

Use of pelvic floor rehabilitation in a statewide quality improvement collaborative: Patient and cost characteristics

Introduction: Clinical trials have suggested that pelvic floor rehab (PFR) can improve early urinary control following radical prostatectomy. However, the details surrounding its use in clinical practice and its contribution to cost and value are not well understood. In this context, we examined the use of PFR in a diverse statewide quality improvement collaborative, including patient characteristics, implementation patterns, and costs.

Methods: Using registry data from the Michigan Urological Surgery Improvement Collaborative and claims data from Michigan Value Collaborative, we identified all men who underwent a laparoscopic radical prostatectomy from 04/2014 through 11/2015 with insurance from Medicare or a large commercial payer. All men reported pre-operative urinary function using the STAR questionnaire with scores ranging from 0 (worst) to 21 (best). We compared patient demographics, cancer characteristics, pre-operative urinary function, and 90-day total episode costs of patients who did and did not receive PFR.

Results: 142 men met our inclusion criteria, of whom 53 (37%) received pelvic floor rehab. There were no differences in patient or cancer characteristics among patients who did and did not receive PFR. Patients initiated PFR an average of 34 days after discharge (range 15-83 days). Mean baseline urinary function scores

were worse for PFR patients (17.8 vs 19.3, $p=0.01$). Ninety-day episode costs were similar in the two cohorts, with PFR contributing an average of \$422, or 3% of total episode costs.

Conclusion: In a statewide collaborative, PFR is used in the minority of cases, but its use appears to be concentrated among patients with worse baseline urinary function. Incremental costs from PFR are modest, accounting for 3% of 90-day episode costs. In the era of value-based care, decisions about further expanding this therapy will depend on studying its comparative impact on post-operative patient reported outcomes in large groups of non-clinical trial patients.

Table 1: Patient Demographics, Cancer Characteristics, Urinary Function, and Costs with and without Pelvic Floor Rehab after Prostatectomy

	Pelvic Floor Rehab	No Pelvic Floor Rehab	p-value
A. Demographics			
No. pts (%)	53 (37.3)	89 (62.7)	
Mean age (years)	63.4	62.2	0.32
Race (%)			0.31
White	92.5	84.3	
Black	5.7	9.0	
Other	1.9	6.7	
BMI (%)			0.83
<25	5.9	9.3	
25-29	49.0	47.7	
30-34	39.2	34.9	
≥35	5.9	8.1	
No Charlson comorbidity (%)			0.48
0	0.0	0.0	
1	3.8	9.0	
2	28.3	24.7	
3+	67.9	66.3	
Biopsy Gleason score (%)			0.19
≤6	34.0	20.2	
7	54.7	66.3	
8-10	11.3	13.5	
Pathologic T stage (%)			0.83
T2	56.6	58.4	
T3	43.4	41.6	
Nerve sparing (%)			0.16
None	9.6	7.9	
Unilateral	0.0	6.7	
Bilateral	90.4	85.4	
Baseline urinary score	17.8	19.3	0.01
90-day total episode cost	\$14,510	\$14,167	0.47
Rehab costs	\$422	\$0	<0.01