May 16th, 1:45 PM

**Direct-to-Patient PRO Collection to Support Quality Improvement in TJR**

Hua Zheng  
*University of Massachusetts Medical School*

*Et al.*

---

**Let us know how access to this document benefits you.**

Follow this and additional works at: [https://escholarship.umassmed.edu/cts_retreat](https://escholarship.umassmed.edu/cts_retreat)

Part of the Health and Medical Administration Commons, Health Services Administration Commons, Health Services Research Commons, Orthopedics Commons, and the Translational Medical Research Commons

**Repository Citation**

[https://doi.org/10.13028/8crs-x794](https://doi.org/10.13028/8crs-x794). Retrieved from [https://escholarship.umassmed.edu/cts_retreat/2017/posters/93](https://escholarship.umassmed.edu/cts_retreat/2017/posters/93)

**Creative Commons License**

This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License. This material is brought to you by eScholarship@UMassChan. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Research Retreat by an authorized administrator of eScholarship@UMassChan. For more information, please contact Lisa.Palmer@umassmed.edu.
DIRECT-TO-PATIENT PRO COLLECTION TO SUPPORT QUALITY IMPROVEMENT IN TJR

Hua Zheng, PhD; Celeste Lemay, RN, MPH; Wenyun Yang, MS; Patricia Franklin, MD, MBA, MPH
University of Massachusetts Medical School

Introduction: Patient-reported outcomes (PROs) are widely used in orthopedic clinical research to evaluate quality of care. However, it is difficult to capture complete post-operative PRO data through surgeon office visits. The UK and Sweden collect post-TJR PRO measures directly from patients in their homes. We compared two US post-operative PRO collection processes—PROs in clinic at scheduled office visits and direct-to-patient collection, to evaluate timing and completeness of both approaches.

Methods: At a large TJR center that has collected PROs at office visits routinely for years, post-TJR patients complete a PRO survey on a computer at follow-up clinic visits. In contrast, the national FORCE-TJR cohort manages post-operative PRO surveys across dozens of offices by sending PROs to patients directly via web-based questionnaires or scannable paper forms. We calculated post-operative PRO response rates and timing from these two approaches and compared patient physical outcomes between them.

Results: In the clinic, 892 patients had TJR surgery during the study period. Of these, 392 (44%) completed post-operative surveys; 115 (29%) between 5 months and 7 months after surgery, and 85 (22%) after 7 months. Direct to patient PRO surveys were centrally distributed in month 5 after surgery. Of 11,702 TJR patients, 8283 (71%) completed the PRO survey within 5 to 9 months post-op. Of these, 90% were returned between 5 and 7 months. SF36 PCS scores were comparable between these two approaches.

Discussion: While PRO collection at the office visit can support individual patient care decisions, patients return to the surgeon office at varied time points after TJR based on their recovery progress and convenience. Direct to patient PRO collection with appropriate retention processes can lead to uniform data timing and optimal completeness. Quality monitoring programs will benefit from consistent data across providers and should consider these factors in designing PRO procedures.

Contact:
Hua Zheng, PhD
Department of Orthopedics and Physical Rehabilitation
University of Massachusetts Medical School
Hua.Zheng@umassmed.edu