A Conceptual Framework from the Philippines to Analyse Organisational Capacities for Health Policy and Systems Research

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Author contributions

HJL conceptualised the study and co-led project development and implementation with KAR and PJA. FRAF performed data collection with the assistance of RLT. HJL, FRAF, KAR, and PJA led data analysis and interpretation with intellectual contributions from RLT, LDV, RLCG, and AF. RLT and RLCG provided technical and administrative support to project implementation. HJL led the framing and writing of the manuscript with assistance from FRAF and RLT. All authors contributed to the initial drafting and subsequent revision of the manuscript and approved the final version. HJL acts as the guarantor.

Reflexivity statement

We ensured gender and institutional balance by including three male (HJL, RLT, PJA) and five female authors (FRAF, KAR, LDV, RLCG, AF) who represent a range of institutional types, including academic (HJL, FRAF, KAR, RLT, LDV, AF), private research (HJL, FRAF, KAR, RLT), and national government institutions (LDV, RLCG, PJA). The authorship team is multidisciplinary as evidenced by expertise in global health systems (HJL), medical anthropology (FRAF), health systems and health promotion (KAR), public health (RLT, LDV), health policy and research management (RLCG), social science and community health (AF), and health policy, research management, and research ethics (PJA). Although 4/8 authors report affiliations in high-income countries, namely, Switzerland (HJL, AF), USA (KAR), and Australia (LDV), most authors (7/8) (HJL, FRAF, KAR, RLT, LDV, RLCG, PJA) also report joint affiliations in the country of study (Philippines), which ensured the inclusion of perspectives from both the Global North and South. In terms of career stages, 3/8 are junior researchers (FRAF, RLT, RLCG) and 5/8 are early- and mid-career researchers (HJL, KAR, LDV, AF PJA).

Keywords:

Health systems, Capacity building, Organisational development, Research translation, Health policy

Key messages

- Building capacities for Health Policy and Systems Research (HPSR) requires strengthening capacities at the individual, organisational, and system levels over time, but there exists no structured approach to better understand the attributes that characterise organisations with robust capacities for HPSR.

- To address this gap, we conducted a multi-method study in the Philippines to explore the model of 'HPSRIs' (pronounced as 'hip-srees,' i.e., Health Policy and Systems Research Institutions) and developed a conceptual framework to analyse their capacities based on eight organisational attributes across the domains of research expertise, leadership and management, policy translation, and networking.

- We identified indicators to assess the degree to which HPSRIs attain these attributes, which can inform purposive organisational development efforts. We also analysed the positionality of HPSRIs in the ecosystem and recommend the need to enhance the interactions between HPSR actors and to assign responsibility to a national or regional authority that will foster the HPSR community.

- We proposed HPSRIs to be at the nexus of research, management, policy, and networks to perform better in attaining the primary purpose of HPSR, which is to 'achieve collective health goals and contribute to policy outcomes. The broad conceptual framework from this study can guide organisational development for HPSR but must be tailored according to the specific context of every HPSRI.

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Ethics approval

The study proposal and informed consent forms were approved by the Single Joint Research Ethics Board, Department of Health, Manila, Philippines (SJREB-2023-01).

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Competing interests

The findings from this study include an analysis of the governance role for health policy and systems research of the Department of Health of the Philippines where three of the authors (LDV, RLCG, and PJA) are employees.

Data availability

All relevant data are included in the article and the online supplementary files. The complete interview transcripts cannot be made publicly available without indirectly revealing the identities of informants. Anonymised excerpts from the interview transcripts and related data from this study may be made available by through a formal request to the corresponding author.

ABSTRACT

Organisations that perform Health Policy and Systems Research (HPSR) need robust capacities, but it remains unclear how these organisations should look like in practice. We sought to define 'HPSRIs' (pronounced as 'hip-srees', i.e., 'Health Policy and Systems Research Institutions') as organisational models and developed a conceptual framework for assessing their capacities based on a set of attributes. We implemented a multi-method study in the Philippines that comprised: a qualitative analysis of perspectives from 33 stakeholders in the HPSR ecosystem on the functions, strengths, and challenges of HPSRIs; a workshop with 17 multi-sectoral representatives who collectively developed a conceptual framework for assessing organisational capacities for HPSRIs based on organisational attributes; and a survey instrument development process that determined indicators for assessing these attributes. We defined HPSRIs to be formally constituted organisations (or institutions) with the minimum essential function of research. Beyond the research function, our framework outlined eight organisational attributes of well-performing HPSRIs that were grouped into four domains, namely: *research expertise:* (1) excellent research, (2) capacity building driven; *leadership and management:* (3) efficient administration, (4) financially sustainable; *policy translation:* (5) policy orientation, (6) effective communication; and *networking:* (7) participatory approach, (8) convening influence. We developed a self-assessment instrument around these attributes that HPSRIs could use to inform their respective organisational development and collectively discuss their shared challenges. In addition to developing the framework, the workshop also analysed the positionality of HPSRIs and their interactions with other institutional actors in the HPSR ecosystem and recommend the importance of enhancing these interactions and assigning responsibility to a national/regional authority that will foster the community of HPSRIs. When tailored to their context, HPSRIs that function at the nexus of research, management, policy, and networks help achieve the main purpose of HPSR, which is to 'achieve collective health goals and contribute to policy outcomes.'

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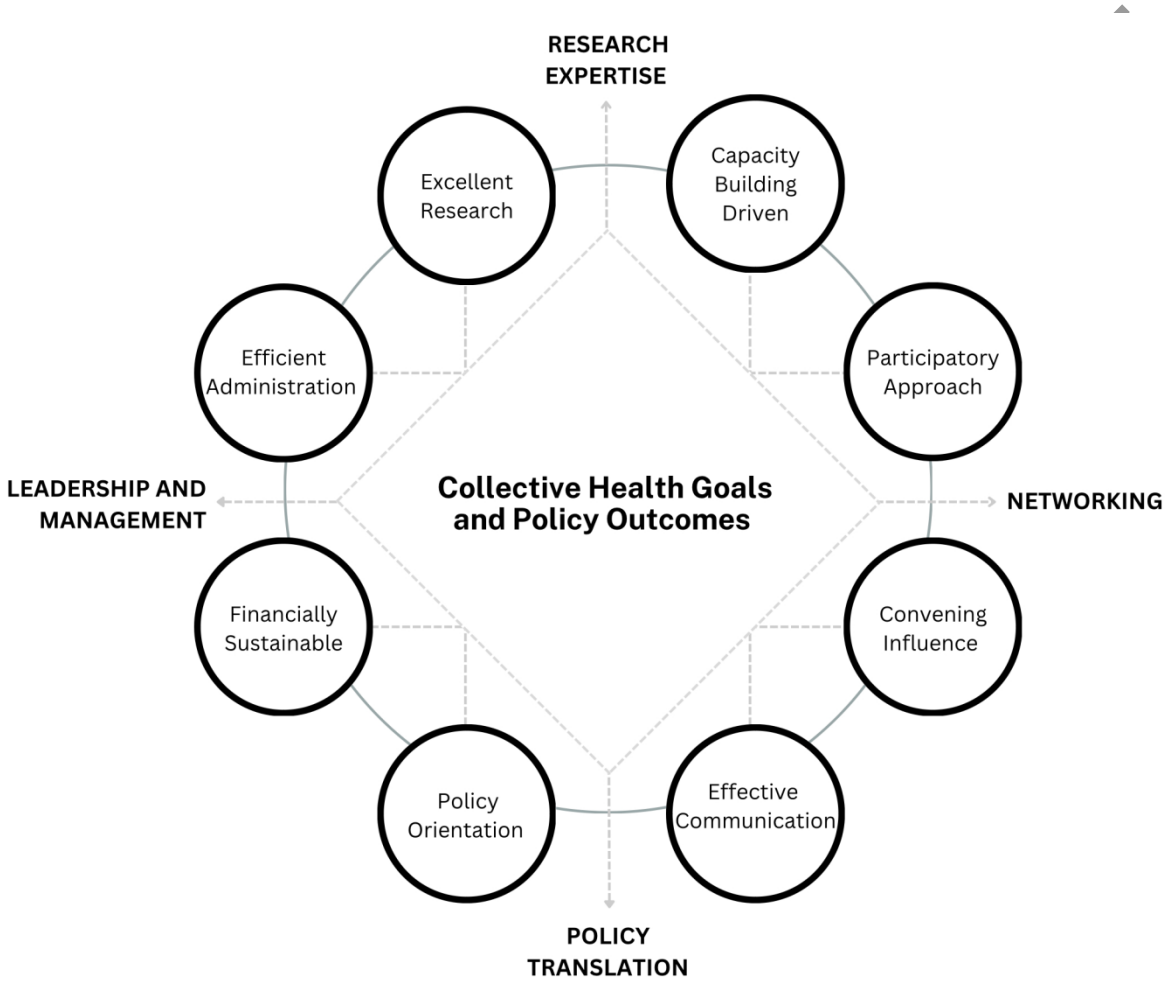
Figure 2

Conceptual framework for the organisational attributes of Health Policy and Systems Research Institutions (HPSRIs).



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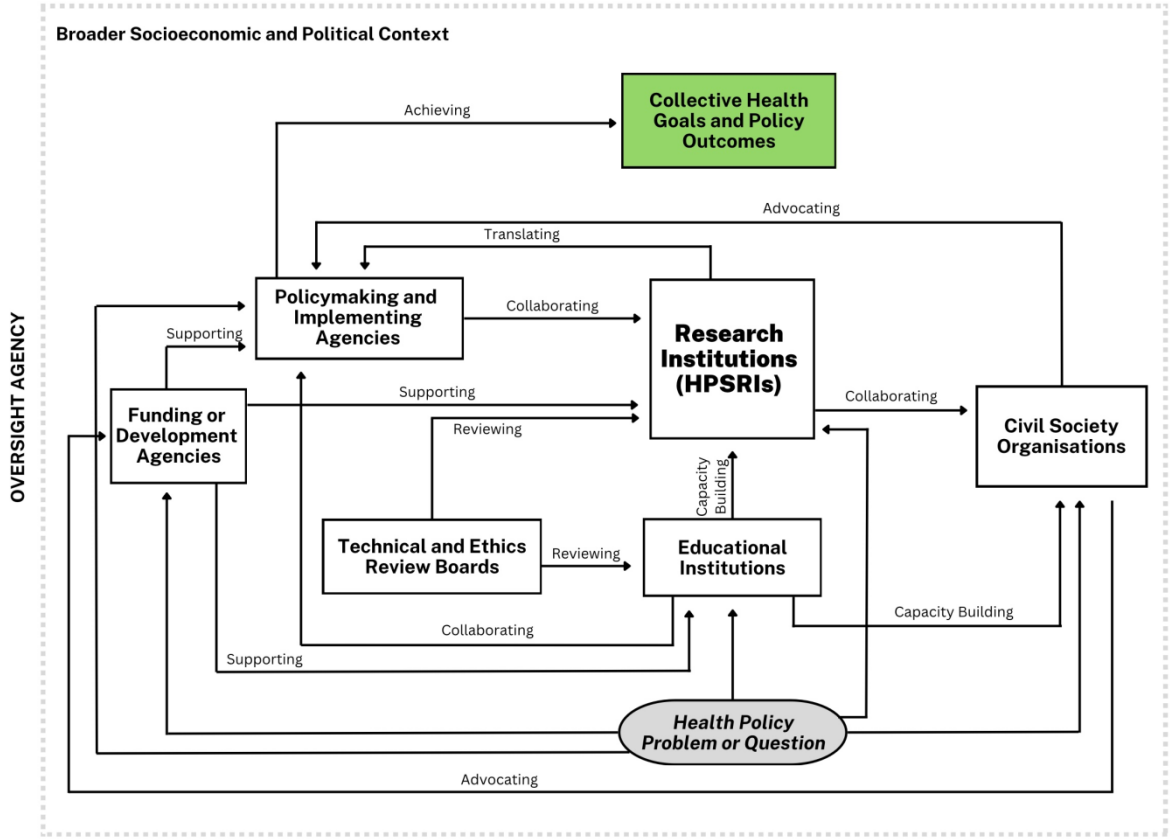

Table 1

Selected indicators for assessing the eight organisational attributes of Health Policy and Systems Research Institutions (HPSRIs).

Supplemental file 1

Copy of interview guide.

Supplemental file 2

Sample sheet for charting text from interview transcripts.

Supplemental file 3

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INTRODUCTION

A maxim sometimes used in management theory says that "*If you can't measure it, you can't manage it"* (Zak 2013). Although not everything could be measured, the quote nevertheless suggests that metrics have a role in assessing capacities to manage performance better, including in Health Policy and Systems Research (HPSR). HPSR, initiated in 1996 by the World Health Organization (WHO) (Bennett, Frenk and Mills 2018), is broadly defined as research "that seeks to understand and improve how societies organise themselves in achieving collective health goals, and how different actors interact in the policy and implementation processes to contribute to policy outcomes" (Alliance for Health Policy and Systems Research 2024). Some of the initial metrics used to assess capacities for HPSR in low- and middle-income countries (LMICs) indicated stagnant domestic funding and continued reliance on external assistance to support HPSR in low-income countries (Adam et al. 2011). However, the study also found an increasing number of HPSR-related publications from LMICs, affirmed by a later study that reported a sustained rate of growth in

HPSR-related publications from LMICs and with an LMIC lead author (English and Pourbohloul 2017). These metrics, while useful to estimate progress in capacities for HPSR, nevertheless lack an in-depth assessment of capacities that could better inform policy action to support purposive capacity building. New comprehensive approaches to capacity assessment for HPSR are needed to understand the specific areas of strengths and weaknesses and, consequently, better manage performance at the individual, organisational, and system levels of capacities.

The question of capacities for HPSR

One seminal paper from the 'First Global Symposium on Health Systems Research' in 2010 advanced an agenda to build the field of HPSR by determining competencies for individuals, finding institutional homes for HPSR, and reforming funding structures, fostering networks and supporting methods development (Bennett et al. 2011). At the level of systems capacity, Mirzoev et al. proposed an overarching framework for HPSR that encompassed the individual-organisational-system interface, recognised the importance of collective efforts among researchers, educators, advocates, practitioners, and policymakers, and emphasised the values of equity, inclusiveness, transparency, and accountability (Mirzoev et al. 2022). The authors recommended to strengthen HPSR capacities at all three levels over time, but also acknowledged that capacity strengthening need not address all three levels simultaneously in practice.

At the individual level of capacities, Schleiff et al. proposed competencies for HPSR that could serve as a point of reference for standards setting in curricula and benchmarking between training programmes (Schleiff et al. 2022). Their list included 'hard technical skills' (systems thinking, policy relevance, critical appraisal), 'soft relational skills' (leadership, partnerships, communication), and attributes related to 'character' (ethics and accountability). Nevertheless, a question that remains is how to translate these individual competencies into organisational competencies. An earlier study by Bennett et al. analysed

the evolution of 'health policy institutes' in selected LMICs and found different administrative configurations (e.g., university-based, government-owned, and non-government organisations), with most institutes conducting policy research to respond to government or donor requests and advising policymakers in the form of reports, while only a few institutes facilitated policy dialogues (Bennett et al. 2012). The authors concluded that institutes fostered evidence-informed decision-making when they had some degree of independence in governance and financing, offered timely and actionable recommendations, maintained strong links with policymakers, operated within a supportive policy environment, and when governments were motivated to utilise policy advice. A subsequent study by Schroff et al. surveyed research institutes and Ministries of Health (MOH) in LMICs and identified the barriers to institutional capacity building to include the lack of core funding for HPSR within organisations and incentives to attract the commitment of organisations to give HPSR a home (Shroff et al. 2017). The authors recommended providing incentives for researchers and engaging multiple stakeholders within and outside academia, including governments and funders, as part of coordinated efforts to strengthen the broader HPSR community.

Assessing 'HPSRIs'—Health Policy and Systems Research Institutions

We will focus on capacity strengthening for HPSR primarily at the organisational (or institutional) level in the context of LMICs. Although the term 'institutional' may refer to the broader 'norms, rules, ideas, and processes in a system' within which organisations exist (Wu et al. 2023), in this paper we make no distinction and consider institutions and organisations as synonyms. On the one hand, strengthening the field of HPSR would require highly competent researchers, but researchers also need the support of well-functioning organisations to perform well (Shroff et al. 2017). On the other hand, the strength of HPSR as a system would depend on the development of organisations and their positionality and interactions with other actors in the system. The literature on organisational development in general is replete with resources, including the Baldrige Excellence Framework developed in the United States to assess the performance of healthcare organisations (US Department of

Commerce 2010, Beitsch, Yeager and Moran 2015). However, there are few studies on organisational development specifically for HPSR. This gap has emphasised the need for useful guidance on what organisational capacity assessment for HPSR would require, and how this process could be used to inform programmes to foster organisational development. Hereafter, we label organisations that perform HPSR as 'HPSRIs' (pronounced as 'hip-srees'), i.e., 'Health Policy and Systems Research Institutions.'

Analysing the capacities of HPSRIs is a process that is not straightforward. Although there is a broad definition provided by the Alliance for HPSR, the field still suffers from varying interpretations, which negatively impact how the field is perceived in terms of scope and rigour (Shroff et al. 2017). HPSR is multi- and inter-disciplinary in approach, deploying a wide spectrum of methods, contextual in the application of its findings, tackling various questions at multiple points of the research-to-policy cycle (Sheikh et al. 2011), and characterised less by its methods and more by its instrumentality to bridge research and policy (Bennett et al. 2011). Thus, it also remains unclear which types of organisations qualify as 'HPSRIs'. It is rare for research organisations to do HPSR exclusively, or explicitly label themselves as an HPSR organisation. Some of HPSR is undertaken by researchers in an organisation that conducts other types of research (e.g., policy think tanks or institutes for development) or in a non-HPSR-specific unit within a larger unit (e.g., either a department of health economics or health policy in a school of public health). It also remains to be explored which specific organisational functions of HPSRIs warrant evaluation to assess capacities comprehensively, although what is apparent from the literature is that HPSRIs should go beyond the function of conducting research alone. Clarifying to what extent these 'other' organisational functions, such as engaging stakeholders or communicating research findings, should be expected of HPSRIs can guide how these organisations should be further shaped by the authorities that have the mandate to steer the health research system. Developing guidance to analyse the capacities of HPSRIs should involve a process to identify and profile such organisations and understand their functions, which could position

HPSR into prominence and encourage more organisations to commit to HPSR rather than do so only when commissioned by governments or funders (Bennett et al. 2011).

Why a framework for analysing HPSRIs

Frameworks provide a structure or overview of different categories and the relations between them that are relevant to a particular issue at hand, although they do not serve as an explanatory model for a phenomenon or a mechanism for change (Nilsen 2015). A conceptual framework will indicate the desired organisational attributes of HPSRIs based on their functions and provide a structured approach to capacity assessments and a point of reference for benchmarking of performance between HPSRIs. Through the auspices of a regional or national authority (e.g., MOH, research council, or a regional network/consortium), a framework can also bring HPSRIs together to address shared challenges and collectively manage their performance in an informed manner. Furthermore, from the perspective of national governments and development partners, the results of capacity assessments are critical to guide investments that target capacity strengthening for HPSR.

Our goal in this study was to develop a conceptual framework for organisational capacity assessment for HPSR by addressing the following research questions: *(a) What are HPSRIs and what are their functions? (b) What are the organisational attributes of HPSRIs with robust capacities? and (c) How can we assess organisational attributes to inform organisational capacity strengthening in HPSR?* In doing so, we sought to influence the trajectory of the field of HPSR by advancing the idea of well-performing HPSRIs that ensure fidelity to the overall goal of the field of HPSR to 'achieve collective health goals and contribute to policy outcomes.'

METHODS

Project Design and Setting

As part of a regional initiative in Asia to shape the future of HPSR in the region (Health Systems Strengthening Accelerator 2024), we implemented a multi-method project in the Philippines where the Department (Ministry) of Health (DOH), has taken the responsibility to develop the domestic HPSR community in support of evidence production and utilisation for health policy on a national scale (Sales et al. 2023). Strengthening HPSR has legislative basis under the Universal Health Care (UHC) Act (Republic Act 11223) which has served as a policy window for the DOH together with other government entities to establish mechanisms that integrate evidence into policy and decision-making including advancing HPSR in the country (Department of Health of the Philippines 2019).

An institutional partnership for the project was formalised through a memorandum of understanding between the Alliance for Improving Health Outcomes (AIHO) (AIHO 2024), a non-government organisation in the Philippines focused on health systems strengthening, and the Health Policy Development and Planning Bureau, the unit within DOH with the mandate to develop and coordinate sectoral strategies for health research and policy development in the country (Department of Health of the Philippines 2017). The project had three main components:

a. a qualitative study that analysed the perspectives of organisations that play various roles in HPSR;
b. a conceptual framework development workshop that involved researchers, policymakers, and programme implementors; and
c. development of a survey instrument to identify indicators and assess the capacities of HPSRIs based on a set of organisational attributes.

The research proposal received technical approval from the Health Systems Strengthening Accelerator (Health Systems Strengthening Accelerator 2024) and ethics approval from the DOH Single Joint Research Ethics Board in the Philippines (SJREB-2023-01).

Qualitative Study

Interview Guide

We prepared an interview guide that set to explore the perspectives of key informants regarding: (a) their understanding of HPSR as a field; (b) how they would define an organisation that performs HPSR and its functions; (c) the desired attributes of an organisation that performs HPSR; (d) their strengths and weaknesses as an organisation performing HPSR; and (e) their ideas for potential strategies to strengthen their organisational capacities for HPSR (Interview Guide in Supplemental File 1).

Key Informants

We used purposive sampling to identify key informants from different types of organisations, both public and private, including research organisations, policy development or programme implementation organisations, educational or training organisations, and funding or development agencies. We performed in-depth interviews in the first quarter of 2023 with 33 informants, which was the stage when the project team ascertained that data saturation was reached (Saunders et al. 2018). Informants were comprised of representatives from academia (11), research organisations (9), funding and development agencies (6), programme managers and practitioners (5), and policymakers (2). All interviews were conducted via Zoom (Zoom Inc., San Jose CA, USA) in English or Filipino.

Analysis

We transcribed the audio recordings into Microsoft Word (Microsoft Corp., Redmond WA, USA) using Trint (Tint Ltd., London, UK), after which a team of research assistants reviewed the transcripts to detect and correct errors manually. We did not *a priori* align with a theory but implemented a deductive approach for the analysis based on: (a) the definition of HPSRIs; (b) functions of HPSRIs; (c) desired attributes of HPSRIs; (d) strengths and weaknesses of HPSRIs; and (e) strategies to strengthen the capacities of HPSRIs. We followed the methods of framework analysis as described by Gale et al. (Gale et al. 2013). Four co-authors reviewed the transcripts independently to familiarise themselves with the content and to identify initial codes. We created a matrix on a shared Google Sheet (Google

LLC, Mountain View CA, USA) that served as our charting tool to organise quotes according to categories. A sample sheet showing how charting was organised with selected excerpts from interview transcripts in Supplemental File 2. The shared spreadsheet allowed the members of the team to engage with the data simultaneously to identify patterns, including repetitive themes, and the categories that contained the most quotes. The team met virtually to discuss the themes that would be used as material for discussion in a subsequent workshop.

Framework Development

Workshop Participants

We convened an in-person workshop in the Philippines in the second quarter of 2023 with 17 purposively selected stakeholders who represented various organisations that play a role in HPSR: five policymakers from the DOH at the national level; one programme implementer from the DOH at the regional level; one senior manager from the national health research council; three senior and four junior researchers from three different non-government research organisations; one college dean from a public university; one emeritus professor from a private university; and one mid-career researcher from a foreign university. We also invited one senior government official (undersecretary of health or deputy minister of health) and one country representative of a development partner (USAID) as guests who commented on the outputs at the end of the workshop.

Process

The specific objectives of the workshop were: (a) to define what HPSRIs are and determine their functions; (b) to describe the organisational attributes of robust HPSRIs and organise these attributes in a conceptual framework; and (c) to explore indicators for assessing the capacities of HPSRIs based on the framework. The stages of the workshop included the following:

a. *Orientation to organisational mandates*

Participants introduced their respective organisations and described their overarching mission and their activities in HPSR.

b. *Review of DOH initiatives to advance HPSR*

Representatives from the DOH presented an overview of past and current initiatives to promote and strengthen the HPSR community in the Philippines. This phase ensured that the framework to be developed would closely align with future DOH plans for advancing HPSR at the national level.

c. *Discussion on the definition and functions of a HPSRI*

First, the project team presented the themes from the qualitative study to highlight key issues affecting capacity building for HPSR at the organisational level. These themes included the common organisational functions reported during the in-depth interviews. Across the different groups of key informants (i.e., educators, researchers, funders, practitioners, and policymakers), workshop participants identified research as a cross-cutting function. Second, workshop participants reviewed the scope of the field of HPSR based on the definition from the Alliance for HPSR. Third, workshop participants reviewed the mandates and activities of five illustrative organisations in the Philippines to explore what it would mean for an organisation to be a 'HPSRI.' These organisational examples included: Institute of Health Policy and Development Studies of the University of the Philippines (UPM-NIH 2024), AIHO (AIHO 2024), Zuellig Family Foundation (ZFF 2024), Health Justice Philippines (HealthJustice Philippines 2024), and the Philippine Council for Health Research and Development (DOST-PCHRD 2022). Workshop participants noted that the first three conduct research in the field of HPSR, while the latter two organisations do not conduct research *per se* but rather perform advocacy and research governance, respectively. The discussions in comparing these organisations in light of the Alliance definition for HPSR and the findings from the in-depth interviews led to the participants' consensus to define a HPSRI as an organisation that conducts research as its minimum essential function. We reached

consensus on the definition of HPSRIs not through formal voting but in the absence of objection from any workshop participant (UN Dag Hammarskjöld Library 2024). Our consensus meant that other organisations, such as those that provide funding for HPSR or perform advocacy based on HPSR but do not, in practice, conduct research would not be considered HPSRIs. However, participants also recognised that other essential functions on top of the research function may characterise a well-capacitated HPSRI depending on its primary mandate and strategic priorities. To identify these other organisational functions, participants examined the positionality of HPSRIs across the policy action cycle (Macaulay et al. 2022) and analysed the relations between the various organisational functions through a group activity that involved the use of ropes to demonstrate interlinkages between the functions and synergy (Figure 1). Finally, participants mapped the interactions of a hypothetical HPSRI with other institutional actors in the HPSR ecosystem to identify bottlenecks in processes that affect their performance (note: we use 'ecosystem' to refer to the HPSR network where a HPSRI is positioned while 'system' refers to the broader scope of interactions beyond HPSR).

[Figure 1 here]

Participants mapping the roles of organisations across the policy action cycle (top) and analysing the synergy of organisational functions and attributes (bottom) during a workshop in Quezon City, Philippines (April 2023).

d. *Visualising the conceptual framework*

Participants translated the organisational functions into organisational attributes and identified eight organisational attributes of a well-capacitated HPSRI. A conceptual framework was visualised by structuring the eight organisational attributes into four domains. Here we made a distinction between an organisational function, attribute, and capacity where 'function' referred to what a HPSRI does (e.g., conducting

research) while ‘attribute’ referred to the quality of performing the function (e.g., excellent research) and ‘capacity’ referred to the extent an organisation meets the attributes expected of it (e.g. an organisation has a high level of capacity if it conducts research in an excellent way).

e. *Exploring potential indicators*

The last part of the workshop involved exploring preliminary indicators or metrics that could be used to assess the attributes of HPSRIs based on the framework.

Development of Survey Instrument

We developed a survey instrument based on our framework by initially expanding from the questionnaire previously used by Tangcharoensathien et al. to assess HPSR capacities in Ethiopia and Ghana (Tangcharoensathien et al. 2022) and adding our own questions. We re-organised the survey questions according to the eight attributes outlined by our framework. The survey instrument was designed as a self-administered tool to be answered by the head and/or manager of an organisation. The first section of the survey involved a list of questions to characterise the administrative configuration, mission, and activities of the organisation to determine whether it performs HPSR and, thereafter, whether it could be considered as a HPSRI. Organisations considered to be HPSRIs continued with the rest of the survey to provide both quantitative and qualitative information that describes their performance in eight organisational attributes. The complete survey instrument is in Supplemental File 3. The conceptual framework and its accompanying survey instrument were also shared with collaborators in Nepal and have been adapted according to their context to explore the applicability of the framework for HPSRIs across LMIC contexts. Findings from the survey of HPSRIs in the Philippines and the use of the framework in Nepal will be reported in separate publications.

RESULTS

Defining the organisational model of a HPSRI

We define a HPSRI as an institution or organisation that conducts research based on HPSR as its minimum essential function. It was not our intent here to reiterate the definition of HPSR beyond how the Alliance has already defined the field (Alliance for Health Policy and Systems Research 2024) in addition to other references on defining HPSR based on the framing of the research questions (Sheikh et al. 2011) and the methods used to answer these questions (Gilson et al. 2011, Gilson 2012). We further define a HPSRI as a formal group of individuals that perform HPSR, whether as a standalone organisation or as a unit within a larger organisation, that is constituted through some form of regulation, rules, bylaws, or statutes. Therefore, we do not consider an organisation where only a single individual researcher is conducting HPSR, or an *ad hoc* group or a loose association of individuals who perform HPSR as HPSRIs. Organisations that do not *de facto* perform research but perform other HPSR-related functions, such as training, advocacy, or funding for HPSR are also not HPSRIs but considered as other institutional actors in the HPSR ecosystem.

Our definition of HPSRIs supports the idea that organisational functions in addition to performing research are necessary for HPSRIs to be well-capacitated in meeting the overall goal of HPSR, including the organisation's capacity to lead and manage its operations, inform policy development, and network with other actors in the HPSR ecosystem. These functions were translated into eight organisational attributes structured into four domains as summarised by our conceptual framework for capacity assessment (Figure 2). The following paragraphs describe each of these attributes and outline selected indicators from the survey instrument to assess capacities based on organisational attributes.

[Figure 2 here]

Figure 2. Conceptual framework for the organisational attributes of Health Policy and Systems Research Institutions (HPSRIs).

Domain A: Research Expertise

This domain refers to a HPSRI's capacity to perform its essential function of research that is not limited to a single discipline or methodological approach. A HPSRI with robust capacities in this domain has the attributes of *Excellent Research* and a *Capacity Building Driven* organisation. The following quote from the interviews illustrates how HPSRIs perceive their important role in advancing research and facilitating capacity building in research skills:

"[We] teach students how to do research or provide them with the experience and appreciation to do research because [their] perception sometimes of research is [that it is] difficult 'academic research' but in reality, research is fun, not [something] to be afraid of in developing as a skill." – Associate professor in a department of health policy and administration in the national university

Attribute 1: Excellent Research

A HPSRI with excellent research produces high-quality research as evidenced by its research publications and other forms of research products that tackle various issues in HPSR, draw from international evidence, and withstand the scrutiny of peer review or quality control. It is comprised of a highly skilled and multi-disciplinary research staff with expertise in a wide range of methods as demonstrated by their advanced training and their postgraduate qualifications. Possible indicators to assess the attribute of excellent research are summarised in Table 1 (see also Supplemental File 3 for the complete list of indicators):

[Table 1 here]

Table 1. Selected indicators for assessing the eight organisational attributes of Health Policy and Systems Research Institutions (HPSRIs).

Attribute 2: Capacity Building Driven

A capacity building driven HPSRI has concrete efforts to support the further training and continuing professional development of its staff. Such efforts are best sustained through the existence of internal procedures that enable staff to apply for training opportunities that the organisation may be able to support directly or indirectly. The following quote also illustrates the importance of ensuring multi-disciplinarity in building the capacities of HPSRI staff:

"The key is multi-disciplinarity. My background is clinical epidemiology and infectious diseases and HPSR cannot be done by just clinical epidemiologists. So [we] involve economics, [because] there are health financing questions. We also have social scientists... An example of a HPSRI that I would cite has a cadre of very well-trained researchers in various disciplines." – Professor emeritus in the national university who was also involved in the development of the Alliance for HPSR

Domain B: Leadership and Management

We include leadership and management as an important domain because the capacity of HPSRIs to produce high-quality research is also negatively impacted by a lack of planning, administrative inefficiencies, and unsustainable funding streams. The following quote illustrates why most organisations consider efficient management as important:

"Let's say we just get a grant for an entire year that already includes [budget for] training, developing the research methods and hiring researchers from different fields and from different institutions, but that [timeframe] is not going work with poor administration." – Researcher in a national health policy institute

We combined leadership and management during the workshop into one domain to keep our conceptual framework simple as these two notions are related although distinct (Gavin 2019). Leadership refers to the HPSRI's capacity to plan strategically and set a vision for the organisation, while management refers to the capacity to operate efficiently to support the

timely completion of projects and ensure financial sustainability. A HPSRI with robust capacities in leadership and management has the attributes of *Efficient Administration* and a *Financially Sustainable* organisation.

Attribute 3: Efficient Administration

A HPSRI with efficient administration has regular processes to set a vision and a strategic agenda for the organisation. It also absorbs a portfolio of HPSR projects that matches its administrative capacity to deliver satisfactory implementation of these projects, including flexibility to adapt when required by the circumstances of implementation.

Attribute 4: Financially Sustainable

A HPSRI that is financially sustainable has a range of revenue streams, including core funding, rather than relying only on external grants to support HPSR projects, hire staff for the long term, and invest in equipment and infrastructure. Information to assess leadership and management are likewise presented in Table 1.

Domain C: Policy Translation

Policy translation refers to a HPSRI's capacity to facilitate the translation of its research findings to influence policy development or decision-making, making it the domain closest to the main purpose of HPSR to contribute to policy outcomes. A HPSRI with robust capacities in this domain has the attributes of *Policy Orientation* organisation and *Effective Communication.* The following quote illustrates why stakeholders considered this domain as important:

"Communication is a challenge, [but] we need to do the research and communicate the research results so that we will influence policymakers, [and] advocate for new or enhanced policies. Communication should [also] target the people so that people understand policy." – Former vice chancellor for research of a public university

Attribute 5: Policy Orientation

A HPSRI with policy orientation nurtures a working relationship with policymakers in government and regularly facilitates activities to broker knowledge and provide recommendations to decision-makers to influence policy development or programme implementation.

Attribute 6: Effective Communication

A HPSRI with effective communication converts its research outputs into other forms of knowledge products with less technical jargon and deploys a communications strategy to promote its work to reach non-researchers and other stakeholders in accessible and comprehensible ways.

Domain D: Networking

The domain for networking emphasises that HPSRIs do not function in isolation from the same health system it seeks to understand and are positioned always in relation to other institutional actors. A HPSRI that is well-capacitated in networking has the attributes of a *Participatory Approach* and *Convening Influence.* The following quotes illustrate how one stakeholder appreciated the importance of participation in the organisation:

"[Being] participatory as research organisation is about [giving] the beneficiary, the target population, a say about the research design and their views [are] taken into consideration as part of the research. We require voices from many stakeholders, many perspectives and angles, which makes us transparent and also accountable for [the] recommendations from our research." – Coordinator of a non-government organisation focused sanitation and nutrition in schools

Attribute 7: Participatory Approach

A HPSRI with a participatory approach can engage an array of stakeholders not only to communicate the findings from research projects but also to foster a relationship with stakeholders in the entire research cycle. A participatory HPSRI makes a constant effort to be inclusive in bringing in the voices of stakeholders from the conceptualisation of research questions to research implementation and until policy translation or programme implementation.

Attribute 8: Convening Influence

A HPSRI with convening influence can bring different stakeholders together for evidence-informed debates and constructive dialogues, as well as catalyse collective action to improve health policies and programmes. Table 1 also includes information to assess both these attributes for networking.

HPSRIs' Positionality and Relations in the Ecosystem

We present the output from our mapping during the workshop of the positionality of a HPSRI and its interactions with other institutional actors in the HPSR ecosystem (Figure 3).

[Figure 3 here]

Figure 3. *Map of the position of a Health Policy and Systems Research Institution (HPSRI) and its interactions with other institutional actors in the ecosystem.*

Every HPSR project begins with a health policy problem or question which drives the conduct of research by HPSRIs, the end goal of which is to contribute to collective health goals and policy outcomes. The capacity of HPSRIs to deliver impact from the initiation of policy inquiry to policy development depends not only on its organisational attributes but also on the quality of its interactions with other institutional actors in the HPSR ecosystem. HPSRIs nurture a relationship with funding or development agencies to finance their research projects; technical and ethics review committees to ensure the quality and integrity

of their research projects; educational or training institutions to strengthen the competence of their staff; civil society organisations to advocate for the recommendations arising from their research; and policymaking and implementing agencies to translate their research into policies and programmes. Bottlenecks that exist in any of these relationships would adversely impact the capacities of HPSRIs to perform well. For example, a HPSRI may have the attributes of excellent research and capacity building driven but with bottlenecks in its links to funding or development agencies, there may be fewer opportunities to venture into new research programmes, which does not maximise the organisation's research expertise. In another scenario, a HPSRI may have strong capacities for leadership and management as an organisation with sustainable financing and efficient administration, but with poor relations with policymaking and implementing agencies, very little of its accomplishments feed into improving health policies and programmes. The use of the framework to assess the organisational attributes of a HPSRI should be combined with an examination of the quality of a HPSRI's relations with other institutional actors to identify and address any bottleneck in interactions that affect their performance. Finally, a national or regional authority should be identified and assigned with responsibility as the oversight agency that steers the entire HPSR ecosystem where HPSRIs and other organisations interact with each other. In the Philippines, we have identified this as the DOH which has assumed the mandate of fostering the HPSR community.

DISCUSSION

Our conceptual framework offers a structured approach to organisational capacity strengthening with clarity on the desired attributes to aspire for and the measures to assess these attributes. The framework and its accompanying survey instrument offer a tool for HPSRIs in LMICs to undertake self-assessments, although the utility of the framework may not be limited to LMICs but may also be useful as a reference for HPSRIs to adapt in their contexts, including those in high-income countries. The framework provides a platform for

HPSRIs to reflect and be aware of the attributes they are good at, and the attributes where there is room for improvement. There is a need to explore additional ways to assess each of the eight organisational attributes which, because of their complexities, are measured only indirectly by our survey tool. The framework does not provide a basis to develop a summative measure of HPSRI performance (e.g., a composite index, or a scoring system that ranks HPSRIs). Summative quantitative measures defeat the purpose of an in-depth understanding of the various aspects of organisational capacities. Rather, the framework might serve as a dashboard for HPSRIs to use the information to mature as learning organisations (Sheikh and Abimbola 2021).

Second, based on consensus among stakeholders in the Philippines, the minimum essential function of HPSRIs is research, but HPSRIs need to develop capacities in other research-enabling functions outlined by our framework. There remains a tendency to focus only on publications as a metric of organisational performance in HPSR. HPSRIs are not to be recognised only for their research capacities or their ability to publish quality papers but also for their capacities for leadership and management, policy influence, and networking. The importance of strengthening both research and research-enabling capacities aligns with Schleiff's individual competencies for HPSR that included relational skills and character in addition to research competencies (Schleiff et al. 2022) and Mirzoev's emphasis on the importance of researchers working with various stakeholders to strengthen the HPSR ecosystem (Mirzoev et al. 2022). The idea of HPSRIs with multi-functional capacities also resonates with recent discussions outside the field of HPSR about new organisational models to maximise impact in the public health space, such as the recommendation that national public health institutes be responsible for fostering multi-sectoral linkages beyond their essential public health functions (Zuber et al. 2023); the suggestion for higher educational institutions to become hybrid organisations that do both research and implementation to attain the sustainable development goals (Saric et al. 2023); or the emerging model of knowledge brokering organisations that span the boundaries of research,

translation, and policy (MacKillop and Downe 2023). With the assumption that HPSRIs operate at the nexus of research, management, policy, and networks, and that each of these domains reinforces one another through synergy, multi-functional HPSRIs can be positioned to play impactful roles in advancing socially just and people-centred health systems (Gilson et al. 2020). Although we recognise that the performance of HPSRIs vary depending on the context they find themselves in, the organisational attributes in the conceptual framework are broad enough to facilitate an analysis of different aspects of capacities of HPSRIs across contexts. As demonstrated in this study, organisational capacities based on the framework must be combined with an analysis of the positionality of the HPSRI in the ecosystem as HPSRIs will vary in their mandates, priorities, and capacities based on several factors including their level of operation (international, national, or subnational), ownership (public, private, or hybrid), or typology (academic, think tank, civil society organisation, etc.), among others. The conceptual framework provides a platform to assess organisational capacities for research, networking, policy translation, and leadership and management regardless of the HPSRI typology, and leaves the HPSRI with the space to decide for itself in which domains it might want to strengthen itself as an organisation, consistent with the overarching goal of HPSR to achieve collective health goals and policy outcomes.

Third, our study highlighted the role of a national or regional authority (e.g., government agency) in fostering the respective HPSR community. In the case of the Philippines, this role has been fulfilled by the DOH through the policy window offered by the passage of the UHC law. In other countries, their ministries of health or science, or their national institutes for health and national research councils could potentially fulfil the role of national promoter and oversight. Because there is usually a ‘wax and wane’ cycle in interest in the value of HPSR, having a national agency for cultivating HPSR means there would be sustained attention on and resources for organisational and network development across the country as part of shaping an overall supportive environment for HPSRIs. HPSRIs are not organisations operating in isolation and, therefore, strengthening the multi-functional capacities of HPSRIs

may benefit from enhancing their relationships with other actors that impact their ability to perform. Depending on the extent that the political governance structure of a particular country allows, to ensure that these relationships between HPSRIs and other actors in the ecosystem are optimal, having a national or regional authority with a mandate to foster the HPSR community is critical, rather than assuming an 'invisible hand' that will move the HPSR ecosystem to develop organically by itself. The involvement of a national agency also ensures government ownership of capacity strengthening efforts and translation of research findings into a concrete policy for advancing HPSR on a national scale, as evidenced by the revised DOH policy called "AHEAD with HPSR Program" which was informed by results from this study (Department of Health of the Philippines 2024).

Finally, we acknowledge that the framework is not a theory for change but only determines 'what' organisational attributes are important. Further studies are needed to understand 'how' HPSRIs could best achieve these attributes. In the Philippines, the findings collected from the survey and profiling of HPSRIs will be used by the DOH to better understand the collective capacities of domestic HPSRIs and to make evidence-informed decisions about the iteration of the national programme to advance HPSR (Staff Reporter 22 January 2024, Lopez et al. 2019). The framework has served as a platform for the DOH to convene HPSRIs in selected regions to give them dedicated time to undertake self-assessments, prepare their respective organisational capacity development plans, learn from the experiences of other HPSRIs, and guide subsequent co-creation activities towards forming stronger networks of HPSRIs to facilitate mutual learning, collaboration, and resource sharing to address cross-cutting challenges. Governments and development partners may also use this framework to guide investment decisions that go beyond the usual focus on individual-level capacity strengthening through funding instruments or partnering arrangements that support organisational development and incentivise interventions that will move HPSRIs closer to attaining the eight attributes of our framework. Follow-up studies are

needed to monitor improvements in the capacities of HPSRIs in different LMIC contexts as an outcome of these efforts—which need to be sustained as changes will take time.

CONCLUSION

Sustainable capacity strengthening for HPSR must address individual-, organisational-, and system-level capacities. Focusing on organisations needs a structured approach that allows an assessment of their capacities across multiple functions and helps them enhance their agency to achieve desired organisational attributes. Well-capacitated HPSRIs serve as a home for nurturing the competencies of individual researchers in HPSR and as important players working with other actors in a functional HPSR ecosystem. With an evidence-informed process to support their organisational maturity, HPSRIs at the nexus of research, management, policy, and networks could better manage their performance to achieve the main purpose of HPSR to "contribute to collective health goals and policy outcomes."

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Table 1. Selected indicators for assessing the eight organisational attributes of Health Policy and Systems Research Institutions (HPSRIs).

Domain	Organisational Attributes	Selected Indicators
Research Expertise	Excellent Research	• The number of peer-reviewed publications and other types of research outputs by the research staff per year in the last five years and the topics these publications covered (e.g., according to health system building blocks) • The number and diversity of researchers in the organisation analysed according to gender, age, job level (e.g., senior, mid-career, or early-career), highest educational degree (e.g., PhD, MD, master's, or bachelor's degree, etc.), and main discipline (e.g., health systems, anthropology, epidemiology, etc.) or profession (e.g., medicine, nursing, economist, etc.)
	Capacity Building Driven	• List of internal programmes by the organisation to provide support for the capacity building for its staff such as, but not limited to, scholarships for further studies, mechanisms for internships, secondments, or fellowships, and a mentoring or coaching programme • An explicit statement of commitment to human resources development in the organisation's official articulation of strategies or policies
Leadership and Management	Efficient Administration	• The vision, mission, and objectives statement of the organization • A description of the process taken by the organisation to identify its topical priorities in HPSR, if such a process exists in the organization • The number of HPSR-related projects that the organisation has implemented in the last three years, analysed according to the number of projects completed on time and projects whose objectives or methods were adjusted when compared to the original proposal
	Financially Sustainable	• The share of HPSR projects in the total annual budget of the organisation, including whether it is increasing, decreasing, or stable in the last three years • The sources of the budget for HPSR analysed according to core funding, external grants from domestic sources, external grants from foreign sources, and other sources • The value of each HPSR-related project categorised according to small, medium, or large projects • Breakdown of the budget for HPSR according to purpose (e.g., salaries, travel, allowances, administrative costs, etc.) • Flexibility to reallocate or repurpose budgets for HPSR from how the budget items were originally intended.
Policy Translation	Policy Orientation	• Description of formal or informal mechanisms for the HPSRI to engage with policymakers, decision-makers, and other stakeholders • Evidence of influential status as a go-to HPSRI by policymakers based on the number of requests or commissioning by the government for the HPSRI to conduct research and/or provide advice on a policy question • Examples of concrete policies or programmes that were developed based on the findings from a research project implemented by the HPSRI.
	Effective Communication	• The list of stakeholders that the HPSRI deliberately engages to disseminate the lessons of its research, if it exists • Examples of knowledge products that the HPSRI develops and disseminates to promote findings from its research (e.g., policy briefs, press releases, social media promotions, visual presentations, etc.) • Description of strategies used by the HPSRI to convey key messages of its research tailored fit for the target audience and the various activities used to reach diverse audiences

Networking	Participatory Approach	• Description of partnerships with other organizations related to health policy issues including the nature of partnership (e.g., jointly conduct research, jointly conduct capacity building, jointly author publications, etc.), goals of the partnership activities, and specific organizations with partnerships.
	Convening Influence	• Description of methods or approaches used by the HPSRI to facilitate stakeholder participation and evaluate the impact or effectiveness of participation and convening in enhancing the relevance of its work in HPSR • Enumeration of events organised by the HPSRI to engage stakeholders about its research initiatives, including a description of the format of the activity and the types of stakeholders engaged • Description of formal or informal partnerships between the HPSRI with other organisations, both research and non-research organisations (e.g., civil society organisations) for HPSR-related initiatives