Body System: Geriatrics
Session Topic: Urinary Incontinence and Urinary Frequency

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<tr>
<th>Educational Format</th>
<th>Faculty Expertise Required</th>
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<tr>
<td><strong>REQUIRED</strong></td>
<td>Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&amp;A during the final 15 minutes of the session are required.</td>
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<td>Interactive Lecture</td>
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<td><strong>OPTIONAL</strong></td>
<td>Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.</td>
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<td>Problem-Based Learning (PBL)</td>
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### Professional Practice Gap

- AAFP recently endorsed the American College of Physicians (ACP) Nonsurgical Management of Urinary Incontinence in Women clinical practice guidelines.
- Family physicians need to improve awareness of diagnostic criteria for OAB &/or incontinence, including identification of at-risk patients and the completion of an appropriate differential diagnosis.
- Family physicians need education to overcome a lack of knowledge and confidence around utilization of integrated pharmacologic and behavioral therapy for OAB &/or incontinence.
- As patients often fail to provide a timely and accurate representation of their symptoms, family physicians need to improve

### Learning Objective(s) that will close the gap and meet the need

1. Incorporate current guidelines for diagnosis in patients presenting with urinary problems.
2. Coordinate referral to a urologist or urogynecologist if initial diagnosis is unclear; or red flags such as hematuria, obstructive symptoms or recurrent urinary tract infections are present.
3. Counsel patients regarding first-line treatment options, including behavioral therapy and lifestyle modifications, emphasizing adherence and follow-up.
4. Prescribe second or third line treatment options if first-line therapies are unsuccessful, coordinating referral and follow-up care for surgical treatment as necessary.

### Outcome Being Measured

Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.
communication with their patients so that the impact of OAB &/or incontinence, specific to the individual, at the societal, quality of life and patient heath levels is acknowledged and considered as integral in the treatment plan.

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<tr>
<th>ACGME Core Competencies Addressed (select all that apply)</th>
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<tr>
<td>X Medical Knowledge</td>
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<tr>
<td>X Interpersonal and Communication Skills</td>
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<td>Professionalism</td>
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**Faculty Instructional Goals**

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
  - Visit [http://www.aafp.org/journals](http://www.aafp.org/journals) for additional resources
  - Visit [http://familydoctor.org](http://familydoctor.org) for patient education and resources
- Provide recommendations for incorporating current OAB & UI guidelines for diagnosis in patients presenting with urinary problems.
- Provide strategies for coordinating referral to an urologist or urogynecologist if initial diagnosis in unclear; or red flags such as hematuria, obstructive symptoms or recurrent urinary tract infections are present.
- Provide strategies and resources for counseling patients regarding first-line treatment options, including behavioral therapy and lifestyle modifications, emphasizing adherence and follow-up.
- Provide recommendations for prescribing second or third line treatment options if first-line therapies are unsuccessful, coordinating referral and follow-up care for surgical treatment as necessary.
- Provide recommendations regarding guidelines for Medicare reimbursement.
- Provide recommendations to maximize office efficiency and guideline adherence to the diagnosis and management of UI/OAB.
Needs Assessment:
Approximately 17% of women and 16% of men over 18 years old have overactive bladder (OAB), and an estimated 12.2 million adults have urge incontinence. Urge incontinence is a result of detrusor over activity, and can be further divided into two subtypes: sensory (a result of local irritation, inflammation, or infection within the bladder) or neurologic (most often caused by loss of cerebral inhibition of detrusor contractions). Overactive bladder, with and without UI, has a clinically significant impact on quality-of-life, quality-of-sleep, and mental health in both men and women. Urinary incontinence, the unintentional leakage of urine, affects approximately 15 million persons in the United States, most of whom are older. The impact of this disorder extends beyond basic QOL issues and into financial implications and patient comorbidities. The total costs associated with overactive bladder in the United States are estimated to range from $16 billion to $26 billion each year, placing the cost burden on par with that associated with depression or Alzheimer’s disease. These expenses comprise indirect costs (e.g., lost productivity) and direct costs, including diagnosis, treatment, and routine care. In addition, common comorbidities associated with this condition include skin infections, urinary tract infections, depression, and, in older adults, injuries associated with falls that occur as a result of hurrying to the toilet, which further the health-related and financial impact of OAB on the patient and health care system.

The American Academy of Family Physicians (AAFP) CME Needs Assessment Survey indicates that family physicians have statistically significant and meaningful knowledge and skill gap to manage patients with incontinence. Additionally, CME outcomes data (March 2011) for the AAFP Bulletin on Overactive Bladder indicates that participants in their Commitment to Change Statements (n = 300) consider improving screening and evaluation of symptoms of OAB a high value concern. Participants also noted a need to improve their combined approach to the utilization of both pharmacologic and non-pharmacologic (behavioral training) into the patients’ management strategy. CME outcomes data from 2014, 2015 and 2016 AAFP FMX (formerly Assembly): Urge Incontinence, Detrusor Instability, and Overactive Bladder: Urge Incontinence sessions, suggest that physicians have knowledge and practice gaps with regard to knowing when to assess older patients for incontinence; history taking; counseling patients with regard to voiding diaries and bladder retraining, including behavior modification; and evidence-based recommendations for pharmacologic therapies.

Incontinence affects 55 percent of nursing home residents and is associated with increased risk of falls, depression, anxiety, embarrassment, and social isolation. Evaluation and treatment goals should be individualized based on feasibility, appropriateness, and resident and family preference. Evaluation of urinary incontinence and retention in nursing home residents is similar to that in the community setting, but includes particular attention to the resident's overall care plan and medications associated with incontinence.
Currently, the diagnosis and treatment of OAB remains suboptimal; it is colloquially known as the “hidden condition” because relatively few individuals admit having symptoms and many assume that the symptoms are a normal part of aging. Yet there is opportunity for improvement as studies demonstrate the value of evidence-based management in successfully elevating symptoms and concomitantly reducing the condition’s financial burden and likelihood of OAB-associated comorbidities.

Standing in the way of improved outcomes is the reluctance of patients, despite OAB-related morbidity, to initiate communication of this perceived taboo subject with their doctor. A study of toileting-related attitudes and behaviors of 1,001 adults aged 30 to 70 years in the United States showed that among those reporting bladder control issues, only 26% had discussed their symptoms with a physician. Of this number, less than half reported feeling comfortable having such a discussion. Furthermore, an additional study of 1,228 woman found greater than half of its participants waited more than a year after an initial discussion with their health care provider before seeking treatment. Evidence as to why this might be points to a number of patient fears or misconceptions, including embarrassment, belief that the symptoms are self-limiting, perception of lack of treatment efficacy, fear of treatment/diagnostic procedures, and cost fear issues.

For those patients given pharmacologic treatment, adherence issues are apparent that limit the value of treatment, and Pelletier and colleagues suggest that the discontinuation rate for OAB medications ranges as high as 70% to 90% in the first year. Reasons for this significant barrier to treatment are varied but include those that are common to many chronic medications, such as low educational levels, cultural factors, side-effects, and costs. In addition, specific to OAB, unmet expectations of drug treatment are a primary cause.

Physicians in primary care—especially those in family practice, are ideally placed to treat patients with OAB and affect long-lasting improvements in health outcomes. However, while symptoms of OAB make the condition and associated bladder control problems innately recognizable in the primary care environment, and often does not require input from specialist urological testing, ineffective or an absence of communication may lead to a loss of important diagnostic information that allows OAB to go unrecognized. Despite patient reticence as a well-documented barrier, there is a general lack of appropriate screening for the condition, consistent with the observation that physicians do not routinely initiate this essential dialogue with at-risk patients. Evidence shows that a primary driver for this is a perceived “lack of importance” of OAB among primary care physicians, as like their patients they share a perception that OAB and UI are a natural part of aging. This is coupled to the misperception among some physicians that because patients do not initiate the communication, their symptoms are not important to them. While some physicians also show a lack of awareness of the differential diagnosis, and impact of potential co-morbidities. Family physicians should receive continuing education to assist them with incorporating evidence-based practice recommendations and guidelines for the diagnosis and management of patients presenting with overactive bladder. Family physicians can also improve information-gathering during the patient encounter with the use of symptom diaries.
Physicians can improve patient satisfaction with the referral process by using readily available strategies and tools such as, improving internal office communication, engaging patients in scheduling, facilitating the appointment, tracking referral results, analyzing data for improvement opportunities, and gathering patient feedback.36,37

The American Urological Association (AUA) recently published recommendations to provide a clinical framework for the diagnosis and treatment of non-neurogenic OAB. Physicians may improve their care of patients with OAB by engaging in continuing medical education that provides practical integration of current AUA evidence-based guidelines and recommendations into their standards of care for diagnosis and treatment, including first-line behavioral therapy treatments, oral antimuscarinics second-line treatments, and surgical or intradetrusor onabotulinumtoxin A as potential third-line treatments:38 For urinary incontinence diagnosis and management, physicians may want to consider the following evidence-based recommendations:2,12,39-41

- Evaluation and treatment goals for urinary incontinence and retention in nursing home residents should be individualized based on feasibility, appropriateness, and resident and family preference.
- The 3 Incontinence Questions tool, which asks patients if, when, and how often they experience urine leakage, should be used to help categorize the type of urinary incontinence.
- A three-day voiding diary can be used as part of the initial assessment for urinary incontinence symptoms.
- A positive cough stress test result is the most reliable clinical assessment for confirming the diagnosis of stress incontinence.
- Postvoid residual urine measurement should be performed in select high-risk patients (e.g., those with overflow incontinence).
- Undertake routine digital assessment to confirm pelvic floor muscle contraction before the use of supervised pelvic floor muscle training for the treatment of UI.
- Do not use imaging (magnetic resonance imaging [MRI], computed tomography [CT], X-ray) for the routine assessment of women with UI. Do not use ultrasound other than for the assessment of residual urine volume.
- Conservative therapies (e.g., behavioral therapy and lifestyle modification) should be the first-line treatment for stress and urge urinary incontinence.
- Pharmacologic interventions (e.g., anticholinergics) should be used as an adjunct to behavioral therapies for refractory urge incontinence.
- Do not offer oxybutynin (immediate release) to frail older women
- Surgical therapy should be considered in women with stress incontinence that has not responded to less invasive treatment modalities.

Finally, although the growing list of pharmacotherapeutic agents makes idealized treatment a more distinct possibility, the potential for side-effects, non-adherence, and the relative importance of a combined approach to optimize the use of drug- and non-drug based therapies needs to be better understood by physicians as they seek to tailor treatment that best suits the needs of an individual patient.42,43
The AAFP recently (May 2015) endorsed the Nonsurgical Management of Urinary Incontinence in Women guidelines from the American College of Physicians (ACP), summarized as follows:44

- Pelvic floor muscle training should be first-line treatment for women with stress urinary incontinence (UI).
- Bladder training should be first-line treatment for women with urgency UI.
- Women with mixed UI should be treated with pelvic floor training combined with bladder training.
- Systemic pharmacologic therapy should not be prescribed for stress UI.
- Pharmacologic treatment should be prescribed to women with urgency UI if bladder training was unsuccessful. Choice of pharmacologic agent should be based on tolerability, adverse effect profile, ease of use, and cost.
- Weight loss and exercise should be recommended for obese women with UI.

Physicians need continuing medical education to remain up to date on new guidelines, new treatment options, and changes to existing guidelines. Physicians should also be kept up to date on new treatment therapies, changes to therapies, or warnings associated with existing therapies. Provide recommendations regarding new FDA approved medications for the treatment of UI/OAB; including safety, efficacy, tolerance, and cost considerations relative to currently available options. Examples include, but are not limited to:45,46

- Myrbetriq (mirabegron); Astellas Pharma US, Inc; For the treatment of overactive bladder, Approved June 2012
- Anturol (oxybutynin) Gel; Antares Pharma; For the treatment of overactive bladder, Approved December 2011
- Gelnique (oxybutynin chloride); Watson Pharmaceuticals; For the treatment of overactive bladder, Approved January 2009
- Toviaz (fesoterodine fumarate); Pfizer; For the treatment of overactive bladder, Approved October 2008
- Sanctura (trospium chloride); Indevus Pharmaceuticals; For the treatment of overactive bladder with symptoms of urge urinary incontinence, Approved May, 2004
- Vesicare (solifenacin succinate); Yamanouchi, GlaxoSmithKline; For the treatment of overactive bladder with symptoms of urge urinary incontinence, Approved November, 2004
- Oxytrol (oxybutynin transdermal system); Watson Pharmaceuticals; For the treatment of overactive bladder with symptoms of urge urinary incontinence, urgency, and frequency., Approved March 2003
- Detrol LA (tolterodine tartrate); Pharmacia & Upjohn; For the treatment of overactive bladder with symptoms of urge urinary incontinence, urgency and frequency, Approved December 2000
- For adults who cannot use or do not adequately respond to anticholinergics, there are Botox (onabotulinumtoxinA) injections. Botox is injected directly into the bladder muscle under local or general anesthesia in a doctor’s office using a small camera that enables the urologist to see the inside wall of the bladder.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient’s family physician. As with all clinical reference
resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Diagnosis of urinary incontinence
- Urinary incontinence in women: evaluation and management
- Interstitial cystitis/painful bladder syndrome
- American College of Obstetricians and Gynecologists (ACOG): urinary incontinence in women
- (ACP): Urinary Incontinence in Women. Clinical Practice Guideline
- NICE provides several A-level guidelines on other pharmacologic treatments for OAB symptoms
- NICE Urinary incontinence: the management of urinary incontinence in women
- Diagnosis and treatment of overactive bladder (non-neurogenic) in adults: AUA/SUFU guideline
- 2012 update: guidelines for adult urinary incontinence collaborative consensus document for the Canadian urological association
- AMA PCPI Performance Measures: Management of Urinary Incontinence in Women Aged 65 Years and Older
- The Use of Symptom Diaries in Outpatient Care
- A nursing home documentation tool for more efficient visits
- Simple tools to increase patient satisfaction with the referral process
- Health Coaching: Teaching Patients to Fish
- Engaging Patients in Collaborative Care Plans
- FamilyDoctor.org. Urinary Incontinence | Overview (patient resource)

References


45. CenterWatch. FDA Approved Drugs by Medical Condition. 2016;


