

White Paper

# Coming Together to Address Global Health Priorities: A Systematic Approach for Concerted Action and Shared Responsibility

*White paper commissioned by Sanofi*



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# Acronyms

<b>AMR</b>	Antimicrobial resistance
<b>CD</b>	Communicable disease
<b>COPD</b>	Chronic obstructive pulmonary disease
<b>DAH</b>	Development assistance for health
<b>DALY</b>	Disability-adjusted life year
<b>EMEA</b>	Europe, Middle East and Africa
<b>GHNT</b>	Global Health Needs Tool
<b>GHU</b>	Sanofi's Global Health Unit
<b>HCP</b>	Healthcare professional
<b>HIC</b>	High-income country
<b>HIV</b>	Human immunodeficiency virus
<b>IHME</b>	Institute for Health Metrics and Evaluation
<b>LIC</b>	Low-income country
<b>LMIC</b>	Low- and middle-income country
<b>NCD</b>	Non-communicable disease
<b>OOP</b>	Out-of-pocket expenditures
<b>RWE</b>	Real-world evidence
<b>SDG</b>	Sustainable Development Goals
<b>UHC</b>	Universal health coverage
<b>UMIC</b>	Upper middle-income country
<b>WHO</b>	World Health Organization

# Introduction

Achieving equitable, inclusive, and sustainable access to high-quality healthcare is a central aspiration for a wide variety of national and international stakeholders, including many non-governmental actors, and is a key pillar of the Sustainable Development Goals (SDGs). The pharmaceutical and medical technologies industries have been under pressure to play their part by contributing to long-term solutions and have made commitments accordingly, although major gaps remain. These players are emphasizing that insufficient awareness, lack of access to diagnostic tools, inadequate healthcare capacity and capabilities, sub-optimal 'last mile' distribution, and other social and political determinants can significantly affect access to care, proving that barriers to achieving a scalable and sustainable impact are broader than price alone.

Keeping these issues in mind, this paper discusses the importance of using evidence-based analysis to ultimately address healthcare access disparities in a more structured fashion. This approach aims to articulate meaningful, comprehensive, mutually beneficial, and sustainable interventions by encouraging cross-sectoral action grounded on more robust contextual assessments and the principle of shared responsibility. As no single actor can solely resolve complex healthcare challenges or operate under a single set of industry-specific assumptions, the paper argues that it is not only desirable but necessary to establish robust multi-stakeholder partnerships in the pursuit of more accessible, scalable, sustainable, and locally driven solutions to care.

Sanofi believes that tackling global health priorities effectively requires a clearer roadmap. To this end, it developed a data-driven tool in collaboration with IQVIA to refine its ability to respond to the healthcare needs of vulnerable and underserved groups through multi-sectoral partnerships, particularly in disease areas and locations with the highest disease burden and unmet need, considering the willingness of local authorities to act and financial sustainability factors. The tool was designed with the primary objective of guiding conversations on Sanofi's global strategy for sustainable

and equitable access, identifying priority disease areas and targeting regions and countries where action is most urgently required. Sanofi then decided to publicly share its experience with the tool to encourage other stakeholders to consider similar routes and shed light on the value of data insights in further refining healthcare interventions.

This paper contains three sections. The first describes current global health macro trends, equity, and inclusiveness considerations in access to health services, and potential integrated solutions to care. The second introduces Sanofi's systematic evidence-based approach supported by the newly developed Global Health Needs Tool (GHNT), presenting an illustrative case to show how it can streamline global access planning and help design more effective comprehensive care programs. The final section focuses on the value of shared responsibility and the crucial role of multi-sectoral partnerships in facilitating access to care and strengthening health systems, and shares some successful access programs from Sanofi on diabetes. The paper concludes with a call to action for healthcare ecosystem players to scale up access to innovation and essential care, so that collectively designed solutions can adequately address global health concerns.



## Section I. Current challenges and trends in global health

The global health landscape is as complex as ever, with countries and regions making progress in some areas while also witnessing the aggravation of existing challenges and the emergence of new ones. As the efforts of national governments and the international community have contained the impact of prominent communicable diseases (CDs) in some regions, the burden of non-communicable diseases (NCDs) is growing considerably, particularly in low- and middle-income countries (LMICs). Similarly, the increasing toll that climate and environmental changes are taking on human health and health systems, the potential arrival of a new pandemic, the effects of antimicrobial resistance (AMR), and emerging comorbidities are meeting a socioeconomic and political context dominated by longer lifespans, population growth, armed conflict, humanitarian and debt crises, inequality, polarization, and the inability of states to provide wider safety nets for the most vulnerable sectors of society.<sup>1,2</sup> Furthermore, slower growth in development assistance for health (DAH), down from an average annual increase of 11% between 2000 and 2010 to 1.3% between 2010 and 2018,<sup>3</sup> creates a major resource gap for grappling with healthcare-related priorities. Aside from the peak years of the COVID-19 pandemic, traditional sources of funding for health have not been keeping up with unmet need estimates. This is true for both public and private sources. As of 2025, this situation could be further aggravated by drastic fluctuations in the contributions of major public donors due to changes in their approach to international development and global health security.<sup>4</sup>

### Salient global health challenges

Five major dynamics are currently influencing global health: (1) the rising burden of NCDs, (2) capacity gaps in health systems, (3) worsening climate-related health outcomes, (4) the threat of new pandemics, and (5) inequality and healthcare access disparities.

#### THE RISING BURDEN OF NCDs:

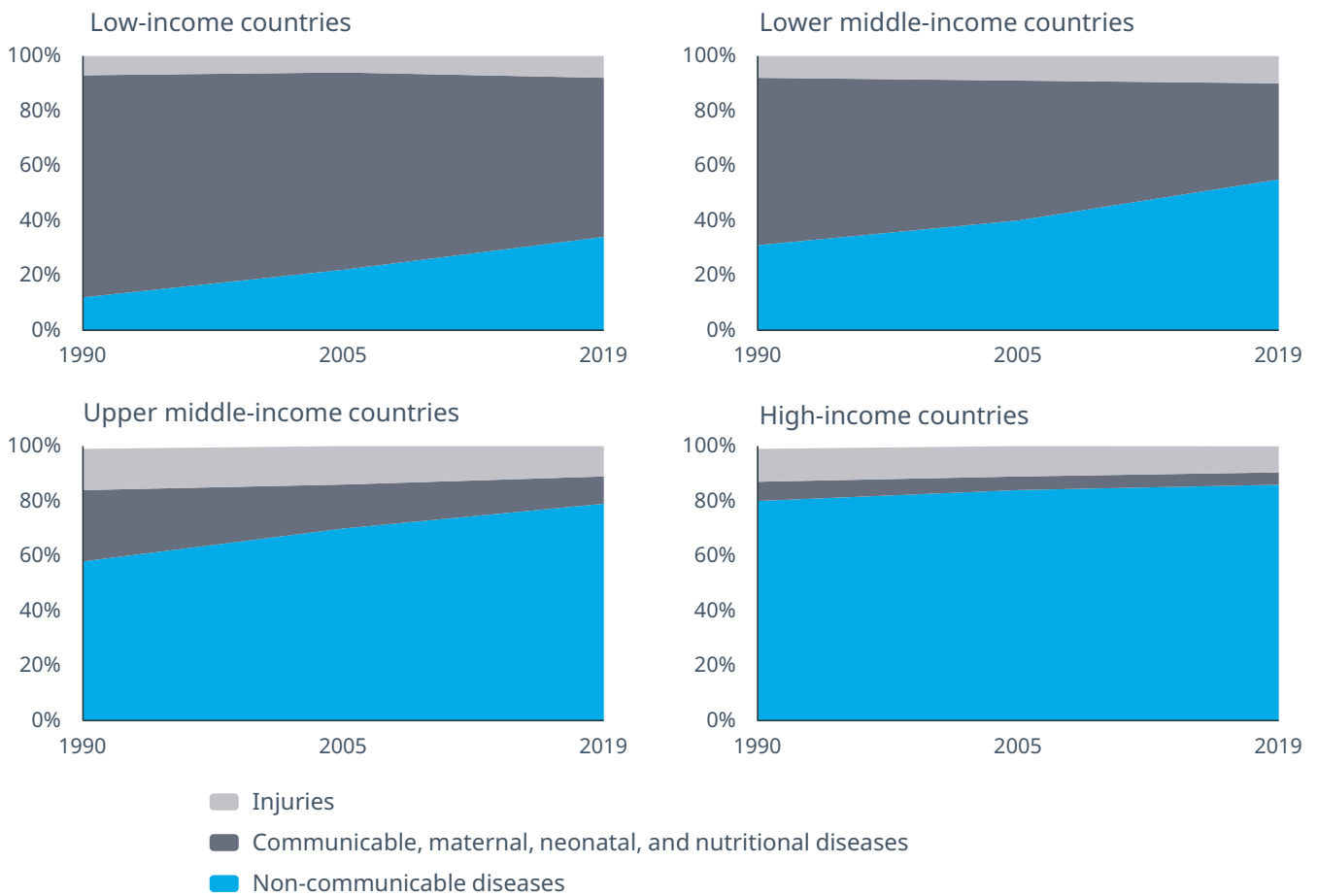
With cardiovascular, oncological, respiratory and metabolic conditions leading the way, NCDs



are responsible for 71% of deaths globally, disproportionately affecting the poorest and most vulnerable. Of the 41 million people killed by NCDs every year, 77%, or 32 million, live in LMICs, and of those who die prematurely between the ages of 30 and 69 years from an NCD, 85% live in LMICs.<sup>5</sup> Increases in NCD prevalence are a consequence of population aging, behavioral and lifestyle changes, environmental exposure, infections, and genetics. In many cases, sub-optimal primary care, prevention, and screening can result in delayed diagnosis and higher mortality rates across vulnerable and underserved groups.

In terms of global epidemiological dynamics, the global burden of communicable, maternal, neonatal, and nutritional conditions has decreased due to important international and governmental development initiatives over the last few decades,<sup>6</sup> but the remaining burden, which is stable but still considerable in some geographies, is converging with rapidly rising NCD rates in LMICs. Figure 1 illustrates the evolution of NCD burden relative to other conditions, showing how the greatest increases are taking place in low-, lower-middle, and upper middle-income countries. Along with this double disease burden, the appearance of multiple comorbidities makes patient management more complex and requires the implementation of meaningful integrated approaches to primary healthcare. The possibility of new infectious diseases turning into pandemics complicates this intricate situation even more at a patient and population level.

**Figure 1. Evolution of disease burden in disability-adjusted life years (DALYs) for CDs and NCDs, based on World Bank country income classification (1990-2019)**



Sources: Institute for Health Metrics and Evaluation (IHME)'s Global Burden of Disease (2019),<sup>7</sup> World Bank, and IQVIA analysis

### CAPACITY GAPS IN HEALTH SYSTEMS:

Approximately 1.8 billion people, or 24% of the world's population, live in fragile settings with suboptimal healthcare capacity to support appropriate care protocols.<sup>8</sup> Overall, it is estimated that 50% to 80% of medical equipment in developing countries is out of service.<sup>9</sup> Globally, one in eight healthcare facilities lacks running water, one in five has no sanitation service, and one in six has no hand hygiene facilities. In Africa, only 11% of countries have at least one magnetic resonance imaging machine per one million people and only 24% have at least one computed tomography scanner.<sup>10</sup> These resource limitations severely impede the timely diagnosis of many conditions and, as a result, their timely treatment.

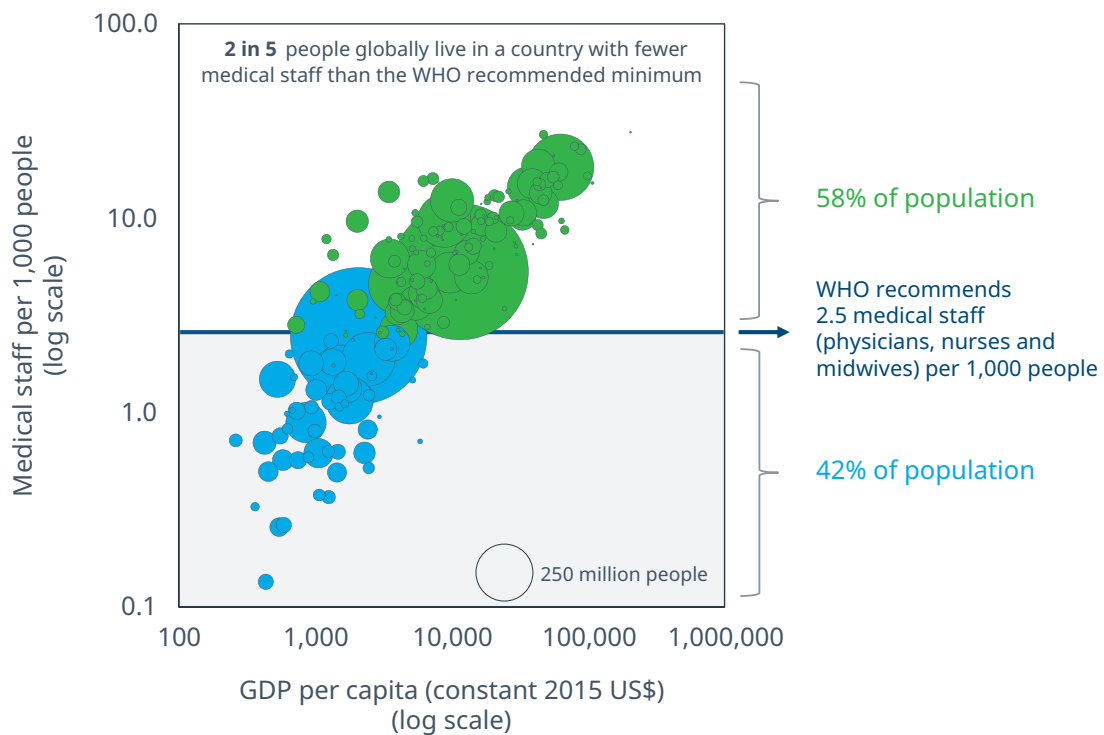
If geographical barriers are factored in, distance between health centers and rural populations continues to be problematic, even before considering the impact of seasonal climate events or conflict. For example, 36% of the 250 million people living in rural areas across sub-Saharan Africa are located more than 30 minutes away from the closest health center, normally one within 400 square kilometers.<sup>11</sup> Distance can also impact access to healthcare in high-income countries, with declines in patient attendance when distances between remote areas and the closest point of care exceed as little as 16 kilometers.<sup>12</sup>

In parallel, access to sufficiently qualified medical staff can be a substantial hurdle for many patients from community to tertiary care level. The World Health Organization (WHO) estimates that there could be a shortage of 11 million health workers by 2030, especially in LMICs across South-East Asia and Africa due to population size and need severity, respectively.<sup>13,14</sup> Overall, as figure 2 illustrates, two in five people globally live in a country with fewer medical staff than the WHO-recommended minimum of 2.5 resources per 1,000 inhabitants.<sup>15</sup>

Suboptimal supply chains, including supply chain infrastructure itself, prevent healthcare providers

from offering adequate and timely access to lifesaving commodities. A lack of systems to maintain the integrity of medicines and other health equipment, especially under adverse climate and environmental conditions, can impact their quality and final cost, leaving patients with markups and potentially unsafe drugs and vaccines. Alongside difficulties in maintaining resilient, operational, and efficient supply chains, deficits in regionalized manufacturing across African countries directly affect equitable access to critical therapies and immunization tools. Africa imports between 70% and 90% of its medicines, and almost all the vaccines its population needs.<sup>16</sup>

**Figure 2. Number of medical staff per 1,000 people by country**



Source: WHO National Health Workforce Accounts Database (2024)<sup>17</sup>

**WORSENING HEALTH OUTCOMES RELATED TO CLIMATE AND ENVIRONMENTAL CHALLENGES:**

Climate and environmental hazards are severely impacting human health by exacerbating certain diseases, putting health systems under pressure and disproportionately affecting marginalized and vulnerable populations. Currently, one in four deaths can be attributed to climate change or preventable

environmental causes, with respiratory diseases being the leading causes of mortality and disability-adjusted life years (DALYs) due to weather and environmental fluctuations.<sup>18,19</sup> A World Economic Forum report released in 2024 estimates that climate change could place enormous strain on health systems and be responsible for the deaths of 14.5 million people and US\$12.5 trillion in economic losses by 2050 (cumulative).<sup>20</sup>

The relationship between climate and health manifests itself in different ways through both direct and indirect impact on health outcomes. Severe temperature, rainfall and humidity variations and their direct consequences, mostly droughts, floods, and wildfires, are affecting the profile of infectious and non-communicable conditions globally. Natural disasters are also causing major human displacement, and the destruction of habitats is bringing humans and animals together, increasing the likelihood of zoonotic infections. Immediate consequences of climate events include deaths, physical injuries, malnutrition, respiratory and cardiovascular illnesses, and increased exposure to infectious diseases such as cholera, dysentery, and typhoid, as well as an expected rise in mental health disorders. The impact on environmental, social, and economic health determinants, including air and water quality and food availability, may also result in indirect and longer-term effects such as impaired development in children from chronic malnutrition.

Looking at infectious diseases as an example, flooding in Pakistan in 2022 triggered the country's worst malaria outbreak in 50 years due to the ability of mosquitoes to thrive in pools of stagnant water. Similarly, weather conditions are enabling the expansion of an invasive mosquito species from South Asia and the Arabian Peninsula, the *Anopheles stephensi*, in several African countries.<sup>21</sup> Dengue fever, another vector-borne disease, reached historic levels in some countries in 2024: in the first half of that year alone, the number of cases reported in the Americas exceeded double that of all of 2023, with the United States being one of the affected countries.<sup>22</sup> The *Aedes* mosquito, responsible for dengue transmission, has a growing presence due to changes in temperature and humidity, especially in areas with tropical and sub-tropical climates, where around 40% of the world population lives. The *Aedes* species is also contributing to the co-circulation of the chikungunya and zika viruses.<sup>24</sup> Similarly, yellow fever, endemic in many tropical regions, is causing approximately 78,000 deaths every year in Africa alone. Climate change is predicted to impact the transmission and burden of this disease: one study projects that the annual number of deaths in Africa could increase by 11% between 2020 and 2050 in the least severe scenario, or 25% under the most severe

circumstances.<sup>25</sup> Finally, the lack of access to clean water and forced migration caused by major climate events are also creating an acute crisis around cholera in Africa.<sup>26</sup>

Regarding NCDs, heatwaves are taking a toll on people with cardiovascular disease, while air pollution, variations in humidity, and storms are impacting those with respiratory conditions such as chronic obstructive pulmonary disease (COPD), asthma, and lung cancer.<sup>27</sup> Some studies estimate that a one-degree-Celsius increase in temperature could increase cardiovascular and cerebrovascular mortality in elderly people by 3.44% and 1.40% respectively.<sup>28</sup> While more detailed research is needed to describe the precise correlation between climate change and COPD mortality rates, it is widely accepted that increased air pollution exacerbates the symptoms of this condition, even more so when changes in temperature and relative humidity trigger the appearance of irritant air particles.<sup>29</sup> COPD is the third leading cause of death worldwide and kills more people each year than breast and lung cancers combined.<sup>30</sup> In the case of asthma, one study has found that extreme climate events involving storms, high winds, pollen dispersion, cold downdrafts, and pollution, among others, can increase the number of asthma episodes by 1.18-fold, symptoms by 1.10-fold, and diagnoses by 1.09-fold. In addition to notably higher figures regarding hospital visits and admissions, weather-related events appear to increase asthma mortality by 2.10-fold, particularly in the case of women and children.<sup>31</sup> Finally, extreme climate events and their consequences (stress, trauma and displacement) are also affecting the mental health of large populations, causing anxiety, depression and higher risk of developing post-traumatic stress disorders. Overall, the list of circumstances impacting mental health is long and complex.<sup>32</sup>

Climate hazards are also linked to infrastructure damage that may disrupt access to health services and care. At the same time, surges in healthcare demand can add to the ballooning pressure on health systems, especially in LMICs, where they may be underfunded and less well-equipped. These issues are heightened when environmental disasters make health facilities difficult to staff, leading to a cycle of workforce deficit in times and places with the highest patient need.

## **THE THREAT OF NEW PANDEMICS:**

The COVID-19 pandemic heightened awareness among the international community of the importance of anticipating and responding quickly to global health emergencies. Several multi-stakeholder initiatives are endeavoring to establish more robust surveillance systems to identify signs of future outbreaks and areas for rapid response; accelerate vaccine research, development, manufacturing, and distribution to curb infection rates; and build stronger and more resilient supply chains to ensure the availability of therapeutic, immunization, and diagnostic tools. Ongoing discussions around the WHO-led Pandemic Treaty and other multilateral interventions are ideally set to achieve these goals and institute global frameworks for equitable access to healthcare.<sup>33</sup> Similar deliberations took place around the emergence of the monkeypox virus, which was recognized as a health emergency in the third quarter of 2024.<sup>34</sup>

Determining when a new pandemic or 'Disease X' will become a reality is not easy to predict. Experts anticipate that demographic changes and climate and environmental challenges, alongside a wide array of ever-changing socioeconomic variables, will create new risks for the emergence of new pathogens or the reemergence of known ones.<sup>35</sup> In this regard, countries need to ensure that these different factors are proactively mitigated, so that health emergencies are accompanied by a more deliberate — and less reactive — response. While the COVID-19 pandemic demonstrated that the scientific community can respond to major outbreaks, gains would be higher if crises were prevented through more robust and interconnected early warning systems or if patients had more equitable access to diagnostics, medical supplies, and vaccines.

In parallel, the global health community is raising awareness of the impact of AMR and its links to existing or emerging pathogens and other factors, including animal health and natural ecosystems.<sup>36</sup> Usually referred to as a 'silent pandemic,' AMR has been identified by the WHO as one of the world's most dangerous global health threats, associated with 4.9 million deaths in 2019 and possibly 10 million

annually by 2050<sup>37</sup> if not addressed urgently. High-level conversations on AMR during the 79<sup>th</sup> session of the United Nations General Assembly in September 2024 underscored the continued resolve of the international community to address this issue, asking countries to support the design and implementation of truly impactful national action plans to reduce AMR-related mortality.

## **INEQUALITY AND HEALTHCARE**

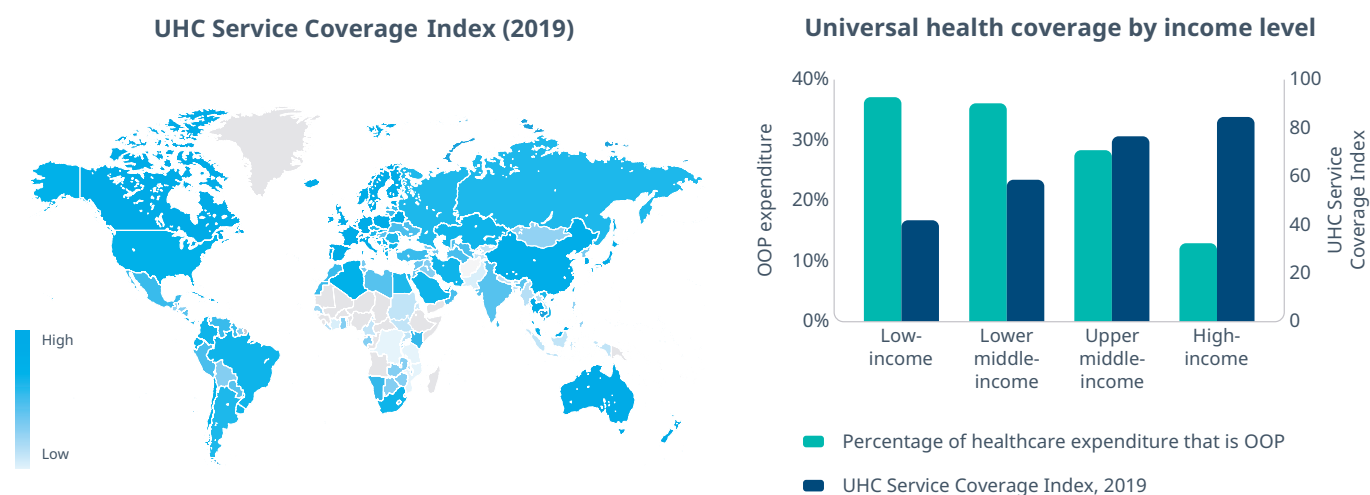
### **ACCESS DISPARITIES:**

Inequality goes hand in hand with global health needs and the inability of vulnerable and underserved groups to access high-quality healthcare. This is particularly true in LMICs but also applies to individuals and communities across upper middle-income countries (UMICs) and high-income countries (HICs), where inequality levels create vast differences in the capacity of people to pay for treatment and medical services, their level of education or awareness, and, as a result, their overall ability to access healthcare. These differences are partly fueled by the extreme socioeconomic disparities that characterize the world today, in which 1% of the population owns 38% of the total wealth.<sup>38</sup>

Suboptimal or non-existent universal health coverage (UHC) and underfunded health systems can significantly widen access gaps, disproportionately affecting those who cannot bear the brunt of catastrophic out-of-pocket (OOP) expenditure, regardless of their country, region of origin or income classification. Data shows that in a developed country like the United States, 28% of adults could not receive medical care in 2022 due to their inability to cover related costs.<sup>39</sup> The poorest countries in the world are disproportionately affected by the same challenge. According to the WHO, 11 million people in Africa and 550 million people in Asia experience crippling health expenditures every year. Across these two continents, access to health insurance varies substantially. In Africa, health insurance reaches only 17% of the population, while in Asia, coverage ranges from 1% in Afghanistan to 98% in Japan.<sup>40</sup> Figure 3 shows differences in UHC and OOP expenditure across regions and income groups.



**Figure 3. UHC across regions and income groups measured by the WHO's UHC Service Coverage Index and out-of-pocket expenditure**



Notes: WHO's UHC Service Coverage Index is defined as the average coverage of essential services, measured on a unitless scale between 0 (worst) and 100 (best)

Sources: World Bank, WHO Global Health Observatory,<sup>41</sup> and IQVIA analysis

### Addressing global health challenges across underserved and vulnerable populations globally: A perspective on equity in access to care and health outcomes

Global inequalities, income gaps, patterns of private sector investment, and differing national sociopolitical circumstances and development levels create structural conditions that hinder the ability of the population to access health services and products. To address these disparities, many efforts have focused on the mainstreaming of equity as a practice that removes unfair, avoidable, and remediable differences across populations with notable social, economic, geographical, and demographic inequalities. Such differences can also be the result of other factors such as sex, gender, ethnicity, disability, or sexual orientation.<sup>42</sup> Inequality is highly pervasive and affects every country, although to different degrees.

There are many considerable obstacles to realizing health as an inalienable human right. As discussed in the previous sub-section, providing UHC schemes is often an effective and equity-driven solution that reduces the financial burden on patients and improves their wellbeing, and more so in the case of those living in vulnerable conditions. However, for truly equitable

and comprehensive health-for-all approaches to thrive, interventions must go beyond policy and fiscal initiatives around insurance coverage and focus on access to the full breadth of healthcare provision. In this regard, the ability of people to receive the medical services and health products they need is contingent upon (1) the consistent and dependable presence of these resources (fit-for-purpose healthcare facilities, sufficient workforce, and availability of medicines, vaccines and diagnostics, among others); (2) the capacity of patients to pay for them without incurring financial hardship; (3) the elimination of physical, financial, legal and cultural obstacles to reach them; and (4) the removal of misinformation, stigma or fear around diseases.<sup>43</sup> In the same order, these represent the four most commonly known dimensions of equitable access: availability, affordability, accessibility and awareness.

Evidence presented in the description of current global health macro-trends directly or indirectly references care access deficits. This means that, in most cases, a single dimension of access — or the action of a single actor — can never facilitate access entirely on its own. For example, resolving a particular health condition may go beyond easily accessing an affordable medicine or service, especially in emerging markets. If diagnostic tests are not conducted properly — or not

conducted at all — or if health workers or patients are not properly informed about the nature of a particular illness, programs to bring medicines closer to those who need them may fail. Even when private sector initiatives make therapeutic solutions more affordable, insufficient distribution systems could increase costs at the point of care, thwarting the initial intention to remove price-related barriers.<sup>44</sup> Therefore, building solid and far-reaching healthcare should adopt an ecosystem approach that brings assets and resources from multiple parties to the table. The last section of this paper provides some examples of successful cross-sectoral and multi-stakeholder collaboration to illustrate this point.

Addressing healthcare disparities requires continued efforts from private and public players to improve awareness across underserved and vulnerable populations; ensure equitable access to education, prevention, and care; and scale up access to innovation. The 2024 Access to Medicine Index indicates that, for instance, 61% of the products assessed by the report still lack access strategies for LMICs. On the innovation front, the report highlights that fewer than half of clinical trials globally are conducted in LMICs, with many companies currently abandoning the research and development pipeline for priority infectious diseases (from 367 projects in 2022 to 253 in 2024).<sup>45</sup> Other accounts on this issue highlight the importance of engaging governments in the improvement of healthcare infrastructure, including stronger regulatory frameworks, to attract more investment in clinical research and, whenever possible, encourage localized manufacturing. This is the case in Africa, a continent that hosted only 4% of the clinical trials that started in 2023.<sup>46</sup>

## The role of integrated care

Integrated health systems can provide the coordination necessary to address prevention, promote end-to-end care, achieve more efficient operations, and ultimately reduce inequalities. This approach provides patients with accessible services across the continuum of care, including screening, diagnosis, treatment, rehabilitation, and palliative support within and beyond health-specific organizations. Integrated care also factors in the

participation of different community players at multiple levels. The experience of the National Health Service in England, for example, shows how this care modality can successfully engage communities, faith organizations, social enterprises, and other actors focusing on education, housing, and employment.<sup>47</sup>

In the global health space, major health agencies, including those that had originally focused on traditionally disease-specific interventions, are advocating for the strengthening of health systems as a whole. Health-focused multilateral organizations have consistently identified the need for more resilient and sustainable health systems in their programmatic approaches over the last decade, with their strategies calling for more empowered community-owned and people-centered interventions.<sup>48</sup> For instance, the Global Fund to Fight AIDS, Tuberculosis and Malaria, one of the largest players in the field, is integrating assets to diagnose and treat HIV, tuberculosis and malaria, while also boosting quality of care, data tracking, accountability, and governance.<sup>49</sup> Other examples illustrate how the integration of services for NCDs into existing HIV primary care clinics in sub-Saharan Africa was able to improve rates of retention in care for people with diabetes or hypertension.<sup>50</sup> In the same manner, as part of its 2026-2030 strategy, Gavi, the Vaccine Alliance, committed to strengthening the integration of a vast immunization portfolio into primary care to reach even more patients.<sup>51</sup> In all cases, multi-pronged approaches to strengthening health systems are encouraging the engagement of non-state actors, most notably the private sector, to propel innovation and enhance service delivery.

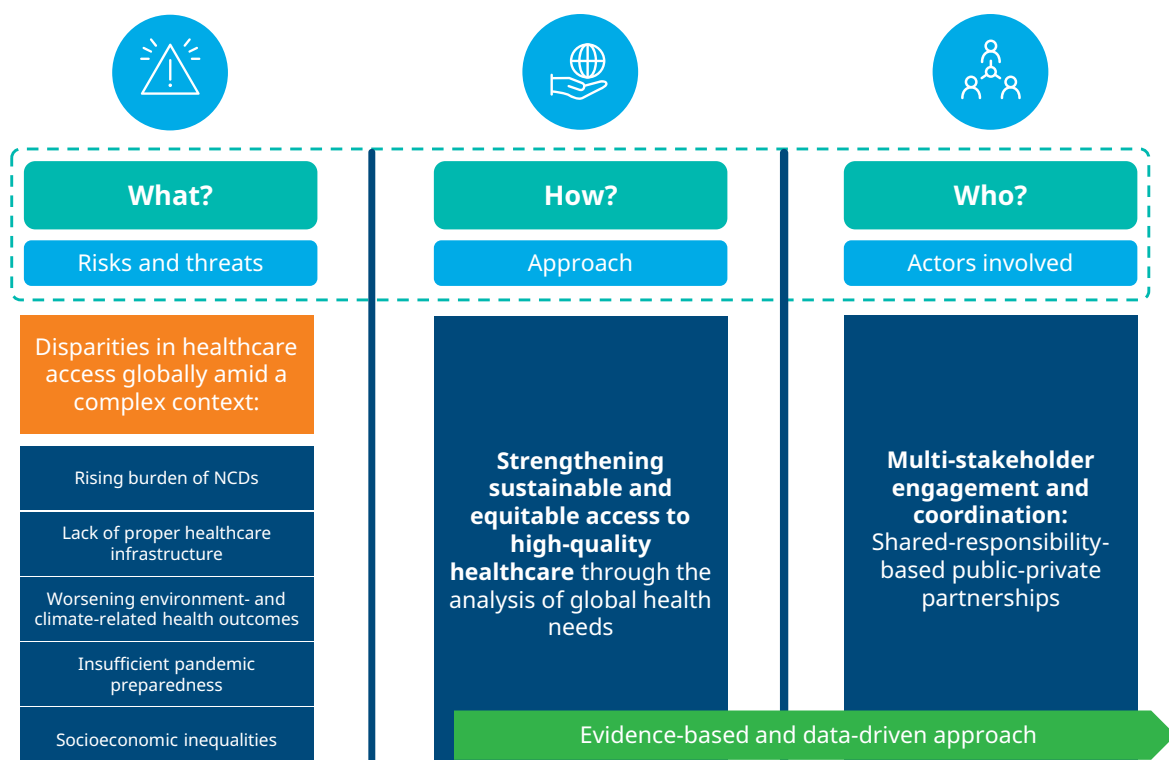


## Bringing it all together

After identifying the key elements behind sustainable and equitable access to healthcare and defining the conceptual foundations for multi-stakeholder collaboration in the pursuit of similar access-related objectives, it is possible to conclude that:

1. The global health community and the governments it supports must navigate a landscape dominated by major risks and challenges: overpopulation and extended life expectancy, the increased burden of NCDs, underperforming health systems, the possible emergence of pathogens with pandemic potential, and the impact of climate and environmental change on health. This is taking place against a backdrop of unprecedented levels of inequality, political instability, and diminished social cohesion.
2. Sustainable and equitable access to healthcare can only be achieved through comprehensive approaches that combine disease awareness, prevention and diagnosis, patient education and care, healthcare capacity building, strengthening of health systems and supply chains, and provision of affordable medicines, vaccines, and care. Similarly, integrating care for infectious and non-communicable conditions can help to successfully address multi-comorbidities.
3. Health disparities arising from several determinants such as socioeconomic status, ethnicity, gender expression, sexual orientation, and disability, among others, can be extreme and affect the ability of people to access health services and products equitably. While this issue is more prominent and urgent in LMICs, it has not been resolved in many upper middle- and high-income regions and countries. Articulating better insurance coverage schemes and focusing programs, policies, and investment on addressing these issues can improve the health of vulnerable populations and reduce health disparities.
4. Global health priorities are complex and cannot be addressed by a single player or in isolation. The likelihood of successfully resolving healthcare challenges is intrinsically linked to the active engagement of cross-sectoral stakeholders through partnerships driven by the principle of shared responsibility.

**Figure 4. Summary of the suggested approach to addressing global health priorities**



Source: IQVIA EMEA Thought Leadership

## Section II. Tackling global health challenges: A systematic approach

Tackling global health challenges is central to Sanofi's strategy and programs. This thinking is reflected in the company's existing global access initiatives such as those targeting access to diabetes care.<sup>52,53</sup> Sanofi aims to enhance sustainable and equitable access to high-quality medicines, vaccines, and health services across underserved and vulnerable populations, focusing on disease areas and geographies with the highest unmet need.

There are numerous, complex challenges associated with selecting disease areas and portfolios for future action, especially as resources are finite, the willingness and capacity of national and sub-national authorities to engage varies, and the underlying causes of unmet need depend heavily on the region and therapeutic area. Prioritization is necessary to determine where and how relevant players can intervene with the highest possible impact, thereby informing and streamlining access strategies while contributing to patient health and the strengthening of health systems.

To achieve this goal, Sanofi developed a perspective on key global health needs with substantial qualitative and quantitative components. A series of interviews with external experts served as a foundation for the qualitative dimension, while the latter took the form of an interactive Global Health Needs Tool (GHNT), which quantifies a range of key components of disease burden and unmet need. By combining these factors, Sanofi defined a more systematic approach for assessing need and, consequently, for addressing healthcare gaps through equitable and sustainable access to country-specific care programs in collaboration with global and local partners.

### **Objective and overview of the Global Health Needs Tool**

The GHNT was developed by Sanofi in collaboration with IQVIA, to primarily identify and map global health needs across countries and regions based on highly granular data. The key parameters of the GHNT are the

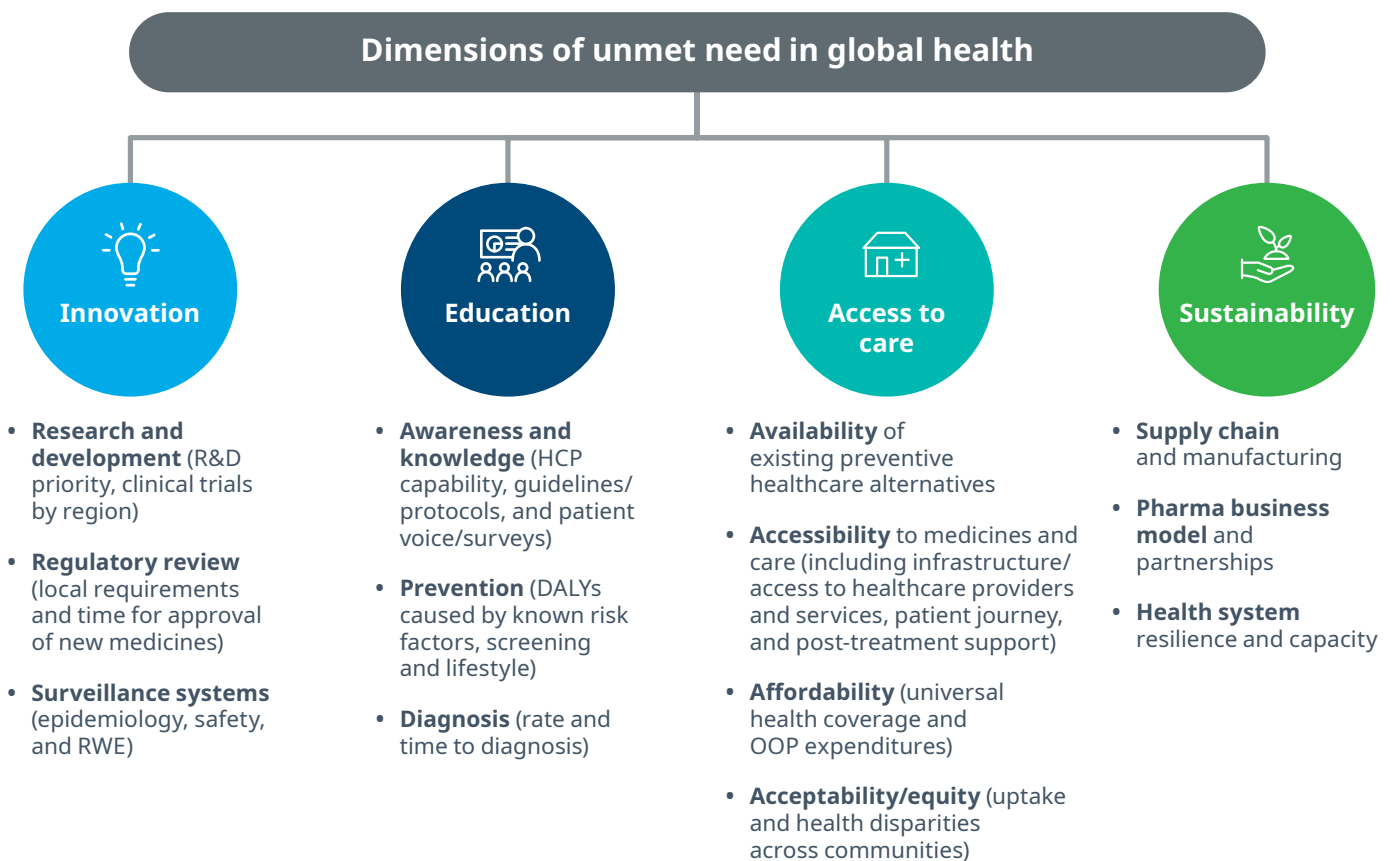
conditions and geographical areas. Once these have been selected, the GHNT indicates the corresponding burden of disease and generates metrics that quantify a range of dimensions associated with unmet need.

While burden of disease is relatively straightforward to quantify by using data on DALYs, prevalence, and mortality, determining overall unmet need is considerably more complex. This requires not only numerous data sources, but also a structure that systematically captures and consistently assesses a large set of variables. To provide this structure within the GHNT, unmet need is broadly defined through four categories: innovation, education, access to care, and sustainability. As figure 5 illustrates, each of these comprises a set of subcategories. The GHNT calculates a score for each category and subcategory to indicate the level of unmet need.





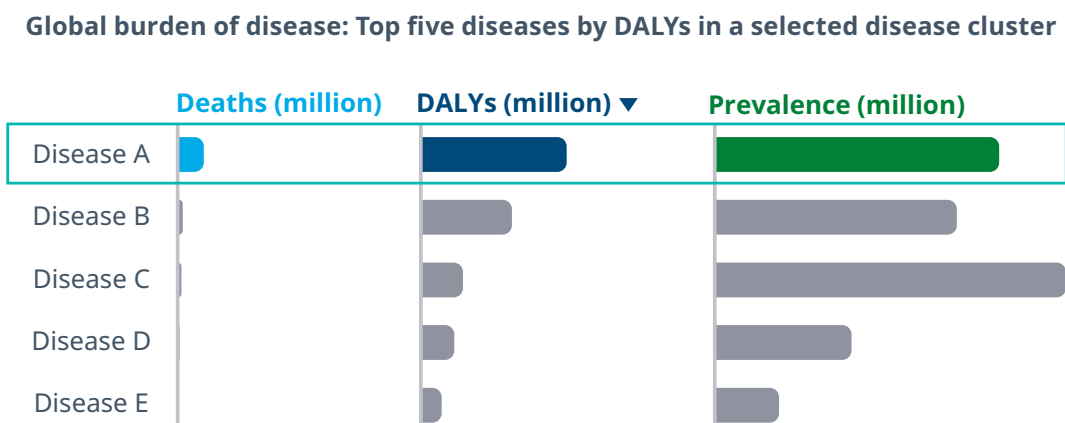
Figure 5. Four dimensions of unmet need quantified by the GHNT



Note: RWE = real-world evidence; HCP = healthcare professional; OOP = out-of-pocket  
 Source: Global Health Needs Tool

To demonstrate its applications, the GHNT has been used to examine a selected group of diseases in an illustrative example below. Initially, the geographical scope selected is global, and the diseases are ranked according to the number of associated global DALYs. The burden of disease is captured in figure 6 for the top five conditions.

Figure 6. The five diseases of a selected cluster that have greatest associated DALYs globally (illustrative)

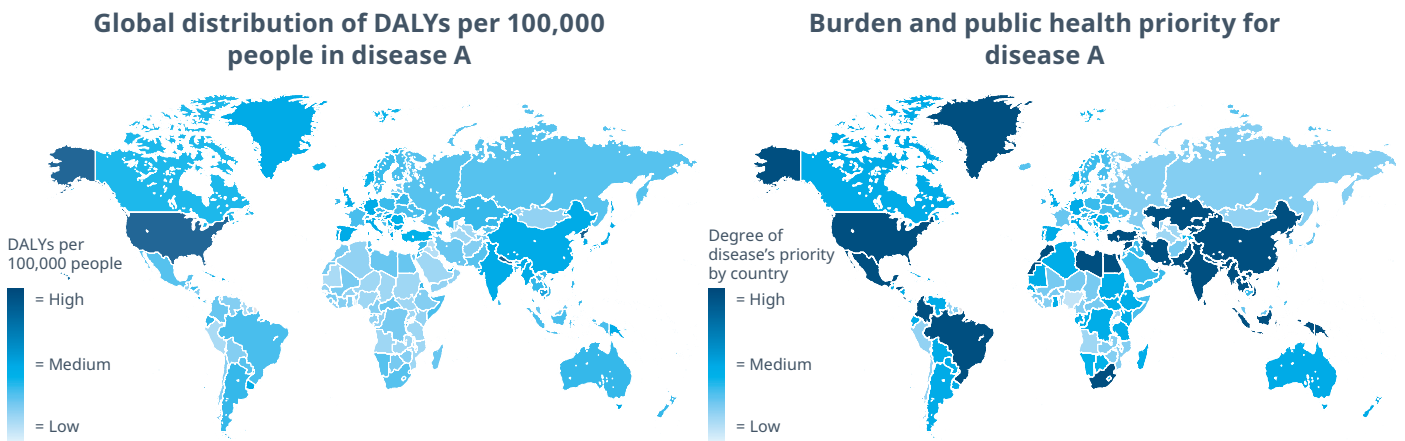


Note: The scale is different for each of the three columns  
 Sources: IHME (2019)<sup>54</sup> and Global Health Needs Tool



Any disease burden, exemplified by disease A, can be compared across regions and countries. Figure 7 illustrates two heatmaps that depict the geographical distribution of its DALYs per 100,000 people, and the degree to which disease A is considered a priority in each country. The figure shows that disease burden is particularly high in Asia and North America, with the condition being considered a public health priority in many countries worldwide, especially those where the burden is highest.

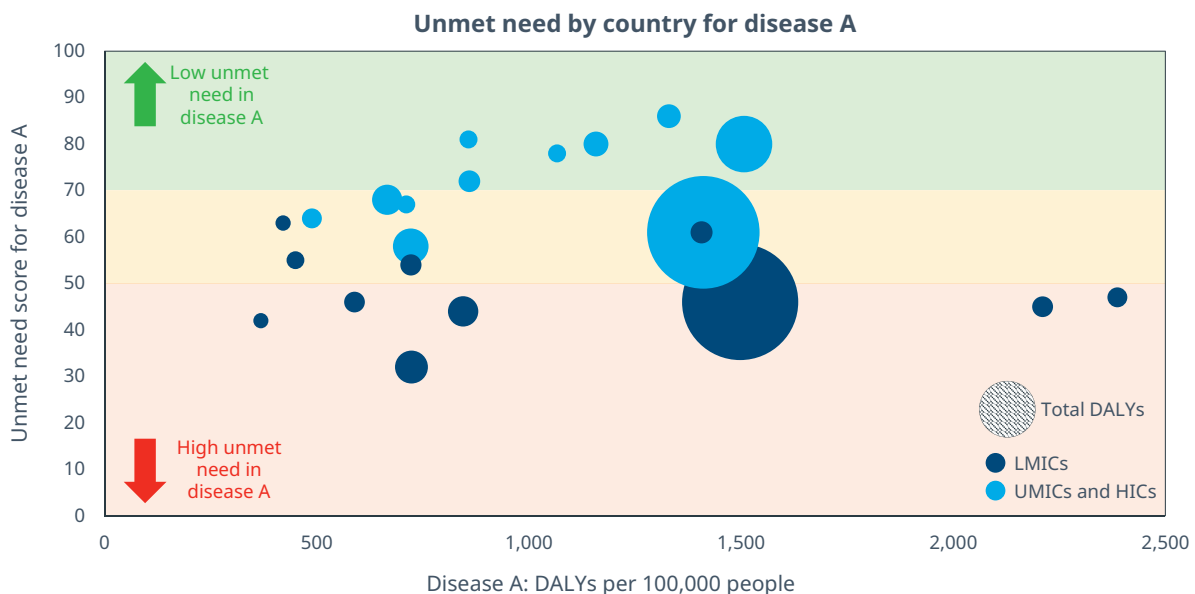
**Figure 7. Geographical distribution of DALYs per 100,000 people for disease A and the degree to which disease A is considered a public health priority**



Note: Priority based on a composite score as defined in Annex A  
Sources: IHME (2019)<sup>55</sup> and Global Health Needs Tool

To understand how disease burden translates into unmet need for each country, figure 8 shows the GHNT's composite unmet need score for disease A in selected countries with a high burden. For this disease, LMICs have a large range of DALYs per 100,000 people relative to UMICs and HICs, and they also typically have lower unmet need scores, corresponding to greater unmet need. However, this is unique to each country and there is no clear correlation between disease burden and overall unmet need, which emphasizes the importance of exploring and understanding other contributing factors.

**Figure 8. Unmet need in disease A by country, in countries with a high number of DALYs**

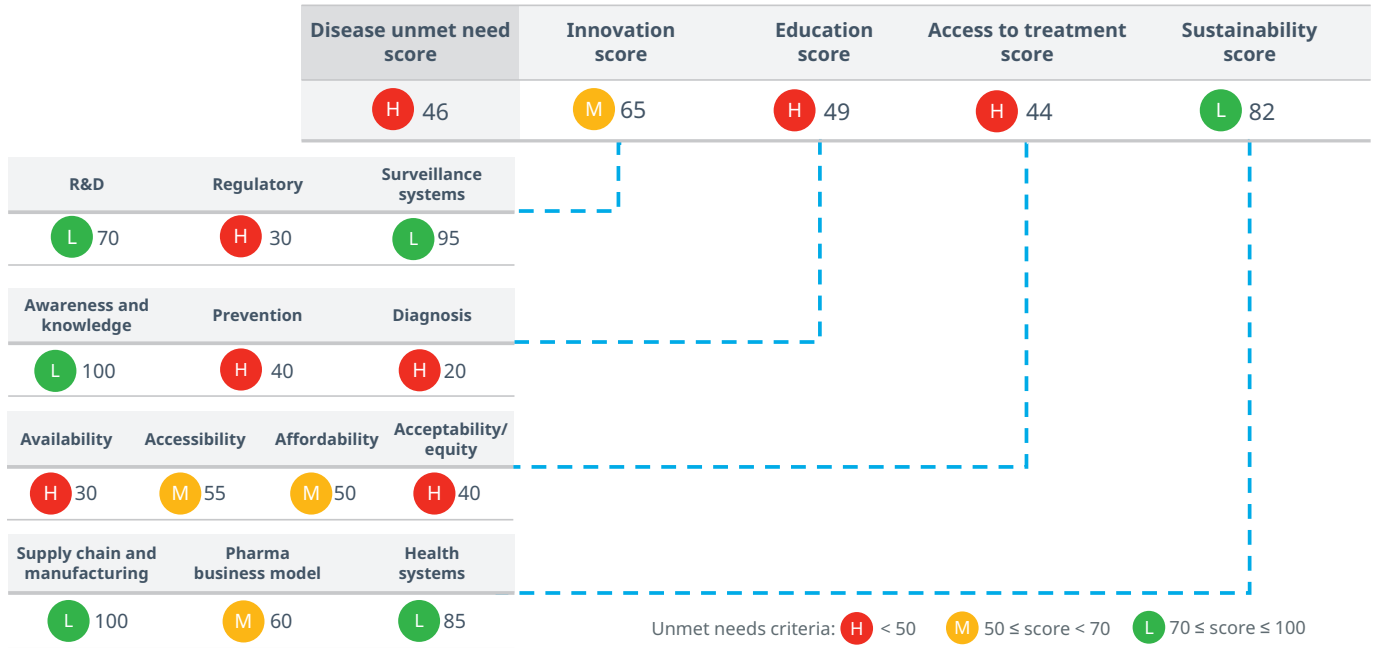


Note: A lower unmet need score corresponds to greater unmet need  
Sources: IHME (2019)<sup>56</sup> and Global Health Needs Tool

A detailed breakdown of unmet need in disease A is provided in figure 9. In this instance, a small selection of countries has been included in the scope. The top row covers the scores for each of the four dimensions of unmet need shown in figure 5, as well as the composite score (top-left), while the subcategories

for each dimension are shown in the far-left columns. In these countries, unmet need in disease A is high, largely owing to insufficient education and limited access to treatment. Diagnosis is a particular challenge and is likely closely linked to difficulties in preventing the disease.

**Figure 9. Unmet need dimensions for disease A in selected countries**



Note: A lower unmet need score corresponds to greater unmet need  
Source: Global Health Needs Tool

This discussion illustrates how the GHNT can be employed to analyze and compare the burden of conditions, identify the regions most affected by them, and pinpoint the most prominent barriers to receiving high-quality treatment. In this way, accurate quantitative considerations can guide the selection of priority disease areas and geographies, assisting efforts to improve access in specific locations.

### Identifying and addressing global health needs

The tool provides an evidence-based baseline that contributes to more detailed evaluation and robust decision-making processes about where and how to act, in terms of both therapeutic and geographic areas. Sanofi has combined the insights provided by the GHNT with its own experience to reflect on its inclusive global access-to-healthcare strategies, further examining necessary adjustments to sustainability, potential scalability, and long-term impact on population health.

In addition to the concrete outputs the tool can generate, the refinement of current access programs or the design of new ones must also consider the unique attributes of local healthcare ecosystems, the specificities of political and macroeconomic contexts, national health priorities, potential partnership opportunities, and the willingness and capacity of key local health authorities and other partners to meaningfully collaborate and invest. For instance, Sanofi’s work on the ground in diabetes care shows that access initiatives can only be successful if local authorities and other key stakeholders are committed to co-creating comprehensive solutions addressing multiple issues along the healthcare value chain (regulatory, legal, education-related, healthcare capacities and capabilities, affordability, and supply, among others). Carefully assessing the availability of resources and infrastructure to implement care programs is also important. Ultimately, Sanofi’s ability to engage in a particular national setting is determined

by the convergence of its sustainable and equitable access to care principles for population health and the financial sustainability of its operations. While sustainability can be hard to determine in many contexts, Sanofi seeks to support the development and the availability of healthcare solutions that can withstand the test of time and remain viable from a financial standpoint, for both health systems and private sector players alike.

Other organizations are also conducting assessments of different elements of the healthcare value chain to further optimize financing and healthcare decision-making. For example, the World Bank designed an NCD system assessment tool for identifying priority investments, examining health system performance across fourteen strategic and operational levers behind the improvement of service delivery and patient outcomes. The ultimate objective of the World Bank's approach is to propose investments that can support the prevention and management of NCDs through primary care and improve the availability of hospital-based NCD services.<sup>57</sup> Overall, many international and regional actors, including the European Union, are calling for more and better tools to measure access, so that more targeted interventions towards vulnerable groups can be supported with the right evidence.<sup>58</sup>



## Section III. Shaping solutions

Given the nature and complexity of today's healthcare challenges and funding shortages, defining long-lasting and innovative solutions is not the task of a single actor, but a result of the concerted action of multiple stakeholders inspired by the same goals and aspirations. Sanofi recognizes that successfully achieving sustainable and equitable access to care is a function of multiple pieces and capabilities combined under the umbrella of well-delineated partnerships. More importantly, players in this ecosystem should be driven by a common goal, recognizing that their contributions add value to a joint effort that is larger than the sum of its parts.

### **Shared responsibility in shaping more accessible, equitable, scalable, and sustainable healthcare solutions**

Shared responsibility in healthcare is a key principle for the success of collective action across a variety of stakeholders: governments (regulators, health authorities and policymakers), international organizations, civil society, academia, and the private sector. Considering the intricacies of the current healthcare landscape, only multi-stakeholder and multi-disciplinary collaboration can generate the comprehensive public goods and all-encompassing solutions that society needs. Each player participating in a partnership must be committed to delivering on a common goal while also seeing an opportunity to fulfill their organizational mission through mutually beneficial agreements.

If partnership roles are approached in a standardized manner, governmental actors should ideally ensure that national health budgets are sufficiently funded, people have universal access to care through well-designed insurance schemes, essential medicines lists reflect population epidemiological needs, and local health infrastructure is adequate, including digital systems to capture standardized patient data. International organizations are essential in mobilizing donor and domestic resources for health, strengthening national capacity and ownership

through sustainability and co-financing frameworks, investing in innovative solutions, forming public-private partnerships to rally society around health causes, and setting global standards. Civil society plays a key role in advocating for the needs of communities and vulnerable populations vis-à-vis every stakeholder with a responsibility in healthcare, and, in many cases, serves as an alternative mechanism for access to information and services.<sup>59</sup> Civil society organizations have also proven to be an extremely powerful tool to fundraise for domestic resources for health as well as increased DAH regionally and globally. Through research and insights, academic institutions can assist the healthcare ecosystem in recalibrating its assumptions and interventions. Finally, the private sector has the ability and expertise to scale up innovation, optimize processes and inclusive business models, increase local healthcare capacity, provide access to lifesaving products, champion policy dialogue, support infrastructure improvements, and broker alternative finance mechanisms across investors and other interested parties.

Building on the premise of SDG 17<sup>60</sup> towards the revitalization of global partnerships for development, multi-sectoral collaboration is the most appropriate and advisable avenue to move the needle in the delivery of equitable access to healthcare. As indicated previously, successfully tackling unmet need in global health requires addressing various access dimensions, with different players bringing solutions to the table. In the long run, truly impactful access initiatives require a widely accepted accountability framework that operationalizes shared responsibility principles in more concrete terms (e.g., governance, monitoring and evaluation frameworks, timelines, a theory of change, and financial implications, to name a few).

Growing funding constraints in global health add more urgency to the need for innovative cross-sectoral partnerships. With the competition for limited resources growing, the challenge is twofold: ensuring that current needs are fully funded while protecting past investments to preserve their impact and value. Current global health dynamics are also calling for the formalization of new financial and

programmatic paradigms that rely less on traditional public funding streams. In this context, the use of systematic data-driven approaches can add significant value and efficiency to global health interventions, investing diversified resources and deploying technical capabilities where they are truly needed.

### **Guiding future action: Broadening sustainable and equitable access to healthcare and establishing more impactful public-private partnerships**

Achieving accessible and equitable healthcare requires a series of synchronized actions. As a starting point, it is essential that all stakeholders are aligned in terms of their perceptions of the healthcare landscape, collaboratively selecting areas with the greatest potential for impact. This involves identifying key areas and determining the focus of future efforts. By having a more detailed grasp of the regions and conditions with the most significant unmet needs, resource allocation can be more effective and interventions more strategic and influential. Taking a systematic approach that incorporates rigorous quantitative and qualitative analysis does not only streamline the action of a single player but also starts a conversation across existing or new partners to shape multi-stakeholder action.

To advance collective work, it is crucial to identify relevant contributors who can add value and are also willing to partake in access interventions. Recognizing the specific roles and potential contributions of each stakeholder enables a more coordinated response and sets the right expectations. Utilizing the GHNT can initiate useful discussions on what areas each party can address based on an objective baseline, which can flag the most pressing challenges across multiple disease areas.

Finally, well-structured public-private partnerships can maximize collaboration. These partnerships should be designed to address various aspects of healthcare access and steer through clear ways of working. This includes, as mentioned, establishing transparent governance structures, defining accountability frameworks, and implementing robust monitoring



and evaluation systems. Collaboration must be action-driven, with a focus on tangible outcomes and measurable impacts. Goal-oriented and data-driven partnerships have the potential to expand their effectiveness and sustainability. Assessing unmet need more comprehensively, through using the GHNT to incorporate innovation, education, access to care, and health systems sustainability in a structured manner, can assist in defining key performance indicators and other metrics to achieve these goals.

### **Key elements of access guiding collaborative action: A view from Sanofi**

Sanofi believes that sustainable access to care is a shared responsibility among various stakeholders including policymakers, regulators, patients, care providers, and the private sector. The company is committed to playing its part through commercial, social, inclusion-driven and/or philanthropic access models tailored to the specificities of local health systems and population needs.

Sanofi has a long history of working alongside health systems to make its medicines and vaccines accessible and affordable to patients and people in need. While understanding and sharing concerns about medicine affordability, the company encourages countries to respond to local needs with appropriately resourced

health budgets and ensure that actors involved in procurement and distributions processes do their part. The pharmaceutical industry is only one of the many stakeholders that can and should contribute to this goal. Multiple efforts with donated, low-price, and at-cost provision of medicines have proven that barriers to access are broader and deeper than price alone. Lack of awareness, diagnosis, healthcare capacity and capabilities, and 'last mile' distribution, as well as other social determinants of health, remain crucial obstacles to access.

Some examples in diabetes-related care illustrate Sanofi's ability to optimize access through the deployment of various tools. Sanofi continues to strengthen its commitment to improving access to diabetes care in LMICs and underserved communities through a series of initiatives and partnerships with local health systems, patients, providers, and global organizations, following goals and priorities defined by the WHO, and the recommendations and guidance from other actors such as the Access to Medicines Foundation, patient advocacy groups, non-profit stakeholders, and international medical societies.<sup>61</sup> The company considers a variety of approaches — commercial, social, inclusion-focused and philanthropic — depending on the needs of people with diabetes and the specifics of local healthcare ecosystems.





In wealthier countries, patient support programs for underserved communities are in place to improve affordable access to analogue insulins. In the United States, Sanofi has expanded its affordable access to insulin for underserved people through the Insulins Valyou Savings Program.<sup>62,63</sup> Similarly, as analogue insulins were included in the WHO List of Essential Medicines in 2021, Sanofi worked with the WHO for insulin glargine U100 to be part of the prequalification of medicines program in 2023.<sup>64</sup> This ensures that this medicine is supplied by procurement agencies and meets acceptable standards of quality, safety, and efficacy.

In LMICs, Sanofi has responded to a WHO call to action in 2022,<sup>65</sup> supporting a first wave of countries implementing access to diabetes care based on a systematic evidence-based assessment. This approach allowed the identification of countries with the highest disease burden and unmet need and spurred the strong commitment of health authorities towards NCD control and prevention. The implementation of comprehensive care programs was set in motion to address access issues across the patient journey, focusing primarily on HCP training and increasing awareness and education in schools. These efforts are being complemented with the introduction of digital tools and sharing of health data, and the provision of high-quality analogue insulin at an adapted price.<sup>66</sup>

In the world's most vulnerable countries, Sanofi's non-profit Global Health Unit (GHU), created in 2021, is aiming to bridge the gaps in access to healthcare by strengthening health systems and

care delivery. This includes the deployment of its Impact brand, launched in 2022, to offer a range of essential medicines at reduced prices, including for diabetes.<sup>67,68</sup> The GHU's ambition is to improve diabetes care for 300,000 insulin-dependent patients by 2030 through an increased availability of affordable treatments and the strengthening of health systems in 40 countries.<sup>69</sup> Alongside its inclusive business models, Sanofi's Foundation S, The Sanofi Collective, provides aid and donates medications to displaced and vulnerable populations in situations of humanitarian crises or emergency.<sup>70</sup>

In planning all of its interventions for sustainable and equitable access to care through different inclusive models, Sanofi conducts a careful assessment of the targeted disease areas and local health systems, to understand, for example, the disease burden and unmet need in these contexts. Formulating access strategies also requires collaboration with the relevant governments, non-governmental entities, and other key stakeholders at the local, national, regional, and global levels, ensuring that partners are aligned and committed to addressing multiple issues across the healthcare value chain and the patient journey. This course of action facilitates the generation of sustainable holistic healthcare solutions, especially around awareness, education and prevention, training and capability building for HCPs and community health workers, health systems strengthening measures, and the supply of affordable high-quality medicines, vaccines and care.



## Conclusions

The approach described in this paper reflects Sanofi's aspiration to continue implementing sustainable and equitable access initiatives through comprehensive awareness, prevention, education, and care programs to reach underserved and vulnerable populations in places with the highest unmet need. Sanofi recognizes that implementing this vision should be further sustained by detailed assessments and feasibility considerations, so that the resulting action has a greater impact on the health outcomes of patients and the sustainability of health systems. Ultimately, improved access should be translated into every person receiving appropriate, high-quality care notwithstanding any differentiating factors. Health is a universal and inalienable right whose observance represents a global priority.

Enhancing sustainable and equitable access is a joint endeavor that calls for structured and systematic ways of working. As a potential avenue to do so, this paper presents an approach to better navigate and comprehend disease burden and unmet need, allowing stakeholders to optimize the process of identifying areas and geographies in which their impact on patient health could be greatest. To complement these factors and form a fuller picture, the design and implementation of comprehensive access initiatives need to incorporate qualitative considerations that assess the willingness of national and international actors to adequately engage, in addition to other local determinants. Overall sociopolitical and macroeconomic conditions are also pivotal for collective action to be sustainable and financially viable in any given context.

As global health challenges continue to grow in complexity, with the increasing impact of climate change and environmental factors on health and current shifts in international development funding, more than a single actor with clearly defined accountabilities is required to articulate and execute comprehensive access programs and bring about the diversity of views, incentives, and trade-offs that multidisciplinary action demands. Partnerships with health experts, patient groups, communities, policymakers, civil society, academia, and others come to the center of the equation and represent the most advantageous route to addressing emerging and protracted access issues in health systems worldwide. Multi-stakeholder collaboration is also built on the notion that access dimensions call for differentiated approaches based on the capability and comparative advantage of each actor. In the end, achieving tailored and relevant access models is not a function of strengthening availability, affordability, accessibility, or awareness as standalone dimensions, but the result of initiatives that address them holistically.

Sanofi is determined to continue its efforts to address key global health needs, tackling the link between health equity and environmental challenges, especially for diseases in which the company's value proposition and product portfolio can make a lasting difference to the journeys of underserved and vulnerable individuals and communities. However, Sanofi is also aware that building national access capacity is a joint endeavor that demands the engagement of partners and contributors that can propose new solutions or scale up existing ones. Overall, Sanofi is ready to play its part in striving for sustainable and equitable access to healthcare, broadening patient reach while contributing to strengthening health systems where needed the most.

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# Annex A. Global Health Needs Tool: Methodological considerations

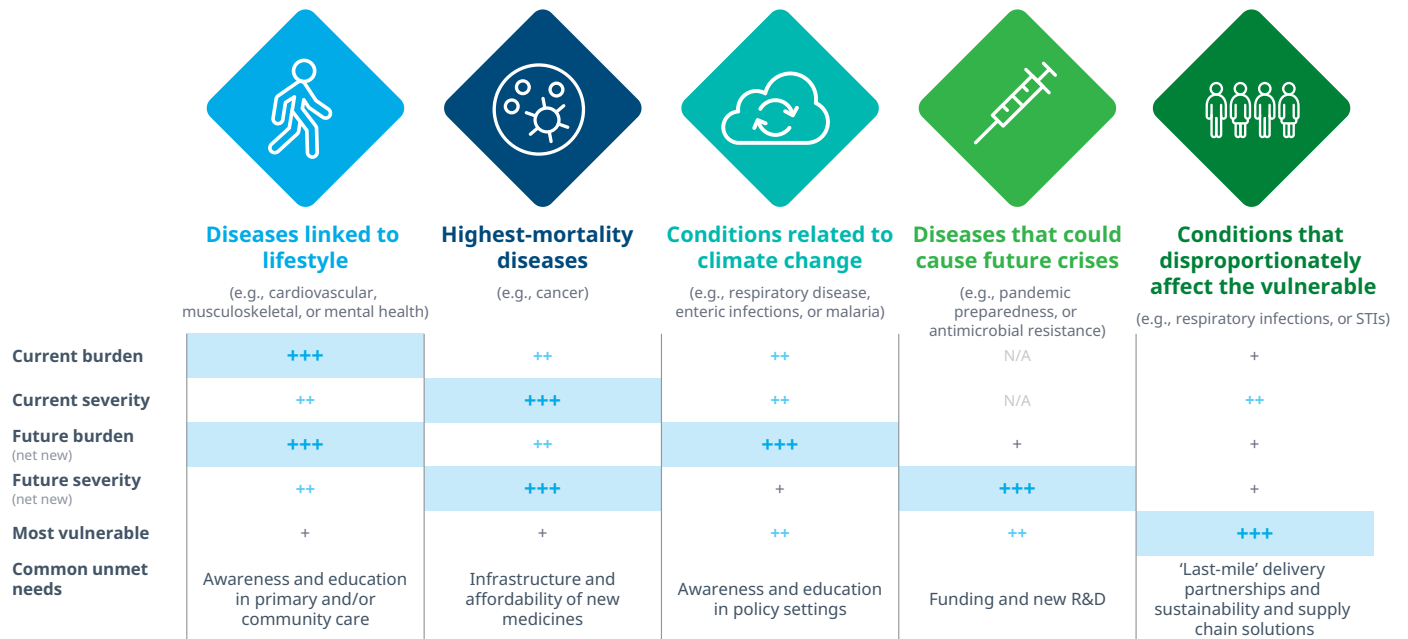
Section II of this paper presents an overview of the GHNT, with particular emphasis on the analysis and applications of its outputs. This annex provides a more detailed description of the inputs for the tool — such as the groupings of diseases and countries available — as well as the methodology that underpins it.

The GHNT contains over one hundred datasets aggregated across three categories. Firstly, at the core of the tool is global data on **burden of disease**, split out by disease and country. Secondly, the tool uses data from numerous international sources to account

for the **population and the broader healthcare ecosystem** in each country (including the level of sophistication of health systems and availability of different medicines, for example). Thirdly, to connect data on **disease burden and unmet need with existing Sanofi portfolios**, the tool includes relevant information from the company.

When defining the geographies and diseases in scope, several groupings are available to choose from. Geographically, the scope can consist of a country, a region, a group of countries with similar income, or all countries. Similarly, the therapeutic scope can include one specific disease, all diseases within a therapeutic area, a group of conditions based on the nature of their public health priority (figure A1), or all diseases combined.

**Figure A1. Disease groupings according to the nature of the public health priority**



Source: IQVIA analysis and Global Health Needs Tool



To quantify the dimensions of unmet need in figure 5 for each disease, applicable to the selected countries, the tool incorporates many elements of country-level data into a series of calculations. Some of these elements are specific to a therapeutic area and others are disease-agnostic. For each element, the data is normalized across countries and then mapped to the relevant therapeutic area (or, where disease-agnostic, to all therapeutic areas). For each disease, the relevant scores are then averaged for the countries that are both in scope and classified as priority countries for that disease.

The priority countries for a given disease are assigned according to a composite score that considers the disease burden in DALYs and the severity (defined as the DALYs/prevalence ratio) in a given national setting, as well as a qualitative assessment based on interviews with public health experts and public health agendas.

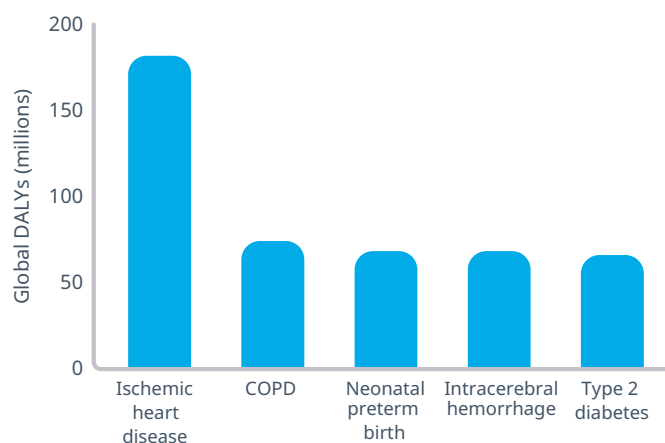
The GHNT is a dynamic tool that can be adapted as required to ensure it continues to serve current assessment needs. This entails updating the data that underpins it and potentially evolving aspects of its functionality to incorporate additional considerations.



## Annex B. Identifying and addressing global health needs

To demonstrate its concrete applications, the GHNT has been used to examine the disease burden and unmet need across three of the top five NCDs in terms of global DALYs in 2019, as in figure B1: ischemic heart disease, COPD, and type 2 diabetes. These cases illustrate the burden of these conditions, the regions most affected, and the most prominent barriers to receiving high-quality treatment. The use of the tool demonstrates how more accurate quantitative considerations can guide the process of selecting disease areas and geographies in which to focus efforts to improve access.

**Figure B1. Global burden of the top five diseases based on global DALYs**



Note: COPD = chronic obstructive pulmonary disease  
Source: IHME (2019)<sup>71</sup>

### Ischemic heart disease

Not only is ischemic heart disease responsible for more than twice as many DALYs as any other disease, but together cardiovascular diseases are the leading

cause of death worldwide, with over three-quarters of these deaths occurring in LMICs.<sup>72</sup> In addition, cardiovascular health is negatively affected by climate change: exposure to extreme heat can exacerbate cardiovascular disease and increase mortality.<sup>73</sup> The development of ischemic heart disease can reasonably be used as a proxy for poor access to prevention and early treatment of underlying conditions such as hypertension, diabetes, and obesity.

The GHNT's scores for ischemic heart disease shed light on the extent and nature of unmet need in this condition. A lower score represents greater unmet need, with scores below 50 representing the category of highest severity. For ischemic heart disease, global unmet need is categorized as medium with a score of 62, but this number falls to 48 when applied to LMICs only. Analysis of the four major underlying components covered in figure 5 shows that, in this case, the most significant challenges relate to access to treatment. These include affordability and accessibility barriers, primarily due to insufficient health workforce and long distances to health facilities, as well as a low availability of cardiovascular medicines, including generics.<sup>74</sup>

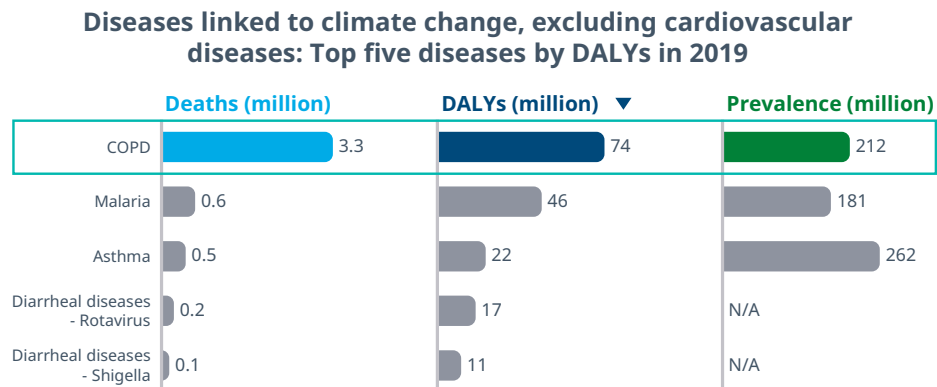
### Chronic obstructive pulmonary disease

COPD is the second most burdensome of all diseases worldwide, as figure B1 indicates, accounting for 74.4 million DALYs in 2019. Furthermore, it is responsible for over 3.2 million deaths each year, making it the third leading cause of death globally. COPD, which encompasses, among other disorders, the progressive and irreversible lung disease known as emphysema, is a common respiratory condition that causes breathing difficulties, chronic cough, fatigue, and an often-long period of morbidity. Tobacco smoking and air pollution are the main causes of COPD, and people affected by it are at higher risk of developing other health issues.<sup>75,76</sup>

COPD will continue to be a high global health priority, especially due to the impact of climate change. As is typical of many respiratory diseases including asthma, COPD is affected significantly by environmental factors. Climate change and environmental factors are projected to have major implications for the mortality

associated with this condition because increases in extreme temperatures, relative humidity levels, and air pollution can exacerbate COPD symptoms.<sup>77</sup> COPD is also responsible for a significant and rising economic burden, with substantial costs resulting from the management of acute episodes and subsequent hospitalizations.<sup>78</sup>

**Figure B2. Most burdensome diseases linked to climate change, excluding cardiovascular diseases**

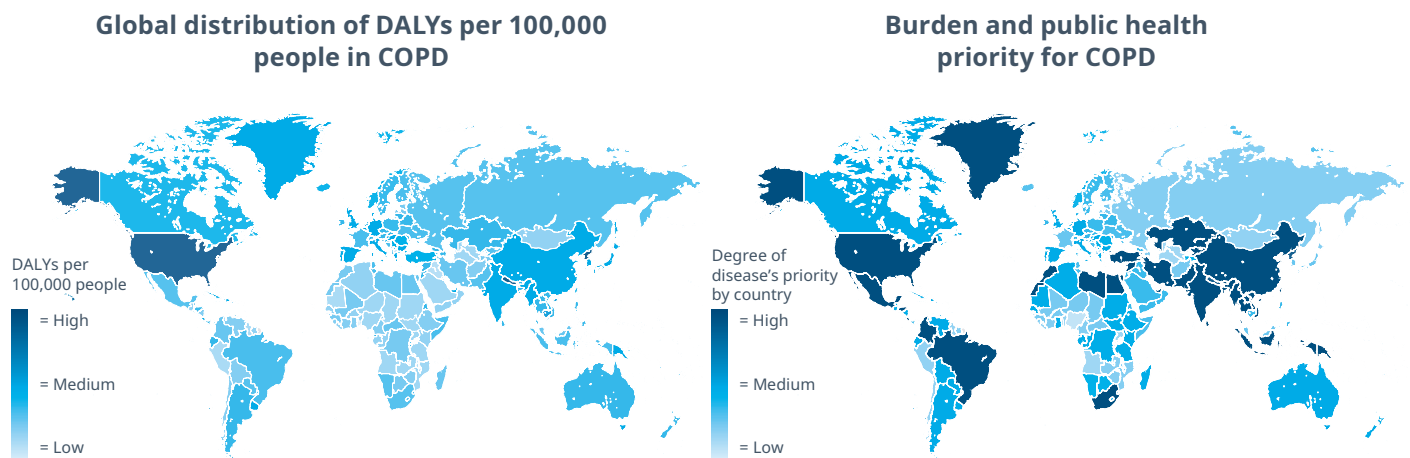


Sources: IHME (2019)<sup>79</sup> and Global Health Needs Tool

Analysis from the GHNT reveals that for COPD, many of the countries with the greatest DALYs per 100,000 people and highest unmet need scores are located in Asia and the Pacific and span all income groups. As in the map in figure B3, the United States, India and China are among the top countries, each with over

1,400 DALYs per 100,000 people and significant unmet need, particularly linked to insufficient diagnostics. In addition, these are the three countries where there are the greatest total DALYs associated with COPD. In each of them, COPD is considered a very high-priority condition.

**Figure B3. Geographical distribution of DALYs per 100,000 people for COPD and the degree to which COPD is considered a public health priority**



Note: Priority based on a composite score as defined in Annex A  
Sources: IHME (2019)<sup>80</sup> and Global Health Needs Tool

COPD accounts for more DALYs in India than anywhere else<sup>81</sup>; Northern Indian states experience the highest disease burden, driven by factors such as biomass fuel usage and high smoking rates, while air pollution further aggravates the situation in regions like Punjab and Delhi.<sup>82</sup> The GHNT's disease unmet need score of 46 places India in the highest category of unmet need for COPD due to significant challenges in both education and access to treatment. More detailed analysis from the GHNT reveals that a low diagnosis rate is the largest obstacle. While spirometry tests are generally available, this gap is partly caused by a limited regional access to screening tools and a lack of knowledge on interpreting the results.<sup>83</sup>

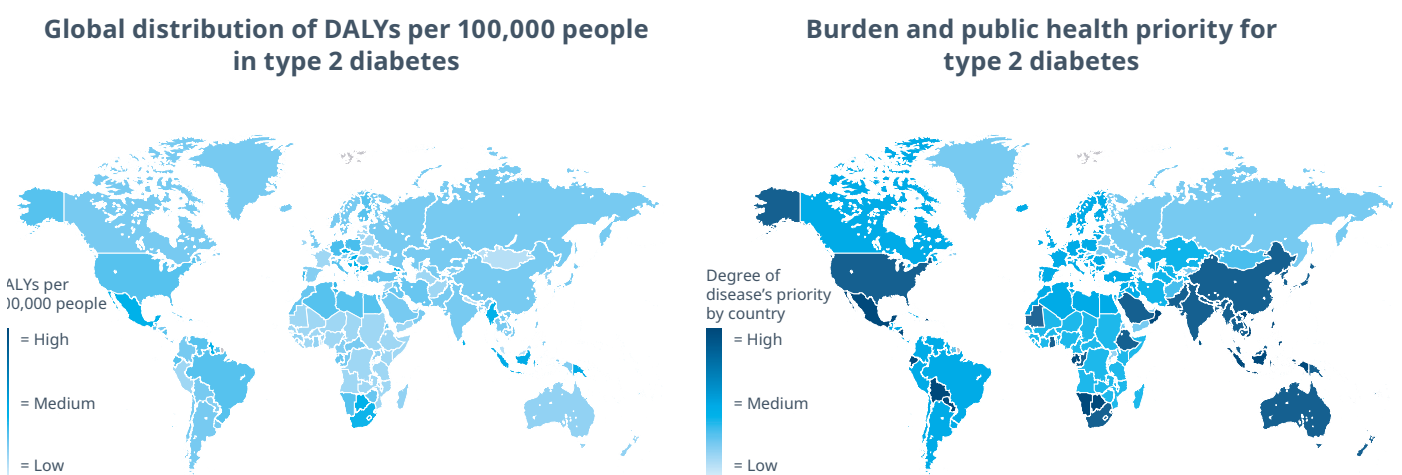
## Type 2 diabetes

Type 2 diabetes represents a substantial public health challenge. It is considered a global pandemic with approximately 14% of the world's adult population living with either type 1 or type 2 diabetes in 2022.<sup>85</sup> Those who receive a diagnosis face many barriers in access to care, including an insufficiently qualified

health workforce, substandard or non-existent comprehensive diabetes management encompassing treatment of comorbidities, deficiencies in supplies, poor education and patient support, and low availability of affordable and high-quality medicines. This lack of access to care has led to a renewed focus in global and national public health agendas on improving diagnosis, treatment, and control of diabetes, including the Global Diabetes Compact launch by the World Health Organization in 2021.<sup>86</sup>

The global burden of type 2 diabetes is considerable, with 66 million associated DALYs and 1.5 million deaths each year. This condition affects over 437 million people worldwide<sup>87</sup>, with countries from all income groups bearing a significant portion of the impact, as illustrated in figure B4. In terms of total DALYs associated with type 2 diabetes, India, China, the United States and Indonesia have the highest ranking.<sup>88</sup> Type 2 diabetes is acknowledged as a public health priority in many countries worldwide, especially across south and east Asia and the Pacific.

**Figure B4. Global distribution of DALYs per 100,000 people for type 2 diabetes and the degree to which type 2 diabetes is considered a public health priority**



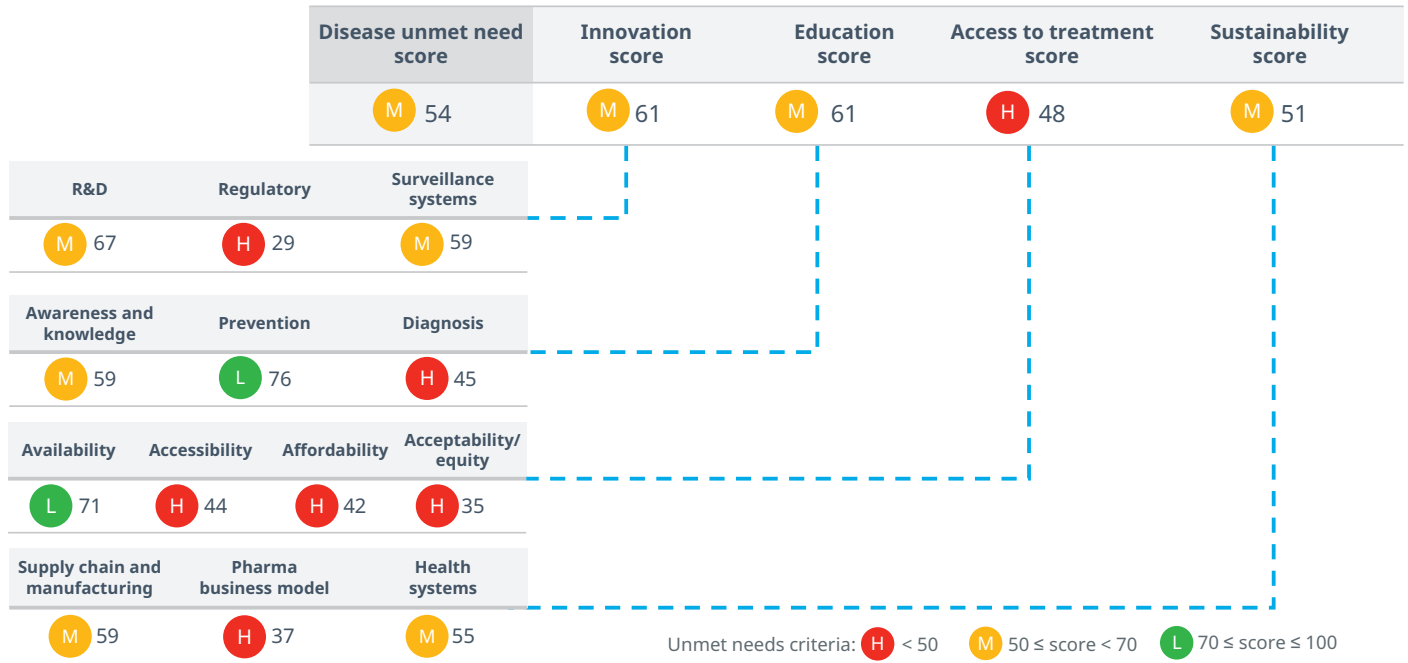
Note: Priority based on a composite score as defined in Annex A  
Sources: IHME (2019)<sup>89</sup> and Global Health Needs Tool



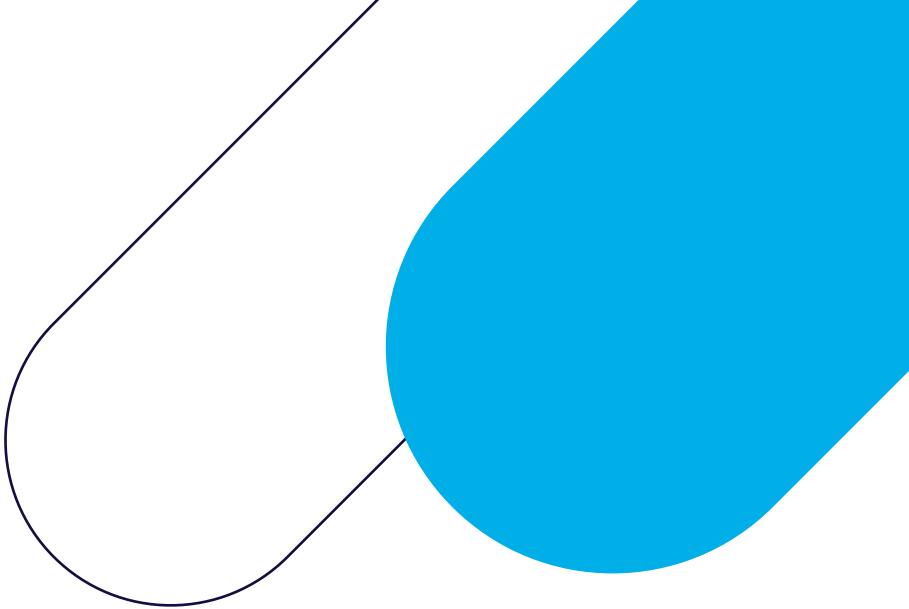
For LMICs, the type 2 diabetes unmet need score calculated by the GHNT is 54, and figure B5 illustrates the detailed breakdown as defined by the four dimensions of unmet need in figure 5. Access to treatment is where the unmet need is greatest, with a score of 48. This is due to a combination of accessibility and affordability barriers, and challenges around

treatment solutions not being universally accepted in LMICs due to cultural attitudes and traditions.<sup>90</sup> Tackling these challenges in LMICs is particularly important as an estimated 81% of adults with the condition live in these geographies, and the prevalence there is increasing rapidly.<sup>91,92</sup>

**Figure B5. Unmet need dimensions for type 2 diabetes in LMICs**



Note: A lower unmet need score corresponds to greater unmet need  
 Source: Global Health Needs Tool



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