Approaches to Urinary Incontinence in a Rural Population: A Comparison of Physician Assistants, Nurse Practitioners, and Family Physicians

Thomas V. Jones, MD, MPH, and Scott H. Bunner

Background: **Although urinary incontinence is a challenge and a burden to older patients, many clinicians fail to query older patients about incontinence symptoms or, even when aware of a problem, fail to diagnose the underlying cause or recommend treatment. We wanted to compare the approaches of physician assistants, nurse practitioners, and family physicians to detection, diagnosis, and initial management of urinary incontinence in older adults seen in rural primary care practices.**

Methods: **One male and 2 female simulated patients portrayed otherwise healthy patients with urinary incontinence, including urge or obstruction-overflow type for the man, and stress or urge type for the women. The 3 simulated patients saw 3 physician assistants, 3 nurse practitioners, and 3 family physicians each, for a total of 27 visits during which they posed as new patients seeking primary care.**

Results: **Health professionals spontaneously asked about incontinence in only 18 percent of visits (33 percent for physician assistants, 11 percent each for nurse practitioners and family physicians). When incontinence was discussed (spontaneously or by patient prompting), queries were made about potential precipitants (ie, coughing, caffeine consumption) in 63 percent of visits. Questions about other urinary symptoms (eg, dysuria) were asked in 59 percent of visits. Rectal examinations were performed in 68 percent of the male simulated patient's visits but in none of the female simulated patients' visits. No pelvic examinations were performed. No attempts or recommendations were made to measure postvoiding residual volume. Tentative diagnoses were made in 48 percent of visits; some form of therapy was discussed in 52 percent of visits.**

Conclusions: **Asking about incontinence was uncommon, and potentially important questions about precipitants and associated symptoms were often omitted. The providers examined areas potentially relating to incontinence and recommended supplementary assessments and specialized testing infrequently. Commonly, they made diagnoses and offered therapy at the end of an initial visit despite minimal history taking and examinations and lack of any additional assessment or testing. (J Am Board Fam Pract 1998;11;207-15.)**

Urinary incontinence is a major problem affecting older persons. Among noninstitutionalized adults in the United States, approximately 40 percent of women and 20 percent of men have experienced urinary incontinence.[1] Among those 15 to 64 years of age, 1.5 to 5.0 percent of men and 10 to 25 percent of women are affected[2]; the rate rises to 15 to 30 percent for persons older than 60 years, with women affected twice as often as men.[3] Although persons with urinary incontinence report a wide range of frequency and severity, as many as 30 percent have considerable leakage weekly if not more frequently.[3]

Urinary incontinence is a challenge and a burden to patients. Consequences can include rashes, pressure ulcers, urinary tract infections, and even sepsis, restricted mobility, and an increased risk of falls.[4] Embarrassment and low self-esteem, social isolation, anxiety, and depression can result.[5] Incontinence is often a factor in the decision by family members to place a relative in long-term care.[6] Urinary incontinence is also expensive for

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From the Section of Geriatrics and Gerontology, Department of Medicine, University of Nebraska Medical Center (TVJ, SHB), and the Department of Veteran Affairs Medical Center (TVJ), Omaha. Address reprint requests to Thomas V. Jones, MD, MPH, Section of Geriatrics and Gerontology, Department of Internal Medicine, University of Nebraska Medical Center, 600 S. 42nd St, Omaha, NE 68198-5620.

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patients and society, with diagnostic and treatment-related costs estimated to have reached $11 billion in 1987.[7]

Unfortunately, despite an array of diagnostic approaches and the availability of effective treatment, professionals and patients frequently do not communicate with each other about urinary incontinence.[8,9] It is believed that many clinicians fail to query older patients about incontinence symptoms.[10] Even when aware of a problem, health professionals often fail to diagnose the underlying cause or recommend treatment. Several studies have shown physician responses to patients' involuntary urine loss to be nonaggressive. Patients are often told either that urinary incontinence is part of normal aging or simply not to worry about the symptoms.[11] Alternatively, patients might choose not to report urinary incontinence if they, too, believe it is to be expected and accepted or if they presume there is no effective treatment. Sometimes patients are simply too embarrassed to raise the issue.[11]

Despite concerns that physicians do not look for or undertreat urinary incontinence, minimal attention has been focused on either physician or patient characteristics or the specifics of the interactions between physicians and their patients as possible factors. One study found that geriatric assessment teams outperformed community physicians in recognizing urinary incontinence, although no noteworthy differences in referrals or interventions were found.[12] Moreover, with record reviews being their sole source of data, the investigators were unable to ascertain specific reasons for the higher rates of recognition by geriatric team members.[12] Some researchers have suggested that inadequate attention of physicians to incontinence could in part reflect lack of training or interest in topics germane to women's health, assessment of patient function, or patient education and counseling.

Rising costs, overspecialization, and projected shortages and problems with geographic distribution of primary care physicians come at a time when the numbers of physician assistants and nurse practitioners are increasing. Several studies have shown that physician assistants and nurse practitioners can perform many primary care roles with potentially greater efficiency and at a level equivalent to that of physicians; it has been suggested that they might be even better suited than physicians for assessing function, educating, and counseling for such problems as urinary incontinence.[13,14] No studies were found, however, that directly compared physician assistants, nurse practitioners, and physicians in the detection, diagnosis, and initial management of urinary incontinence.

A critical step in evaluating behavior and decision making or in making comparisons between different types of professionals is the selection of an approach that accurately measures what the professionals actually do. Strategies or tools for assessing behavior and decision making have included written case simulations[15,16] and mail and telephone surveys,[10,17] medical record reviews,[12,17] and exit interviews with patients.[17] Another option, simulated patients, has been widely used by educators[18] but rarely by researchers.[19-21] Simulated patients allow standardization of cases and can improve accuracy of reporting what occurs in professional-patient encounters. In most reports the clinicians know they are seeing a simulated patient. An additional advantage in research on behavior and decision making would occur if the simulated patient could be introduced into the practice setting without the providers' awareness, so that the encounter is approached as though the providers were seeing an actual patient.[21,22]

The purpose of our study was to compare approaches of physician assistants, nurse practitioners, and physicians to initial detection, diagnosis, and treatment of urinary incontinence in older adults in rural practices. Choosing a rural setting was based on the assumption that access to subspecialist care would be limited, thus amplifying the importance of the primary care provider's abilities and decision making. We sought to answer the following questions: (1) Do health professionals ask their primary care patients about urinary incontinence? (2) How do physician assistants, nurse practitioners, and physicians compare in their initial approaches to detection, diagnosis, and treatment of urinary incontinence? (3) Can health professionals' behavior and decision making be measured in actual practice settings using simulated patients without the providers' awareness of the simulation?

Methods

The study design was cross-sectional, with face-to-face encounters between health professionals and

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simulated patients. A convenience sample of 9 providers participated, including 3 each of physician assistants, nurse practitioners, and physicians. The providers worked in 9 separate practices in rural eastern Nebraska and western Iowa in communities with populations ranging from 2000 to 10,000. Practices with physician assistants or nurse practitioners were selected only when it was normal procedure for new patients to receive primary care from a nonphysician provider either randomly or when the patient so requested. The providers agreed to participate with the understanding that it would be cost neutral, that is, they would be paid the same rate for seeing simulated patients as they would for other patients. They were told only that the study was investigating how physician assistants, nurse practitioners, and physicians compared in their approaches to common problems in the primary care of older adults; they were not told of the specific focus on urinary incontinence. They were also told that they would be seeing a few simulated patients within a few months but were not told exactly how many or when.

Two women (aged 63 and 69 years at start of the study) and 1 man (aged 63 years at start of the study) were recruited as simulated patients through advertisements and communication with local actors' guilds. Two had limited amateur acting experience, and the other had limited experience in television commercials. The investigators trained the simulated patients to portray patients who were incontinent as described by their respective case histories. The simulated patients were paid an incentive of $25 per hour. Providers and simulated patients gave written informed consent, and the study was approved by the Institutional Review Board at the University of Nebraska Medical Center.

The principal investigator constructed cases that combined factual information from the simulated patients' own personal histories with fictitious personal and health data. One simulated patient each was selected to report predominantly stress or urge urinary incontinence (women), or mixed urge-obstruction or overflow (man). All cases were pilot-tested in written versions by geriatricians, urologists, and nonparticipating physician assistants, nurse practitioners, and family practice physicians. Simulators then role-played their scenarios with geriatricians who were colleagues of one of the investigators (TVJ) and underwent further training, critiquing, and evaluation to enhance consistency and accuracy.

Each simulated patient portrayed a generally healthy younger old person (aged between 60 and 64 years to be almost, but not yet, eligible for Medicare), having recently moved into the community to be closer to a son or daughter and seeking primary care on the advice of relatives. Fictitious laboratory reports and office records were developed in the event that these patients were asked to bring in their medical records. A different set of records was prepared for each type of health professional. For example, the simulated patient scheduled to see a nurse practitioner had a set of records reflecting health care with a nurse practitioner in a previous community.

Fictitious insurance coverage, including wallet cards and claim forms, was created to minimize suspicion should a simulated patient be unable to provide evidence of medical insurance. The simulated patients were instructed to offer to pay for the visit in cash, however, stating that their insurance company allowed them to choose either paying cash and filing insurance claims themselves or having the health professional file for them. Toll-free telephone numbers were established with prerecorded messages and message-recording options for three fictitious insurance companies.

Three local contacts, one for each simulated patient, were recruited from each of the nine communities to provide a plausible home address and telephone number for each simulated patient-provider pairing in the event that an office might telephone to reschedule an appointment. Because the patient scenarios included an explanation that the simulated patients had moved to the area recently and were staying temporarily with a relative until finding their own residence, the contacts were given enough information about the study and their corresponding simulated patients to act as a relative. The investigators recruited the contacts through colleagues who had friends or family in the nine communities, and the contacts were only from households not receiving health care from the practices participating in our study. The contacts were reminded of their roles when the simulated patients paired with those contacts were about to schedule a visit.

The simulated patients were instructed not to volunteer complaints of urinary incontinence unless the provider failed to ask about urinary incon-

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Table 1. Percentage of Providers Spontaneously Inquiring About Urinary Incontinence.

Provider	Percent
Nurse practitioners	11
Physician assistants	33
Physicians	11

Note: 4 providers spontaneously asked about urinary incontinence during a total of 5 visits (1 physician assistant asked 2 simulated patients).

tinence during the interview portion of the visit or the initial part of the examination. If prompting about urinary incontinence was necessary, the simulated patients were instructed to do so near the latter part of the examination. Each simulated patient agreed to undergo complete histories and examinations, including rectal and genital examinations, and in the case of the women, pelvic examinations. If asked to submit to venipuncture or other invasive testing procedures, however, they were instructed to offer a plausible explanation for why they would prefer to return the next day or soon after to have the testing done (ie, I would prefer to have my blood tested tomorrow before I have anything to eat, so that you can check my blood glucose and cholesterol.)

Each simulated patient-provider pairing was terminated by a telephone call to the provider's office after the initial visit. The visits made by simulated patients to the practices occurred during a 2- to 4-month period, with a minimum of 2 weeks between any two visits. All 27 visits were completed in approximately 1 year.

Incontinence-related variables were measured using a checklist with simple yes-or-no responses. The checklists, based directly on an Agency of Health Care Policy and Research Clinical Practice Guideline,[23] included questions on history (Was I asked about urinary incontinence?), physical examination (Did they perform a rectal examination?), additional tests (Did they check to see whether I had any urine loss while coughing or bearing down?), supplementary assessments (Was I asked to keep a record or diary about the incontinence?), specialized testing (Was I told about or scheduled for any radiographic procedures?), and proposed treatment (Was I given information about behavioral changes to make?). One checklist was completed by the simulated patient as soon as possible after each visit, and a second was completed by one of the investigators (SHB) after review of office records of the encounter. The two checklists were compared for any inconsistencies between the simulated patient's recollection and the health provider's written records. Provider demographics were obtained during face-to-face debriefing interviews conducted soon after all 3 simulated patients had made their visits to a practice.

Analysis was primarily descriptive, determining overall rates of asking specific types of questions or performing specific parts of a physical examination or conducting tests related to diagnosis of urinary incontinence, and making diagnoses and treatment recommendations. In addition, rates were compared between physician assistants, nurse practitioners, and physicians.

Results

Because the health providers were a convenience sample, there were clear differences between the disciplines. All of the physician assistants and physicians were male; all of the nurse practitioners were female. There was considerable range in years spent in clinical practice for the three disciplines, from a low of 1 to 2 years for the nurse practitioners, to 3 to 21 years for the physician assistants, to 1 to 31 years for the physicians. One person from each of the disciplines reported some specific training on urinary incontinence either during formal training or during subsequent continuing education. Self-estimates for the number of outpatients seen were highest for the physicians at 100 to 150 per week, compared with the estimates given by the physician assistants at 75 to 125 per week, and the nurse practitioners at 50 to 80 per week. The estimates for the percentage of outpatients seen who were older adults were similar for the physician assistants and physicians, 15 to 40 percent and 20 to 40 percent, respectively. The estimates given by the nurse practitioners were somewhat higher, 40 to 50 percent.

With 3 simulated patients making 9 visits each, a total of 27 encounters occurred. Even though at least 1 person from each of the health disciplines asked at least 1 simulated patient about urinary incontinence without prompting, overall, there were few inquiries (Table 1). The simulated patients were asked about urinary incontinence during only 18 percent of all visits.

When urinary incontinence was discussed, either spontaneously or by prompting, providers'

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Table 2. Percentage of Visits During Which Simulated Patients Were Asked by Providers About Incontinence-Related Items.

Items	Female, Stress Incontinence, %	Female, Urge Incontinence, %	Male, Urge or Obstruction Incontinence, %	Total,* %
Characteristics				
Frequency	11	78 (33)†	0	30
Duration	11	56 (11)	0	22
Time of day	22	22 (11)	0	15
Consistency	11	22 (11)	0	11
Precipitants				
Alcohol	22	56 (33)	67	48
Coughing	33	44 (22)	0	26
Other‡	11	33 (11)	0	15
Caffeine	11	11	22	15
Medications	0	11 (11)	11	7
Surgery	11	0	0	4
Urinary tract problems				
Urinary frequency	0	56 (22)	11	22
Nocturia	0	22 (11)	44	22
Dysuria	0	22	44	22
Hesitancy	0	0	66	22
Infections	22	33 (11)	0	19
Urgency	22	22 (11)	0	15
Interrupted stream	0	0	33	11
Straining	0	0	33	11
Difficulty emptying	0	0	22	7
Hematuria	0	22	0	7

*Totals by discipline (queries about one or more characteristics): 33% of physician visits, 33% of physician assistant visits, 56% of nurse practitioner visits. Totals by discipline (queries about one or more precipitants): 67% of physician visits, 56% of physician assistant visits, 67% of nurse practitioner visits. Totals by discipline (queries about one or more urinary tract problems): 67% of physician visits, 56% of physician assistant visits, 56% of nurse practitioner visits.
†All rates reflect percentage of total providers who inquired; rates in parentheses reflect spontaneous inquiries about urinary incontinence.
‡Queries about other precipitants included sneezing, laughing, change in diet or water consumption.

questions relating to incontinence were categorized as focusing on characteristics, potential precipitants, or related urinary tract problems (Table 2). Efforts to characterize the incontinence were modest. Questions about the duration of incontinence or the frequency and timing of episodes of leakage or the consistency of incontinence (incontinent during all voiding versus preservation of some episodes of continent voiding) were all asked on a very sporadic basis. Queries about the frequency of episodes were made more often than any other questions about the characteristics of the urinary incontinence, but these questions were asked in only 30 percent of all visits.

Overall, more questions were asked concerning characteristics of urinary incontinence during visits with nurse practitioners than during visits with physician assistants or physicians. Questions about possible factors or precipitants of urinary incontinence were asked more commonly than questions about characteristics of the incontinence, and nurse practitioners asked more questions about precipitants than did physician assistants or physicians. Questions about potentially related urinary tract problems were asked at a very low rate. Some potential questions more commonly associated with obstruction, such as hesitancy, interrupted stream, straining to initiate urination, and difficulty emptying the bladder, were much more likely to be directed to the male simulated patient.

It was very unlikely for the simulated patients to be questioned about the effects of urinary incontinence. For example, questions about the impact of urinary incontinence on self-esteem or functional status were asked by 2 of the 3 physician assistants, but not at all by the nurse practitioners or physi-

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Table 3. Percentage of Visits During Which Providers Performed Physical Examinations Potentially Related to Urinary Incontinence.

Type of Examination	Female, Stress Incontinence, %	Female, Urge Incontinence, %	Male, Urge or Obstruction Incontinence, %	Total,* %
Lower abdominal	0	67 (33)†	56	41
Rectal	0	0	67	22
External genital	0‡	0	56	19
Pelvic	0‡	0	-	0

*Totals by discipline (performance of one or more components of examination potentially related to urinary incontinence): 44% of physician visits, 56% of physician assistant visits, 33% of nurse practitioner visits.
†All rates reflect percentage of total providers; rates in parentheses reflect spontaneous inquiries about urinary incontinence.
‡One provider, a nurse practitioner, suggested a genital-pelvic examination for next visit.

cians. In the case of the 2 physician assistants who did ask about self-esteem or function, they did so during encounters with only 1 of the 3 simulated patients. Queries about self-treatment, including use of pads or protective garments, were also infrequent, occurring in only 11 percent of physician visits, 22 percent of physician assistant visits, and 33 percent of nurse practitioner visits.

A physical examination relevant to detecting and diagnosing urinary incontinence was infrequent for the female simulated patients but somewhat more likely for the male simulated patient (Table 3). Overall, physician assistants were more complete than nurse practitioners or physicians in performing a relevant examination.

Suggestions or recommendations for additional tests or supplementary assessments or specialized tests for evaluating urinary incontinence were uncommon as well (Table 4). Examples of additional tests or supplementary assessments might have included determination of the postvoiding residual volume or a diary kept by the patient of incontinent episodes, whereas specialized testing might have included urodynamics or radiographs. Actual additional tests or assessments recommended for the female simulated patient with stress incontinence included a urine specimen and unspecified blood tests in one visit each. Specialized tests included unspecified radiographs and tests of the sphincter in one visit each. For the female simulated patient with urge incontinence, additional tests or assessments included urinalysis to detect infection and an unspecified test in one visit each. For the male simulated patient prostate-specific antigen tests and urine specimens were recommended in four and two visits, respectively.

Despite collecting modest amounts of data from histories and examinations or from additional tests or assessments, diagnoses were ventured for 48 percent of the encounters (Table 4). In five of nine visits made by the male simulated patient, the problem was diagnosed as something to do with the prostate, and medication was prescribed in four instances, including two encounters during which no formal diagnosis was given to the simulated patient or recorded in the written record.

Diagnoses and recommended therapies were more diverse for the 2 female simulated patients. The female simulated patient with stress incontinence had her condition diagnosed as stress incontinence in two encounters and as possible dropped bladder and aging process in one visit each. Therapy included Kegel exercises and referral in three visits each, decongestant in two encounters, and hormone therapy and education hand-out and behavior change in one visit.

The female simulated patient with urge incontinence had her condition diagnosed as the aging process in two visits and bladder overflow and medication side effect in one visit each. Therapy included referral and medication in two visits, and Kegel exercises, increase in hormone therapy, and behavioral therapy in one visit each. As a note, for two visits in which no diagnosis was provided to this simulated patient, the provider recorded a diagnosis in the record, with one as bladder trigonitis and the other as dysuria.

Only two inconsistencies were found between the simulated patients' checklists and the providers' office notes. In both instances, once during a physician assistant visit and once during a physician visit, the male simulated patient was told the problem was due to his prostate, but in the medical record the problem was labeled urgency incontinence.

Overall, the simulations, including efforts to in-

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Table 4. Percentage of Visits During Which Providers Recommended Additional Tests or Assessments, Diagnosis, and Therapy.

Recommendation	Female, Stress Incontinence, %	Female, Urge Incontinence, %	Male, Urge or Obstruction Incontinence, %	Total,* %
Additional tests or supplementary assessments	22	22 (11)†	67	37
Specialized tests	22	0	0	7
Diagnosis	44	44	56	48
Therapy	44	56	56	52

*Totals by discipline for tests or assessments: 33% of physician visits, 44% of physician assistant visits, 44% of nurse practitioner visits. Totals by discipline for diagnosis: 44% of physician visits, 44% of physician assistant visits, 56% of nurse practitioner visits. Totals by discipline for therapy: 56% of physician visits, 44% of physician assistant visits, 56% of nurse practitioner visits.
†All rates reflect percentage of total providers; rates in parentheses reflect spontaneous inquiries about urinary incontinence.

troduce the simulated patients into the practices unannounced and undetected appeared to be quite successful. The simulated patients reported no evidence of being recognized as a simulated patient, judging by the comments or by the behavior of the health providers or practice staff. Nevertheless, office record review and provider debriefing suggested suspicion or possible detection in 7 of 27 encounters because of inconsistencies in personal histories (2 simulated patients), errors made by local contacts (2 patients), postponed laboratory tests (2 patients), a hunch (1 patient).

Discussion

Effective means for diagnosing and managing urinary incontinence are available and applicable to primary care physicians, yet urinary incontinence continues to be underdiagnosed and undertreated. This point was perhaps the most critical made by the Agency for Health Care Policy and Research in developing their clinical practice guideline on urinary incontinence in adults,[23] which does provide a thorough overview of diagnostic and treatment strategies for a wide range of continence problems. Another premise of the guideline was that underdiagnosis and undertreatment, as well as documented wide variations in diagnostic and treatment practices, might be due in part to provider lack of awareness and education, thereby justifying the need for a guideline. If clinicians are to respond positively to a guideline and embrace and assimilate its components into their practices, they must view the guideline and the condition addressed by the guideline as relevant to either themselves or their patients or both.[24] The guideline must be helpful, addressing and assisting the primary care provider in managing the complex interactions that occur not only among the patient, themselves, and the problem but also within the psychosocial context of the patient's current life situation.[24]

When urinary incontinence goes undiagnosed and consequently untreated, numerous and serious adverse functional and economic outcomes can result that have an impact on the patients, their families, and society as a whole. Herein lies the relevance of the condition. Although a useful guideline must focus on the skills and knowledge needed to detect, diagnose, and manage incontinence, realistically, the guideline must also address the advantages and disadvantages of allocating limited time and resources as well as the barriers encountered in those settings where improved diagnosis and treatment are sought.

On a preliminary basis our study addressed an issue that would be difficult to explore by any other methodology: communication during the initial interaction between a patient seeking help for the sometimes simple, sometimes complex, but often embarrassing problem of urinary incontinence and a clinician in a real-world setting, struggling with the constraints of a busy rural primary care practice. In this study, despite recommendations that primary care providers should ask all adult patients (particularly older adults) about loss of bladder control and leakage,[23,25] most providers did not spontaneously ask about urinary incontinence during a routine history, even though the simulated patients acted otherwise quite healthy, thus allowing the time to address continence. Even when prompted by simulated patients' complaints, the providers infrequently inquired about such key issues as the characteristics of incontinence, potential precipitants

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or related urinary tract problems, and effects of urinary incontinence on function and self-esteem. Examining the patient for conditions relating to urinary incontinence and making recommendations for supplementary assessments and specialized testing were performed infrequently, especially for the female simulated patients.

Overall, histories recorded by nurse practitioners were more complete, especially when characterizing incontinence and determining its impact on the patients. Nevertheless, even the nurse practitioners' history-taking was not consistent, and there were many gaps. In contrast, the physician assistants were the most thorough when performing those components of the examination potentially related to urinary incontinence, because all 3 physician assistants included lower abdominal, genital, and rectal components when they examined the male simulated patient. The physician assistants were no more likely than the nurse practitioners or physicians to examine the female simulated patients in a manner pertinent to assessment of urinary incontinence.

The most disturbing finding was the strong tendency on the part of all three types of providers to discuss diagnoses or offer therapy despite the relatively sparse histories and examinations and lack of additional assessment or evaluation. Without additional information, the patient's incontinence could be transient but treated incorrectly and unnecessarily as chronic. On the other hand, the rate of success (as defined by cure or marked improvement) for treating the chronic incontinence simulated in our study is quite high when accurate diagnoses are made; obstruction or overflow incontinence improvement rates range from approximately 50 to 60 percent, and stress and urge incontinence improvement rates range from 70 to 90 percent.[23] In our study, proposed therapy was most often appropriate for the simulated patient portraying stress urinary incontinence.

Our study, along with others,[20-22] showed that it is feasible to use standardized patients to assess responses to new outpatients with conditions such as urinary incontinence. The simulations appeared to be successful, including efforts to introduce the simulated patients into the practices unannounced and undetected. The simulated patients were adamant that they were not recognized, although debriefing interviews did indicate possible suspicion or awareness of simulated patient identity in approximately one fourth of the visits.

As a preliminary or pilot study, the small sample size (the number of simulated patients, cases portrayed, and providers) limits generalizability. The numbers were too few to determine statistically significant differences between the three types of providers or between their responses to female and male patients. Additionally, the study was performed only in rural practices and confined to two Midwestern states; the findings might not be representative of behavior and decision making in urban settings or other geographic locations. Although two methods were used to measure responses (checklists completed by simulated patients and record review), there is no way to be certain that events and decisions that took place during visits were completely and accurately measured.

If the providers were indeed aware of the simulated patients in one fourth of the visits, those encounters might not have represented typical behavior or decision making. Even had they suspected a simulated patient in a limited number of instances, however, there was no evidence they were aware that the study focused on the detection, diagnosis, and management of urinary incontinence.

Our study could not address day-to-day variations in the responses individual providers might have to the same patient seen on different days or under different circumstances. For example, how busy the provider is on a given day might determine to some degree the provider's focus on specific clinical issues for a patient. Finally, the study only addressed behavior and decision making for patients during their first visit; for some providers, certain problems or issues are more likely to be addressed on subsequent visits regardless of other circumstances.

A standardized or simulated patient can be a useful tool to assess how well primary care providers evaluated and initially treated urinary incontinence. Our findings, albeit preliminary, showed considerable variation both by the same provider when seeing different patients with the same underlying problem and between providers seeing the same patient. Although the ideal patient would bring up every issue that is relevant, urinary incontinence is a problem that will continue to vex providers as long as patients associate it with embarrassment and ageism. Even when asked, some

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providers might not feel sufficiently knowledgeable or experienced to evaluate or treat urinary incontinence, even though most causes can be successfully diagnosed and treated in primary care settings without direct input from specialists.[4] Further study is justified to determine how to enhance the interaction between primary care providers and their patients with urinary incontinence so that both can take full advantage of effective diagnostic tools and therapeutic options.

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