

## Better Physician Ratings from Discussing PROs with Patients

**Case Study** · June 20, 2018

**Jennifer Freel, PhD, MBA, CAF, Johanna Bellon, PhD, MS, CFA & Janel Hanmer, MD, PhD**

UPMC (University of Pittsburgh Medical Center)

The UPMC orthopaedic service line began routine collection of patient-reported outcomes (PROs) from all patients seeking orthopaedic care in 2017. In a survey of patients who had seen a foot and ankle specialist, greater shares of patients who report that their physician discussed their PROs with them reported top-box scores for physician communication and shared decision-making from the Clinician and Group Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS) survey.

There is a correlation between PROs and patient satisfaction; patients who reported that physicians were discussing their PRO responses during office visits reported significantly better ratings of physician communication and shared decision-making.

### KEY TAKEAWAYS

- 1 Patient-reported outcomes can be routinely collected and reported in the electronic health record.
- 2 Simply collecting patient-reported outcomes is not sufficient — clinicians must also discuss the responses during visits.

**3** On average, patients who report that their patient-reported outcome responses were discussed during a visit provide higher ratings for doctor communication and shared decision-making.

**4** Physicians may need training to discuss patient-reported outcome results with patients.

## The Challenge

As part of the federal Comprehensive Care for Joint Replacement episode-based payment program, UPMC began collecting PROs from patients undergoing elective joint replacement in 2015. These data were used both to fulfill mandatory reporting to the Centers for Medicare and Medicaid Services and to allow clinicians to track improvement in hip and knee function from the patients' perspective. Because of the operational and financial success of this program, the UPMC orthopaedic service line leadership expanded PRO collection to all patients presenting for care in 35 orthopaedic practices across all orthopaedic specialties in June of 2017.

The use of PROs originated in academic research arenas, but their use has expanded into both clinical care and population health management. Recently, PROs have become a central focus in health care outcomes with a movement toward patient-centeredness as embodied by the Patient-Centered Outcome Research Institute.

*With the expansion of PRO collection, and recognizing the potential to improve patient outcomes, UPMC stakeholders performed a quality improvement project to evaluate the impact that routine electronic collection of PROs has on patient perceptions of their orthopaedic care, using the foot and ankle subspecialty as a case study.”*

The widespread use of electronic health records (EHRs) has reduced the burden of capturing, analyzing, and acting upon PROs. For example, a recent randomized control trial found that patients undergoing chemotherapy for solid tumor cancers who self-reported symptoms electronically to a nursing team were less likely to visit the emergency room, remained on chemotherapy regimens longer, and survived longer than the standardized care group of patients.

PROs have also been shown to improve patient-physician communication and may help individualize treatment for patient-specific concerns or symptoms; these findings are primarily in oncology and behavioral health contexts.

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## The Goal

Our goal was to better understand the association between PRO clinical use with patient engagement and patient experience in a general orthopaedic population.

## The Execution

The UPMC Patient-Reported Outcomes Center creates systems for collecting PRO questionnaires from patients through EpicCare. UPMC began PRO collection through Epic in 2012 with formal creation of the PRO center in 2017, though many of the center functions were informally in place before that time. The Center's purpose is to improve the management of individual patients, clinical services, and population health using patient-reported outcomes.

*Greater shares of respondents who reported completing PROs and discussing them with their doctor gave top-box scores for provider communication (94%) compared to those who completed but did not discuss PROs (83%) and those who did not complete the PROs (84%).”*

The Center's services include advising on the selection and collection of PROs, managing the integration of PROs into the EHR, and developing methods and reports for clinical use, quality assurance/improvement, and population management. UPMC has been at the national forefront of implementing this functionality with 58 clinical questionnaires in use and 273 active clinic locations live with PRO collection. Patients enter data directly into their EHR by completing questionnaires via the MyUPMC patient portal or an office-based tablet computer.

An electronic PRO implementation has many advantages, including:

1. patient data flow instantaneously into the EHR, eliminating the need for staff time dedicated to data entry and the potential of data entry error;
2. questionnaires can be completed in advance of a scheduled visit so the time spent filling out questionnaires in the office is reduced;
3. providers can trend patient responses to see improvements or declining health during treatment;
4. these data fulfill requirements from regulatory agencies and payers, such as measures required before and after a procedure or surgery; and
5. remote administration of questionnaires via the MyUPMC patient portal allows collection of follow-up questionnaires outside of regular office visits at predetermined intervals.

The UPMC orthopaedic service line was an early adopter for the electronic collection of PROs in the spine, foot and ankle, and adult joint reconstruction subspecialties. In 2017, the department proposed to expand its collection and use of PROs to include all general orthopaedic care and its subspecialties, such as sports medicine, hand and upper extremity, orthopaedic trauma, and musculoskeletal oncology. For this study, we focused on patients presenting to foot and ankle specialists.

All patients age 18 and older who saw a foot and ankle specialist between June 2017 and September 2017 with an email recorded in the EHR were sent an invitation to complete an online survey about their orthopaedic office visit. The survey included:

1. the Altarum Consumer Engagement (ACE) questionnaire, which measures a patient's commitment to maintaining daily health behaviors, ability to navigate the health care system, and skill at looking up medical information;
2. two CG-CAHPS survey subsections, which measure patient perceptions of physician communication and shared decision-making;
3. a question assessing if the patient remembered completing PRO questions (which included a screen shot reminder), and, if they did complete the PRO questions, then a follow-up question; and
4. asking if their doctor discussed the PRO responses with them.

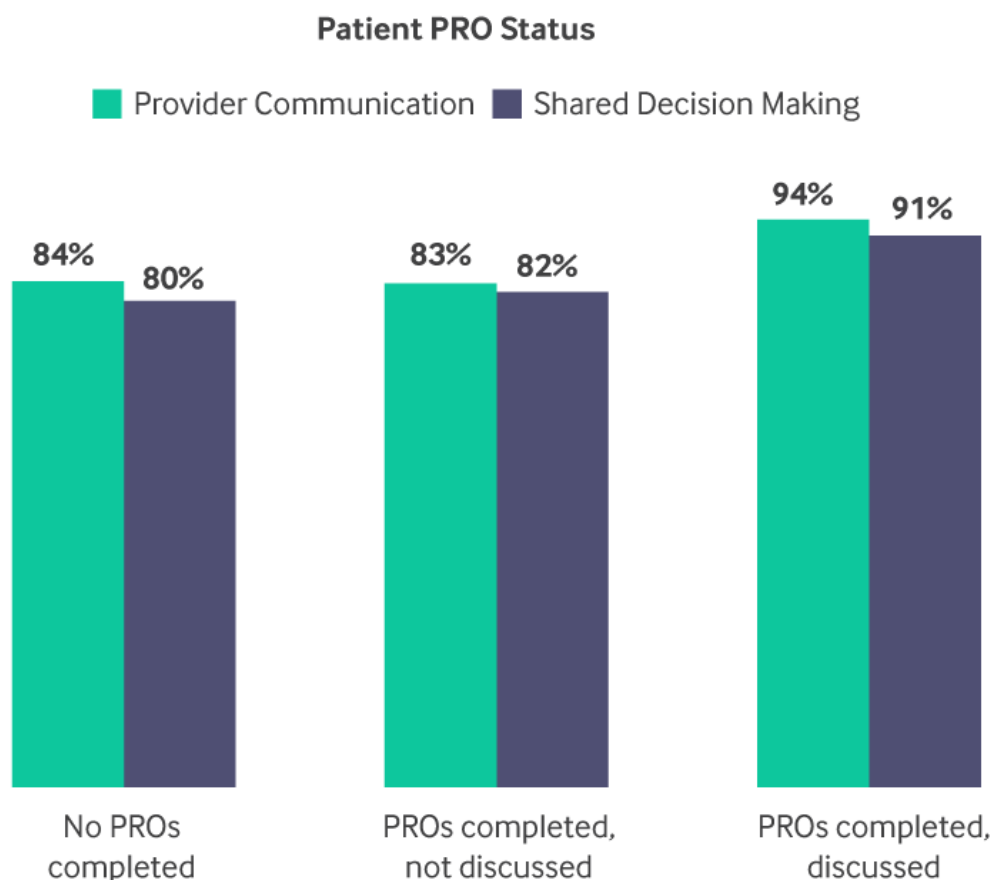
## **The Team**

The evaluation team comprised the study authors (Medical Director of UPMC Patient-Reported Outcomes; Director of Innovative Quality Care Programs, UPMC; Senior Director of Quality

Analytics and Performance, UPMC) in collaboration with the UPMC Chief Quality Officer and key orthopaedic stakeholders (Vice Chairmen of Education, Orthopaedics; Vice Chair of Clinical Outcomes Research, Department of Orthopaedic Surgery).

## PROs Associated with Better Top-Box Satisfaction Scores

There is a correlation between patient reported outcomes and patient satisfaction. Patients who reported that physicians were discussing their PRO responses during office visits reported significantly better ratings of physician communication and shared decision-making in CG-CAHPS surveys.



Source: The Authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

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### The Metrics

Invitations were sent to 4,455 patients who had a visit with one of 63 providers; 558 people completed the survey (response rate 12.5%) of whom 150 reported not completing the PRO measures, 154 reported completing the PRO measures but not discussing them with their doctor, and 254 reported both completing the PRO measures and discussing them with their doctor.

ACE scores that measured the patient's commitment to health and ability to look up medical information were not statistically different between groups. But ACE scores that measured the patient's ability to navigate the health care system were statistically significantly different and slightly higher in the group that reported completing PROs and discussing them with their doctor compared to the group that reported completing PROs but not discussing them with their doctor.

*Success requires both the efficient collection of PROs from patients and the ability for physicians to address their responses during the visit.”*

The percent of CG-CAHPS scores with top box of physician communication were statistically different between groups. Greater shares of respondents who reported completing PROs and discussing them with their doctor gave top-box scores for provider communication (94%) compared to those who completed but did not discuss PROs (83%) and those who did not complete the PROs (84%). The group not completing PROs and the group who completed PROs but did not discuss them with their doctor were not statistically different.

A similar pattern was seen in CG-CAHPS shared decision-making scores. Greater shares of respondents who reported completing PROs and discussing them with their doctor gave positive scores for shared decision-making (91%) compared to those who completed but did not discuss PROs (82%) and those who did not complete the PROs (81%). The group not completing PROs and the group who completed PROs but did not discuss them with their doctor were not statistically different.

## **Where to Start**

Success requires both the efficient collection of PROs from patients and the ability for physicians to address their responses during the visit. Based on our experience, for efficient collection of PROs, we recommend direct integration into the EHR, the ability to complete questionnaires before a visit, and tablet-based collection in waiting rooms. This enables physicians to immediately access responses and scores in the electronic record.

## **Next Steps**

Future work will focus on educating physicians to explicitly discuss PRO results during visits.

## Jennifer Freel, PhD, MBA, CAF

Director of Innovative Quality Care Programs, Wolff Center at UPMC

## Johanna Bellon, PhD, MS, CFA

Senior Director of Quality Analytics and Performance, Wolff Center at UPMC

## Janel Hanmer, MD, PhD

Assistant Professor of Medicine; Medical Director, UPMC Patient-Reported Outcomes Center

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DISCUSS

HIDE 2 RESPONSES

+ ADD A RESPONSE

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## Jerry McShane MD

I would imagine there are many things that could be discussed that would drive the Physician Metric of communication. This being probably one of the most important. Any engagement strategy could have the same impact; if one engaged the patient with listening and answers

*June 27, 2018 at 9:52 am*

REPLY

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## Melissa Robinson

Agreed Dr. McShane. As a patient who is not in the medical field, this does not mean that I am incapable of understanding medical terminology nor participating in medical decisions pertaining to my healthcare treatment. Discussing the patient's symptoms/concerns should always be a vital part of the examination process and what used to be done prior to the onset of laboratory only driven decisions.



When I was a child, I remember our family doctor actually asking me, and of course my parents, what symptoms I was experiencing each time I had to see him. My in-office care and/or follow up treatment was not solely based upon what the lab work showed but also included my doctor's clinical diagnosis based on my exam and our verbal input.

In our current medical climate, I have had doctors argue with me about symptoms I have self-reported, with one physician telling me that it was impossible for me to have "those" symptoms because the lab work doesn't support it. I even had a male OBGYN patronize me by saying, "Now Ms. Robinson, c-sections aren't THAT bad and certainly aren't as painful as you are describing." Really? My response was, "When was YOUR last c-section?? Oh that's right, YOU'VE never had one so do not patronize me with your dismissive attitude!" In my opinion, this is not care. It shows blatant disregard for my health, comes off as having a blase' attitude toward me, and dismisses me completely from participating in my treatment.

Most patients want to be able to openly discuss their concerns with their doctor but many healthcare professionals do not want to hear from patients. No, we did not earn our medical degrees through Google; however, that doesn't mean we aren't intelligent enough to look up medical information. PubMed is a wonderful tool and one I frequently use. If healthcare professionals would take a few minutes to listen to their patients, they may just be surprised at what their patients have to say.

*July 26, 2018 at 12:37 pm*

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