



Accelerating the Use of Patient-Reported Quality Measures in Value-Based Care

The widespread collection and use of patient-reported quality measures is essential to the success of a truly person-centered, value-based care system. These types of quality measures – which focus on both patient-reported outcomes and patient-reported experiences – build upon the historical clinically-focused quality measurement system. The inclusion of patient-reported quality measures better focuses care delivery assessments on what matters most to patients. While both patient-reported quality measures are relatively well known, they are not universally being used. Health care payers, providers, and clinicians should pursue greater uptake and use of such measure sets to improve quality by focusing more closely on patient feedback.

This Task Force resource explains the landscape around patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs) and identifies available survey tools for capturing data on both types of patient-reported quality measures (PRQM). This resource also highlights the benefits and challenges associated with both measurement sets, offering a path forward to drive greater uptake of such data collection and usage.

Definitions

- **Patient-Reported Outcome Measures (PROMs):** PROMs are tools that capture patient reports of their health outcomes.
- **Patient-Reported Experience Measures (PREMs):** PREMs capture patients' views of their experience receiving care.
- **Patient-Reported Quality Measures (PRQMs):** PRQMs capture both patient reports of their health outcomes (PROMs) and views of their experience receiving care (PREMs).
- **Patient-Reported Outcome Performance Measures (PRO-PMs):** PRO-PMs aggregate information from patients into valid and reliable performance measures at the provider level.

Background

PROMs and PREMs are distinct quality measures that share a common goal to more effectively capture the patient perspective associated with the provision of health care items and services. Both sets of measures advance the goal of fostering person-

centered care that is provided in an equitable and culturally competent way. The sections below provide more context for each type of person-centered quality measure and their interrelatedness.

I. Patient-Reported Outcomes Measures

PROMs are used to evaluate patients' perspectives of their health care outcomes including symptoms, physical and emotional well-being, and overall quality of life. These measures can be used to monitor disease progression, assess treatment effectiveness, and identify areas in need of additional support. PROMs can be generic or disease-specific and can help clinicians better understand the patient perspective and tailor treatment plans to improve outcomes over time. PROMs are also valuable in clinical trials and research to evaluate the effectiveness of different treatments or interventions.

PROMs are typically incorporated into questionnaires, surveys, or interviews that are administered directly to patients, either in a clinical setting or through self-reporting. Data can be collected before, during, and after medical interventions to track changes over time. Data collected from PROMs can be analyzed to assess the severity of symptoms and the impact of health conditions on patients' lives.

PROMs are a primary means of enhancing high-quality care by considering patients' perspectives and priorities in treatment decisions. They provide a standardized way to measure and track changes in health-related quality of life. Understanding a patient's perspective on their outcomes facilitates meaningful shared decision-making between patients and their healthcare providers to better support patient well-being.

II. Patient-Reported Experience Measures

Distinct from PROMs, PREMs are used to gather information about patients' experiences on the process of accessing and receiving care, rather than on their outcomes. PREMs can be used to gain valuable insights from patients about the level of trust they have with their providers and whether their providers treat them with respect, engage in active listening, and involve patients in decision making.

PREMs are typically collected through surveys administered to patients after they have received health care services and include questions about their communication with health care providers, wait times, access to care, coordination of care, cleanliness of facilities, and the overall patient experience. The data collected from PREMs can yield quantitative and qualitative insights into patients' experiences and can include overall approval ratings, approval of specific aspects of care, and patient-driven suggestions for improvement.

The goal of PREMs is to report objectively on patient experiences, which differentiates them from traditional patient satisfaction surveys. Instead of asking "Are you satisfied with your health care provider?" a PREMs survey may ask "Did your provider listen to your health concerns?" and "Did your provider address all of the

concerns you raised during your visit?” Answers to these questions provide stakeholders with a more concrete understanding of what is going well and where improvements can be made.

There are several benefits associated with collecting and using patient-reported experience data, such as identifying areas where health care services can be improved and tailored to meet patients' needs and preferences. Additionally, by incorporating PREMs into quality improvement efforts, organizations can foster patient engagement and empowerment in health care decision-making. PREMs ultimately help health care organizations improve quality of care by understanding and strengthening patients' experiences interacting with their providers and the health care system.

III. The Correlation Between PROMs and PREMs

While patient-reported outcome and experience measures assess different aspects of patient care, they are highly interrelated and should be used in tandem to present a more comprehensive view of patients' quality of care. A [study](#) on their combined use for patients undergoing elective surgery found a positive correlation between experience and outcomes: patients with high outcome scores had ten percent higher experience ratings, and patients with high experience ratings had three percent higher outcome scores. One [systematic review](#) of connections between patient experience and clinical effectiveness found that patients with a positive experience were more likely to adhere to their provider's recommendations, engage in preventive care, and score higher on self-rated health outcome measures.

Other [PCORI-funded studies](#) find that prioritizing high-quality patient and family engagement leads to improved patient experiences and outcomes, including the identification of more patient safety errors and adverse events. When providers engage patients in their own care, they can develop care plans that are concordant with peoples' own care delivery priorities, leading to improved outcomes. These findings demonstrate the distinct but interconnectedness of PROMs and PREMs and support the case for including both measures in patient-focused feedback efforts.

IV. Implementation Challenges

The challenges associated with the implementation of PROMs and PREMs are well documented and include selecting the right survey, avoiding patient burnout and low response rates, effectively embedding measures into existing workflows, and obtaining investment. While the recommendations for PRQMs implementation outlined in this document address some of these challenges, more work needs to be done to determine how to mitigate their impact.

When it comes to selecting the right survey, stakeholders must determine whether to administer general health outcome and experience measures or disease-specific measures. Disease-specific measures tend to provide a more targeted

assessment of functioning and quality of life related to a specific condition, resulting in greater nuance and detail that may be missed by general measures. However, it is challenging to develop and assess the reliability and validity of disease-specific measures, which is why stakeholders may opt for general measures.

High levels of patient burnout leading to low response rates is another challenge for stakeholders as they consider how to administer PRQMs. Filling out paperwork is time consuming, and patients are unlikely to complete surveys that are too long, are not in plain language, and do not reflect their priorities for their care. Stakeholders have noted that when surveys are administered in a hospital or clinic setting, patients are more likely to respond, but confidentiality concerns lead to the underreporting of adverse events, causing bias in the data. However, when surveys are administered after leaving the site of care, patients are significantly less likely to respond. No matter where surveys are administered, patients who are seen more frequently and who experience adverse events may be over-represented in the data. Additionally, administering anonymous surveys presents the added challenge that data cannot be stratified by demographics, making it difficult to assess and address equity concerns.

Challenges around survey response rates and response bias lead to concerns about the accuracy of the data and its statistical significance, especially when responses are tied to payment. Physicians have also raised concerns about PRQMs captured through CAHPS surveys where Medicare payment rates are tied to the results. Specifically, clinician groups have noted concerns about scoring methodologies which rank clinicians against each other, such that a group can score in last place and be penalized even if they achieve relatively high outcome and experience scores.

In contrast, for PRQM responses not tied to payment, statistical significance may not be important. Stakeholders may still be able to engage in quality improvement efforts that focus on improving care for the outliers, or those with the lowest experience and outcome scores.

Other challenges include embedding PRQMs into existing workflows and Electronic Health Records (EHRs), as well as incorporating data into processes that support quality improvement efforts. There is often a lack of standardized formats for PRQMs data that can hinder efforts for EHR integration. Additionally, providers aren't all aligning on measure selection, robust data reporting, and end goals. Lastly, EHRs don't fully support the ability to effectively report PRQMs to the Centers for Medicare and Medicaid Services (CMS) and account for differing timelines between the Inpatient and Outpatient Prospective Payment Systems (IPPS and OPSS).

Integrating PRQMs can also be burdensome and resource intensive to providers, as it adds administrative responsibilities and disrupts established routines. Without initial and ongoing investments in developing infrastructure for PRQM collection, providers may struggle to get their efforts off the ground. For PRQMs to gain buy-in from providers and generate a meaningful impact on patient care, mechanisms must be put in place to ensure that the data collected are integrated into clinical decision-making.

However, this process also requires funding and resources, as it is time-intensive to implement.

Despite the many challenges to implementing PRQMs, organizations have continued to incorporate them into their systems and have gained effective implementation strategies along the way. While best practices for the implementation challenges listed above are still evolving, the recommendations in the section below address some of these concerns and help organizations take steps toward effectively implementing these measures.

The Path Forward for Patient-Reported Quality Measures

The Task Force welcomes the Center for Medicare and Medicaid Innovation's (CMMI) inclusion of PROMs and PRO-PMs as priorities in the 2022 *Approach to Person-Centered Care* release. To meaningfully expand the design, testing, implementation, and evaluation of PROMs, the Task Force offers recommendations below for all stakeholders looking to implement PROMs and PREMs, based on lessons learned from experiences with their implementation.

- **Support a stepwise approach that first supports establishing a PROM and PREM infrastructure before measuring health systems on their performance.** Data collection and infrastructure are critical to the widespread implementation of PRQMs and subsequent use of the data that is embedded into the EHR or located elsewhere. Payment models will not be successful if they require PROMs and PREMs to be implemented without incentives to establish necessary infrastructure.
- **Include funding in new value-based payment models specifically designed to advance PROMs and PREMs implementation, reporting, and evaluation.** This could include upfront funding to invest in proper infrastructure for the collection and sharing of the responses, or incentives that stimulate physicians and other health care providers to incorporate PRQMs into the care delivery process. For example, CMMI's [Comprehensive Joint Replacement \(CJR\) model](#) offers two points toward participating hospitals' quality scores if they successfully submit PRO data, increasing their financial opportunity under the model. This recommendation

CMMI's approach to person-centered care guiding principles:

- Include at least two PROMs in new accountable care models, with one being a PRO-PM.
- Support PRO-PM development to advance CMS' focus on outcome measures and accountability.
- Use PROMs and PRO-PMs, at a minimum, for pay-for-reporting. Ideally, they will be used as pay-for-performance or quality rating criteria.
- Design models to use similar PROMs and PRO-PMs.

aligns with CMMI's acknowledgement that future models should incorporate PROMs. The Agency's goal is to include at least two PROMs (see text box) in every new model.

- **Design a Value-Based Payment program that includes a PROM and/or a PREM as a central/primary outcome measure.** Build upon the voluntary nature of reporting PROMs in Medicare's Comprehensive Joint Replacement clinical episode model by making PRQM data collection mandatory in future value-based payment models. Phase in using this data to evaluate quality performance to allow time for infrastructure development, investment, and testing.
- **Provide training for physicians, other health care providers, and payers in how to administer and act upon PROMs and PREMs.** For survey instruments that are not administered by third-party organizations, there are opportunities to train professionals in how to make sure a patient feels comfortable and respected in responding to questions. More attentive support to administering the survey can address historic concerns about low response rates. Surveys should be administered electronically through a patient portal, tablet devices in the waiting room, or via email whenever possible to reduce survey fatigue and declining response rates.
- **Support research that informs how PROMs and PREMs can be used to improve clinical care experiences and outcomes at the point of care with the patient.** One of the biggest concerns regarding these measures is that the data are not analyzed in a timely manner, and subsequently do not result in improvements for the patients who may have had negative experiences. Efforts to advance the use of these measures should include looking at ways to improve the timeliness of data collection and analyses of data, allowing providers and plans to take action to address the issues raised. To improve buy-in, providers also need evidence that the outcome of PROMs and PREMs can be acted upon and are not simply the result of external factors.
- **Continuously proclaim the importance of PROMs and PREMs to the quality measurement and value transformation enterprises.** Achieving the goal of creating a person-centered health care system requires constant and consistent discussion of the strategies that are available to improve upon the current system.

I. Advancing Health Equity through Patient Reported Quality Measures

Like every aspect of our current health care system, PRQMs design, testing, implementation, and evaluation should explicitly center on achieving equitable outcomes and experiences. This means ensuring that these patient-reported quality measures are accessible by and applicable to all individuals regardless of race, ethnicity, socioeconomic status, reading level, language, and other health-related social needs. In addition, the data that is collected must be used to identify and address inequities. To ensure these quality measures incorporate a health equity lens:

- Ensure questionnaires are written at a fifth grade reading level and are available in any language for which a population makes up more than five percent of the area's total population. Have translators readily available when a health care professional is asking the questions in-person if another language is needed.

- Include language on the surveys, communicating why patients are being asked these questions and how providers are using the data to improve patient care.
- Ensure PREMs ask pointed questions that gauge whether patients were treated with respect and fairness and without biased or discriminatory care, and whether providers offered culturally competent care.
- Test questionnaires with patient focus groups to ensure they are understandable, appropriate, and do not contain any bias. This includes ensuring that individuals across race, ethnicity, language, sexual orientation, and gender identities are included in decision-making roles in the design and evaluation of PROMs and PREMs.
- Ensure the surveys can be completed within a reasonable amount of time, compared to other patient experience and outcome surveys that are longer and suffer low response rates as a result. Make the surveys available for patients to access online (either through phone, tablet or computer) and are accessible for people with disabilities.
- Once patient-reported quality measure data are collected, require data stratification by race, ethnicity, and other demographic factors to determine where inequities exist and develop a plan to address inequities.

Conclusion

Patient-reported quality measures are an important part of improving our health system to make it more accessible, responsive, and equitable by placing patients at the center of their care. These measures provide critical insight into the patient perspective on the outcomes and experience of their care that, when used in tandem with traditional clinical quality measures, offer a solid foundation for improving care delivery by listening to patients and acting upon their feedback. This comprehensive approach fosters a more effective quality assessment and improvement system.



Established in 2014, the Health Care Transformation Task Force brings together patients, payers, providers, and purchaser representatives to act as a private sector driver, coordinator, and facilitator of delivery system transformation. In addition to serving as a resource and shared learnings convener for members, the Task Force is also a leading public voice on value-based payment and care delivery transformation.

Appendix A: Federal Policymaking Support for Patient-Reported Quality Measures

In 2011, the Agency for Healthcare Research and Quality (AHRQ) disseminated its National Quality Strategy (NQS)ⁱ, which created a framework built around six improvement priorities designed to achieve better and more affordable care, and healthier communities. One of the NQS priorities is person-and-family-centered care, defined as “*examining individual experiences with care in an office or clinic setting, during a hospital stay and while receiving home health care; tracking measures of perceptions of communication with providers and satisfaction with the provider-patient relationship.*” The inclusion of person-reported measures in the NQS is just one indication of the recognition of their importance. Pre-dating the NQS, in 2006 the Consumer Assessment of Healthcare Providers and Systems (CAHPS) was implemented nationally, with public reporting of the hospital survey (HCAHPS) beginning in 2008.ⁱⁱ

In 2016, the CMS Innovation Center implemented a mandatory clinical episode payment model designed to improve care for Medicare patients undergoing total hip and knee replacements performed in inpatient and outpatient hospital settings as well as total angle replacements performed on inpatients. Under the model, participants have the option to increase their quality composite score by reporting patient-reported outcomes data, thereby increasing their potential financial rewards. This is a good example of deploying payment incentives to increase PRQM data capture and public reporting.

In December 2022, the Centers for Medicare and Medicaid Services (CMS) launched their [National Quality Strategy](#). As part of this larger work, they released [Patient-Reported Outcome Measures](#), a detailed supplement to the [CMS Measures Management System \(MMS\) Hub](#), that describes approaches to developing Patient Reported Outcome Performance Measures (PRO-PMs), attributes of high-quality PROMs, and best practices for evaluating PROMs. This document points to the growing recognition of the need to make significant inroads into implementing PROMs across payment models and programs.

In 2019, the Larry A. Green Center introduced the [Person-Centered Primary Care Measure Patient Reported Outcome Performance Measure](#) (PCPCM PRO-PM) endorsed by both CMS and the National Quality Forum (NQF). The measure is an 11-item survey that assesses aspects of primary care focusing on a patient’s relationship with their clinician or practice. In 2022, the measure became available for use as a Quality Payment Program MIPS clinical quality measure, and, in 2023, CMS announced its use in the new Making Care Primary model to assess patient experience.

Appendix B: Current PROMs in the Public Domain

Existing PROMs	Where is the PROM used?
<p>Breast Q PROM</p> <ul style="list-style-type: none"> • PROM for use in cosmetic and reconstructive breast survey that covers quality of life and patient satisfaction. <ul style="list-style-type: none"> ○ Independent modules for breast reduction/mastopexy, augmentation, and breast cancer. • Several domains for each module: psychological well-being, physical well-being, sexual well-being, satisfaction with breasts, experience of care, and satisfaction with outcome 	N/A
<p>Cataracts: Improvement in Patient’s Visual Function within 90 Days Following Cataract Surgery (OP-31)</p> <ul style="list-style-type: none"> • Used to assess improvement in visual function achieved within 90 days following the cataract surgery 	Part of CMS voluntary reporting as finalized in the CY 2023 OPPI/ASC final rule.
<p>Functional Assessment of Cancer Therapy</p> <ul style="list-style-type: none"> • Covers breast, bladder, brain, colorectal, central nervous system, cutaneous t-cell lymphoma, cervix, esophageal, endometrial, gastric, head & neck, hepatobiliary, lung, leukemia, lymphoma, melanoma, multiple myeloma, nasopharyngeal, ovarian, prostate, vulva. • 37 items - Measures five domains of health-related quality of life in cancer patients: physical, social, emotional, functional well-being, and a cancer subscale depending on the type of cancer. 	N/A
<p>Hip Disability and Osteoarthritis Outcome Score (HOOS)</p> <ul style="list-style-type: none"> • 40-question questionnaire recommended when there are symptoms of hip disability, with or without osteoarthritis. The questionnaire assesses five subcategories: pain, symptoms and stiffness, activities of 	HOOS are part of voluntary reporting in the CJR Model

<p>daily living, function in sports and recreational activities, and quality of life.</p> <ul style="list-style-type: none"> • Link to survey <p>Hip Dysfunction and Osteoarthritis Outcome Score for Joint Replacement (HOOS, JR)</p> <ul style="list-style-type: none"> • Used to assess a patient’s opinion about their hip pain specifically related to joint replacement surgery. • Link to survey 	<p>HOOS, JR, when combined with the KOOS, JR for Total Hip Arthroplasty (THA) and Total Knee Arthroplasty (TKA) patients make up the THA/TKA PRO-PM measure, to be included in the Inpatient Quality Reporting (IQR) program on a voluntary basis at first with mandatory reporting starting in July 2024.</p>
<p>ICHOM Patient-Centered Outcomes Measures</p> <ul style="list-style-type: none"> • The International Consortium for Health Outcome Measures lists various measure sets including for the following specialties: cardiometabolic, congenital anomalies, gastrointestinal, infectious disease, life-course, maternal and child health, mental health, musculoskeletal, neurology, oncology, ophthalmological, renal, urogenital. • ICOM also lists externally developed sets. 	<p>N/A</p>
<p>Knee Injury and Osteoarthritis Outcome Score (KOOS)</p> <ul style="list-style-type: none"> • Developed to assess a patient’s opinion about their knee pain and associated problems. It contains 42 questions that assess pain, function in daily living, function in sport and recreation, and knee-related quality of life. • Link to survey <p>Knee Injury and Osteoarthritis Outcomes Score for Joint Replacement (KOOS, JR)</p> <ul style="list-style-type: none"> • Used to assess a patient’s opinion about their knee pain specifically related to joint replacement surgery. • Link to the survey 	<p>KOOS are part of voluntary reporting in the CJR Model</p> <p>KOOS, JR, when combined with the HOOS, JR for Total Hip Arthroplasty (THA) and Total Knee Arthroplasty (TKA) patients make up the THA/TKA PRO-PM measure, to be included in the Inpatient Quality Reporting (IQR) program on a voluntary basis at</p>

	first with mandatory reporting starting in July 2024.
<p>Oxford Hip Score</p> <ul style="list-style-type: none"> • A 12-item PRO specifically designed to assess function and pain for patients undergoing hip replacement surgery. • Link to survey 	N/A
<p>Oxford Knee Score</p> <ul style="list-style-type: none"> • A 12-item PRO designed to assess function and pain after total knee replacement surgery (arthroplasty). • Link to survey 	N/A
<p>Patient Reported Outcomes Measurement Info System (PROMIS)</p> <ul style="list-style-type: none"> • PROMIS measures are relevant across all conditions for the assessment of symptoms and functions. • Measures are only available to members 	Part of voluntary reporting in the CJR Model
<p>Patient Health Questionnaire (Mental Health)</p> <ul style="list-style-type: none"> • Various surveys to assess anxiety, depression, PTSD, and substance use <ul style="list-style-type: none"> ○ PHQ-9: used to assess depression 	N/A
<p>Total Hip Arthroplasty/Total Knee Arthroplasty (THA/TKA)</p> <ul style="list-style-type: none"> • Includes pre- and postoperative data elements • Evaluates the hospital-level risk-standardized improvement rate in patient-reported outcomes following elective, primary THA/TKA 	This PROM/PRO-PM will be included in the Inpatient Quality Reporting (IQR) program on a voluntary basis at first with mandatory reporting starting 7/1/24.
<p>Veterans RAND Survey</p> <ul style="list-style-type: none"> • 12 questions that focus on the patient's ability to do certain tasks and any physical/emotional impairment in everyday tasks and social activities. • The questions ask about the patient's functionality as compared to four weeks prior, as well as compared to a year prior. 	Part of voluntary reporting in the CJR Model (more info on the model included below the table)

Appendix B: Current PREMs in the Public Domain

Existing PREMs	Where is the PREM used?
<p>CAHPS Measures of Patient Experience</p> <ul style="list-style-type: none"> Each CAHPS survey produces several measures of patient experiences. Surveys include the following: Health Plan Survey, Clinician & Group Survey, Cancer Care Survey, Surgical Care Survey, Dental Plan Survey, Experience of Care and Health Outcomes Survey and the CAHPS American Indian Survey 	<p>CMS uses Hospital CAHPS to measure patient perspectives in hospitals across the US. HCAHPS is also employed in the Hospital Value-Based Purchasing (VBP) Program</p>
<p>Canadian Patient Experiences Survey</p> <ul style="list-style-type: none"> Tool used to assess patients' care received during an acute care hospital stay. The survey gathers information about patients' experiences during the admission process, communications, involvement in decisions, coordination of care, discharge process, and overall experience of care. Link to survey 	<p>N/A</p>
<p>Friends and Family Test</p> <ul style="list-style-type: none"> Used in the UK's National Health Service (NHS), FFT asks patients whether they would recommend the health care service they received to friends and family. 	<p>N/A</p>
<p>General Practice Patient Survey</p> <ul style="list-style-type: none"> Used in the UK to assess patient experiences in general practice settings, including ease of access, appointment booking, and overall satisfaction. Link to survey 	<p>N/A</p>
<p>Outpatient and Ambulatory Surgery CAHPS Survey</p> <ul style="list-style-type: none"> Designed for assessing patient experiences in outpatient and ambulatory surgical settings. Link to survey 	<p>CMS voluntary national reporting program open to Medicare-certified Hospital Outpatient Departments and free-standing ambulatory surgery centers</p>
<p>Patient Satisfaction Questionnaire III</p>	<p>N/A</p>

<ul style="list-style-type: none"> • 50-item survey that taps global satisfaction with medical care as well as satisfaction with six aspects of care: technical quality, interpersonal manner, communication, financial aspects of care, time spent with a doctor, and accessibility of care. • PSQ-18 is a short form version that takes 3-4 minutes to complete. 	
<p>Person-Centered Primary Care Measure Patient-Reported Outcome Performance Measure</p> <ul style="list-style-type: none"> • 11-question survey to assess the broad scope of primary care, focusing on a patients' relationship with the clinician or practice. • Link to survey 	<p>MIPS quality reporting and CMS' Making Care Primary model</p>
<p>Primary Care Patient Experience of Care Survey</p> <ul style="list-style-type: none"> • Used to assess patient experiences in primary care settings, including general practitioners' offices and family medicine clinics. 	<p>Developed by CMS for use in the Primary Care First model</p>

ⁱ <https://onlinelibrary.wiley.com/doi/full/10.1111/joim.12471>

ⁱⁱ <https://www.ahrq.gov/cahps/about-cahps/index.html>