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International Partnerships to Develop Evidence-informed Priority Setting Institutions: Ten Years of Experience from the International Decision Support Initiative (iDSI)

Peter Baker^a, Edwine Barasa^b, Kalipso Chalkidou^c, Lumbwe Chola^d, Anthony Culyer^{ib e}, Saudamini Dabak^f, Victoria Y. Fan^a, Katrine Frønsdal^d, Lieke Fleur Heupink^d, Wanrudee Isaranuwatthai^{ib fg}, Rahab Mbau^b, Abha Mehndiratta^a, Justice Nonvignon^h, Francis Ruizⁱ, Yot Teerawattananon^{ib fj}, Anna Vassalliⁱ, and Javier Guzman^{ib a}

^aGlobal Health Policy, Center for Global Development, Washington DC, USA; ^bHealth Economics Research Unit, KEMRI Wellcome Trust Research Programme, Nairobi, Kenya; ^cThe Global Fund to Fight AIDS, Tuberculosis and Malaria, Geneva, Switzerland; ^dGlobal Health, Norwegian Institute of Public Health, Oslo, Norway; ^eDepartment of Economics and Related Studies and Centre for Health Economics, University of York, York, UK; ^fHealth Intervention and Technology Assessment Program (HITAP), Department of Health, Ministry of Public Health, Nonthaburi, Thailand; ^gInstitute of Health Policy, Management and Evaluation, University of Toronto, Toronto, Canada; ^hHealth Economics Programme, Africa Centres for Disease Control and Prevention, Addis Ababa, Ethiopia; ⁱDepartment of Global Health and Development, London School of Hygiene and Tropical Medicine, London, UK; ^jSaw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore

ABSTRACT

All health systems must set priorities. Evidence-informed priority-setting (EIPS) is a specific form of systematic priority-setting which involves explicit consideration of evidence to determine the healthcare interventions to be provided. The international Decision Support Initiative (iDSI) was established in 2013 as a collaborative platform to catalyze faster progress on EIPS, particularly in low- and middle-income countries. This article summarizes the successes, challenges, and lessons learned from ten years of iDSI partnering with countries to develop EIPS institutions and processes. This is a thematic documentary analysis, structured by iDSI's theory of change, extracting successes, challenges, and lessons from three external evaluations and 19 internal reports to funders. We identified three phases of iDSI's work—inception (2013–15), scale-up (2016–2019), and focus on Africa (2019–2023). iDSI has established a global platform for coordinating EIPS, advanced the field, and supported regional networks in Asia and Africa. It has facilitated progress in securing high-level commitment to EIPS, strengthened EIPS institutions, and developed capacity for health technology assessments. This has resulted in improved decisions on service provision, procurement, and clinical care. Major lessons learned include the importance of sustained political will to develop EIPS; a clear EIPS mandate; inclusive governance structures appropriate to health financing context; politically sensitive and country-led support to EIPS, taking advantage of policy windows for EIPS reforms; regional networks for peer support and long-term sustainability; utilization of context appropriate methods such as adaptive HTA; and crucially, donor-funded global health initiatives supporting and integrating with national EIPS systems, not undermining them.

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Introduction

All countries in the world face a similar fundamental challenge—they lack the resources to meet their populations' health needs. They must set priorities by deciding what health technologies and services are provided to their citizens. Evidence-informed priority-setting (EIPS) is a form of systematic priority-setting that involves the explicit consideration of evidence to determine the health care interventions to be provided, often in the form of a health benefits package (HBP).¹ EIPS aims to ensure that the available resources are used as efficiently and effectively as possible to achieve value for money, equity, and other health system goals. To be

effective it should be institutionalized and systematically used in routine decision-making. Indeed, EIPS can be seen as an integral function of good health system stewardship, both in terms of managing resources effectively, and facilitating transparency and accountability in decisions. Without EIPS, resources are likely to be wasted, inequities may increase, and the most cost-effective interventions might not be rolled out to those who need them.²

One approach to EIPS, promoted by World Health Assembly resolution 67.23, is Health Technology Assessment (HTA).³ HTA is a multidisciplinary process that uses explicit methods to determine the value of

CONTACT Peter Baker  pbaker@cgdev.org  Center for Global Development, 2055 L Street Northwest, Washington DC 20036, USA

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a health technology at different points in its lifecycle.⁴ It is a comparative evaluation of competing health technologies, with explicit evaluations against clear criteria as set by decision makers. Health technologies are defined broadly, including medicine, vaccines, medical device, as well as public health interventions. HTA is both a method and a process, with the process having its origins in the “accountability for reasonableness” framework of public decision-making.⁵ HTA is underpinned by transparent, explicit, and public deliberative decision-making. Appropriate experts, lay representatives, and stakeholders meet to appraise the evidence collected against relevant system goals and social values, such as cost-effectiveness and equity, with a clear route to appeal and revision of decisions.

Investments to support the implementation of EIPS are timely, and as we will argue in this article, effective and empowering. With many countries facing post-COVID fiscal and debt crises, getting more value from domestic health expenditure has never been more relevant, nor more urgent for policy makers. EIPS has been shown to be highly effective at improving system performance. In India, Thailand, and the UK, each dollar spent on EIPS had an estimated return of approximately eight to nine US dollars of additional health service impact.⁶ For donors that are serious about empowering recipient governments and reducing aid dependency, this is also an important moment to review progress on EIPS. Strong priority-setting capacity is essential for governments to

be able to achieve their goals and is necessary for a successful planned transition from aid.

In 2013, given uneven and limited progress in countries’ institutionalization of EIPS, the international Decision Support Initiative (iDSI) was established by UK’s National Institute for Health and Care Excellence (NICE), Thailand’s Health Intervention and Technology Assessment Program (HITAP), and the Center for Global Development (CGD). iDSI is a collaborative platform that catalyzes faster progress of EIPS, particularly in low- and middle-income countries (LMICs). The establishment of iDSI followed initial work by HITAP and NICE to support countries to develop HTA and EIPS capacity, and a seminal CGD working group report on *Priority-Setting in Health: Building Institutions for Smarter Public Spending*.¹ In this article we summarize the successes, challenges, and lessons learned from iDSI’s ten years of experience in partnering with countries to develop EIPS institutions and processes.

Methods

We carried out a thematic documentary analysis, structured by iDSI’s theory of change (Figure 1). We reviewed evaluations from iDSI’s work over the last ten years and internal reports to funders.⁷ We simplified the iDSI theory of change into four areas (Table 1). Firstly, iDSI seeks to develop strong international

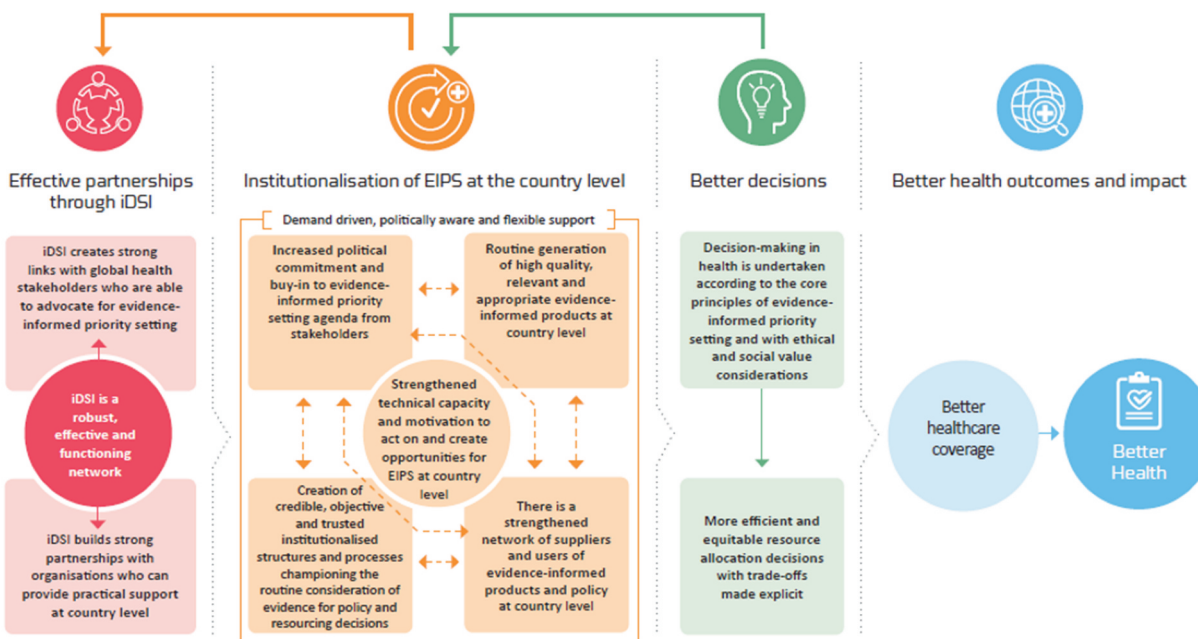


Figure 1. iDSI’s 2018 theory of change. Note: Reproduced under Creative Commons CC BY-NC-SA license from Lloyd R, Gleed G, Wallach S. International Decision Support Initiative (iDSI) Theory of Change Review Report. F1000Research. 2018 Oct 18; 7(1659):1659.⁷

Table 1. Simplified framework for data extraction based on iDSI's theory of change.

Main theory of change area	Example sub-areas
(1) Strong international partnerships	iDSI as a platform iDSI supporting regional networks iDSI producing global public goods
(2) Country institutionalization of EIPS: demand side	Policy demand for EIPS Development of EIPS institutions
(3) Country institutionalization of EIPS: supply side	Production and synthesis of evidence Capacity building of evidence producers
(4) Better decisions and better health	Decisions on service coverage & funding Decisions on procurement of technologies Decisions on clinical guidelines Changes in health outcomes

partnerships that can work together to promote EIPS. Secondly, iDSI seeks to promote the “demand side” for EIPS at the country level. This includes both policy maker demand for stronger EIPS institutions, and stronger EIPS institutions that can articulate their demand for evidence for decision making and interpret and implement what they receive. Thirdly, iDSI seeks to build the capacity of “supply side” institutions to meet the evidence requirements of decision makers. Fourthly, iDSI aims to improve the *process* by which EIPS institutions use evidence to take decisions regarding health services to be provided. Under each of the four areas, the lead author extracted the reported successes, challenges, and lessons for the future. We defined success as iDSI securing progress along one element of the theory of change, and a challenge as a barrier to this progress. Lessons learned were defined as iDSI identifying a specific change needed in its approach in order to secure greater progress along the theory of change. As per the theory of change, these lessons could relate directly to the nature of iDSI and its partnerships, or to technical dimensions of how to improve evidence-informed priority setting institutions.

Results

Descriptive Results: The Three Phases of iDSI's Work

We identified 19 reports to funders and three external evaluations of iDSI.^{8–10} Based on these reports, from 2013 to 2023 iDSI's work can be considered to have had three phases (see [Appendix A](#) for iDSI Partners, funders and countries involved per phase). The first phase (inception, 2013–2015) saw the development of the iDSI network and governance structure, the delivery of pilot and demonstration projects, and the production of foundational global public goods such as the iDSI reference case.¹¹ The second phase (2016–2019) represented a substantial scale-up of country support work with the greatest focus on Asia and support for the Asian regional network (HTAsiaLink). Apart from foundational work in Ghana and South Africa, work in Africa was exploratory

at this stage. The third phase (2019–2023) involved: a greater focus on support to African countries and to the development of African hubs at the Africa Centre of Disease and Control (CDC) and KEMRI Wellcome Trust Research Programme (KWTRP); preparation for future Africa-led iDSI secretariat and grants; and iDSI support to the national, regional, and global COVID-19 response. We now turn to the successes, challenges, and lessons learned from each area of the theory of change.

1) Theory of Change Area One: Strong International Partnerships

Successes

The iDSI network has been very successful in establishing a platform for Partners to coordinate their work, share lessons between LMICs in Asia, Africa, and Latin America, collaborate with global stakeholders, and produce joint global public goods. By 2023 iDSI was comprised of ten Partners with independent funding from a range of philanthropic and bilateral funders ([Appendix A](#)). At a national level, in a 2019 evaluation report, Partners noted that they could do “*more together than they could do individually.*”⁹ For example in 2016 the iDSI network facilitated sharing lessons from experience in India and China with key South African policy makers.¹² In Kenya it supported a Memorandum of Understanding and close collaboration on HTA between the Ministries of Health of Kenya and Thailand.¹³ In Ghana it enabled London School of Hygiene and Tropical Medicine (LSHTM), Norwegian Institute of Public Health (NIPH), and external partners such as PATH to collaborate and coordinate activities under the leadership of the national HTA secretariat.

At the regional level in Asia, HITAP, one of the founding members, was involved in the development of HTAsiaLink, a collaborative network that supports mutual capacity building and learning. Since 2011, HTAsiaLink has grown from three founding agencies to 55 members from 21 countries and no longer relies on iDSI support.¹⁴ In Africa, KWTRP has developed

a nascent AfroHTA network with 11 members and Africa CDC has launched a Health Economics Programme (HEP) with initial CGD support. The HEP has now scaled-up its work beyond iDSI with a five-year strategic roadmap and a range of funded regional and country support initiatives. For example, the HEP has supported five African countries to develop HTAs of COVID vaccines, produced regional guidance on the topic, and is now developing a continental EIPS framework for Africa.^{15–18} Beyond 2023, Africa CDC and AfroHTA will take forward iDSI work in Africa, with additional grants they have secured.

At the global level, iDSI has successfully advanced the priority-setting agenda by supporting the critical 2014 World Health Assembly resolution 67.23 on HTA, the Prince Mahidol Award Conference 2016 on Priority Setting for Universal Health Coverage (UHC), and through contributions to global guidance, such as co-authoring the World Health Organisation's (WHO) *Principles of Health Benefit Packages and Guidance for Institutionalizing Health Technology Assessment*.^{3,19,20} iDSI has also supported the development of the field through co-producing over 200 peer-reviewed papers (see Appendix B), practical tools, and guides to support countries on priority-setting including the iDSI reference case, *What's in, what's out: designing benefits for universal health coverage*, a range of guides on HTA methods and institutionalization, and the Guide to Health Economic Analysis and Research (GEAR) database (<https://www.gear4health.com>).^{21,22} iDSI also supported the development of LMIC context-appropriate HTA methods, such as adaptive HTA, and use of real-world evidence, and supported the move away from GDP-based cost-effectiveness thresholds to more accurate country-specific estimates of supply-side thresholds.^{23–26} Finally, iDSI and WHO worked in partnership on the COVID-19 multi-model collaboration during the pandemic, resulting in important recommendations on the use of modeling in pandemic priority-setting.²⁷

Challenges and Lessons Learned

While iDSI focused primarily on country support, it also sought to develop partnerships with global agencies and donors, such as co-convening the Joint Learning Network's Efficiency Collaborative with the World Bank, and forging partnerships with WHO in country projects and on global guidance.²⁸ However, in Itad's 2018 evaluation, it was noted that iDSI had less success in partnering with global health initiatives to improve the value for money of vertical donor funding, or integrating it into national EIPS systems.⁹ The issue has remained intractable, despite partnerships including

joint projects with Gavi on vaccine “*Total Systems Effectiveness*,” and the Global Fund on the use of economic evidence in Kenya's HIV response as well as extensive analysis on the importance of HTA and value for money considerations to optimize the Global Fund's impact on HIV, TB and malaria.^{29–32}

One important lesson from this experience is that parallel donor-funded health financing systems (i.e., that are not pooled with government budgets) are usually matched by parallel priority-setting systems, which prevents integration within national EIPS systems and consideration of overall system efficiency. For example, priority-setting decisions for Global Fund-funded HIV services are usually separate from a national health insurer's decision on whether to prioritize and fund treatment for high blood pressure, and there may be no mechanism to compare the two to look for allocative efficiency gains. Furthermore, there appears to be no strong mandate for global health initiatives to use HTA approaches when making resource allocation decisions, nor support the development of HTA systems in LMICs. Because their mandate comes from their boards, greater support to national EIPS from global health initiatives may only be possible if board members require it. As FCDO's independent evaluation of iDSI noted: “*It is also important that DFID funding through all channels reinforces harmonization: for example, funding to [the Global Fund] and Gavi should ensure that these initiatives support national HTA processes.*”¹⁰ Harmonized and integrated priority-setting is particularly important as a country moves toward transitioning from aid and is expected to take over funding of vertical initiatives.

Another challenge noted by iDSI was defining the role and characteristics of an effective African regional hub. In Asia, HITAP and HTAsiaLink demonstrated the value of a well-functioning hub and network to rapidly scale up EIPS in a region. They also showed a route to regional self-sufficiency and mutual support to utilize domestic resources without over-reliance on donor funding. However, iDSI's first effort to establish an African hub in South Africa was unsuccessful, in part because South African institutions were continually pulled into focusing first on development of domestic HTA institutions and were unable to prioritize the development of a regional EIPS network and function. This unsuccessful approach set iDSI back three of four years in developing a model for an African led regional priority setting hub. During this period iDSI realized that a hub would have to be able to build capacity among HTA producers while also advocating effectively to HTA users, often policy makers, regarding the importance of EIPS. To date, there is no organization like

HITAP in Africa that has been able to work authoritatively with both policy makers and researchers, nor generate the same momentum as seen in Asia. iDSI therefore opted for a dual-hub model. Africa CDC's HEP, with iDSI support, became the first hub—an authoritative regional voice that could legitimately engage policy makers on the continent and promote the importance of EIPS, without getting pulled into domestic affairs. The AfroHTA network, using HTAsiaLink as a model, then became the second hub, seeking to develop a community of HTA practitioners and experts, which Africa CDC and national policy makers could then draw upon.

2) Theory of Change Area Two: Country Institutionalization of EIPS—Demand Side

Successes

Through activities such as direct policy advice to national HTA champions, policy engagement workshops, high-level panels, demonstration projects, study tours, and south–south learning, iDSI has been successful in supporting country partners in gaining high-level commitments to strengthening EIPS in nine countries. These efforts include commitment to establish HTA in India by a Parliamentary Standing Committee in 2016, a treasury funding commitment for an HTA unit in South Africa, legislative provision for an HTA unit in the Philippines, a Ministerial Instruction for HBP revision in Rwanda, roadmap to EIPS reform in Indonesia, China, and Zambia, and detailed commitments in Ghana's HTA strategy and Kenya's HTA framework. The Minister described the motivation behind Ghana's support for HTA thus: *“the National Health Insurance Scheme was a logical beneficiary of the positive impact of HTA . . . from the design and management of benefit package to the determination of the reimbursement list of medicines, as well as price-setting mechanisms, the tool was seen as useful among other considerations to help assure value-for-money.”*³³

These commitments have resulted in stronger domestically funded EIPS institutions in eight countries. This includes the establishment of HTA in India (HTAIn); China's national HTA network; Ghana's HTA steering committee, technical working group and secretariat; revised processes for Philippines establishing its HTA council and unit, which in 2020 grew from 13 to 26 staff; South Africa's National Essential Medicines List Committee (NEMLC); Indonesia's HTA committee, “InaHTAC;” Rwanda's HBP committee and secretariat; and Kenya's nascent HTA technical working group. HTAIn is the most prominent example of progress in building institutions for EIPS. HTAIn has

established governance processes, appraisal committees, staffing, 18 regional HTA resource centers, a range of national process and methods guides, a national costing database, and over 36 studies have been completed and appraised and their associated policy briefs produced.³⁴

Challenges and Lessons Learned

A key challenge that iDSI faced in supporting the development of EIPS institutions is the political nature of the process and the extended time required for maturity and tangible impact. Thus, a policy window for reform, a policy champion to drive it forward, and sustained political will over several years are required to achieve meaningful impact. Political will is conceived as ministerial level support for reform, but because the reform extends beyond a single minister's appointment or indeed beyond a government's term in office, success may be more likely if there are longer term pressures on policy makers, for which EIPS reform is seen as a solution. For example, Kenya's new National Health Insurance (NHI) scheme created a need to define a new HBP, leading to increased interest in EIPS. However, this heightened interest faced a setback a few years later when a change in government forced iDSI to initiate new sensitization efforts with policy makers, slowing down the national HTA strategy. In contrast, stable high-level political concern regarding financial sustainability of Rwanda's Community Based Health Insurance (CBHI) scheme has so far driven ongoing progress in EIPS.

Four lessons can be identified here. Firstly, iDSI is working in a political environment and needs the skillset to support capable national policy champions who can promote sustainable political commitment and identify policy windows.⁹ As FCDO's external evaluation noted, this politically-sensitive support to policy champions may be more effective if led by long term in-country iDSI Partners.¹⁰ Secondly, iDSI needs to be strategic in country selection, carrying out situational analysis to understand the political economy and health financing context from national experts and policy champions, and to identify policy windows for EIPS reform.³⁵ Thirdly, sustained political will is hard to predict, so iDSI and its funders must take a long-term approach and be flexible enough to move efforts between countries as opportunities appear, disappear, and reappear. Fourthly, iDSI needs to form long-term trusted partnerships with senior government policy makers. This was historically assisted by iDSI's association with public sector HTA agencies such as HITAP and NICE, iDSI's track record in supporting countries, and its avoidance of funding with potential conflicts of interest.

3) Theory of Change Areas Three: Country Institutionalization of EIPS—Supply Side

Successes

Over the past ten years, iDSI has delivered a wide range of capacity building approaches at the individual and institutional level. With national experts, iDSI has co-produced 47 HTAs or similar studies in 14 countries in Africa and Asia on topic areas including diagnostics, vaccines, treatment for infectious diseases, medical devices, screening, and treatment for non-communicable diseases. iDSI has also co-produced multi-technology reviews such as a review of Tanzania's EML, a review of Vietnam's most expensive drugs, and an ongoing review of Rwanda's HBP. To speed up production of results, countries have piloted faster adaptive HTA methods that draw on HTA reports from other countries.²⁴ In India, more than ten adaptive HTAs have been produced to inform the revision of clinical guidelines for cancer care in the National Cancer Grid, a network of hospitals covering 60% of Indian cancer care.³⁶ With iDSI support, countries have scaled-up their own HTA production, and developed standards such as national HTA guidelines and reference cases in eight countries: Indonesia, Ghana, South Africa, Philippines, China, Bhutan, Vietnam, and India. HTAIn has built on this guidance to produce its HTAs—and has now published 36 policy briefs based on HTA studies completed by its secretariat and regional resource centers.³⁴

Challenges and Lessons Learned

Three common challenges were reported on the supply side. First, too few HTA reports were produced to adequately address the needs of decision-makers. Second, scaling up the production of HTA reports hit capacity limitations in terms of limited staff, funding, skills, local data, and absence of national standards or method guides. This highlights the challenges inherent in navigating the learning curve associated with HTA. Third, topics selected for HTA analysis were not well matched with decision makers' priorities. This was particularly common when HTA production was driven by donors, partners, or another part of government, without appropriate engagement of the end users of the HTA reports—the decision-makers. For example, Ghana and Indonesia are strengthening topic selection processes because topics have been historically biased toward what studies can be funded, rather than by the needs of key health system decisions. Relatedly, in India the return on investment (ROI) of carrying out HTA analysis varied from 5:1 to 40:1, highlighting the significance of careful selection on which topics to carry out HTAs.⁶ One lesson here is that to be serious about EIPS countries must invest significant

resources in good topic selection, backed by intentional funding of high-quality HTA analysis and a process for quality assurance, with topics targeted to the country's decision needs. Development partners should be supportive of this and avoid pushing for analysis to be carried out on their own priorities.

A second lesson is that it is important for iDSI to consider capacity building for HTA broadly, such as using the Individual, Nodes, Networks and Environment (INNE) approach.³⁷ An individual researcher may need to learn a new technique, but their capacity to use it will be enhanced if they have access to experienced mentors and peers through HTAsiaLink, and are supported by a high quality national cost database and a national methods guides. Whether the work has impact will depend on if it is situated in a reliable and effective HTA process. Finally, capacity building largely carried out by national experts can empower trainers, increase domestic networks and mentorship, and help to ensure that capacity building is locally appropriate and sustained over time. An over-reliance on “fly-in and fly-out” international experts risks undermining this; they should be used only to supplement national skillsets. In addition, the effective capacity of a country can be increased by working collaboratively on common topics, perhaps coordinated through regional agencies such as Africa CDC. iDSI has had some success with economies of scale in Asia, for instance, supporting multiple countries to carry out HTAs on common topics such as dialysis and pneumococcal vaccines. Countries could go further—by using adaptive HTA methods to systematically and rapidly adapt reports and decisions made by other countries, thereby enabling quicker decisions and focusing limited analytical questions on areas where there is the greatest uncertainty.

4) Theory of Change Area Four: Better Decisions and Better Health

iDSI has an impact on population health through better resource allocation decisions in the short-term, but also in the long term once iDSI has left, through ongoing stronger EIPS institutions. In principle this impact could occur through a single EIPS process that proceeds to direct all relevant resource allocation decisions in a country in an integrated manner. In practice, however, we identified three common routes through which HTA analysis has impact. These routes are important to emphasize because, in our experience, they are often not integrated, leading to siloed decision-making processes involving different decision makers (Figure 2).

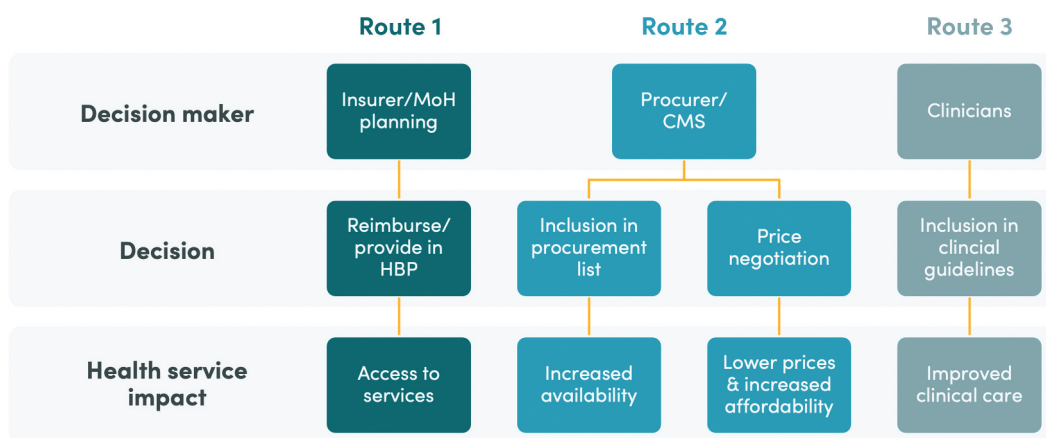


Figure 2. Three common routes to impact of EIPS.

These routes are not mutually exclusive, rather they represent different pathways that can contribute to the impact of HTA. Furthermore, it is noteworthy that only one route needs to be functioning for EIPS to have impact.

Successes

From iDSI's reports we identified the following specific short-term outcomes that may be reasonably attributed to iDSI-supported institutions and analysis. While longer-term health impacts are cumulative, they are not yet known. Vietnam optimized its HBP to limit indications for high-cost drugs—potentially saving D 231 USD million annually.²¹ Philippines, Bhutan, and China included HPV and PCV vaccines in their immunization schedules.^{38–40} In China, HTA is now routinely used to revise the National Drug Reimbursement List, including substantially influencing prices.⁴¹ Tanzania worked with iDSI to review its standard treatment guidelines and essential medicines list, and more recently it reviewed its clinical guidelines for the critically ill following COVID-19.^{42,43} Ghana's HTA on hypertensive drugs informed the Standard Treatment Guidelines and Essential Medicines Lists, and also underpinned their price negotiation with suppliers. In addition, a HTA analysis resulted in a decision by the Ghanaian National Health Insurance Scheme insurer to add cost-effective treatment for Burkitt's Lymphoma childhood cancer to its benefit package.⁴⁴ In Rwanda, evidence from a 2020 HTA pilot on dialysis informed commodity price negotiations on this expensive service, and a HBP review is currently underway, with ongoing decisions being taken to optimize the package of services covered by CBHI, which includes 90% of the population. In India, iDSI's Progression Scale for EIPS (iProSE) was used to assess progress of HTAIn on reimbursement and pricing decisions. It found that

before 2017, economic evidence informing decision-making was rare, but by 2023, complex economic evidence was informing decisions for Ministry of Health programs, the PM-JAY insurance scheme, and state governments across all types of health technologies.⁴⁵ Modeling the ROI of this progress, India found that the additional health system benefits of just three HTA studies produced nine times the health system benefits compared to the annual costs of HTAIn.⁶

Challenges and Lessons Learned

Implementation of EIPS recommendations is difficult partly because strong interest groups—including industry, service delivery, health professionals and patients—may resist the decisions, lobbying decision makers and testing their commitment to EIPS. For example, Indonesia decided to remove bevacizumab and cetuximab from the national list of medicines, following a HTA, which could have saved an estimated 22.4 million USD annually for use on other more cost-effective interventions. However, this decision was later reversed due to resistance from clinicians.⁴⁷ Implementation is an area which most countries need to strengthen substantially, even when they have had success in other parts of EIPS development. For instance, during the iProSE review of India, shifting from partial implementation of HTA recommendations, to systematic, routine and full implementation was considered the main area for future development, and would increase the ROI from 9:1 to 71:1.^{6,45} A key lesson is to provide a clear mandate for EIPS institutions, which, when combined with explicit and transparent decision-making processes, can be more resistant to lobbying. This mandate, combined with systematic and transparent institutional processes that link the EIPS recommendations to downstream decision makers along the three impact

routes (see [Figure 2](#)), can promote consistent and reliable implementation.

A second common challenge that impedes implementation is fragmentation of health financing. This can be caused by donor funding methods, different pooling and insurance mechanisms, and the federal nature of a country's political system. In countries such as India and Ethiopia, regional and state health expenditure decisions are made independently of national level priority-setting efforts. This results in challenges where national EIPS recommendations may only be partially implemented by autonomous states. Fragmentation of domestic health financing in Ethiopia resulted in the health insurer covering costs for an HBP which has been defined by the Ministry of Health without explicit regard for the budget envelope of the insurer. In Ghana, Kenya, and most low-income countries worldwide, independent priority-setting systems for donor- and domestically-funded services exist. This challenge of fragmentation by federal states, plural financing systems, or donors may be addressed by an appropriate governance structure that is inclusive of the health financing streams, ensuring that the EIPS system is responsive and useful to the various decision-makers. High-level coordination at the ministerial level and through health development partner forums is needed, ideally with an EIPS system backed by a legislated mandate.²⁰

Finally, implementation can be strengthened if planned for from the beginning of an EIPS reform process. iDSI has developed a range of tools to support this, including a situational analysis template, a template for national HTA frameworks, and the iProSE tool.⁴⁶ An example of this approach is Ethiopia where a situational analysis resulted in agencies such as the national insurer and ministry of health working together on a single national HTA framework that meets all budget-holders' needs.³⁵

Discussion

At the global and regional levels, we found evidence that iDSI was partially successful in advancing the global priority setting agenda, establishing a platform of Partners with independent funding that enables coordination of support to countries, and producing a range of high-impact global public goods that were influential both globally and at the country level. HTAsiaLink has been highly effective at promoting regional EIPS through a peer support network and is now self-sufficient without ongoing iDSI support. Africa CDC and the AfroHTA network have now built the foundations for similar success in Africa, and with the grants

they have secured they can begin to catalyze a step-change in EIPS on the African continent. These regional successes are particularly important because, with the Bill and Melinda Gates Foundation (BMGF) ending its core support to iDSI after 2024, they offer a legitimate, regional, sustainable mechanism for long-term impact.

iDSI was less successful at engaging vertical global health initiatives to support country EIPS institutionalization. Bilateral donors and board members of global health institutions will need to reform the initiatives' mandates to be supportive of national integrated EIPS processes. This will be particularly critical over the next decade, as donor funding for global health looks highly uncertain, with increased donor focus on other priorities such as climate change. Resources for global health initiatives may fall, and unless strong EIPS systems are in place, the transition to domestic financing will be sub-optimal and populations will be worse off.

Regarding national institutionalization of EIPS, iDSI was successful in obtaining high-level commitments, policies, and strategies on HTA in nine countries, with eight of those having made substantive domestically funded developments in their EIPS institutional processes. Over the last ten years, iDSI learned several key lessons on how to make this work more effective. It identified the importance of policy windows and sustained commitment over many years to the development of EIPS, which means careful country selection, long-term partnering with politically aware EIPS policy champions, strategic planning based on situational analysis with appropriate political economy analysis, and flexible programming and funding to move countries when opportunities rise and fall. iDSI has supported the development of capacity to produce HTAs in over 14 countries and learned that capacity building needs to be considered holistically, going beyond skilled individuals to developing supportive networks and strong institutions such as universities and HTA secretariats; and where possible delivered by national experts. Limited capacity can be focused through good topic selection and its impact extended with rapid adaptive HTA methods, and in the future, supplemented by regional HTA efforts. Going forward, iDSI will adopt a politically sensitive, layered model of EIPS support, as described in [Figure 3](#), with policy champions navigating (and creating) policy windows, supported by domestic experts, and supplemented by regional and extra-regional technical assistance and networks when necessary.

Implementation of EIPS recommendations was identified as one of the most challenging steps, especially in a fragmented, federal, and donor-dependent health financing system. A clear mandate for EIPS, inclusive governance with high-level coordination, and

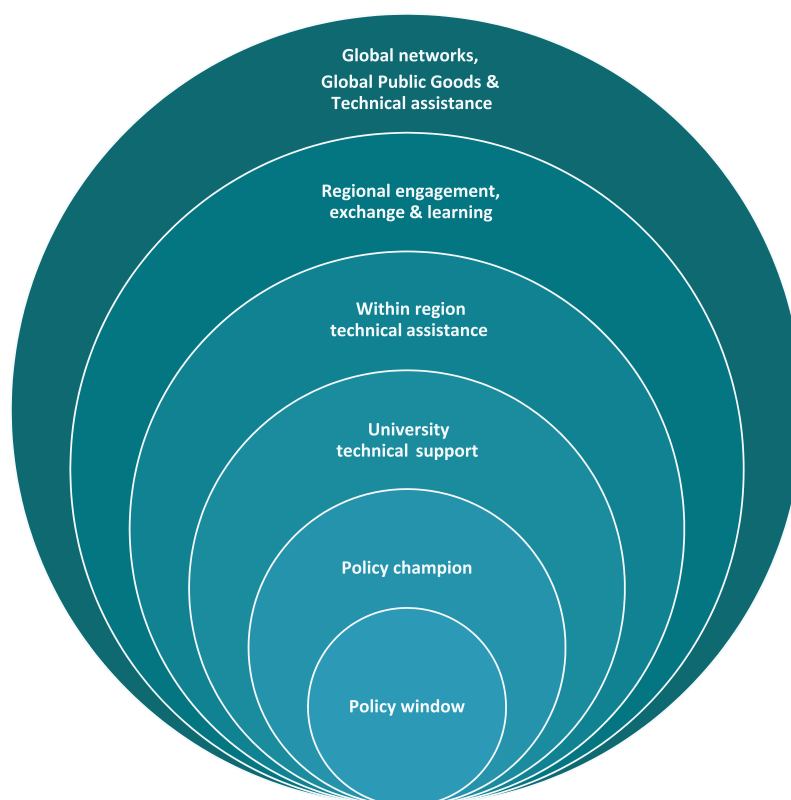


Figure 3. Layered politically sensitive model of EIPS support.

systematic links between EIPS and decision makers on all three impact routes can promote population health impact. Despite the challenges, iDSI reported that several countries' EIPS systems had substantial and quantifiable impact on decision-making in countries in Africa and Asia through changes in service provision, drug procurement, and clinical care. The estimated ROI in India and Thailand was 9:1 and 8:1, respectively, which is similar to findings of ROIs in the UK.⁶

One related paper reviewed HTA progress in Asia, and, as we also found, stated that political will, legislation, capacity, data, good collaboration with stakeholders, and independence from donors all assisted in making highly effective HTA systems. As an additional factor, it stressed the importance of high public expenditure.⁴⁸ A review of an international program of support for HBP revision similarly found implementation very challenging.⁴⁹ It also noted the need for sustained and stable political leadership, technical and managerial capacity, meaningful engagement of all stakeholders, a clear understanding of the health financing context and budget availability, and developing a plan for implementation early in the process, all of which came out of iDSI's experience.

iDSI also learned lessons regarding the nature of an effective global platform and secretariat. The network

has historically had a strong secretariat based in the UK and has tended to have more high-income country Partners than LMIC Partners. This has had some success as described in this paper, but has limited its legitimacy and effectiveness in speaking directly to LMIC policy makers, increased costs, and reduced the resources available to develop within-region networks. Building on these lessons iDSI is entering into a new phase, evolving to a model where Partners have independent funding, Partners in LMICs have direct grants from funders, regional Partners in Africa lead regional work (Figure 3), the network Advisory Board is chaired by a Nigerian health economist, and the secretariat moves to Africa. This new phase was made possible due to long term partnerships between the secretariat and LMIC leaders.

The methodology of this paper is inherently limited in two ways. First, it was drafted by members of the iDSI network, and based primarily on reviewing internal reports from iDSI. Such an approach introduces an element of bias, as iDSI is incentivized to report progress and impact. These limitations were mitigated by including external evaluation reports, and where possible, triangulating impact against additional sources in the reference list. Second, iDSI is trying to achieve policy and system change in the highly political field of setting

health priorities. This is an inherently complex intervention, and the counterfactual is unknown, making attribution of policy changes to iDSI hard to demonstrate. An external evaluation by Itad attempted to address this using qualitative methods, finding considerable attribution, but this was not comprehensive.⁹ We hope, nonetheless, that this paper will assist judgment in appraising the performance of initiatives like iDSI, as well as the governments and agencies that iDSI seeks to serve.

Conclusion

We are now entering a challenging era for health financing in LMICs. The fiscal space for health is rapidly shrinking in most countries, and using EIPS to get value for money from limited budgets is key to preventing backsliding on UHC objectives. We are also facing great uncertainty regarding donor commitment to global health funding, and without strong EIPS, transitions from aid to domestic financing will be risky, with populations in danger of losing access to key services and high-impact technologies.

Over the last decade, iDSI has been successful in supporting countries to develop domestically funded national EIPS systems in Africa and Asia that have strengthened decision-making and resulted in better population health. It has learned from the challenges it faced, become a platform of Partners with independent funding, adjusted its approach by developing LMIC-appropriate adaptive HTA methods, and shifted to a regional, Africa-led model. It is still early in the development of these national EIPS systems, and many are now tackling challenges related to implementation of EIPS in the context of fragmented health financing systems. With BMGF ending its core support for iDSI in 2024, this progress is at risk, and there is a need for other funders, global health initiatives, and national treasuries to invest in EIPS. With further support and led by the regional hubs and networks, these EIPS systems can enable countries to deliver on their promises of high value for money UHC.

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ORCID

Anthony Culyer  <http://orcid.org/0000-0002-8896-8491>
 Wanrudee Isaranuwatthai  <http://orcid.org/0000-0002-8368-6065>
 Yot Teerawattananon  <http://orcid.org/0000-0003-2217-2930>
 Javier Guzman  <http://orcid.org/0000-0002-3013-0602>

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Appendix A. Three phases of iDSI 2013–2023

Phase	(1) Inception	(2) Scale-up	(3) Focus on Africa
Main BMGF grant	iDSI1	iDSI2	iDSIplus
Years	2013–2015	2016–2019	2019–2023
Funders	BMGF, DFID, Rockefeller, UK DoH & Thai MoH	BMGF, DFID, Wellcome Trust	BMGF, Wellcome Trust, Norad, SIDA
Secretariat	NICE	Imperial College London	CGD
iDSI network Partners	HITAP NICE International CGD York	HITAP NICE International CGD PRICELESS SA Imperial College London CNHDRC	HITAP & Asia HTA Consortium CGD Imperial College London (Later transferred to LSHTM) NIPH CHAI KWTRP PGIMERRadboud UMC CNHDRC Africa CDC Health Economics Programme IECS
Key objectives	<ul style="list-style-type: none"> • Business model & governance • Develop Theory of Change and capacity building approach • Technical methods for LMICs e. g., reference case • Promote EIPS with policy makers and donors • Demonstration projects 	<ul style="list-style-type: none"> • Scale-up support to country EIPS institutionalization • HITAP and HTAsiaLink as regional hub for Asia • Scope out a regional hub in Africa including support to African low-income countries • Improve priority setting in aid-funded programs e.g., GFATM • Demonstrate impact through M&E & ROI 	<ul style="list-style-type: none"> • Increase country EIPS institutionalization support to Africa • Regional hubs in Africa • Develop HTA/HBP methods for LMICs • Preparation for future iDSI secretariat & grants to be Africa-led • <i>Additional objective: inform global, regional & national COVID priority setting</i>
Countries	Indonesia India China Ghana	Indonesia India China Ghana Philippines Vietnam Bhutan South Africa Tanzania Zambia Kenya	Indonesia India China Ghana Philippines Vietnam Bhutan South Africa Kenya Tanzania Zambia Ethiopia Rwanda Palestine Nigeria Uganda
Regional hubs/networks		HITAP & HTAsiaLink PRICELESS (South Africa)	HITAP & HTAsiaLink KWTRP & AfroHTA network

Appendix B.

	Journal	Article name	URL	Date
1	CGD publication	Priority-Setting in Health: Building Institutions for Smarter Public Spending	https://www.researchgate.net/publication/239806973_Priority-Setting_in_Health_Building_Institutions_for_Smarter_Public_Spending	01/10/2012
2	The Lancet	Health technology assessment in universal health coverage	https://doi.org/10.1016/S0140-6736(13)62559-3	21/12/2013
3	Health Policy and Planning	Is diabetes and hypertension screening worthwhile in resource-limited settings? An economic evaluation based on a pilot of a Package of Essential Non-communicable disease interventions in Bhutan	https://doi.org/10.1093/heapol/czu106	08/10/2014
4	Health Systems & Reform	Mapping Priority Setting in Health in 17 Countries Across Asia, Latin America, and sub-Saharan Africa	https://doi.org/10.1080/23288604.2015.1123338	01/01/2015
5	Health Systems & Reform	Departures from Cost-Effectiveness Recommendations: The Impact of Health System Constraints on Priority Setting	https://doi.org/10.1080/23288604.2015.1124170	01/01/2015
6	South African Medical Journal = Suid-Afrikaanse Tydskrif Vir Geneeskunde	National Health Insurance in South Africa: Relevance of a national priority-setting agency	https://doi.org/10.7196/SAMJnew.8584	01/01/2015
7	PLOS one	Do Pneumococcal Conjugate Vaccines Represent Good Value for Money in a Lower-Middle Income Country? A Cost-Utility Analysis in the Philippines	https://pubmed.ncbi.nlm.nih.gov/26131961/	07/01/2015
8	Health economics, policy, and law	Information will be the key to successful implementation	https://doi.org/10.1017/S1744133114000565	16/01/2015
9	PLOS ONE	Methodological variation in economic evaluations conducted in low- and middle-income countries: information for reference case development	https://doi.org/10.1371/journal.pone.0123853	07/05/2015
10	Vaccine	A learning experience from price negotiations for vaccines	https://doi.org/10.1016/j.vaccine.2014.12.050	07/05/2015
11	Health Systems & Reform	One step back, two steps forward: an economic evaluation of the PEN program in Indonesia	https://doi.org/10.1080/23288604.2015.1124168	08/10/2015
12	SSRN Electronic Journal	The Politics of Priority Setting in Health: A Political Economy Perspective	https://doi.org/10.2139/ssrn.2671571	10/10/2015
13	PharmacoEconomics	Health Technology Assessment as a Priority-Setting Tool for Universal Health Coverage: The Call for Global Action at the Prince Mahidol Award Conference 2016	https://doi.org/10.1007/s40273-015-0360-1	11/12/2015
14	The Lancet Global Health	Implementing pro-poor universal health coverage	https://doi.org/10.1016/S2214-109X(15)00274-0	11/12/2015
15	Bulletin of the World Health Organization	Priority-setting for achieving universal health coverage	https://doi.org/10.2471/BLT.15.155721	01/01/2016
16	Health Research Policy and Systems	How to meet the demand for good quality renal dialysis as part of universal health coverage in resource-limited settings?	https://doi.org/10.1186/s12961-016-0090-7	01/01/2016
17	Health Research Policy and Systems	The influence of cost-per-DALY information in health prioritisation and desirable features for a registry: a survey of health policy experts in Vietnam, India and Bangladesh	https://doi.org/10.1186/s12961-016-0156-6	01/01/2016
18	Health Systems & Reform	Defining a Health Benefits Package: What Are the Necessary Processes?	https://pubmed.ncbi.nlm.nih.gov/31514661/	01/01/2016
19	International Journal of Health Policy and Management	Health Technology Assessment: Global Advocacy and Local Realities	https://doi.org/10.15171/ijhpm.2016.118	01/01/2016
20	International Journal of Health Policy and Management	HTA – Algorithm or Process?: Comment on “Expanded HTA: Enhancing Fairness and Legitimacy”	https://doi.org/10.15171/ijhpm.2016.59	01/01/2016
21	Journal of Comparative Effectiveness Research	Comparative effectiveness research around the globe: a valuable tool for achieving and sustaining universal healthcare	https://doi.org/10.2217/cer-2016-0097	01/01/2016
22	Journal of Health Economics	Decision rules for allocation of finances to health systems strengthening	https://doi.org/10.1016/j.jhealeco.2016.06.001	01/01/2016
23	Value in Health	Should Countries Set an Explicit Health Benefits Package? The Case of the English National Health Service	https://doi.org/10.1016/j.jval.2016.01.004	01/01/2016

(Continued)

(Continued).

24	Value in Health	Country-Level Cost-Effectiveness Thresholds: Initial Estimates and the Need for Further Research	https://doi.org/10.1016/j.jval.2016.02.017	01/01/2016
25	Value in Health	How to Get Cost-Effectiveness Analysis Right? The Case of Vaccine Economics in Latin America	https://doi.org/10.1016/j.jval.2016.04.014	01/01/2016
26	Value in Health	The International Decision Support Initiative Reference Case for Economic Evaluation: An Aid to Thought	https://doi.org/10.1016/j.jval.2016.04.015	01/01/2016
27	Health Systems & Reform	The International Right to Health: What Does It Mean in Legal Practice and How Can It Affect Priority Setting for Universal Health Coverage?	https://doi.org/10.1080/23288604.2016.1124167	02/01/2016
28	Journal of Health Organization and Management	Improving equitable access to health care through increasing patient and public involvement in prioritisation decisions	https://doi.org/10.1108/JHOM-06-2016-0120	02/01/2016
29	Health Systems & Reform	Accounting for Technical, Ethical, and Political Factors in Priority Setting	https://doi.org/10.1080/23288604.2016.1124169	03/01/2016
30	Journal of Health Organization and Management	Patterns of public participation: opportunity structures and mobilization from a cross-national perspective	https://doi.org/10.1108/JHOM-03-2016-0037	03/01/2016
31	Journal of Health Organization and Management	Introduction: priority setting, equitable access and public involvement in health care	https://doi.org/10.1108/JHOM-03-2016-0036	04/01/2016
32	BMJ Global Health	Institutionalising health technology assessment: establishing the Medical Technology Assessment Board in India	https://doi.org/10.1136/bmjgh-2016-000259	05/01/2016
33	Value in Health	Making choices on the journey to universal health care coverage: from advocacy to analysis	https://doi.org/10.1016/j.jval.2016.04.021	06/01/2016
34	Health Economics	Development of a health screening package under the universal health coverage: the role of health technology assessment	https://doi.org/10.1002/hec.3301	15/01/2016
35	BMJ (Clinical Research Ed.)	Role of priority setting in implementing universal health coverage	https://doi.org/10.1136/bmj.i244	26/01/2016
36	F1000 Research	Improving quality for maternal care - a case study from Kerala, India	https://f1000research.com/articles/5-166	01/02/2016
37	PLOS ONE	Impact and Cost-Effectiveness of Point-Of-Care CD4 Testing on the HIV Epidemic in South Africa	https://doi.org/10.1371/journal.pone.0158303	08/07/2016
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