

## Resource Toolkit

# What Works for Health Systems Strengthening



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Acronyms	
<b>CHW</b>	Community health worker
<b>DHIS2</b>	District Health Information Software-2
<b>FCAS</b>	Fragile and conflict-affected settings
<b>FCDO</b>	Foreign, Commonwealth & Development Office
<b>HIS</b>	Health information systems
<b>HR</b>	Human resources
<b>HRH</b>	Human resources for health
<b>HSS</b>	Health systems strengthening
<b>IDSR</b>	Integrated disease surveillance and response
<b>IT</b>	Information technology
<b>K4D</b>	Knowledge for Development
<b>LMIC</b>	Low and middle-income countries
<b>PHC</b>	Primary health care
<b>SDG</b>	Sustainable development goal
<b>WHO</b>	World Health Organization
<b>UHC</b>	Universal health coverage
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development

# Overview of the Health Systems Strengthening Resource Toolkit

This resource toolkit has been produced by **K4D** in partnership with the Health Systems Team in the Foreign, Commonwealth & Development Office (FCDO) Human Development Department and renowned global health systems expert Prof. Sophie Witter (Queen Margaret University, Edinburgh). The toolkit is aimed at FCDO's network of health advisors, and policy and programme managers based in country offices and central teams.

The purpose of this toolkit is to summarise and present key messages from the latest evidence on 'what works' for health systems strengthening (HSS) to help embed a stronger HSS approach into all of our work on health as outlined in FCDO's position paper [\*Health Systems Strengthening for Global Health Security and Universal Health Coverage\*](#) (FCDO 2021).

The toolkit draws extensively on more detailed pieces of work analysing the evidence in more depth, which were disseminated through the health network in FCDO (and previously the Department for International Development) between 2019 and 2022 titled [\*Evidence Review of What Works for Health Systems Strengthening, Where and When?\*](#) (Witter *et al.* 2021). This toolkit also links back to a multitude of resources and recorded sessions collected as part of [\*K4Ds previous learning journey on HSS\*](#).

The evidence presented in this resource toolkit should support better decision-making to improve the way FCDO implements HSS approaches and enhance the effectiveness of the investments we make in health. The toolkit is designed to be a guide to steer FCDO health and policy advisors towards important resources and evidence that can be used to think through programme design and implementation, support technical and diplomatic dialogue, and build confidence in embedding an HSS approach.

The toolkit purposely does not go into detail on all of the evidence, nor does it translate how to use evidence in different contexts – that synthesis needs to be done by health and policy advisors themselves. It should

therefore be used in conjunction with country and programme assessments, and operational and local research findings of what works, alongside global and normative guidance, much of which comes from the World Health Organization and other critical technical partners in this space.

## How to use the Health Systems Strengthening Resource Toolkit

The toolkit can be downloaded in its entirety to improve general knowledge on HSS or as separate chapters associated with a particular health system area or 'building block'. Hyperlinks have been included that link directly to important guidance or papers that explore each area in more depth. The references are in no way exhaustive, but efforts have been made to include the most recent evidence available. Additional summaries of evidence will continue to be circulated through the FCDO HSS newsletter.

## Structure of the Health Systems Strengthening Resource Toolkit

The toolkit starts with a scene-setting section in Chapter 1, which provides a very brief introduction to HSS, outlining important distinctions between different types of health interventions commonly applied to improve health outcomes. The introduction also provides a brief summary of FCDO's approach to HSS.

Chapters 2 to 7 draw out key messages from the latest evidence and resources, with a specific focus on individual functional health system building blocks. Each section includes a mixture of key messages and a synthesis of some of the evidence on 'what works', with links to a list of references, useful resources and relevant tools. The resource lists are not comprehensive, but provide a flavour of what evidence has been published recently and include the latest important thinking on climate-resilient systems. There is more

detail in some of these chapters (e.g. Chapter 5: Health workforce) because these are priority areas outlined in FCDO's HSS position paper.

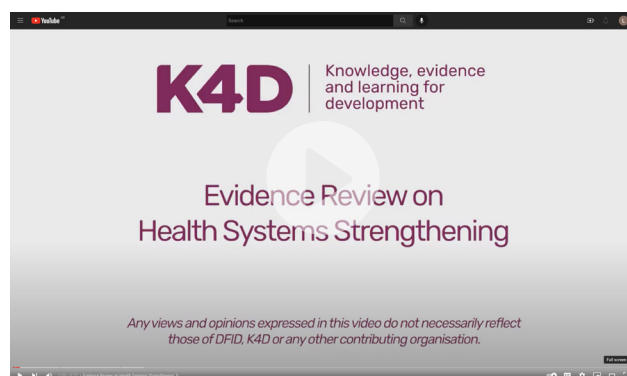
Chapter 8 contains important cross-cutting considerations on design, implementation, and monitoring and evaluation. This is a 'must-read' chapter as it outlines a number of areas that help bring the building blocks together. The chapter also covers a number of topics where advisors have asked for more evidence. Again, the list of topics is not exhaustive – we will continue to expand the list over time.

Chapter 9 concludes with a few 'high-level' takeaway messages that apply to all the HSS work that we do. An extensive reference list is provided at the end of the document to facilitate further reading.

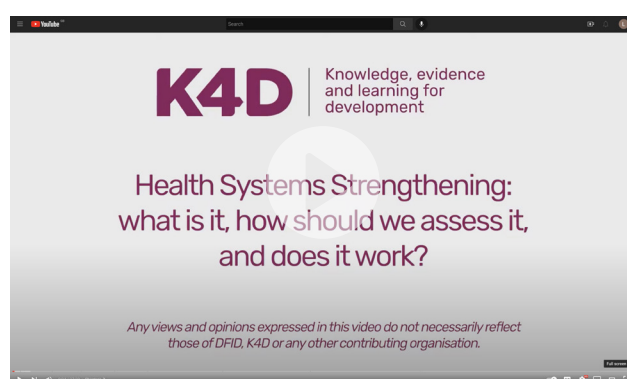
## Before you start

Two short videos presented by researchers in the field of HSS provide an overview and summarise some of the key findings within this toolkit and based on the more detailed evidence review of what works.

- > The **first video** outlines the key findings from the detailed literature review and acknowledges the complexity of HSS, and the value and impact of health systems research more generally, and makes recommendations for FCDO staff and other donors.
- > The **second video** summarises what works for HSS, based on different contexts, and highlights some of the key messages, based on different building blocks.



### Evidence Review on Health Systems Strengthening



### Health systems strengthening – what is it, how should we assess it, and does it work?

# 1 Introduction to health systems strengthening

## Setting the scene

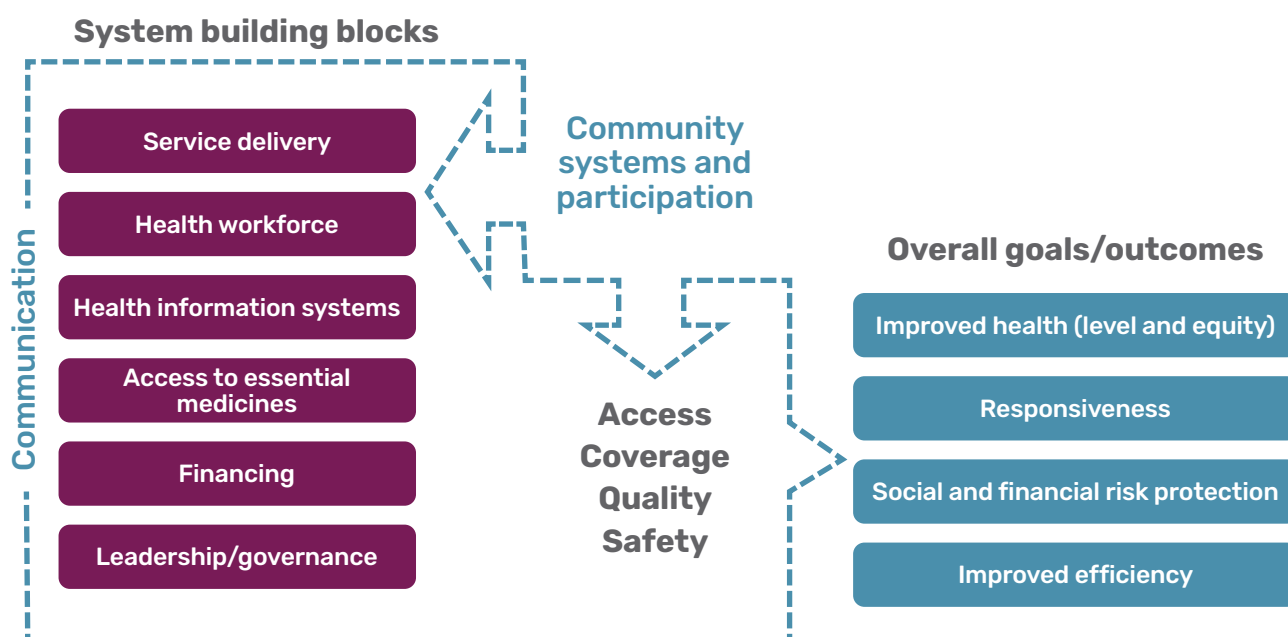
Health systems strengthening (HSS) is a concept that has been defined by the World Health Organization (WHO) as: ‘the process of identifying and implementing the changes in policy and practice in a country’s health system, so that the country can respond better to its health and health system challenges’. To support identifying the changes that are needed, WHO developed a framework in 2007 describing health systems in terms of six core components or ‘building blocks’, which over time has been adapted to also include community systems (Figure 1).

HSS is not something new; governments and development partners have applied a variety of interventions to strengthen national and regional systems for many years. However, HSS can mean different things to different people, and the terminology and definitions used can be confusing. There are, for example, different types of interventions that can be made in a health system, all of which are legitimate in particular circumstances, but not all of which can be classified as HSS.

It is therefore useful to be aware of the different ways of describing interventions that are outlined in a [review of Global Fund investments by Witter and Pavignani \(2016\)](#):

- 1 **Supporting** is about identifying resource gaps and inputs (e.g. procurement of medicines) to be filled, and is justified when systems are frail and under resourced. Supporting health systems should be backed by a solid grasp of the situation and recognition that long-term benefits for the health system are unclear.
- 2 **Strengthening** goes beyond supporting immediate gaps or constraints currently found, to changing the system so that it can address these constraints in the future; for example, harmonising the way medicines are delivered. A stronger health system is better able to adapt and respond to external changes, such as emerging diseases, financial crises, climate change or population migrations (Chee *et al.*, 2013).
- 3 **Pursuing resilience and sustainability** raises the stakes of engagement with a health system and entails an intimate understanding of the whole health

**Figure 1 Common building-blocks framework used to describe HSS**



Source: [Health systems strengthening for global health security and universal health coverage](#), FCD0 (2021: 16). Reproduced under Open Government Licence v3.0.

system, of the determinants of its functioning and of its evolution over time, all framed in the international context that powerfully conditions its prospects; for example, ensuring there are national and subnational institutions managing supplies linked to changing population needs.

- 4 **Preventing systems under severe stress from collapsing**, and in turn making their recovery easier and faster, also constitutes a potentially important and high-return investment, even if it is usually constructed in emergency terms; for example, being able to add new medicines or products such as Covid-19 vaccines and personal protective equipment using existing systems that do not displace delivery of routine services.

## The Foreign, Commonwealth & Development Office's approach to HSS

The Foreign, Commonwealth & Development Office (FCDO) recognises the differences in these different types of interventions. It has used, and continues to use, a combination of approaches depending on the local context. However, in December 2021 FCDO published its [\*Health Systems Strengthening for Global Health Security and Universal Health Coverage\*](#) (FCDO 2021) position paper to mark a shift in embedding a stronger HSS approach in all FCDO's work on global health. The

paper was based on the latest evidence and was intended to provide clearer direction to and greater cohesion on the United Kingdom's investments in health.

The FCDO position paper is set out in three chapters. The first chapter demonstrates why HSS is important to FCDO in achieving the health-related targets of the United Nations Sustainable Development Goals (SDGs) including global health security and universal health coverage (UHC). The chapter acknowledges the common building-blocks framework outlined in Figure 1. The paper goes on to identify **five key principles** and **ten technical focus areas** that FCDO will prioritise (Figure 2). These are meant to guide our technical considerations for future programme implementation and policy dialogue.

The final chapter highlights FCDO's commitment to **work with international, multilateral, national and civil society partners**, as well as outlining approaches to different country and regional contexts.

Being familiar with FCDO's HSS paper is important for all FCDO health and policy advisors working on global health. More details on how to approach this, can be sought from the Health Systems Team in the Human Development Department in FCDO – contact Jo Keatinge on [jo.keatinge@fcdo.gov.uk](mailto:jo.keatinge@fcdo.gov.uk) for more information.

**Figure 2 Summary of core principles and focus areas outlined in FCDO's position paper on HSS**

## Technical content

UK's approach focuses on a number of **core principles**:

- Leaving no one behind
- Protecting and promoting people's right to health
- Respecting country leadership and working together
- Doing no harm
- Being science-led, evidence-based, cost-effective and promoting value for money

**Key focus areas** include:

- **Integrating** key essential services with focus on primary health care
- Building **resilient public health functions**
- Focusing more on **quality of care**
- Supporting leadership on **health financing**
- Strengthening countries' health and care **workforce**
- Supporting better ways to **measure impact**
- Supporting countries to better understand **equity**
- Seeking to transform health systems by utilising **digital technologies**
- Strengthening our **multisector approach** and engagement
- Taking a **longer-term approach**

Source: Adapted from authors' own work.

# ② Leadership, governance and accountability

## Key messages

The literature exploring health systems governance demonstrates that interventions and policy change in this area can improve health, access to services and responsiveness.

- > An increasing body of evidence suggests that governance-specific interventions, including civil participation and engaging community members with health service structures and processes, can lead to tangible health improvements, as well as improved service uptake and quality of care (e.g. using community score cards or other social accountability mechanisms).
- > Leveraging collaborative models involving different stakeholders and health units, and other sectors, to work towards a clear objective – managing a particular service or unit – is found to achieve results.
- > Capacity development and mentoring are particularly important to enable this process. Leadership and management training remains a key ingredient in improving governance and HSS in low- and lower-middle-income countries.
- > Context is critical (e.g. government acceptance of shifting authority to community organisations, or shared societal values in line with pro-equity and gender-equality policies).
- > Most interventions in other health system building blocks have a governance component – as each of these functions needs to be regulated, managed, resourced and monitored. Each function is strengthened by a good health governance framework. Investments cannot seek to separate these; on the contrary, they should attempt to mainstream governance in all funding and programmatic streams.
- > Health system governance and broader good governance have been credited with achieving improvements in reforms of whole health systems, even where resource inputs have been insufficient. Some of the critical concepts of a whole-system governance approach involve: (1) political elites invested in change and taking into account windows

of opportunity; (2) a national plan; (3) comprehensive and coherent reform programmes addressing multiple building blocks over significant periods of time; and (4) allowing for lesson learning and policy adaptation that respond to an ever-changing environment.

## Evidence review of what works for governance and leadership

Interventions pertinent to this building block include: (1) specifically strengthening health system governance and leadership (with intended and unintended) that have spillover effects on the overall health system and population health outcomes; (2) 'governance plus' (intended interventions paired with others addressing another health system function, such as human resources for health (HRH) or regulation and management of supply chains); and (3) governance policies and reforms embedded within broad programmes aiming at wholesystem reform. Key findings from the '[Evidence review of what works for health systems strengthening, where and when?](#)' by Witter *et al.* (2021) include:

- > Governance-specific interventions, including **civil participation and engaging community members with health service structures and processes**, can lead to tangible improvements in health (usually focusing on maternal and child health outcomes), as well as better service uptake and quality of care.
- > Capacity development and mentoring are central for effective governance – **complex leadership programmes** blending skills development, mentoring and promotion of teamwork bring about improvements in service quality, management competence and motivation.
- > **Collaborative working models** involving different stakeholders working in synergy to achieve long-term strategic reform goals across micro-/meso-/macro-levels of the health system and within the public sphere are a key mechanism for improving outcomes. For example, in Ethiopia during the Covid-19 pandemic, stakeholders saw the existence and functionality of structures such as the National Immunisation Technical Advisory Group,

the Interagency Coordination Committee, and the Essential Programme on Immunisation technical working group as critical for success. For more examples, see [\*Strengthening Coordination for Shock Preparedness and Response: Lessons for Health System Resilience\*](#) (Gooding *et al.*, 2022).

- Evidence on the effect of **decentralisation** as a stand-alone intervention in health system governance on health outcomes highlights mixed effects (Panda and Thakur, 2016, Sumah *et al.*, 2016).

Key studies under each of the three domains described above can be found in Witter *et al.* (2021), alongside a summary table on effects of governance interventions. The authors also discuss how to operationalise these findings in relation to HSS.

## Resources for leadership, governance and accountability

### Publications and evaluation studies

[\*Institutionalizing Leadership Management and Governance for Health System Strengthening in\*](#)

[\*Emerging Economies: Evidence from Partnership for Health System Strengthening in Africa \(PHSSA\) Programme\*](#) (Chepkorir *et al.*, 2021)

explores experiences, critical success factors and recommendations for improving UHC through institutionalising health system governance in emerging economies.

### Guidance, strategies and support networks

[\*Health Governance: Concepts, Experience, and Programming Options\*](#) (Brinkerhoff and Bossert 2008)

proposes options for health governance programming that can strengthen health systems and ultimately increase use of priority services.

### Useful websites and other resources

[\*HSS Session 3 – Strengthening Accountability to Improve Health Outcomes\*](#) (K4D 2020b) is a recording of a K4D session to provide participants with practical tools to understand and tackle accountability to improve health outcomes. It illustrates the use of these tools through several examples to demonstrate what can be done to encourage greater accountability.

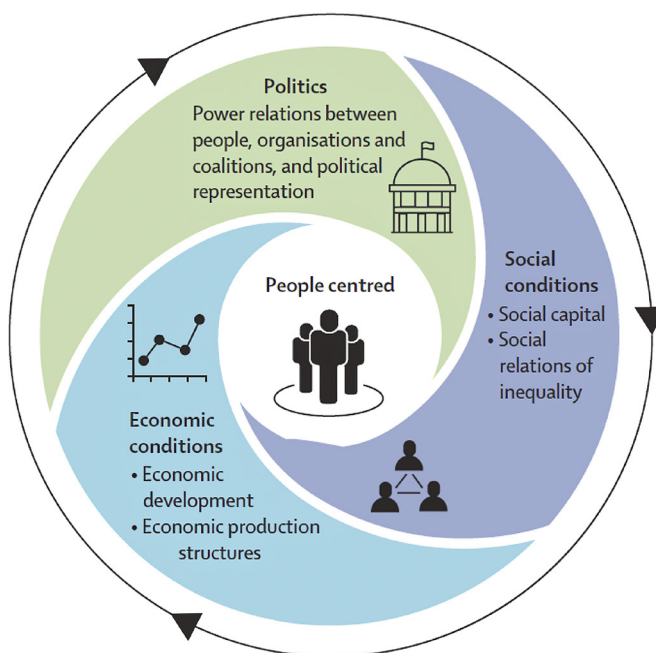
# 3 Health financing

## Key messages

- > Health-financing functions include: (1) revenue raising and pooling; (2) purchasing; (3) benefit package design and service provision; and (4) cross-cutting issues such as governance and public financial management. Interventions, however, rarely fit cleanly into one functional area.
- > All health-financing interventions need to start from joint assessment of needs and priorities and consider the application of political economy analysis to health financing (Figure 3).
- > To be classified as HSS, health-financing interventions need to go beyond providing inputs into improving health-financing functions. WHO has provided clear norms, and all health-financing reforms or interventions should ensure they support movement towards these progress indicators (Figure 4).

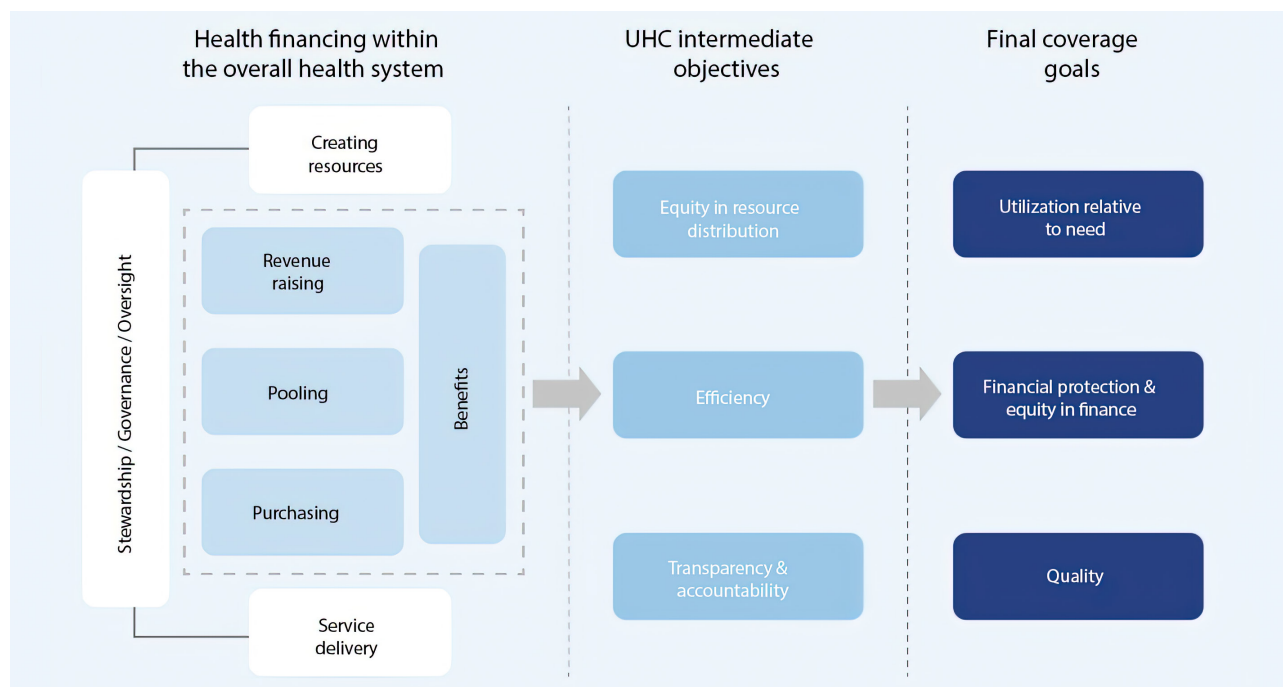
The WHO (2016b) guide [\*Health Financing Country Diagnostic: A Foundation for National Strategy Development\*](#) facilitates undertaking a situation analysis for health financing and provides guidance on developing national health-financing strategies. It includes normative proposals for each functional area to enhance health-financing reforms.

**Figure 3 A political economy analysis conceptual framework for health-financing reform**



Source: [The Lancet Global Health Commission on financing primary health care: putting people at the centre](#). The Lancet Global Health Commissions, 2022. Reproduced under CC BY 4.0.

**Figure 4 Universal health coverage goals and intermediate objectives influenced by health-financing policy**



Source: [Developing a national health financing strategy: a reference guide](#). World Health Organization, 2017. Reproduced under CC BY-NC-SA 3.0 IG0

## Evidence review of what works for health financing

Financial resources and the systems and modalities through which they flow are a key factor in how effective (and strong, according to various criteria) health systems are. As a lubricant of all other functions, the interlinkage between reforms to financing and other system areas is also clear.

Key findings from the [\*Evidence review of what works for health systems strengthening, where and when?\*](#) (Witter *et al.* (2021)) include:

- > Public spending on health is associated with improvements in life expectancy and child and infant mortality across several studies, as well as more equitable distributions of health outcomes at population level when compared with private spending. These effects are more pronounced in low-income countries.
- > Provision of external aid is associated with improved outcomes (especially infant mortality rates) and health equity – but this effect depends on the aid delivery approach (harmonisation with domestic systems and priorities is key). However, evidence on positive health outcome and equity effects from aid coordination mechanisms (e.g. sector-wide approaches, joint assessments and budget support interventions that combine financing and governance changes) is limited.
- > Health outcome and equity effects arising from a range of other combined healthfinancing interventions (e.g. performance-based financing), purchasing reforms, contracting in/out, reforms to the mix of public and private providers operating in the health sector, and others – most of which combine financing and governance reform – show mixed results.
- > Community-based health insurance is unlikely to deliver improvements in service coverage and equity.

## Resources for health financing

### Publications and evaluation studies

- > [\*Paying for Performance to Improve the Delivery of Health Interventions in Low- and Middle-income Countries\*](#) by Diaconu *et al.* (2021) summarises the evidence base on pay for performance for health care in LMICs.
- > [\*Improving Effective Coverage in Health: Do Financial Incentives Work?\*](#) (de Walque *et al.* 2022) is a Policy Research Report that examines one specific policy approach to improving effective coverage: financial incentives in the form of performance-based financing (PBF) or financial incentives to health workers on the front lines.

- > [\*From Overall Fiscal Space to Budgetary Space for Health: Connecting Public Financial Management to Resource Mobilisation in the Era of Covid-19\*](#) (Barroy and Gupta, 2020) advances the concept of budgetary space for health, which explores resources available for health that are generated through higher public expenditure, better budget allocation and improved public financial management.
- > [\*Health Taxes: A Primer\*](#) (World Health Organization, 2018) summarises the evidence on the health and economic impacts of health taxes (those imposed on products with a negative public health impact such as tobacco, alcohol, sugar-sweetened beverages and fossil fuels).
- > [\*Health Financing in Fragile and Conflict-affected Situations: A Review of the Evidence\*](#) (Witter *et al.* 2020) is designed for policymakers tasked with developing and implementing health-financing policy in fragile and conflict-affected settings (FCAS), as well as those who advise such policy. The overarching recommendations are to safeguard the financing of critical health system functions, ensuring policy is consistent with a set of principles that underpin health financing in support of UHC; and use cash and voucher assistance to protect human welfare to meet both health and non-health needs.
- > [\*Can Low- and Middle-Income Countries Increase Domestic Fiscal Space for Health: A Mixed-Methods Approach to Assess Possible Sources of Expansion\*](#) (Barroy *et al.*, 2018) uses both qualitative and quantitative methods to assess the scope of possible sources of domestic fiscal space for health in LMICs.
- > [\*Health Financing Reforms for Moving towards Universal Health Coverage in the Western Pacific Region\*](#) (Chu *et al.*, 2019) provides an overview of health-financing reforms across countries in the Western Pacific Region as progress is made towards UHC.

## Guidance, strategies and support networks

- > The [\*Lancet Global Health Commission on Financing Primary Health Care\*](#) (Hanson *et al.* 2022) provides the latest evidence of what works in financing primary health care (PHC). The report has five key recommendations: (1) the majority of PHC funding should come from public financing – using pooled financing mechanisms. These should be allocated equitably, reach frontline PHC providers efficiently; and remain flexible enough to support rapidly changing service-delivery models; (2) spending more and spending better on PHC requires

a whole-of-government approach; key actors such as civil society should be involved in designing and implementing financing arrangements; (3) countries should plot out a strategic pathway towards people-centred financing; (4) technical agencies should reform the way PHC expenditure data is collected, classified and reported; and (5) academic researchers, technical experts and policymakers should pursue a robust research agenda on financing arrangements for PHC. This report also details a blended capitation-based payment model with key steps: (1) establish a baseline capitation payment system; (2) define a PHC package; (3) manage enrolment; (4) adjust for risk levels; and (5) blend payment methods (for detailed steps, [\(Hanson et al., 2022\)](#)).

> **[Financing for Universal Health Coverage: Dos and Don'ts](#)** (World Health Organization, 2019) synthesises lessons learned from reform experiences in a question and answer format.

> **[Health Systems Governance and Financing & Covid-19](#)** (WHO 2022e) focuses on raising adequate revenues for health systems, organising the revenues to maximise risk-sharing across the entire population, and spending funds in the best way to improve the health of all citizens of a country.

> **[Leveraging Public Financial Management \(PFM\) for Better Health](#)** (WHO 2022f) provides global guidance on fiscal and budget reforms, with links to a network of global experts, a global budgetary repository, country-level support and capacity-building modules.

> **[Assessing Country Progress in Health Financing for UHC: Health Financing Progress Matrix](#)** (WHO 2022a). The **[Health Financing Progress Matrix](#)** is WHO's standardised qualitative assessment of a country's health-financing system. Developed to provide real-time information to policymakers, the matrix is a sister product to the **[system of health accounts](#)**, that supports the assessment of health revenues and expenditures.

> The WHO policy brief **[Budget Matters for Health: Key Formulation and Classification Issues](#)** (Barroy et al. 2018) aims to raise awareness on the role of public budgeting, specifically aspects of budget formulation including for non-public financial management specialists working in health.

## Useful websites and other resources

> **[HSS Session 4 – Health Financing Priorities in the Time of COVID 19?](#)** (K4D 2020) is a recording of a K4D session that explored key principles and concepts in health financing during the Covid-19 pandemic, financial crises and in FCAS. It highlighted key priorities and introduced best practice for engaging in dialogue with key stakeholders.

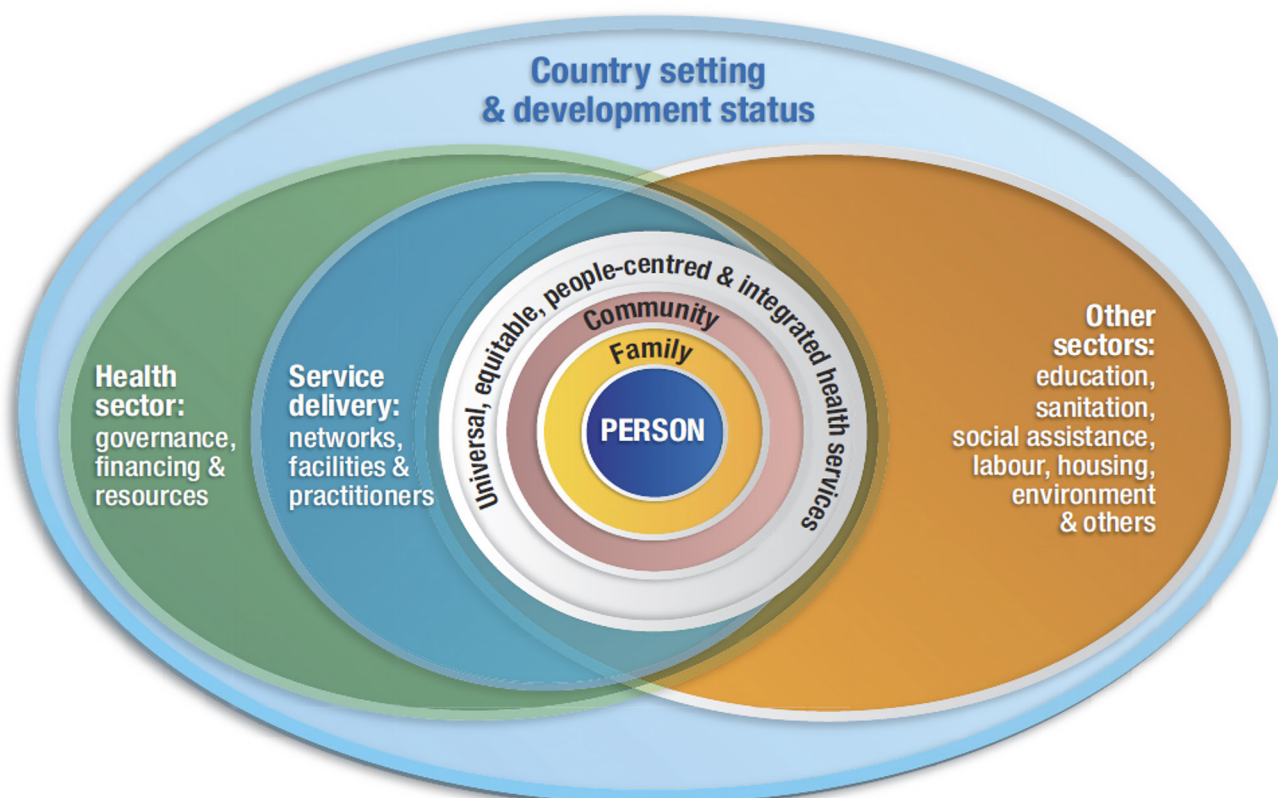
> WHO's **[Global Health Expenditure Database](#)** shows comparable health-expenditure data for 192 countries over the past 20 years. The present time series, from 2000 to 2019, up to the Covid-19 pandemic period, provides a useful basis for assessing future changes in health systems. The database supports the goal of UHC by helping monitor the availability of resources for health.

# 4 Safe, quality and equitable service delivery

## Key messages

- > The range of interventions to strengthen service delivery is very broad. There is reasonable evidence that multicomponent service-delivery interventions, and notably those whose constituent components reinforce each other, are associated with higher effectiveness. This is particularly evidenced in the case of comprehensive service integration (Figure 5), when the aim is to improve the whole continuum of care delivery – including service redesign, demand generation, and quality improvement through supervision, data management and pre-service training. In these cases, integration is more likely to lead to positive health outcomes, service use and sustainability.
- > Conversely, when the intervention is designed predominately as a means to increase uptake of specific and often siloed services (e.g. HIV treatment uptake) without investment in broader health-system components (e.g. governance and training), impact is more limited or unknown.
- > So-called ‘packages’ of interventions (e.g. integrated management of childhood illnesses) often can increase uptake, but evidence on health outcomes is mixed.
- > The role of community engagement in the design and implementation of interventions emerged from the [\*Evidence review of what works for health systems strengthening, where and when?\* \(Witter et al. \(2021\)\)](#) as an ingredient of higher effectiveness of interventions.

**Figure 5 Conceptual framework for integrated people-centred health services**



Source: Graphic: Figure. Conceptual framework for integrated people-centred health services. Page 8, from World Health Organization. (2015). Interim report: placing people and communities at the centre of health services: WHO global strategy on integrated people-centred health services 2016–2026: executive summary. World Health Organization. <https://apps.who.int/iris/handle/10665/180984>. Document number WHO/HIS/SDS/2015.20

- > Investments at scale that support the underpinning system itself, and combine supply- and demand side-activities, seem to produce generally better health outcomes.
- > Health care must respond to the growing climate emergency, not only by treating those made ill or injured by, or dying from the climate crisis and its causes, but also by practising primary prevention and radically reducing its own emissions (Karliner *et al.*, 2020).
- > Although not yet formally assessed, responses to the Covid-19 pandemic drove changes in service-delivery models, including acceleration of digital health.

## Evidence review of what works to strengthen the delivery of health services

Strategies that strengthen health services aim to improve the provision, quality, use, coverage, efficiency and equity of health services, with a view to improving effectiveness and achieving intended health outcomes (Witter *et al.*, 2021). A wide range of system strengthening interventions focus on service delivery, both on the supply side and to a lesser extent on the demand side.

The spectrum of service-delivery interventions is large, ranging from disease-focused interventions, and design and provision of packages of services (e.g. integrated management of childhood illness), to service redesign (e.g. strengthening community-level delivery of health services), organisational strengthening (e.g. improving referral systems and quality improvement initiatives), implementing complex and multicomponent interventions, and providing patient-focused integrated care models. On the demand side, strengthening strategies generally involve demand generation programmes at community level, and in some cases co-production of services. A summary table on effects of service-delivery interventions can be found in the [Evidence review of what works for health systems strengthening, where and when?](#) (Witter *et al.* (2021) ).

**Community engagement and involvement** in the planning, implementation, monitoring and accountability of service delivery is vital. Depending on the context, this includes through village health committees, health centre committees, community health workers (CHWs) and peer support groups.

In addition, models of community care for consideration include: (1) integrated community case management of childhood illness (Oliphant *et al.* (2021); (2) integrated management of neonatal and childhood illness (Gera *et al.*, 2016); (3) integration of mother and child health services (Rahman *et al.*, 2011); (4) from pregnancy to neonatal and child health (Emond *et al.*, 2002, Findley

*et al.*, 2013); and (5) differentiated service delivery developed as a means to combat suboptimal long-term retention in HIV care (Roy *et al.*, 2019). All interventions described had a strong component of demand generation, involving development with and delivery of health services at household and community levels. Interventions also involved strengthening the majority of health system building blocks, including human resources, infrastructure and pharmaceuticals (Witter *et al.*, 2021).

**Quality improvement strategies** can involve a range of components. Peters *et al.* (2009) categorised these according to the following organisational strategies: (1) public oversight (e.g. contracting out, accreditation); (2) provider – human resources (e.g. training, peer support, personal development); (3) provider – performance improvement or input management (e.g. guidelines, supervision, audit, financial or pharmaceutical management, monitoring); (4) provider – public provider reorganisation (e.g. decentralisation, integration); and (5) household and community empowerment (community education, community empowerment). Successful interventions included performance measurement, and establishing areas for improvement and development of ideas for change, as well as ongoing coaching and mentoring.

## Resources for strengthening service delivery

### Publications and evaluation studies

#### > [‘High-quality Health Systems in the Sustainable Development Goals Era: Time for a Revolution’](#)

(Kruk *et al.* 2018) is a Lancet commission that examined the literature, analysed surveys, and did qualitative and quantitative research to evaluate the quality of care available to people in LMICs across a range of health needs included in the SDGs. They explored the ethical dimensions of high-quality care in resource-constrained settings, and reviewed available measures and improvement approaches, reaching five conclusions.

#### > [A Compendium of 38 Primary Care Case Studies](#)

(World Health Organization, 2009) submitted by 29 countries across the six WHO regions summarises and analyses studies, with particular emphasis on the contribution of nurses and midwives to strengthening health systems. It is a useful resource for examples of best practice and reviews to discern the common elements of, and barriers to, successful primary-care service delivery. WHO is in the process of collating more case studies to showcase successful implementation strategies, which should be available by the end of 2022.

## Guidance, strategies and support networks

### > [WHO Global Strategy on Integrated People-centred Health Services 2016–2026](#) (WHO 2015)

sets forth a compelling vision to improve service delivery. The strategy is based on experience gained in different countries, as well as wide-ranging consultation with experts at global, regional and national levels, informed by a number of related global policy commitments, regional strategies and initiatives in the areas of UHC, PHC, HSS and social determinants of health.

### > [WHO Operational Framework for Primary Health Care: Transforming Vision Into Action](#) (WHO 2020a)

outlines 14 interrelated levers to accelerate progress in strengthening PHC systems and supports the implementation of the strategy. The guideline

provides proposed actions and interventions to be considered at policy, operational, implementation and community levels. It also includes a list of tools and resources to facilitate the actions in each lever.

## Websites and other resources

### > [HSS Learning Journey Session 2 – Improving Quality of Care](#) K4D (2020c)

is a recording of a K4D session that discusses considerations on improving quality of care in FCDO health programming and policystrengthening efforts, in partnership with the global community. It outlines the case for improving quality of care, and examining the evidence base on quality interventions and how to organise thinking, exploring entry points for FCDO to promote national action to improve quality of care.

# 5 Health workforce

## Key messages

- > Human resources for Health (HRH) are a core component in enabling the realisation of UHC, health security and health system goals, with different HR dimensions enabling or blocking the reality of service delivery.
- > HR policy directly affects leadership capacities and performance, linking to governance.
- > Studies of specific HSS interventions for HR tend to be short term, missing long term effects. More macro-level interventions (e.g the effectiveness of creating HRH observatories, of HRH strategies, or approaches to strengthening HR information systems) are under evaluated.
- > The HR field has a well-developed menu of priority actions, as reflected in policy documents such as WHO's [\*Global Strategy on Human Resources for Health: Workforce 2030\*](#) (WHO 2016), which provides a useful framework for strengthening HR functions.

## Evidence review of what works for strengthening the health workforce

Literature in this area mainly focuses on interventions to address: (1) workforce supply; (2) health worker distribution; and (3) performance. Key findings from the [\*Evidence review of what works for health systems strengthening, where and when?\*](#) (Witter *et al.* (2021) include:

- > Most evidence addressing the workforce and at least one other building block focuses on bundled retention packages for health staff in underserved areas – where outcomes assessed are usually staff attrition rates. These interventions usually combine educational, regulatory and financial incentive design changes.
- > Skills-mix or task-shifting (redistributing health tasks within workforces and communities) approaches have been successfully used to address shortages of more highly skilled but scarcer professional groups. Non-formal cadres of health workers such as community health volunteers or CHWs can help address staff shortages if tasks are not too complex.
- > Well-designed performance management systems can improve workforce performance; at a minimum,

they may reduce absenteeism, but they have also been shown to improve service delivery. Individual performance contracts can also reduce absenteeism. Supervision can lead to improvements in quality and productivity. Workforce performance is more likely to improve when a coherent combination of strategies is used. There are examples of developing an effective organisational culture of performance, which impacts on individual performance of health workers (*ibid.*: 39).

- > The 2021 review and subsequent reviews of HRH policies and strategies highlight the need for more robust evaluation of interventions in this area.

## Specific areas related to health workforce reforms

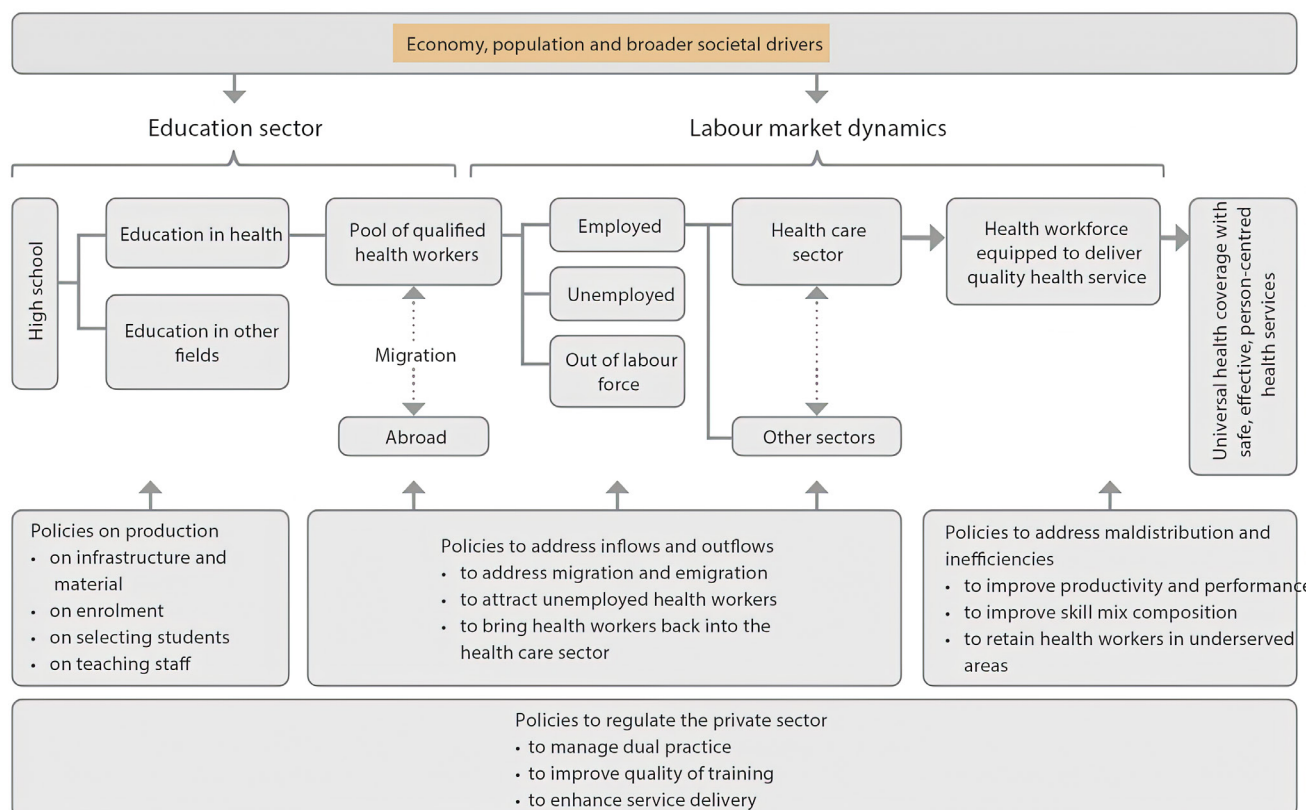
### Health workforce recruitment and selection

Workforce recruitment initiatives include, for example: (1) establishing a public services commission (Rwanda); (2) an emergency hiring plan supported by donors (Kenya); (3) understanding labour market dynamics (see Figure 6); (4) leadership and delivery of health services by women; and (5) getting a clear estimate of need using workload indicators of staffing need (Witter *et al.*, 2021).

### Health workforce distribution and retention

Challenges to deployment, distribution and retention are particularly found in remote rural areas. The recommendation is that several strategies should be bundled together to produce a more coherent approach to addressing these problems (Witter *et al.*, 2021).

Strategies to improve distribution and retention include: (1) health worker retention schemes (e.g. education support, financial incentives, schooling for children and employment opportunities for spouses, opportunities for career advancement, networking with peers and growth of social capital – (Esu *et al.*, 2021)); (2) bonding mechanisms such as being tied to repayment of training costs; (3) addressing disruptive variances in quality and quantity of health workers by facility; (4) privileges programmes for women (South Sudan), levelling up of salaries and other remunerations; (5) reducing staff transfers to ensure those with relevant skills are placed where they are needed most; (6) ensuring training includes rural placements; and (7) recruiting from rural areas (Witter *et al.*, 2021, Ozano, 2022a, Martineau *et al.*, 2022).

**Figure 6 Policy levers to shape health labour markets**


Source: [Health labour market analysis guidebook](#). Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO.

## Interventions to support health workforce capacity and motivation

On the support side, interventions include: (1) audits and feedback; (2) educational outreach visits and continuing education meetings; (3) linking financial reward to performance – individual or organisational; (4) working at organisational level; and (5) developing a culture of performance – team work, recognition and trust ([Witter et al., 2021](#)).

Interventions to improve capacity and performance across malaria, TB and HIV disease programmes include: (1) structured, regular training and retraining that are tailored and have multifaceted supervisory and group problem-solving components; (2) supportive supervision; (3) interventions to improve attitudinal, diagnostic and treatment skills for people-centred care; (4) knowledge and practice for health workers; (5) improving models for cascading training; (6) performance-based financing initiatives; and (7) accelerated training of health technicians ([Ozano, 2022b](#)).

## Interventions to strengthen health workforce management and supervision

Much effort has been invested in ensuring health workers have the competencies they need, but the

challenge is then to support and encourage their use to provide effective service delivery. While a lot of research covers what motivates staff ([Witter et al., 2021](#), [Borghi et al., 2018](#)), there is less evidence on what managers can do to improve workforce performance ([Witter et al., 2021](#)).

## Skills-mix and task-shifting interventions

Task shifting and sharing involve redistributing health tasks within workforces and communities. WHO has developed a guide book on task shifting for HIV/AIDS programmes ([World Health Organization, 2007b](#), [World Health Organization, 2007a](#)), as well as an electronic guide on maternal and newborn health ([WHO 2012](#)). Evidence suggests that it is possible to deliver programmes safely and effectively, and expand coverage using task shifting ([Polus et al., 2015](#)) but rolling out such programmes can be challenging ([Okyere et al., 2017](#)).

## Strengthening the community health workforce

CHWs are health-care providers who live in the community they serve and receive lower levels of formal education and training than professional health-care workers such as nurses and doctors

(World Health Organization, 2020). Key areas to focus on to strengthen the community health workforce include:

- > Having clearly identified tasks and catchment populations;
- > Providing adequate incentives or remuneration;
- > Embedding programmes within communities;
- > Technical and social training, and supportive supervision;
- > Strong linkages and referrals to other pathways of care;
- > Adequate and regular provision of supplies;
- > Strong relationships with local health actors; and
- > Recognising contextual variations.

CHWs are a central component of HSS; however, they are often recruited for vertical programmes, which compromises opportunities for integrated care provision and sustainability after programmes end. Investment in government-directed CHWs, instead of recruiting new community agents for specific diseases, is essential for integration into health systems and HSS (Ozano, 2022a).

CHWs also have a central role in reaching the most marginalised people. Recognition has been growing of their contributions and importance during pandemics such as Covid-19 (Ballard *et al.*, 2020).

## Resources for strengthening the health workforce

### Publications and evaluation studies

- > **Improving Health Worker Performance: An Ongoing Challenge for Meeting the Sustainable Development Goals** (Rowe *et al.*, 2018) presents a history of past efforts to improve health worker performance and describes the effectiveness of strategies to improve these, concluding with recommendations on priority actions for further improvements in this area.
- > **What Do We Mean by Individual Capacity Strengthening for Primary Health Care in Low- and Middle-Income Countries? A Systematic Scoping Review to Improve Conceptual Clarity** (Finn *et al.*, 2021) seeks to identify the most common domains of individual capacity strengthening, as well as their most common forms of measurement, to generate a better understanding of what is meant by the term capacity strengthening for PHC workers.
- > **Global Experiences in Health Workforce Policy, Planning and Management Using the Workload Indicators of Staffing Need (WISN) Method, and Way Forward** (Kunjumen *et al.*, 2022) provides an overview of the body of evidence that shows how workload indicators of staffing need assessments can be a relevant and effective tool when complemented with other sources of data to support policy and planning dialogue, decision-making and investment in health.
- > **The Gendered Health Workforce: Mixed Methods Analysis from Four Fragile and Post-conflict Contexts** (Witter *et al.*, 2017b) applies a gender analysis framework to explore access to resources, occupations, values, decision-making and power. The findings shed light on patterns of employment: in all contexts women predominate in nursing and midwifery cadres, are under-represented in management positions and clustered in lower-paying positions.
- > **Implementation of Health Workforce Information Systems: A Review of Eight Sub-Saharan Country Experiences** (Chibuzor *et al.*, 2021) assesses the effectiveness of health workforce registries for improving health systems in LMICs. This study looked at the role the health workforce registries can play in improving the distribution and skills mix, quality of data, availability and use of data for policy and planning, and user satisfaction.
- > **How To Do (or Not To Do)... Measuring Health Worker Motivation in Surveys in Low- and Middle-income Countries** (Borghi *et al.*, 2018) discusses how motivation can be conceptualised, then sets out the steps in developing questions to measure motivation within health worker surveys, and in ensuring data quality through validity and reliability tests.
- > **Improving Health Workforce Governance: The Role of Multistakeholder Coordination Mechanisms and Human Resources for Health Units in Ministries of Health** (Martineau *et al.*, 2022) explores the existence and operation of HRH coordination mechanisms and structures in Malawi, Nepal and Sudan, and additionally from a global perspective through 28 key informant interviews and a review of 165 documents.
- > **Systematic Review of Performance-enhancing Health Worker Supervision Approaches in Low- and Middle-income Countries** (Deussom *et al.*, 2022) includes studies documenting supervision enhancements and approaches that improved health worker performance to highlight components associated with these interventions' effectiveness. Structured by a conceptual framework to classify the inputs, processes, and results, the review assessed 57 supervision studies since 2010 in around 29 LMICs.

### Guidelines, strategies and support networks

> The ***Global Health and Care Worker Compact: Technical Guidance Compilation*** (WHO 2022c) provides recommendations on how to protect health and care workers, safeguard their rights, and ensure decent work, free from racial and all other forms of discrimination within a safe and enabling practice environment. A wide range of international conventions, instruments, treaties and resolutions inform these recommendations. Each section includes extensive referencing to relevant legal and other normative instruments.

- > The ***Health Labour Market Analysis Guidebook*** (WHO 2021b) provides a comprehensive overview of the health labour market, offers guidance on how to analyse and understand its dynamics, and identifies key steps in undertaking a health labour market analysis.
- > ***Conceptual Framework for Task Shifting and Task Sharing: An International Delphi Study*** (Orkin *et al.*, 2021) is engaged with an international panel of scholars with experience in knowledge synthesis concerning task shifting and sharing to develop a conceptual framework to support these processes.

# 6 Medicines and supply chain management

## Key messages

- > Functioning health supply chains are essential to achieving health programme goals such as increasing availability of medicines, improving quality of health services, and delivering commodities cost effectively.
- > Supply chain strengthening is an area that has benefitted from large investments in recent years, particularly due to the interest of global health initiatives in strengthening supply chains for their commodities.
- > There is anecdotal and grey literature evidence of success; in particular, reforms that have moved supply chain management to a greater distance from centralised control. There is also evidence of considerable scope for private sector involvement. However, evidence that formally links investments in supply chains to greater access to health care or better outcomes is scarce.
- > Supply chains are critical to achieving a climate-resilient and low-carbon health system and thereby meeting United Nations Climate Change Conference (COP26) health commitments.

## Evidence review of what works for strengthening supply chains

It is recognised that ineffective supply chains are a key limitation in health systems. Inefficiencies in supply chain management are linked to increased costs of medicines for patients, proliferation of falsified or substandard medicines, stock-outs and wastage (Witter *et al.* 2021). Ensuring that essential pharmaceuticals and other medical inputs are available and affordable to patients when needed is critical to high-quality service provision and improvements in health status. Interventions may include: (1) improvements to supply chain management to reduce stock-outs and loss due to expiration; (2) bulk or pooled procurement of medicines to obtain lower prices and increase affordability; and (3) training of pharmacists and providers to improve stock management and prescribing practices (Hatt *et al.*, 2015).

## Improving equitable access to essential drugs and supplies

Improving equitable access to drugs and supplies requires policy and programmatic efforts throughout the value chain, from development through to delivery, and can be achieved by using the following levers: (1) research and development that meets public health needs and improves access to health products; (2) application and management of intellectual property to contribute to innovation and promote public health; (3) evidence-based selection and fair and affordable management; (4) procurement and supply chain management (SCM) and; (5) appropriate prescribing, dispensing, and rational use ([Improvement Strategies Model: Drugs and Supplies](#), PHCPI (2015)).

Essential medicines and supplies are those that satisfy the priority health-care needs of the population. They must be selected with regard to public health relevance, evidence on efficacy and safety, and comparative cost effectiveness. When a drug or supply is considered a priority or essential, it is especially important to ensure fair pricing to alleviate the expensive burden of out-of-pocket payments. A fair price is one that is affordable for health systems and patients, and which also provides sufficient market incentive for industry to invest in innovation and the production of medicines. In addition to the [WHO Model List of Essential Medicines: 22nd List 2021](#) (WHO 2021c), for recommendations and advice concerning all aspects of the quality assurance of medicines, see the [WHO medicines website](#).

## Supply chain strengthening

Much of FCDO's investment passes through multilateral agencies and global health initiatives such as the Global Fund. The Global Fund is investing in improving and integrating supply chains and pharmaceutical management. For instance, the Global Fund has established a pooled procurement mechanism that combines orders from 63 participating countries to support better negotiation of prices on commodities and delivery conditions with manufacturers. A good example of what can be achieved directly at country level comes from Zimbabwe, where Global Fund investments, aligned with country priorities and other

partner investments, have helped to build national procurement and supply chain management institutions and multiple parts of the system, including warehousing and storage enhancements that have wider impacts on the whole health sector beyond HIV, malaria and TB (UNDP Zimbabwe, 2020).

Other effective interventions related to medicines include: (1) better regulation of drugs available at both public and private pharmacists; (2) integrated logistics management of key drugs and laboratories to minimise stock-outs and expired medicines; (3) revisions of drug order forms at facility level, alongside training and supervision for quantification and requisition of medicines; (4) redistribution of surplus commodities from facilities; and (5) tools to counter the growing threat of drug and insecticide resistance (Ozano, 2022a).

Ensuring there is a sufficient health workforce to manage supply chains is also important. UNDP initiated two major training programmes in 2017: a short certification course by the [Chartered Institute of Procurement and Supply](#) and an 11–18-month post-graduate course in [pharmaceutical procurement and supply chain management](#) offered by the [Empower School of Health](#). These courses seek to improve participants' understanding of the entire supply chain and address bottlenecks (UNDP Zimbabwe, 2020).

## Prescribing and rational use of medicines

The right drug of the right quality, safety and effectiveness should be available, affordable and marketed correctly; and the infrastructure should be appropriate for individuals and the community. Rational use of medicines involves: (1) the correct/proper/appropriate use so that selection, dosage and duration follow evidence-based guidelines; (2) being effective to meet clinical needs; (3) offering the lowest cost to the provider, community and the patient; and (4) correct dispensing and instructions for taking (World Health Organization, 2014). In [Promoting Rational Use of Medicines](#) (WHO 2022g), WHO provides a useful checklist comprising 12 key interventions to strengthen the prescribing and rational use of medicines.

All medication carries a carbon footprint. Reducing this footprint should be considered as part of effective and safe clinical practice, particularly where alternatives are available, such as lower-carbon pharmaceuticals, social prescribing, or interventions that improve health through personalised support and community engagement. Improved management and sustainable procurement

processes for pharmaceuticals can reduce the overall quantity of products manufactured and purchased. This can lead to reduced emissions by reducing the energy footprint of producing and transporting unused or expired pharmaceuticals. It can also reduce the amount of energy required for waste disposal through the reduction and substitution of toxic chemicals. An overview of multiple interventions for how the sector can implement a number of high-impact actions can be found in the [Global Road Map for Health Care Decarbonization](#) (Karliner et al., 2021).

## Resources for strengthening the supply chain

### Publications and evaluation studies

> [Improving Global Health Supply Chains Through Traceability](#) (Pisa and McCurdy, 2019) finds that tracking and tracing goods offers a realistic solution to some of the problems found in LMIC health supply chains, but that implementing the approach is a huge logistical endeavour that requires a strong political commitment. The authors discuss how donors can support committed governments, by taking an evidence-based approach to determine what traceability methods work best.

### Guidance, strategies and support networks

- > [Leveraging the Power of Public Supply Chains to Drive Change for Children Every Day](#) (UNICEF 2021) highlights a value proposition, commitments and vision to support countries in strengthening their supply chains and accelerating children's equitable access to essential services and supplies.
- > WHO's [Assessment of the Covid-19 Supply Chain System](#) (WHO 2021a) assesses the Covid-19 supply chain system focused on strategy and implementation, providing lessons learned and recommendations for the future.
- > WHO's [Essential Programme on Immunization](#) to strengthen vaccine programmes, supply and delivery, and ensure universal access to all relevant vaccines for all populations across the life course, offers a menu of key WHO tools, resources and guidance on immunisation supply chains.

### Useful websites and other resources

- > International non-governmental organisation [Health Care Without Harm](#) has resources to understand and reduce the carbon footprint of health-care supply chains and other areas.

# 7 Health information systems (HIS)

## Key messages

- > Health information systems (HIS) and effective use of the data they generate are critical for health system functioning. However, there has been insufficient research attention and evaluation of approaches to HIS strengthening.
- > Promising areas to investigate further include: (1) increased use of m-health (using mobile electronic devices to deliver health services) and e-health (using information technology (IT) for health care) approaches; (2) further strengthening of routine data systems, their interoperability and use for decision-making; (3) streamlining of often fragmented health data collection; and (4) support for learning at all levels of the health system.

## Evidence review of what works for HIS

Health information systems include health data sources required to plan and implement national health strategies (Witter *et al.*, 2021). These include electronic health records for patient care, health facility data, surveillance data, census data, population surveys, vital event records, human resource records, financial data, infrastructure data, and logistics and supply data. Health information can inform the planning and targeting of national and subnational health programmes to support the achievement of health equity and UHC. The output of strengthened HIS is the improved availability of high-quality data used on a continuous basis for decision-making at all levels of the health system. Reviews identify the need for: (1) development of trained health workers in informatics; (2) involvement of stakeholders; (3) adaptation to local needs; (4) strong leadership and policy direction to improve health information; and (5) use of routine HIS to increase capacity over time (Akhlaq *et al.*, 2016, Wagenaar *et al.*, 2016, Luna *et al.*, 2014).

## Key considerations for strengthening HIS

- > Develop and strengthen national health observatories as a comprehensive one-stop shop for good-quality and reliable information on human health

to provide knowledge, information and surveillance in public health. ***The African Health Observatory and national health observatories as platforms for strengthening health information systems in sub-Saharan Africa*** by Kebede *et al.* (2014) make suggestions on establishing or strengthening national health observatories.

- > Apply District Health Information Software-2 (DHIS2) as a 'tool' for collecting, validating, analysing and presenting aggregated statistical data, tailored (but not limited) to integrated health information management activities. The purpose of DHIS2 is to document data that are routinely collected in all public health facilities in a country. More than 73 countries worldwide use DHIS2, which is offered free of charge as a global public good. ***The DHIS2: A literature review and meta-synthesis of its strengths and operational challenges based on the experiences of 11 countries*** by Dehnavieh *et al.* (2019) review the strengths and operational challenges in the DHIS2.
- > Consider **integrated disease surveillance and response (IDSR)** as a comprehensive, evidence-based strategy for strengthening national public health surveillance and response systems at community, health facility, subnational and national levels. The strategy makes explicit the skills, activities and resources needed at each level of the health system to operate all functions of surveillance. Good examples of surveillance during the Covid-19 pandemic included: (1) fostering a culture of surveillance and comprehensive contact tracing where mass testing was not possible; (2) innovative diagnostics; and (3) health worker engagement in early detection and screening, testing, and treatment. For more information, read the policy paper ***Fragmented health systems in COVID-19: rectifying the misalignment between global health security and universal health coverage*** by Lal *et al.* (2021).
- > Improve the link between routine data collection and use of data for decision-making, as well as building capacity in data management and data use competencies (analysis, synthesis, interpretation,

critical review of data and data-informed decision-making), and organisational culture and the practice of monitoring, evaluation and communication of data use interventions. Read more in the review by [Leon et al. \(2020\)](#) entitled [\*\*\*Routine Health Information System \(RHIS\) improvements for strengthened health system management.\*\*\*](#)

- > Consider using frameworks to measure the impact of strengthening HIS including the [\*\*\*SCORE \(Survey, Count, Optimise, Review, Enable\) for Health Data Technical Package\*\*\*](#), which was developed by WHO and partners to assist in strengthening country data systems and capacity to monitor progress towards the health-related SDGs and other national and subnational health priorities. SCORE presents the most comprehensive strategies and interventions for strengthening country HIS.
- > Other frameworks for measuring the impact of strengthening HIS include the [\*\*\*Performance of Routine Information System Management \(PRISM\) framework\*\*\*](#) (MEASURE Evaluation 2018), which encourages and guides the development of interventions for strengthening or reforming HIS ([Aqil et al., 2009](#)) and the HIS-strengthening model in [\*\*\*MEASURE Evaluation's Health Information System Strengthening Model: A Summary\*\*\*](#) (MEASURE Evaluation 2017), consisting of four areas: the human element; the enabling environment; information generation; and HIS performance.

## Resources for health information systems

### Publications and evaluation studies

- > [\*\*\*Integrated Disease Surveillance and Response\*\*\*](#)

[\*\*\*\(IDSR\) Strategy: Current Status, Challenges and Perspectives for the Future in Africa\*\*\*](#) (Fall et al., 2019) presents the current status of IDSR implementation; and provides future perspectives for enhancing IDSR strategy in Africa.

- > [\*\*\*Strengthening the National Health Information System Through a Capacity-building and Mentorship Partnership \(CBMP\) Programme: A Health System and University Partnership Initiative in Ethiopia\*\*\*](#) (Tilahun et al., 2021) evaluates the outcomes of a technical assistance programme and shares experiences of working with universities to strengthen the national HIS.

### Guidelines, strategies and support networks

- > [\*\*\*Health Data Collaborative: Data for Health and Sustainable Development\*\*\*](#) is a collaborative platform that leverages and aligns technical and financial resources (at all levels) to country-owned strategies and plans for collecting, storing, analysing and using data to improve health outcomes, with a specific focus on SDG targets and communities that are left behind.
- > MEASURE Evaluation's [\*\*\*HIS Strengthening Resource Center\*\*\*](#) is a learning space for health professionals, decision makers and IT professionals to access resources, search for HIS assessment tools, and learn how HIS strengthening is contributing to stronger health systems.

### Useful websites and other resources

- > The UN [\*\*\*Early Warning Systems\*\*\*](#) website provides a number of examples of programmes that help communities to prepare for hazardous climate-related events.

# ⑧ HSS design, implementation, monitoring and evaluation considerations

## Key messages

- > Systems are interconnected, so individual investments in one area of the system are likely to have wider impacts, whether intended or not. It is important to anticipate these impacts in design, avoid 'siloed' thinking, and look for them in monitoring and evaluation.
- > Given that HSS aims to change relationships in a positive way, local ownership and leadership are critical; the 'how' of HSS is often as important as the 'what', including building trust and enabling adaptive programming.
- > Understanding of context, including the political economy, climate-related stressors and societal norms (e.g. gender disability inclusion) is key to designing and implementing effective HSS and resilient health systems.
- > Following good aid effectiveness principles is important, including effective coordination between development partners and with government priorities.
- > Having a common goal and clarity of norms for what a 'strong' health system looks like may help guide design, monitoring and evaluation of HSS.
- > Political commitment to a process;
- > Shared societal values;
- > Taking advantage of windows of opportunity;
- > Sustained commitment;
- > Coherent reform programmes;
- > Quality of implementation;
- > Iterative learning and adaptation;
- > The role of community engagement in the design and implementation of interventions; and
- > Individual and organisational capacity development and mentoring.

This suggests that the implementation process might be as important as the specifics of intervention design in HSS. System strengthening concerns how a specific intervention helps the existing health system and its institutions to adapt, flex and change, not only to ensure long-term sustainability, but also to build system resilience. Paying attention to 'system software' – such as trust in relationships, or leadership processes and values – is critical in this regard.

## Design and implementation considerations

This section includes suggested considerations and references for designing and implementing HSS interventions.

### Implementation factors that increase HSS success

Factors highlighted, from evidence synthesised by Witter *et al.* (2019), that are likely to increase HSS success include:

### Understanding context

No one health system is the same and there is no one-size-fits-all approach in HSS – each context is unique. HSS design needs to incorporate an understanding of the history of and institutions in each setting, which will condition responses.

### Working politically

An aspect of understanding the context is about understanding the politics. HSS is about changed 'relationships within a health system (and beyond), with implications for power and resource distribution, so any intervention needs to be politically informed. Tools such

as political economy analysis have been developed to support this process. They should be deployed during the design phase, and to guide implementation strategies and progress reviews.

## Resources

- > **The Beginner's Guide to Political Economy Analysis (PEA)** (Whaites 2017) provides a learning resource and considers recent evidence on how politics and power impact development. The guide includes everyday analytical tools, looking at some of the questions central to political economy analysis.
- > **HSS Learning Journey Session 1 – Political Economy Analysis** (K4D 2020d) is a recording of a K4D session in which experts provide ideas and information on political economy analysis approaches and concepts, and the application of these in the context of the health sector. It introduces key questions that health advisors confront in their work and allows them to consider issues that arise in the practical application of political economy analysis.
- > In **Addressing the Political Economy of Health Financing Reform** (WHO 2022b), WHO has developed an approach to analysing the political economy of health-financing reform to support strategies in their progress towards achieving UHC. This approach shows how analysis of relevant stakeholders, their respective position and power relative to a reform objective, and the political economy context within which they operate, helps to identify challenges and opportunities associated with health-financing reform.

## Fragile and conflict-affected settings

Literature has focused recently on FCAS, where there are high needs yet limited health system capacity to respond. Wider challenges to HSS in FCAS typically include: (1) deficits in legitimacy, insecurity and capacity; (2) destruction of health infrastructure and supply systems; (3) lack of health workers; (4) fragmentation and lack of co-ordination between multiple formal and informal providers; (5) weak governance capacity to coordinate and develop the health system anew; and (6) lack of capacity to provide essential services to the population.

This has led organisations to produce specific guidance for working on HSS in FCAS, which highlights the need for: (1) innovation in models of 'best practice' (seeking pragmatic solutions even if these are not optimal); (2) long-term support for institutional strengthening; (3) politically sensitive engagement; (4) greater focus on effective aid coordination (including between development and humanitarian actors); (5) adaptability

in the face of complexity and change; and (6) ensuring that development partners do no harm.

## Resources

- > The Eldis platform **Health Systems in Fragile and Conflict-affected Settings** provides a collection of technical guides, relevant published literature and resources on HSS in FCAS, collated by the technical working group on health systems in FCAS and supported by Health Systems Global, an international membership organisation that promotes health systems research and knowledge translation.
- > **What is a Shock-responsive Health System?** (Newton-Lewis *et al.*, 2020) sets out a conceptual framework for a shock-responsive health system to maintain essential services after natural disasters.
- > **Leaving No One Behind: Lessons on Rebuilding Health Systems in Conflict and Crisis-affected States. Reports on Findings from a Multi-country Consortium Examining Health Systems Rebuilding in Sierra Leone, Zimbabwe, Northern Uganda and Cambodia** (Martineau *et al.*, 2017) looks at the impact of conflict and crisis on three important aspects of HSS including communities, the health workforce and national institutions.
- > **Maintains Programme: Research Supporting Social Services' Adaptation to External Shocks** provides a diverse portfolio of research projects funded by FCDO in six countries (Bangladesh, Ethiopia, Kenya, Pakistan, Sierra Leone and Uganda) to examine what can work after a shock or disaster. This website may be of particular use to FCDO advisors based in these countries.
- > **Establishing a Responsive and Equitable Health Workforce Post Conflict & Post Crisis: Lessons from ReBUILD Research** (Witter and Martineau, 2011) highlights some of the main findings and recommendations to invigorate health workforce strategies post-conflict or -crisis based on a wide-ranging series of studies conducted since 2011.
- > **Health Financing in Fragile and Conflict-affected Situations: A Review of the Evidence** (Witter *et al.*, 2020) summarises the myriad of health-financing interventions implemented in FCAS, using WHO's functional approach to health financing as its organising framework.
- > **The Role of Trust in Health-seeking for Non-communicable Disease Services in Fragile Contexts** (Arakelyan *et al.*, 2021) is a cross-country, multiple-case study that analyses the role of trust in health seeking in Sierra Leone, Lebanon and El Salvador.

## Resilience

It is also important to connect HSS, often conceptualised as a (donor-funded) external intervention in a health system, to the wider literature on resilience, which identifies desirable general features for strong health systems, such as adaptability, good collaborative mechanisms and intelligence gathering (Witter *et al.* 2019).

## Resources

- > **Principles of Health Systems Resilience in the Context of Covid-19 Response** (Ager and Tollica, 2020) summarises key principles for promoting resilient health systems. It is based on evidence from research programmes commissioned by the Department for International Development and the National Institute for Health and Care Research. Three resilience processes are usefully distinguished: absorption, adaptation and transformation.
- > **Strengthening Coordination for Shock Preparedness and Response: Lessons for Health System Resilience** (Gooding *et al.*, 2022) outlines how factors such as strengthening coordination and cross-sector partnership can build greater resilience.
- > **Resilience Capacities of Health Systems: Accommodating the Needs of Palestinian Refugees from Syria** (Alameddine *et al.*, 2019) reflects on changes in population health status and health service delivery during the Syrian crisis, notably with respect to the influx of refugees from Syria. This includes features that can foster system resilience; for example, staff commitment, community cohesion and organisational flexibility.

## Climate-resilient health systems

A global shift towards sustainable climate-resilient health systems requires action at both national and global levels. Countries are being asked to come forward with ambitious 2030 emissions reductions targets that align with reaching net zero by the middle of the century; health systems have a role to play in this agenda. Health systems' climate footprint is equivalent to 4.4 per cent of global net emissions. Of those, 71 per cent of emissions primarily derive from the health-care supply chain through the production, transport and disposal of goods and services, such as pharmaceuticals and other chemicals, food and agricultural products, medical devices, and hospital equipment and instruments (Karliner *et al.*, 2020). For tangible change, national governments need to develop plans that address their health systems' current and projected vulnerability to climate change, and which limit the health systems' carbon emissions.

## Resources

- > **Global Road Map for Health Care Decarbonization: A Navigational Tool for Achieving Zero Emissions with Climate Resilience and Health Equity** (Karliner *et al.* 2021) and **'Health Care's Climate Footprint: How the Health Sector Contributes to the Global Climate Crisis and Opportunities for Action** (Karliner *et al.* 2020) provide practical tools to support climate change goals in health care.

## Gender and health systems

Unless explicit attention is paid to gender and its intersectionality with other social stratifiers, through explicit protection and careful linking of benefits to needs of target populations (e.g. poor women, unemployed men, female-headed households), movements towards UHC can fail to achieve gender balance or improve equity, and may even exacerbate gender inequity (Witter *et al.*, 2017a).

## Resources

- > **Adopting a Gender Lens in Health Systems Policy: A Guide for Policymakers** (Hawkins *et al.* n.d.) outlines what a gender-equitable health system looks like, providing a set of updated benchmarks that health policymakers can use. The guide is structured by building blocks, with an introduction to the issues and a set of considerations that policymakers should take into account.
- > **Minding the Gaps: Health Financing, Universal Health Coverage and Gender** (Witter *et al.*, 2017a) is an article of a 2015 webinar in which a panel of health-financing and gender experts reflect on 'why we need to focus on gender'.

## Monitoring, evaluating and learning from HSS interventions

Monitoring HSS efforts is complex. There is no globally agreed comprehensive HSS monitoring framework that is routinely used. Programmes therefore use a mixture of WHO standardised metrics, such as health workforce density, and/or programme-specific indicators to monitor impact. As a result, a number of different evaluation and monitoring frameworks for HSS are implemented, which report on impacts on targeted elements – often within one building block – without considering the impact on the wider system and its interactions (Adam and de Savigny, 2012).

Many interventions do have theories of change relating to specific building blocks, but more work is needed on a set of overarching health system process goals (Figure 7). If projects, programmes, or reforms contribute to these, all other things being equal, it is reasonable to assume that they will improve the overall health system and its outcomes.

**Figure 7 HSS framework**



Source: [Health system strengthening—Reflections on its meaning, assessment, and our state of knowledge](#), The International Journal of Health Planning and Management, 2019. Reproduced and adapted under CC BY 4.0.

Work on defining a common framework for monitoring HSS investments is underway within FCDO, but it is likely to take time to pull this together and it will need to link to frameworks that countries already use. In the interim, several existing frameworks are useful for identifying indicators and developing monitoring tools for programme management purposes.

## Resources

> [The Health Systems Strengthening \(HSS\) Evaluation Collaborative](#), convened by Itad, has developed a focused, common agenda and a shared understanding of how to achieve better HSS evaluation methods, with a particular focus on some of the Global Health initiatives but with broader lessons for all. The website provides various summary briefs and case studies that could be useful for planning HSS programme evaluations.

> The [Health System Performance Assessment: A Framework for Policy Analysis](#) (WHO 2022d) aims to provide policymakers with a practical tool that allows them to measure the performance of health system functions and outcomes, outlining proposed assessment areas linked to routinely collected indicators.

> [Primary Health Care Measurement Framework and Indicators: Monitoring Health Systems Through a Primary Health Care Lens](#) (WHO and UNICEF 2022) is a menu of indicators that countries can use and prioritise, based on national context and health needs, in an approach that suits the maturity of their health systems.

> The United States Agency for International Development (USAID) has produced a list of [Health Systems Strengthening Indicators](#) (USAID n.d.) focused on health financing, health workforce, governance and leadership that draws on monitoring and evaluation plans from 34 USAID-funded projects. The indicators are primarily at the lower levels of the results framework for a typical donor-funded project (inputs, processes and outputs).

> MEASURE Evaluation's [Compendium of Indicators](#) (Diana, Yeager and Hotchkiss 2017) presents a very wide and extensive array of indicators, organised under each of the six building blocks of a health system. The indicators have been identified through an extensive literature review and come from many diverse sources.

> [Measuring Primary Health Care Performance](#) (PHCPI 2018) provides a conceptual framework that is being used to monitor the progress of the Primary Health Care Performance Initiative, a partnership between the Bill & Melinda Gates Foundation, WHO, the World Bank Group, Ariadne Labs, Results for Development, UNICEF and the Global Fund. The website provides a list of PHC indicators that can be linked to snapshot profiles at country level to monitor progress.

> [Measuring Health Systems Strength and its Impact: Experiences from the African Health Initiative](#) (Sherr *et al.*, 2017) provides insights from a country perspective in five sub-Saharan African

countries (Ghana, Mozambique, Rwanda, Tanzania and Zambia) in measuring system progress using a health system building-blocks framework.

## Learning health systems

There has been a renewed emphasis recently on supporting health systems as learning entities. Learning improves health system functions at all levels, enabling individuals, teams and organisations to enhance their regular practices and, therefore, perform their functions more effectively. Health system leaders play an important role in modelling learning, allocating resources to learning and using it to influence decisions (Witter *et al.*, 2022). In [Learning Health Systems: Pathways to Progress: Flagship Report of the Alliance for Health Policy and Systems Research](#), World Health Organization (WHO) Sheikh *et al.* (2021) suggest an action agenda for key stakeholders:

- > Health policymakers and planners can take the lead by developing, implementing and monitoring a learning strategy that supports institutionalisation of learning at all levels of the health system.
- > Health programmes and health workers can strengthen team-based learning and on-the-job mentoring, establish learning sites and participatory learning initiatives, and develop communities of practice and solution-sharing platforms.
- > Community representatives and civil society organisations can strengthen platforms for participatory planning and governance, amplify the voices of citizens and service users, and participate in and drive shared learning.

## Use of Information Technology

Developing, adapting and deploying new forms of IT can support learning functions, helping service providers perform their jobs more efficiently and to a higher quality. Information Technology is being used to help providers contact patients or convey health promotion messages, ultimately improving adherence to treatment and better treatment outcomes (Hatt *et al.*, 2015). Two broad categories of IT include e-health and m-health. This toolkit has not explored this area fully; further updates on the impact of different technologies still need to be compiled.

## Aid effectiveness, partner coordination and HSS

Aid effectiveness principles and their usefulness are vital considerations given the changing landscape of development, including projected decreases in aid, the rise of non-traditional donors, transition of middle-income countries away from aid and increase in private financing of development objectives. Covid-19 has highlighted the importance of using aid well.

## Examples of frameworks to support better aid effectiveness

- > [The Paris Declaration on Aid Effectiveness](#) (2005)
- > [International Health Partnership plus](#) (2007)
- > [Accra Agenda for Action](#) (2008)
- > [Busan Partnership for Effective Cooperation](#) (2011)
- > [Global Partnership for Effective Development Cooperation](#) (2011)
- > [Addis Ababa Action Agenda on Financing for Development](#) (2015)
- > [Universal Health Coverage 2030 Global Compact](#) (2017)

Coordination between donors is recognised as important for improving the efficiency of development assistance efforts by reducing fragmentation and duplication, both of which dilute resources and capacity. Research by Witter *et al.* (2019), Witter *et al.* (2021) and Bijleveld *et al.* (2016) suggests a number of strategies supporting greater aid effectiveness for HSS, including:

- > Establishing joint donor initiatives in the administration, planning, funding and implementation of HSS interventions that strengthen existing activities, allowing programmes to achieve results over and above what would be possible with a single donor. This is likely to reduce duplication and allow donors to fill other programmatic and financial gaps within existing HSS plans;
- > Creating formal partnership agreements and/or multistakeholder HSS coordination forums that establish a shared understanding of programme objectives, and the roles and responsibilities of each partner, with a diverse membership;
- > Formalising processes for participation and communication, with strong accountability mechanisms;
- > Maintaining accurate information about how much donors are spending on different aspects of HSS at both the country and global levels;
- > Enabling flexibility in how resources can be deployed, allowing any immediate needs to be addressed and a rapid response to any time-sensitive bottlenecks; and
- > Enabling a financing horizon that is longer than the typical cycle of 12–24 months, to facilitate longer-term planning and enhance the consistency of the networks required for effective implementation.

## Useful websites and other resources

- > [HSS Session 7 – How Does Global Health Architecture Strengthen Country Health Systems?](#) (K4D 2021) is a recording of a K4D session to facilitate greater appreciation of how different actors in the global health architecture support HSS.

# 9 Conclusions

As can be gleaned from the information and resources within this HSS resource toolkit, strengthening health systems is complex. Understanding 'what works' is critical for us to evolve the approaches that are currently being used so we can continue to adapt and improve. This toolkit is just one resource available to the FCDO health network to help improve our technical and policy dialogues, build capability and embed an HSS approach within all our health programmes.

## Final takeaway messages

- > There is **no 'one-size-fits-all' approach to HSS** – strengthening systems is not predictable, remains difficult to forecast and is difficult to measure – we know it is complex, but it is achievable and it is essential to gaining durable results.
- > HSS is as much a **political as a technical issue** and there is a need to think about incentives, system behaviours, motivation, governance and politics and how these impact on how a system can be strengthened.
- > Systems building is **not a one-off** process – it requires long-term action which is often difficult to secure. However, we can be the catalyst for more effective

systems thinking and help to shift the mindset and the ways we (and others) operate.

- > The HSS building blocks provide a good starting point, but they are **not independent of one another and optimising just one part of the system is not sufficient** – interlinkages are critical.
- > Interdependency of embedded systems across larger systems requires **multisector and multistakeholder engagement** – it takes time to bring sectors together and build trust, but we need to get multiple sectors working towards a common goal.
- > We **need to carefully track what we are doing** – elements of the system change themselves (they adapt) and any adaptations have consequences for the rest of the system; small changes can have big effects, either positive or negative.

For more support on how to approach HSS, please reach out to other health advisors or contact the Health Systems Team directly, in the Human Development Department under FCDO's Global Health Directorate. Focal points include: Beth Scott, Team Leader – [beth.scott@fcdo.gov.uk](mailto:beth.scott@fcdo.gov.uk) and Jo Keatinge, Health Advisor – [jo.keatinge@fcdo.gov.uk](mailto:jo.keatinge@fcdo.gov.uk).

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