

PACE

Pharmaceutical Assistance
Contract for the Elderly

 **IDIS**
Independent Drug
Information Service

Balanced information for better care

Evaluating and managing urinary incontinence



Urinary incontinence: major impact, but few seek care

It is *not* a normal part of aging.

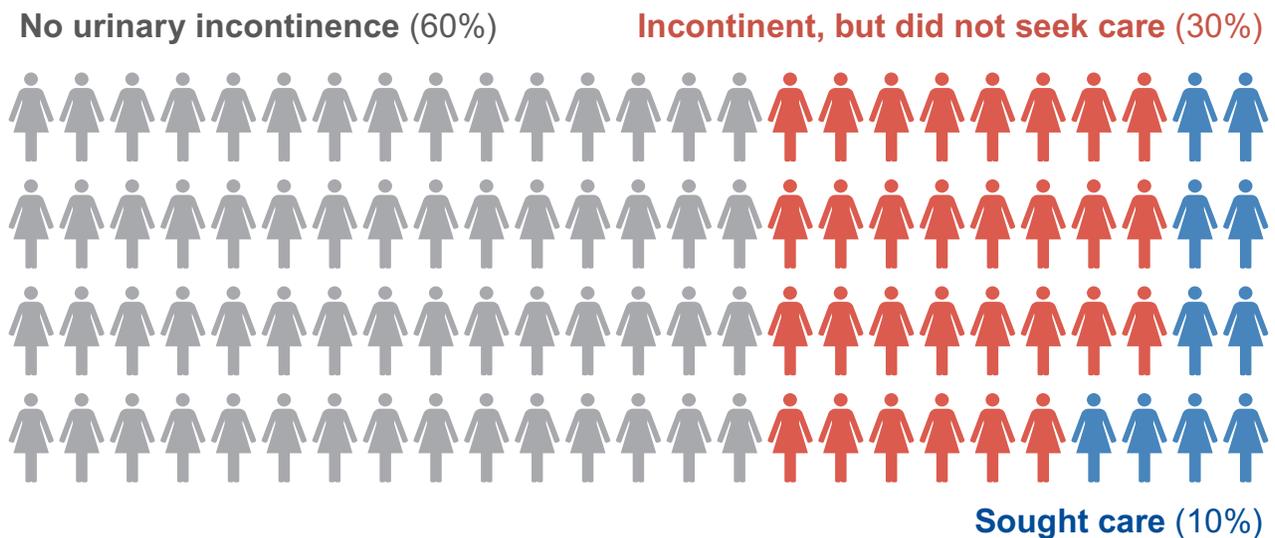
FIGURE 1. Incontinence raises the risk of important clinical events.



Incontinence is also expensive, with an annual direct cost of \$19 billion.⁴

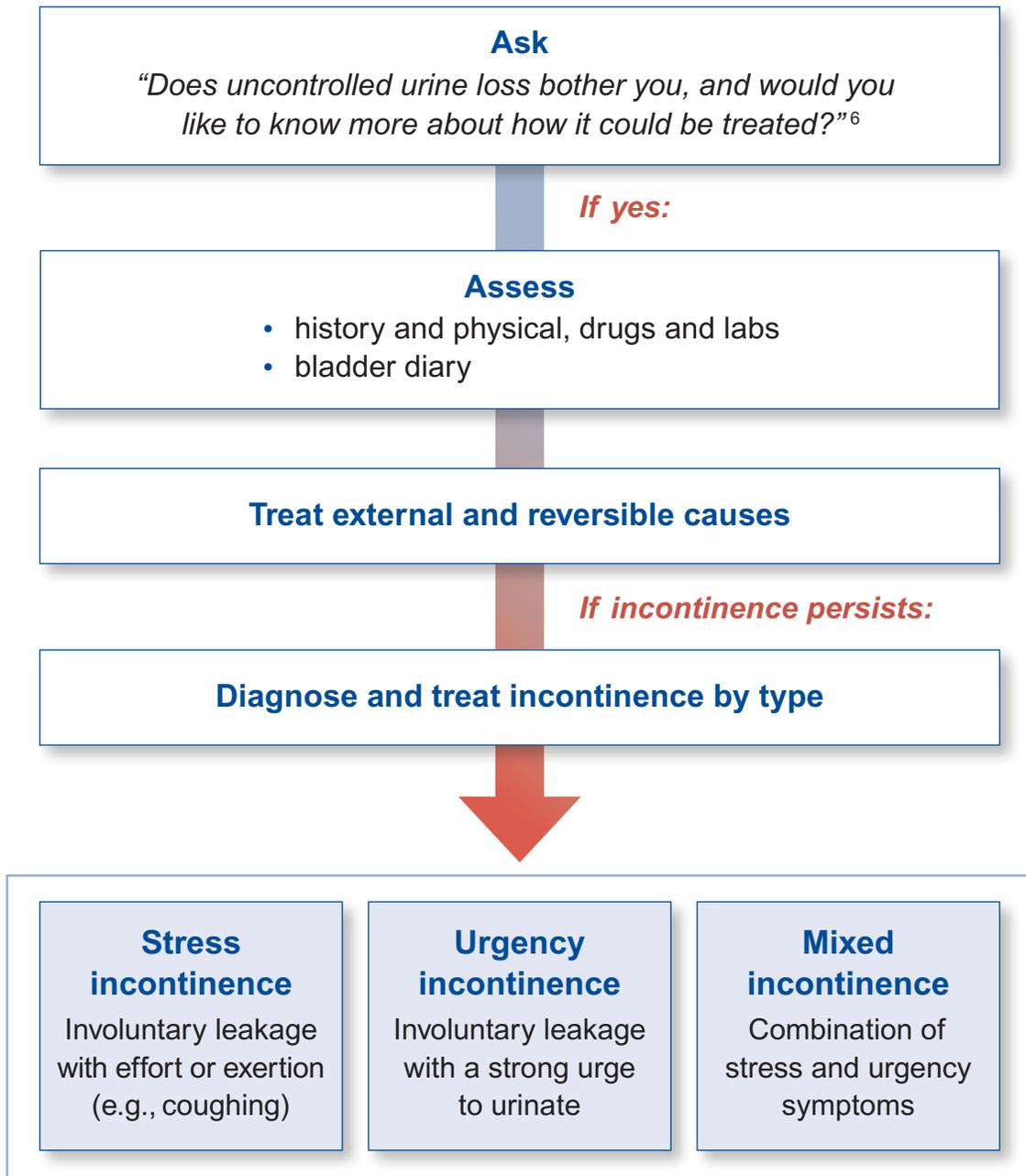
Patients may be unwilling to talk about incontinence, often suffering needlessly.

FIGURE 2. Despite the high prevalence of incontinence, most patients do not seek or receive care.⁵



A straightforward workup can guide effective treatment

FIGURE 3. Algorithm for detecting and addressing incontinence



If incontinence persists or an anatomical abnormality is suspected, refer to a urologist or urogynecologist.

Finding reversible causes of incontinence can make a big difference

FIGURE 4. Factors contributing to incontinence

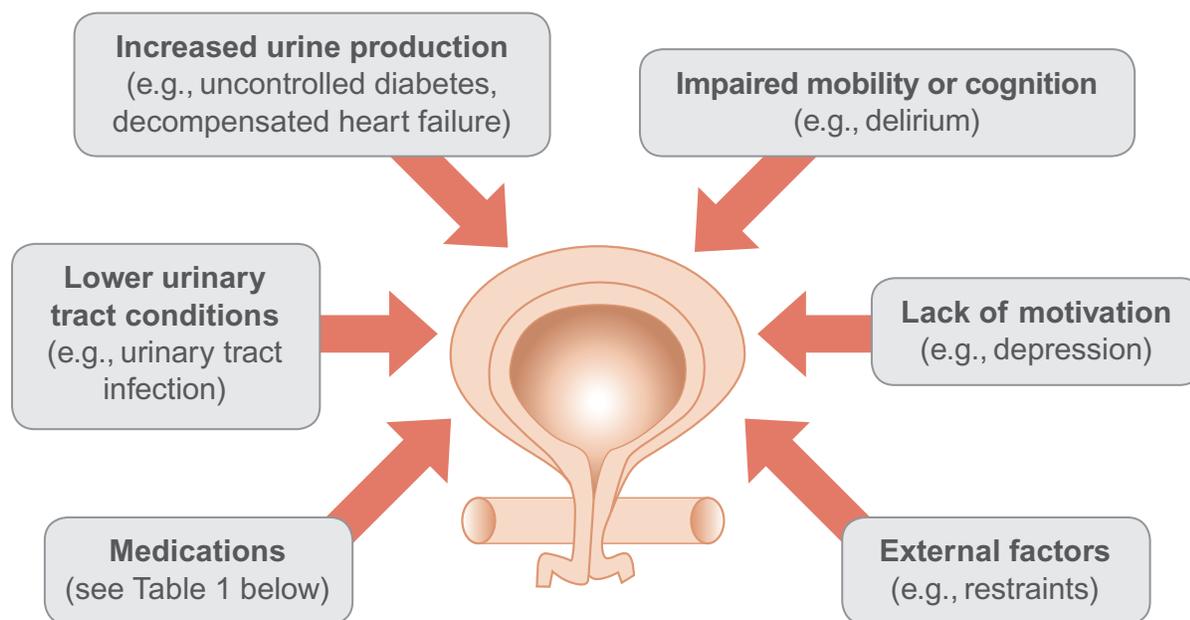


TABLE 1. Medications that can affect continence

Effect on continence	Drug class
urinary retention	α -agonists, anticholinergics, antidepressants, antipsychotics, calcium channel blockers, inhaled anticholinergics, opioids
sedation, delirium, immobility	alcohol, anticholinergics, antidepressants, antipsychotics, opioids, sedative-hypnotics
increased urine production	alcohol, caffeine, diuretics
urethral muscle relaxation	α -blockers, sedative-hypnotics
stool impaction	anticholinergics, opioids
cough	ACE inhibitors
bladder irritation	caffeine

Evidence overview of interventions to treat incontinence

TABLE 2. Behavioral and pharmacologic treatments of incontinence in men and women

Interventions	Stress UI		Urgency UI		Mixed UI	
BEHAVIOR (first-line treatment)						
caffeine reduction						
pelvic floor muscle training						
bladder training						
weight loss <i>(for obese patients)</i>						
MEDICATIONS (second-line treatment)						
anticholinergics						
β_3 -adrenoceptor agonists						
duloxetine						
α_1 -adrenoceptor antagonists						
vaginal estrogen						

= men = women

- = efficacy and acceptable safety
- = efficacy but unfavorable/unclear safety
- = not efficacious or insufficient evidence

Stress incontinence in women can respond to behavioral interventions

Caffeine and fluid reduction are often recommended, but their effectiveness in reducing stress incontinence is limited.⁷

TABLE 3. Effective strategies to manage stress incontinence

Interventions	Relative reduction in incontinence	Number need to treat for benefit*	Absolute reduction in incontinence
BEHAVIOR			
pelvic floor muscle training (Kegel exercises) ⁸⁻¹²	54-74%	1 in 2	50%
weight loss ¹³	58%	1 in 5	20%
MEDICATIONS			
vaginal estrogen ¹⁴		1 in 5	20%

* Proportion of treated women who have a $\geq 50\%$ reduction in incontinence episodes

Medications have only a limited role in managing stress incontinence.

- Trials have not produced evidence that systemic drugs improve stress incontinence.¹² Oral estrogen actually worsens incontinence.¹⁵
- Vaginal estrogen has limited data for efficacy in stress incontinence and carries an FDA warning related to risks such as breast cancer and thromboembolic disease.

Urgency incontinence in women: start with behavioral interventions, use medications with caution

TABLE 4. Effective strategies to manage urgency incontinence

Interventions	Relative reduction in incontinence	Number need to treat for benefit*	Absolute reduction in incontinence
BEHAVIOR			
caffeine reduction ¹⁶	55%		
bladder training ^{12,17,18}	46-57%	1 in 2	50%
weight loss ¹³	42%	1 in 6	17%
MEDICATIONS			
anticholinergics ^{12,19}	60%	1 in 6-10	10-17%
β_3 -adrenoceptor agonist ^{12,20}	55%	1 in 9	11%
vaginal estrogen ¹⁴		1 in 2	50%

* Proportion of treated women who have a $\geq 50\%$ reduction in incontinence episodes

Anticholinergic drugs: similar efficacy, but their adverse effect rates vary widely.

- Common side effects: dry mouth (10-70%), constipation (2-20%), headache (2-8%).
- Extended-release preparations are better tolerated.

β_3 -Adrenoceptor agonist (mirabegron [Myrbetriq])

- Has efficacy similar to that of anticholinergics, but data on long-term safety are limited.
- Common side effects: elevated blood pressure (9-11%), heart rate (2%), nasopharyngitis (4%), urinary tract infection (3-6%).

Not all “overactive bladder” results in incontinence or requires medication.

Overactive bladder, characterized by urgency and frequency, does not always cause loss of urine, and does not always require drug treatment.

For mixed incontinence in women, match treatment to the primary symptom

Mixed incontinence is not a distinct entity; it has components of stress and urgency incontinence.

Patients report better satisfaction with behavioral treatment (78%) than drugs alone (49%).²¹

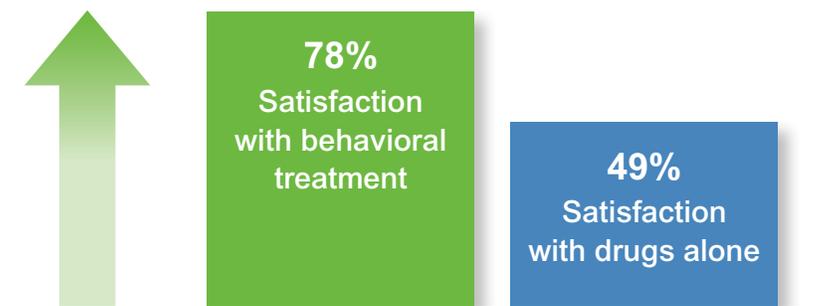
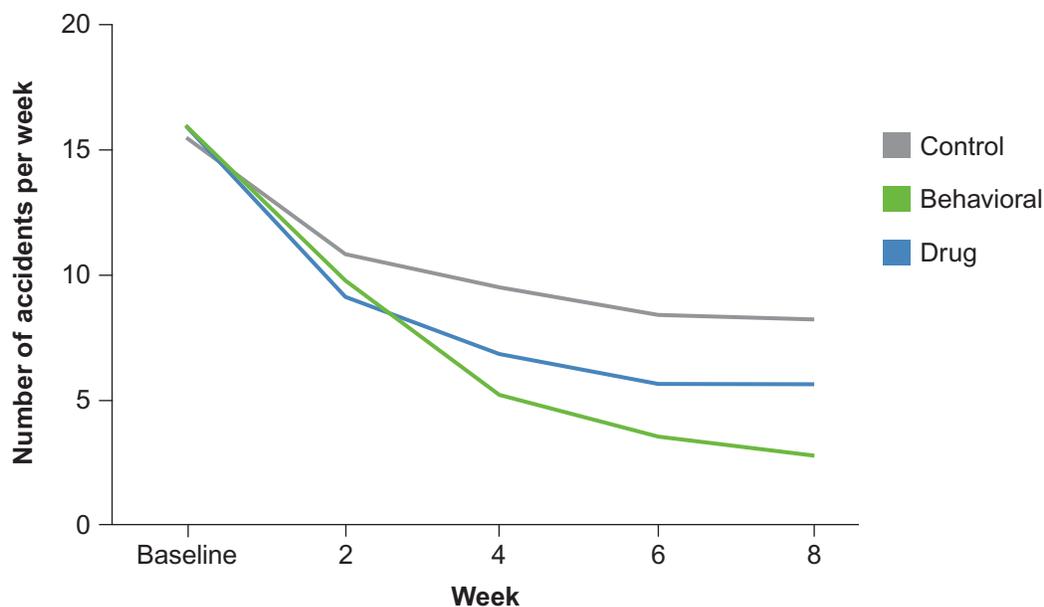


FIGURE 5. Behavioral training may be more effective than drugs in older women.²¹



Anticholinergic medications can help in urgency-dominant but not stress-dominant mixed incontinence.

There is less evidence on treating incontinence in men

Urgency incontinence is the most common type of male incontinence.

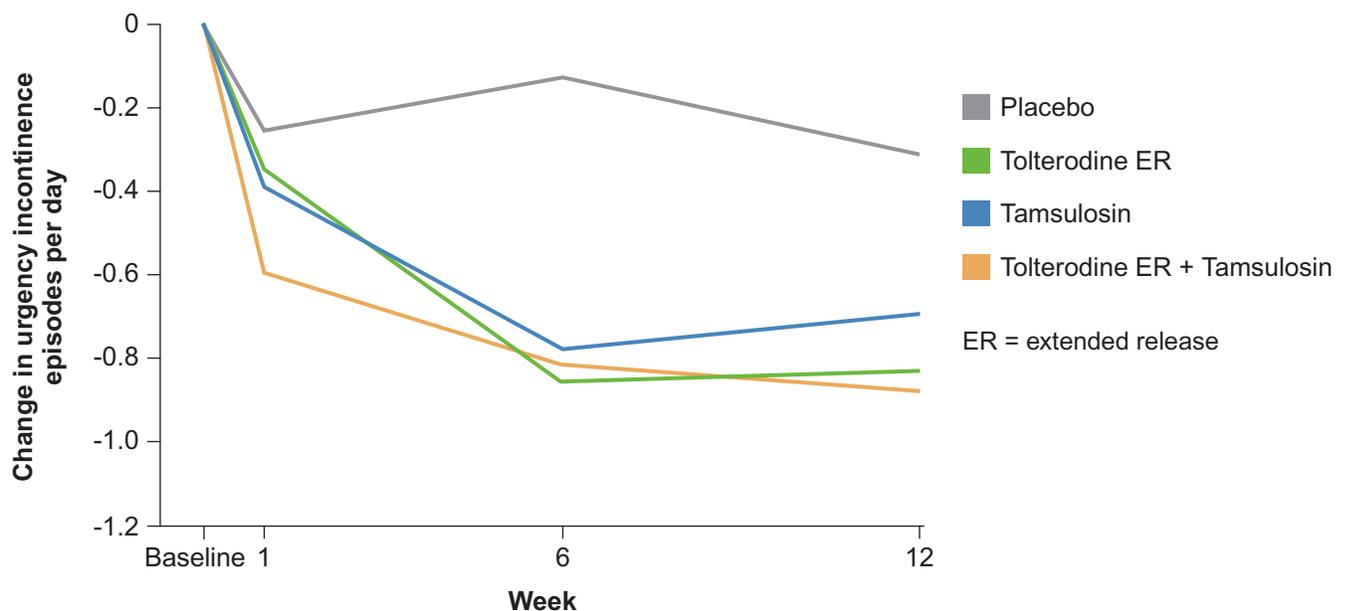
Behavioral interventions work:

- Weight loss: a 9% reduction in weight led to a 56% reduction in incontinence.²²

Pharmacologic interventions:

- Behavioral interventions such as bladder training are as effective as anticholinergics in men taking α -blockers.²³

FIGURE 6. α -blockers, anticholinergics, and their combination are similarly effective in reducing incontinence episodes.²⁴

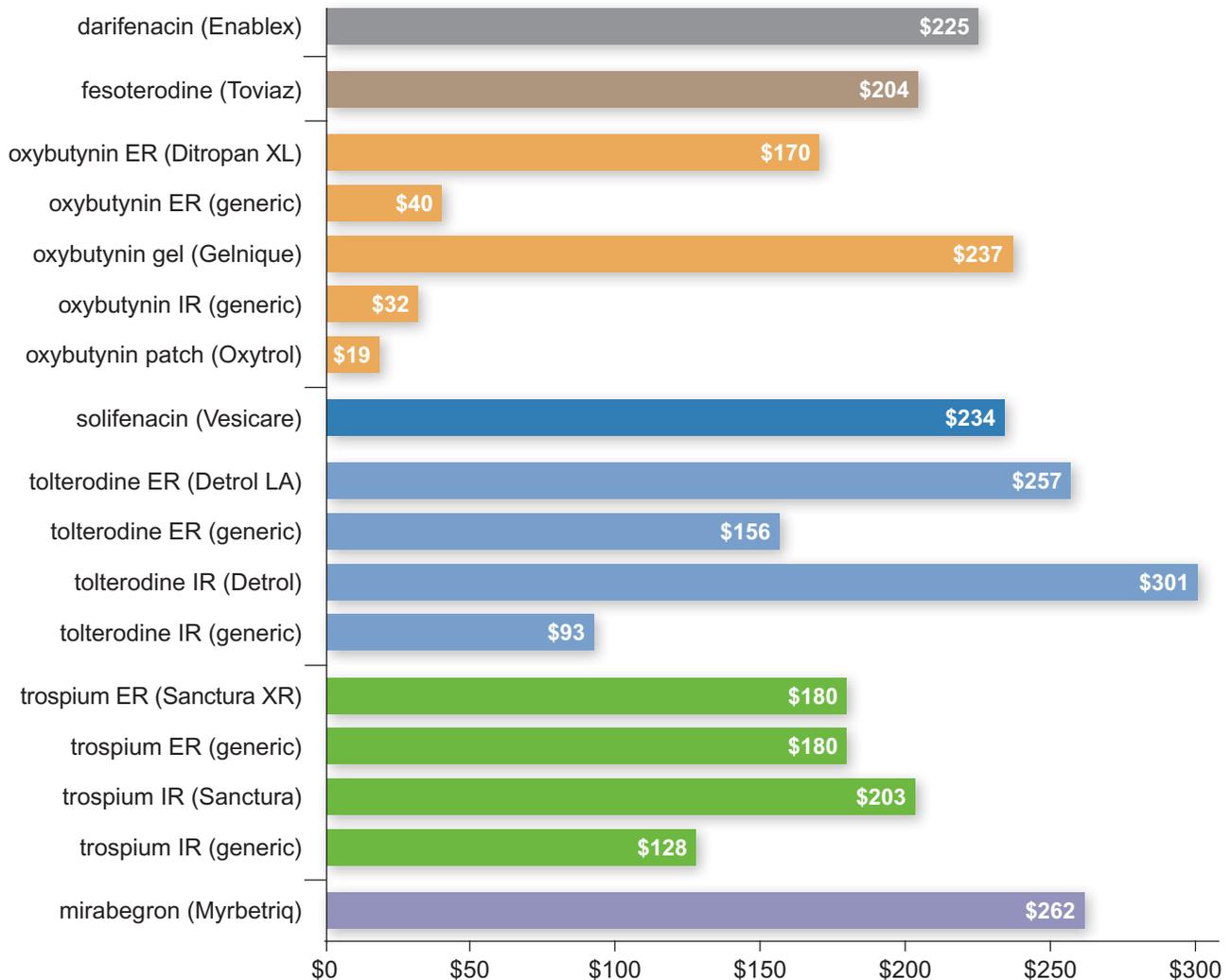


Stress incontinence in men:

- No behavioral or pharmacological interventions have been proven effective.
- Persistent post-prostatectomy stress incontinence may benefit from specialist referral.

Drug costs vary widely, and can be quite high

FIGURE 7. Price for a month's supply of medications for incontinence



ER = extended release, IR = immediate release

Prices are generally similar across different doses. Source: goodrx.com

Links to resources for talking with patients about incontinence and more at:
alosafoundation.org/modules/incontinence

Key messages

- Urinary incontinence is common and can have a substantial clinical impact, including reduced quality of life, depression, and nursing home admission.
- It is **not** a normal part of aging.
- Simple screening can reveal symptoms that might otherwise go undetected and untreated.
- Look for and manage reversible causes of incontinence.
- Distinguish among urgency, stress, mixed, and other causes to guide treatment.
- As appropriate, implement caffeine reduction, pelvic floor muscle training, bladder training, and weight loss as first-line treatments.
- Medications can be useful to treat urgency symptoms, but not those of stress incontinence. They often have modest benefits, variable side effects, and (occasionally) enormous costs.

References:

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About this publication

These are general recommendations only; specific clinical decisions should be made by the treating physician based on an individual patient's clinical condition. More detailed information on this topic is provided in a longer evidence document at alosafoundation.org.



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