wbcsd

Healthy people, healthy business

Strategies for business
to strengthen health
system resilience

Guidehouse

Contents

1. Executive summary

WBCSD Vision 2050 sets out the goal to achieve the highest attainable standard of health and wellbeing for everyone by 2050, calling for a world in which: people live healthy lives; societies promote and protect health; everyone has access to robust, resilient and sustainable healthcare services; and all workplaces promote health and wellbeing. Business has a significant role to play in realizing this vision, thereby creating healthier and happier societies and building business resilience.

The COVID-19 pandemic has reminded the world that health and wellbeing are the foundations on which societies and economies thrive and prompted much reflection about how to promote and protect health more broadly and equitably in the future.

Its force has demonstrated that robust, well-resourced and resilient health systems are vital for a wide range of economic sectors to operate and function adequately. Strengthening health systems and their resilience is more important than ever as the burden on health systems is set to increase globally, making it ever more challenging to provide appropriate care.

This white paper aims to demonstrate that businesses from a variety of sectors - far beyond the health sector - play essential roles in building health system resilience and thereby contributing to achieving the highest attainable standard of health and wellbeing for everyone, everywhere. Working in close partnerships within sectors, across sectors and with governments and multilateral institutions is key to bridge private and public domains, build capacity and enhance knowledge transfer.

It seeks to make the case that building health system resilience goes far beyond preparing for and bouncing back from individual shocks and disasters. It involves mitigating the exposure to threats as much as possible and strengthening the ability of health systems to overcome structural challenges to withstand any catastrophic event. To provide guidance, the paper outlines a number of strategies businesses can apply to help build health system resilience.

It concludes that businesses that recognize their interconnectedness and dependence on health systems can unlock transformational change. Applying a variety strategies to strengthen health systems will be an important determinant of long-term business resilience.

2. Context

The COVID-19 pandemic has caused the most significant global public health crisis and deepest economic downturn in a century. While the devastating consequences have revealed significant vulnerabilities and serious burdens on health systems worldwide, they also have brought the importance of robust and resilient health systems to the forefront of the global political and economic agenda in a way rarely seen before.

The pandemic has reminded the world that health and wellbeing are the foundations on which societies and economies thrive. It has also prompted much reflection and challenged societies to reimagine how else to promote and protect health more broadly and equitably moving forward, putting them on course to realize many of the ambitions laid out in United Nations Sustainable Development Goal 3: Good Health and Well-being.

In this context, WBCSD established a coalition of members in 2021 to explore and identify how businesses from a broad range of sectors can maximize their contributions to support government efforts to achieve the highest possible standards of health and wellbeing.

One of the priorities of this coalition has been to help businesses implement the actions laid out in the Health & Wellbeing Pathway of Vision 2050: Time to Transform, the framework we launched in March 2021 to provide the business community with guidance on how it can lead the transformations needed to realize a world in which more than 9 billion people are able to live well, within planetary boundaries, by 2050.

The Vision 2050 Health & Wellbeing Pathway sets out the goal to achieve the highest attainable standard of health and wellbeing for everyone by 2050, calling for a world in which: people live healthy lives; societies promote and protect health; everyone has access to robust, resilient and sustainable healthcare services; and all workplaces promote health and wellbeing. The pathway goes on to highlight the key transitions required to make this vision a reality, before underlining 10 critical action areas for business to help drive these transitions over the course of the next decade.

Several of these 10 critical action areas (see below) call on business to support efforts that aim to build health system resilience, collaborate with governments and other key stakeholders to tackle health system threats, prepare for future pandemics, invest in capacity-enhancing technologies to prevent, diagnose and treat disease and, ultimately, to reshape the boundaries of the healthcare system. Doing so underlines the importance of cross-sectoral and public and private collaboration to strengthening health system resilience.

This white paper seeks to provide insights into how business can turn this ambition into reality. It represents the results of an exploration by companies from WBCSD's Healthy People, Healthy Business working group and identifies various strategies for businesses from all sectors to enhance access to healthcare and strengthen health system resilience. It builds on a previous exploration of the role of business in ensuring health and wellbeing in the workplace that resulted in the guidance on Healthy People, Healthy Business: Embedding a culture of health and wellbeing.

It is paramount to unite forces to strengthen health system performance and resilience. Businesses from a diverse range of sectors that interact with health system value chains have a central role to play in leveraging their private sector know-how and resources. We and our members look forward to further engaging on this topic and exploring routes for business to build long-term resilience.

Vision 2050 Health & Wellbeing Pathway: Action areas for business 2020-2030

1. *Innovate and rebalance product portfolios to support healthy diets and lifestyles, while moving away from addictive and harmful offerings.*

2. *Influence consumer behavior towards more healthy diets and lifestyles via marketing activities, information campaigns and collaborative education platforms. Refrain from marketing harmful products.*

3. *Scale business models to address indoor and outdoor air pollution, particularly in highly industrialized and densely populated urban environments.*

4. *Implement programs that ensure the highest standards of health, safety and wellbeing for employees throughout global operations and value chains, while expanding access to basic preventive services at places of employment.*

5. *Support efforts to safeguard biodiversity and eradicate the conversion of wildlife habitats to prevent the future spread of zoonotic diseases.*

6. *Collaborate with governments and intergovernmental organizations to invest in systems that build international health system resilience to respond to pandemics and other health risks.*

7. *Collaborate with policy-makers to establish clear standards and guidelines to uphold data privacy in the context of an evolving digital healthcare system.*

8. *Develop new technologies that enhance the capacity to prevent, diagnose and treat diseases, with a focus on ensuring access to health care in low- and middle-income markets.*

9. *Collaborate with governments and other stakeholders to eradicate antimicrobial resistance due to the misuse of antibiotic treatments and invest in new antibiotics to ensure their continued effectiveness in treating infection.*

10. *Fundamentally reshape perceptions of the boundaries of the healthcare system, underlining the importance of healthy lifestyles and cross-sector collaboration. Work to understand and account for the true value of health-related externalities.*

3. Introduction

Strengthening health system resilience has never been more essential as global health pressures continue to rise. The COVID-19 pandemic has proven that robust, well-resourced and resilient health systems are vital to creating elasticity in responses without allowing existential threats to damage societies and economies. The pandemic's unparalleled consequences have demonstrated the interdependent nature of the public and private sectors and the collaborative role of governments and businesses in building health system resilience.

The pandemic has exposed the lack of preparedness, ineffective response mechanisms, structural deficiencies and fragility, the dangers of disinformation, as well as vast social inequalities throughout health systems globally. In the wake of the pandemic, many questions have surfaced about how to strengthen health systems to better serve everyone, in the face of growing structural challenges and considering looming future shocks that are very likely to cause more public health emergencies.

While the debate about health system resilience is front and center among policy-makers and health system experts, there is increasing recognition that businesses from a variety of sectors have unique subject matter expertise and have a significant role to play in maximizing their contributions to build health system resilience, both directly and indirectly.

Against this backdrop, this report brings together insights from research and WBCSD member companies across a range of industries to explore:

- The core building blocks of a resilient health system;
- The most significant factors that threaten the short- and long-term resilience of health systems globally;
- The role that businesses can play in helping to enhance health system resilience.

4. Understanding health systems and their resilience

Health systems

Health systems are complex: they blend a multitude of professional and disciplinary features and functions across public and private performance environments.[1] While health systems vary greatly in organizational and operational structure, the World Health Organization (WHO) describes them in terms of six interdependent components or building blocks (see Figure 1). Efforts to enhance health system performance and to build resilience must focus on strengthening these building blocks.

Figure 1: WHO Health System Building Block Framework[2]
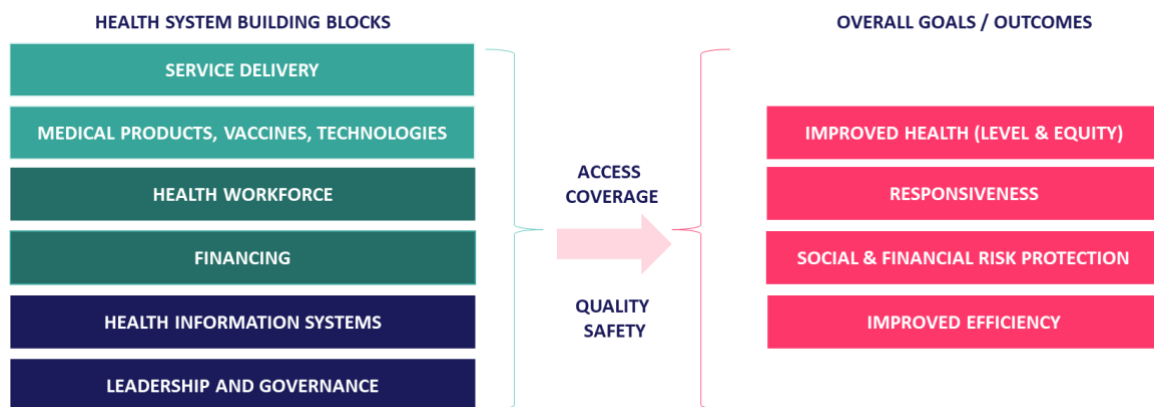
- Leadership, governance and information systems are foundational components that form the overall policy, regulatory and technological environments upon which the other building blocks are built and operate.

- Adequate and appropriate health system financing is imperative for a well-resourced and trained health workforce to deliver high-quality care.

- Medical products, vaccines, technologies and service delivery represent direct outputs of the health system.[3]

Health system resilience

Understanding and applying the concept of resilience to strengthen the performance of health systems has received increasing attention in recent years due to a series of severe health emergencies, such as Ebola and COVID-19. The far-reaching consequences of the COVID-19 pandemic have propelled health system resilience to the forefront of the global debate across economic, societal and government domains.

Most definitions of health system resilience focus on preparedness for and responsiveness to severe health emergencies and acute shocks, and how the system can absorb, adapt and transform to cope with sudden changes.[4] Following the experiences of COVID-19, the debate is progressively shifting to explore how to minimize exposure to crises in the first place. This involves expanding the resilience concept to look at the capacity of health systems to tackle structural challenges that cause significant burdens and determine the system's vulnerability or susceptibility to potentially catastrophic events.[5]

In this context, the European Union's Expert Group on Health Systems Performance Assessment describes four capacities of a resilient health system: **1) to foresee, 2) to absorb, 3) to adapt, and 4) to transform**.

First, a resilient health system needs to be able to foresee potential threats and areas of operational sensitivity, allowing it to develop emergency protocols, stockpile critical resources, and make other preparations to reduce risks. Second, the absorptive capacity of a health system refers to its ability to continue providing the same level (access, quality and equity) of healthcare services and protection to people in times of crisis without substantial changes in resources. Third, the adaptive capacity refers to the ability to modify strategies and operations to provide effective care in new or changing circumstances. Finally, the transformational capacity describes the ability of health system actors to change the operations and structure of the health system in response to a changing environment, thereby institutionalizing important adaptations and building out long-term strategies.

Recommended reading

- Business Climate Resilience: Thriving Through the Transformation (September 2019)
- Building long-term business resilience (Vision 2050 Issue Brief) (September 2020)
- Strategic resilience: A primer for business (October 2020)

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5. What are the most significant factors that threaten short- and long-term health system resilience?

Health experts expect the burden on health systems to rise significantly, making it ever more challenging to provide appropriate care. It is important to understand the most significant factors that threaten health system resilience, today and in the future. Threats to health system resilience stem from global megatrends and domestic structural challenges that strain health system capacity and capability and thereby determine the overall level of sensitivity and exposure to potential shocks.

Aging populations	Health and social systems are facing enormous challenges due to aging populations.[6] By 2050, WHO expects the world's population over the age of 60 to have nearly doubled compared to 2015 and the number of persons aged 80 years or older to triple to reach 426 million.[7] As people live longer, the number of people experiencing age-related conditions grows, increasing the burden on health systems to provide appropriate care.
Existing and increasing burden of non-communicable diseases (NCDs)	Non-communicable diseases, commonly known as chronic or lifestyle-related diseases, include heart diseases and stroke, cancers, chronic lung diseases and diabetes.[8] Chronic diseases are the leading global cause of death, resulting in 41 million deaths annually, representing 71% of total morbidity and mortality globally. The rise in chronic diseases affects people of all age groups and across all regions. However, these diseases impact people in low- and middle-income countries disproportionately, with about 75% of NCD-related deaths occurring in these regions. Evidence shows that chronic diseases strongly affect people between 30 and 69 years of age, representing around 35% of NCD-related deaths. The rise in chronic conditions in this age group significantly increases the burden on health systems and reduces the economic contributions of these people.
Vaccine hesitancy[9]	Vaccinations are one of the most cost-effective ways of avoiding communicable diseases. WHO estimates that they prevent 2-3 million deaths per year, with the potential to avert another 1.5 million deaths through improvements in global vaccine access. However, people are increasingly reluctant or refusing to get vaccinated against various diseases. Growing vaccine hesitancy has the potential to reverse significant health gains as it allows diseases under control to spread again. For example, measles, one of the most infectious human pathogens, has seen a 30% increase in cases globally in recent years.

While the reasons behind this trend are complex, WHO emphasizes the importance of disseminating credible and trustworthy information throughout communities to counteract vaccine hesitancy.

Breakdown of natural systems

There is unequivocal scientific evidence that human activities are driving fundamental changes to the biosphere and disrupting many of the planet's natural systems. Factors such as the unfolding climate crisis, widespread pollution, unprecedented levels of biodiversity loss, and pervasive changes in land use and cover are changing the foundational conditions for people to live healthy lives – from safe air quality, drinking water and nutritious food to protection from infectious diseases and extreme weather events.[10]

Due to these disruptions to natural systems, health systems face an ever-growing burden of disease and health risks. These include: exponential rises in incidences of malnutrition, heat stress, infectious and chronic disease, displacement and conflict, as well as negative mental health impacts.[11]

Air pollution alone is responsible for nearly 9 million deaths each year worldwide due to stroke, heart disease, pulmonary disease, lung cancer and other respiratory infections.[12,13] The World Meteorological Organization (WMO) states that weather-related disasters kill 115 people and cause USD $202 million in losses on average each day. The number of disasters has increased by a factor of five over the last 50 years, mostly due to climate change.[14] Since 2010, weather-related emergencies have displaced an average of 21.5 million people a year[15], and estimates show that climate change could force as many as 1.2 billion people to migrate by 2050.[16]

With the rise in global temperatures and the unfolding breakdown of natural systems, extreme weather events or conditions will become more frequent, persistent, dangerous and potentially lethal. Be it extreme heat or cold, heavy downpours, flooding or destructive storms – all are likely to negatively affect the health and wellbeing of millions and place a significant burden on health systems worldwide. Droughts resulting from extreme heat are also likely to worsen global hunger and cause more severe malnutrition.

For a more in-depth description of the health implications related to the breakdown of natural systems, see our Healthy People, Healthy Planet report.

Future pandemics, infectious diseases and antimicrobial resistance

For years before the outbreak of COVID-19, scientists had been warning about a pandemic causing a worldwide public health crisis. SARS and MERS were earlier examples of coronavirus outbreaks that spilled over from animals to humans.

The scientific community and WHO continue to warn that other infectious diseases are on the horizon and to call for concerted efforts to better prepare for the next pandemic.[17]

WHO outlines three main types of infectious diseases that can create a significant burden on health systems worldwide:[18]

- *Zoonoses:* infectious diseases transmitted from animals to humans, for example, an animal borne influenza such as swine flu, bird flu or COVID-19.

- *Vector-borne:* infectious diseases transmitted by parasites, bacteria or viruses, for example, malaria, Lyme disease and dengue fever.

- *Water-borne:* pathogens transmitted via polluted water, causing, for example, typhoid fever, cholera, hepatitis A or salmonella.

Intrinsically linked to the increasing threat of infectious disease outbreaks is the imminent threat of antimicrobial resistance (AMR). AMR occurs when bacteria, viruses, fungi and parasites evolve over time to develop resistance to antibiotics, making infections more difficult or nearly impossible to treat. AMR is of global concern because the inability to treat common infections also allows infectious diseases to spread faster. This puts more people at risk, is likely to lengthen hospital stays and can have a significant impact on standard medical procedures such as surgery, chemotherapy, cesarean sections and organ transplants.[19]

AMR causes about 700,000 deaths per year worldwide. This number could rise to 10 million a year by 2050. Because AMR could have the potential to cause the next pandemic, there are calls for substantially reinforced efforts to tackle AMR.[20]

Health inequality and access to healthcare

Social determinants of health (SDH) are non-medical factors that influence health outcomes, such as a person's level of income, education, employment, living conditions, and access to suitable healthcare. SDHs account for 30–55% of health outcomes and are central to mounting health inequality. While disparities in the health status of different social groups are apparent in all countries, irrespective of development status, WHO emphasizes that people in a lower socio-economic position are at higher risk of poor health.[21]

Access to primary care is of paramount importance to overcoming health inequities and reducing the burden on health systems. WHO states that about 50% of the world's population have insufficient access to basic health services and out-of-pocket spending on healthcare pushes 100 million people each year into extreme poverty. Access to affordable healthcare is essential to preventing disease, promoting health and counteracting financial distress while improving people's wellbeing and quality of life. Access to care is therefore indispensable in building resilient health systems.[22]

Governance

Governance of health systems is fundamental to building resilience as policies and regulations create national operating environments. Effecting change in health systems can require long lead times as change management processes are slow and stand in the way of preparing for shocks and responding effectively in times of crisis.

The EU Observatory on Health Systems and Policies argues that building health system resilience requires effective leadership, strong coordination across governmental functions, and coordination with other key stakeholders, including the private sector. These factors help to ensure efficient information flows to strengthen early warning surveillance systems built upon diagnostic capacities.[23]

A world of just-in-time production and consumption has left little elasticity to respond to sudden spikes in demand. While health systems gain efficiency in the short term, they lose resilience to sudden shocks in the long term. Governments are also overextended in terms of their own capacities and capabilities to provide basic services, coordinate appropriate responses, and understand and manage supply chain dynamics.
For example, some policies enacted to reduce the cross-border movement of high-demand resources during the first wave of the pandemic created trade barriers that impeded the distribution and delivery of essential supplies to locations with a critical need for them.

Capacity and adequate financial, human and physical resources

The ability of a health system to perform at optimal levels and provide quality care relies heavily on adequate financial, human and physical resources. Health systems need to have sufficient capacities across these three components and the flexibility to reallocate, redistribute and reinject additional resources to meet changing demands, especially in times of crisis when sudden surges in demand require a swift response.

6. Strategies for business to strengthen health system resilience

The COVID-19 pandemic has provided a stark reminder that robust, well-resourced and resilient health systems are vital for a wide range of economic sectors to adequately operate and function. In turn, the pandemic's devastating consequences have served as an inflection point for many sectors to understand their interconnectedness with the healthcare value chain and to recognize the contributions they can make to building health system resilience.

Health systems depend directly or indirectly on a variety of economic sectors, particularly communications, chemicals, emergency services, energy, food and agriculture, finance, information technology and transportation systems[24] (see Figure 2).

For example, the energy, food and water sectors provide essential inputs and supplies to both patients and the workforce. Communications and information technology play key roles in connecting health systems and care providers, storing patient medical data, and delivering healthcare services. Chemicals are a key input for the development of medical products and equipment. The list goes on. It is clear that health systems depend on many other critical national infrastructure sectors.

*Figure 2: Interconnections of critical infrastructure sectors with health system building blocks*
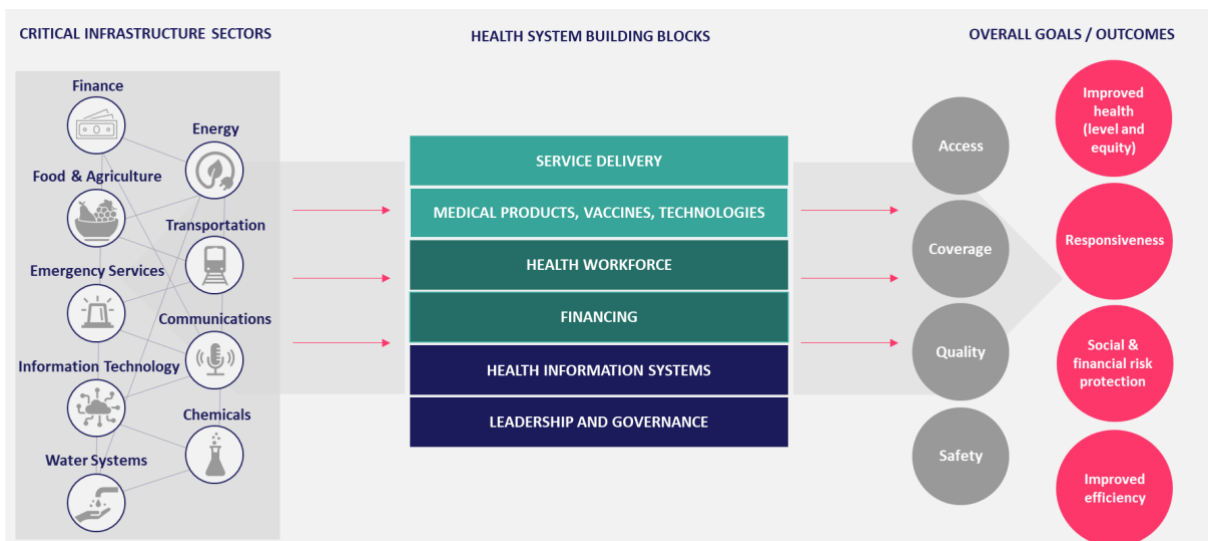
Source: Adapted from WHO's Health System Framework[25] and US Cybersecurity and Infrastructure Security Agency[26]

With their know-how, innovative capabilities and stakeholder networks, businesses in these value chains have a key role to play in identifying health system resilience gaps and developing strategies to close them.

We have identified three strategic avenues through which businesses from a variety of sectors can contribute to enhancing health system performance and to building health system resilience.

These strategies aim to strengthen all six health system building blocks as outlined in Figure 1 and 2 by addressing structural challenges and fostering preparedness for future shocks.

1. Assess → 2. Enage → 3. Deliver
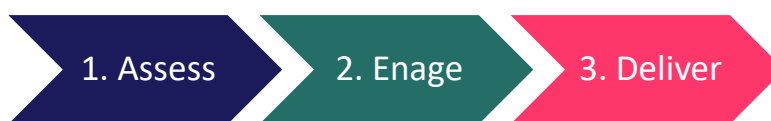
1. Assess

Businesses from all sectors should identify their direct and indirect impacts and dependencies on health systems to assess bottlenecks and vulnerabilities while pursuing opportunities to close resilience gaps.

To identify resilience gaps, assess areas sensitive to disruption and evaluate levels of exposure to various threats, businesses can conduct resilience, stress and emergency tests – on their direct operations, with their suppliers and with the communities in which they operate. Such analyses can help businesses better understand impacts and dependencies on the health sector, mitigate or prevent threats, overcome structural barriers and enhance preparedness to acute shocks (International Organization for Standardization standard 22301 – Security and resilience – Business continuity can serve as a starting framework[27]).

In addition, businesses should understand how they can best collaborate with other parties to support national preparedness and response efforts. Before proceeding, it is critical to understand a country's policies, regulations and protocols (at local, regional or national levels) that govern private sector engagement in all relevant geographies to identify what support routes are possible. The catalyst for such engagements is often governments, which establish legal frameworks in this area.

Businesses are in a unique position as they have knowledge about local and global supply chains crisscrossing communities through their operations. Such a view may enable businesses to detect demand fluctuations before public authorities notice the onset of a potential crisis. For example, businesses may observe a sudden surge in demand for specific products, materials or equipment before public knowledge about a new health threat emerges.

By signaling a flux in demand early to the relevant authorities, businesses can help elevate signs of disruptions, thereby enhancing early warning systems to activate a response. This would be a substantial contribution to boosting and expanding surveillance mechanisms.

In collaboration with governments, businesses can also contribute to better surveillance and early warning systems more broadly, for example, by strengthening communication and information exchange systems. Telecommunications and internet-based companies can develop (or lean on existing) communication infrastructure to sound alarms and provide key information when needed.

Recommended actions

- **Conduct resilience tests, stress and emergency exercises and operational sensitivity analyses to**
    - o **Document health system capacities and gaps**
    - o **Evaluate the level of preparedness and efficacy of processes at operational, corporate and sector-level.**
- **Understand national policies, regulations and protocols for private sector engagement to identify how private sector action can support national preparedness and response efforts.**
- **Monitor, detect and signal demand fluctuations within supply chains for early response activation.**
- **Support the enhancement and expansion of surveillance, detection and early warning systems.**

2. Engage

Businesses can help close health system resilience gaps by creating new forms of partnerships across sectors, with governments and multilateral institutions, communities, civil society and other key stakeholders.

Health outcomes are the result of many determinants, including social, behavioral, environmental and economic factors. Therefore, strengthening health systems and driving positive health outcomes require innovative partnerships and collaborations at sectoral and systemic levels. Businesses can build, expand and strengthen cooperation channels with governments, multilateral institutions, communities and civil society to help close resilience gaps.

There is ample opportunity to expand and enhance collaboration efforts between the public and private sectors. Public-private partnerships can be instrumental mechanisms for governments and business to advance together on common objectives. Largely applied in infrastructure sectors such as transport, water or energy, social infrastructure sectors are progressively using public-private partnerships, especially to provide and enhance the delivery of health services.

Public-private partnerships allow for pooling of resources and skills, sharing risks, and accountability. They also provide a platform for ongoing collaboration, dialogue and knowledge exchange and strengthen national and local institutions. For governments, such partnerships often provide access to new sources of finance, technology and a more diversified skill set. In turn, they create valuable benefits for businesses by providing access to wider public service developments and the opportunity to share best practices and engage in dialogue to guide policy transformation.

More broadly, businesses can facilitate knowledge transfer, elevating their key lessons learned and insights to tackle structural barriers and manage crises. It is important to raise awareness, enhance information flows and articulate the public value of efforts to enhance resilience. Using their knowledge and expertise, businesses can create capacity-building partnerships through education, training and upskilling.

Recommended actions

- **Build, strengthen and expand cooperation channels within and across industry sectors, with governments, multilateral institutions, communities and civil society to break down barriers and close resilience gaps.**
- **Engage in public-private partnerships, advisory groups and other forms of public-private initiatives (including blended finance) to advance wider infrastructure and policy transformation.**
- **Facilitate knowledge transfer and support capacity-building partnerships through education, training and upskilling.**

CASE STUDY: 3M and Get to Yes – enhancing access to dental care

Eager to help improve health equity, 3M partnered with a dental coalition called Get to Yes that had taken on decade-long efforts to improve dental access for underserved Minnesotans in the US.

3M guided the coalition to develop a public value advocacy playbook, including a white paper describing the social impact of their proposal, and a slate of key influencers and decision-makers in state government eager to hear their proposal. The Get to Yes coalition leveraged this playbook by engaging in dialogue with legislators, local communities and the executive branch. As a result of this collaboration, legislators increased state funding for dental access by USD $61 million, which the federal government will match with another USD $61 million.

The initiative aims to provide dental care to an additional 15% of Minnesota's Medicaid population. New delivery models will help gain the trust of patients so they can receive much-needed dental care. Increased trust will help decrease health disparities, reduce disease burden and drive down overall healthcare costs.

CASE STUDY: Healthcare access for all in Rwanda – Abbott

Some 83% of the population in Rwanda lives in a rural setting. Distance, a lack of infrastructure and costly transportation options limit access to quality healthcare. Abbott formed a public-private partnership with the Rwandan Ministry of Health and the Society for Family Health (SFH) to redesign and reimagine health posts, the key access point for the provision of full-spectrum primary healthcare.

Working on the ground in Rwanda, the team enabled strong support and participation by engaging the local community in key decisions from the beginning of the project. Abbott also supported strategic planning, project management, data collection and analysis, and business communications, resulting in the transfer of knowledge and expertise to the local NGO partner, which has strengthened its operational capabilities.

Through their joint efforts, Abbott, the ministry and SFH served more than 232,000 patients, addressing tens of thousands of malaria cases, respiratory infections and intestinal parasites through an operational model validated by financially self-sustained healthcare practitioners. These service enhancements and expansions have resulted in higher services levels throughout the health system as second-generation health posts have been successful in diverting simple treatment cases from overcrowded health centers, helping to make the system more resilient day-to-day and improving its adaptability in the face of future shocks.

CASE STUDY: Partnership for Health System Sustainability and Resilience

The World Economic Forum, the London School of Economics and AstraZeneca have founded the Partnership for Health System Sustainability and Resilience. This collaboration aims to build knowledge, understanding and consensus on the dimensions of and the relationship between health system sustainability and resilience. It also aims to provide policy recommendations and facilitate cross-border and cross-sectoral collaboration by enabling knowledge transfer among key stakeholders.

3. Deliver

Delivering innovations in health-focused products and services, guiding crisis preparations and response management and reducing pressure on health systems require the actions of businesses from a range of sectors.

Innovation

To strengthen health system capacities and deliver lasting impact, innovation in products, services and their respective distribution and use will be crucial. Businesses from a variety of sectors have a central role to play in driving health-focused innovation at scale. Many of the advances in global health over the past century have come from innovations *within* the healthcare sector directly and from significant technological developments in communication, manufacturing and logistics.

Innovations in logistics and transportation will further enhance distribution networks and digital transformation will improve health system efficiency. In times of crisis, businesses can provide access to distribution networks to ensure that essential supplies reach their destination.

Crisis preparation and response

The pandemic has shown that businesses have become disciples of efficiency and just-in-time thinking, which means that they have vigorously removed slack or surge capacities from systems.[28] As a result, global supply chains lack the necessary elasticity to respond swiftly in times of crisis. Building surge capacity back into the system is vital. This starts with monitoring supplies and ensuring more than scant inventories of essential products and equipment. Governments must work with businesses to ensure sufficient stockpiles are available to absorb sudden surges in demand. On average, inventories should be able to provide supplies for about 10-12 weeks from the onset of a crisis, which is about the time needed for global supply chains to adjust their manufacturing and distribution capacities when a major disruption causes a sudden surge in demand.

CASE STUDY: Google provides digital innovation for disaster relief

In the aftermath of the devastating 2011 earthquake in Haiti, Google demonstrated how digital innovation can provide solutions for disaster relief efforts. To assist rescue efforts, the company worked in collaboration with the US State Department to create a system that helps find missing people. It took less than 36 hours from the onset of the disaster for Google to create the system.

The online application, People Finder, provided a central database on which survivors and those searching for loved ones could post information about their whereabouts. This innovation came at a crucial moment as the earthquake had damaged critical communication infrastructure, such as telephone lines.

Following its success in Haiti, stakeholders used the application in Pakistan after an extreme flooding event and in the US after Hurricane Katrina.

Reducing pressure on health systems

Throughout the pandemic, alternative care delivery models such as telemedicine have allowed health systems to adapt quickly and have ensured continuity of services. For example, in early 2020 the United States saw an upsurge in the use of telehealth capacities following the onset of the first COVID-19 wave, with office and outpatient physician visits conducted remotely *78-times* more often than before. In addition, remote reviews of radiology scans improved patient and provider safety, preserved patient access to healthcare, and allowed for more flexible diagnostic support.[29]

The increased use of remote medical services enabled by technology is here to stay: US telehealth visits declined after the shock of the pandemic's first wave but stabilized at *38-times* pre-pandemic levels late in 2020.[30] Following the pandemic, alternative and flexible care delivery models like this will continue to be essential to enabling people to access healthcare more efficiently, affordably and closer to home.

Furthermore, businesses can play a central role in mobilizing their workforce, networks and the communities in which they operate by providing vaccination support and supporting fact-based vaccine education. Hosting pop-up clinics for vaccination campaigns or routine checks on corporate campuses is one way to provide easy access to employees and local communities.[31]

As discussed previously, health systems depend on a variety of industry sectors to function effectively. Businesses can support infrastructure development across sectors at local, regional and national levels as part of their efforts to build long-term health system resilience.

Lastly, businesses have a significant opportunity and responsibility to reduce pressures on health systems by influencing and supporting their employees and consumers to live healthier lives. The promotion and integration of a culture of health and wellbeing into the organizational make-up is a key means to encourage change and prevent negative health outcomes. Innovation and the rebalancing of product portfolios are critical in influencing and driving lasting consumer behavior change and supporting healthier lifestyles.

Recommended actions

Innovation
- Drive product and service innovation through, for example, digital transformation in logistics and transportation.

Crisis preparation and response
- Proactively assess the supply and availability of essential products and equipment. Maintain sufficient stockpiles to provide materials for 10-12 weeks from the onset of a crisis.
- Provide and expand access to distribution networks to deliver essential supplies.

Reduced pressure on health systems
- Foster alternative and flexible healthcare delivery models so people can access health systems more efficiently, affordably and conveniently (e.g., telehealth or pop-up clinics on corporate campuses).
- Provide access to vaccinations and support fact-based vaccine education.
- Support cross-sectoral infrastructure developments at local, regional and national levels (e.g., through electrification[32]).
- Promote employee health and wellbeing from within organizations, health systems and businesses to support healthy consumer lifestyles.

CASE STUDY: Upgrading electricity supply to enhance quality healthcare in rural health facilities in Angola - Eni

The lack of access to power compromises the provision of both routine and emergency healthcare, consequently affecting the availability and quality of care. In support of Angola's National Development Plan 2018-2022, which seeks to enhance access to health services for 80% of the population by 2022, Eni has been collaborating with the Ministries of Health and Energy & Water to help install solar systems in a number of public health centers in the rural areas of the Luanda province.

Three health facilities have already been equipped with solar systems which enable them to provide 24 hours health services. Nearly 30,000 people in Kilunda, Kididi and Cabo Ledo have already benefited from these infrastructure improvements permitting enhanced quality care. In 2022, four more health centers in Buraco, Demba Chio, Quiminha and Vitrona will receive solar installations, improving health services for an additional 13,000 people.

Moreover, the intervention also improves working conditions for the personnel of the health facilities, while building capacity and creating new jobs around the maintenance of the new solar energy systems and supporting equipment.

CASE STUDY: Ebola Private Sector Mobilization Group (EPSMG)

In response to the 2014 outbreak of Ebola in West Africa, ArcelorMittal created the Ebola Private Sector Mobilization Group (EPSMG). It brought together up to 100 companies operating in the region to coordinate a common response and actions to the unfolding health emergency. This collaboration allowed businesses to better maintain operations during the crisis, which offered much-needed stability and resilience through the continuous provision of wages, as well as healthcare support for affected communities.

An example of cross-sector collaboration in the face of an acute health crisis, it also acted as a platform for bilateral relations between the private and public sectors, allowing NGOs to combine their humanitarian expertise with the equipment, transport and accommodation that businesses on the ground had at their disposal. In this way, EPSMG went far beyond tapping into the financial resources of the private sector by focusing on unlocking skills and assets to effectively deliver help throughout the affected region.

7. Conclusion

Businesses from a variety of sectors play essential roles in building health system resilience and thereby contribute to the Vision 2050 health and wellbeing pathway goal to achieve the highest attainable standard of health and wellbeing for everyone, everywhere.

While this represents an important opportunity to contribute to the realization of a healthier and stronger society, it also provides a significant window of opportunity to enhance business resilience.

The tragic consequences of the COVID-19 pandemic have reinforced the vital importance of robust, well-resourced and resilient health systems to societies and economies. They have also highlighted the need for governments, healthcare professionals and businesses alike to come together to best prepare for and respond to existential threats. Cross-sectoral and public-private partnerships provide significant opportunities to identify and close current and future resilience gaps.

Building health system resilience goes far beyond preparing for and bouncing back from individual shocks and disasters. It involves mitigating the exposure to threats as much as possible and strengthening the ability of health systems to overcome structural challenges to withstand any catastrophic event.

Businesses that recognize their interconnectedness and dependence on health systems can unlock transformational change. The paper has outlined three strategic avenues through which businesses from a range of sectors can identify direct and indirect impacts and dependencies on health systems, engage in new forms of sectoral, cross-sectoral and public-private partnerships to help close resilience gaps and deliver innovations to enhance crisis preparation and reduce health system pressures. Applying these strategies will help to strengthen health systems and will also be an important determinant of long-term business resilience. Success relies upon continuous, concerted and effective efforts to bridge private and public domains.

WBCSD's Healthy People, Healthy Business project will continue to explore opportunities and identify strategies for businesses to contribute to building health system resilience and welcomes the opportunity for continued stakeholder engagement on this critical topic.

Disclaimer

This publication has been developed in the name of WBCSD. Like other WBCSD publications, it is the result of a collaborative effort by members of the secretariat and senior executives from member companies. A wide range of members reviewed drafts, thereby ensuring that the document broadly represents the perspective of the WBCSD membership. Input and feedback from stakeholders listed above was incorporated in a balanced way. This does not mean, however, that every member company or stakeholder agrees with every word.

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Every organization today faces complexity across multiple levels on a frequent basis. And navigating these challenges and opportunities demands more than the one-dimensional maps, tools or solutions of the past. You need a guide with an understanding of your industry and the proven experience to navigate the changing terrain ahead. At Guidehouse, we combine unequaled expertise, specialized resources and deep domain experience to solve problems that cross sectors, industries and geographies for clients of the public sector and the regulated commercial markets they serve.

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About WBCSD

WBCSD is the premier global, CEO-led community of over 200 of the world's leading sustainable businesses working collectively to accelerate the system transformations needed for a net-zero, nature-positive, and more equitable future.

We do this by engaging executives and sustainability leaders from business and elsewhere to share practical insights on the obstacles and opportunities we currently face in tackling the integrated climate, nature and inequality sustainability challenge; by co-developing "how to" CEO-guides from these insights; by providing science-based target guidance including standards and protocols; and by developing tools and platforms to help leading businesses in sustainability drive integrated actions to tackle climate, nature and inequality challenges across sectors and geographical regions.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than USD $8.5 trillion and 19 million employees. Our global network of almost 70 national business councils gives our members unparalleled reach across the globe. Since 1995, WBCSD has been uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability, united by our vision of creating a world in which 9+ billion people are living well, within planetary boundaries, by mid-century.

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Endnotes

[1] Martínez-García, Mireya & Hernández-Lemus, Enrique (2013). Health Systems as Complex Systems. *American Journal of Operations Research*. 03. 113-126. 10.4236/ajor.2013.31A011.

[2] World Health Organization (2010). *Monitoring the building blocks of health systems*. Retrieved from: https://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf.

[3] World Health Organization (2010). *Monitoring the building blocks of health systems*. Retrieved from: https://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf.

[4] Thomas et al. (2020). *Strengthening health systems resilience*. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/332441/Policy-brief%2036-1997-8073-eng.pdf?sequence=1&isAllowed=y.

[5] Barasa, E. W., Cloete, K., & Gilson, L. (2017). From bouncing back, to nurturing emergence: reframing the concept of resilience in health systems strengthening. *Health policy and planning*, 32(suppl_3), iii91–iii94. https://doi.org/10.1093/heapol/czx118. Retrieved from: https://pubmed.ncbi.nlm.nih.gov/29149319/.

[6] World Health Organization (2021). Aging and health. Retrieved from: https://www.who.int/news-room/fact-sheets/detail/ageing-and-health.

[7] World Health Organization (2021). Aging and health. Retrieved from: https://www.who.int/news-room/fact-sheets/detail/ageing-and-health.

[8] World Health Organization. Burden of noncommunicable diseases in the Eastern Mediterranean Region. Retrieved from: http://www.emro.who.int/noncommunicable-diseases/publications/burden-of-noncommunicable-diseases-in-the-eastern-mediterranean-region.html.

[9] World Health Organization (2019). Ten threats to global health in 2019. Retrieved from: https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019.

[10] Planetary Health Alliance (2021). Planetary Health. Retrieved from: https://www.planetaryhealthalliance.org/planetary-health.

[11] World Health Organization (2021). Climate change and health. Retrieved from: https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health.

[12] World Health Organization (2021). Air pollution. Retrieved from: https://www.who.int/health-topics/air-pollution#tab=tab_1.

[13] The World Counts, Air Pollution Deaths Per Year. Retrieved from: https://www.theworldcounts.com/challenges/planet-earth/air/air-pollution-deaths-per-year/story.

[14] World Meteorological Organization (2021). Weather-related disasters increase over past 50 years, causing more damage but fewer deaths. Retrieved from https://public.wmo.int/en/media/press-release/weather-related-disasters-increase-over-past-50-years-causing-more-damage-fewer.

[15] United Nations (2021). Climate change link to displacement of most vulnerable is clear: UNHCR. Retrieved from: https://news.un.org/en/story/2021/04/1090432.

[16] Henley, J. (2020). Climate crisis could displace 1.2bn people by 2050, report warns. *The Guardian*. Retrieved from: https://www.theguardian.com/environment/2020/sep/09/climate-crisis-could-displace-12bn-people-by-2050-report-warns.

[17] Gavi, The Vaccine Alliance (2021). The next pandemic. Retrieved from: https://www.gavi.org/vaccineswork/next-pandemic.

[18] World Health Organization (2021). *COP26 Special Report on Climate Change and Health*. Retrieved from https://www.who.int/publications/i/item/cop26-special-report.

[19] World Health Organization (2021). Antimicrobial resistance. Retrieved from: https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance.

[20] GSK (2021). Antibiotic resistance: now's the time to prevent the next pandemic. https://www.gsk.com/en-gb/behind-the-science/antibiotic-resistance-now-s-the-time-to-prevent-the-next-pandemic/.

[21] World Health Organization (2018). Health inequities and their causes. Retrieved from: https://www.who.int/news-room/facts-in-pictures/detail/health-inequities-and-their-causes.

[22] World Health Organization (2021). Universal Health Coverage. Retrieved from: https://www.who.int/health-topics/universal-health-coverage#tab=tab_1.

[23] Thomas et al. (2020). *Strengthening health systems resilience*. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/332441/Policy-brief%2036-1997-8073-eng.pdf?sequence=1&isAllowed=y.

[24] US Cybersecurity and Infrastructure Security Agency (CISA) (2021). Healthcare and the public health sector. Retrieved from: https://www.cisa.gov/healthcare-and-public-health-sector.

[25] World Health Organization (2010). *Monitoring the building blocks of health systems*. Retrieved from: https://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf.

[26] US Cybersecurity and Infrastructure Security Agency (CISA) (2021). Critical infrastructure sectors. https://www.cisa.gov/critical-infrastructure-sectors

[27] International Organization for Standardization (ISO) (2019). ISO 22301:2019 Security and resilience — Business continuity. Retrieved from: https://www.iso.org/standard/75106.html.

[28] WBCSD (2020). *Building long term business resilience* (Vision 2050 issue brief). Retrieved from https://www.wbcsd.org/Overview/About-us/Vision-2050-Time-to-Transform/Resources/Building-long-term-business-resilience.

[29] McKinsey & Company (2021) Telehealth: A quarter-trillion-dollar post-COVID-19 reality? Retrieved from: https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality.

[30] McKinsey & Company (2021) Telehealth: A quarter-trillion-dollar post-COVID-19 reality? Retrieved from: https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality.

[31] McKinsey & Company (2021) Getting to work: Employers' role in COVID-19 vaccination. Retrieved from: https://www.mckinsey.com/industries/life-sciences/our-insights/getting-to-work-employers-role-in-covid-19-vaccination.

[32] World Health Organization (2020). WHO guidance for climate resilient and environmentally sustainable health care facilities. https://www.who.int/publications/i/item/9789240012226

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