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## The Validity of Patient-Reported Short-Term Complications following Total Hip and Knee Arthroplasty


Leslie R. Harrold

*University of Massachusetts Medical School*

*Et al.*

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## **The Validity of Patient-Reported Short-Term Complications following Total Hip and Knee Arthroplasty**

Leslie Harrold<sup>1</sup> MD MPH, Scott Pascal<sup>1</sup>, David Ayers<sup>1</sup> MD, Courtland Lewis<sup>2</sup> MD, Regis O'Keefe<sup>3</sup> MD PhD, Patricia D. Franklin<sup>1</sup> MD MBA MPH

<sup>1</sup>UMass Medical School department of Orthopedics and Physical Rehabilitation, Worcester, MA; <sup>2</sup>Hartford Hospital, Hartford CT, <sup>3</sup>University of Rochester School of Medicine

Corresponding Author: Leslie Harrold MD MPH, Associate Professor  
Department of Orthopedics and Physical Rehabilitation, UMass Medical School  
Phone: 508-856-6139; Email: leslie.harrold@umassmed.edu

**Introduction:** Given the lack of national data on outcomes of on patients who undergo total joint arthroplasty (TJA) and the limitations of hospital databases to capture information on patients who seek post-TJA care elsewhere, there is growing interest in using patient self-report to identify possible complications following surgery. We examined the concordance between patients self-report of potential short-term complications with review of available medical records as well as the location of the reported post-operative care.

**Material & Methods:** Patients undergoing primary hip or knee arthroplasty from 7/1/11 through 12/3/12 participating in a tertiary care center were identified. Patients completed a 6-month post-operative survey regarding needing evaluation at an emergency department, day surgery or hospitalization for possible medical or mechanical complications and the location of care. We reviewed available inpatient and outpatient medical records to identify the location of postoperative care as well as the validity of patient self-report (sensitivity, specificity, positive predictive values and negative predictive values).

**Results:** There were 413 patients who had 431 surgeries and completed the 6-month questionnaire. Patients reported 40 medical encounters including emergency department, day surgery or inpatient care resulting in a 9% reported complication rate, of which 20% occurred at outside hospitals Overall patient self-report of emergency department, day surgery and inpatient care for possible complications was both sensitive (82%) and specific (100%). The positive predictive value was 100% and negative predictive value 98%.

**Conclusion:** Given the prevalence of events requiring care at outlying hospitals and the accuracy of self-report, methods that directly engage patients can augment current surveillance procedures.