

BladderAware 3.0 Client Review Document

Overview

The BladderAware HRA identifies men and women experiencing bladder control problems. It assesses different types of bladder control problems, degree of bother, and urinary incontinence (UI) risk factors. People are also asked about urinary symptoms that warrant prompt medical evaluation. This is a patient engagement questionnaire and not a diagnostic tool. Its goal is to raise awareness that UI is treatable.

Key Results Provided

People with activity-related leaks (possible stress UI), urgency-related leaks (possible urge UI), and other types of leaks are identified using a derivative of a question from 3 Incontinence Questions (3IQ).¹

- *Indicate when you leaked urine in the past 3 months. (check all that apply)*
 - *While performing some physical activity like sneezing, laughing, lifting, or exercising*
 - *With an urge to empty bladder but couldn't get to the toilet in time*
 - *Without physical activity or a sense of urgency*

People who avoid urine leaks by making frequent bathroom trips (possible urge UI) are identified using the following questions about voiding habits:

- *Do you typically use the bathroom more than 8 times per day?*
 - *Yes*
 - *No*
- *Do you typically use the bathroom more than once during the night?*
 - *Yes*
 - *No*

Bladder Control Assessment

People with bladder control problems or urinary symptoms (as outlined below) are urged to talk to a health care professional. People are grouped into 5 possible results.

- Prompt Medical Evaluation Recommended
 - Person reports one of these symptoms: Visible blood in the urine, pain with passing urine, pain in lower abdominal/genital area, or trouble emptying the bladder²
 - This result supersedes all other results (i.e. Everyone reporting one of these symptoms sees this result regardless of what bladder control problems are also reported)
- Treatable Control Problems Identified
 - Person is greatly bothered by activity-related leaks
 - Urology referral may be deemed most appropriate for this group
 - Person may also be experiencing other types of bladder control problems
- Treatable Bladder Problems Identified
 - Person has urgency-related leaks, frequent urination, and/or activity-related leaks (the latter without great bother)

- A Medical Evaluation Is Needed
 - Person is only experiencing leaks without physical activity or a sense of urgency (and no frequent urination)
- No Bladder Control Problems Reported
 - Person reports no leaks or frequent urination

Symptom Summary

This assessment conditionally asks people to rate the degree of bother associated with their activity-related leaks, urgency-related leaks, and/or frequent urination (via derivative questions from the Urogenital Distress Inventory³ [UDI-6]). Their highest reported degree of bother is shown on the Results Report.

Leak Risk

Depending upon the bladder control problem(s) reported, people are conditionally asked about related risk factors.^{2,4} Leak Risk is categorized as Low, Average, or Increased based on several factors, which may include the following:

- Overweight or obesity
- Older age
- Surgery to pelvic area
- Chronic cough or sneezing
- High-impact activities over many years
- Consumption of bladder irritants
- Current tobacco use
- Medications affecting bladder control
- Post-menopause (women only)
- Vaginal childbirth (women only)

Other Causes of Accidental Urine Leaks

The Results Report explains that treatment for urine leaks depends on what's causing the incontinence. It stresses that urine leaks due to any of these causes may need specialized management:

- Neurologic conditions (multiple sclerosis, Parkinson's disease, cerebral palsy, stroke, spinal cord injury, etc.)
- Mental impairment (dementia, schizophrenia, bipolar disorder, Alzheimer's disease, etc.)
- Cancer treatment involving chemotherapy or radiation therapy to the pelvis
- Certain birth defects (spina bifida, hypospadias, vesicoureteral reflux [VUR], etc.)
- Any mobility condition that stops a person from getting to the bathroom in time
- Type 1 or type 2 diabetes with high blood sugar
- Chronic constipation or chronic diarrhea
- Family history of incontinence

References

1. Brown JS, Bradley CS, Subak LL, et al. The Sensitivity and Specificity of a Simple Test to Distinguish between Urge and Stress Urinary Incontinence. *Ann Intern Med.* 2006;144(10):715–723.
2. The National Institute of Diabetes and Digestive and Kidney Diseases. Symptoms & Causes of Bladder Control Problems (Urinary Incontinence). <https://www.niddk.nih.gov/health-information/urologic-diseases/bladder-control-problems/symptoms-causes>. Updated June 2018. Accessed November 2018.
3. Uebersax JS, Wyman JF, Shumaker SA, et al. Short forms to assess life quality and symptom distress for urinary incontinence in women: the Incontinence Impact Questionnaire and the Urogenital Distress Inventory. Continence Program for Women Research Group. *Neurourol Urodyn.* 1995;14:131-139.
4. Takashi K, Hiroki I, Mashiro Y, et al. Impact of smoking habit on overactive bladder symptoms and incontinence in women. *International Journal of Urology.* 2020;27:1078-1086.

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