# CRiHSP Policy Dialogue - Implementing Patient Reported Outcome Measures to Improve Health System Performance in Singapore

## 29 July 2026

## Q&A

**Chair:** **Dr Jennifer Sumner**
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## Speakers & Panellists

**Prof Nicholas Goodwin**
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**Dr Jegatheesvaran Pradeeba**
Value Driven Outcomes Office, National University Health System

**Dr Albert Ty**
Ministry of Health, Singapore

**Dr Michael van den Berg**
Organisation for Economic Co-operation and Development

**Dr Ritu Jain**
DEBRA International, DEBRA Singapore Agency for Care Effectiveness (ACE)'s Consumer Panel for Health Technology Assessments (HTA)

**Ms Huang Lezhi**
NHG Health

**Prof Julian Thumboo**
Duke-NUS, Singapore

**A/Prof Sandra Nolte**
Monash University, Melbourne, Australia

**Dr Laurie Goldsmith**
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**Prof Jose M Valderas**
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## Audience Questions:

**Question:** From a policy perspective, what measures are in place to ensure PROMs implementation is sustainable while minimizing administrative burden on providers and patients?

**JMV (CRiHSP):** It depends on the country, the target population, the disease and the intended use (individual, group, population). Measurement systems based on Computer Adapted Testing are the state-of-the-art approach, but are not really used mostly because of limited understanding by stakeholders, more familiar with legacy measures (EQ5D, SF-36, etc.)

**NG (CRiHSP):** EQ5D (and its variants) can be used for various conditions, including multiple conditions, to track changes in self-reported outcomes over time, create health profiles and/or to compare general health status within or between different groups. There are useful user guides on the EuroQoL website. Choice of PROMs is covered in the Policy Briefing, but it's a well-used standardised generic measure of health status that can be used in conjunction with condition-specific approaches.

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**Question:** How are the PROMs administered? Can patients fill them in via HealthHub+?

**JMV (CRiHSP):** I note that the question is posed in relation to a specific administration process that was alluded to in the presentation. There are multiple ways in a PROM can be administered: paper and pencil vs electronic, self-reported vs administered, computer adaptive vs standardise, etc.

**WK (NHG):** NHG will be transiting to HealthHub+(HH+) in Nov 26. By then, patients can fill in PROMs via HH+, and data will flow back to EPIC as source of truth.

**JP (NUHS):** The current strategy across clusters is EPIC-first. Even with the move to HH+, EPIC modules and MyChart will continue to be the backend infrastructure and hence no changes.

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*JMV: Prof Jose M Valderas (CRiHSP) | NG: Prof Nicholas Goodwin (CRiHSP) | WK: Ms Winnie Koh (NHG) | JP: Dr Jegatheesvaran Pradeeba (NUHS)*

**Q:** Really agree with Ms Huang's point that trust is key, and patients would be more agreeable to fill up PROMs if their healthcare providers use them in clinic care/ consultations. How should we encourage clinicians to integrate the use of PROMs into their care? Resistance from clinicians today is quite a big barrier to implementation. Oftentimes, the ones championing the use of PROMs are already "converted", but it is difficult to onboard the masses.

**Follow-up:** Not an answer but a question elaboration on trusted messenger. How do you train or incentivize clinicians to educate and encourage patients to use PROMs in a busy clinic?

**HL (NHG):** The attendee is spot on that more often than not, clinicians already recognise the value of PROMs in clinical care. Hence, efforts should be put into reducing friction by making PROMs easy to access, easy to interpret, and useful in guiding consultations.

This can be achieved through co-designing meaningful clinical use cases with clinicians, refining EMR builds such that it suits the clinicians' workflows, and investing in broader patient education campaigns to build a culture of PROMs reporting. If patients already understand the purpose of PROMs and arrive prepared to complete them, less consultation time is spent explaining and encouraging participation, making PROMs more sustainable to implement at scale.

Ultimately, the goal is for PROMs to be perceived not as an additional administrative task, but as a tool that helps clinicians quickly identify what matters most to their patients and have more focused, efficient, and meaningful conversations.

**RJ (DEBRA)**: Perhaps encourage hospitals (not just clinicians) to work with patient organisation leaders; they could be trusted and valuable partners that patients trust. More importantly, a PROM should be completed via an app before a consult so as to avoid burdening clinicians for its administration.

Engaging with and educating patients to take initiative can also incentivise the uptake of PROMs.

**Question:** How do different clusters decide which PROMs or disease conditions are prioritised for data collection?

**AT (MOH):** Currently, clusters may prioritise PROMs based on their own clinical priorities, existing value-based care initiatives, availability of validated measures, and readiness to implement them. This means there can be variation across clusters in both the conditions selected and the PROMs used.

Moving forward, I would expect prioritisation to become more coordinated nationally, with MOH leading the work, taking into account factors such as the clinical value of measuring patient-reported outcomes, whether there is a suitable validated instrument, the potential for comparison and learning across institutions, and implementation feasibility. The intent is not to remove cluster or specialty input, but to provide a common national process through which priorities and measures can progressively converge.

**JP (NUHS):** Within NUHS, there is already significant activity in different disease specialties - where prioritisation will sit is harmonisation for e.g. a project in NTFGH where data is being used and a good workflow, that can then be scaled to NUH, AH, NUP etc. Regardless, teams are actively encouraged to explore PROMs. NUHS will also work with the other clusters to harmonise builds on EPIC where possible.

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**Question:** What are your recommendations of doing EQ5D paired with a disease-specific PROMs? In our ageing population, how do we measure the prom for those with cognitive impairment? Do we use caregiver as surrogate given the caregivers are impacted with the patients' conditions?

**JMV (CRiHSP):** 1st question: See above, may be a reasonable approach, ideally supported by individualised instrument, if feasible; 2nd question: Both instruments that have evidenced validity in the population of interest or proxy measures may be appropriate; 3rd question: See previous response. But if the interest is the caregiver, then a caregiver rather a proxy instrument, should be used

**LN (SSHSPH):** Yes, family members can be used as proxy if needed. EQ-5D, for example, has a proxy version.

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**Question:** What about PREMs? Will MOH come up with a central pool of recommended PROMs for each speciality?

**AT (MOH):** For PROMs, yes, there is already work underway to establish a more nationally harmonised approach. We have set up a national PROMs Steering Committee and four specialised units to look at validation and research, clinical implementation, patient and stakeholder engagement, and IT and data. Hence, MOH alongside the clusters are developing a nationally harmonised framework and progressively establishing recommended, validated PROMs for priority conditions.

PREMs are related but distinct. There is also work underway, although through a separate stream. MOH's patient experience work, led through MOH's Communications and Engagement Group, is looking at greater alignment and standardisation of the questions used to measure patient experience across clusters. This is complementary to the PROMs work.

**Question:** What is the role of PROMs in HTA (health technology assessment)?

**LN (SSHSPH):** Some PROMs can be converted into value measures such as EQ-5D index scores for HTA purpose.

**Question:** Given the importance of seamless EMR integration to reduce barriers for clinicians to use PROMs and the complexity of technical implementation, do the clusters have a dedicated team of analysts building PROMs into EPIC?

**JP (NUHS):** This is something in discussion between all three clusters.

**Question:** What about patients with multimorbidities? They will end up with multiple PROMs. Is it recommended?

**JMV (CRiHSP):** See previous answers on this issue.

**LN (SSHSPH):** Generic PROMs are best measures for such patients.

**LJG (CRiHSP):** Here's an example where patient and public involvement (PPI) could be really helpful. Why not ask people with multimorbidities to contribute to the planning around this issue? Perhaps for certain combinations of multimorbidities there is a particular PROM that is most important. Perhaps patients want to choose their primary PROM. Perhaps there's another idea that researchers and clinicians have not thought about because they do not have the lived experience of multimorbidity and filling out PROMS.

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**Question:** In the situation where PROMs are truly more useful for cohort analysis / HTA than for actual individual patient care, how do we ethically disclose this to patients and motivate their participation?

**LJG (CRiHSP):** For the most part, we are talking about adults when we are talking about patients. And even for underage patients there are adults who are involved with decision making. The short answer is to treat patients as adults with full decision-making ability. Be transparent. Allow patients to make their own decisions. There are many patients who are interested in helping others even if they will not directly benefit themselves. And if a patient is not interested in taking on an additional task that will not directly benefit them (for whatever reason), it is their right to decline participation. But generally I find that many people in the world are motivated in part by being a helpful member of the communities in which they find themselves, as long as they can juggle the things already on their plate.

**RJ (DEBRA):** I agree with this wholeheartedly; most of the social science research we do in academia doesn't benefit our participants but they are happy to help shape programs or policies that may impact communities in the future.

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**Question:** How do we move forward with a national standardized PROMs that can be used in public and private healthcare?

**AT (MOH):** In addition to the answer for an earlier question, a nationally useful PROM requires common definitions, validated instruments, consistent timing and methods of collection, and agreement on how the data will be interpreted and used. We also need the digital infrastructure and governance to allow information to follow the patient across settings.

MOH can play an enabling role by bringing stakeholders together, establishing common principles and standards, and identifying areas where a common national measure would provide clear value. But clinical ownership is important. The measures need to be meaningful to clinicians and patients, rather than simply becoming another national reporting requirement.

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**Question:** Computerised Adaptive Testing is a good way to reduce repetitive questions for patients however to administer CAT via HealthHub+ or any app needs infrastructure available to clinicians. How do we avail such access to clinicians?

**JP (NUHS):** This is something in discussion between all three clusters.

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**Question:** What is the statistical rigour required to properly interpret comparative proms results?

**JMV (CRiHSP):** I am afraid the question is too non-specific: comparing individuals across time, individuals against each other, comparing groups of individuals? Also not clear how to respond to statistical rigour required.

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**Question:** I am doing Paediatrics and Child development. A condition like autism has recommended PROMs, and we have collected all sorts of data in relation to their outcomes etc. But we share the care standards and services with our community providers (early intervention centers providing therapy). Without a national aligned index, clinicians feel we cannot do any better too — in looking at the value and gaps the different care settings. Is there any value of PROMS in such situations — shared clinical with community care measurements, national level.

**LJG (CRiHSP):** There are likely interested groups of patients (parents) and public who would welcome having access to such PROM data and participating in conversations around how to use these data at a national level.

**RJ (DEBRA):** The absence of alignment shouldn't be read only as a gap to be fixed before PROMs are useful; it may be pragmatic to agree on a small shared core measure (or agreed upon goals/measurements of progress) that both settings agree to use and exchange/pilot with a longer term goal of a fuller index?

**AT (MOH):** For conditions such as autism, outcomes are influenced by care delivered across healthcare, early intervention, education and community services. If each setting measures outcomes differently, it becomes difficult to understand the patient's overall trajectory, where interventions are working, and where gaps exist.

The aim, however, should probably not be a single index that attempts to capture everything. Autism is heterogeneous, and outcomes that matter may differ substantially by age, developmental stage and individual goals. A more useful approach may be a common core outcome framework, with a small number of agreed measures that can follow the child across settings, supplemented by measures relevant to particular services.

This is an area where PROMs could potentially move beyond measuring individual services towards understanding outcomes across the whole care journey.

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**Question:** Should an institution/department institute a PROM workflow where they have a system to address each returning response, or it's ok to leave the responses in EMR and hope another institution chances upon the result to help take action?

**JMV (CRiHSP):** It would be not ethical to increase the burden of care, including administration of PROMs, thereby making information available and not acting upon it.

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**Question:** How do we come into agreement and highlight the need for a validated national set of PROMs we can all adopt through the MOH's support?

**LJG (CRiHSP):** Involving patients and public in this endeavour is part of the solution. Deliberative dialogue with all stakeholders, including patients and public, would be a helpful step in identifying and developing a national set of PROMs.

**AT (MOH):** This is exactly what MOH and cluster leads are trying to achieve through the national PROMs initiative. Rather than individual institutions or specialties independently selecting different PROMs, we have established a national process to progressively identify and agree on PROMs that are scientifically sound, clinically relevant and appropriate for our local population.

The MOH PROMs Implementation Committee's Validation and Research Unit will develop common criteria for selecting PROMs, determine whether existing instruments can be adopted as-is or require local adaptation or validation, and recommend tools for national implementation. This provides a common evidence-based process through which we can arrive at greater national alignment.

At the same time, I would not frame the end-point as having one fixed national set that every specialty must adopt. Different conditions and patient populations may require different measures. The aim is to establish a nationally harmonised framework and, where there is a clear case for comparability, converge on common validated PROMs that can be adopted across institutions.

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**Question:** Would PDPA be presented as a hurdle?

**JP (NUHS):** It should not be a fundamental hurdle to PROMs - PDPA should be treated as a necessary design requirement, not a block.

**AT (MOH):** I would avoid characterising PDPA itself as the hurdle.
The more practical issue is how we design the governance, consent where applicable, data-sharing arrangements and technical infrastructure that allow PROMs data to be used appropriately across organisations while protecting patients' information.

This becomes particularly important when care crosses organisational boundaries, such as between hospitals and community providers. Privacy requirements need to be addressed, but they should be treated as a design requirement rather than a reason not to proceed.

The harder questions are likely to be: who is collecting the data, for what purpose, who can access it, whether it can follow the patient across settings, and whether the necessary legal and governance basis exists for each intended use.

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