

Capturing the Voice of the Patient: Using PROMs Improves Shared Decision Making


Mass General Brigham


HEALTHCARE ORGANIZATION

- Large Academic Integrated Delivery System
- Accountable Care Organization

PRODUCTS

- Health Catalyst® Analytics Platform, including the Late-Binding™ Data Warehouse

SERVICES

- Professional Services
- Installation Services

EXECUTIVE SUMMARY

Healthcare suffers from an overabundance of metrics, many of which are used to determine payment in several federal healthcare programs. While these metrics are intended to improve the quality of care that patients receive across the country, they provide no insight into how disease and treatment impact patients' daily lives.

Mass General Brigham (formerly Partners HealthCare) recognized that while it had data for patient outcomes such as mortality and morbidity, and an abundance of data for process measures, it did not have data about patient symptoms, function, or quality of life. To improve care, the healthcare system needed to engage patients to understand the impact of treatment on how patient's felt and functioned following treatment.

Mass General Brigham implemented a patient-reported outcome measures (PROMs) survey program to collect this data. The organization now has several years of experience collecting PROMs and is gaining insight into how to successfully collect and use the information to improve shared decision making with patients and their providers.

- Patients have completed nearly 300,000 questionnaires in more than 20 specialties and over 75 clinics at most of Mass General Brigham's hospitals.
- Clinicians actively use this data to facilitate shared decision-making with their patients.

TOO MANY METRICS; LIMITED INSIGHTS

Recently, the National Quality Forum's Measure Applications Partnership suggested the federal government consider eliminating one-fifth of the metrics used to determine payment in several federal healthcare programs, as the measures do not improve care quality or outcomes for patients.¹ Hospital rating programs also abound, with more than 1,600 medical centers that can claim they are on a "top 100," "grade A," or "best" hospital list.²



With this information, I can look at the outcomes of 5,000 patients for a particular type of surgery, and speak with my patient about the expected outcomes and recovery.

Neil Wagle, MD, MBA
Associate Chief Quality Officer
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Despite an overabundance of measures, clinician understanding—including the availability of data about the impact of disease and treatment on patients' daily lives—is somewhat poor. Patient-reported outcomes measures (PROMs), reports of the patient's health condition that comes directly from the patient, can improve communication and shared-decision making between clinicians and patients, improving outcomes and patient satisfaction with care.³

Mass General Brigham is a not-for-profit healthcare system committed to patient care, research, teaching, and service to the community, locally, and globally. Mass General Brigham aims to provide superior care that is patient and family centered, accessible, and equitable.

PATIENT-REPORTED OUTCOMES YIELD MORE MEANINGFUL DATA

Mass General Brigham strives to provide optimal care by delivering the appropriate intervention in the best way possible, while avoiding costly and unnecessary activities. As part of this mission, Mass General Brigham recognized that while it had data for patient outcomes, such as mortality and morbidity, and an abundance of data for process measures, it lacked data about patient quality of life.

For example, Mass General Brigham could see and compare morbidity and mortality rates among clinicians doing similar procedures, but couldn't see how much better patients could walk after knee replacement or the rate of incontinence after a prostatectomy. This was an important decision-making factor when patients chose whether to have a procedure and which physician to work with.

To measure what matters most to patients, Mass General Brigham needed to engage patients with questions about their symptoms, functional status, and mental health. However, paper and pencil questionnaires (the most common method) were not effective, as they made it difficult to gather and trend patient responses over time. To collect meaningful patient quality-of-life data, Mass General Brigham needed to record data electronically, allowing the healthcare system to quantify, aggregate, and compare the data.

The healthcare system needed a strategy that would support both meaningful patient data and easy data collection. This would make the data actionable and enable comparison across providers and institutions.

INTEGRATING PATIENT-REPORTED OUTCOME MEASURES INTO PRACTICE

Mass General Brigham developed the infrastructure to use PROMs as an essential component of quality improvement. For PROMs to be successfully adopted and integrated into practice, Mass General Brigham needed to develop a workflow that was not burdensome and added value for the patient and the provider.

Mass General Brigham leveraged technology—using a suite of tools to collect PROMs in the EHR, and the Health Catalyst® Analytics Platform, including the Late-Binding™ Data Warehouse, to aggregate the PROMs data and generate reports. The analytics applications could visualize the data and trends over time, generating insight to support patient decision making and quality improvement efforts. This technology, combined with the patient's unique background, the physician's knowledge, and data about other patients' outcomes, is Mass General Brigham's Care Decisions framework—which actively supports patients and physicians in making the “right” care decision.

Mass General Brigham uses recognized, validated, clinical questionnaires that are automatically assigned to the patient in the EHR. The assignment of questionnaires is based on the patient's appointment type, specific diagnoses, procedures, and time since the PROMs questionnaire was last completed. PROMs questions measured symptoms, functional status, mental health, and quality of life.

Implementation support

To ensure clinics have the support required to successfully integrate the measures into workflow, Mass General Brigham provides clinics with an implementation specialist. The implementation specialist helps survey the office layout, obtain an adequate number of electronic tablets for patients to use, and sets up the appropriate PROMs questionnaires by appointment type. Mass General Brigham offers physician and staff training to support the launch of PROMs, as well as ongoing, on-site training. The healthcare system also offers education for patients (videos and written materials) to explain the “why” and “how” of PROMs.

Patient-friendly considerations

Patients prefer shorter surveys, so Mass General Brigham tries to limit questions to 30 or fewer. PROMs focus on the most relevant questions for a condition; patients complete them once per visit, once per year, or on a regular schedule. Patients undergoing surgery submit PROMs before surgery and again at three, six, and twelve months post-surgery.

Patients can complete PROMs questionnaires from home using the Mass General Brigham patient portal before their scheduled appointments or while waiting to be seen at the clinic; the front desk staff provides tablets for the surveys. Appointment scheduling screens automatically inform the front desk staff if the patient still needs to complete a questionnaire.

More efficient; better focus

Patient responses create interpretable and actionable scores, which are immediately integrated into the patient's medical record. When patients have already completed questionnaires, the past and current scores appear in a graphically trended table. In addition to providing valuable information for shared decision-making, PROMS surveys complete time-consuming fact finding before the appointment, allowing the patient and clinician to focus on the impact of treatment on the patient.

The analytics platform aggregates the data so that Mass General Brigham can group PROMs results together. This helps clinicians improve their guidance to patients as they discuss the impact of potential interventions on quality of life. For example, patients who have knee pain and limitations in daily activity and are considering a knee replacement may ask how long recovery will take and when they can return to daily activity. Mass General Brigham can use PROMs data in the analytics platform to answer this question (see Figure 1), giving patients valuable information that can inform their choice for treatment.

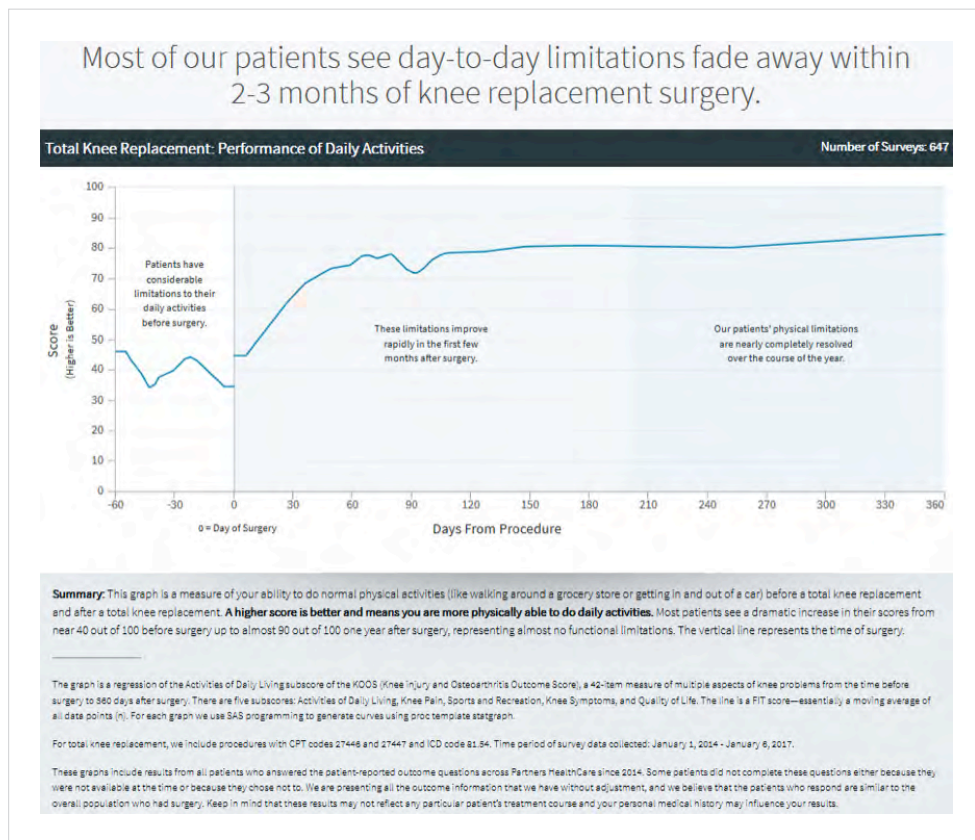


Figure 1: Aggregate PROMs data for total knee replacement performance of daily activities.

That's where the tools provided by Care Decisions differ from other health care decision aids. Within the Mass General Brigham network, teams work together to ensure patients receive the most appropriate care for their unique case. Mass General Brigham wants its patients to achieve better outcomes (like faster healing time, less pain, or bigger gains in physical function), and wants their experience to be better too. Each person has unique reasons for seeking treatment, and Mass General Brigham believes clinicians should fully understand the patient perspective before embarking on a course of care.

Clinicians can use PROMs data to support shared decision-making and individual patient results to address issues that may be hindering improvement. If, after a knee replacement, the patient is not achieving the expected benefits from surgery, and daily activities are still limited, the clinician can discuss the issue with the patient. Together, they can identify ways to improve recovery, such as prescribing additional physical therapy or addressing social issues, anxiety, or depression.

Value for patients and physicians

Mass General Brigham determined that collecting and using PROMs is valuable to both the patient and physicians. As such, Mass General Brigham is integrating PROMs into ongoing quality improvement efforts. By sharing PROMs data with physicians during interinstitutional meetings, they can review the data, discuss variability, and identify potential opportunities for improvement. Mass General Brigham then engages physicians in developing improvement activities and evaluating how those improvement activities impact PROMs.

RESULTS

Mass General Brigham now has several years of experience collecting PROMs, gaining insight into the value of PROMs and what it takes to make collecting PROMs successful.

- Patients have completed nearly 300,000 questionnaires in more than 20 specialties at more than 75 clinics at Mass General Brigham's hospitals.
- Mass General Brigham collects more than 12,000 PROMs per month with providers in orthopedics, oncology, psychiatry, neurology, and urology leading the way.
- Clinicians actively use this data to facilitate shared decision-making with their patients.

Patient feedback has been incredibly positive: patients report that PROMs questionnaires ask the right questions, and the subsequent discussions with their clinicians better meets their healthcare needs.

Feedback from clinicians has also been positive. Rather than using their time to collect data, clinicians can focus on patients and what they have been going through, and try to find better ways to meet their needs.

WHAT'S NEXT

Given that Mass General Brigham is seeing the value of collecting patient-reported data, the healthcare system aims to have every specialty and institution within its network collecting PROMs by the end of 2018. Mass General Brigham's goal is to compile enough PROMs data to support the development of predictive models for patient outcomes, further enabling patients to make informed treatment choices.

Mass General Brigham anticipates that PROMs may someday be used as a quality measure for reimbursement and is interested in determining how to risk adjust for clinical and sociodemographic characteristics. The healthcare system is also committed to not overwhelming patients with constant surveys and developing ways to reach patients conveniently, without jeopardizing privacy. ❖

REFERENCES

1. National Quality Forum. (2017). *NQF's measure applications partnership identifies opportunities to reduce measure burden in federal healthcare programs*. Retrieved from https://www.qualityforum.org/News_And_Resources/Press_Releases/2017/NQF_s_Measure_Applications_Partnership_Identifies_Opportunities_to_Reduce_Measure_Burden_in_Federal_Healthcare_Programs.aspx
2. Doherty, B. (2016). Do performance measures miss the point? – Is our focus on performance metrics really moving us in the right direction? *MedPageToday*. Retrieved from <http://www.medpagetoday.com/Blogs/CareerConsult/56230>
3. Nelson, E. C., Eftimovska, E., Lind, C., Hager, A., Wasson, J. H., & Lindblad, S. (2015). Patient reported outcome measures in practice. *BMJ*. Retrieved from <http://www.bmj.com/content/350/bmj.g7818>

ABOUT HEALTH CATALYST

Health Catalyst is a next-generation data, analytics, and decision support company committed to being a catalyst for massive, sustained improvements in healthcare outcomes. We are the leaders in a new era of advanced predictive analytics for [population health](#) and [value-based care](#). with a suite of machine learning-driven solutions, decades of outcomes-improvement expertise, and an unparalleled ability to integrate data from across the healthcare ecosystem. Our proven data warehousing and analytics platform helps improve quality, add efficiency and lower costs in support of more than 85 million patients and growing, ranging from the largest US health system to forward-thinking physician practices. Our technology and professional services can help you keep patients engaged and healthy in their homes and workplaces, and we can help you optimize care delivery to those patients when it becomes necessary. We are grateful to be recognized by Fortune, Gallup, Glassdoor, Modern Healthcare and a host of others as a Best Place to Work in technology and healthcare.

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