The Alliance for Health Policy and Systems Research (the Alliance) promotes the generation and use of health policy and systems research as a means to strengthen the health systems of low- and middle-income countries (LMICs). As a WHO hosted partnership, we work together with organizations around the world to:

- Stimulate the **generation and synthesis of policy-relevant health systems knowledge**, encompassing evidence, tools and methods
- Promote the **dissemination and use** of health policy and systems knowledge to improve the performance of health systems
- Facilitate the **development of capacity** for the generation, dissemination and use of HPSR knowledge among researchers, policy-makers and other stakeholders

Throughout all our work, we prioritize and promote systems thinking, which recognizes that the whole of the system is more than its constituent parts. We also recognize the need to engage diverse actors and improve equity – we target our support to ensure better inclusion of and participation by women, those in LMICs and other historically under-represented groups.
Systems for health: everyone has a role
Flagship report of the Alliance for Health Policy and Systems Research

Edited by Zubin Cyrus Shroff, Robert Marten and Kara Hanson
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Foreword

Health systems are foundational to health and well-being. Yet how we think about health systems is anachronistic. Health systems boundaries are expanding. Digital transformations are radically transforming how governments and the private sector communicate with people and communities, and vice versa, changes are shifting how people and communities engage with health systems. However, thinking on health systems has been focused on ensuring access to services and financial protection. This is not enough. It is time to re-envision how we can plan, programme and empower health systems to do more. Health systems need to be reworked to be systems for health that ensure health security and create healthy populations.

This Report defines systems for health as those ready to respond to both the known and unknown, present and future threats. Systems for health anticipate and address social, economic, environmental and commercial drivers of health to secure and enable healthier societies by aligning efforts to ensure health security and create healthy populations, systems for health not only provide, protect, and promote health, but also harness technology working with people and communities to deliver physical, mental and social health for all populations across the life course.

This report provides actionable guidance for policy and practice and is a significant contribution to our future health. From the recommendations in the report, we highlight three:

• First, the report recommends identifying indicators for systems for health. This is not about creating new indicators, instead it is about consolidating a select group of indicators so that we can measure and monitor progress to create systems for health.

• Second, we must recognize and emphasize commonalities across efforts to realize systems for health. Ensuring health security, creating healthy populations and creating access to health services—these are often separate goals, but there are many commonalities across these efforts.

• Third, establishing systems for health requires investing in the local generation of research to illuminate how the broader drivers of health as well as social and political context interact to create health.

The ongoing pandemic continues to demonstrate the importance of expanding our understanding of health systems. We look forward to working with countries and many other partners to advance new understandings of systems for health to improve and accelerate policy changes to effect progress, so we all achieve the Sustainable Development agenda.

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Dedicated to the memory of the late Keshav Desiraju.
FOREWORD AND ACKNOWLEDGEMENTS

CHAPTER 1
Introduction

CHAPTER 2
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CHAPTER 3
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Realizing systems for health
CHAPTER 1

Introduction

The COVID-19 pandemic showcases how national health systems remain largely unprepared to manage a pandemic (Ghebreyesus et al., 2022). Every country has faced challenges in maintaining essential services, particularly for immunization, maternal and child health, sexual and reproductive health, and nutrition (Mustafa et al., 2022). Obstacles have been faced, too, in maintaining services for noncommunicable diseases (NCDs). Managing a pandemic is challenging and expensive, and it can exacerbate inequities for the poorest and most vulnerable (WHO, 2021a).

COVID-19 has highlighted the importance of sustained investments in emergency preparedness and response. It has exposed what has been termed the cycle of panic then forget, where increased investments are quickly followed by reduced investments and neglect (WHO, 2020a). The global spread of COVID-19 has had a huge impact on economic activity and lowered resource availability for investments in health and well-being, creating a mutually reinforcing negative spiral.

This pandemic has also illuminated how critical health systems are to the economy. It has demonstrated how under-investments in health systems have enabled health security to be gravely challenged. At the same time, continuing epidemiological and demographic transitions mean that more than seven out of every 10 deaths are now caused by NCDs, underlining the importance of the broader drivers of health (Mathers et al., 2017). These NCDs lead to worse outcomes for patients with COVID-19.

Moreover, such broad drivers of health are critical to addressing antimicrobial resistance as well as the unprecedented climate crisis. Recurrent conflict around the world continues to highlight how people’s health, social and economic well-being depend on peace within and across nations and societies. Coordinated action is essential to create healthy populations that “enjoy better health and well-being”, as envisioned in Sustainable Development Goal 3 (SDG3) (WHO, 2020a).

The boundaries of what constitutes health systems are expanding. Health systems need to be reimagined as systems for health that create both healthy populations and health security. The COVID-19 pandemic has placed health high on government agendas globally. This, along with the growing realization of the multiple links between health and well-being, makes it an opportune moment to rethink how health systems can move beyond a focus
on treating illness and delivering health services, towards becoming care systems that can create health and well-being throughout the life-course. The digital revolution and technological innovations have a major role in enabling the development of such care systems.

We define systems for health as systems ready to respond to both known and unknown future threats, hazards and risks; they address social, economic, environmental and commercial drivers of health that are critical to securing and enabling healthier societies. Systems for health not only provide, protect and promote health, but they encompass a broader framing as a complete package capable of delivering physical, mental and social health, quality of life and sustainability for all populations across the life-course (Davies & Pearson-Stuttard, 2021).

The COVID-19 pandemic also demonstrates the multiple linkages across the World Health Organization’s (WHO) Triple Billion Strategy: namely, between the targets of moving towards universal health coverage (UHC), ensuring health security and creating healthy populations (WHO, 2020b). UHC is often conflated with health systems, but health systems need to do more than ensure people’s access to the health services they need, when and where they need them, and without financial hardship. Indeed, UHC is enabled when health security is assured, and when populations have high levels of underlying health and well-being. Access to the range of services envisioned in UHC provides a much-needed foundation for efforts to improve health security and create healthy populations. UHC is, thus, necessary but not sufficient.

While there is not yet a codified definition of healthy populations, we understand this to build on the 1978 Alma-Ata and 1986 Ottawa Declarations, as well as the 2008 Commission on Social Determinants (WHO, 1978; 1986; 2008). It includes a focus on preventing, controlling and managing varied, changing and overlapping health conditions (for both communicable diseases and NCDs), and it places particular emphasis on the drivers of human and planetary health and well-being (Healthier Societies for Healthier Populations Group, 2020).

Addressing today’s challenges demands increased attention to, and investments in, both managing health emergencies and creating healthy populations. In the wake of the COVID-19 pandemic, however, the understandable emphasis on health security risks a situation where these

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1 We understand UHC to mean that all people have access to all the services they need without financial hardship.
2 While a broader definition might be needed, health security is currently defined as “the activities required, both proactive and reactive, to minimize the danger and impact of acute public health events that endanger people’s health across geographical regions and international boundaries” (WHO, 2021b).
investments distort funding, displacing and crowding-out other priorities. A clear demonstration of the added value of aligning the goals of health security and healthy populations can mitigate that risk, illustrate potential efficiencies, and overcome any framing that pits investments in one at the cost of the other.

An either/or framing of health security and healthy populations reinforces competition for resources across these two different agendas and leads to fragmentation. Such a framing is also a false dichotomy and overlooks the foundational role of health systems in addressing both goals (Frenk & Gómez-Dantés, 2017; Ooms et al., 2017) as well as UHC. Through controlling epidemics, health systems can create healthy populations; in turn, healthy populations can mitigate future pandemics. The ongoing COVID-19 pandemic exemplifies this.

For example, it is known that COVID-19 risks are substantially elevated in populations with high rates of obesity and chronic disease. Health systems that focus solely on the management of health emergencies can disrupt routine health services, thus limiting efforts to move towards UHC and to create healthy populations. A 2021 WHO survey found that, of 127 countries examined, 92% reported disruptions to at least one essential health service as a consequence of COVID-19. Drilling down, 53% of countries reported disruptions to primary health care (PHC) and 59% to elective surgeries (WHO, 2022).

COVID-19 will not be the last pandemic. Indeed, increased population density, urbanization and climate change, as well as enhanced animal–human interactions, will increase the likelihood of future pandemics (Ghebreyesus et al., 2022). While there is a consensus that health systems are critical in managing and responding to health emergencies, the COVID-19 pandemic showcases deficiencies in how we currently envision health systems.

Health systems frameworks are contested. They are produced by institutions and actors and reflect their respective interests and agendas; they are products of their time. They simultaneously advance and limit efforts to programme and finance health systems. In the future, health systems frameworks need to consider how to manage risks and not just diseases.

Predating the SDGs, COVID-19 and the ongoing digital transformation (Kickbusch et al., 2021), most health systems frameworks have largely ignored health security and healthy populations and have instead focused largely on access to health care. They have also ignored the new ways in which people and communities engage policy-makers and hold them accountable, as well as innovations in how governments can communicate
with and engage people and communities. Our understanding of health systems must move beyond individual access to essential services and financial risk protection, which lies at the core of how UHC has been conceptualized, monitored and measured.

This 2022 Alliance for Health Policy and Systems Research flagship report addresses this challenge. It demonstrates the importance of moving beyond the false dichotomy of investing in either health security or healthy populations (Shroff et al., 2021). It provides practical recommendations for policy-makers, implementers, development partners and communities on developing systems for health that are essential to the achievement of the SDGs – particularly SDG3. Building on recognized limitations in current health systems frameworks, this report re-imagines health systems, illuminating possible linkages across future efforts to create both health security and healthy populations.

The report contains five chapters.

This introduction is followed by Chapter 2 that focuses on health systems frameworks, their utility and limitations. It reviews existing thinking on health systems, demonstrating how broader socioeconomic and political forces have influenced and shaped our understanding. The frameworks that are commonly used to describe national health systems have increasingly looked beyond functional elements such as the building blocks and have recognized the importance of so-called software. Yet the emphasis of these existing frameworks on health services means that the role of software in health security and the creation of healthy populations remains underappreciated. The chapter identifies four elements linked to software that must be addressed as we move towards systems for health that encompass health security and healthy populations. These include a greater consideration of issues of trust and power; closer attention to the role of communities and rights-based approaches; focusing more on how health systems engage and work across sectors; and consideration of transnational impacts on national health systems and the role of international cooperation.

Chapter 3 examines these four software elements in the wider context of efforts to create healthy populations that address the broader drivers of health. Through examples, it highlights how investments in these elements have enabled countries to create healthy populations. The chapter underlines why an emphasis on the creation of healthy populations is foundational to the development of future health systems.

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3 In line with Sheikh et al. (2011:2), we understand software to mean “the ideas and interests, values and norms, and affinities and power that guide actions and underpin the relationships among system actors and elements.”
Next, the report examines the four elements in the context of the ongoing COVID-19 pandemic. **Chapter 4** showcases how efforts to address these software elements have enabled health systems to manage the health emergency comparatively well; country examples are included. It underscores the importance of foregrounding these issues in the reimagination of health systems as systems for health.

Informed by the first four chapters, the **fifth and concluding chapter** explores the various linkages between healthy populations and health security; and it demonstrates the benefits of aligning our responses to these two challenges. It goes on to provide practical recommendations on how policy-makers, implementers, communities and development partners can realize systems for health.
References


CHAPTER 2
Health systems frameworks and their limitations

Researchers and policy-makers often use health systems frameworks to inform both how they think about health systems and how they plan and programme their work. This chapter provides a brief overview of the development of health systems frameworks that are commonly used to better understand national health systems and inform national planning. It characterizes their shortcomings, with particular emphasis on their limitations to ensure health security and produce healthy populations.

The chapter goes on to identify four key elements that are foundational to enable systems for health to overcome these limitations, and to inform how we think about systems to achieve both the WHO’s Triple Billion targets (WHO, 2020), as well as the SDGs – especially SDG3 for health and well-being.

What are health systems frameworks for?

Health systems frameworks are models – simplifications of reality that highlight essential features and organizing ideas. They describe elements of a system and map relationships among these elements. Frameworks can be descriptive, explanatory or both. They are sometimes normative, offer criteria for performance assessment and can identify health system features towards improved performance.

Often, health systems frameworks are a starting point for planning. They also shape, direct and determine programming, prioritization and financial investments. For policy-makers and practitioners, frameworks are useful to create shared understandings, as well as common language to aid communication among groups that span different disciplines and backgrounds. For researchers, they can guide the design and conduct of studies and inform theoretical and empirical thinking, thus shaping research and analysis.

Superficial or inappropriate use of frameworks can distort efforts and hinder the ability to learn. Health systems frameworks should be fit-for-purpose and carefully considered to appreciate their use and limitations (Peters, forthcoming). They may not be as detailed or as comprehensive as needed...
Frameworks can also become an end in and of themselves, instead of a tool to support analysis and policy development. Perhaps most importantly, their power in framing an issue can also be a limitation. They can restrict the categories used to describe a health system and/or reinforce a particular (and limited) conception of a health system, thereby constraining imagination and the ability to create health.

For example, at this time, most existing frameworks that examine national health systems reinforce a limited notion of them as health care systems. They overlook other components such as digital innovations or changes in the way communities and populations engage with policy-makers. There is often an implicit conflation of health systems and UHC, which reinforces medicalization and an arguably undue focus on biomedical health services. Larger, structural and social determinants of health are often ignored (Clark, 2014).

Such a conception of health systems pays little attention to the conditions in which people are born, grow, live, work and age; how these influence health trajectories; and the role of transnational actors, intellectual property rights and phenomena such as climate change. A paradigm shift is needed. Does this require a new framework, or are there other ways to incorporate new elements into how health systems are conceptualized and understood?

The historical evolution of health systems frameworks and their priorities

The development of health systems frameworks over time reflects changing ideas about the goals of health systems as well as which actors and functions they encompass. More importantly, they reflect societal ideas of how health systems should be organized. They also reflect the influence of a changing constellation of actors in global health and the power and resources they wield, and of shifting priorities and goals.

Any timeline tracking the development of health systems frameworks imposes an arbitrary starting point and inflection points. Accordingly, this chapter draws on existing reviews of health systems frameworks (Cueto, 2004; Gilson, 2012; van Olmen et al., 2012; Hanson, 2015), and a historical analysis of the evolution of the idea of a health system (Gorsky, 2013). It focuses on frameworks commonly used to describe and analyse national health systems. It does not include frameworks that look at particular aspects of the health system such as barriers to effective coverage of
services (Tanahashi, 1978), health systems governance and accountability (Molyneux et al., 2012; Abimbola et al., 2014), the social determinants of health (Solar & Irwin, 2010) or financing common goods for health (Soucat & Kickbusch, 2020). Thus, the review should not be considered an exhaustive or systematic review of every framework related to health systems.

The term “health system” has been in use for more than 100 years. During this time, what is meant by a health system and the frameworks used to analyse them have evolved. References to health systems can be found in the literature from the late 19th century regarding the delivery of “practical sanitation” (Gorsky, 2013). The development of organized systems of medicine in the inter-war years variously used the terms “health service” and “health system”. By the 1960s the term “health system” was used in the field of comparative health systems research (e.g., Anderson, 1972; Roemer, 1991). This latter effort focused on describing and classifying national health systems, often emphasizing the extent of the role of government and private sectors in financing and providing health services.

Two main themes emerge when tracing the development of health systems frameworks. The first is a pendulum swing between frameworks that focus on disease control interventions (what is often called a vertical approach) and an emphasis on the underlying and connected factors that delineate health systems (what is often called a horizontal approach). The second is an emergent extension in the focus of health systems frameworks, expanding from functions, actors, supplies and inputs, to recognizing the role of elements such as power, influence and trust. With this is a parallel extension, from a focus on the health sector to a broader interest in factors beyond that and beyond national boundaries in influencing health outcomes.

These extensions to health systems frameworks are important elements of how health systems thinking must respond to current challenges. But such efforts have not yet gone far enough. To accelerate progress towards the SDGs and respond to the needs of the 21st century, these efforts must go much further.

**Pre-system – a focus on programmes, shifting from disease to systems**

At the creation of the WHO in 1948, health programmes largely focused on disease control through vertical interventions (for example, the application of new technologies such as insecticide spraying to eradicate malaria in the 1960s) (Packard, 2016). Against the wider backdrop of decolonization and liberation and the Cold War, a number of influences led to the emergence of “primary health care” (PHC) as an alternative to technical, hospital-
based interventions. These included emerging economic theories that emphasized the role of economic development in improved health (Bloom & Canning, 2007); as well as the successes of movements training lay health workers through missionary medical organizations, community development programmes and the Chinese experience of so-called barefoot doctors. These influences culminated in the 1978 Alma-Ata Declaration on Primary Health Care (WHO, 1978). While PHC was not presented as a health systems framework per se, this horizontal approach envisioned an integrated delivery model for PHC involving active community participation and intersectoral collaboration.

This new approach also recognized the importance of the wider determinants of health through the inclusion of other sectors (e.g., housing, education, water and sanitation). Some of these ideas shaped later health systems frameworks. For example, the role of community engagement, which is critical to PHC, is highlighted in the health systems resilience framework of Haldane et al. (2021). Similarly, Smith and Hanson (2011) set out the need for the health system to look beyond the health sector, in calling for recognition of the role of wider macroeconomic determinants and their impacts on health (and indeed, the impacts of health on the economy). This perspective is also indirectly identified in the relationship between health emergencies and broader economic impacts in the global health security literature (Wenham et al., 2019).

Enthusiasm for PHC was short-lived, however: concerns soon emerged that “health for all by 2000” was not feasible or realistic. PHC was considered too diffuse, too hard to measure progress against, and too broad. Walsh and Warren (1979) proposed “selective PHC” as an interim strategy through which basic health services could be developed. In contrast to the comprehensive and cross-sectoral PHC approach, selective PHC proposed focusing on a limited number of interventions (initially four: growth monitoring, oral rehydration solution, promotion of exclusive breastfeeding and immunization), selected on the grounds that they addressed major causes of disease burden for which it was feasible to deliver cost-effective interventions.

The shift from comprehensive to selective PHC can also be explained by the wider political context. The global economic crisis of the 1970s led to structural adjustment programmes and fiscal austerity, waning support from industrialized countries for development assistance, and a greater focus on narrowly defined economic efficiency of health interventions. This period also saw some at the World Bank advocate for the introduction of user fees for health services (De Ferranti, 1985). Shortly thereafter, the 1987 Bamako Initiative – which was jointly sponsored by WHO and the United Nations Children’s Fund (UNICEF) – focused on local-level user payments to provide
essential drugs and supplies and it emphasized the strengthening of district health systems (Knippenberg et al., 2003).

**Back to disease – but recognizing the underpinnings of systems**

The 1993 *World Development Report* (World Bank, 1993) marked the start of a transition and a return to a disease focus. With the first Global Burden of Disease estimates – measured through a new metric, the Disability-Adjusted Life Year (DALY) – the World Bank justified a renewed focus on priority health conditions and cost-effective interventions. From the mid-1990s to the mid-2000s and reinforced by the Millennium Development Goals (MDGs), a number of disease-specific global health initiatives were launched. These included Roll Back Malaria (1998), the Global Alliance for Vaccines and Immunizations (GAVI) (2000), the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) (2001) and the (United States’) President’s Emergency Plan for AIDS Relief (PEPFAR) (2003).

Together with new philanthropies, including notably the Bill & Melinda Gates Foundation, the above initiatives and the MDGs injected substantial new funding into global health with a focus on narrow technological rather than system-oriented solutions (Marten, 2019). Between 2000 and 2009, development assistance for health grew by over 11% per year, with assistance for HIV/AIDS, TB and malaria recording the highest increases (Dieleman et al., 2016).

**Renewed focus on health systems**

The *World Health Report 2000* provided a new definition of health systems: “all the activities whose primary purpose is to promote, restore or maintain health” (WHO, 2000:5). It also set out a performance framework based on explicit goals – improving health outcomes, health system responsiveness and fairness of financing – to compare and rank countries.

In parallel to this resurgent interest, there was concern that weak underlying health systems could constrain achievements towards the MDGs. Specifically, there was concern that health systems might be weakened further as resources (particularly human resources) were drawn away towards disease-specific programmes (Hafner & Shiffman, 2013). Analysis for the WHO Commission on Macroeconomics and Health considered the constraints to scaling up priority health services, including those operating at the health-system level (Hanson et al., 2003). There were also important policy choices required to prioritize the most impactful ways to achieve the disease-specific MDGs (Travis et al., 2004).
In response, some global health initiatives introduced funding streams directed specifically at strengthening health systems. For example, GAVI spending on health systems strengthening averaged around 12% of their total budget over the period 2007–2015 (Tsai et al., 2016). While this risked presenting health systems in instrumental terms with a focus on the “inputs” necessary to achieve disease-specific targets, it also provoked wider thinking and initiatives to maximize “positive synergies” between disease-specific programmes and health systems (WHO Maximizing Positive Synergies Collaborative Group, 2009). This linking up of vertical programmes and health systems strengthening is sometimes framed as a “diagonal approach”: using the resources of targeted approaches to diseases or population groups, but also providing opportunities to strengthen health systems (Sepúlveda et al., 2006; Frenk et al., 2014a).

With the development of the 2007 Everybody’s Business, WHO’s framework for action on strengthening health systems, WHO presented a “building blocks” strategy, with six health system functions (WHO, 2007). This is now one of the most commonly used frameworks and is widely applied to research and programme development.

**Beyond the building blocks**

The World Bank and a team of Harvard-based researchers developed a “control knobs” model (Roberts et al., 2008), identifying five policy knobs (financing, payment, organization, regulation and behaviour) that can influence selected health systems outcomes. Meanwhile, the Systems Thinking report of the Alliance for Health Policy and Systems Research (de Savigny & Adam, 2009) characterized health systems as complex adaptive systems, in which elements are connected and respond to one another in often unpredictable ways. For example, feedback loops mean agents influence other agents, but also that their own actions serve as feedback that affects future behaviour. This feature provides for both path dependence and the basis for system learning. The report offered a conceptualization that led to the application of methods of complexity science to analyse health system behaviour (Peters, 2014; Borghi & Chalabi, 2017; de Savigny et al., 2017).

More recently recognized is the importance of health systems resilience (Kruk et al., 2015; Topp, 2020). This perspective gained prominence in the aftermath of the Ebola virus epidemic in West Africa in 2014, with the need for stronger, better health systems highlighted in all four major reviews of the epidemic response (Gostin et al., 2016). The idea of resilient health systems has gained wider traction in the ongoing COVID-19 pandemic (Saulnier et al., 2021) – the resilience of countries has continued to be tested by the need to maintain access to essential services while surging to respond to the
additional health care demands of COVID-19 treatment and vaccination. But COVID-19 presents an opportunity to “build back better”, supporting the development of resilient health systems that are better able to withstand future shocks (Sagan et al., 2021).

Indeed, Sagan et al. (2021) draw on evidence of how countries have responded to COVID-19 to identify 20 strategies for strengthening health systems resilience. These are organized loosely around the building blocks of governance and leadership, financing, health workforce, strengthening public health interventions, and service delivery arrangements. However, resilience is not just about shocks – it requires systems to be able to anticipate, preempt and promptly respond to ever-increasing and more diverse threats such as the long-term structural challenges posed by climate change and NCDs. This notion that resilience is valued beyond pandemics and other exogenous shocks, as a property of health systems that enables them to deal with the more common “everyday” shocks that affect health systems, is captured in the concept of “everyday resilience” (Barasa et al., 2017; Gilson et al., 2017).

Where next?
The incremental development of new health systems frameworks has introduced additional dimensions to respond to particular shortcomings and limitations. These developments have also brought new disciplinary perspectives and methods, such as organizational design, complexity and implementation science. However, the development of these frameworks has not always translated into the necessary increase in investments in health systems, or indeed in the knowledge required to inform stronger health systems. Recognizing that health and health systems are socially determined, there is a need to shift to a broader, more holistic system for creating and promoting health. This requires moving from a medical or health system to a care system, which provides health and social services to realize health and well-being at different stages of the life-course (NHS England, 2022a; 2022b).

Further, most existing health systems frameworks remain reductive, directing existing programming and policy efforts to focus on health services. They are often insufficient to guide practical action to meet the new challenges of health security and healthy populations. For example, those associated with the building blocks overlook, amongst other issues, essential public health functions as well as commercial drivers of health, both of which are critical for ensuring health security and maintaining healthy populations.
If health systems conceptualizations are intended to provide a common language and set of constructs to shape the development of systems for health – in other words, if they are to be fit for purpose – greater attention is needed to the following four elements (see Fig. 1):

1. **Trust and power**: Trust and power play a critical role in influencing how health system actors relate to each other and in shaping the interlinkages between them. This includes trust between patients and providers, as well as trust among governments, private actors and civil society, all of whom are crucial stakeholders. Similarly, power asymmetries – whether between donors and national agencies, multinational corporations and public health interests, or between government functionaries and citizens – play a major role in determining “who gets what, when and how” (Laswell, 2012). Existing frameworks are starting to recognize the importance of including trust and power in influencing health system functioning. Therefore, the responses to new global health challenges around health...
security and healthy populations must prioritize the role of trust and power to reimagine health systems (Gilson, 2003, 2006; Østergaard, 2015; Topp et al., 2021; COVID-19 National Preparedness Collaborators, 2022).

2. Engaging communities and focusing on rights: Existing conceptualizations of health systems largely overlook community engagement. The growing recognition of the co-production of health and the role of communities in such co-production necessitates a new focus on communities – and with that the need to identify actionable strategies. A focus on rights can help ensure that resources are directed towards the most marginalized and vulnerable groups within communities. It also draws attention to the need for health systems to balance individual rights and freedoms with societal concerns around health, be they around the spread of communicable diseases or regulation to control NCDs (Hunt & Backman, 2008; Backman et al., 2008; Allotey et al., 2019; Sacks et al., 2019).

3. Looking beyond the health sector: Many of the interventions needed to enhance health security and create healthy populations require action beyond the health sector through intersectoral collaboration. For example, addressing NCDs and the climate crisis both require action outside the health sector. This demands interventions that are not the traditional policy tools of public health, such as taxation and regulation of commercial firms engaged in the production of unhealthy goods and services. Likewise, efforts to address health security need to take a wider perspective and engage sectors including agriculture, the environment and animal health. However, most existing health systems frameworks largely overlook the critical influence of non-health sectors on health systems functioning (Tangcharoensathien et al., 2017; Bennett et al., 2018).

4. Beyond national boundaries: Existing health systems frameworks give little attention to how global factors shape national health systems and their functionality. The COVID-19 pandemic illustrates starkly that pathogens do not respect national boundaries and that national health systems are dependent on the movement of goods, technology and expertise across these very same boundaries. Similarly, efforts to create healthy populations often extend beyond the control of any single country. International cooperation is imperative to address these challenges, be they linked to climate change or the need to regulate and manage global corporate actors central to the fossil fuel, tobacco and food industries (Frenk et al., 2014b; Javed & Chattu, 2020).

The next chapter provides specific examples to illustrate how strategies that account for these four relatively neglected elements have been central to efforts around the globe to create healthy populations.
References


CHAPTER 3

Systems for health: the importance of healthy populations

The conditions in which people are born, live, learn, play and work are significant drivers of health. Creating healthy populations to advance systems for health requires investment in, and effort to address, the socioeconomic, environmental and commercial drivers of health. These drivers include education, social inclusion and employment, clean water and air quality, a built environment that enables physical activity, as well as regulating industries such as tobacco, alcohol, food and fossil fuels (Healthier Societies for Healthy Populations Group, 2020).

In turn, healthy populations make institutional, structural and policy choices to deliver health for all people. This requires investment in disease prevention strategies, such as childhood vaccinations and screening programmes; timely disease diagnosis, treatment and control; as well as broader wellness and well-being programmes.

This chapter makes the case for reimagining health systems to create healthy populations. It showcases the centrality of the four elements identified in Chapter 2 to efforts to address these broader drivers of health, which is essential to the development of systems for health. The chapter provides examples of successful interventions that take these elements into account.

**Element one: the central role of trust and power**

Despite often being invisible, trust and power are integral to attempts to create healthy populations (Sheikh et al., 2011). Lack of trust – whether this be interpersonal, in institutions or in leaders – is a barrier to successful interventions. At the same time, trust in the health system – including in medicines, care providers and the messages that health systems convey – impacts how communities utilize both preventive and curative services (Gilson, 2003).

It may be challenging to establish connections and social support systems in communities with low levels of trust in governments and, by extension, in health systems (Elgar, 2010). This is often exemplified in barriers faced by immunization campaigns. Low levels of trust – generally due to previous
experiences with the system and lack of trust in governments – are significant contributors to the low rates of vaccine uptake in communities. As illustrated in the case from Nigeria in Box 1, overcoming such trust barriers demands extensive and targeted efforts.

**Box 1. The role of trust-building in the last mile of eradicating polio in Nigeria**

In 1988, the WHO World Health Assembly launched the goal of eradicating poliomyelitis globally by 2000. While evidence showed a 99% reduction in global incidence by 2000, the last phase proved challenging, particularly in Nigeria (Bhatta, 2011). Efforts to vaccinate people in northern Nigerian states stalled because of spurious health, fertility and religious concerns, which meant that, in 2012, Nigeria accounted for more than half of the remaining global cases of polio.

The CORE Group Polio Project (CGPP), along with the Federal Government of Nigeria, WHO and other United Nations (UN) agencies, implemented innovative grassroots campaigns to restore public trust. They worked with community health volunteers with strong interpersonal and communication skills, as well as with traditional and religious leaders to access populations. In 2020, Nigeria announced that it was polio-free after three years without new cases of wild poliomyelitis (Ekwebelem et al., 2021).

An understanding of the role of power in shaping health outcomes can help identify pathways to address power imbalances and enact change (McCartney et al., 2021). Power imbalances and information asymmetry often exacerbate each other, creating disparities not just between health care providers and patients, but also across different levels of health systems. They can reinforce top-down approaches to health systems, excluding both patients and communities. Such approaches may also lead to centralized decision-making. This erodes trust. Initiatives to redress these imbalances, for example those that encourage public participation in decision-making (see Box 2), can play a major role in building community trust.

**Box 2. Decentralized people’s planning of health care in Kerala, India**

In 1996, Kerala State in India developed a people’s campaign to decentralize governing power – including financial and administrative power – to the lowest tiers of government. Under the initiative, the village *Panchayat* (the local self-government that is elected by the...
community) manages primary health centres and district hospitals. The people’s campaign gave local governments control of 35–40% of the state budget. Power was also shared with grama-sabhas (village assemblies) in which the people prioritized local health needs, including addressing determinants of health like water, transport, sanitation and vector control. Health programmes were built on power-sharing between the state government, local governments and communities, which ultimately built trust with communities.

New innovative models developed through this decentralized planning process were later adopted in other Indian states. Beyond this, Chile, Kenya and the Philippines, among other countries, have also used decentralization to address issues related to public health (PHCPI, n.d.; Elamon et al., 2004; Varatharajan et al., 2004; Azeez & Anbuselvi, 2021).

Element two: the importance of engaging communities, and a focus on human rights

Community engagement improves health outcomes, not least by changing health behaviour, such as encouraging healthy eating, physical activity, breastfeeding and condom use (O’Mara-Eves, 2015). However, community engagement can also be central in advancing healthy populations by facilitating partnerships, power-sharing and collaborative learning. The example from Colombia in Box 3 illustrates this (Cyril et al., 2015).

Box 3: Colombia’s community engagement for equitable and better health in Sumapaz, Bogota

Building on a rights-based approach, in 2001 Colombia developed a social innovation model to provide equitable and quality health care through community participation in the Sumapaz district of Bogota. The initiative aimed to prevent diseases using a co-production model that integrated environmental, nutrition and food security perspectives, while at the same time ensuring affordable, quality health services.

The initiative focused on collaborations among providers, insurers and authorities, and encouraged community education networks. It provided the community with training and education and provided a platform for the community to work with physicians, nurses, social workers, nursing assistants and anthropologists. Accordingly, the community became more confident in demanding their right to health, which led to an increase in health care coverage – 100% of the rural community reported access to services through visits to the health
centre, home visits and community health activities. The initiative also led to a reduction in the use of pesticides and an increase in the adoption of more sustainable agricultural practices (Bautista-Gómez & van Niekerk, 2022).

As well as enabling individual behaviour change, countries such as Thailand and Tunisia have extensive experience in engaging communities to set health agendas and design health policies. The example in Box 4 illustrates the role of Thailand’s National Health Assembly in enabling public participation in the design of national health policies (Clark et al., 2021).

**Box 4: Thailand’s efforts to engage communities in health policy development**

Thailand enacted its National Health Act in 2007, establishing a National Health Commission (NHC) that is chaired by the Prime Minister. The work of the NHC is informed by the National Health Assembly, which has met annually since 2008. Bringing together over 1500 people from various areas of Thailand (including from government), the Assembly was established to create broad public participation in the development of innovative health policies and it has served as a vehicle to establish trust. The National Health Assembly has adopted resolutions urging the government to implement social protection measures, develop and update health information data (Rasanathan et al., 2012) and ban asbestos (Tangcharoensathien et al., 2017).

Creating healthy populations also demands that health be framed as a human right that prioritizes equity. This is because such a framing highlights the needs of marginalized groups who bear the brunt of health inequities (Santos et al., 2021). The example in Box 5 from South Africa demonstrates the role of a human-rights and equity lens in creating access to health services for often marginalized groups.

**Box 5: An equity- and human rights-based approach to health in South Africa**

The Treatment Action Campaign (TAC) was established in South Africa in 1998 by political activists and people living with HIV/AIDS to advocate antiretroviral access for all. TAC used a rights-based approach, running workshops on rights around treatment and supporting civil society groups to campaign for both basic social security grants to alleviate poverty as well as for health system reform. TAC used legal filings to ensure people’s access to health and health care.
After years of unsuccessful efforts to convince the government to provide Prevention of Mother to Child Transmission (PMTCT) care, TAC filed a lawsuit alleging that the non-provision of PMTCT violated South Africa’s constitutionally guaranteed access to health care services. South Africa’s Constitutional Court agreed with TAC’s contention and ordered the government to ensure access to comprehensive PMTCT services without delay. The case provides an excellent illustration of the power of social movements in harnessing progressive constitutional arrangements to realize socioeconomic rights, including the right to health care for vulnerable groups (Berger & Kapczynski, 2009).

**Element three: looking at issues beyond the health sector**

With their focus on health services, current conceptualizations of health systems often overlook policies and programmes designed to create healthy populations. This is largely because achieving healthy populations requires action on the broader drivers of health – for example, housing, education, transport and employment – which are often contingent on multisectoral collaboration.

Multisectoral action for healthy populations can take multiple forms. Initiatives may target other sectors that directly improve health outcomes (e.g., advocating taxation of fossil fuels, tobacco, alcohol or sugar-sweetened beverages), encourage action in other sectors that have spillover effects on health (e.g., improving female literacy through changes in the educational system), or involve cross-sectoral policies to address structural issues (e.g., minimizing regressive taxation arrangements). Frequently, a combination of action on these different levels is needed to improve health outcomes. For example, in Latin American countries, multisectoral action that has included cash transfers, early childhood development and improved health care systems has helped improve maternal and child health (Villatoro, 2005; Bennett et al., 2018).

**Box 6: Multisectoral action in Peru to reduce pollution and improve health**

In 1996, Peru established a national forum “Let us build cities for life”, promoting collaboration to address the increasingly harmful intersection of urbanization, poverty and environmental issues. At that time, about three quarters of the population lived in urban areas and a majority were classified as poor. Peruvian cities suffered from environmental problems, air pollution and lack of access to green areas, as well as infrastructure challenges such as for sanitation.
The forum brought together representatives from cities, grassroots organizations, nongovernmental organizations (NGOs), universities and local governments to adopt an environmental lens in tackling these issues. It promoted collaboration and the sharing of experiences to implement local community environmental action plans for healthy, safe and productive lives. The forum also allowed different stakeholders and sectors to collaborate. This multisectoral action helped key institutions within local and national governments to better understand urban environmental problems and what shapes these problems. As a result, several cities cleaned up polluted beaches and addressed rapid growth in shanty towns (Miranda & Hordijk, 1998).

The example in Box 7 from Uganda demonstrates the added value of multisectoral action to address the seemingly intractable problem of sleeping sickness.

**Box 7: Multisectoral action to eliminate sleeping sickness in Uganda**

For decades, Uganda faced significant challenges in eliminating African trypanosomiasis (sleeping sickness) with the endemic Tsetse fly (the disease vector) (Albert et al., 2015). A multisectoral approach, known as the Uganda Trypanosomiasis Control Council (UTCC) Model, was initiated in 1992 through an Act of Parliament. The UTCC engaged high-level stakeholders from the ministries of health, animal health, agriculture, environment protection, tourism and wildlife, lands, local governments, finance and economic development, and foreign affairs. It proposed and advocated an integrated approach to tackle the disease, including through collaboration with local governments to mobilize communities. The private sector contributed too, providing insecticides to spray on cattle. This integrated approach also involved meeting with village leaders and residents to engage the community in understanding the intervention approach. As a result, there has been a substantial reduction in numbers of the parasite, and in 2022 Uganda eliminated human African trypanosomiasis (Waiswa et al., 2020; WHO, 2022).

But there are many barriers to multisectoral action for health. These include political challenges, complexity of issues, organizational structures, power asymmetries across sectors, and inadequate capacities and resources (Rasanathan et al., 2017; Juma et al., 2018). Another important barrier to multisectoral action is that sectors other than health may not be attentive
to the potential contribution their interventions can make to creating and sustaining healthy populations. For example, an analysis of the views of decision-makers outside the health sector in Morocco and Tunisia found that they did not perceive obesity as a major threat to public health (Holdsworth et al., 2013). These barriers are exacerbated by commercial interests that act as a serious obstacle to multisectoral action to address policies around tobacco, alcohol and sugar taxes.

**Element four: going beyond national boundaries through international cooperation**

Creating healthy populations requires consideration of issues beyond national boundaries. While the health sector plays an important role, its efforts are sometimes contested by powerful global actors, including commercial actors pursuing economic or security interests (Ottersen et al., 2014).

Globalization is connected to health in many direct and indirect ways through national and household economies, as well as other determinants of health such as education, water and sanitation (Woodward et al., 2001). The past decades have been characterized by an acceleration in globalization, which has led to the emergence of complex global challenges to health that go beyond national borders.

For example, WHO has called climate change the greatest challenge of the 21st century (WHO, 2018). And there is now ample evidence of the effect of the climate crisis on health (Rocque et al., 2021). This includes the direct effect of heat waves, air pollution and floods, as well as the indirect effect through negative influences on crop yields leading to large numbers of climate refugees (World Bank, 2017).

The climate crisis also exacerbates existing inequities, particularly in health. While low-income countries (LICs) have contributed little to climate change, they are likely to bear the brunt of its consequences. They do not always have the needed infrastructure, however, including strong health systems (Ebi & Hess, 2020). Conversely, emerging economies will suffer if required to prioritize climate change mitigation in their policies without global support, which in turn will affect the health of the populations of these countries.
Box 8: Successful global action to eliminate leaded petrol

While global action on climate change remains limited and inadequate, there are positive precedents demonstrating that international cooperation on environmental issues is possible. One example is cooperation to eliminate leaded petrol globally. The use of lead to improve engine performance began in 1922 and by 1970 almost all petrol contained lead. Leaded petrol – through its contamination of drinking water, air, soil, dust and food crops – is associated with stroke, cancer and heart disease; it also affects brain development.

Although most high-income countries (HICs) banned leaded petrol by the 1980s, the vast majority of low- and middle-income countries (LMICs) still used it as late as 2002. The Partnership for Clean Fuels and Vehicles (PCFV), established in 2002 as a public–private initiative led by the UN Environment Programme (UNEP, 2021), promoted cleaner fuels and vehicles.

Within this partnership, UNEP and other UN agencies worked with governments, businesses, scientific experts and civil society to phase out leaded petrol. For example, PCFV efforts in Ghana included media campaigns, studies and reports, exposure of illegal activities and public testing. Following a 19-years-long campaign, 2021 marked the end of leaded petrol globally. It is estimated that the ban on leaded petrol has prevented more than 1.2 million premature deaths per year worldwide, saved about US$ 2.45 trillion annually for the global economy and reduced the incidence of cerebral underdevelopment in children (UNEP, n.d.; 2021).

A key feature of globalization is trade liberalization. Trade is important for countries’ economic development, but it expands the role of multinational corporations and, by extension and if not adequately regulated, the impact of commercial drivers of health (Fidler et al., 2009).

NCDs constitute over 70% of deaths annually, with the vast majority now occurring in LMICs. The growing burden of NCDs is at least partially driven by the actions of multinational corporations that shape the use of fossil fuels and the consumption of soft drinks, processed foods, tobacco and alcohol. For example, in 2013, three multinational companies controlled 40% of the cocoa market, which is a main ingredient for many food products (Hoffman, 2013). Further, Coca-Cola sells more than 1.9 billion drinks per day in more than 200 countries (Coca-Cola, n.d.). The influence of multinational corporations in attempting to undermine measures towards the creation of healthy populations is evident from the case of soda tax implementation in Mexico (see Box 9).
Box 9: Industry efforts to undermine healthy populations in Mexico

Mexicans consume an average of 151 litres of soft drinks annually, making the country one of the world’s largest consumers. The country also has high rates of obesity and diabetes (Pedroza-Tobias et al., 2021). Despite arguments made by the soft-drink industry of thousands of job losses, of negative economic impacts on the poorest groups of the population and of a limited impact on public health, an NGO campaign through the Alliance for Nutritional Health to tax sugar-sweetened beverages (SSBs) succeeded in convincing the government to impose a 10% tax on SSBs in January 2014 (Calvillo Unna, 2018).

After the tax was passed, and in an effort to both repeal the tax in Mexico and prevent the diffusion of taxes to other countries, multinational corporations began supporting the production and dissemination of seemingly scientific studies that demonstrated that the SSB tax had a negligible impact on calorie consumption and obesity, accompanied by significant negative economic effects. This narrative was aided by the absence of peer-reviewed evaluations of the new policy. However, the subsequent publication of independent peer-reviewed evaluations of Mexico’s SSB tax that demonstrated positive impacts of the policy made it much harder for the soft-drink industry to get buy-in for its arguments. SSB taxes rose up the agenda of global NCD experts and were endorsed as an approach to counter obesity and diabetes by WHO (WHO, 2017; Pedroza-Tobias et al., 2021).

While Mexico was able to enact legislation to tax SSBs over the objection of powerful multinational corporations, this may be more challenging in countries where civil society groups are poorly organized, where national research capacity is low and where government accountability to citizens is weak. In such contexts, corporations are able to capture policy processes. This highlights the need for international cooperation to establish a new regulatory architecture for trade that addresses and regulates the commercial drivers of health. As Box 10 shows, there could be some lessons here from global action on tobacco control.

Box 10: International cooperation to reduce tobacco consumption across the world

International cooperation to address NCDs is challenging. However, global action on tobacco could provide lessons. In 2003, WHO adopted the Framework Convention on Tobacco Control (FCTC) to address the global tobacco epidemic. Legally binding for 181 countries as of May
2018, the FCTC sets universal standards around the risks of tobacco and provides nations with evidence-based strategies to reduce demand. These measures include monitoring tobacco use, enacting smoke-free laws, interventions for tobacco cessation, implementing health warnings and educational campaigns, promoting tobacco bans, and increasing tobacco tax (Chung-Hall et al., 2019).

In countries that have met FCTC requirements, tobacco use has declined (Nikogosian, 2010; Puska et al., 2019). For example, an analysis of 126 countries to assess the association between the implementation of key FCTC demand-reduction measures and smoking prevalence found, on average, a 2.6% reduction in smoking prevalence between 2005 and 2015 (Gravely et al., 2017). Through the implementation of a range of different strategies, nearly 22 million smoking-attributable premature deaths have been prevented (Chung-Hall et al., 2019).

**Bringing everything together: how systems for health can create healthy populations**

Sustaining healthy populations requires health systems to address all four of the elements described in this chapter. These elements do not act separately or in a vacuum; they intersect and affect each other. Systems for health that prioritize community engagement and rights and that build trust help to redress unhealthy power imbalances. Similarly, systems for health designed to address the socioeconomic, environmental and commercial drivers of health are likely to pay attention to issues that reach beyond state boundaries and that also facilitate multisectoral action.

Creating healthy populations requires systems for health built around trust to address power imbalances, implement multisectoral action for health and advance international cooperation, while centring community engagement, equity and human rights. The next chapter illustrates how addressing these elements is also central to efforts to enhance health security, another essential part of the development of systems for health.
References


CHAPTER 4
Systems for health: the importance of health security

The increasing interconnectedness of our world underlines the need to address emerging threats to population health. And the rise of such threats elevates the importance of health security – currently defined as the “activities required, both proactive and reactive, to minimize the danger and impact of acute public health events that endanger people’s health across geographical regions and international boundaries” (WHO, n.d.a).

The ongoing COVID-19 pandemic demonstrates the urgency of reimagining health systems for health security (Brown et al., 2022). At the time of writing, COVID-19 continues to have devastating health consequences worldwide, with more than 6.49 million reported deaths (WHO, n.d.b). The pandemic has also had major economic effects, with global gross domestic product (GDP) shrinking by 3.5% in 2020 (IMF, 2021).

COVID-19 illustrates the centrality of health security to maintaining individual and population health and well-being. It has illuminated inadequacies in the International Health Regulations (IHR) framework as a global tool for ensuring health security, evidenced by shortcomings in early alert and response mechanisms (Clark & Sirleaf, 2021). It has exposed the importance of expanding how we understand health security.

Further, the ongoing pandemic showcases insufficient financial and political commitments to mitigate national and international outbreaks (Aavitsland et al., 2021). Inadequate human resources for health, fragmented and incomplete information systems, lack of integrated service delivery, and weak supply chains for medical devices and personal protective equipment (PPE) impacted the early response by many governments (Bhaskar et al., 2020; Brown et al., 2022).

Linking back to the four essential elements discussed thus far to create systems for health, this chapter emphasizes the importance of: 1) trust and power, 2) engagement of communities and an attention to rights, 3) looking beyond the health sector, and 4) going beyond national boundaries, to ensure health security.
Element one: the central role of trust and power

Well-functioning health systems are characterized by high levels of trust between patients and providers, between governments and populations, between governments and providers, and between purchasers and providers. However, trust in health systems varies greatly across regions – a 2018 global survey on trust in health workers reported that 96% of respondents in Australia and New Zealand had a lot or some trust in health workers compared to 57% of respondents in Central Africa (Gallup, 2019).

While recognition of its importance is growing, research remains limited into how trust is created in health systems (Gille et al., 2015). COVID-19 underscores and exemplifies the importance of trust. For example, one study found that “measures of trust in the government and interpersonal trust, as well as less government corruption, had large, statistically significant associations with lower standardised [COVID-19] infection rates” (COVID-19 National Preparedness Collaborators, 2022:1489). There can be a trust deficit between governments, the private sector and civil society within and across countries, as well as a lack of trust in the motives of private foundations and the pharmaceutical sector. New digital information and communication platforms can also rapidly disseminate dis- and misinformation, creating what WHO has termed an “infodemic” (WHO, 2021).

Establishing trust is a critical part of national COVID-19 responses. Early on in the pandemic, countries focused on coordinating health service delivery and ensuring the maintenance of public health functions at the community level, including testing, contact tracing, quarantine and treatment, with attendant socioeconomic support for individuals and families. In many settings, these functions built on existing trusted relationships with individuals and groups, and facilitated the creation of new ones.

Ensuring transparency and legitimacy is crucial for creating accountability and building trust; this also requires clear and transparent communication (European Observatory on Health Systems and Policy et al., 2021). Indeed, the COVID-19 response has helped identify and codify strategies to both create and expand trust. The example in Box 1 from Mumbai, India, illustrates this.
Box 1. Controlling COVID-19 in Dharavi, Mumbai, India: the role of trust

Nearly 25% of urban Indians live in slums that are characterized by extreme crowding and inadequate access to water and sanitation. Such conditions made these particularly challenging settings within which to control COVID-19. Nowhere was this more evident than in Dharavi – Mumbai’s largest slum that is home to nearly 1 million people and where up to 80 people share a public toilet.

As the first cases of COVID-19 were confirmed in Mumbai, controlling virus transmission in slums such as Dharavi became central to efforts to minimize deaths. Door-to-door screening to detect cases early on, together with isolation in rapidly established quarantine centres, were key elements of what proved to be a successful containment strategy.

Municipal authorities maintain that this response would not have been possible without active measures to build community trust to ensure that individuals shared their symptoms and health status. These measures included partnering with local doctors with whom community members had pre-existing relationships, to encourage people to report their symptoms. Measures sensitive to Dharavi’s religious diversity also helped establish and deepen community trust. For example, the authorities took measures to distribute meals at appropriate times so that those isolating at quarantine centres could maintain their Ramadan fasts. The experience of Dharavi demonstrates that an intimate understanding of context was key to building trust and controlling COVID-19 (Bloomberg, 2020; The Economic Times, 2020; Venkatachalam & Memon, 2020).

In addition to trust, the exercise and role of power also influences whose and which priorities are considered, as well as the importance attached to knowledge. In fact, power permeates global health policy-making as individuals, countries and institutions have considerable influence over the selection of global health priorities and strategies (Shiffman, 2014). For example, there are often power asymmetries between international development partners and national agencies in terms of the identification and funding of national priorities (Storeng, 2014).

The role of power is also clearly demonstrated in how scientific advice is developed, created, applied and valued (Jung et al., 2021a). During the COVID-19 pandemic, power has been exerted by many special taskforces and committees comprised largely of biomedical experts. Social sciences or implementation-based evidence have often been ignored and civil
society organizations (CSOs) have not been consulted (Rajan et al., 2020). Furthermore, across countries, there has generally been inadequate gender and ethnic diversity and weak representation of civil society, community groups and nonhealth experts in such entities.

Some countries, however, like Japan, Mozambique, Sri Lanka, Uruguay and Viet Nam, have adopted a more inclusive and multidisciplinary approach. Expert advisory groups that include public health and socioeconomic perspectives beyond clinical medicine have helped make decisions based on evidence but also on building trust.

**Box 2. Scientific advice: the Honorary Scientific Advisory Group in Uruguay**

In Uruguay, the President established an Honorary Scientific Advisory Group (GACH) early in the COVID-19 pandemic. More than 50 multidisciplinary experts worked as an interdisciplinary team to advise the government. The GACH held weekly meetings with specialized subgroups, provided biweekly reports, held special meetings with the President and had daily contact with the government. All GACH reports were made public (Ministerio de Sanidad Uruguay, n.d.).

The GACH focused on scientific evidence, leveraging local and international research, monitoring the evolution of the pandemic and ensuring extensive testing capacity. It considered policy options to calibrate the government’s response, making specific recommendations to TransiciónUY (a government policy team), which evaluated and submitted reports and suggested policy options and recommendations to the President (Pittaluga & Deana, 2020). This ensured that the response was grounded in data and informed by health and socioeconomic considerations.

**Element two: the importance of engaging communities and a focus on human rights**

To protect communities from health threats and create health security, efforts are required to ensure that associated interventions and services are locally acceptable. Community engagement – including through the genuine involvement of communities in the design, production and implementation of interventions and services – serves a critical role in facilitating this acceptability.

While community health workers in several countries helped to keep COVID-19 fatalities low early on in the pandemic, these efforts often focused on
Creating a workforce, rather than on bringing in local knowledge (Bezbaruah et al., 2021). Genuine engagement of communities to create health security is still nascent and decision-makers could learn much from existing HIV/AIDS responses, with their strong civil society involvement and rich history of rights-based approaches.

There is no one-size-fits-all approach to community engagement, which itself varies from relatively tokenistic approaches such as information provision, to approaches around citizen control that more genuinely empower communities (Arnstein, 1969). Thus, at a minimum, community engagement requires decision-making to be decentralized, to bring in community perspectives and to establish feedback mechanisms so that health systems provide services that are both of high quality and appropriate for those they aim to reach.

The inclusion of different perspectives and opportunities for dialogue are crucial in enabling community engagement to foster trust. Such an approach means that the processes and outcomes of community consultations and other engagement activities protect and promote the health and well-being of all people, including those who are marginalized, oppressed or otherwise vulnerable. The example in Box 3 from Canada demonstrates this.

Box 3. Community engagement: engaging First Nations, Inuit and Métis communities in Canada

Indigenous communities in Canada, including First Nations, Inuit and Métis communities, have long faced health and social inequities. This includes a higher burden of disease, food insecurity, lack of access to clean water, inadequate and crowded housing, and limited access to health services. These inequities have rendered Indigenous communities less able to take preventive measures to limit the spread of COVID-19, putting them at higher comparative risk of infection (Public Health Agency of Canada, 2021).

During 2020, the Public Health Agency of Canada collaborated with Indigenous scholars to ensure culturally appropriate engagement with Indigenous communities. They convened “talking circles”, honouring traditional ways of sharing and engaging with Indigenous community members, which included Elders and Knowledge Keepers. The talking circles highlighted the importance of sovereignty, kinship, land and ceremony. Participants described how COVID-19 exacerbated challenges in Indigenous communities and how longstanding mistrust and fractured relationships with governments hindered their COVID-19 response (Public Health Agency of Canada, 2021). These efforts in
culturally appropriate engagement towards improving health outcomes among Indigenous communities greatly benefited from extensive consultations with the Truth and Reconciliation Commission, which has sought to recognize injustices meted out to Indigenous Canadians including through the obliteration of their traditional cultural practices (Truth and Reconciliation Commission, 2015).

As the COVID-19 pandemic demonstrates, building community engagement into responses to health security threats at the earliest stages of their emergence can foster greater community understanding and support. Ideally, community engagement should be a core feature of health service development and delivery in health systems. Establishing communication channels with diverse groups as part of routine health systems strengthening can accelerate community mobilization during health emergencies.

Also important is ensuring that a human rights-based approach to health is embedded in pandemic responses. This creates sustained and broad buy-in for government actions and enhances legitimacy. During the COVID-19 pandemic, many countries introduced emergency laws that restricted and curtailed individual rights. Often, these were enforced with little or no public consultation, giving people insufficient time to prepare for the onset of often drastic measures that limited activities central to their livelihoods. This had particularly damaging consequences for informal-sector workers, among whom women are disproportionately represented.

A pandemic or other emergencies can require drastic policy actions, and governments in many instances have the legal authority to impose restrictions on individual rights in the larger public interest. However, it is important that these restrictions are proportionate to the challenge, nonarbitrary in their application to different groups, and are in place only when strictly necessary (Sekalala et al, 2020). Further, it is important that policy responses from development to implementation are based on human rights principles of equality, nondiscrimination, participation, accountability and transparency (Bueno de Mesquita et al, 2021).
Box 4: A rights-based approach to the COVID-19 pandemic

The IHR was revised in 2005 following the severe acute respiratory syndrome (SARS) outbreak to highlight the importance of human rights in preparedness and response efforts. The revised IHR introduced a limited set of human rights obligations – which includes full respect of dignity, human rights and fundamental freedoms – to country commitments in tackling disease outbreaks (Sekalala et al., 2020). The incorporation of a human rights perspective to the IHR emphasizes that public health interventions be implemented in a nondiscriminatory and transparent manner (Fidler & Gostin, 2006). Yet COVID-19 has highlighted the need for further emphasis on human rights in tackling disease spread and in addressing potential societal consequences.

Some countries have applied a rights-based approach to limit the spread of the virus. For example, early on in the pandemic, South Africa – guided by the right to health care as a basic human right in the country’s constitution – introduced a free mass-testing programme available to everyone. The programme was enacted following consultations with different subject experts, including from the health care and public health sectors, as well as government stakeholders (Sekalala et al., 2020). However, the measures used by the government to tackle the virus – including limitations on people’s movements – disproportionately disadvantaged poor and marginalized groups and have highlighted the need to consider broader societal and economic consequences in pandemic mitigation efforts (Moonasar et al., 2021; Nwosu & Oyenubi, 2021).

A rights-based approach used to address such societal and economic consequences is exemplified by Spain. The country passed a “social shield” package during the pandemic, citing constitutional rights to protect the most vulnerable as the guiding principle for the intervention. The package included a moratorium on mortgage and utility payments and increased unemployment benefits. Emphasizing rights helped advance these measures at the national level through the provision of social services to protect those citizens most at risk, such as the elderly, people with disabilities, and low-income groups (Sekalala et al., 2020).
Element three: looking at issues beyond the health sector

Systematically addressing issues of health security requires action beyond the health sector (Haldane et al., 2021a; Jung et al., 2021b; WHO, 2022). The COVID-19 pandemic has seen governments work across national and subnational levels to redirect resources to improve health infrastructure, encourage equitable deployment of health workers, and provide adequate levels of health services. The examples in Boxes 5 and 6 detail this.

Box 5. Multisectoral collaboration to address COVID-19 in Trinidad and Tobago

Trinidad and Tobago provides an excellent illustration of the role of multisectoral coordination in enabling the successful management of the first wave of the pandemic in 2020. In early March 2020, a week before reporting the first confirmed case of COVID-19, the country established a Multisectoral Committee (MSC) chaired by the Chief Medical Officer to coordinate the government’s public health response. Specifically, the MSC aimed to translate strategic objectives for the control of COVID-19 set by WHO to the local context, and to develop and implement activities across multiple sectors.

Bringing together stakeholders from various ministries including finance, national security, trade, tourism and disaster preparedness, the MSC informed government policies, ensuring that measures to control COVID-19 accounted for public health, social and economic impacts. Factors that facilitated the work of the MSC and multisectoral collaboration more broadly included leadership by the Prime Minister, who served as the spokesperson at weekly press conferences, and the availability of financial and human resources. A participatory style of decision-making within the Committee, the early engagement of nonhealth actors, as well as free sharing of information among Committee members, allowed the country to overcome departmental and institutional silos and have been noted as important enablers (Yearwood & Bachan, 2021).
Box 6: Bottom-up coordination between Spain’s national and regional systems

To address COVID-19 in the early phases of the pandemic, Spain declared a 15-day national emergency and centralized its health care system. Given that Spain consists of 17 Autonomous Communities, it was crucial for the Spanish national government to coordinate care through collaboration. The declaration of a state of emergency helped enact multilevel collaborations and decision-making processes between the national government and regional systems. In turn, this multilevel governance allowed national initiatives to reduce the spread of COVID-19, including through various widespread social distancing measures.

In addition, the bottom-up coordination between the national and regional systems facilitated action in regions that were the worst affected by the virus, including by allowing regions to manage private health services. Lastly, the national government introduced price controls on COVID-19 testing and PPE. When different regions experienced serious shortages of medical supplies, the national government coordinated with the Autonomous Communities to allocate supplies as needed. Following the end of the nationwide emergency in June 2020, authority for these price controls was returned to the regional governments. This resulted in a decentralized model that required periodic meetings between all Autonomous Communities and the central government to agree on COVID-19 policies (Legido-Quigley et al., 2020; Navarro & Velasco, 2022).

Element four: going beyond national boundaries through international cooperation

Health security, by definition, is reliant on effective international cooperation. Nevertheless, the COVID-19 pandemic has revealed challenges in achieving international cooperation to manage disease outbreaks. This became apparent as national interests were prioritized over global needs. For example, during the height of the pandemic, HICs often focused inwards to protect their own populations and were not mindful of the needs of other countries: vaccines were hoarded and border closures were imposed that led to disruptions in supply chains.

The early stages of the pandemic were characterized by global supply shortages, particularly of PPE for health care workers, ventilators, oxygen and diagnostic tests. Ensuring equitable access of such commodities requires continued development, production and sustained equitable
distribution (Haldane et al., 2021b). As illustrated in the example in Box 7, the establishment of COVAX in 2020 aimed to address these issues, yet it faced ongoing practical challenges.

**Box 7: COVAX: an example of global cooperation during the pandemic**

In late 2020, as new vaccines, therapeutics and diagnostics were available to address the escalating COVID-19 pandemic, it became clear that most LMICs would have inadequate access to them. The COVAX facility was established to address some of these challenges.

COVAX is the vaccine pillar of the Access to COVID-19 Tools Accelerator (ACT-A), a multilateral coordination mechanism bringing together multiple stakeholders to accelerate the development, production and equitable access to medical products, technologies, treatments and vaccines globally (Ramchandani et al., 2021). COVAX has been responsible for around 9% of the 17.7 billion COVID-19 vaccines shipped to 146 countries as of July 2022 (UNICEF, 2022).

However, COVAX has been hamstrung by insufficient and delayed financing, manufacturing shortages, vaccine hoarding, skewed geographical concentration of manufacturing capacity, and limited transfer of technology and patent licensing. In October 2020, India and South Africa proposed a landmark intellectual property (IP) waiver for COVID-19 medical tools at the World Trade Organization (WTO). While the waiver was supported by more than 120 countries, it was opposed by several HICs and powerful global health actors. In June 2022, governments at the WTO agreed on a compromise that largely reiterates developing countries’ existing rights to override patents in certain circumstances for COVID-19 vaccines and their ingredients for a maximum duration of five years. The agreement is far from the proposed waiver and highlights the need for a reform of the current biomedical innovation system, including through a reimagination of current IP rules (MSF, 2022; Oxfam, 2022).

Collaboration within regions and between countries also became essential to mitigate the impact of the COVID-19 pandemic. The examples in Boxes 8 and 9 illustrate support from regional organizations in the form of funding, medical supplies and technical guidance to help LMICs strengthen public health infrastructure and health systems.
Box 8: Regional organizations creating new partnerships for sustainable growth and development

On 15 November 2020, countries of the Association of Southeast Asian Nations (ASEAN) (Brunei Darussalam, Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam) signed one of the largest free trade agreements in the world – the Regional Comprehensive Economic Partnership (RCEP). The agreement aims to aid countries in post-COVID-19 pandemic recovery through global trade and investment.

A potentially important arena for cooperation under RCEP could be a regional platform for enhancing rapid and mass testing and vaccination against COVID-19: an investment that would go a long way in contributing to economic growth and spurring the competitiveness of less developed ASEAN countries (ASEAN, 2021; Thangavelu et al., 2021).

Box 9: Africa CDC: A COVID-19 success story for regional health security partnerships

The African Union (AU) established the Africa Centres for Disease Control and Prevention (Africa CDC) in 2016 as a specialized technical institution to help member states detect, prevent, control and respond to disease threats (Africa CDC, n.d.).

Africa CDC deployed more than 12,000 personnel in 2020 alone to support the COVID-19 response among AU member states (Africa CDC, 2021). Its pre-emptive and proactive response resulted in the setting up of the Emergency Operations Centre and Incident Management Systems for COVID-19 in late January 2020, much before the first case was confirmed on the continent (Crone, 2020).

Africa CDC also expanded and strengthened diagnostic and experimental laboratory systems in African countries (Massinga Loembé et al., 2020; Nkengasong, 2020). When global demand for diagnostics rose, initially sidelining the continent, Africa CDC established the Partnership to Accelerate COVID-19 Testing (PACT) to expand testing capacity in countries (Abdool Karim et al., 2021). It sourced and supported countries with more than 6 million test kits and 4 million face shields in 2020 (Africa CDC, 2021).
Moreover, Africa CDC set up an effective continent-wide dashboard by compiling COVID-19 surveillance information from all member states early in the pandemic (US CDC, 2021). The Africa Pathogen Genomics Initiative (Africa PGI) – a four-year partnership to further strengthen the public health surveillance and laboratory network – is another significant addition to global health security efforts. The initiative had conducted more than 109 000 SARS-Cov-2 sequencings by July 2022 (Africa CDC Institute of Pathogen Genomics, 2022).

Africa CDC implemented all of these efforts through member states’ contributions, as well as bilateral contributions and support from established global technical and funding agencies.

**Bringing the challenges together: systems for health security**

Strengthening systems for health security requires tackling the four elements highlighted in this chapter. Importantly, efforts to address these challenges cannot be implemented in isolation, as piecemeal approaches or as short-term measures. They are interdependent and mutually reinforcing.

A reimagined health system for health security will rely on efficient early detection and surveillance mechanisms in line with the IHR. Such detection and surveillance mechanisms are often the product of strong national systems embedded in communities (Kardas-Nelson & Frankfurter, 2018). Moreover, when pandemics occur in such a system, international and regional cooperation should lead to equitable distribution of the tools needed to tackle pandemics, which are then deployed at national and local levels through multisectoral efforts guided by input from communities that trust their governments.

The next chapter highlights the inseparability of healthy populations and health security. It makes the case that aligned investments to address these two challenges will deliver several benefits over and above parallel investments, including through enabling an efficient use of resources. It also provides practical recommendations to bring about systems for health that exemplify this alignment and that encompass the four elements explored throughout this report – trust and power, engaging communities and focusing on rights, looking beyond the health sector, and going beyond national boundaries.
References


CHAPTER 5

Realizing systems for health

To realize systems for health, we must reimagine health systems and identify concrete actions that can ensure both health security and healthy populations. This is not a small or easy task. It demands different, perhaps radical, political choices. Developing systems for health requires stakeholders to reshape and refresh their efforts to promote healthy populations and ensure health security.

This final chapter provides practical guidance on how policy-makers, implementers, development partners and communities can establish systems for health and accelerate progress towards the SDGs, particularly SDG3 on better health and well-being.

The chapter begins by exploring the linkages between healthy populations and health security, illustrating how insufficient attention to the challenges of either one has negative implications for health. It goes on to discuss the benefits of aligning investments at the global and national levels.

Having established the case for coordinated action, the chapter provides recommendations at local, national and global levels to align healthy populations and health security towards realizing systems for health.

Aligning investments in healthy populations and health security: potential synergies

The extensive linkages between healthy populations and health security mean that categorizing actions as contributing to one or the other is an artificial distinction. It also leads to an incomplete and distorted understanding of the benefits of these actions.

First, healthy populations are intrinsically more secure populations. This has been seen in the early phases of the COVID-19 pandemic, where hospitalizations and deaths were disproportionately concentrated among individuals with underlying health conditions (Carrillo-Vega et al., 2020). The association between NCDs and severe manifestations of infectious disease extends beyond COVID-19 and includes most viruses, particularly respiratory viruses and pathogens responsible for antimicrobial resistance. Health systems that prioritize the detection, prevention and treatment of...
NCDs and rehabilitation efforts are thus vital for health security. Notably, core investments in health systems – particularly those that adopt a PHC approach and ensure accessible and affordable health services for all communities – can further advance health security (Lal et al., 2021).

Second, measures focused on making populations healthier generally enhance health security. For example, improved nutrition reduces susceptibility to infectious diseases including TB (Ortblad et al., 2015). This decreases the need for antimicrobial use, a major contributor to antimicrobial resistance (Laxminarayan & Heymann, 2012). Another example is reducing tobacco consumption (UNDP & FCTC, 2018). Tobacco cessation efforts can improve outcomes for HIV/AIDS and TB and reduce the need for more advanced antimicrobials, potentially slowing down the spread of antimicrobial resistance. Meanwhile, improving built environments can contribute to controlling infectious diseases including malaria, dengue and cholera (Tusting et al., 2016; Furnival Adams et al., 2019). This can also create spaces and places for people to exercise and socialize, producing healthier, more secure populations. Reducing air pollution can also improve underlying population health (Chen & Kan, 2008).

At the same time, a lack of health security impedes efforts to make populations healthier. The negative impacts of COVID-19, and previously the Ebola virus epidemic, on routine health services are well documented, including around reproductive, maternal, newborn and child health (RMNCH); immunization; and chronic disease care (Chandir et al., 2020; WHO, 2020). Measures to control infectious diseases with movement restrictions can limit physical activity, thereby contributing to obesity; such restrictions have also been associated with increased gender-based violence (Sharma et al., 2021). The accompanying isolation also has detrimental effects on mental health (Douglas et al., 2020; Sánchez et al., 2021).

In addition to these direct health impacts are the catastrophic economic impacts of pandemics, both in reducing economic activity and diminishing worker productivity. This affects informal economic activity especially, and disproportionately impacts the most vulnerable, including women and children (ILO, 2020). The economic impact of pandemics also reduces resources to enhance the built environment, transition to green energy, and adopt mitigation and adaptation measures to address climate change. Finally, pandemics can disrupt schooling with negative implications for educational achievement, children’s long-term social and mental health, as well as nutrition; there are implications too for women’s employment and livelihoods (Douglas et al., 2020; Agarwal, 2021).
The benefits of alignment

At the global level

The interlinkages between healthy populations and health security make clear that there is a missed opportunity if these two challenges are addressed separately. Given limited resources and positive synergies, an aligned approach is needed that considers both the intended and unintended consequences of investments in one area on the other. There are several advantages to a focus on both healthy populations and health security.

Despite the attention that health systems have received during the pandemic, the current economic and climate crises mean that much more needs to be done to create healthy populations and continue to move towards UHC and to manage health emergencies. Given the global urgency to act on health security and the significant resources that are being made available to address this, such a framing can also enable increased resources for addressing NCDs that are critical to creating healthy populations. Despite their high and growing contribution to the global burden of disease, NCDs receive only a small fraction of external resources for health, estimated at 2% of total development assistance for health (Micah et al., 2019). There are similarly low levels of investment to mitigate the health impacts of climate change; for example, just 0.5% of international development funding – or US$ 11 billion in 2015–2020 – went towards improving outdoor air quality (Clean Air Fund, 2022). Separating the challenges of healthy populations and health security is likely to lead to competition for attention and resources with less-than-ideal outcomes.

Furthermore, establishing separate entities or efforts to achieve health security and healthy populations is likely to exacerbate organizational fragmentation. Some might suggest that this is already happening in the wake of the COVID-19 pandemic with the establishment of the Pandemic Prevention, Preparedness and Response (PPR) financial intermediary fund based at the World Bank. Duplication could be reduced and efficiency improved by ensuring that the work and resources emanating from entities such as the PPR explicitly examine their impact on healthy populations. International negotiations to strengthen the PPR, such as the development of a “pandemic treaty” and IHR amendments, equally should reflect an expanded view of health security, going beyond traditional infectious disease interventions.

A systems-for-health framing has the potential to result in greater buy-in across countries than interventions that focus solely on health security or healthy populations. For example, health security is sometimes considered
within LMICs as an imposition from HICs to control infectious diseases (Rushton, 2011). The reaction of several HICs during the COVID-19 pandemic has only added to this perception, whereby LMICs with well-developed disease surveillance systems often paid a heavy economic price for reporting the emergence of new variants of the virus (BBC, 2021; VOA News, 2021). At the same time, LMIC efforts to control commercial drivers of health through taxes on tobacco and SSBs routinely face resistance from HIC-based multinational corporations (Carriedo et al., 2021). Similarly, multinational corporations have used the threat of action at international fora including the WTO to counter efforts to adopt nutrition labelling (Crosbie et al., 2022). Interventions that address both health security concerns and ease the passage of measures to establish healthy populations may address common interests of both HICs and LMICs, in turn making it easier to overcome resistance of the kind referred to above (Ooms et al., 2017).

At the national level

In addition to the benefits at the global level, there are several benefits at the national level to moving towards a systems-for-health framing.

First, such a framing encourages a broad understanding of the costs and benefits of health-related interventions that prioritize well-being in line with the goals of SDG3. It considers the impact of these interventions on other diseases as well as how interventions impact the economy, which in turn impacts health. This has major implications for health and broader public policy. For instance, any health gains resulting from restrictions on people’s movements during a pandemic must be weighed against the negative effects of these measures on immunization rates, chronic disease care, mental health and well-being. Further, a systems-for-health framing considers the negative health effects of these measures on account of reduced economic activity. These include increased poverty, vulnerability and loss of education at an individual level, as well as reduced availability of resources for health at district, provincial and national levels.

Second, an alignment of efforts focusing on health security and healthy populations can play a major role in reducing parallel programmes with their own reporting requirements, funding streams, supply chains and human resource policies. This would confer several benefits. It could allow ministries of health to reduce time for reporting (of often overlapping information) to different funders and donors, as well as facilitate the use of common definitions. It would also allow for the realization of economies of scale that would result from integrated supply chains, and enable human resources to be more flexibly deployed based on need rather than according to availability of programme-specific funds.
Third, the replacement of the parallel agendas of health security and healthy populations by a systems-for-health agenda would provide a single entry-point for health ministries to engage other sectors, potentially facilitating multisectoral action and overcoming parallel, competing agendas.

**Bringing about this alignment**

This last section provides practical recommendations for policy-makers, implementers, development partners and communities on how to mitigate some of the challenges highlighted in earlier chapters and create the necessary alignment between health security and healthy populations. At the national level these include actions to both establish institutional and governance arrangements for alignment and to reform health systems functions to support alignment. National governments and community organizations are central to bring about the needed alignment for systems for health. However, global actors also have a major part to play given their normative, agenda-setting and financial roles.

As illustrated in Fig. 2, the implementation of each of these recommendations towards realizing systems for health is influenced by one or more of the four elements identified in Chapter 2, namely: trust and power, engaging communities, looking beyond the health sector, and going beyond national boundaries.

![Figure 2: Realizing Systems for Health](image)
Actions at local and national levels

Establishing institutional and governance enablers for alignment

Recommendation 1: Align policy processes for systems for health

A major barrier to efforts to align health security and healthy populations is the development of multiple parallel global health entities, which often have overlapping mandates and compete for attention, resources and influence (Spicer et al., 2020). This lack of global alignment and the resultant patchwork of funding is often reflected in the organization of ministries of health as clusters of programmes each with their own reporting lines, human resources and funding streams.

Reforming institutional arrangements to coordinate across health security and healthy populations may be one way to initiate action. For example, in Nigeria, interministerial collaboration between the Federal Ministry of Agriculture and the Ministry of Health facilitated a coordinated response to address the H5N1 2006 outbreak (Okello et al., 2014). Moreover, there may be efficiency gains to building on existing institutional arrangements and infrastructure. For example, in Pakistan, digital infrastructure developed as part of the polio eradication programme was critical to the rapid establishment of planning dashboards to inform the COVID-19 response. These included dashboards related to COVID-19 statistics, infrastructure availability and the management of cross-referrals (Zaidi, forthcoming).

Integrated planning, budgeting and monitoring processes that bring together stakeholders from different levels of government, multiple sectors and varied development partners can ensure harmonization and alignment. Ethiopia’s roadmap to establish synergies in adopting the One Plan, One Budget and One Report approach demonstrates this. The roadmap delineates roles and responsibilities for stakeholders with detailed monitoring and evaluation mechanisms. In addition, donors have been engaged through the development of the Joint Assessment for National Strategy Committee (JANS) (Tadesse et al., 2021). The One Plan approach is central to the Ethiopian government’s efforts to streamline planning across different levels of the health system and with donors, to coordinate donor resources and assure integrated supervision, quality assurance and inspection (Kelly et al., 2020). The successful implementation of such an approach is enabled by, and in turn reinforces, trust among different levels of government, different sectors and between donors and national governments.
Recommendation 2: Prioritize community and implementer perspectives

Top-down models of policy-making are an important contributor to fragmentation. Communities, district governments and field-level implementers bear the brunt of fragmentation and have the most to gain from alignment. Outdated ways of communicating and engaging with people and communities can also limit policy-makers’ abilities to garner important perspectives. On the other hand, new digital communication platforms and tools can amplify community perspectives and ensure they are embedded in policy design and implementation (Cristea et al., 2022). Working closely with communities – and often drawn from these same communities – field-level health workers are ideally suited to identify opportunities for multisectoral action at the local level and to advance health promotion, prevention and treatment efforts. Such implementers thus have a critical role in informing health policy agendas and design.

In addition to informing the design of contextually grounded, innovative policy solutions, measures to engage communities play an important role in building trust among relevant stakeholders. The example from Chapter 3 of Thailand’s National Health Assembly is an excellent illustration of a systematic national-level effort to enable community participation (Tangcharoensathien et al., 2017). High levels of trust have also been shown to be associated with respect for regulations and government directives during the course of the COVID-19 pandemic (Legido-Quigley et al., 2020). Indeed, trust has a critical role to play in countering the infodemic of fake news that is a major source of dis- and misinformation and that confounds efforts to realize systems for health (Abdalla et al., 2021).

Recommendation 3: Invest in effective leadership

Leadership is central in aligning agendas to realize systems for health. Experiences from several countries illustrate how critical leadership is to overcome silos as well as to instigate new ways of working (Agyepong et al., 2021; Tadesse et al., 2021; Yearwood & Bachan, 2021). National leadership can also play a significant role in aligning donor resources with national priorities and plans (Tadesse et al., 2021). By bringing together stakeholders around a common vision, effective leaders create supportive political coalitions and build stakeholder trust.

While national leadership is decisive, realizing systems for health also requires investing in leaders at village, municipal, district and provincial levels, in sectors beyond health, and beyond government, including within CSOs. Engaging closely with related social sectors and with communities is essential to identify potential leaders – including women leaders, something that is
critical to mitigate the gender gap. These individuals need to be provided with opportunities to demonstrate leadership skills as well as with training (Rasanathan et al., 2018); this can include formal training, on-the-job training and active learning (Daire et al., 2014).

Reforming health systems functions to support alignment

**Recommendation 1: Empower the health workforce to connect across sectors**

Holistically addressing the challenges of health security and healthy populations requires a skilled workforce capacitated to address both these challenges. At the community and PHC level, this implies shifting away from health workers trained to address specific diseases to cadres trained in disease surveillance, basic preventive and curative care, and health promotion activities (Tadesse et al., 2021). It also needs workers to be sensitized to the importance of community engagement, the centrality of trust and the role of multisectoral action. This requires changes in health-worker pre- and in-service training and curricula, and it means supporting health workers to connect across sectors and use a lifecycle approach that will be key to realizing systems for health. Health workers, in turn, need to be provided with adequate remuneration, safe and decent working conditions, and mental and psychosocial support, particularly for women health workers.

**Recommendation 2: Leverage digital transformations for health information systems to improve responsiveness to community needs**

Ongoing digital transformations are already enabling new understandings of the interlinkages between efforts to create healthy populations, health security, health services and health systems performance (Kickbusch et al., 2021). This can accelerate the development of integrated health information systems that draw on a range of sources including individual users and communities. Integration facilitates the establishment of common indicators and definitions, reducing the need for multiple and parallel reporting to a plethora of donors (Tadesse et al., 2021). However, putting into place such integrated systems requires more than technological know-how and funding. It requires extensive coordination between agencies within and beyond the health sector, as well as with donors. It also means efforts to build trust to encourage information-sharing both at the level of communities and with private providers. Also critical are data governance frameworks detailing the roles and responsibilities of different actors and the potential uses of data gathered, thereby addressing privacy concerns (Tiffin et al., 2019).

Using these integrated information systems can inform and accelerate better governance for both health security and healthy populations.
Furthermore, such integrated information systems can facilitate analyses that illustrate unhealthy power imbalances, a first step to their redressal and the empowerment of communities.

**Recommendation 3: Build trust to improve the availability and utilization of flexible funding**

Line-item funding tied to programmes and disease conditions is a major barrier to the ability of governments to develop innovative and context-sensitive strategies necessary to realize systems for health. A narrow disease-oriented focus as well as concerns around financial accountability can lead to strict conditionalities in resource use (Atun et al., 2008; Spicer et al., 2020). Building trust between development partners and national governments is fundamental to increase the availability of flexible funding. This was seen in the experience of Ethiopia’s MDG pool fund: trust-building measures taken by the Ethiopian Ministry of Health included transparent coordination arrangements and strong technical working groups and grant management committees (Tadesse et al., 2021).

The ability of provincial-, district- and field-level implementers to align their actions requires that funds are deployed as and when needed. This means reforms to public financial management systems, replacing rigid input-based financing and reducing earmarking for vertical programmes (Cashin et al., 2017). Engaging multiple sectors, including ministries of finance and personnel, is essential to such reforms (Shroff et al., 2017). It also needs active measures to generate the trust needed to devolve funding decisions and allow flexibility for field-level implementers.

**Actions at the global level**

**Recommendation 1: Identify indicators for systems for health**

Indicators play a major role in shaping investments as well as programming, planning and implementation. Existing tools that assess health systems overlook metrics for both health security and healthy populations; likewise, health security assessments often ignore the goals of health systems and healthy populations.

Investment in global and national efforts to advance the alignment of health security and healthy populations could be greatly facilitated by identifying indicators that can demonstrate progress towards each of these goals. While it would be difficult to identify a single indicator that encompasses progress on health security and healthy populations, there is a major role for accompanying narratives and case studies at country level. These would illustrate the role of improvements in health security indicators on health promotion efforts and, conversely, how improvements in indicators of health...
promotion bolster efforts to make populations more secure (Rasanathan et al., 2018; Agyepong et al., 2021). Indicators to measure healthy populations must examine upstream factors such as tobacco use which are strongly predictive of poor health; while indicators for health security must go beyond process indicators to look at outcomes in terms of the occurrence of health emergencies and the success of measures to mitigate them.

Consultative processes at national and global levels can support the development of indicators acceptable to a wide range of stakeholders - including national governments, multilateral organizations, other global health funders and civil society groups. This requires understanding and challenging existing power imbalances between global and national actors when developing health metrics and indicators.

**Recommendation 2: Emphasize commonalities across efforts while realizing systems for health**

The past few decades have seen a proliferation of global health efforts and initiatives – each with their own interests and priorities (Spicer et al., 2020). This proliferation has been accompanied by an ongoing reframing of the global health agenda. For example, in the early 2000s there was a focus on HIV/AIDS, TB, malaria and children’s health as part of the MDG agenda. More recently, SDG3 on health focuses on ensuring healthy lives and promoting well-being. Such a reframing reflects an essential evolution to meet emerging health challenges. At the same time, it often results in countries feeling obliged to establish new programmes aligned to these novel framings in order to obtain resources – which leads to fragmentation (Agyepong et al., 2021).

It is thus important for funders and the global health community to illustrate commonalities rather than differences among the various framings. This is a first step towards supporting ministries of health to adapt programme reporting and implementation to realize systems for health. Such adaptation can play a major role in reducing fragmentation.

**Recommendation 3: Support the generation and use of knowledge for systems for health**

Establishing systems for health requires investing in the generation of multidisciplinary research to illuminate how health systems, the broader drivers of health, and social and political context interact to produce health. It also requires putting in place mechanisms that can enable the use of such knowledge.

International institutions and funders can play a critical enabling role. This includes support towards the establishment of national research institutions
that can generate multidisciplinary research, while engaging closely with ministries of health to facilitate the use of such research. Thailand’s International Health Policy Programme (IHPP) is an excellent illustration of an institution that has played a major role in supporting health system reforms in that country (Pitayarangsarit & Tangcharoensathien, 2009).

To enable the use of this multidisciplinary knowledge, funders should support efforts to strengthen policy-maker capacities to use research evidence, as well as support the implementation of incentives and organizational changes to enable evidence use at national and subnational levels (Green & Bennett, 2007; Bennett et al., 2012). Coordinated action to enhance the generation and use of such policy-relevant knowledge is essential to the establishment of learning health systems that can go a long way in informing efforts to strengthen national health systems (Sheikh & Abimbola, 2021).

**Conclusion**

Difficult political decisions are necessary if we are to move beyond health care services that constitute the core of how UHC is currently measured and establish systems for health. The ongoing economic effects of the COVID-19 pandemic, food and energy insecurity, conflicts among states and high levels of inflation globally have all made it more challenging than ever to raise resources – and countries face the need to prioritize and sequence actions to enable their optimal use. However, the detrimental implications for health security and thus the economy of not investing in health systems (as illustrated in Chapter 1) provides a compelling rationale for governments to maintain and expand investments in health and systems for health.

Targeting policy-makers, implementers, development partners and communities, the recommendations outlined in this concluding chapter provide a menu of actionable options to realize systems for health, building on existing health systems structures and relationships. We are aware that the application of a power- or rights-based analysis is a desirable next step, one that might suggest a wide variety of possible – perhaps more radical – actions, but that these actions would nevertheless be more challenging to realize in the near-to-mid term.

This report also raises broader questions about current conceptualizations of health security that focus exclusively on acute public health events. The COVID-19 pandemic has made clearer than ever the risk of such acute public health events in endangering people’s lives across national and geographical boundaries. However, the health effects of climate change, growing air pollution, and drought and the resulting food insecurity are equally significant threats to health systems and the security of human and
planetary health. In addition to this, antimicrobial resistance is threatening to reverse decades of progress in the management of infectious diseases with potentially catastrophic impacts. Given these challenges, it may be an opportune moment to make the case for an expanded understanding of health security that goes beyond acute public health events.

Finally, this report has brought to the fore the centrality of people and communities to health and broader well-being. Through their behaviour, actions and inaction, people and communities are both the biggest asset and the most significant threat to ensuring health security and creating healthy populations. Health is everyone’s concern and everyone’s business. We need a synchrony of efforts and a synergy of effects to align interests, avoid conflict and create momentum. Everyone has a role to play in realizing systems for health.
References


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- Learning health systems: pathways to progress (2021) - ahpsr.org/LHS
- Open Mindsets: Participatory Leadership for Health (2016) - ahpsr.org/OM
- Medicines in health systems (2014) - ahpsr.org/MHS
- WHO Strategy on Health Policy and Systems Research (2012) - ahpsr.org/WHOhsr
- Systems Thinking for Health Systems Strengthening (2009) - ahpsr.org/st4hss
- Sound choices (2007) - ahpsr.org/sc
About this report

The boundaries of what constitutes health systems are expanding. Health systems need to be reimagined as systems for health that create both healthy populations and health security while supporting the achievement of universal health coverage. In this flagship report, systems for health are defined as systems ready to respond to both known and unknown future threats, hazards and risks; they address social, economic, environmental and commercial drivers of health that are critical to securing and enabling healthier societies. Systems for health not only provide, protect and promote health, but they encompass a broader framing as a complete package capable of delivering physical, mental and social health, quality of life and sustainability for all populations across the life-course. The report concludes by providing practical recommendations for policy-makers, implementers, development partners and communities on developing systems for health that are essential to the achievement of the Sustainable Development Goals.