Impact of Urinary Incontinence in the Long-Term Care Setting: A View From Directors of Nursing

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Background

- Urinary incontinence (UI), urgency, frequency, and nocturia are bothersome symptoms associated with overactive bladder (OAB)¹
- UI, often caused by OAB, is highly prevalent in residents of long-term care (LTC) facilities²
- symptoms,^{2,3} and up to 89% of LTC residents require assistance with toileting⁴
- LTC residents with UI are more likely than those without UI to have comorbidities—such as cardiovascular disorders, cognitive impairment, and urinary tract infection (UTI) polypharmacy, and increased healthcare resource utilization^{3,5,6}
- Managing UI and OAB is burdensome and costly to LTC facilities with respect to staff time, incontinence product use, and quality measures³

Objective

• To assess and quantify the impact of UI on staff, residents, care processes, and quality measures in LTC settings

Survey Overview

- A 70-question quantitative online survey was sent to directors of nursing (DONs) of LTC facilities through the National Association of Directors of Nursing Administration in Long Term Care (NADONA) and the American Association of Post-Acute Care Nursing (AAPACN) member listservs
- Survey questions were categorized into 6 sections (Figure 1)

Statistical Analysis

- All data are reported at an aggregate level and not at the individual skilled nursing facility
- Data are presented using descriptive statistics reported as means unless otherwise specified

- An estimated 65% to 70% of individuals ≥65 years old in LTC have bladder control

Methods

Background Screener

 Determined eligibility criteria: working in a skilled nursing facility for ≥1 year in a ≥100-bed facility with ≥80% LTC beds

Facility and Resident Characteristics

Electronic medical record use

Facility characteristics

Figure 1. Survey Topics*

Resident demographic and clinical information



UI and Resident Care

- Number of residents with UI
- Symptoms, severity, and management of UI



- UI medication use
- Reasons for treatment initiation/discontinuation



UI Impact on Quality Measures

• Falls, injuries, skin rashes, UTIs, urinary catheter use



UI Product Costs and Burden

 Mean monthly costs of incontinence products Time and costs associated with staff time to manage UI needs

LTC, long-term care; UI, urinary incontinence; UTI, urinary tract infection. *Respondents were asked to answer the questions for their LTC residents only and not their temporary rehabilitation residents.

Results

- The survey was conducted from February 27, 2020, to May 11, 2020
- 71 DONs completed the survey

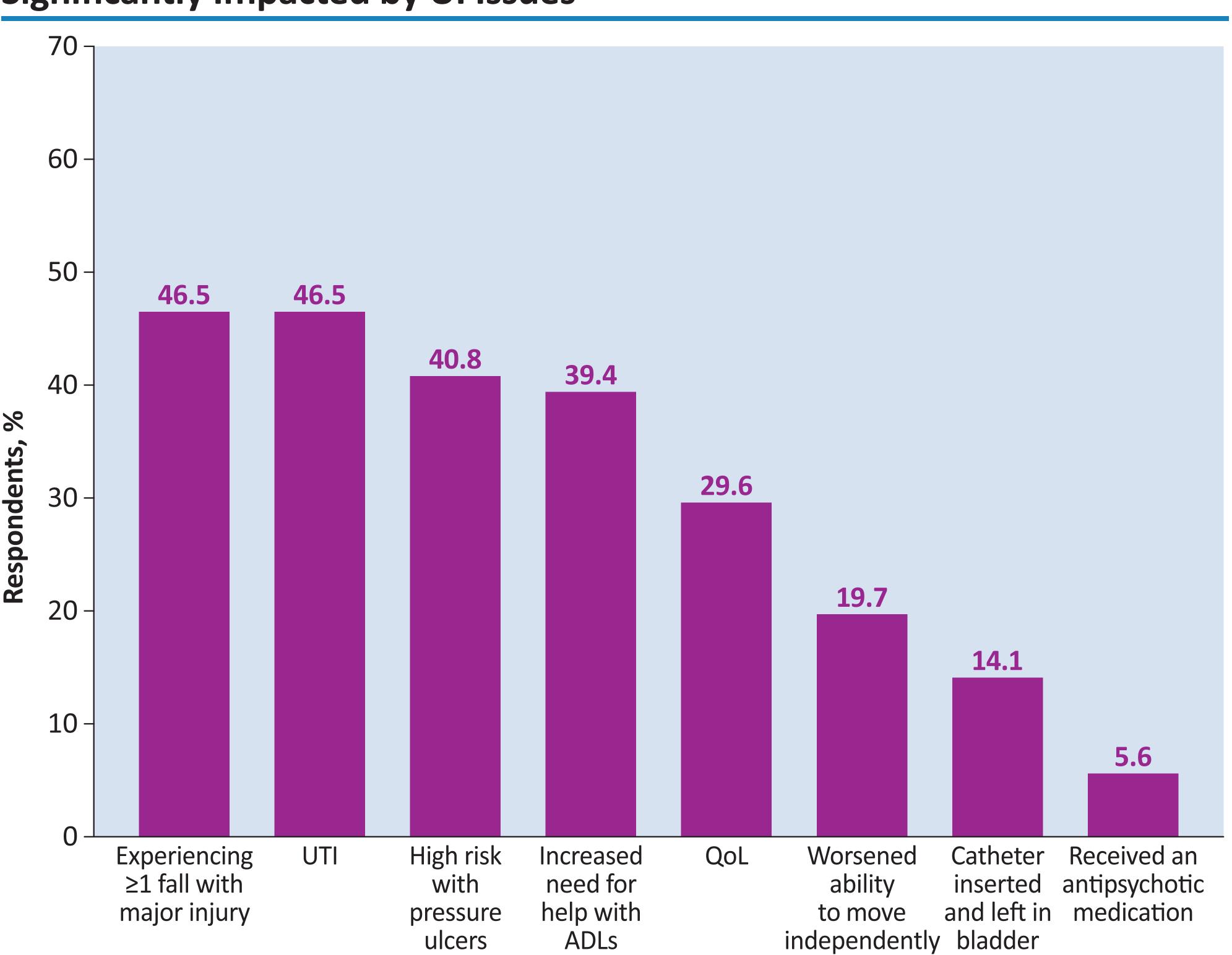
LTC Facility and Resident Characteristics

- Mean 115 residents per LTC facility; 68% female
- 62% with UI
- -75% were frequently or always incontinent
- -81% used incontinence products on an ongoing basis
- 46% with dementia (including Alzheimer disease)
- 43% with depression

Resident Care and UI Impact

- Mean 14.3 resident falls per month per LTC facility
- 36% of falls occur while attempting to access the bathroom
- Quality measures that were most significantly impacted by UI included UTI, falls with major injury, and pressure ulcers (Figure 2)

Figure 2. Quality Measures Considered by Respondents to Be Most Significantly Impacted by UI Issues



ADL, activity of daily living; QoL, quality of life; UI, urinary incontinence; UTI, urinary tract infection.

- 14.5% of residents with UI are treated with medication (Table 1)
- 75% of DONs were unaware of any link between anticholinergic medications and risk of cognitive issues/dementia

Table 1. Treatment Characteristics Among Residents With UI

Characteristic	Value*
Treated With Medication [†]	14.5
Residents who entered facility with a medication for UI	58.8
Oxybutynin or other anticholinergics/antimuscarinics	45.3
Mirabegron	15.0
Discontinued UI medication in the facility	14.4
Residents prescribed a medication for UI in the facility	41.2
Oxybutynin	37.2
Mirabegron	8.2
Reasons for Initiating UI Drug Therapy, n (%) [‡]	
Diagnosis of an incontinence-related condition (ie, OAB)	49 (69.0)
Resident or family request	38 (53.5)
Falls/fractures	19 (26.8)
High frequency of resident bathroom requests become burdensome/time consuming to staff	19 (26.8)
Change/decrease in MDS status	11 (15.5)
Other	6 (8.5)
Reasons for Discontinuing Drug Therapy, n (%) [‡]	
Doctor discontinued due to lack of efficacy	53 (74.6)
Consulting pharmacist recommended due to drug interaction risk/issue	42 (59.2)
Consulting pharmacist recommended due to safety/tolerability issues	39 (54.9)
Doctor discontinued due to safety/tolerability issues	29 (40.8)
Family or staff requested discontinuation	13 (18.3)
Other	5 (7.0)
Assessment of Improving Condition After Drug Therapy [‡]	
Subjective assessment [§]	41 (57.7)
Quantified/documented assessment	47 (66.2)
Resident articulation/verbalization of improvement	37 (52.1)
No formal process	16 (22.5)
Other	4 (5.6)

MDS, minimum data set; OAB, overactive bladder; UI, urinary incontinence

*Mean percentage unless otherwise noted. †Mean percentage of residents with UI, 62.2%. †More than 1 option could be selected, so percentage will not add up to 100%. §Perception of fewer incontinence products being used, fewer bathroom visits, etc. ||Tracked amount of fewer incontinence products, bathroom visits, etc.

Economic and Staff Burden

- Survey data indicated that UI is associated with considerable supply costs, as well as staff time and burden (Table 2)
- -54% of DONs considered the cost of UI products to be "higher" or the "highest" compared with other supplies for the LTC facility
- -59% of DONs reported that managing UI contributes to certified nursing assistant turnover

Table 2. UI Product Costs and Burden

Characteristic*	Overall (N=71)	Facility (n=46)	Chain (n=25)
Cost Burden			
Monthly cost of products for the facility, USD	\$5407	\$6179	\$3437
Mean monthly cost of UI products compared with other	er supplies for fac	cility, n (%)	
Highest	16 (22.5)	15 (29.4)	1 (5.0)
Higher	22 (31.0)	18 (35.3)	4 (20.0)
Average	32 (45.1)	17 (33.3)	15 (75.0)
Lower	1 (1.4)	1 (2.0)	0
Monthly laundering costs, USD	\$5497	\$5683	\$5023
Staff/Time Burden			
How often briefs/pads are checked for wetness, hours	2.5	2.5	2.3
Always changed, n (%)	4 (5.6)	3 (5.9)	1 (5.0)
CNA time spent managing UI needs, %	56.4	56.0	57.5
How many times (per shift) bed linen changed due to resident wetting accidents	1.7	1.8	1.5
Number of toileting assists per shift	25.5	20.8	37.6
Staff time for toileting assists, min	12.9	13.4	11.7
Turnover Burden			
Managing residents with UI, contribution to CNA turno	ver, n (%)		
Definitely a major cause	1 (1.4)	1 (2.0)	0
Probably a significant cause	18 (25.4)	15 (29.4)	3 (15.0)
Some cause	23 (32.4)	16 (31.4)	7 (35.0)
Unlikely a cause	27 (38.0)	17 (33.3)	10 (50.0)
No, definitely not a cause	2 (2.8)	2 (3.9)	0

CNA, certified nursing assistant; UI, urinary incontinence; USD, US dollars. *Values are mean percentage unless otherwise noted.

Conclusions

- Management of residents with UI is burdensome for LTC facilities and staff
- Our survey identified low treatment rates, low awareness of anticholinergic-related UI or OAB treatment risks, high incidence of falls due to urinary urgency, and high CNA turnover, as well as substantial financial impact of UI on supplies and staff time
- These results highlight the need for improved understanding of treatment and management in this population, additional methods to improve quality measures with respect to UI, and more LTC facility-wide initiatives and educational outreach

References 1. Gormley EA, et al. Diagnosis and treatment of overactive bladder (non-neurogenic) in adults: AUA/SUFU guideline. American Urological Association; 2019. 2. Gorina Y, et al. Vital Health Stat. 2019;3(43):1-78. 5. Ko Y, et al. Am J Manag Care. 2005;11(4 Suppl):S103-111. 6. Yehoshua A, et al. J Manag Care Spec Pharm. 2016;22(4):406-413. Acknowledgments Medical writing and editorial support was funded by Urovant Sciences (Irvine, CA). Funding Urovant Sciences (Irvine, CA). Disclosures Diane K. Newman and Richard G. Stefanacci are advisors to Urovant Sciences at the time the work was conducted.

