



# Evaluating the Quality of Urinary Incontinence and Prolapse Treatment (EQUIPT) Study: Quality Indicator Development for Urinary Incontinence



A. Khan, K. Kiyosaki, V. Scott, C. Sevilla, S.E. Connor, C. Roth, M.S. Litwin, L. Rodriguez, N. Wenger, P. Shekelle, J.T. Anger  
David Geffen School of Medicine at UCLA, Los Angeles, CA and Cedars-Sinai Medical Center

## BACKGROUND

- 23.7% of women have at least one symptomatic pelvic floor disorder, and the prevalence increases with age (9.7% in ages 20-39 to 49.7% age 80 and older) (NHANES 2005-2006; Nygaard et al, 2008).
- Quality care for urinary incontinence (UI) for elder patients found to be inadequate (ACOVE project; Schnelle et al, 2001).
- Paucity of data on quality of care for the treatment of women with urinary incontinence.
- Urinary incontinence costs over \$12 billion each year (Chong et al, 2011).

## OBJECTIVE

- Measure the quality of care provided to women with pelvic floor disorders.
- Develop and rate a set of quality of care indicators (QIs) for the work-up and management of urinary incontinence.

## METHODS

- Extensive literature review to develop a set of potential QIs for the management of urinary incontinence.
- Nine experts rated indicators on a nine-point scale for validity and feasibility.
- RAND Appropriateness Method used for preliminary analysis, and then the QIs were discussed by the experts in a forum.
- QIs rated a second time individually using the same nine-point scale.
- QIs that received a median score of greater than or equal to seven were passed.

## RESULTS

- 27 of 40 potential QIs ranked as valid for urinary incontinence with a median score of 7 or greater.
- Areas of controversy included whether:
  - patients should be screened for UI.
  - a uroflow should be obtained on all women with UI.
  - urodynamics should be performed on women with previously untreated UI symptoms.
- It was determined that anticholinergic medications should not be offered to women with pure stress symptoms, and that cystoscopy should not be performed routinely as part of the work-up for uncomplicated stress urinary incontinence.

## PASSED INDICATORS

### Diagnosis Target Evaluation/Basic History

Obtain a detailed history when complaints of new/worsening bothersome urinary incontinence, including:

1. Whether stress, urge, or both symptoms are present.
2. Any previous pharmaceutical treatment.
3. Lifestyle factors for *urge* incontinence.
4. Severity assessment.

### Targeted Physical Exam

Perform physical exam when new/worsening bothersome urinary incontinence, including:

5. Assessment of recent pelvic exam, including presence and degree of pelvic organ prolapse.

### Diagnostic Testing

6. Perform urinalysis with new/worsening bothersome urinary incontinence to screen for microhematuria or urinary tract infection.
7. Do not perform uroflow with new/worsening bothersome urinary incontinence unless also has signs/symptoms of voiding dysfunction.
8. Do not perform urodynamics with previously untreated symptoms (including behavioral) of urge urinary incontinence without neurologic disease or voiding dysfunction.

### Treatment/Management of Urinary Incontinence

9. New/worsening bothersome urinary incontinence should initially be offered pelvic floor muscle training.
10. If surgical management of stress urinary incontinence or pelvic organ prolapse with synthetic mesh, document that she was counseled preoperatively about the risks of mesh.

## STRESS URINARY INCONTINENCE (SUI)

### Behavioral Therapy

11. If BMI > 25 with new/worsening symptoms of SUI, should be advised to lose weight.

### Pharmacological Therapy

12. Do not offer anticholinergics as a treatment for new/worsening bothersome SUI without symptoms of overactive bladder (OAB).

### Surgical Management

13. Perform pre-op post-void residual on woman with SUI who undergoes surgery.
14. Do not perform diagnostic cystoscopy on new/worsening bothersome SUI if there is no other urologic diagnosis or prior incontinence.
15. Do not perform Kelly plication, anterior colporrhaphy, or needle suspension for treatment of SUI.
16. Perform pre-op stress test for incontinence in woman with SUI who elects to undergo surgery.

**A woman undergoing surgery for SUI should be counseled on the risk of:**

17. Bladder perforation with retropubic slings.
18. Lower efficacy of Burch colposuspension vs. bladder neck slings.
19. Higher morbidity of bladder neck slings and open Burch colposuspension because of a larger abdominal incision.
20. Common risks, including: post-op voiding dysfunction (urinary retention), urge incontinence, surgical complications, and mesh complications.
21. Need for repeat bulking procedures.
22. Perform intraoperative cystoscopy when a sling performed for SUI.

### Follow-up of Treatment

23. Re-evaluate woman treated for SUI within 3 months of initiation of intervention to evaluate for efficacy and/or complications.

## URGE URINARY INCONTINENCE (UI)

### Behavioral Modification

24. Obtain history about fluid intake if new/worsening UII.
25. Counsel initially about behavioral modification (fluid restriction and bladder training) if new/worsening UII/OAB.

### Pharmacologic Therapy

26. Counsel also about behavioral therapy in woman prescribed anticholinergics for UII/OAB.

### Botox Injections

27. Counsel about the risk of urinary retention (and possible need for Foley catheter) and increased risk of urinary tract infection in woman that elects Botox injections.

## FAILED INDICATORS

### Screening/Diagnosis

1. A woman over 65 who is seen for a routine annual examination should be examined for POP.

### Surgical Management

2. A stress continent woman with anterior POP who undergoes surgical intervention should be examined for SUI after prolapse reduction.
3. A woman with positive stress testing with POP reduction who chooses to undergo a vaginal POP repair should be offered a midurethral synthetic sling.
4. A woman who undergoes an abdominal sacrocolpopexy (either open, laparoscopic, or robotic) should have synthetic mesh instead of biologic graft material.
5. A woman who undergoes a rectocele repair with perineorrhaphy should be counseled pre-operatively about possible long-term complications of surgery, including dyspareunia resulting from the repair, as well as persistent defecatory dysfunction.
6. A woman who undergoes a rectocele repair with perineorrhaphy should undergo posterior colporrhaphy by a vaginal approach.
7. A woman older than 65 with an intact uterus who elects to undergo a partial colpocleisis should have her endometrium evaluated.

## CONCLUSIONS

- 27 of 40 QIs ranked as valid for management of UI.

## FUTURE DIRECTIONS

- Pilot testing for the feasibility of these QIs, then measure the quality of care provided on a national level.
- This will allow for the identification of underuse, in which the necessary care is not provided, as well as areas of overuse, in which certain tests or procedures are performed unnecessarily, resulting in increased costs of care and patient burden.