

Paper #1

Mobile Patient Engagement Platforms May Help Reduce 30-Day Readmission Rates in Arthroplasty Patients

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Introduction: Online patient engagement platforms (PEP) can provide asynchronous oversight of patients and alerts to the treatment team. The increased connectivity with patients is thought to favorably affect patient management. Our aim was to report the impact of PEP use on non-elective 30-day readmission rates (NE30) at an academic arthroplasty practice.

Methods: We prospectively collected data on all consecutive arthroplasty patients from 01/2016-12/2016 as part of a PEP trial. NE30 rates were compared between groups (active/inactive PEP). Demographic/surgical data from the electronic health record was used to cross-reference and supplement PEP utilization data.

Results: 612 of 764 (80%) eligible patients were enrolled in PEP and 554 activated their accounts. These patients submitted 5787 messages to the care team. The PEP sent 14497 “check ins” to patients and generated 859 alerts in 513 patients. 69 “red” alerts in 48 patients led to 39 documented calls resulting in 1 unscheduled clinic visit and 8 referrals to the ED (3 with GI symptoms, 5 for DVT evaluation). 7/39 (18%) patients contacted had ultrasounds ordered (all negative); no patients were admitted. NE30s amongst active PEP patients were 7/554 (1.3%) and 9/210 (4.3%) for non-active patients ($p=0.01$).

Conclusions: Readmission rates were significantly lower in patients with active PEP accounts. Further research is required to determine if using the PEP avoided readmissions or resulted in unnecessary medical procedures.

Notes
