Task Force 2: Energy, Climate and Sustainable Development

One World, One Health. A Strategic Vision for a Resilient Global Health System

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Abstract

This Policy Brief sets a path forward for achieving shared success in global health, emphasizing the necessity of enhanced coordination, innovation, equal access and sustainable funding to build health systems that are not only reactive to crises but are also equipped to prevent them. It outlines a collaborative framework among the G7 nations in collaboration with G20, alongside partnerships with pivotal global health entities such as the Global Fund, WHO, GAVI and Unitaid, aiming to significantly elevate health outcomes across the globe, with a particular focus on bolstering support for low- and middle-income countries. The strategy highlights several critical areas for action, including fortifying the global health infrastructure, enhancing pandemic preparedness through robust funding mechanisms, tackling the growing threat of antimicrobial resistance, promoting local manufacturing of health commodities in Africa to ensure self-reliance, addressing the health implications of climate change, and harnessing the potential of artificial intelligence in healthcare. The vision set forth in this document is to build resilient and adaptive health systems worldwide, capable of addressing current challenges and preparing for future health crises, thereby ensuring a healthier future for all.

1. Empowering global health architecture

The landscape of global health is complex and multifaceted, requiring the collaboration of various international organizations to address a myriad of challenges. The Global Fund to Fight AIDS, Tuberculosis and Malaria (GF), GAVI (the Vaccine Alliance), the World Health Organization (WHO), Unitaid and the newly established Pandemic Fund constitute the pillars of the global health architecture. These entities, that reduce transaction costs for low- and middle-income countries (LMICs) by pooling individual state’s financial contributions to global health priorities, play a pivotal role in combating infectious diseases and ensuring equitable access to healthcare resources worldwide. Most of them allow coordination with many stakeholders active in the health agenda, including governments, the private sector, NGOs and communities. These organizations are at the forefront of the global health agenda, emphasizing the need for enhanced coordination in health financing, vaccine distribution, disease prevention and control, access to health products, health systems strengthening, and pandemic preparedness and response.

Not to forget neglected tropical diseases (NTDs), a group of preventable and treatable diseases that affect about 1.65 billion people around the world. NTDs cause immeasurable suffering. They debilitate, disfigure and can be fatal. By most commonly affecting some of the most vulnerable people in the world – who often live in remote communities – NTDs create cycles of poverty and cost low and middle incomes countries billions of dollars every year. Moreover, NTD funding is neglected in comparison with the magnitude of the public health threat they represent, and unlike other infectious diseases, there is currently no pooled funding mechanism to support their control or elimination.
Despite their successes, these organizations face numerous challenges, including funding shortfalls, and difficulties in coordinating responses to emerging health threats. Based on technical partners’ global plans, the Global Fund was aiming at raising 18 billion US dollars for the 2023-2025 period to effectively continue its fight against HIV/AIDS, tuberculosis and malaria and its crucial work to strengthen health systems and build capacities for pandemic preparedness. It has however fall short, securing 15.7 billion US dollars. Similarly, Unitaid’s Strategy 2023-2027 aims to raise 300 million US dollars per year to ensure vital live-saving health products can be taken to scale in LMICs (Unitaid 2024: 53). While funds are increasing, in 2023, they generated approximately 200 million US dollars. Despite the COVAX initiative’s success, there are significant logistical challenges in vaccine distribution, including cold chain storage requirements and last-mile delivery issues, especially in remote and conflict-affected regions. The onset of the Covid-19 pandemic highlighted gaps in global health infrastructure and the need for more robust mechanisms for international coordination and information sharing.

For instance, GF’s focus on equitable access to health services and multi-cycle predictable funding to strengthen key health systems functions can guide discussions on efficient resource allocation and sustainability through integration of pandemic preparedness and response into broader health systems and disease programmes.

The focus of the Pandemic Fund on rapid response can guide discussions on unlocking new funding opportunities and ensuring efficient resource allocation, while also ensuring continuous collaboration with other existing global health initiatives to further enhance complementarity of action in the field of pandemic preparedness.

Collaboration with GAVI and the Global Fund can enhance the integration of the One Health approach to address the broader determinants of health. Both Gavi and the Global Fund will hold Replenishment Conferences in the coming years, while Unitaid has established a target of 1.5 billion US dollars between 2023 and 2027, to ensure the achievement of even greater milestones in the pursuit of global health, which will be decisive in the achievement of the Sustainable Development Goals in 2030 and will count on the support from G7 and other donors.

Strengthening partnerships with the WHO and Unitaid can amplify global surveillance and response efforts, promoting data sharing and joint research and development (R&D) initiatives. Integrating the programmes of these organizations with the One Health approach, which considers the interconnection between human, animal and environmental health, can markedly improve global health outcomes. This strategy is especially relevant for addressing zoonotic diseases and antimicrobial resistance, underscoring the necessity of cross-sectoral coordination.

Policy proposals:

- **Build upon WHO-led Global Action Plan for SDG 3 to improve global health response efficiency** by enhancing coordination among key health organizations and integrating the
One Health approach. Priorities include to align global health strategies on country needs, and establish a rapid response mechanism. Expected outcomes are enhanced disease control, integrated health strategies and a resilient global health infrastructure.

- Set up a Global Public Investment Alliance to secure sustainable funding for SDGs and global public goods such as global health and ensure flexible financing mechanisms. Such initiative would aim to develop innovative financing models, engage the private sector, ensure financial flexibility and equity, and support domestic resource mobilization in lower- and middle-income countries (LMICs). It would leverage additional financial resources for global health initiatives, ability to rapidly respond to health crises on the financial level, and stronger partnerships with the private sector and multilateral development banks for global health challenges.

- Financially commit a substantial part of global health aid to fund the Global Fund, GAVI, Unitaid and the Pandemic Fund, not forgetting the NTD programmes (supporting the delivery of the WHO’s NTD road map to contribute towards the target of 100 countries eliminating at least one NTD by 2030).

2. Integrating pandemic prevention, preparedness and response into the universal health coverage framework

Integrating pandemic prevention, preparedness and response into the universal health coverage (UHC) framework, with an emphasis on primary healthcare and the establishment of a task force for the One Health approach is a comprehensive strategy that addresses the interconnectedness of human, animal and environmental health. This integration, however, faces several challenges that need to be addressed.

The Covid-19 pandemic has underscored the critical importance of UHC and pandemic prevention, preparedness and response on a global scale. With at least half of the world’s population lacking full coverage of essential health services as of 2020, and the global cost of the Covid-19 pandemic potentially exceeding 12 trillion US dollars over two years (2020-2021), the urgency for an integrated approach to health security and primary health care (PHC) has been starkly highlighted. Reinforcing the global health architecture by integrating pandemic preparedness into the UHC framework, with a particular emphasis on PHC, becomes paramount in this context.

Investing in PHC can save 60 million lives and increase life expectancy by 3.7 years in LMICs by 2030. This demonstrates the critical role of PHC as the first line of defence against health threats, serving as a crucial component in early detection, prevention and response mechanisms for pandemics. Whether epidemics are blood-borne, such as malaria and HIV/AIDS, air-borne such as Covid-19 and tuberculosis, polio and cholera, addressing them requires having quality PHC structures in place where patients can be diagnosed, treated, or referred to a second- or third-level healthcare structure.
The One Health approach, recognizing the interconnection between human, animal and environmental health, is central to the agenda of the G7 Summit. With three out of every four new or emerging infectious diseases in humans coming from animals, integrating this approach into the UHC framework can foster more robust and resilient health systems capable of withstanding the challenges posed by zoonotic diseases and ecological risk factors of health. The establishment of an international task force to integrate the One Health approach into global health policies signifies a commitment to a holistic strategy for zoonotic disease prevention and addresses health and supply chain risks at the interface of humans, animals and ecosystems.

One of the critical lessons from recent health crises is the need for a global pipeline and stockpile of critical emergency resources and products. In this realm, the Medicines Patent Pool (MPP) is playing a key role. Utilizing the resources of the MPP, can enhance the global capacity to respond to pandemics effectively. Unitaid created and funds the MPP, as part of its role to influence market shaping. This highlights the potential of collaborative efforts to ensure equitable access to life-saving diagnostic tools, treatments and vaccines, especially in low-resource settings. By addressing these challenges and leveraging the strengths of UHC, PHC and the One Health approach, along with the strategic use of global resources like the MPP, a more resilient and equitable global health system can be built. This integrated strategy is essential for tackling the complex health challenges of our time, making it a critical component of global health initiatives’ investments.

Recommendations:
- Develop WHO led global standards for pandemic prevention, preparedness and response as part of UHC is a forward-looking strategy that underscores the necessity of a unified global response framework supporting the Pandemic Fund, GF, GAVI and Unitaid.
- Integrate the One Health approach into global health policies, representing a forward-thinking strategy to enhance global health security.

### 3. Combating antimicrobial resistance: A multifaceted approach

Antimicrobial resistance (AMR) poses one of the most formidable challenges to global health, threatening to reverse decades of medical progress. Drug resistant bacterial infections alone

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1 MPP is a United Nations-backed public health organization working to increase access to and facilitate the development of life-saving medicines for LMICs. Through its innovative business model, MPP partners with civil society, governments, international organizations, industry, patient groups and other stakeholders to prioritize and license needed medicines and pool intellectual property to encourage generic manufacture and the development of new formulations. To date, MPP has facilitated over 150 patents and sublicenses to improve access to 13 essential medicines in over 140 countries, in complementarity with international law on trade-related aspects of intellectual property rights (TRIPS).
already cause nearly 1.3 million deaths each year, surpassing both HIV and malaria. An additional 3.7 million deaths are associated with AMR and this is projected to grow significantly into the future. The Italian G7 Presidency, along with the 2024 UN High Level Meeting on AMR, represents a pivotal opportunity to galvanize international efforts against this escalating threat. Effective action against AMR necessitates a multi-faceted approach, focusing on improving access to existing antimicrobials, spurring the development of new therapeutic agents, enhancing integrated surveillance systems, and strengthening systems for health, with a focus on LMICs.

Access to antimicrobial medications is uneven across the globe, with misuse and/or overuse of treatments (antibiotics, antivirals, anti-fungi and anti-parasitic) in some regions leading to heightened resistance, while misuse and/or underuse in others result from lack of availability, affordability or awareness. AMR already costs G7 countries an estimated 30 billion US dollars per year and the World Bank has estimated that as soon as 2030 it could be responsible for a 1 to 3.4 trillion US dollars loss in global GDP per year.

High resistance rates, poor sanitary conditions and lack of access to existing treatments mean that the majority of the burden of AMR is in LMICs, and vulnerable populations, including children of all ages, are particularly at risk. Non-bacterial AMR is also a major concern with WHO warning for example that drug resistance in HIV could make crucial antiretrovirals partially or fully inactive. Resistance in fungal infections is also a growing concern, with some strains of infective fungi, such as Candida auris, showing resistance to all usual antifungal treatments.

AMR is exacerbated by other crises and transnational challenges. Increased global temperatures can create more favourable conditions for the growth of many strains of bacteria, including those deemed as priority pathogens by WHO, leading to their proliferation. Conflicts and extreme climate events can lead to displacement, overcrowding, poor sanitary conditions and lack of access to appropriate treatments, creating conditions for the accelerated growth of drug resistance.

A functioning set of effective antimicrobials is vital to avoid the worst consequences of AMR. However, necessary investments for the relevant infrastructure and incentives to sustain R&D and to assure reliable access have been lacking. As private investment declined, there was no concomitant rise of sources of other suitable funding, leading to an antimicrobial development pipeline that WHO has described as “insufficient to tackle the challenge” of AMR (WHO 2021: viii). When new antimicrobials are marketed, they often are not registered widely. Global access, particularly in LMICs, is an even more acute issue and a lack of funding for strategies to improve access to both diagnostics and therapeutics severely undermines our efforts to control the spread of resistant infections.

In addition to improving R&D infrastructure and strengthening sustainable access to antibiotics, effective surveillance systems are foundational to understanding and combating AMR. These
systems track the spread of resistant pathogens, monitor antibiotic usage patterns and inform public health responses. However, surveillance capabilities vary widely across countries, with LMICs lacking the resources to implement effective AMR surveillance. According to the WHO, less than 20 per cent of countries have a funded national plan to fight antimicrobial resistance, illustrating the gap in global surveillance capabilities. Other health systems strengthening related investments that help tackle AMR include laboratory system strengthening, infection prevention and control, and early warning. Furthermore, engaging communities is vital in fighting AMR, as communities are the first to detect outbreaks and must be empowered to monitor and contain the spread of diseases. Here again, Unitaid is active on these issues, and needs additional resource to scale up its work.

To effectively address AMR, it is necessary to consider R&D as part of an integrated approach that includes improving access to quality healthcare, removing human rights barriers, and investing in trained healthcare personnel and sustainable financing strategies for treatments. The G7 has made commitments to tackle AMR since as early as 2014. The G7 nations have a pivotal role in leading global efforts to combat AMR by sharing resources, knowledge, and implementing coordinated actions to enhance healthcare access, funding and R&D initiatives worldwide.

Recommendations:
- Strengthen global antimicrobial R&D and access infrastructure through increased push funding, government support and other relevant investments.
- Support and provide full funding for innovative mechanisms, institutions and models aimed at ensuring adequate manufacturing, supply, timely registration and procurement.
- Commit to a coordinated approach to financing and supporting pull incentive schemes, considering global needs for R&D and access.
- Beyond R&D, continue to invest in components of health systems strengthening that are crucial to control the spread of and combat AMR, especially in LMICs.

4. Forging resilience: Strengthening local health commodity R&D and manufacturing in Africa

The Covid-19 crisis has shed light on the shortfalls of the global health manufacturing architecture, the vulnerability of global supply chains, and the need to support equity and self-reliance in access to health commodities in LMICs, especially through enhanced local and regional R&D and manufacturing capacities.

Strengthening local and regional manufacturing of vaccines, diagnostics and treatment commodities in Africa faces a series of complex challenges that span regulatory, economic, infrastructural and technical domains, as well as in R&D. Currently, Africa imports more than 90 per cent of its pharmaceuticals, underscoring the continent’s reliance on external sources for
health commodities.

Addressing these challenges requires a coordinated effort from governments, the private sector, international partners and local communities. Implementing supportive policies, investing in infrastructure and education, and fostering regional collaboration are key strategies for strengthening local health commodity manufacturing in Africa. For instance, the African Union's Pharmaceutical Manufacturing Plan for Africa (PMPA) aims to enhance the continent’s pharmaceutical production capabilities by 2040 (African Union 2012), a vision that necessitates comprehensive support from all stakeholders.

The promotion of local health commodity manufacturing in Africa represents a pivotal strategy aligned with broader global health security objectives. Encouraging the production of health products on the continent not only enhances regional self-sufficiency and resilience but also underpins the health sovereignty and economic growth of African nations. The African pharmaceutical market was valued at 20.8 billion US dollars in 2019 and is expected to reach 60 billion US dollars by 2024, illustrating the sector’s potential for contributing to economic development.

Global Health initiatives are already supporting capacity building for regional manufacturing. The Global Fund, in collaboration with partners such as African institutions, the US President’s Emergency Plan for AIDS Relief (PEPFAR), Usaid, WHO and Unitaid, focuses on enabling a regional network that sustainably matches supply to demand and avoids duplication and underusage of capacities at the local level. To this aim, it partners with regional pooled procurement platforms and supports regional regulatory harmonization efforts and mobilization of demand for regionally manufactured products. In addition, Gavi will launch the African Vaccine Manufacturing Accelerator (AVMA) in June 2024, a 10-year initiative developed with African partners, which will commit up to 1 billion US dollars to support the sustainable growth of Africa’s vaccine manufacturing base.

The integration of global health initiatives and partnerships is crucial for the successful establishment and expansion of health commodity manufacturing in Africa. Initiatives like the WHO prequalification programme can support this by ensuring that locally produced health commodities meet international quality standards, thus facilitating market access.

Italy’s work for strengthening local health commodity manufacturing in Africa can draw inspiration from the "Mattei Plan", which emphasizes cooperation, development and mutual benefit in international relations. By promoting a model of partnership that respects and supports the health sovereignty of African countries, the G7 can contribute to sustainable development and economic growth in the continent. This involves not only financial investment but also the transfer of technology, skills and knowledge to empower African countries to take charge of their health systems and commodity production capabilities.
5. Navigating the health impacts of climate change: A call for financing

The unfolding crisis of climate change represents one of the most significant challenges to global health and healthcare systems in modern times. Its pervasive effects are altering the geographic patterns of climate-sensitive diseases, and catalyzing conditions conducive to the spread of both non-communicable and communicable diseases. According to the IPCC, 3.3 billion people worldwide are highly vulnerable to climate change and face elevated health risks as a result.

Climate change threatens to undo decades of global health progress and widen existing health inequities. It is imperative to protect people from the harmful health impacts of climate change by pursuing ambitious mitigation and adaptation goals, preventing the worst climate risks, and building climate resilient communities (including critical water, food, and health systems), in line with the Paris Agreement and the “right to health” acknowledged within it. Insufficient, fragmented and inaccessible financing currently jeopardizes such action.

Funding for mitigation and adaptation at the climate-health intersection falls well short of current needs. While over 90 per cent of countries include health priorities in their Nationally Determined Contributions under the Paris Agreement, only 0.5 per cent of multilateral climate funding is allocated to projects that explicitly aim to protect or improve human health – and likewise, apart from Unitaid, global health funders have not integrated action to address climate change into their investments. The COP28 Ministerial Declaration on Climate and Health signed by 149 countries (COP28 2023a) offers the clearest and most recent signal of the demand and need.

Moreover, LMICs struggle to efficiently access and use available financing due to a range of issues, including unattractive financing terms and lack of capacity to fully assess funding needs and seek appropriate financing options.

There are opportunities across sectors – from health and energy systems to economic development, agriculture, gender, and beyond – to advance climate solutions that protect and promote human health. Studies show the economic return of every dollar invested in health is at least 4 US dollars. With constrained resources and multiple overlapping global challenges, investing towards mutual climate and health goals will improve health, foster development, and ensure a sustainable future.
G7 countries have a critical role to play in promoting integrated financing of climate action in the global health architecture and to ensure that health is considered an integral part of the climate adaptation agenda.

The Italian G7 Presidency has articulated an ambitious agenda to support African Development under the Mattei Plan for Africa “to boost local economies and living standards” (Vagnoni 2024), directing a significant share of the Italian Climate Fund to the African continent. The climate-health needs are the largest in the African continent and countries are demanding support to better mitigate and adapt to the health impacts of climate change.

To that end, a consortium of multilateral development banks and funders, countries and philanthropies developed the Guiding Principles for Financing Climate and Health Solutions (COP28 2023b), to support the coherence and collaboration needed across a diverse set of funders to accelerate the allocation of finance for the countries and communities that need it most. The Guiding Principles have been endorsed by 44 organizations, including Unitaid. It was announced at the World Climate Action Summit on 2 December 2023 during the 28th session of Conference of Parties to the UNFCCC (COP28) in Dubai.

Already various stakeholders are aligning work and investments to the Guiding Principles. Member states of the World Health Organization will be voting on a climate and health-focused resolution at the 77th World Health Assembly on 27 May-1 June 2024; the World Bank is developing a financing framework for climate-health solutions; the private sector, through the Sustainable Markets Initiative and the World Economic Forum, are developing their efforts to mobilize private sector capital towards climate-health initiatives; and philanthropies have come together to support in-country solutions that can be scaled with the right financing. Collaboration across these diverse set of financing institutions will be critical, and the G7 is a critical mechanism to facilitate this cooperation.

Recommendations:
• Endorse the Guiding Principles for Financing Climate and Health Solutions.
• Recognize the need to invest in and scale up solutions to manage shifting and growing climate-sensitive disease patterns and burdens.

6. Harnessing generative AI in healthcare: Navigating potential and risks

Generative AI holds the promise of significantly enhancing healthcare delivery and outcomes. By analyzing vast datasets, AI can identify patterns and predict health trends, facilitating early disease detection and personalized treatment plans. For example, in areas with ageing populations, AI can support the monitoring of health conditions in real-time, enabling interventions that prolong
health and improve the quality of life. For chronic diseases, which account for 71 per cent of all deaths globally according to the WHO, AI-driven analytics can optimize treatment efficacy and manage disease progression more effectively.

Furthermore, AI can mitigate health workforce shortages by automating routine tasks, allowing healthcare professionals to focus on more complex patient care activities. The global shortage of healthcare workers is projected to reach 12.9 million by 2035, according to the WHO. AI’s ability to automate diagnostic processes, patient triage and administrative tasks can significantly alleviate this burden. Equally important is AI’s role in bridging the access gap to healthcare services, particularly in underserved regions, through telemedicine and digital health platforms. Telemedicine, powered by AI, has the potential to reach an additional 60 per cent of patients in remote areas, improving access to essential healthcare services.

The utilization of artificial intelligence in Africa’s healthcare sector underscores a transformative wave aimed at addressing some of the continent’s most pressing health challenges, including malaria, tuberculosis and HIV/AIDS.

Despite these promising developments, sustainable integration of AI into Africa’s health systems remains a challenge, compounded by limited infrastructure, data availability, and the need for long-term investment in health technology projects. Addressing these challenges requires concerted efforts from governments, international partners, and the private sector to create a conducive environment for AI technologies to flourish and contribute effectively to public health outcomes. This includes establishing specific funds and agencies dedicated to managing the integration of AI in healthcare, ensuring that pilot projects evolve into sustainable, system-wide implementations that can significantly improve health outcomes across Africa.

Bias in AI models represents another significant challenge. If AI systems are trained on datasets that lack diversity, their outputs may not be generalizable to all populations, exacerbating existing health inequities. Additionally, the lack of transparency in how AI models make decisions can hinder trust among healthcare providers and patients alike. Privacy concerns also loom large, as the use of sensitive health data to train and implement AI systems must be safeguarded against breaches and unauthorized access. The General Data Protection Regulation (GDPR) in the European Union sets a precedent for stringent data privacy measures, emphasizing the importance of protecting patient data in the era of AI-driven healthcare.

The G7 nations can lead a global effort to harness the power of AI in healthcare ensuring that this technological revolution benefits humanity in a manner that is responsible, transparent and inclusive.

Recommendations:

- Support an expert independent reflection on global AI in the International Healthcare Standards and Ethics Board (IHSEB).
• Invest to support AI for health equity in Africa.

Conclusion

For the G7 and the broader international community, the imperative is to deepen engagement on global health as a strategic priority, viewing every health intervention as a step towards not only ending diseases, but also ensuring peace and prosperity. The evidence is compelling, the precedents are clear, and the moral and strategic imperatives are also clear. It is an invitation to transform health diplomacy from an instrument of soft power to a cornerstone of global stability, socio-economic development, and peace.

The geopolitical landscape of the 21st century is shaped by many forces, but few are as powerful and pervasive as health. The G7 and international actors must realize that global health is not a peripheral concern, but a central axis around which the wheels of peace and progress turn. The continued commitment of the international community and the G7 in support to global health initiatives and organizations such as the WHO, Global Fund, Gavi, the Pandemic Fund and Unitaid determines not only the health outcomes of populations, but also the very tenor of international relations and the prospects for world peace in the decades to come and this needs to be kept high in the G7 Agenda.

These proposals collectively aim to strengthen the global health system through better coordination, innovation, access, and funding, ensuring a comprehensive approach to addressing current and future health challenges.
References


About Think7

Think7 (T7) is the official think tank engagement group of the Group of 7 (G7). It provides research-based policy recommendations for G7 countries and partners. The Istituto Affari Internazionali (IAI) and Istituto per gli Studi di Politica Internazionale (ISPI) are the co-chairs of T7 under Italy’s 2024 G7 presidency.