

**Measuring to improve: patient reported outcomes during the first year after prostatectomy in a statewide collaborative**

Gregory Auffenberg\*, Rodney Dunn, Tae Kim, Ann Arbor, MI, James Peabody, Mani Menon, Detroit, MI, David Miller, for the Michigan Urological Surgery Improvement Collaborative, Ann Arbor, MI

**INTRODUCTION AND OBJECTIVES:** The Michigan Urological Surgery Improvement Collaborative established its patient reported outcomes program (MUSIC PRO) with the dual objectives of systematically measuring and improving population-level urinary and sexual function outcomes after radical prostatectomy (RP). Herein, we report statewide outcomes from the first-year after RP and examine differences in patient-reported urinary function (UF) across surgeons to identify initial improvement opportunities.

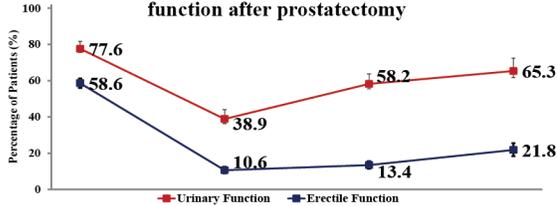
**METHODS:** Initiated in 2014, MUSIC PRO involves electronic collection of validated questionnaire data from men treated in 23 diverse academic and community urology practices. Men are surveyed at baseline, 3, 6, 12, and 24 months after RP. For all MUSIC PRO patients, we determined the proportion reporting good overall UF (score range 0-21, good function  $\geq 17$ ) and good overall erectile function (EF) (score range 0-30, good function  $\geq 22$ ) at baseline and during the first year after RP. After limiting the cohort to include only men treated by surgeons with  $\geq 10$  patients having good baseline UF, we evaluated surgeon-specific differences in the proportion of patients returning to good UF by 3 months post-operatively.

**RESULTS:** From 4/2014 through 10/2016, 1,593 and 1,447 men completed baseline UF and EF surveys, respectively. Throughout the first year, response rates varied from 83-97%. At baseline, 77.6% of men reported good UF. While only 38.9% of men report similar good UF at 3 months post-RP, this proportion decreased to 10.6% at 3 months, and then improved progressively to 21.8% after one year (Figure 1a). Across 21 MUSIC surgeons, there was broad variation in the proportion of patients reporting a return to good UF by 3 months (range 0-63.9%  $p < 0.001$ ) (Figure 1b).

**CONCLUSIONS:** Across the state of Michigan, most men recover baseline levels of good urinary function, but not sexual function, during the first 12 months after radical prostatectomy. Surgeon-specific differences in short-term urinary control outcomes highlight a quality improvement opportunity being addressed through continued measurement, technical assessments and refinements, and survivorship interventions.

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**Figure 1a. Statewide rates of good urinary & erectile function after prostatectomy**



	Baseline	3 months	6 months	12 months
UF n =	1593	1364	1277	718
EF n =	1447	1208	1057	546

**Figure 1b. Surgeon-specific variation in rates of good urinary function 3 months after surgery**

