

Challenges for Managing Overactive Bladder and Guidance for Patient Support

Vernon F. Schabert, PhD; Tamara Bavendam, MD; Erica L. Goldberg;
Jeffrey N. Trocio, MPH; and Linda Brubaker, MD

Abstract

Objective: Describe challenges to improving management of overactive bladder (OAB) outcomes and summarize research findings on critical success factors for supporting OAB treatment.

Study Design: A multidisciplinary team collected primary and secondary data, including an OAB-specific survey; a literature review; and an expert panel discussion.

Methods: A US survey of patients who were prescribed antimuscarinics included topics related to OAB, such as reasons for medication discontinuation. The PubMed database was searched for articles published in the past 10 years on OAB treatment and adherence, and additional publications were reviewed related to health behavior change models. An expert panel reviewed findings and provided perspective.

Results: The survey (n = 5392) showed that, among patients discontinuing OAB medications, 45.4% reported unmet treatment expectations as the reason for discontinuation. Literature review findings supported intervention at the beginning of OAB treatment, specific messages to increase treatment adherence, and involving the health-care stakeholders most trusted by patients. Implications of OAB patient support were drawn from reviews of the Transtheoretical Model, the Health Belief Model, and social learning theory. The expert panel highlighted desirable attributes of OAB patient education delivered in the medical care setting.

Conclusion: Challenges to improving OAB symptom burden and outcomes include underdiagnosis, undertreatment, and patient nonadherence with medications. Patient support of medication adherence may be enhanced by simultaneously supporting the use of nonpharmaceutical lifestyle modifications and behavioral interventions. Healthcare providers acknowledge the need for patient education but lack the time and resources to deliver interventions or monitor patients' progress outside the medical office. Patient support may be achieved through external programs that complement patient–physician interactions.

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Overactive bladder (OAB) syndrome is defined as urgency, with or without urgency incontinence, usually with increased daytime frequency and nocturia.¹ Whereas OAB including urgency urinary incontinence (UUI) was once regarded as a “nuisance” condition, it is now known that OAB and urinary incontinence are associated with skin infections, depression, sleep disturbances, falls and fractures, and reduced health-related quality of life (HRQOL) among sufferers.²⁻⁵ Given that OAB is associated with such health issues, managed care organizations and other payers could benefit from increased understanding of the condition.

OAB is a prevalent condition, with the National Overactive Bladder Evaluation (NOBLE) program finding that approximately 33 million Americans aged 18 years or older are affected.³ Similarly, the EPIC study found that the overall prevalence of OAB in 4 European countries and Canada was 11.8%, with rates similar in men and women.⁶

The 2 primary OAB treatment options are management with behavioral strategies (eg, lifestyle modification, bladder training, and urgency suppression techniques including pelvic floor muscle exercises) and pharmacotherapy.^{7,8} Six oral antimuscarinic medications are currently licensed for the treatment of UUI and OAB in the United States. Tolerability and efficacy of these medications has been convincingly demonstrated, and they are recommended as first-line OAB pharmacotherapy.^{8,9}

Despite the high prevalence of OAB and the availability of effective therapeutic options, OAB treatment remains suboptimal in the United States. The condition is underdiagnosed, often because of patients' reluctance to bring their urinary symptoms to the attention of their physicians.⁹ Many patients accept their symptoms as a “normal” part of aging or believe surgery is the only treatment available.⁸ Others with OAB adjust their lifestyle to compensate for symptoms instead of seeking medical attention and develop coping mechanisms to hide and manage urine loss due to OAB.^{8,10} In addition, many physicians are unaware of the latest practice guidelines and pharmacotherapy or believe available medications are ineffective or carry intolerable side effects.^{8,11}

Among those who are diagnosed and prescribed medication, adherence and persistence are low. Adherence (synonymous with compliance) is defined as the extent to which a patient's behavior

coincides with medical advice (prescribed medication interval and dose).¹² Studies of adherence often measure medication persistence, defined as the act of continuing treatment for the prescribed duration, either as a mean number of days between treatment initiation and discontinuation, or as a percentage of patients who persist at least a fixed number of days.¹² Personal, clinical, and environmental factors all influence patients' adherence to individual therapies, regardless of causes; however, adherence is associated with positive health outcomes.¹³ In addition, patients with poor medication adherence are at a higher risk for morbidity and mortality, and increased healthcare costs than adherent patients.¹³

High discontinuation rates present a substantial barrier to achieving optimal outcomes in all chronic conditions requiring long-term, consistent pharmacotherapy. Discontinuation rates of 80% to 90% within the first year of therapy have been reported for OAB medications in healthcare claims databases.^{14,15} A study of US Medicaid patients ($n = 1637$) found that less than half (32%-44%) of those prescribed OAB medications continued treatment beyond 30 days, eventually declining to a 5% to 9% 1-year persistence rate.¹⁵ In comparison, about 57% of hypertensive patients continue past the first year after receiving initial antihypertensive prescription medications.¹⁶

Few studies have measured either the predictors or the patient-reported reasons for OAB medication discontinuation. A recent, retrospective study of claims data identifies some predictors of OAB medication discontinuation, such as being in younger age groups (<65 years), taking an immediate-release formulation, and taking multiple daily doses.¹⁴ Patient-reported reasons for discontinuation include side effects, low efficacy, insurance limits, and lifestyle incompatibility/inconvenience and are similar among patients with OAB and patients with other chronic conditions.¹⁴ Cost does not appear to be a primary reason for OAB medication discontinuation, suggesting that patients may need more education and support from physicians to set realistic treatment objectives and encourage persistence.¹⁴

The low reported adherence to OAB medications and consequences of nonadherence prompt

the question of whether specific patient support techniques could improve OAB treatment adherence. Various authors assert that medication adherence is a multidimensional phenomenon requiring complex supportive interventions.^{17,18} Physician-centered interventions alone cannot effectively improve medication adherence because their interactions with patients are limited.^{19,20} The most effective adherence-improvement interventions incorporate multiple dimensions of care, and failed programs often lack this multidisciplinary approach.

In OAB, a multidimensional intervention may include combining interventions specifically for medication adherence with interventions to improve the use of behavioral techniques such as bladder training. A program that combines medication adherence support with education on nonpharmaceutical OAB treatments and training techniques, such as keeping a bladder diary, may accelerate the awareness of OAB symptom reduction, addressing the unmet treatment expectations that are frequently cited among those who discontinue OAB medications. This article describes formative research conducted to gain a better understanding of patient challenges in managing OAB and effective methods for helping patients achieve improved outcomes.

METHODS

A multidisciplinary team was formed to synthesize the critical success factors for supporting OAB patients treated with antimuscarinic medications. Primary and secondary data collection included a survey of OAB patients administered in July 2005 who reported use of 1 or more US Food and Drug Administration–approved antimuscarinic medications for OAB symptoms; a review of the literature on OAB treatment challenges, medication adherence, and health behavior change models; and an expert panel composed of individuals with experience in OAB treatment and physician–patient communication.

The OAB Persistence Survey measured the burden of bladder symptoms and the use of prescription medications for OAB in a national sample of US adults. A screening survey identified 6577 potential respondents who had been prescribed

1 antimuscarinic or more for OAB over the prior 12 months. Respondents received a questionnaire containing items regarding demographic and clinical characteristics, antimuscarinic medication use, OAB symptom bother, beliefs about OAB, treatment expectations, OAB treatment satisfaction, disease-specific quality of life, and reasons for medication discontinuation. A more complete discussion of survey methodology is published elsewhere.²¹

The literature review included PubMed searches for English articles with abstracts published in the past 10 years (October 31, 1997-October 31, 2007) using the following terms: overactive bladder, urinary incontinence, urinary frequency, urinary urgency and patient compliance, persistence, adherence. Articles retained had relevance for improving OAB medication adherence and patient outcomes, included original evidence-based findings, or provided useful synthesis of existing literature. Applicable health behavior change models were also explored.

An expert panel of 13 members was formed to provide further input on the challenges for managing OAB and further guidance on supporting patients. The multidisciplinary panel included 6 physicians (internists, urologists, obstetricians/gynecologists), 1 physician assistant, 5 other health-care professionals (including pharmacists, health educators, and a behavioral psychologist), and 1 patient advocate. Physician members were selected due to their personal successes introducing health behavior change interventions to patients. All panel members had extensive expertise in OAB, patient education, and/or medication adherence. The panel was charged with reviewing and commenting on literature review findings and providing recommendations for effective ways to help patients manage their OAB.

RESULTS

Of the surveys mailed for the Persistence Survey (n = 6577), 82.0% (n = 5392) were returned complete. Of these respondents, 24.5% reported discontinuing 1 antimuscarinic prescription medication or more during the prior 12 months. Survey responses of those who discontinued showed that the most frequently reported reason for discontinued episodes was the generic response that medication

“didn’t work as expected” (45.4%). No follow-up questions were used to probe the specific reasons for unmet expectations.

The literature review provided evidence of when patients need the most help, what messages are most important, and how those messages should be delivered. Reviews provided guidance on characteristics of successful patient programs.

Evidence indicates that an effective intervention should target patients early in their treatment, as OAB medication persistence declines rapidly over the first months after initiating pharmacotherapy.¹⁵ Important messages to convey include establishing OAB as a treatable, but not curable, medical condition, and dispelling misperceptions that it is an untreatable part of aging.²² Content should reinforce that effective pharmacologic treatment of OAB requires long-term therapy and that incomplete adherence to or discontinuation of medication is associated with inadequate symptom relief.^{10,14,23} The review confirmed findings from the Persistence Survey that unrealistic treatment expectations may contribute to low adherence,^{19,22} therefore underscoring the importance of setting appropriate patient expectations regarding degree of possible symptom control and onset of action. Patients should be encouraged to modify lifestyle habits that aggravate OAB symptoms (eg, caffeine consumption) and to set intermediate, process-oriented program goals that can improve adherence.^{24,25} Techniques to help patients manage negative emotions and develop a positive treatment outlook may positively impact HRQOL for those who suffer from OAB.¹⁰ Physicians and pharmacists continue to be patients’ most trusted source of health information; therefore, educational content is best delivered by these healthcare professionals.²⁶

Few studies evaluated these strategies in the context of intervention programs for OAB medication adherence. Furthermore, a Cochrane review of medication adherence programs found that most interventions showed inconsistent effectiveness across studies and clinical conditions.¹⁷ Commonly referenced models used to understand the principles of health behavior change may increase the likelihood that these strategies can be incorporated into effective intervention programs. The implications of 3 complementary models for developing

OAB adherence interventions are described here: Transtheoretical Model (TTM), Health Belief Model (HBM), and social learning theory.

The TTM proposes that people transition through multiple cognitive stages of readiness to change health-related behaviors. Most TTM-based interventions use as few as 2 questions to determine someone's stage of change.²⁷ Inferring someone's stage of change by behavioral cues is prone to significant risk. Because patients with OAB perceive stigma with diagnosis and abandon treatments quickly due to unrealistic expectations, the receipt of diagnosis or a prescription may be a poor predictor of individual patients' readiness to continue medications or behavioral interventions.

The health belief model focuses on the cost/benefit assessments that people make prior to intentional health behavior change.²⁸ Specific components of that assessment include the person's self-perceived risks from not changing behaviors, the perceived severity of those risks, the costs and benefits of engaging in the new behavior, and the presence of specific prompts to change the behavior. Because multiple behavioral interventions exist to complement OAB medication therapy, allowing patients a degree of choice regarding which techniques to use may increase the adoption of those techniques perceived as low-cost or high-benefit by individual patients.

The concept of self-efficacy, a patient's belief that they are able to successfully perform a new health behavior, is central to social learning theory.²⁹ Self-report scales have been developed to measure medication-taking self-efficacy in some medical conditions,^{30,31} although none currently exists for OAB medications. Interventions may incorporate a variety of efficacy-enhancing techniques studied in social learning theory. In order of decreasing effectiveness, the techniques include those that help the patient accomplish specific behavior performances, model success through vicarious experience, use verbal persuasion, and increase emotional arousal.²⁹

Expert panel discussions covered the need to destigmatize OAB and its treatment, redefine success, and reposition the patient's role in treatment. The panel emphasized that, while there are critical messages that patients need to hear, healthcare providers often lack the time required to appro-

priately reinforce messages for optimal effectiveness. Recommendations for OAB patient programs included ensuring consistent and long-term interactions between healthcare providers and patients; designing components to be consistent with the clinical practice environment; allowing for customization of materials; and encouraging patients to set clear, realistic treatment expectations.

DISCUSSION

The literature review firmly supported the use of behavioral interventions to improve patient management of OAB symptoms but found that they are underutilized. Wider use of educational and behavioral interventions, in combination with prescribed pharmacotherapy, may be helpful in addressing treatment persistence and outcomes. Previous studies support this strategy by demonstrating the benefits of simultaneously prescribing OAB medication and behavioral interventions.¹⁹ Programs in other chronic conditions, such as osteoporosis, have shown similar success.³²

The support strategies highlighted in this article could be organized into an external program offered to patients at therapy initiation. External support could engage and motivate patients between medical visits without replacing the need for physicians to remain directly engaged with patient support outside the office. An external patient support program would most likely gain acceptance if it was widely accessible, contained information that physicians agree with, and provided a method for patients to communicate feedback to physicians during follow-up visits. The challenges facing OAB patients reported herein emphasize that development and evaluation of such external support should be prioritized.

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Author Affiliations: From IMS Health, Inc., Health Economics and Outcomes Research, Falls Church, VA (VFS, ELG); Medical Division (TB), Department of Outcomes Research (JNT), Pfizer Inc, New York, NY; Departments of Obstetrics & Gynecology and Urology, Loyola University, Chicago, IL (LB).

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Address correspondence to: Vernon F. Schabert, PhD, Senior Director, IMS Health, Inc., Health Economics and Outcomes Research, 300 N Washington St, Ste 300, Falls Church, VA 22046. E-mail: VSchabert@us.imshealth.com.

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Overactive bladder, also called urge incontinence, affects people in many ways. It makes it hard to get through your day without lots of trips to the bathroom, and can get in the way of your work, social life, exercise and sleep. Learn about the causes. Learn about the causes of overactive bladder and effective lifestyle tips and techniques you can do at home to address it with Dr. Nancy Lin, PhD, holistic nutritionist. Video Highlights. 00:38: The real number of people living with overactive bladder is likely larger than what's reported. 02:05: Both men and women are at risk for overactive bladder with age. 02:40: Overactive bladder is not a disease. It's a group of urinary symptoms. Overactive bladder describes a combination of symptoms that can include a frequent urge to urinate and waking up at night to urinate. Causes can include weak muscles, nerve damage, use of medications, alcohol or caffeine, infection, and being overweight. Lifestyle changes may help. This therapy is very effective, even for patients who have not had good results with other therapies. A very small percentage of people may have temporary urinary retention (difficulty voiding) after Botox. This treatment wears off over time and generally needs to be repeated every six months. Outlook / Prognosis. Can overactive bladder be controlled? Overactive bladder therapy can be challenging to manage. The clinical guideline on Diagnosis and Treatment of Non-Neurogenic Overactive Bladder (OAB) in Adults: AUA/SUFU Guideline discusses patient presentation, diagnosis, treatment, and follow-up of patients based on the currently available data. The Panel fully recognizes that OAB constitutes a significant burden for patients. Patients must understand that voiding is a behavior that can be managed and that successful OAB treatment requires a willing participant who is informed and engaged in the treatment process. Describe challenges to improving management of overactive bladder (OAB) outcomes and summarize research findings on critical success factors for supporting OAB treatment. A multidisciplinary team collected primary and secondary data, including an OAB-specific survey; a literature review; and an expert panel discussion. The survey (n = 5392) showed that, among patients discontinuing OAB medications, 45.4% reported unmet treatment expectations as the reason for discontinuation. Literature review findings supported intervention at the beginning of OAB treatment, specific messages to increase treatment adherence, and involving the healthcare stakeholders most trusted by patients. Strengthen Muscles and Retrain Your Overactive Bladder. It's possible to retrain your bladder to hold more urine for longer periods of time. Better muscle control can also help. Ask your doctor for a specific plan and stick with it; it can take up to three months to see results. These strategies may be part of your plan: Keep a bladder control log. Record how much you drink, when you pee, and how much (average for you, less than average, or more than average). Each time you have an urge to pee, record how strong it is, on a scale of 1 to 10, and whether any urine leaks. Do Kegel exercises.