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# A Patient's Perspective on Lower Urinary Tract Symptoms

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# A Patient's Perspective on Lower Urinary Tract Symptoms

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October-November, 2017

Preceptors: Dr. Justin Karlitz-Grogin and Dr. William Cove

# The Problem

- In 2010, there were approximately 19 million unique visits to urologists in the United States<sup>1</sup>
  - 30% of the visits involved lower urinary tract symptoms (LUTS)
- The overall prevalence of LUTS in males is 10.3%<sup>2</sup>
  - Among males, prevalence is 2.7% at 45-49 years old and increased to a maximum of 24% at 80 years, with the incidence increasing linearly with age
- In 1992, the American Urological Association (AUA) developed a symptom index to assess the severity of seven LUTS associated with benign prostatic hyperplasia
  - The symptom index score is recommended to be used as a measurement for the objective assessment of symptoms

Project Objective:

**Should each of the seven symptoms be weighted equally in the AUA symptom index or are there particular symptoms that patients view as more important and, thus, should contribute more to the symptom index?**

# Public Health Cost

- The estimated annual health care cost of LUTS in the United States is 3.9 billion dollars<sup>3</sup>
- Beyond a direct monetary cost, LUTS are also associated with a significantly reduced quality of life, an impairment in instrumental activities of daily living, and depression<sup>4</sup>
- By 2030, 20% of the U.S. population is estimated to be 65 years or older<sup>5</sup>
  - It is reasonable to expect that the prevalence of LUTS will increase as the population ages
  - LUTS will continue to account as an increasing burden on the health care system if no changes to the existing clinical approach are made

# Community Perspective

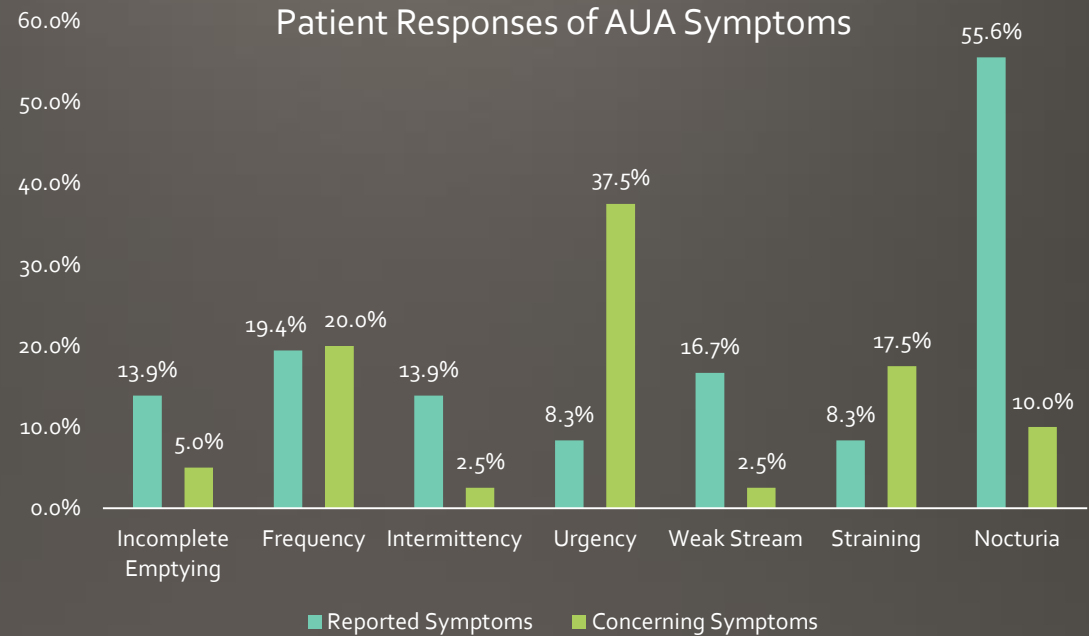
- Community Interviews
  - Urology Physician
  - Family Medicine Physician
  - Administrative Medical Assistant
- General Summary
  - The misconception that urinary symptoms are inevitable with aging abound
  - LUTS rarely come up as a chief complaint but rather are uncovered via a review of systems
  - There is a stigma surrounding conversations about urinary difficulties
  - Patients minimize their urinary symptoms even when they significantly impact their quality of life
  - The AUA symptom index is better for initiating a conversation than tracking progress over the long term. It is not useful for guiding clinical management.
  - A majority of patients that complain of LUTS do so at a stage when chances for meaningful intervention are low

# Intervention & Methodology

- Methods
  - Data Collection – anonymous oral survey
    - Inclusion criteria: patients  $\geq 18$  years old seen at Waterbury Medical Center and CVMC ExpressCare Waterbury from October 18<sup>th</sup>-November 15<sup>th</sup>, 2017
    - Exclusion criteria: patients who refused to participate in survey
  - Patient Responses
    - Previous urologic evaluation
    - Urinary symptoms that patient is currently experiencing
    - Urinary symptom(s) that would most concern patient and lead them to seeking out further evaluation from their PCP or a urologist
- Analysis
  - Descriptive statistics

# Data & Results

- Total number of patients included: n = 45
- Total number of patients completed survey: n = 36
- Patient Responses
  - Prior Urologic Evaluations: n = 13 (36.1%)
  - Number of LUTS
    - None = 12 patients (33.3%)
    - One = 11 patients (30.6%)
    - Two to Three = 10 patients (27.8%)
    - Four to Five = 3 patients (8.3%)
  - Distribution of Symptoms
    - Incomplete Emptying = 5 patients (13.9%)
    - Frequency = 7 patients (19.4%)
    - Intermittency = 5 patients (13.9%)
    - Urgency = 3 patients (8.3%)
    - Weak Stream = 6 patients (16.7%)
    - Straining = 3 patients (8.3%)
    - Nocturia = 20 patients (55.6%)



- Concerning Symptoms: 40 unique responses
  - Incomplete Emptying = 2 (5.0%)
  - Frequency = 8 (20.0%)
  - Intermittency = 1 (2.5%)
  - Urgency = 15 (37.5%)
  - Weak Stream = 1 (2.5%)
  - Straining = 7 (17.5%)
  - Nocturia = 4 (10.0%)
  - None = 2 (5.0%)

# Conclusions & Limitations

- Conclusions
  - 24 patients (66.7%) reported at least one LUTS
  - While nocturia was the most common symptom (55.6%), there was not a corresponding desire to seek evaluation for it (10.0%)
  - Urgency (37.5%) was the urinary symptom that caused the most distress to patients, while intermittency and weak stream (2.5%) caused the least distress
  - Patients are more concerned about developing certain LUTS—urgency, frequency, and straining—over others. Health care practitioners should focus on these symptoms to ensure both earlier detection and better patient outcomes.
- Limitations
  - Only categorical data was collected, from which statistical analysis was not able to be performed
  - Prior urological evaluation should have been in the inclusion criteria, however that would have resulted in an unremarkable sample size of 13 patients. By including any patient  $\geq 18$  years old, responses may have been influenced by personal bias and misinformation as opposed to experiences with LUTS.
  - It is hard to evaluate the ultimate effect that this project will have on the practitioners presented to. One can only hope that the subjectively charismatic presentation made a lasting impression that will result in changed clinical behaviors and not instead be lost to the unrelenting winds of time.



# Recommendations for Future Initiatives

- Expand the study to include epidemiological and quantitative data to ensure for more robust research
  - Ask for symptom severity and effect on quality of life, increase sample size, include LUTS not included in the AUA symptom index, gather age at which symptom started
- Reorganize the urinary review of systems on EMRs so that the concerning symptoms are more visible
- Create a written survey for easy dissemination and data tracking
- Expand the reach of the project by sharing it with other primary care practitioners in the UVM Health Network

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