Healthcare systems outmatched by new human security challenges
CHAPTER 6

Healthcare systems outmatched by new human security challenges
Health is fundamental to human security, which is concerned with protecting the “vital core of all human lives in ways that enhance human freedoms and human fulfilment,” and people’s ability to exercise their freedoms depends on their health. In other words health directly constitutes people’s wellbeing and enables people to exercise agency (that is, the ability to pursue what they value in life). In contrast, ill health not only diminishes wellbeing; it also limits people’s agency. Threats to health present some of the most critical challenges to human security.

The past few decades have seen major improvements in global health. Child mortality was more than halved between 1990 and 2019, and life expectancy has greatly improved. Maternal mortality rates have declined significantly, though they remain unacceptably high in some parts of the world. There have been large reductions in mortality from HIV/AIDS, malaria and diarrhoeal diseases. Disparities between developing and developed countries in basic health outcomes have greatly narrowed over time. But a new generation of health challenges has come into play in the form of more frequent new and re-emerging zoonotic diseases (linked to the Anthropocene context) and the predominance of noncommunicable diseases, resulting in a mismatch between new health challenges and the healthcare systems that have propelled achievements in basic health outcomes.

The Covid-19 pandemic has been one of the most acute threats to people’s health in recent decades, but this type of pandemic is expected to increase in frequency in the near future. Covid-19 started as a health shock and has gone hand in hand with an enormous setback for human development. In 2021 Covid-19 adjusted Human Development Index (HDI) values remain far below their precrisis levels (see box 1.1 in chapter 1), resulting in a clear setback to human security. The pandemic has shown that without considering threats to human security, gains in human development remain vulnerable to reversal.

Health threats are unevenly experienced and their impacts unequally distributed, mediated by people’s exposure and their ability to cope with and recover from them once they occur. The ability to weather poor health and to live a healthy life is connected closely to the conditions for people to grow up, learn, work and age—that is, to social determinants of health. In countries at all incomes, poor socioeconomic outcomes are associated with poor health outcomes. A substantial and growing body of evidence shows that the impacts of Covid-19 on people have been driven by inequalities in the social determinants of health.

Because health outcomes are shaped strongly by decisions outside the health sector, efforts to protect against threats to health cannot be limited to healthcare systems alone but must also be connected to systemic measures.

The gap between health threats and the ability of healthcare systems to address them poses a critical challenge for human security. At the same time, healthcare systems are among the most promising spaces for advancing the new generation of human security strategies, combining protection, empowerment and solidarity.

For instance, the global burden of disease has been shifting, with noncommunicable diseases accounting for an increasing share of the causes of ill health and mortality. Health systems that delivered impressive gains in meeting the challenges of communicable diseases, maternal health and child health are evolving to address the new challenges of chronic illnesses and noncommunicable diseases. Still, while the need for affordable and comprehensive healthcare is intensifying, healthcare remains inaccessible to many people around the world. Nearly half the world’s people lack complete coverage of essential health services. Progress towards the World Health Organization’s (WHO) goal of 1 billion more people benefitting from universal health coverage by 2023 was slowing even before the Covid-19 pandemic. Out-of-pocket health spending is catastrophic for poor people and is an increasingly substantial burden for middle-class households as well.

The gap between health threats and the ability of healthcare systems to address them poses a critical challenge for human security. At the same time, healthcare systems are among the most promising spaces for advancing the new generation of human security strategies, combining protection, empowerment and solidarity. The aspiration is for healthcare systems that directly protect people against a wide range of threats to human security (including disasters, chronic illnesses and infectious diseases), empower people by supporting the broad expansion of human capabilities and support solidarity by

CHAPTER 6 — HEALTHCARE SYSTEMS OUTMATCHED BY NEW HUMAN SECURITY CHALLENGES
As economies bounce back from the Covid-19 pandemic, people’s health remains under threat

Reported deaths due to the Covid-19 pandemic surpassed 5 million at the end of 2021. Excess mortality is estimated to be at least double that number globally. Interruptions in health and nutrition services and declines in household income due to the pandemic are set to have devastating consequences on child nutrition and, in turn, possibly on child mortality and long-term health. The pandemic has gone from a health crisis to a full-fledged human development crisis. In 2020 the world Covid-19 adjusted HDI value declined, reflecting impacts from large disruptions in education systems to labour market dislocations.

The year 2021 was expected to be a year of recovery, as more information about the characteristics of the virus that causes Covid-19 was uncovered and multiple vaccines became available (even if used unequally across and within countries). In practice, we are living through another manifestation of economic development with human insecurity. While most economies bounced back and global income per capita reached a historical peak, health outcomes reached a new low: global life expectancy declined for the second year in a row. Based on data on excess mortality in 2021, the gap in global life expectancy at birth with respect to the non-Covid-19 scenario is an estimated 1.5 years, or a 7 year reversal for the world as a whole (figure 6.1).

While most economies bounced back and global income per capita reached a historical peak, health outcomes reached a new low: global life expectancy declined for the second year in a row

The economic recovery, while substantial, has been uneven. Developing economies have had more limited emergency fiscal responses than developed countries. By mid-2021 countries had spent $16.9 trillion globally on Covid-19 pandemic–related fiscal measures. The heterogeneity across countries in responses to the economic effects of the pandemic is substantial—in their speed of response, reach and, above all, size. Overall, in 2020 advanced economies spent 23.1 percent of GDP on discretionary fiscal measures, compared with emerging economies’ 9.9 percent of a smaller GDP. Low-income countries spent 4.1 percent of 2020 GDP. Monetary policy in advanced economies has also relied on unprecedented and exceptional measures to support the fiscal efforts.

Most of the direct fiscal support measures have targeted households (by expanding or creating new cash and noncash transfers), businesses (by providing access to financial resources and the ability to meet payments during the Covid-19 pandemic) and health systems (by spending more in the health sector). As the pandemic worsened and the economic consequences of several lockdowns started to hit, countries designed and implemented alternative lifelines to protect households, support businesses and bolster the health sector.
As a result of asymmetries in the fiscal and monetary measures put in place during the Covid-19 pandemic, high-income economies have experienced smaller economic contractions than low- and middle-income countries. Low- and middle-income countries have also experienced greater disruptions in essential health services during the Covid-19 pandemic than high-income countries and greater challenges accessing life-saving medicines and other essential supplies, such as medical oxygen. Emergency support measures are also winding down earlier in emerging economies than in high-income ones. A large part of fiscal support is expiring in Brazil and China, and only in high-income economies (France, Japan, Spain, the United States) is it being replaced by additional measures or a substantial extension of existing programmes. For the remaining emerging economies the extension of fiscal measures has been extremely limited.

Deploying vaccines has been central in making economic recovery possible. Therefore, disparities in vaccine access and use are not only a morally repugnant situation but also a key driver of divergence between countries’ economic recoveries.

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Even though at least 10 manufacturers set production targets of a billion doses each by 2021, access to Covid-19 vaccines has posed a considerable challenge for several developing countries. Many developing countries are still far from the way out of the crisis but have not been able to access enough licenced vaccines to cover their entire population. The constraints they have faced include limited vaccine supply and insufficient cooperation and investment in global solutions to combat Covid-19. In this sense, greater international cooperation is required to distribute vaccines at affordable prices. The main cooperative mechanism to combat inequality in access to vaccines is the global COVAX initiative, which aims to reach the most vulnerable 20 percent of every nation around the world.
Figure 6.2 The disparities in Covid-19 vaccination across countries and territories are stark

But it has faced insufficient funding to purchase vaccines and competing national vaccine procurement strategies. During the Group of 7 Summit in June 2021, high-income countries announced the donation of 1 billion vaccines, to be delivered mainly to developing countries through the COVAX initiative.

Market mechanisms could also help countries expand vaccine production. Temporary exemptions on the protection of intellectual property for Covid-19 vaccines from vaccine-producing countries and manufacturers could help expand vaccine production (see chapter 3), as could raw material exports, technology transfers and expanded manufacturing capacity in low- and middle-income countries.

An evolving disease burden is driving adjustments to healthcare systems

As countries have become better at protecting basic health, the biggest health threats have shifted to noncommunicable diseases—primarily cancer, diabetes, cardiovascular disease and chronic lung disease—just when healthcare systems were facing increasing pressures from noncommunicable diseases. As countries have become better at protecting basic health, the biggest health threats have shifted to noncommunicable diseases—primarily cancer, diabetes, cardiovascular disease and chronic lung disease. These diseases, on the rise worldwide over the past decades, are rapidly becoming a central public health challenge. Globally, the cause and distribution of the disease burden are shifting, from communicable diseases to noncommunicable diseases, and an increasing share of this new burden of diseases is affecting developing countries (figure 6.3).

Figure 6.3 More people are dying from noncommunicable diseases today than in the past

Noncommunicable diseases together accounted for 74 percent of deaths in 2019, 36 most of them in developing countries (see figure 6.3). The pressure of these diseases will likely intensify globally because the number of people over age 65 is expected to more than double by 2050 (see table 5.1 in chapter 5). Social determinants of health shape the prevalence and distribution of noncommunicable diseases as well as the mortality associated with them. For instance, the main behavioural risk factors (unhealthy diets, tobacco smoking, low physical activity and excess alcohol consumption) and physical risk factors (obesity, high blood pressure and diabetes) for noncommunicable diseases are socially patterned, as is exposure to pollutants that cause specific noncommunicable diseases. Mental health has become a human security emergency (box 6.1). Having low socioeconomic status or living in a low- or middle-income country increases the risk of developing type 2 diabetes, chronic pulmonary disease, cardiovascular disease and lung cancer. Many noncommunicable diseases are preventable with policy measures that address their main risk factors and underlying social determinants. Effective action goes beyond healthcare systems to include justice, education, social welfare, urban planning and environment protection.

Although people in some developing countries (in particular those in Sub-Saharan Africa) were still

*Box 6.1 The mental health crisis is a human security emergency*

Addressing mental health is directly relevant to advancing human security. Mental disorders place a massive burden on every aspect of human lives (including relationships, school, work and community participation). Roughly 10 percent of the global population suffers from mental disorders. When children face hardships or environmental stressors, long-term physical health problems as well as damage to the developing brain can result. Globally, about 20 percent of children and adolescents and about 15 percent of people ages 60 and older have mental disorders. These numbers are most likely underestimated. Social stigma works against reporting and diagnosing mental disorders. In many countries access to mental health services is so limited that people do not have the possibility of seeking treatment or being diagnosed.

Common mental health conditions include depression, dementia, bipolar disorder and schizophrenia. These disorders tend to be associated with poor education outcomes, low productivity at work, poverty, premature and excess mortality and poor overall health. Mental health issues are also estimated to generate substantial losses in economic output.

Some of the leading causes of mental health conditions are adverse life experiences (such as abuse, trauma, violence and conflict), ongoing medical conditions (such as cancer and diabetes), substance abuse (such as alcohol and recreational drugs), biological factors (such as genes and brain chemical imbalances) and isolation and loneliness. Some groups are especially vulnerable. Women, because they are more exposed to sexual violence and other potential triggers of mental disorders than men, tend to be more affected by mental health conditions (particularly anxiety, depression, posttraumatic stress and eating disorders).

Major threats to human security, such as conflict, can foster large-scale, long-lasting mental health crises. For instance, negative life experiences such as the Covid-19 pandemic have been linked to anxiety, depression, stress and disturbed sleep, while disrupting mental health services worldwide, particularly in low-income countries.

Often overlooked as a human security issue, mental health is essential for people to enjoy secure lives. So, failing to address mental health amounts to neglecting a major ongoing threat to human security and can leave health systems unprepared for future mental health crises.

*Notes*
more likely to die from a communicable disease (such as malaria, HIV/AIDS or tuberculosis), deaths from communicable diseases have been declining. Meanwhile, deaths from noncommunicable diseases are on the rise across all regions (see figure 6.3). Some countries that are undergoing this transition are facing a triple burden, with increases in noncommunicable diseases and injuries alongside a substantial existing burden from communicable diseases. The growing burden of noncommunicable diseases places new demands on healthcare systems, particularly for preventive or chronic care. Many national healthcare systems that have historically catered to communicable diseases and maternal and child health are ill-prepared for these new demands. Even in some developed countries the growth of multiple noncommunicable diseases—such as cancer—is creating new gaps in healthcare outcomes.

Meanwhile, climate change, biodiversity loss and food insecurity are expected to intensify in the Anthropocene context (see chapter 2), with unequal impacts across and within countries. Air pollution and warmer temperatures resulting from climate change are causing people’s health to deteriorate through both direct and indirect channels. By one estimate, anthropogenic climate change contributed to 37 percent of warm-season heat-related deaths between 1991 and 2018. The biggest increase in heat vulnerability during the past 30 years has been in low and medium HDI countries. Air pollution is a key factor behind excess mortality and low life expectancy, in part by exacerbating cardiovascular disease. Climate change is contributing to the decline in yield potential for major crops in many parts of the world and in turn undermining efforts to curb malnutrition. As chapter 2 discusses, climate change is expected to become a leading global risk factor by the end of this century (though with great inequalities in impact across regions).

Planetary disruptions, health and equity are closely linked. Climate change threatens to undo years of progress in public health and sustainable development outcomes, and adaptation responses are far from adequate. These new risks pose serious challenges to health systems, in addition to disrupting the social, economic and political conditions for the operation of healthcare systems. Some communities and countries are better positioned to cope than others. First, climate change can drive social and economic dislocation—say, by reducing food security or access to water. Second, the health impacts of climate change are not equally borne across people or communities. They fall disproportionately on those left behind socially, poor people and individuals with underlying health conditions. Health shocks can cause families to become and remain poor and in turn be more vulnerable to the hazards associated with the Anthropocene context. The Covid-19 pandemic presents a glimpse of how this new reality can exacerbate human insecurity.

**Reinforcing human security though enhanced healthcare systems**

Affordable, comprehensive and equitable healthcare is vital for human security, both to protect against illness and to promote health more generally. The performance of healthcare systems is itself an important social determinant of health. Well-performing healthcare systems are essential for realizing the human right to health: the right to the enjoyment of the highest attainable standard of physical and mental health. The right to health demands that healthcare services, goods and facilities be available, accessible, acceptable and of decent quality—and be provided to all without discrimination. The right to health also calls attention to the need for going beyond healthcare systems. As Amartya Sen notes, “The policy question points to the fact that good health depends on healthcare, and health care is something that we can be legislate about. But good health does not depend only on health care. It also depends on nutrition, lifestyle, education, women’s empowerment, and the extent of inequality in a society.” So the right to health “has […] broad demands that go well beyond legislating good health care (important as that is). There are political, social, economic, scientific, and cultural actions that we can take for advancing the cause of good health for all.”

“**Well-performing healthcare systems are essential for realizing the human right to health: the right to the enjoyment of the highest attainable standard of physical and mental health**

Still, strengthening healthcare systems is one of the central actions needed to fulfil the human right
to health. Limitations in the performance or equity of healthcare systems pose a pervasive challenge for enhancing human security and addressing major health challenges, including noncommunicable diseases, pandemics and unmet mental health needs. People in countries at all incomes experience the implications of limitations in healthcare systems.\(^6^0\) Contributing factors include fragmented healthcare delivery, shortfalls in the healthcare workforce, ineffective health information systems and weak governance structures.\(^6^1\) Healthcare systems are often difficult to navigate, so much so that they can deter people from seeking care altogether.\(^6^2\)

“Healthcare remains prohibitively expensive for many people around the world. When people lack financial coverage for healthcare, falling ill can have catastrophic financial consequences, which in turn compromise human security.”

People in lower income countries suffer the most from inadequacies in healthcare.\(^6^4\) In low- and middle-income countries an estimated 8 million people die each year from conditions that should be treatable by healthcare systems, and 60 percent of deaths are due to poor quality care.\(^6^4\) About a third of patients in these countries encounter disrespectful care, short consultations, poor communication or long wait times in healthcare systems.\(^6^5\) One patient in ten hospitalized in developing countries can expect to acquire a healthcare-associated infection, compared with 7 in 100 in high-income countries.\(^6^6\) In low- and middle-income countries 5.7–8.4 million deaths a year occur due to poor quality care for a selected set of health conditions (including some communicable, noncommunicable, and maternal and child health conditions).\(^6^7\)

Healthcare remains prohibitively expensive for many people around the world. When people lack financial coverage for healthcare, falling ill can have catastrophic financial consequences, which in turn compromise human security. Unaffordable healthcare directly impedes people’s wellbeing and restricts their ability to work, pursue education, participate in social and political life and live otherwise fulfilling lives. As stated in Anirudh Krishna’s seminal work: “People continue to live only one illness away from poverty.”\(^6^8\) In low-income countries 44 percent of health spending is met by out-of-pocket payments.\(^6^9\) If health insurance or other financing is unavailable, poor people cannot obtain the care they need. Where out-of-pocket spending is the primary source of financing for healthcare, social inequities arise because the costs of healthcare weigh more heavily on those with low incomes. In Sub-Saharan Africa problems with affordability were the most frequent barrier for people unable to access medical care during the pandemic, followed by fear of catching Covid-19.\(^7^0\)

The unequitable burden of out-of-pocket spending is especially disadvantageous in settings where the burden of noncommunicable diseases is growing. The costs of treating these diseases can heavily strain household incomes, contributing to impoverishment.\(^7^1\) The link between noncommunicable diseases and poverty can be a vicious cycle: poverty is associated with risk factors for noncommunicable diseases, and the costs of care for these diseases in turn generate impoverishment.\(^7^2\) High out-of-pocket spending is often related to the cost of medicines, especially burdensome for people with chronic conditions.\(^7^3\) The unaffordability of medicines is a major obstacle for treating many noncommunicable diseases.\(^7^4\) High prices and limited availability make insulin, crucial for treating diabetes, inaccessible for many people.\(^7^5\)

Across countries at all incomes, coping with ill health can be a major burden. In Organisation for Economic Co-operation and Development (OECD) countries 20 percent of health spending is paid directly by households, on average—ranging from less than 10 percent in France to more than 30 percent in Chile, Greece, the Republic of Korea and Mexico.\(^7^6\) Evidence from OECD countries shows that private health spending, such as private health insurance and out-of-pocket spending on health products and services, accounts for a growing share of middle-class budgets.\(^7^7\) Among OECD countries, middle-income households’ health-related spending rose between 2005 and 2015.\(^7^8\) The increase was largest in Chile, Germany, Latvia, the Slovak Republic, Spain and the United States.\(^7^9\)

Middle-class households are spending more on private health insurance than a decade ago. In the United States the highest expenses have been associated with health insurance premiums and out-of-pocket expenses when facing illness, and a strong association has been documented between economic
insecurity and households facing health challenges. Between 2000 and 2010 the average spending of middle-income households on healthcare increased by 51 percent, whereas household incomes grew by 30 percent. By one measure the mean family health insurance premium in 2016 equalled 30.7 percent of median household income. The increasing costs of long-term services and support for the older people and their families present a major risk to the economic security of middle-class families. Family caregivers who provide unpaid assistance to family members in need of long-term services and support do so at the expense of their own economic security. And caregivers are usually women.

Unaffordable and low-quality healthcare diminishes human security. From the standpoint of enhancing human security, and in line with strategies that are based on solidarity, a key contribution would be to move towards universalism in healthcare. Universal policies are “those that reach the entire population with similarly generous benefits independent of the instruments used.” Universalism is a multidimensional concept, incorporating elements of coverage, generosity and equity. A variety of policy instruments and strategies can achieve universalism. The appropriate reforms to this end are necessarily context-specific, depending on social structures, economic conditions, state capacities and initial institutional arrangements.

Because high out-of-pocket health spending drives impoverishment and poor health outcomes, there has been a global push towards universal health coverage, which is relevant for advancing human security. By WHO’s definition, universal health coverage is achieved when all people receive the health services they need, including health promotion and prevention, treatment, rehabilitation and palliative care across the life course without suffering financial hardship. Universal health coverage is one target in the Agenda for Sustainable Development. Coverage of essential services—one of two indicators for monitoring universal health coverage in the Sustainable Development Goal framework—has improved globally since 2000. Most OECD countries have near-universal coverage of costs for some healthcare services, including consultations with doctors, tests and examinations, and surgical and therapeutic procedures. In September 2019 UN member states issued the Political Declaration on Universal Health Coverage, reaffirming a commitment to ensure that by 2030 people would receive the health services they need without suffering financial hardship.

While universal health coverage seeks to address financial protection, the quality of healthcare also matters greatly for health outcomes. There is growing recognition that expanding coverage alone does not translate to better health outcomes, unless healthcare is also high quality. Fulfilling the human right to the highest attainable standard of health also demands investments in the quality of care. Improving the quality of healthcare is important on equity grounds: high quality healthcare should be accessible to all people regardless of their status and identities, and efforts to enhance quality should prioritize people who are receiving the worst quality care. Enhancing human security thus requires moving beyond coverage and towards enhancing quality and equity in healthcare.

“Improving the quality of healthcare is important on equity grounds: high quality healthcare should be accessible to all people regardless of their status and identities, and efforts to enhance quality should prioritize people who are receiving the worst quality care.”

An important issue in advancing healthcare universalism relates to public or private provision. Public provision has long been central in improving population health outcomes, with implications for expanding human development. Private actors have also played an important role in health systems, through provision of care as well as through insurance coverage, pharmaceutical innovation and service delivery, among others. There is evidence that private provision can support some dimensions of universalism—namely coverage, generosity and equity. It can compensate for shortfalls in public provision of healthcare services. Private actors often enjoy greater capacity to spur innovation, experimentation and technological advances in health. Indeed, the private sector could play an important role in addressing the burden of noncommunicable diseases through innovation in diagnostics, treatment and care.

In some settings, however, private responses can undermine equity, as those able to pay enjoy higher quality care than those who must rely on
Strategies to enhance human security based on solidarity: Towards the new generation of universalism in healthcare systems

The Covid-19 pandemic has exposed many longstanding weaknesses of healthcare systems around the world. It has highlighted that nearly anyone could face a sudden health threat and that even the most well-resourced health systems could be overwhelmed by a crisis on such a large scale. In the Anthropocene context these types of threats are expected to increase in frequency and intensity, a lack of preparedness and vast disparities in people’s abilities to weather a health crisis exposed by Covid-19 should serve as a wakeup call. Meanwhile the evolving burden of disease and growing inequalities between and within countries in addressing disease pose additional risks to human security. Beyond Covid-19 there is abundant empirical evidence that long-term adversities—such as poverty, racism, violence against women and girls or unsafe neighbourhoods—can increase the possibility of a wide range of health conditions. These include obesity, diabetes, cardiovascular disease, cancer, substance abuse, autoimmune diseases, enhanced inflammation, impaired cognition, interpersonal and self-directed violence, and chronic mental illnesses. In this context the close relationships among meeting basic needs, promoting freedoms and protecting against shocks become all the more important. Strategies for the new generation of human security must reflect the systemic nature of these threats and move beyond partial solutions that leave the underlying drivers of insecurity unaddressed.

In this vein the new generation of human security needs to systematically foster not only protection and empowerment (dealing with urgent needs while reinforcing agency) but also solidarity. Moving towards universalism in healthcare would be a concrete way to advance human security in the enlarged perspective advocated for in chapter 1.

Actions to meet a shared health threat can come from a wide range of actors using a variety of instruments, going well beyond healthcare systems alone. Efforts to stem the spread and impact of Covid-19 have come from governments, civil society, the scientific community, industry and individuals acting on their own with a common purpose. The success of measures such as movement restrictions, social distancing and masking relied strongly on public legitimacy, empowerment and accountability. Special efforts have been needed to reach those furthest behind, such as people otherwise excluded from social protection systems. And the uneven deployment of several effective vaccines against Covid-19 around the world has highlighted shared (in)security—that the security of one group is not guaranteed unless that of all others is addressed too.

Linking universalism in healthcare with human security

Moving towards universalism in healthcare would directly enhance human security. A genuinely universal healthcare system would provide protection that is not conditional, enhancing capabilities through both prevention and adequate treatment when needed. It would also be empowering because it is based on expanding agency.

“Universal healthcare is framed as a strategy that advances human security through protection, empowerment and solidarity and links to a broader international consensus expressed in the 2030 Agenda for Sustainable Development aspiration to leave no one behind

In exposing structural inequalities and the interconnectedness of human security risks, the Covid-19 pandemic has further highlighted the need for universal and systemic responses to health threats that do not exclude groups and individuals from access to healthcare—not only would that be a direct threat to those excluded, but it would also put whole populations at continued risk. As the inequitable provision and use
of Covid-19 vaccines show, excluding someone from access can pose continued severe threats to the health of many. Experiences during the Covid-19 pandemic therefore emphasize the vital importance of effective universal access to adequate healthcare, in a context of mutual interdependence across countries and people when it comes to the conditions that can advance the pursuit of health as a human right. And it is in this context that solidarity, along with protection and empowerment, acquires heightened relevance.

Universal healthcare is therefore framed as a strategy that advances human security through protection, empowerment and solidarity and links to a broader international consensus expressed in the 2030 Agenda for Sustainable Development aspiration to leave no one behind. It is also expressed in Sustainable Development Goal target 3.8, in the World Health Organization’s UHC service coverage index, in the International Labour Organization’s Social Security for All and in the Global Partnership for Universal Social Protection launched by the World Bank and the International Labour Organization.

Measuring universalism: Introducing the Healthcare Universalism Index

To measure the extent to which healthcare systems can be characterized as universal in the sense elaborated above, this Report introduces the Healthcare Universalism Index (HUI). The HUI, which is based on a comprehensive concept of universalism, incorporates not only effective coverage but also generosity and equity (see annex 6.1).

The HUI shows a large gap across countries at different HDI values. Norway, Japan and Sweden top the index, with values above 0.9, while Afghanistan, Bangladesh, Equatorial Guinea and Nigeria have values below 0.1. Some developing countries have high values, with Costa Rica (0.720), Uruguay (0.703), Kuwait (0.691) and Maldives (0.671) enjoying universalism comparable to that in more industrialized countries such as the United States (0.727). Cuba, another outlier, ranks seventh, higher than historical leaders on universal provision of services such as Germany and the United Kingdom.

Among the HUI components, generosity appears to be the main barrier for healthcare universalism. This emphasizes the key argument that coverage alone is not sufficient: it needs to be accompanied by sufficient investment in quality and accessibility. Low scores among developed countries are typically due to imbalances in achievements across the three dimensions of universalism. For example, while Uruguay scores almost equally well across coverage (0.69), generosity (0.72) and equity (0.70), the United States is characterized by vast differences in dimension scores—especially between coverage (0.86) and equity (0.46).

Among developing regions, Latin America and the Caribbean stands out with high HUI values, despite persistent weaknesses in healthcare systems. The region is followed by the Arab States, Eastern Europe and Central Asia, and East Asia and the Pacific. Countries in South Asia and Sub-Saharan Africa are lagging behind.

HUI values have improved over time: between 1995 and 2017 the world HUI value increased from 0.395 to 0.472. But there are some points of concern:

- **Gaps in universalism between developed and developing countries are widening on average.** In general, progress in universalism across developing countries has been too slow to catch up with high HDI countries (figure 6.4).
- **Progress is heterogeneous.** On the positive side, 80 countries substantially improved on the HUI, with an increase of more than 0.1. Examples include populous countries such as China and Indonesia as well as many African countries, such as the Democratic Republic of the Congo, Côte d’Ivoire, Liberia and Togo. On the other hand, 37 countries experienced a deterioration on the HUI, which mostly reflects less generous, more unequal and overall more segmented healthcare systems. This trend is most prevalent among countries with medium universalism in 1995 and especially strong in Eastern Europe and Central Asia. Countries such as the Central African Republic, Iraq, Sudan, Venezuela and Yemen also saw deteriorations.

Making healthcare systems more universal to address new challenges to human security

To what extent can current healthcare systems respond to the new generation of human security challenges discussed in this chapter?
Recall that healthcare universalism is weaker and improving less rapidly in developing countries. In addition, healthcare systems in developing countries seem to be less effective or not fit-for-purpose to deal with the challenges arising from the burden of non-communicable diseases and pandemics.

The current generation of healthcare systems is associated with remarkable achievements in human security, including the reduction in mortality rates at all ages—but the progress is heterogenous. The 2019 Human Development Report documents two global trends. First, inequalities in basic capabilities (proxied by surviving the first years of life, the focus of the Millennium Development Goals) are declining: countries with high initial infant mortality rates are experiencing faster reductions and are therefore catching up. Second, inequalities in enhanced capabilities (improving health at old ages, in line with the Sustainable Development Goals) are growing: countries that already had relatively low mortality rates at older ages have been recording more progress over the last decade than countries with higher mortality rates at older ages.\footnote{105}

These patterns may be associated with the universalism of healthcare systems. There is a strong negative association between HUI value and child (ages 0–5) mortality rate, a proxy of basic capabilities, up to an HUI value of around 0.6—from there on, improvement on the HUI does not change the child mortality rate (figure 6.5).

In contrast, improvement on the HUI changes the mortality rate at ages 50–80, a proxy for enhanced

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**Figure 6.4 Progress with inequality: Widening gaps in healthcare over time**

Note: Balanced panel of 185 countries. Aggregates are based on simple averages.

Source: Based on Schillings and Sanchez-Ancochea (2021).

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**Figure 6.5 There is a strong negative association between Healthcare Universalism Index value and child probability of death up to an index value of around 0.6**

capabilities, very little up, to an HUI value of about 0.4, but from there on mortality rate drops quickly as HUI value increases (figure 6.6). This is an indication of the limited universalism (and thus effectiveness) of developing country healthcare systems in responding to emerging health threats to human security that are associated with enhanced capabilities.

“Healthcare universalism is weaker and improving less rapidly in developing countries. In addition, healthcare systems in developing countries seem to be less effective or not fit-for-purpose to deal with the challenges arising from the burden of noncommunicable diseases and pandemics.

The impact of limited universalism on the effectiveness of healthcare systems to address the new health threats to human security can be further examined by considering the burden of noncommunicable diseases and preparedness for pandemics. Improvements on the HUI up to about 0.5 reduce the age-normalized death rate associated with noncommunicable diseases by very little (figure 6.7), but as HUI value increases from that level, there is a strong relationship between it and noncommunicable disease–related deaths.

A similar pattern is observed between the Global Health Security Index (a metric of preparedness for pandemic response) and the HUI (figure 6.8). Up to an HUI value of about 0.4, HUI value is not associated with Global Health Security Index value, but above that level, the relationship is strongly positive and significant. For lower HUI values there is no statistically significant association.

The limitations of healthcare systems already evident in this analysis will determine not only the wellbeing and agency of people living in developing countries but also how the world will be able to respond to the compounded threats to human security going forward in the Anthropocene context. The greatest threats to human security are likely to be where HUI values are lower (figure 6.9). Hazards and challenges likely to be exacerbated in the Anthropocene context will hit harder in countries with an HUI value of 0.25 or lower and progressively less as HUI value increases.

**Figure 6.6** At a Healthcare Universalism Index value of about 0.4 and higher, the probability of death at ages 50–80 drops quickly as index value increases

**Figure 6.7** As Healthcare Universalism Index value increases from 0.5, there is a strong relationship between it and noncommunicable disease–related deaths
But healthcare universalism faces limitations beyond developing countries. The pattern of divergence in life expectancy at older age (with groups with higher socioeconomic status expanding their advantage over the rest) is taking place in other developed countries, including Canada, Denmark, Finland, England (United Kingdom), the United States and some other European countries. Even in Sweden, which has a robust universal healthcare system, health outcomes appear to be improving faster among people at the top of the distribution than among poorer members of the population.

The impact of the Covid-19 pandemic in societies has also depended heavily on socioeconomic status, even in countries with relatively universal healthcare systems. There is evidence that some groups in Sweden have faced higher morbidity and mortality from Covid-19: migrants had higher mortality from Covid-19 than people born in Sweden, and this has been explained in part by their poorer socioeconomic conditions. In the United Kingdom Black, Asian and ethnic groups—who are more likely to have low incomes and nonsalaried jobs—are at higher risk of death from Covid-19 than White Britons.

Figure 6.8 Up to a value of about 0.4, Healthcare Universalism Index value is not associated with Global Health Security Index value, but above that level, the relationship is strongly positive and significant.


Figure 6.9 The greatest threats to human security in the Anthropocene context are likely to be experienced where Healthcare Universalism Index values are lower.

Note: Each box plots the middle 50 percent of the distribution; the central line is the median. Outside the box the extreme lines are the approximate minimum and maximum of the distribution. All graphs exclude outliers. Healthcare Universalism Index groups for 2017 are defined as follows: group I, 0–0.24; group II, 0.25–0.49; group III, 0.50–0.74; group IV, 0.75–1.0. Hot days refer to the number of days with a maximum temperature above 95°F degrees by 2100 under the Representative Concentration Pathway 4.5 scenario. Inequality loss is based on Inequality-adjusted HDI values.

Source: Human Development Report Office calculations based on Schillings and Sanchez-Ancochea (2021), Carleton and others (2020) and IEP (2020b).
Affirming solidarity at the core of human security strategies to address new health threats

The Covid-19 pandemic has shown that human insecurity can indeed be contagious: the uncontrolled spread of the virus in some countries is a threat to the rest of the world. This is a moment of shared vulnerability, as nearly every human on the planet has been affected by a sense of insecurity or its repercussions. It is also a moment of shift in the policy mindset. People turned to their governments and scientists for guidance and protection. In many countries the Covid-19 moment brought a new set of social behaviour norms that would have been unthinkable prior to the pandemic—also underpinned by a shared sense of solidarity.117

At the same time, the Covid-19 pandemic exposed the structural limitations of existing multilateral mechanisms in the face of an acute global threat to human security. By many accounts the pandemic was met with a failure of preparedness, cooperation and cross-country solidarity, with dire consequences for the most vulnerable.118 As this Report describes, the new generation of human security challenges involves complex multidimensional threats that play out on a global scale in the Anthropocene context. There is an urgent need for reimagining and reforming multilateral systems to meet these challenges. The present moment is thus a crucial opportunity to reaffirm a human security approach in strengthening multilateralism to better address health threats to human security.

“Past major health crises have often been followed by the reform of global health systems

Determinants of health include various “transnational norms, policies, and practices that arise from global political interaction across all sectors that affect health,” ranging from trade rules to international aid flows.119 Many of these determinants contribute to poor health outcomes among some groups (for instance, intellectual property rules for lifesaving drugs or fiscal austerity measures that constrain spending on health).120 And many cannot be addressed within national healthcare systems alone. Interventions must sometimes be cross-sectoral, outside the health sector and cross-country.121

An example of the importance of cross-country action is the effort to tackle the Covid-19 pandemic through widespread vaccination. The COVAX initiative offered a way of addressing inequitable access to life-saving vaccines against Covid-19. The effort has reinforced how essential collaboration and solidarity are for navigating a deadly, fast-moving threat to human security. However, the COVAX initiative has been hampered by entrenched power disparities, institutional stickiness and weak accountability mechanisms.122 Power imbalances between partners in the COVAX initiative and its eventual reliance on voluntary vaccine donations (as opposed to enabling large-scale procurement, as initially envisaged) reduced COVAX’s ability to secure enough, timely vaccine doses.123 The Covid-19 pandemic also exposed the limitations of the International Health Regulations in coordinating an effective response to an acute global health crisis.124 These limitations were apparent in the delayed reporting of the disease outbreak to the WHO in the early days of the pandemic, the delays in declaring a public health emergency of international concern thereafter and the delays in coordinating national responses.125 Taken together, this presents a failure of protection, empowerment and solidarity in the face of a very serious and universal human security threat.

Past major health crises have often been followed by the reform of global health systems.126 The SARS outbreak led to major revisions of the International Health Regulations in 2005, and the 2006 H5NI avian flu outbreak was followed by the development of the Pandemic Influenza Preparedness Framework. Similarly, the global Covid-19 pandemic could spur evolution in global cooperation on health. A key effort to this end is the establishment of the Independent Panel for Pandemic Preparedness and Response, through World Health Assembly Resolution 73.1 in May 2020.127 The panel’s task is to provide an evidence-based path forward to help countries and global institutions address health threats, which can greatly contribute to human security (box 6.2).

The panel’s recommendation on legal instruments has renewed efforts to establish a new pandemic agreement.128 In May 2021 the World Health Assembly passed a resolution endorsed by 194 countries to host a special session devoted solely to an international pandemic agreement.129 At the Special Session on 1 December 2021 the assembly established an intergovernmental negotiating body to draft and
The work of the Independent Panel for Pandemic Preparedness and Response is organized around four key themes:

- **Build on the past.** Learn from previous pandemics and the status of the system and actors pre-Covid-19.
- **Review the present.** Analyse the chronology of events and activities in relation to the Covid-19 pandemic, the recommendations made by the World Health Organization (WHO) and the responses by national governments.
- **Understand the impacts.** Review how health systems and communities responded to the pandemic and the impacts of response measures.
- **Change for the future.** Promote analysis and a vision for a strengthened international system ideally equipped for pandemic preparedness and response.

The panel found that the outbreak and spread of Covid-19 reflected “gaps and failings at every critical juncture of preparedness.” Containment measures were too slow, as was emergency response funding, and the global response lacked coordinated leadership. These failures, along with gaps in social protection systems, led to widening inequalities and disproportionate socioeconomic impacts on vulnerable and marginalized people around the world. At the same time, enormous efforts by healthcare workers around the world and the expedient development of vaccines have been major strengths in efforts to mitigate the crisis. The most successful national responses drew lessons from past crisis, listened to evidence, engaged communities and communicated clearly and consistently.

The panel called for a set of immediate measures to curb Covid-19 transmission, including (but not limited to) commitments from high-income countries to deliver more than a billion vaccine doses to the Gavi COVAX Advance Market Commitment, voluntary licensing and technology transfer for Covid-19 vaccines from vaccine-producing countries and manufacturers, and additional resources from Group of 7 and Group of 20 countries to the Access to Covid-19 Tools Accelerator.

The panel also presented recommendations for preventing future disease outbreaks from becoming pandemics:

- Enhancing political leadership for pandemic preparedness and response (including through a new high-level Global Health Threats Council and a Pandemic Framework Convention).
- Strengthening WHO’s independence, authority and financing. Investing in national preparedness, with universal periodic peer reviews through WHO and an evaluation of economic policy response plans through International Monetary Fund Article IV consultation with member countries.
- Establishing a new agile and rapid surveillance information and alert system by WHO with the authority to publish information about outbreaks with pandemic potential immediately and the power to investigate pathogens with pandemic potential.

(continued)
Box 6.2 From global institutional weakness to the last pandemic (continued)

- Establishing a prenegotiated, end-to-end platform for tools and supplies, supported by technology transfer and commitment to voluntary licencing agreements, as well as enhanced regional capacities for manufacturing, regulating and procuring necessary tools and supplies.
- Setting up a new International Pandemic Financing Facility to support preparedness and response.
- Making national pandemic coordinators who are accountable to heads of state and government, with a mandate to drive whole-of-government coordination for pandemic preparedness and response.

Notes
1. Independent Panel for Pandemic Preparedness and Response 2021a.
5. Independent Panel for Pandemic Preparedness and Response 2021b.

Recommendations of the Independent Panel for Pandemic Preparedness and Response

Annex 6.1. The Healthcare Universalism Index: Coverage, equity and generosity


Measuring universal health coverage has been a key focus in global health literature, at least since the adoption of universal health coverage as Sustainable Development Goal target 3.8. Target 3.8 aspires to “universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.” But a universalist approach to health emphasizes the importance of all aspects of health system performance, especially effective access throughout the lifecycle. The universalist approach thus goes further than universal health coverage to consider generosity and equity in healthcare services. The Healthcare Universalism Index (HUI) combines measures of coverage, generosity and equity in a single global index.

Like the Human Development Index, the HUI is constructed as the geometric mean of normalized indices in each of the three dimensions of universalism (figure A6.1). The selected indicators for each dimension of universalism and their rationales are as follows:

- **Coverage:** UHC effective coverage index, which assesses health system performance relative to individual countries’ population health needs.
- **Generosity:** Government health spending as a percentage of GDP, which signifies public efforts and commitment to comprehensive and accessible services for all.
- **Equity:** Private health spending as a percentage of total health spending, which indicates the segmentation of healthcare. A large private sector suggests high segmentation in healthcare and inequity between wealthier and poorer groups in accessing quality care.

This measure includes out-of-pocket spending, which in most countries accounts for the bulk of private health spending.

The HUI uses these indicators for three reasons. First, they provide high-level aggregate measures of healthcare systems that are likely to be central representations of universalism across many different countries. Second, the availability of good data on these indicators allows for comprehensive measurement of healthcare universalism, across both countries and time. Third, the HUI’s aggregation approach favours joint measurement along the three dimensions. Joint measurement reflects the premise that

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**Figure A6.1 Dimensions and indicators used to calculate the Healthcare Universalism Index**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Coverage</th>
<th>Generosity</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>UHC effective coverage index</td>
<td>Government health spending (% of GDP)</td>
<td>Private health spending (% of total health spending)</td>
</tr>
<tr>
<td>Dimension index</td>
<td>Coverage index (33%)</td>
<td>Generosity index (33%)</td>
<td>Equity index (33%)</td>
</tr>
</tbody>
</table>

**Source:** Global Burden of Disease Health Financing Collaborator Network 2020.
the different dimensions depend on each other and so should not be considered in isolation—and that their combined achievement is necessary to attain truly universal outcomes.

The HUI aims to provide a globally comparable, macro-level measure of healthcare universalism. This high-level measure could be supplemented with more granular analyses that capture contextually relevant factors shaping the dimensions of universalism within countries. For instance, an important contribution to this effect would be to develop national health satellite accounts to evaluate the effects of health spending on health outcomes.

The HUI uses geometric mean instead of arithmetic mean to aggregate the dimension indices because geometric means favour equal achievement in all dimensions. Simple averages imply that reductions in one dimension can be linearly compensated for by equal increases in another, whereas geometric means reduce the substitutability between the index components and make each component’s marginal contribution dependent on the level of the others. Like the Human Development Index, the HUI assigns equal weight to each dimension index, based on the theoretical assumption that all are equally important for achieving true universalism.

The HUI’s generosity and equity dimension indices are calculated by normalizing the corresponding variables based on their minimum and maximum values. To avoid the impact of extreme outliers, the minimum and maximum values are defined as the 1st and 99th percentile of all country-year observations (table A6.1).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Minimum (1st percentile)</th>
<th>Maximum (99th percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government health spending as a percentage of GDP</td>
<td>0.3</td>
<td>9</td>
</tr>
<tr>
<td>Private health spending as a percentage of total health spending</td>
<td>5</td>
<td>85</td>
</tr>
</tbody>
</table>


The dimension indices are then calculated as:

$$I_{D_{ij}} = \frac{x_{ij} - x_{min}}{x_{max} - x_{min}}$$

where $I_{D_{ij}}$ is the dimension index $D$ for country $i$ and year $j$, and $x_{ij}$ is the corresponding observation. Because the equity indicator (private health spending as a percentage of total health spending) measures the level of (negative) market segmentation, the resulting index is additionally transformed by subtracting it from 100 percent.

The geometric mean of the two resulting generosity and equity dimension indices and the UHC effective coverage index$^{137}$ are aggregated to create the HUI:

$$\text{HUI}_{ij} = (I_{Coverage_{ij}} \cdot I_{Generosity_{ij}} \cdot I_{Equity_{ij}})^{\frac{1}{3}}.$$

The choice of normalization based on the 1st and 99th percentile results in the key limitation that zero values in one of the dimensions lead to an overall HUI value of zero and a loss of information in the other dimensions. The pragmatic solution to this issue is to add a marginal score to these zero values equal to the lowest nonzero country-year observation (usually equal to 0.1 percent).