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Measuring progress in institutionalising evidence-informed priority-setting in the Indian healthcare system: an application using the iProSE scale

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Introduction

Faced with the recovery from COVID-19, debt, increasing effects of climate change and global macroeconomic uncertainty, many governments in low-income and middle-income countries (LMICs) are likely to have less money to spend on healthcare in real terms up to 2030 compared with what they had before COVID-19.[1 2] As such, already resource-constrained health systems will have to do more with less if hard-earned progress in improving health and financial risk protection is not to be lost. Using evidence to inform healthcare priority-setting has long been recognised as central to making progress towards universal health coverage,[3] and seems more important than ever today. Evidence-informed priority-setting (EIPS), understood as a form of systematic priority-setting that involves the explicit consideration of evidence to determine the healthcare interventions to be provided,[4] is not just sensible in theory; recent empirical evidence suggests that EIPS represents good value for money, for example, in Thailand, EIPS delivered an estimated 8:1 return on investment (ROI).[5]

However, institutionalising EIPS in LMICs is not straightforward. A 2019 report by the WHO provides guidance on institutionalisation,[6] however, there is currently no agreed way to understand and measure progress, plan improvements or enable cross-country comparisons. In this piece, we use the recently developed International Decision Support Initiative (IDSI) Progression Scale for EIPS (iProSE)[7] to outline, assess and reflect on India's recent steps in institutionalising health technology assessment (HTA), a common approach under the EIPS umbrella. IDSI, whose secretariat is hosted at the Center for Global Development (CGD), has developed iProSE following a review of existing tools that measure HTA progress; iProSE aims to complement and build on them by being explicit about how health economic evidence informs spending decisions, which we argue can focus policymakers' attention towards tangible, strategic institutional developments for EIPS.

iProSE—a scale for measuring progress in institutionalising priority-setting

iProSE is a self-assessment scale whose aim is to help countries map and score the extent to which they use evidence to inform their healthcare priority-setting and resource allocation decisions across all types of health technologies. 'Health technology' is understood in a broad sense as 'an intervention developed to prevent, diagnose or treat medical conditions; promote health; provide rehabilitation or organise healthcare delivery' and includes pharmaceuticals, vaccines, medical procedures (eg, surgery, physiotherapy), diagnostic tests (eg, mammography) and population-health interventions (eg, organised screening).[8] iProSE focuses on the use of comparative health economic evidence as well as broader system-level aspects (eg, legal, organisational, ethical, economic, social), which are recognised as essential components of priority-setting processes and for which there is much more variability across countries.

iProSE tracks country progress on implementing six enabling factors for EIPS and on using evidence to inform two key types of resource allocation decisions: which health technologies to reimburse from public funds, and at what prices to procure health technologies as part of public procurement procedures. The resource allocation decisions and enabling factors were selected by senior experts at IDSI and CGD based on the literature, their relevance to public spending on health and their measurement feasibility for LMICs. They are operationalised as aspirational statements, eight in total, formulated so they apply to most health systems. For each statement, the country's current level of progress is assessed based on information available in official, published documents (to minimise bias and reduce the need of extensive stakeholder consultations) and scored against an implementation spectrum ranging from 'None' to 'Full implementation' (see table 1). The statement scores are currently only a starting point and will require refinement through further country applications. These additional experiences led by IDSI partners and beyond will improve the appropriateness of the original scale. The how-to guide of iProSE gives further practical details, with examples.[9]

Table 1 Summary of India's institutionalisation of EIPS in healthcare, 2016 and 2023

Statement	Implementation stage					
	None	Policy	Legislative	Operational	Implemented partially	Implemented fully
Decisions						
When deciding which health technologies to reimburse using public funds, health economic evidence on the respective health technologies/interventions is considered in the decision.	Statement is mapped to the implementation stage based on information in official documents for each of six types of health technologies: medicines, vaccines, medical procedures, diagnostic tests, medical devices different from diagnostic tests, public health programmes.					
Pharmaceuticals						
Vaccines	Not assessed					
Medical procedures						
Medical devices						
Diagnostic tests						
Population health interventions					No change	
When negotiating prices as part of a public procurement procedure for health technologies, health economic evidence on the respective health technologies is considered in price negotiations.	Statement is mapped to the implementation stage based on information in official documents for each of four types of health technologies: medicines, vaccines, diagnostic tests and medical devices different from diagnostic tests.					
Pharmaceuticals						
Vaccines	Not assessed					
Medical devices						
Diagnostic tests						
Enabling factors	Each statement is mapped to the implementation stage based on information in official documents.					
Organisational structures are in place with the mandate to generate health economic evidence on health technologies.						
Organisational structures are in place with the mandate to interpret health economic evidence on health technologies and make recommendations or resource allocation decisions.						
Formal linkages are in place to bring together producers and users of health economic evidence on health technologies.						
The government funds organisational structures to produce and/or use health economic evidence on health technologies to inform resource allocation decisions.						
Soft infrastructure is in place (eg, cost databases, methods guide, rules-based thresholds, health-related quality-of-life tariffs) to support producers/users of health economic evidence for resource allocation decisions.						
When deciding which health technologies to reimburse using public funds, relevant health system stakeholders have their perspectives heard.						

Yellow and brown cells depict the level of progress in 2016 and 2023, respectively. The implementation stages mean the following: *None*: there is no documentary evidence of any intent or application towards EIPS in healthcare. *Policy*: there is documentary evidence of political intent or statement in the direction of institutionalising EIPS (eg, the country has an HTA strategy). Being at this stage is scored lower because such policy commitments are usually non-binding. *Legislative*: there is documentary evidence reflecting a binding commitment for EIPS (eg, laws, decrees, directives). Being at this stage is scored higher than in Policy, however, legislation usually does not include explicit, actionable steps that can guide implementation. *Operational*: there is documentary evidence which operationalises policy and legislation (eg, standard operating procedures, manuals, norms). Being at this stage is scored higher than in Legislative, however, there is still no evidence of EIPS implementation. *Partial implementation*: there is documentary evidence attesting that in some cases (eg, pilots, ad hoc) decisions are being implemented or EIPS enabling factors are being enacted. *Full implementation*: there is documentary evidence attesting that implementation occurs as intended in most instances. This stage receives the highest score.

EIPS, evidence-informed priority-setting.

How healthcare priority-setting has evolved in India since 2016

We have used the iProSE scale to compare India's position relative to institutionalising EIPS in 2023 and, retrospectively, to its position in 2016, before the establishment in 2017 of the Indian Health Technology Assessment body (HTAIn) under the Department of Health Research, Ministry of Health and Family Welfare.[10] The scale was completed in collaboration with experienced Indian HTA experts, and the findings were presented to key HTA decision-makers for their feedback. We outline below the main changes made from 2016 to 2023 in every area of the scale except for vaccines, which were not assessed as part of this exercise. In short, progress has been made along the implementation spectrum in all enabling factors, resource allocation decisions and types of health technologies, in most cases from 'none' to 'implemented partially' (see table 1).

Enabling factors

In 2016, there was only policy intention to develop and embed all six iProSE enabling factors for priority-setting, but there was no legal mandate, operational process or implementation. By 2023, all enabling factors are present to a strong degree and some of them are applied systematically. In March 2017, the Government of India approved the allocation of funds that allowed setting up HTAIn and soon after more than a dozen staff were hired; in hindsight, achieving this milestone was catalysed by a coalition of champions with sufficient seniority and political authority across a wide group of organisations, who were keen to advance the cause of HTA policy development and considered carefully the organisational placement of HTAIn.[11] Not only has the HTAIn been setup and become operational, financed from public funds with an explicit mandate to generate evidence for policy decisions, but formal links with users of evidence are also present, for example, Memorandum of Understanding between HTAIn and the Health Financing and Technology Assessment Unit at the National Health Agency. Also, 18 regional resource centres (RRCs) have been identified and established in Indian states to conduct research commissioned by HTAIn. Considerable progress has also been made in developing and implementing a tailored national capacity building programme for HTA[12] and in developing elements of 'soft infrastructure' that enable evidence generation: a technical manual and a process manual for conducting HTA were elaborated in 2018,[13 14] a national healthcare costing study and public cost database were published in 2020,[15 16] EQ-5D-5L tariffs[17] and population norms[18] were published in 2022.

Evidence-informed decisions

The use of health economic evidence is more advanced for reimbursement decisions (ie, deciding if technologies are publicly funded) than for procurement or pricing decisions, where operational procedures are in place, but implementation is yet to begin.

Before 2016, instances of economic evidence supporting reimbursement decisions were rare. For example, a model-based economic evaluation of targeted HIV prevention interventions for female sex workers compared with mass media for the general population alone found that the intervention was likely to be cost-effective and informed the decision during the Mid-Term Review of National AIDS Control Programme Phase-3 to continue its delivery.[19] However, that was an isolated case, and there was no formal systematic process in place. By 2023, many more examples of complex economic evidence of all types of health technologies are available. These evaluations informed decisions for Ministry of Health and Family Welfare programmes, the publicly funded Pradhan Mantri Jan Arogya Yojana (PM-JAY) health insurance scheme, and state governments. HTAIn has published two volumes of HTA studies, with 19 and 17 policy briefs, respectively, that influenced policy decisions.[20 21] Some examples include public health interventions (eg, strategies for cervical cancer screening), diagnostic tests (eg, point of care diagnostics for tuberculosis), medical devices (eg, the use of safety engineered syringes) and medical procedures (eg, intraocular lens for cataract surgery).

For the procurement of health technologies, in 2016 there was no indication that any decision was informed by evidence on the costs and outcomes of health technologies. By 2023, the pricing policy for PM-JAY, India's largest public health insurance scheme, was published,[22] and a HTAIn-commissioned analysis of the cost-effectiveness of safety-engineered syringes informed procurement decisions and pricing decisions in several states and for a national programme.[23] Table 1 summarises India's changes between 2016 (yellow) and 2023 (brown) across the domains of the iProSE scale. The next steps towards full implementation would entail, for reimbursement decisions, that all main health system budget holders systematically use HTA to decide which health technologies are covered; and for procurement, that HTA outputs begin to inform price negotiations for all types of health technologies.

Implications for measuring the institutionalisation of priority-setting in other settings

Over the past 7 years, India has progressed from ad-hoc interest in EIPS to 'implementation' status in most areas of institutionalising EIPS captured by the iProSE scale—enabling factors, reimbursement decisions and procurement decisions. This progress has been overwhelmingly owned, driven by, and achieved through the efforts of the Government of India and its academic collaborators, with external international technical support from partners such as IDSI as required.[12] Acknowledging this progress is essential for sustaining political commitment and motivation for priority-setting in the country's vast and complex health system. The Indian experience can provide lessons and inspiration to other countries, particularly LMICs, seeking to develop or consolidate their healthcare decision-making processes. India has shown that setting up the foundations of EIPS institutions is achievable in a matter of years with adequate commitment, ownership and resources.

At the same time, with all the efforts and achievements to date, the benefits of implementing EIPS are only beginning to be observed. HTAIn already has an estimated, average ROI of 9:1 when comparing its total operating costs to the benefits of the HTAs it has conducted.[24] If HTAIn and its RRCs are scaled-up so that they can cover all major decision needs in the country and HTA evidence is routinely taken up by big budget-holding decision-makers, like the National Health Authority and the National Health Mission, India can become a global leader in EIPS.[25] Indeed, it can be argued that the most difficult, but also the most rewarding part of the HTA institutionalisation journey is only beginning, where existing structures and processes begin to work systematically to cover key decision-making that dictates how healthcare resources are allocated and spent. Setting the foundations for institutionalising EIPS should, however, be approached as a long-term commitment. It will require a focused, compelling vision and strategy for building on achievements to date (including learning from challenges), continued political commitment and resources, as well as patience for EIPS to

become integral, not just an appendix, of decision-making culture in India's healthcare system.

Monitoring progress in institutionalising EIPS is an area that can benefit from further developments as a catalyst for improving value for money, so that countries have access to real-time understanding of where they are in their priority-setting journeys. The iProSE scale can be a useful monitoring instrument to this end, which can benefit from more country applications to improve its design and applicability. Our application in the Indian context has shown that iProSE can be implemented easily by one knowledgeable expert over a few days, provided they can access required documents and consult key stakeholders for clarifications. The most challenging aspect has proven to be accessing information relating to the early stages of HTA institutional development, before policy and operational documents were finalised and published.

Routine monitoring and evaluation are key for maintaining progress. For this reason, more countries should consider conducting baseline assessments of EIPS institutionalisation as a starting point for policy learning, planning and action, or, equally important, as a retrospective assessment to demonstrate progress and strengthen political commitment. Global health funders and the healthcare priority-setting community at large should push for more discussion about and visibility of such progress-tracking tools as enablers of cross-country learning.

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