Quality of Care for Women with Urinary Incontinence in the Veterans Health Administration

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INTRODUCTION

Urinary incontinence (UI) is a widespread problem affecting 3–17% of community-dwelling and VA women, and has high cost and patient burden.¹ Quality deficiencies in primary care for UI have been identified in community settings.² Whether similar quality concerns are also present in the Veterans Health Administration (VA) is unknown. Our objective was to assess UI care quality for women in VA primary care.

METHODS

Quality Indicator Identification

We identified a comprehensive set of evidence-based quality indicators (QIs) for UI evaluation and management in women,^{2,3} then selected the subset applicable to primary care and detailed enough for electronic health record (EHR) measurement. For each QI, we defined the applicable population, inclusion and exclusion parameters, and desired primary care provider (PCP) action for delivering the care specified. We developed an electronic abstraction instrument for data collection.

Study Design and Subjects

Using a cross-sectional observational design, we applied these QIs to the care of women receiving primary care 6/2013–9/2015 at four VA sites. This study was approved by the VA Greater Los Angeles Healthcare System Institutional Review Board. From all primary care patients at these sites, a trained chart abstractor identified women who received a PCP request for specialty consultation for UI care and/or UI medication prescription (oxybutynin or tolterodine, since other UI

medications were restricted to specialists). We defined these actions as the index event. We identified patients who were having new or worsening symptoms requiring clinical assessment or action.

Quality Assessment

For each patient, we assessed care provided in the 18 months prior to, or on the day of, the index event. This timeframe was used in published data for community UI care.² We excluded patients who received UI medication or specialty, non-VA, or non-PCP urologic care prior to the index event.

For each QI, we used abstracted data to determine which episodes of care were eligible for care measured by the QI (the denominator) and, of these, which episodes received the specified care (the numerator). We calculated quality achieved as the percentage of episodes of care that met the action specified in the QI out of the episodes eligible for that QI.

RESULTS

We identified 538 patients with potential UI referrals or medications. Chart review excluded 408 patients for: UI not being the reason for referral ($n = 207$); previously treated UI (medication $n = 34$; other care $n = 161$); or other ($n = 6$). Our resultant sample included 130 new UI patients (40% of all UI patients) (Table 1).

Table 1 VA Women Veteran Sample Characteristics ($n = 130$)

Characteristic	N (percent) or mean (Std. Dev.)
Age in years, mean (std. dev.)	51.1 (14.8)
Age group (%)	
18–44 years	45 (34.6%)
45–64 years	63 (48.5%)
≥ 65 years	22 (16.9%)
Race/ethnicity (%)	
White, non-Hispanic	77 (59.2%)
Black, non-Hispanic	16 (12.3%)
Hispanic	14 (10.8%)
Other or unknown	23 (17.7%)
Overweight or obese (%)	100 (76.9%)
Type of UI (%)	
Stress UI only	33 (25.4%)
Urge UI/OAB only	51 (39.2%)
Mixed stress and urge UI	17 (13.1%)
Other type of UI, or, no data on type	29 (22.3%)

UI urinary incontinence, OAB overactive bladder

Trial Registration [ClinicalTrials.gov](https://clinicaltrials.gov) NCT01918072; VA Greater Los Angeles Healthcare System IRB approved protocol number PCC#2012-111579.

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Table 2 Quality of VA Primary Care for Urinary Incontinence—130 Women with New or Worsening Symptoms of UI

Domains	Quality indicator	Percent and number of eligible VA patients meeting quality indicator/number eligible
Relevant medical history assessment	Stress and urge symptoms assessed	79.2% (103/130)
	Previous pharmaceutical treatment assessed	11.5% (15/130)
	Fluid intake assessed for women with urge UI	14.7% (10/68)
Diagnostic evaluation	Pelvic examination performed or offered	50.0% (65/130)
	Urinalysis obtained	70.8% (92/130)
Treatment/management	Weight loss counseling conducted for overweight or obese women (BMI > 25)	87.0% (87/100)
	Anticholinergic therapy not offered for women with isolated stress UI	55.1% (38/69)
	Behavioral modification counseling (e.g., bladder training) for women with urge UI/OAB	30.9% (21/68)

UI urinary incontinence, BMI is body mass index, OAB overactive bladder, isolated stress UI stress UI without symptoms of urge UI or OAB

The quality of VA primary care for the 8 UI QIs had wide variation (Table 2). The percent of eligible episodes receiving the specified care ranged from 11.5% for previous pharmaceutical treatment assessed to 87.0% for weight loss counseling for overweight or obese women. Quality measured was high (70.8–87.0%) for three QIs and low (11.5–30.9%) for three QIs (Table 2).

DISCUSSION

This study found 40% of VA UI patients had new or bothersome symptoms prompting primary care treatment, but variable quality for that care. Both high and medium-to-low adherence was measured in all domains of UI management. VA care quality was similar to care quality in community primary care settings, where QI adherence ranged from 20 to 89%.² Thus, UI care quality concerns in community settings are also applicable to VA primary care.

Outside of VA, primary care-focused multi-component quality improvement interventions have improved UI care quality.⁴ VA should similarly consider provider education, educational material for patients and family members, and development and use of EHR-based tools. Such tools could include structured templates to guide UI-related history taking and physical exam prior to UI treatment or referral. VA has developed educational training programs in comprehensive women's care, such as women's health mini-residency.⁵ Our findings support the continued need for these initiatives.

There are limitations to our study. UI care that was not documented did not contribute to quality assessment. Our sample was limited to those who had a specialty care referral or UI medication prescription. A strength of our study was the comprehensiveness of the QIs.

There are myriad factors that potentially affect guideline adherence. More research should be directed toward identifying determinants of variations in guideline adherence, including site-level variation.⁶ Knowledge regarding these determinants could be used to develop or adapt UI care quality interventions for VA.

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Compliance with Ethical Standards:

Conflict of Interest: The authors declare no conflicts of interest. All authors are employed by the Department of Veterans Affairs.

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