

# (MP27-02) Personal characteristics associated with 30-day recall of self-reported lower urinary tract symptoms



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## BACKGROUND

- Self-reported LUTS measures often use a recall period, e.g., “In the past 30 days...”
- Concordance between averaged daily reports and recalled reports is good overall
- However, concordance varies by item
- Some symptoms have higher proportions of individuals with recall bias
- We examined associations between 30-day recall of LUTS and personal characteristics

## METHODS

- Participants were recruited from 6 U.S. tertiary care sites
- They completed daily assessments for 30 days and a 30-day recall assessment at the end of the study month
- We evaluated 18 items representing 9 LUTS covering storage, voiding, and post-micturition (symptoms)
- Using general linear regression models for each item, the average of the participant’s daily responses was modeled as a function of their 30-day recall, the personal characteristic (e.g., age, symptom bother), and the interaction between the 30-day recall and the characteristic, adjusted for sex

## STUDY PARTICIPANTS

	Females (n=127)	Males (n=127)
Age at consent	57.7 (43.4-67.7)	62.3 (53.7-67.1)
BMI <sup>2</sup>	28.4 (24.9-35.8)	29.3 (26.0-32.5)
White, n (%) <sup>1</sup>	109 (87.2)	110 (86.6)
Hispanic or Latino, n (%) <sup>2</sup>	7 (5.8)	2 (1.6)
Education, n (%)		
Graduate degree	35 (27.6)	43 (33.9)
College degree	51 (40.2)	46 (36.2)
Some college or less	41 (32.3)	38 (29.9)
PROMIS Anxiety	51 (40-59)	48 (40-54)
PROMIS Depression	51 (41-58)	29 (41-54)
PANAS Positive Affect	29 (23-33)	30 (25-35)
PANAS Negative Affect	13 (11-17)	12 (10-17)

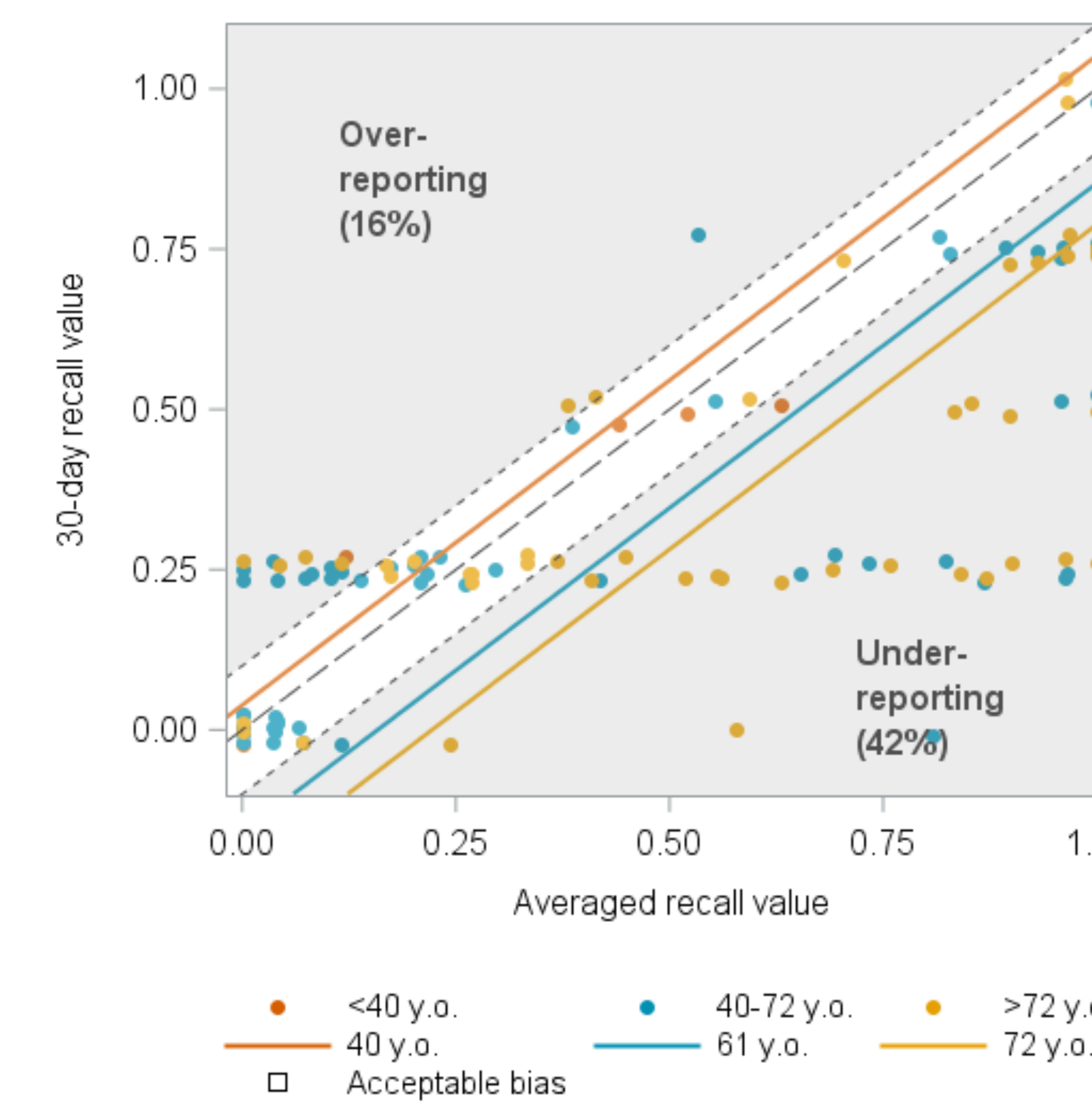
Median (IQR) unless otherwise noted (percent reported among non-missing observations)  
 IQR=interquartile range, BMI=body mass index  
<sup>1</sup> <1% missing, <sup>2</sup> 5-10% missing  
 PROMIS ranges 0-100, 50 (SD=10) is US average  
 PANAS ranges 10-50

## RESULTS

Symptom	Recall bias <sup>1</sup>	Associated characteristic(s)
Urgency incontinence	Underreporting	Older age, Lower anxiety
Stress incontinence	Underreporting	Higher negative affect, Lower anxiety
Other incontinence	—	—
Daytime frequency	—	—
Nocturia	Overreporting	Sex
Urgency incontinence	Overreporting	Lower symptom bother, anxiety, & depression, Higher symptom variability
Slow/weak stream	Overreporting	Lower symptom bother
Incomplete emptying	Overreporting	—
Post-micturition dribble	Overreporting	Lower symptom variability

<sup>1</sup> Systematic over- or under-reporting, where at least 25% of participants had bias of at least 10%

### A. Age & Urinary Incontinence



### B. Gender & Nocturia



The lines represent the estimated mean averaged daily recall value for a given 30-day recall value for (A) 40, 61, and 72 year old participants and (B) male and female participants. Lines in the upper triangle indicate over-reporting (males in B) while lines in the lower triangle indicate under reporting (61 and 72 year olds in A). The overlaid points demonstrate observed data for (A) participants <40, 40-72, and >72 and (B) males and females, which indicate sufficient numbers of participants in each category to support the conclusions of the associations of older age with underreporting urgency incontinence and male sex with over reporting nocturia.

## SUMMARY

- For half of the items we tested, at least a quarter of participants exhibited recall bias
- For 6 common LUTS, recall bias was associated with one or more patient characteristics, specifically with underreporting of incontinence (age, anxiety, negative affect) and overreporting of other LUTS (sex, symptom bother, symptom variability, anxiety, depression)
- Urologists rely on the accuracy of self-reported LUTS for clinical decision making, to guide treatment options, and to gauge treatment responsiveness