hours is insufficient for adequate instruction. They recommended investigation into effective instructional methods to teach nurses and nursing students about UI. But practicing nurses may not have positive attitudes toward continence education; in one study, 20% of nurse participants believed that nurses in U.S. nursing homes would be apathetic or resistant to a formal educational program on incontinence (Morishita et al., 1994).

Last July’s invitational symposium provided a forum for examining past and current incontinence research, developing an agenda for nursing research, and making recommendations for immediate implementation and for future directions in nursing education and practice.

**Symposium Methodology**

The symposium began with a reception featuring selected readings from Michael Korda’s book, *Man to Man: Surviving Prostate Cancer*, to highlight the consumer perspective on incontinence issues, particularly the humiliation experienced by many with incontinence.

The second day featured four speakers. Each speaker prepared a paper that had been sent to the participants prior to the symposium. The speakers discussed their papers; summarized the state of the research, including major gaps and future research directions; and responded to questions and issues raised by participants. The papers presented reviews of the research literature on the following topics:
• Incontinence in young and middle-age women (Carolyn M. Sampselle)
• Gender, social, ethnic, racial, and cultural issues in incontinence research and practice (Mikel L. Gray)
• Incontinence treatment in different populations, including older women (Jean F. Wyman)
• Incontinence needs in frail elderly populations (Deborah Lekan-Rutledge and Joyce Colling)

Each presentation was followed by small group discussions on the gaps in knowledge, barriers to improved management of UI in the target population addressed in the paper, and strategies for overcoming these barriers. Each group identified barriers to adequate research, education, practice, administration, financing, regulations, and support services (such as products and medications). It then developed recommendations and strategies to overcome three of these barriers, and finally, it reported its work to the large group for discussion and consensus building.

Results

Symposium participants recognized that there was little discussion of research in several areas. Most of the discussion focused on incontinence among men treated for prostate cancer is an issue that warrants particular attention and study.

In addition, discussion of incontinence products, treatment devices, and medications was absent in all but one of the papers solicited for the symposium, and no papers were solicited to address only these topics. Yet nurses are the health care providers who most often recommend products and devices to patients. Many nurses also participate in product selection, although their facilities’ bulk purchasing decisions may restrict access to the most effective products available. Such experience enables nurses to identify product deficiencies as well as to make informed suggestions about new products. Advanced practice nurses prescribe medications for incontinence; all nurses monitor patients for drug efficacy and side effects, and they teach patients about self-administration of medications. To begin to address this omission, the symposium report includes information on devices and products that can be found in the National Association for Continence’s 12th edition of the Products & Services for Incontinence Resource Guide, 2002-2003, as well as a short review of current UI and OAB drug therapy. In addition, the group made several recommendations that address this issue.

References


