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Current PROM and PREM use in health system performance measurement: Still a way to go

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Abstract

There is a growing impetus to “measure what matters” to enable health systems to optimise value-based, person-centred healthcare. This paper describes the critical importance of patient-reported outcome and experience measures (PROMs and PREMs) in this pursuit and provides an in-depth overview of how PROM and PREM programs differ between England, the United States, and Australia. A comprehensive timeline of PROM, PREM, legislation/policy, and value-based purchasing (pay-for-performance) program implementation accompanies this discussion. Importantly, this paper highlights disparities between these nations’ PROMs and PREMs programs, evidencing that we still have a way to go towards equal health system performance measurement globally.

Keywords

Patient-reported outcome measure; patient-reported experience measure; person-centeredness; health system performance measurement

It is unethical to ask patients to comment on their experiences if these comments are going to be ignored.” (Coulter et al, 2014)¹

Patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs) have been in use since the mid 1900’s, primarily in a research capacity. They have evolved into measures capable of contributing to clinical practice by supporting communication between patients and care providers; guiding the diagnosis, management and monitoring of patients’ health conditions; and improving health outcomes.²⁻⁸ PROMs and PREMs are also used to benchmark services and care providers, thereby supporting patient choice about where and by whom they receive care; driving competition within and across services.^{1,9-11}

The United States (US) was the first country to implement nationally mandated patient-reported measures, beginning with the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey in 1997,¹² followed by the Medicare Health Outcomes Survey (HOS) in 1998.¹³ The United Kingdom (UK) followed suit quickly with the implementation of the General Practice Patient Survey (GPPS) in 1998.¹⁴ Internationally, the use of PROMs and PREMs for system performance measurement is gaining momentum given their capacity to transform healthcare to be value-based, person-centred, and of higher quality and safety.^{4,15} However, there is also significant variation in how PROMs and PREMs are used to support health system performance measurement globally, thereby limiting opportunities for cross-country

comparisons, and the collection of common metrics to drive person-centred, value-based healthcare.¹⁶

Herein, we provide an overview of how PROMs and PREMs currently contribute to health system performance measurement, specifically in England (UK), the US, and Australia. Whilst we acknowledge the differences in each country’s health systems, they evidence different mechanisms by which PROMs and PREMs contribute to health system performance measurement. Supplementary file 1 ([linked here](#)) supports this discussion by providing a comprehensive timeline of PROM and PREM implementation efforts across these countries, and highlights seminal legislation, policy, and the introduction of prominent Value-Based Purchasing (VBP) and reporting programs. We conclude this piece with recommendations for advancing international PROM and PREM programs.

PROMs and PREMs for system performance measurement in England

The National Health Service (NHS) England implemented its first PROMs program in 2009. PROMs related to hip and knee replacement are administered pre- and post-operatively by all NHS-funded services, gauging the extent to which patient’s conditions improved or deteriorated in the 6-months post-surgery.¹⁷ Originally, PROMs specific to hernia repair and varicose veins were also included in the program, but were removed in 2017.¹⁸ A 2010 report by The King’s Fund identified that the UK Department of

Health was working to extend the PROMs program over a wider range of conditions (including chronic conditions),¹⁹ but there is presently only evidence of pilot studies,²⁰⁻²⁴ with no routine, national implementation. PROM program data is summarised and publicly reported on NHS Digital annually, and available to registered providers on a monthly basis.²⁵ Additionally, PROM data informs the National Tariff Payment System (previously, Best Practice Tariff).²⁶ This is a VBP scheme that links bonus payments to providers that: (i) do not perform statistically significantly worse than the risk-adjusted national average of patient health status improvements, and (ii) have a survey participation rate of $\geq 50\%$.^{27,28}

The NHS England PREM program started in 1998 with the General Practice Patient Survey (GPPS).¹⁴ Several PREMs have been nationally implemented since,^{14,29-35} the most recent of which is the Friends and Family Test (FFT).³⁶ The FFT was first implemented in accident and emergency, inpatient and maternity services, and subsequently extended to all NHS services.³⁶⁻³⁸ PREM data has also been used to inform VBP programs in the UK, starting with the Quality and Outcomes Framework (QOF) for primary care providers in 2004,³⁹ and more recently, the Commissioning for Quality and Innovation (CQUIN) payment framework for acute care services (which also incorporates PROM data).^{40,41} Additionally, PREM data informed the development of generic adult and mental health patient experience National Institute for Health and Care Excellence (NICE) clinical guidelines and quality standards.⁴²⁻⁴⁵ Thus, whilst England has a multifaceted approach to implementing and using PROMs and PREMs, these programs are largely targeted towards auditing and providing feedback to care providers as opposed to consumers.

PROMs and PREMs for system performance measurement in the US

In 2010, the Patient Protection and Affordable Care Act mandated that the Centres for Medicare & Medicaid Services (CMS) establish several public reporting and payment programs based on information collected by the Consumer Assessment of Healthcare Providers and Services (CAHPS) PREMs.⁴⁶ Since launching in 1995, CAHPS measures have been increasingly used to support health plan accreditation; consumer choice of care providers, services, and health plans; and VBP programs (e.g., the Hospital VBP Program^{47,48}) (Table 1). While CAHPS surveys must be completed by all CMS healthcare services and providers (which provide care for 35% of the US population^{49,50} and consume 37% of national health expenditure⁵¹), many private health insurers also elect to participate in the CAHPS program and implement their own VBP programs.⁵²

In addition, the Medicare Health Outcome Survey (HOS) – the first PROM used in Medicare managed care – has been included as a quality indicator in Medicare Advantage Quality Bonus Payments since 2012.⁵⁷ As well as contributing to the quality bonus payments made by Medicare to plan providers (on average US\$886 per enrollee in employer-sponsored plans),⁵⁸ HOS data is presented in the form of Medicare Star Ratings on the Plan Finder website.⁵⁹ Transparent and meaningful public reporting of quality data in the US healthcare system drives competition amongst service and plan providers, and supports quality-informed consumer choice.⁶⁰ Additionally, the US arguably operates the world's most comprehensive VBP initiatives.

PROMs and PREMs for system performance measurement in Australia

Relative to England and the US, Australia's implementation of PROMs and PREMs for health system performance measurement has been slow. There are currently two national patient-reported measure programs in Australia. The Patient Experiences Survey program, first implemented in 2009 by the Australian Bureau of Statistics (ABS), reports data annually related to access and barriers to, as well as experiences of, healthcare services across the country.⁶¹ The National Health Survey program, first implemented in 2011 by the ABS, infrequently reports health statistics relative to long-term conditions, mental wellbeing, and health risk factors (e.g., smoking).⁶² Separate to the work conducted by the ABS, the Australian Commission on Safety and Quality in Health Care (ACSQHC) undertakes work to support the use of patient-reported measures by recognising the importance of consumer engagement in safety and quality national standards,⁶³ publishing reports and resources to support uptake and use of instruments in service delivery, and recommending core questions for inclusion on patient experience surveys and clinical registries.⁶⁴ They are also involved with the Organisation for Economic Co-operation and Development (OECD) and the International Consortium for Health Outcomes Measurement (ICHOM), supporting the development, standardisation and adoption of PROMs for international monitoring.⁶⁵

The ACSQHC also developed the Australian Hospital Patient Experience Question Set (AHPEQS) in 2017 for use across any Australian hospital.⁶⁴ While the AHPEQS was intended to “provid[e] an opportunity for national consistency”, the ACSQHC are “unable to mandate the use of particular instruments.”⁶⁴ Instead, they strongly encourage systems and services to implement the AHPEQS of their own accord, which only Queensland has done at the time of writing (Supplementary file 1).⁶⁶ Moreover, almost all reporting on quality and safety across Australia relies on data from administrative datasets (e.g.,

Table 1. Uses of CAHPS surveys for systems performance in the US

Use of CAHPS surveys	Description of use	Outputs	Coverage
Health Plan Accreditation (HPA) by the National Committee for Quality Assurance (NCQA) ⁵³	NCQA evaluates commercial and private health insurers across several standards (using CAHPS data alongside Healthcare Effectiveness Data and Information Set (HEDIS) measures) to award health plans an accreditation score out of 5-stars (highest)	Star ratings are publicly reported on the NCQA website, enabling consumers to choose their preferred health insurance plan ⁵⁴	42 US states require or use NCQA HPA, and over 75% of insured Americans are in NCQA accredited health plans ⁵³
Public reporting of CAHPS data via the <i>Care Compare</i> Medicare.gov website	<i>Care Compare</i> collates CAHPS survey data relevant to doctors and clinicians, hospitals, nursing homes (including rehabilitation services), home health services, hospice care, inpatient rehabilitation facilities, long-term care hospitals and dialysis facilities in one online portal accessible by the public ⁵⁵	Consumers can specify their location and the type of provider/service they want to access, and obtain an overall star rating (based on quality of care performance) and a patient survey rating (based on CAHPS performance), supporting their choice of care provider/service ⁵⁵	National (Medicare services)
Public reporting of CAHPS data via the <i>Plan Finder</i> Medicare.gov website	Similar to <i>Care Compare</i> , <i>Plan Finder</i> collates CAHPS survey data to measure how well Medicare Advantage and Part D (Prescription Drug Benefit) plans perform in five categories, including: (i) staying healthy, (ii) managing chronic conditions, (iii) plan responsiveness and care, (iv) member complaints, problems, getting services, and choosing to leave the plan, and (v) health plan customer service ⁵⁶	Consumers can specify their location, identify the type of Medicare coverage they want, and use star ratings to compare plans in their service areas (5-stars represents highest performing plans) ⁵⁶	National (Medicare services)
VBP programs	VBP programs reward providers and services with incentive payments (or penalties) for the quality of care they provide to people covered by Medicare ^{48,52}	Financial incentives that reward high quality care and financial penalties for poor quality ⁴⁸	National (Medicare services) and private insurers on an elective basis ⁵²

^aPerformance criteria differs slightly for Part D plans; CAHPS = Consumer Assessment of Healthcare Providers and Services; HPA = Health Plan Accreditation; NCQA = National Committee for Quality Assurance; HEDIS = Healthcare Effectiveness Data and Information Set; US = United States; CMS = Centers for Medicare & Medicaid Services; VBP = Value-based performance

wait times, complications), incident information systems (e.g., sentinel events) and bespoke data collections (e.g., healthcare associated infections).⁶⁷

There are several Australian state and territory-based surveying programs. In New South Wales for example, the Bureau for Health Information (BHI) established the largest national PREMs program in 2007, which invites up to 300,000 people each year to report on their experiences of care.⁶⁸ The program includes surveys related to emergency department, admitted, rural admitted, maternity, cancer, and more recently, virtual care patients.⁶⁸ However, there is a lack of performance measurement coordination between states, with each state, and even health services within states, having different priorities. Unmandated data collection programs further

compound these challenges, impairing the ability to undertake national benchmarking and evaluation across Australia.

Where to from here?

There is clear impetus to align international PROM and PREM programs to enable global health system performance measurement and to collectively drive person-centred, value-based healthcare. However, as evidenced in this piece, there is also significant variation in current PROM and PREM programs across England, the US and Australia. We propose three key recommendations that are internationally relevant based on the current state of play.

First, countries such as Australia that are developing PROM and PREM programs need to mandate nationally consistent measures and survey programs. The current lack of nationally consistent PROMs and PREMs impedes hospital and health services data collection practices, thereby limiting opportunities for national benchmarking and quality improvement. Moreover, siloed and oftentimes tokenistic surveying programs are resource-intensive and financially burdensome without clear gain, and make poor use of consumers' time in participating.

Second, it is imperative to identify and implement internationally agreed upon and consistent core PROM and PREM items to enable international health systems comparisons and benchmarking. Not only will this ensure that all health systems are striving towards the same general goals of person-centred, value-based healthcare, but this will enhance the capacity of health systems to learn from one another, improving the transferability of programs targeting quality improvement.

Third, health systems (both independently and collectively) need to establish clear priorities for using PROM and PREM data once it has been collected. Public reporting of data (such as demonstrated by the US Centers for Medicare and Medicaid's Plan Finder and Care Compare platforms) should be prioritised for its ability to support consumer choice. As researchers and institutions (both government and private), we have an ethical responsibility to give consumers the opportunity to see the results of what they have contributed their time and information to. Additionally, due consideration should be given to how PROM and PREM data can form the basis of value-based funding programs for public healthcare sectors, moving away from traditional fee-for-service and activity-based funding schemes.

Conclusion

Despite an array of robust PROM and PREM programs internationally, most countries are siloed in their approach to health system performance measurement. Whilst it is unreasonable to assume that all health systems will have the same priorities (i.e., where optimising healthcare accessibility is a priority for some, reducing iatrogenic harm may be a priority for others), having a degree of consistency in how we measure person-centred, value-based healthcare should be a universal priority. This paper describes the different PROM and PREM performance measurement programs employed across England, the US and Australia, and suggests key recommendations for advancing PROM and PREM programs internationally. In combination with the timeline presented in Supplementary file 1, the paper provides a complete and comprehensive overview of the evolving nature of performance measurement from which countries with less established performance measurement activities can learn.

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