A healthy return
Investment case for a sustainably financed WHO
A healthy return: investment case for a sustainably financed WHO

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Foreword

The world needs a strengthened, empowered and sustainably financed World Health Organization (WHO), at the centre of the global health architecture. To ensure that our structures, processes, and culture are fit for purpose, WHO has implemented far-reaching reforms over the past five years.

However, even as we work to strengthen WHO, we are undermined by our financial model with its over-dependence on voluntary, mostly earmarked, contributions for more than 80% of our budget. This constrains our ability to deliver the high-quality normative and technical work that Member States expect of us, to recruit and retain the best talent, and to be the independent and authoritative global health leader which the world needs WHO to be.

Between January 2021 and the Seventy-fifth World Health Assembly in May 2022, the Member States’ Working Group on Sustainable Finance has been addressing the issue and I am grateful to them for their commitment as they seek a long-term solution to this perennial problem. This includes the possibility of increasing assessed contributions, which accounted for only 16% of our budget in the last biennium. This would broaden the base of WHO’s funding and share the funding burden between nations, reflecting their ability to contribute.

This document is a further contribution from the Secretariat to support Member States in their deliberations. In 2018, I launched WHO’s first corporate investment case for investing in health, and specifically WHO’s Triple Billion targets and the health Sustainable Development Goals. I take no pleasure in noting that the COVID-19 pandemic has reinforced the findings of that document; not only is health a good investment, but it is also an investment that we neglect at our peril.

This second iteration of our investment case quantifies the economic returns from investments in WHO itself. Using a rigorous methodology, it calculates the benefits from investing in WHO over the next 10 years and sets that against the cost of fully funding the projected Programme Budget over the same period. The conclusion is clear: investment in WHO will produce a high rate of economic return. For the strongest results, we need a predictable and sustainable financing model.

I understand that many countries face hard fiscal choices stemming from the pandemic. But I also know that the cost of investing in a strong WHO and other domestic and global health institutions pales in comparison with the collective global cost of the pandemic, estimated at US$ 13.8 trillion through 2024. All the experts’ reviews have said it; if we are unable take this decision for the greater global good now, after all we have experienced over the last two years, then when?

We have a historic opportunity to safeguard and nurture WHO’s unique expertise, global mandate, reach and legitimacy for future generations. The question before us is not whether we can afford to transform the financing of WHO. It is whether we are willing to pay the price of not doing so.
There is no solution to global health security that does not involve a properly funded WHO.

“There is no solution to global health security that does not involve a properly funded WHO. We all want WHO to play its key role in surveillance, in closing the gaps in the surveillance to action loop, in ensuring resilient national health systems, in ensuring a fast-moving global response when a pandemic actually hits, particularly for medical countermeasures. We want WHO to do all these things, but it means we need to fund it adequately and reliably.

Funding WHO goes hand-in-hand with the broader strengthening of multilateral finance for global health security. It is not an “either-or”. It is not about either funding WHO, or strengthening global health security funding generally. They have to hang together.

Each of us, in countries rich, middle income and poor, have it in our financial interests, quite apart from the moral and epidemiological case, to contribute to a stronger multilateral system, with WHO at its centre. The amounts that we each have to pay, to strengthen and empower WHO and to strengthen global health security, will benefit us even from a financial perspective. We pay relatively modest amounts to help avoid the larger continuing costs of a long-drawn COVID pandemic, and to avoid the immense human and economic costs of the next pandemic.”

His Excellency Tharman Shanmugaratnam
Senior Minister of Singapore and Co-Chair of the G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response
A healthy return: Investment case for a sustainably financed WHO

Executive summary

According to the new analysis presented here, investing in WHO provides a return of US$ 35 for every US$ 1 invested.
WHO needs to be resourced and empowered if it is to play the role the world expects from it.

“Today only four staff in the Country Office are funded through assessed contributions, the most stable and predictable resources for WHO, which have covered less than 5% of the budget for WHO’s Iraq programme across the last three bienniums. That leaves more than 50% of our staff on short-term contracts. Our human resources are the capital we deploy in the service of our mission and yet we are only able to provide staff with contracts based on voluntary contributions which expire along with the grants. WHO needs to be resourced and empowered if it is to play the role the world expects from it.”

Dr Ahmad Zouiten
WHO Representative, Iraq

Long-term problems require long-term solutions – and the financing to sustain them.

“Long-term problems require long-term solutions – and the financing to sustain them. For example, mental health challenges have been exacerbated by the pandemic yet, using normative guidance developed by our global WHO colleagues, my team and I are committed to making a measurable difference, working closely with the Ministry of Health in its implementation.”

Dr Eva Jané Llopis
WHO/PAHO Representative, Argentina
For more than 70 years, WHO has been the cornerstone of the global health architecture and has played the leading role in improving global health during a period of unprecedented improvement in human well-being and longevity. Today, the importance of improved health outcomes is increasingly recognized from an economic perspective, and the value of health capital as a whole may be at least as large as the value of all other forms of capital combined. Spending on health is an investment which underpins the quality of life, happiness and prosperity.

WHO’s Thirteenth General Programme of Work, 2019–2023\(^2\), focuses on making a measurable impact on people’s health in all countries. Its Triple Billion targets set the course for WHO to support the world to ensure that one billion more people benefit from universal health coverage, one billion more people are better protected from health emergencies, and one billion more people enjoy better health and well-being by 2023.

However, with disruptions caused by COVID-19 exacerbating slow progress toward the Triple Billion targets, the world is far off track to achieve these global goals. Extending the timeline of the Thirteenth General Programme of Work from 2023 to 2025 to achieve these targets is a necessary step.

Investment in WHO is catalytic by nature, meaning that funds invested in WHO are used to support Member States in taking action on health issues. This is done through the three key functions of WHO – leadership, development of technical products and country support. An example of catalytic action is development of technical products such as guidelines and the prequalification of medicines, vaccines and medical devices which through one process can achieve benefits in all 194 Member States.

According to a new analysis contained here, the quantifiable return on investment in WHO is very substantial. The cost of WHO in net present value terms over the coming 10-year period, 2022–2031, is US$ 33 billion and the public value created as a result of this investment, in the most conservative estimation possible, is likely to be between US$ 1.155 trillion and US$ 1.46 trillion. The resulting return on investment is US$ 35 for every US$ 1 invested in WHO.

Now is the time to sustainably finance WHO and invest in a healthy return for all.

The disruptive shock of the COVID-19 pandemic has sharpened global awareness of the value of health and the need for investment in it. Yet despite this, in the 2020–2021 biennium, only 16% of WHO’s budget was accounted for by assessed contributions, which are provided by all Member States. Increasing the proportion of assessed contributions to cover a greater part of the base budget of WHO’s programme budget would create a secure, sustainable financing stream, enabling a greater focus on fulfilling the core aims of the Organization.

There has never been a more critical moment to invest in WHO, and strengthen the unique role it plays in global health. Now is the time to sustainably finance WHO and invest in a healthy return for all.


\(^3\) In resolution EB150.R4, WHO’s Executive Board recommended that the Seventy-fifth World Health Assembly in May 2022 extend the endpoint of the Thirteenth General Programme of Work by two years from 2023 to 2025.
Chapter 1.
The case for investing in health

Good health is a vital component of human well-being, and enables individuals and communities to build satisfying and productive lives.

Since the establishment of WHO in 1948, there has been an unprecedented improvement in human well-being and longevity. Average global life expectancy at birth has increased from 47 years in 1950–1955 to 72 years in 2015–2020, an increase of 25 years or 54% over this time period. Even though many factors have shaped these major improvements in global health, including rising economic prosperity, rapidly growing medical knowledge, and more effective systems and institutions to apply that medical knowledge to the whole population, WHO has been pivotal in catalysing and securing these health outcomes.

The value of the improvement in global health over the past century is not in dispute, and economists have increasingly recognized its importance relative to other factors. Current estimates indicate that US$8.5 trillion is spent every year on health, representing almost 10% of global gross domestic product. An estimate for five countries (Brazil, China, India, the United States of America and Venezuela (Bolivarian Republic of)) suggests that the value of health capital is more than twice as large as all other forms of capital combined.

This shift in recognizing the value of health has been accompanied by a reorientation towards regarding health as an investment, in common with a wider change in the way in which expenditure in areas of long-term benefit to citizens is regarded. Global targets and estimates of associated resource needs have been extensively used in global health to mobilize resources and drive progress, but they have traditionally been rooted in a commodity approach which regards such spending as a consumption expenditure. Such a perspective often focuses on the resources required for the scale-up of discrete interventions rather than overall outcomes and results, such as increasing healthy life expectancy, and can lead to a fragmented view of health as merely the aggregation of separate interventions, each of which competes for a share of the funding pie.

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The WHO Council on the Economics of Health for All has been leading a reappraisal of health for all as a public policy objective, and the structural changes that are needed to ensure that national and global economies and finance can deliver this ambitious goal. The Council has argued that investments in health are characterized by strong positive externalities, that is the gains to society extend beyond the direct return to investors because there are more than just monetizable benefits and they are reaped over a long-term horizon. Fiscal space at the governmental level is critical to financing investments in public goods including health.8

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<th>INCREASES IN LONGEVITY</th>
<th>ANNUAL GLOBAL HEALTH SPENDING</th>
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Average global life expectancy at birth has increased from 47 years in 1950–1955 to 72 years in 2015–2020, an increase of 25 years or 54% over this time period.

The value of the improvement in global health over the past 100 years is not in dispute, and economists have increasingly recognized its importance relative to other factors. Current estimates indicate that US$ 8.5 trillion is spent every year on health, representing almost 10% of global gross domestic product.

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Chapter 2.
Current context: the COVID-19 pandemic and continuing challenges to global health

This investment case comes at an extraordinary time in global health. The COVID-19 pandemic is the most extreme combined health and economic crisis in the last century.

It represents the most significant health challenge that the world has confronted in over 70 years of WHO’s existence. There is therefore an unprecedented level of both scrutiny and opportunity for change in relation to global health, as awareness of the consequences of a new pandemic disease and its ramifications across all areas of life are at the forefront of this health emergency. The pandemic has sharply focused policy attention but it is just one of the many challenges to which global health must respond, along with climate change and its ramifications, the growing problem of antimicrobial resistance, the unfinished Millennium Development Goal health-related agenda of HIV, tuberculosis and malaria, and the consequences of urbanization and threats to environmental and animal health which require a coordinated “one health” response.
The global toll of COVID-19 has been massive. By the end of 2021 there were reports of more than 282 million cumulative confirmed cases and 5.4 million deaths, with these numbers almost certainly a major underestimation of the true extent of cases and deaths.9 Successive waves of the pandemic have put health systems under enormous pressure in both wealthy and resource-constrained countries. As well as increased patient loads, health workers themselves have been at the frontlines of exposure to SARS-CoV-2 and WHO estimates that 116 000 health workers lost their lives to COVID-19 between January 2020 and May 2021.10

Indirect health impacts have also resulted from the disruptions to livelihoods, education and social protection consequent on the pandemic. The International Monetary Fund has estimated cumulative economic loss to 2024 as a consequence of the pandemic at US$ 13.8 trillion.11 The pandemic has set back progress towards the Sustainable Development Goals by decades, across all areas.12 This impact has not been felt equally, with the most vulnerable and disadvantaged people most immediately affected and suffering the most lasting damage, as child labour rates have risen, girls have missed out disproportionately on schooling and risks of early marriage have increased, gender-based violence has exploded, and inequality has risen with a 6% increase predicted in the Gini coefficient in emerging and developing country economies.13

The new pandemic created huge demand for rapidly available, trusted scientific advice. WHO responded to the challenge by establishing a new fast-track review mechanism in crucial areas of COVID-19 response in order to ensure the coherence and quality of interim guidance and other outputs. It provided approval or critique to WHO technical teams within 24 to 48 hours, and reviewed more than 1000 documents in the first 18 months of the pandemic. WHO has dispatched missions in response to requests from countries around the globe, supported country intra-action reviews to learn from and improve the response, and worked with 23 partners in the United Nations system in a coordinated United Nations system response. In addition to the direct pandemic response, WHO has been a trusted partner in many countries in ensuring continuity in essential health service delivery.

The experience of the last two years has highlighted the centrality of primary health care to pandemic recovery.14 WHO’s Special Programme on Primary Health Care was launched in 2020 as part of the Organization’s transformation agenda and its building blocks include the Universal Health Coverage Partnership and strengthened systems for health financing, health care workforce, medicines and technologies, data and health information. Primary health care connects the Triple Billion targets, reinforcing health systems, essential public health functions and multisectoral policy approaches. Integral to stronger and more effective primary health care is the promotion of health equity, human rights and community empowerment.

WHO has stepped up its efforts across all its areas of activity in response to the COVID-19 pandemic. Every area of health has felt the impact of the pandemic directly or indirectly. Every level of WHO - global, regional and
WHO’s precarious financing is a major risk to the integrity and independence of its work.

“The WHO has an indispensable leadership role in the international system for prevention, preparedness and response to a global health emergency such as a pandemic. WHO must be central to the global health system. For many years, it has been given new tasks without sufficient authority or resources to undertake them full. The quality, timing and clarity of the technical advice and direction WHO provides to the world are of the utmost importance.

Programmes should be staffed with up-to-date, relevant, high-quality experts, supported by the necessary financial, organizational, and management systems. A core technical function of WHO is the translation of models of successful national response into strategies that can be applied elsewhere. The way that WHO is financed today has serious impacts on the quality of the Organization’s performance. Its precarious financing is a major risk to the integrity and independence of its work. Incremental attempts in recent decades to improve the present funding model have not been successful.

The Panel recommends that we should establish WHO’s financial independence, based on fully unearmarked resources.”


Right Honourable Helen Clark
Former Prime Minister of New Zealand and Co-Chair of the Independent Panel on Pandemic Preparedness and Response

Her Excellency Ellen Johnson Sirleaf
Former President of Liberia and Co-Chair of the Independent Panel on Pandemic Preparedness and Response
country - has delivered at a greater level of intensity than ever before in the Organization’s history. Although this context has posed enormous challenges, it has also created greater clarity in understanding the needs for, and benefits of, investment in WHO. Internal and external reviews of WHO’s performance in pandemic preparedness and response have been undertaken in the context of the COVID-19 pandemic and their results have unanimously called for funding for the WHO Health Emergencies Programme to be increased as well as for more flexible and sustained funding for WHO as a whole.

The pandemic has underscored the dangers of underinvesting in pandemic preparedness, revealing major country-level gaps in surveillance and pandemic intelligence, fundamental health system capacities such as case detection and isolation, and leadership and national coordination capacities. When the pandemic struck, major regional and global gaps in pre-positioned emergency supplies, surge workforce capacities, and coordination structures exacerbated national vulnerabilities.

ECONOMIC LOSS TO 2024

US$13.8T

The International Monetary Fund has estimated cumulative economic loss to 2024 as a consequence of the COVID-19 pandemic at US$ 13.8 trillion.
Examples of return on investment in specific WHO activities: pre-qualification of medicines and antimicrobial resistance.

The pre-qualification of medicines by WHO has both facilitated access and saved money – it saves between US$ 30 and US$ 40 for every dollar invested by virtue of increased competition in the prequalification market especially from developing country manufacturers. It supports innovation – for example paediatric tuberculosis products or HIV self-testing, and enhances safety through access to trusted medicines, vaccines and diagnostics in low-and middle-income countries and through its spill-over impacts\(^{16}\) in improving manufacturing standards.

In the lead up to the United Nations High Level Meeting on antimicrobial resistance (AMR) in 2016, the World Bank estimated that unchecked AMR will likely reduce annual global gross domestic product by 1.1% by 2050 in an optimistic scenario of low impacts, and by 3.8% in the case of heavy impacts. The cost of containing AMR was estimated at US$ 9 billion annually, and, even if this would avert only 50% of costs, the World Bank estimated the net present value of containment efforts in the period 2017–2050 at between US$ 9.8 trillion and US$ 26.8 trillion. The economic rate of return of investment in containment of AMR was estimated as ranging from 31% (if only 10% of costs of AMR can be mitigated) to 88% per annum (if 75% of costs are mitigated).\(^{17}\)


A new estimate for the return on investing in WHO

WHO’s first investment case, published in 2018, estimated the rate of return for the net efforts of all actors in relation to each of the Triple Billion targets. This second investment case builds on that work, taking an attribution approach to estimating the return to investing in WHO itself.

This analysis of the return on investment in WHO quantifies the public value created by WHO and, using a likely estimate of the cost of funding WHO over the coming decade, calculates the rate of return on that investment. The public value created by WHO is achieved through the often unique set of tools and skills that WHO uses as it develops and implements global public goods including global plans, guidelines and other supporting action to achieve impact towards its Triple Billion targets.

These tools include leadership, partnership and convening activities, developing a consistent knowledge base, establishing standards, and developing and supporting the use of normative guidelines. In the more than 150 countries, areas and territories where WHO has a country office, WHO cooperates with national authorities in policy dialogue to develop health systems to meet future needs, and provides strategic support to build high-performing systems and technical assistance to build national institutions.

The risks to health are exacerbated in fragile, conflict-affected and vulnerable countries and, where WHO has a presence in such countries, the Organization has had to deliver services to fill critical gaps in emergencies.

Making this estimation faces several challenges: there are many areas of WHO’s work where the value of the health benefits created has not been calculated and there are uncertainties in any calculation of the benefits generated by WHO that accrue from the totality of the Organization’s efforts and accumulate over a long period. Also, the public value created by WHO is itself dynamic as both health needs and benefits vary across regions and over time.
The total level of funding available to WHO over 2021–2030 is then calculated as the net present value (NPV) of this funding stream at a discount rate of 3% per annum. On this basis, the NPV of future funding over the decade is US$ 33 billion.

The dimensions of attribution vary across programme area, including roles such as strengthening leadership and governance, strengthening country capacity, implementation of strategic responses, advocacy for action, supporting research and development, and supporting monitoring and evaluation systems. Attribution rates vary from 5% for the role of WHO in implementing immunization programmes to 16% for the role of WHO in pandemic preparedness.

With an estimate of the public value created by WHO's action across a range of health areas, the benefit cost ratio of investment in WHO can be calculated as the ratio of the net present value of the attributable benefits to total expenditure by WHO over the decade. The benefits attributable to WHO from programmes implemented during the period 2022–2031 will
produce an estimated attributable benefit of between US$ 1.155 trillion and US$ 1.46 trillion. The estimates are expressed in net present value terms (at a discount rate of 3%) for both a lower and a higher rate of attribution to WHO.

The quantifiable return on investment in WHO is very substantial. The cost of WHO in net present value terms over the coming 10-year period, 2022–2031, is US$ 33 billion and the public value created as a result of this investment in the most conservative estimation possible is likely to be between US$ 1.155 trillion and US$ 1.46 trillion. The resulting return on investment is US$ 35 for every US$ 1 invested in WHO.

RETURN ON INVESTMENT

1:35

The cost of WHO in net present value terms over the coming 10-year period, 2022–2031, is US$ 33 billion and the public value created as a result of this investment in the most conservative estimation possible is likely to be between US$ 1.155 trillion and US$ 1.46 trillion. The resulting return on investment is US$ 35 for every US$ 1 invested in WHO.
Committed to continuous improvement in transparency and accountability.

In the area of transparency, WHO is a leader among organizations in the United Nations system with its Programme budget web portal.\(^{22}\) The portal provides up-to-date information on budget, income and expenditures based on International Aid Transparency Initiative standards including at the level of country offices. The portal offers the possibility to track by individual donor, how and where funds were implemented by WHO.

In terms of accountability, WHO uses its results framework as the core of its annual performance assessment for reporting to Member States. The results report for 2020–2021\(^{23}\) uses a dashboard to track and report on the progress of the Triple Billion targets\(^ {24}\) and its underlying indicators. As for reporting on the work of Secretariat, WHO has implemented a unique output scorecard assessment tool, which evaluates the work by strategic shifts (normative work, leadership, and country support) and considers value for money as well as gender, equity, human rights and disability aspects for the design and delivery of the programmes. The results report for 2020–2021 contains both the Triple Billion dashboard and the output scorecard; in addition, it also contains summaries of key achievements at the country level.

WHO is part of the United Nations-wide efficiency reporting initiative and is using the United Nations Sustainable Development Group’s methodology to estimate its efficiency savings. Since 2018, the Secretariat has launched a large number of efficiency initiatives, which resulted in close to US$100 million saved in the form of cost avoidance and time saved. Most of these efficiencies come from automation of administrative processes (for example, invoice processing); moving operations to lower-cost settings; better and more effective procurement planning; centralization of foreign currency purchases and other treasury transactions and changes in travel policy and travel entitlements.

The WHO Secretariat is committed to working with Member States to build on these initiatives and further improve budgetary oversight, transparency and accountability.


Chapter 4.
WHO’s Thirteenth General Programme of Work

Measurable impact is at the core of WHO’s mission to promote health, keep the world safe, and serve the vulnerable. This focus on impact on people’s health in all countries is reflected in the Thirteenth General Programme of Work, 2019–2023.25
The Programme’s Triple Billion targets (one billion more people benefitting from universal health coverage, one billion more people better protected from health emergencies, and one billion more people enjoying better health and well-being by 2023) provide a unified approach to accelerating progress towards the achievement of the health-related Sustainable Development Goals. WHO’s Triple Billion targets are fundamentally interconnected. As the COVID-19 pandemic has shown, healthier, more resilient societies can respond more effectively to health emergencies. Essential health services must be available to all, because if not, disease spreads along the fault lines of social inequality. Whole-of-society approaches are needed to health, with a corresponding commitment to global solidarity, in order to secure the essential public goods of effective health systems and life-saving commodities.

Although WHO has focused on coordinating and supporting the response to the pandemic and other emergencies globally, regionally and nationally, the Secretariat has continued to implement most of the operational plans agreed in its current General Programme of Work to improve health, build resilient systems and protect populations, especially the most vulnerable, from emergencies.26

The current rate of progress towards achieving the Triple Billion targets is suboptimal. The world is expected to reach an additional 270 million people with universal health coverage – access to services without financial hardship – by 2023.27 This figure represents a significant shortfall of 730 million people to meet the universal health coverage billion target by 2023, with COVID-19 expected to have increased this gap to 800–840 million people.27 Compared with the baseline value of 2018, almost one billion more people were projected to be better protected from health emergencies in 2023, but action towards the target was not sufficiently ambitious to secure the protection required. Moreover, the measurement system needs improvement, as is happening through the development of a dynamic preparedness measure, and universal health and preparedness review.

Before the impact of COVID-19 was taken into account, action on the healthier populations billion target was projected to reach 900 million more people enjoying better health and well-being in 2023 compared with the baseline value of 2018.

This is promising progress, but major inequalities between countries are masked by this overall progress and it leaves a gap of well over two billion people compared with where the world needs to be in 2023 in order to remain on track to achieve the targets for Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages). Given the extent to which the world is off track to achieve the Triple Billion targets and the Sustainable Development Goals, the recommended extension of the Thirteenth General Programme of Work to 202528 should enable rapid and sustained efforts to overcome the setbacks resulting from the COVID-19 pandemic, and to consolidate progress as well as fill gaps in achieving the targets.
To give greater impetus to WHO in carrying out its core functions, the Thirteenth General Programme of Work sets out three strategic shifts: stepping up leadership, driving public health impact in every country, and focusing global public goods on impact. These strategic shifts are integral to the ongoing transformation of WHO, which continues to improve the Organization’s efficiency, effectiveness and ability to fulfil its mission.

Integral to the focus on investment is a commitment to efficiency and transparency in the achievement of results. Associated with the Thirteenth General Programme of Work, new measurement tools and mechanisms to become data driven and demonstrate WHO’s accountability for results have been rolled out. They include the redesign of the programme budget process to make it more bottom up and outcome-focused, improved visibility of funds received through a web portal, a results framework developed with Member States and using a balanced scorecard approach, and regular “delivery stocktakes” that track progress towards the Triple Billion targets and the Sustainable Development Goals, as well as annual results reports to provide greater accountability for results.
With more direct support, WHO can leverage the resources essential to reach the most vulnerable people.

“Flexible and predictable funding is critical because it will enable us to address established priorities, innovate, scale up successful interventions and respond rapidly in case of emergencies. Funding focused on specific diseases tends to duplicate efforts and creates fragmentation. With more direct support, WHO can leverage the resources essential to reach the most vulnerable people and contribute to realizing the Organization’s mandate.”

Dr Djamila Cabral
WHO Representative, Angola
Chapter 5. Investing in the Triple Billion targets

The first WHO investment case in 2018 showed what could be achieved by investing in universal health coverage, protecting people from health emergencies and supporting healthy populations.

Standards setting in a pandemic

With the pandemic, the demand for WHO's normative guidance on COVID-19 and other essential health services has increased dramatically. As at the end of 2021, more than 1600 publications on COVID-19 have been reviewed for quality and consistency through a new mechanism with an average turnaround time of three working days. In the first year of the pandemic, WHO's institutional repository information system (IRIS) recorded 80 million downloads. An implementation evaluation review by a WHO Collaborating Centre showed that countries trust WHO's guidelines to inform national policies, strategies, plans and clinical guidelines. Development of global norms and standards is a core function and mandate of WHO.

Investment by WHO at the start of the pandemic helped to optimize norms and standardize quality assurance, development, and delivery. It promoted a shift from paper-based to technology-enabled scientific evidence appraisal and a "living" guideline issuance approach that equipped regulators and policy-makers with the latest scientific information in real-time. Provision of WHO's guidance has shifted from months to weeks. The availability of policy and practice recommendations from WHO, ranging from vaccines to other preventive public health and social measures, has enabled all governments, regardless of income level, to make informed and equitable economic and social policies.

The first WHO investment case in 2018\textsuperscript{31} showed that, by 2023, 24.4 million lives could be saved owing to improving access to universal health coverage, with a market-valued rate of return of US$ 1.4 for every US$ 1 invested, rising to US$ 9 for every US$ 1 invested if the intrinsic value of human life is included.

WHO has a unique added value in galvanizing progress towards universal health coverage, particularly in the areas of noncommunicable diseases and mental health conditions where WHO is the only global actor setting normative standards and global health sector strategies. The global economic cost of depression and anxiety due to lost productivity alone is about US$ 1.15 trillion per annum.\textsuperscript{32} However, treatment rates for depression range from 7% to 28% across country groupings by income, and for anxiety from 5% to 20%.

Given these large treatment gaps in almost all countries there is considerable scope to reap benefits from increasing coverage rates, and a return on investment of up to US$ 5.70 for every dollar spent is expected. As the only global health agency including mental health outcomes in its mandate, WHO’s Comprehensive Mental Health Action Plan (2013–2030),\textsuperscript{33} mental health treatment guidelines and the Secretariat’s technical assistance to Member States to support the inclusion of mental health services into national strategic planning will be instrumental in closing these treatment gaps.

Vaccinations administered between 2021 and 2030 can avert 51 million deaths, the largest numbers being for measles and hepatitis B, accounting for 19 million and 14 million deaths averted respectively.\textsuperscript{34} Lower-middle-income and low-income countries stand to be the major beneficiaries of the vaccination benefits. The health benefits arising from immunization programmes give rise to economic and social benefits as a result of deaths and disability avoided.

WHO is responsible for developing position papers on immunizations under the guidance of its Strategic Advisory Group of Experts on immunization, and advises on routine immunizations for all age groups. Through the programme on prequalification of vaccines, WHO ensures that vaccines used in immunization programmes are safe and effective, through the application of regular monitoring of international standards in the manufacturing process. Through the implementation plan for the Immunization Agenda 2030, WHO aims to close the gap in equitable access to immunizations worldwide over the next decade.
Sustainable financing is a prerequisite for WHO to continue evolving.

“Sustainable financing is a prerequisite for WHO to continue evolving into the Organization that the world needs. We believe that it is time to equip WHO with predictable and flexible funding that is so critically important to enable WHO to carry out its mandate and meet growing demands, including the prevention and response to sexual exploitation, abuse and harassment.

We believe this is also an opportunity to address the significant discrepancy between Member States’ financial contributions and the expectations on WHO, particularly the demand on the WHE Programme to respond to emergencies and humanitarian crises, and deal with a global pandemic.”

Dr Felicity Harvey
Co-Chair Independent Oversight Advisory Committee for the WHO Health Emergencies Programme
Health emergency protection billion

The first WHO investment case in 2018 estimated that 1.5 million lives would be saved at an average rate of return of US$ 8.4 for every US$ 1 invested if this target were achieved. Due to the COVID-19 pandemic in the time since this analysis was undertaken, it is unlikely that these returns remain valid. New analysis undertaken during the COVID-19 pandemic shows the bigger picture of the potential economic benefits of better protection from health emergencies. With an estimated 25% probability of another major pandemic comparable to COVID-19 emerging in the coming decade, and a conservative estimate of the costs of such a pandemic at US$ 10 trillion, the probability-adjusted benefit of preventing such a pandemic would be US$ 2.5 trillion. Recent estimates indicate the costs of better preparedness to amount to over US$ 31.1 billion per year. The benefits of better controlling and managing an epidemic once it has emerged can be estimated by comparing highest and lowest performing countries in responding to the COVID-19 pandemic, with probability-adjusted benefits of US$ 750 billion in year one and US$ 1.2 trillion over a three-year period. Many of the benefits of activities within the Universal Health Coverage, Health Emergency Protection and Healthier Populations billions will be seen long beyond the timeframe of the Thirteenth General Programme of Work, with return on investments in both health and financial terms accruing for years to come. Investing in these targets, therefore, is not only cost-effective but also impactful and sustainable.

Healthier populations billion

In the first WHO investment case in 2018, the healthier populations billion was predicted to save at least 3.8 million lives over the subsequent 5 years, with returns on investment ranging from US$ 1.50 to US$ 121 for every US$ 1 invested depending on the area. The recent 2021 analyses for interventions in relation to tobacco, alcohol, healthy diets and physical activity estimated that for as little as US$ 0.84 per person per year, seven million additional lives can be saved by 2030 in low- and middle-income countries, for a return on investment of US$ 7 for every US$ 1 invested. When considering tobacco control interventions in low-and middle-income countries alone, for example, a conservative estimate for the economic benefits generated over 10 years is US$ 17.5 billion, compared with an implementation cost of about US$ 2.3 billion. Likewise, other interventions show significant return on investment, including alcohol (1:8) and healthy diets (1:12). Moreover, investments to meet the global nutrition targets have large economic returns and benefits on the lives of children and women in low- and middle-income countries, including a 1:4 ratio for wasting control and 1:35 for breastfeeding promotion, protection and support. Many of the benefits of activities within the universal health coverage, health emergency protection and healthier populations billions will be seen long beyond the timeframe of the Thirteenth General Programme of Work, with return on investments in both health and financial terms accruing for years to come. Investing in these targets, therefore, is not only cost-effective but also impactful and sustainable.


Flexible funding would be a game changer.

“The WHO Country Office for India, which covers over a billion people, supports a presence in 23 States and a network in 14 more through 247 units nationwide. The needs and priorities we deal with every day are enormously diverse and funding streams that are narrowly focused do not take account of that fact. Somehow, we manage to move resources, fill gaps by co-financing with government, or partner with agencies providing flexible funds. But can you imagine what we would be able to deliver as WHO if we had a more predictable and adaptable funding model?

We would be able to deliver much more effectively against the needs we see every day. It is precisely delivery on the ground that will get us to the Triple Billion targets and the Sustainable Development Goals and sustainable, flexible funding would be a game changer that enables that.”

Dr Roderico Ofrin
WHO Representative, India
Chapter 6.
Current state of WHO’s financing

The way in which funds are provided to WHO constrains the efficiency of the Organization and its ability to maximize returns on investment.

For much of the Organization’s history most of its funds were provided through assessed contributions made by Member States, but in recent decades these have been capped and today account for only 16% of WHO’s total budget. As these assessed contributions have declined in real terms, they have been replaced over time by an increasing share of funding to WHO coming as voluntary contributions where donors direct funding according to their priorities.

Contributions to WHO come largely from public funds. In both assessed and voluntary funding, Member States contribute directly nearly 60% of the programme budget, and another 14% comes from other organizations in the United Nations system, partnerships and development banks which are themselves largely funded by governments. Nearly 10% of WHO’s funds come from philanthropic foundations, predominantly the Bill & Melinda Gates Foundation. Through the results framework for the Thirteenth General Programme of Work WHO holds itself accountable for the use of these funds, whether from government or philanthropic sources, and to ensure that they support significant outcomes.

Although countries have increasingly recognized that health financing has value as a comprehensive and sustained investment in the well-being of their populations, this perspective has not yet translated to their funding of global health, given the dominance of relatively short-term earmarked contributions to WHO. This investment case is intended to build on the general argument that WHO contributes to progress in global health outcomes by establishing a more specific quantification of the return on investment attributable to WHO. This conclusion will strengthen the basis on which Member States and other funding contributors can assess the return on their investment in WHO.

Increased assessed contributions to strengthen investment in WHO’s base programme budget would enable WHO to invest in the expertise required to provide global health leadership and directly support Member States in a sustainable way to develop and maintain the best possible health care services.

WHO country offices are at the heart of our operation yet limited predictable and sustainable funding hinders our efforts.

“When COVID struck in the Republic of Moldova, WHO was the first resort for the Government. We provided evidence and guidance in developing the National Response Plan, we improved the surveillance system, we built laboratory and testing capacities, we assessed health system needs, we assisted by procuring PPE and consumables, by training for doctors and nurses, and supporting risk communication and community engagement. And our efforts were far from unique. WHO country offices are at the heart of our operation yet limited predictable and sustainable funding hinders our efforts. While we are thankful for all the support provided so far, we need sustainable financing and your hand of hope to help us help those most in need.”

Dr Miljana Grbic
WHO Representative, Republic of Moldova
It would also ensure the Organization was resourced to detect and respond to emergencies, strengthen the governance of WHO so that the technical priorities set by Member States in governing-body budgets, resolutions and decisions would be fully financed and attention could be focused on fulfilling them and sustaining financing for critical priorities. These would include support to health systems based on people-centred primary care, and better support areas where predictable, long-term financing is crucial, including emergency preparedness, the fight against noncommunicable diseases, mental health and the polio transition.

The constraints of inflexible funding of WHO are manifest at all levels of the Organization but are felt more strongly at country level. Looking at the mid-point of the 2020–2021 biennium, flexible funding made up only 10.2% of total funds for WHO country-level activities. Such a low percentage of flexible funding impedes WHO’s ability to provide sustained and effective technical cooperation with countries and to achieve the Triple Billion targets, especially in relation to universal health coverage and promoting healthier populations, areas that have traditionally received less support from earmarked contributions. Sustained technical assistance and policy advice to Member States is a vital function of WHO and enables the achievement of health benefits across the spectrum of WHO and country activities.

Increased flexible and predictable financing for WHO would enable it to meet a broader range of health challenges that the globe will face in coming decades. It would enable improved planning and delivery of results based on predictable and sufficient funding for all areas of work and priorities, eliminate pockets of underfunded neglected health areas, and support reliable hiring capacity to ensure that WHO can recruit and retain world-class expertise. Financing provided in a consistent way would align with the governance and ownership of the Organization in fulfilling its strategic priorities and directions set by Member States, and lessen the risk of funding-driven compromise of the impartiality required to deliver WHO’s normative, research, and standard-setting work.

In the context of the COVID-19 pandemic, reviews of better ways to protect the world from future health threats have unanimously recommended strengthening WHO, by means that include more sustainable and flexible funding. Member States have considered the sustainable financing of WHO in a process established by the Executive Board at its 148th session in 2021.43

Investment in WHO returns major benefits to its investors. These investors are taxpayers and citizens the world over. They can be assured that their investment in WHO is being returned many times over. The world needs WHO to be “financially fit for purpose” so that it can “deliver on its broad – and ever-growing – mandate to act as the world’s leading authority on global health.”44
Working effectively and efficiently for the future just isn’t possible where we are reliant on heavily earmarked, unpredictable, short-term funding.

“The health challenges faced in the Western Pacific Region are not new. But they do require new approaches and new ways of working. Our Member States are asking us to prioritize our work today, to address the challenges of tomorrow. They are also asking us to accelerate implementation of the vision, including by strengthening our collective efforts to work for the future and address long-term challenges. However, working effectively and efficiently for the future, using a longer-term systems approach and engaging partners beyond health, just isn’t possible where we are reliant on heavily earmarked, unpredictable, short-term funding.”

Dr Mark Jacobs
WHO Representative, Pacific Island Countries
Funding the WHO is a test of our common humanity.

“Injustice anywhere, is in my view, a threat to justice everywhere and this is where the WHO can help transform lives. So, we have to ask all our potential funders: do we really value human life in the South, so little and so cheaply, that even when we have the miracles of vaccines and drugs, that can bring about global health coordination led by the WHO, we are not prepared to spend more than a fraction of what we spend in the Global North?

Funding the WHO is a test of our common humanity. Fair burden-sharing is what pays US$ 10 billion dollars a year for UN peacekeeping. Fair burden-sharing based on updated quotas is what finances the IMF and the World Bank. Fair burden-sharing based on assessed contributions is what inspired the funding of most of the initial work of the WHO. And it cannot be right that the purest of global public goods, the control of disease, is subject to the least burden-sharing by all. And is most reliant on charity.”

Right Honourable Gordon Brown
Former Prime Minister of the United Kingdom of Great Britain and Northern Ireland and WHO Ambassador for Global Health Financing
Annex

Methodology for WHO’s second investment case

WHO’s second investment case presents two main pieces of data related to returns on investment:

1. the return on investment through achieving the Triple Billion targets of WHO’s Thirteenth General Programme of Work, 2019–2023.\(^{45}\)

2. the return on investment in WHO for its action as a catalyst for achieving these goals.

This annex outlines the methodology underpinning each of these sets of data. More detailed methodology of each analysis is available.\(^{46, 47}\)


The return on investment of the Triple Billion targets

WHO’s Thirteenth General Programme of Work, 2019–2023 aims to ensure that an additional one billion people benefit from universal health coverage, one billion more people are better protected from health emergencies, and one billion more people enjoy better health and well-being by 2023. The General Programme of Work was conceptualized before the COVID-19 pandemic, which has caused widespread disruptions to essential health services, increasing delays in achieving these targets. The proposed extension through to 2025 is at the time of writing awaiting consideration from the Seventy-fifth World Health Assembly in May 2022.

WHO’s first investment case “A healthier humanity: the WHO investment case 2019–2023” reported the economic case for attaining the targets of the General Programme of Work. The full methodology was published in an accompanying technical report “Investing global, investing local: supporting value for money towards the health SDGs” by the WHO Secretariat. This second investment case refers to these same data and methodology.

The analysis underlying the first investment case used a compilation of existing models and publications, with adjustments made as appropriate. The authors began by identifying the estimates of costs and benefits of scaling up interventions for each of the Triple Billion targets in the 2019–2023 timeframe, focusing on low- and middle-income countries where the global burden of disease is mainly concentrated and where progress towards universal health coverage is required. Efforts were made to avoid double counting and to exclude studies lacking the requisite methodological detail. The costs required to achieve each of the billion targets in the first investment case are the sum of the financial costs of implementing interventions in a specific year, for each area, above what would be spent at established baseline levels – that is, the additional investment need.

Each investment is associated with a health impact. Health benefits are measured as health outcomes only (expressed as lives saved), and not converted into monetary values. With regard to the investments needed to reach universal health coverage, the health benefits are also expressed as healthy life years gained, and as a summary measure, increases in life expectancy.

The analysts also identified the economic gains expected from the scale-up of interventions. Because the economic gains attributable to some investments in the five-year period of the General Programme of Work will continue to accrue beyond 2023, they are taken into account where published estimates existed. Investments leading to “cost savings” are presented as “cost offsets” but were not added to the other estimated gains.

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Calculating the attribution of benefits to investment in WHO

The analysis presented here is the first attempt to determine the economic and social return on investing in WHO now. It advances the work presented in the first investment case, which identified the investment and returns at the global level. We now look at attributing benefits at the country level to investments made in WHO across all its three levels.

The methodology follows three major steps: estimating the global public benefits, attributing those benefits to WHO and estimating the benefit-cost ratio.

**Estimate of global benefits**

Estimates of the benefits created by the scaling up of more than 100 WHO-recommended interventions were identified in the literature. The public benefit created by each intervention is calculated using disease-specific deterministic projection models and varying the coverage values from the current level to a higher level aligned with reaching the health-related Sustainable Development Goals or other targets. The size of the impact associated with each intervention is taken from the literature, largely composed of systematic reviews of randomized controlled trials. The attributable health benefits are defined as the difference between the health outcomes in two scenarios: scale-up of coverage and business as usual. For each of these interventions, the health benefits measured in lives saved and healthy life years gained were drawn from the published studies for the time period 2022–2031, that is, over a 10-year period from now. The public benefit is then adjusted for an achievement rate to account for over optimistic scale-up scenarios, such as those which assume achievement of Sustainable Development Goal indicators by 2030.

**Benefits attributed to WHO**

As WHO works with national governments and other partners such as other United Nations organizations (for example the United Nations Population Fund (UNFPA), global health partnerships (for example Gavi, The Vaccine Alliance and the Global Fund to Fight AIDS, TB and Malaria) and nongovernmental organizations, the share of public benefit that can be attributed to WHO is then identified through the development of an attribution rate. The share of returns attributable to WHO will likely vary across WHO’s spheres of activity, depending on the nature of those activities in a given area, and the skills, expertise and communications capability that WHO brings relative to that of other parties involved in that area.

Using the three strategic shifts identified in the Thirteenth General Programme of Work, combined with seven normative functions that WHO performs, the common set of influencing tools used by WHO to achieve public benefit at the country level can be identified (Table 1).
### Table 1. WHO’s strategic shifts and associated influencing tools

<table>
<thead>
<tr>
<th>Influencing tool</th>
<th>Common strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stepping up leadership</td>
<td></td>
</tr>
<tr>
<td>Providing leadership</td>
<td>→ Issue of initial awareness-raising report  \n→ Consultation with partners</td>
</tr>
<tr>
<td></td>
<td>→ World Health Assembly’s request for a global plan  \n→ World Health Assembly’s adoption of a resolution  \n→ International treaty  \n→ Health sector response in countries</td>
</tr>
<tr>
<td>Convening and coordination</td>
<td>→ Meetings with partners  \n→ Meetings with highly qualified technical experts  \n→ Involvement of Member States in extensive consultations  \n→ Global plan launched with buy-in of high-level partner  \n→ Outbreak surveillance</td>
</tr>
<tr>
<td>Driving public health impact in every country</td>
<td></td>
</tr>
<tr>
<td>Country office network</td>
<td>→ Assisting in the implementation and adoption of WHO’s plans and strategies by Member States  \n→ Supporting Member States to update and/or revise national guidelines, regulations and legislation  \n→ Assisting in raising awareness and establishing country monitoring and surveillance systems  \n→ Assisting in country-level health planning processes</td>
</tr>
<tr>
<td>Partnerships</td>
<td>→ Formation of partnerships with other organizations in the United Nations system, development banks, international private and philanthropic bodies and other intergovernmental organizations Involvement of Member States</td>
</tr>
<tr>
<td>Focusing global public goods on impact</td>
<td></td>
</tr>
<tr>
<td>Knowledge base</td>
<td>→ Input of high-quality WHO staff expertise  \n→ WHO collaborating centres  \n→ Constant knowledge renewal through regular contact with world experts WHO’s Global Health Observatory and WHO’s World Health Data Hub  \n→ Consolidation of data collected by Member States</td>
</tr>
<tr>
<td>Establishing standards, providing guidelines</td>
<td>→ Developing intervention frameworks  \n→ Providing formally approved WHO guidelines and standards  \n→ Issuing fact sheets  \n→ Online reference publications  \n→ Global health strategies and action plans adopted by Member States</td>
</tr>
<tr>
<td>International norms</td>
<td>→ Adoption and implementation of international treaties and agreements</td>
</tr>
</tbody>
</table>
The estimated benefits reflect the total health-system outcomes for only a proportion of WHO’s activities. It is not possible to estimate WHO’s full value owing to absence of data and the limitations of modelling. However, based on comparability across those areas included using the common method, the analysts expect that the methodology can apply across all health areas addressed by WHO. The additional benefits attributable to WHO depend on the resources allocated to the use of the influencing tools identified by WHO, and ultimately, the value of the health outcomes generated by the proposed intervention programmes in each of these additional areas.

To calculate the attribution rate for each area of activities, two methods were used:

1. Global health action plans that allocate roles and responsibilities to key actors, including Member States, other organizations in the United Nations system, the WHO Secretariat, global health partnerships and nongovernmental organizations, were used as the basis for allocation of attribution.
   
   a. For each activity proposed within the plan, an assessment of the importance of relative contribution of actors is taken.
   
   b. Each activity is weighted for its relative contribution to the public benefit anticipated from implementation of the plans’ recommendations on a scale from 0 to 100.

2. A qualitative assessment of the use of influencing tools across the programme area to identify the overall level of WHO’s involvement in development of policies and interventions implemented at country level was undertaken when global health action plans were unavailable.

The global health action plan methodology was used for three areas: mental health (7.5–14%), noncommunicable diseases (5.0–7.5%) and road safety (5.0–7.5%). The value of the influencing tools were assessed for non-COVID-19 vaccines (7.5% attribution rate), pandemic preparedness (15–20%) and reproductive, maternal, newborn child and adolescent health (7.5–10%), and prevention of child marriage (3–5%).
Table 2 summarizes the results for the more than 100 interventions considered above. The first line presents the results emerging from the models for the global value of the benefits created in each area, expressed as net present value at a discount rate of 3% per annum. The total figure of the public value at the global level which WHO contributes to over the 109 interventions (excluding pandemic management) amounts to US$ 15.9 trillion.

Two critical variables influence the calculation of the net benefits attributable to WHO: the achievement rate and the attribution rate. The first, the achievement rate, represents the extent to which it is reasonable to assume that the target level of outcomes in the studies used as a basis for these estimates can be achieved. For an investment case, as it is not appropriate to use high target levels for interventions and outcomes that may not be achievable in practice, modelled public benefits have therefore been adjusted to reflect the probability of achieving coverage targets. The second is the attribution rate, for which lower and upper bounds have been calculated to reflect the uncertainty in this area.

The weighted average attribution rates are 7.3% (lower) and 9.2% (higher), giving respectively a net present value of public benefits attributable to WHO of US$ 1.155 trillion and US$ 1.460 trillion. Both of these figures are net present values at a 3% discount rate. Owing to the high level of uncertainty in this attribution analysis, the lower bound is used as the base case for the calculation of the return on investment in WHO. This lower estimate corresponds to an average attribution rate of 7.3% over the more than 100 interventions studied and translates to US$ 1.155 trillion out of the net global public benefits of US$ 15.9 trillion attributed to WHO’s activities.

<table>
<thead>
<tr>
<th>Pandemics</th>
<th>RMNCH</th>
<th>Adolescent health</th>
<th>Depression and anxiety</th>
<th>Child marriage</th>
<th>Vaccines</th>
<th>Non-communicable disease</th>
<th>Road safety</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net global value of benefits from 2021 to 2030</td>
<td>9 700</td>
<td>757</td>
<td>392</td>
<td>702</td>
<td>1 800</td>
<td>866</td>
<td>1 690</td>
<td>15 907</td>
</tr>
<tr>
<td>Achievement rate</td>
<td>70%</td>
<td>70%</td>
<td>100%</td>
<td>80%</td>
<td>90%</td>
<td>80%</td>
<td>80%</td>
<td>76.5%</td>
</tr>
<tr>
<td>Net achieved benefits</td>
<td>3 700</td>
<td>6 790</td>
<td>530</td>
<td>392</td>
<td>562</td>
<td>1 620</td>
<td>693</td>
<td>1 352</td>
</tr>
<tr>
<td>Attribution rate to WHO</td>
<td>16.6%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>3.0%</td>
<td>7.5%</td>
<td>9.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Net benefits attributable to WHO</td>
<td>308</td>
<td>509</td>
<td>40</td>
<td>29</td>
<td>17</td>
<td>122</td>
<td>62</td>
<td>68</td>
</tr>
<tr>
<td>Attribution rate to WHO</td>
<td>10%</td>
<td>10%</td>
<td>14%</td>
<td>5%</td>
<td>7.5%</td>
<td>16.5%</td>
<td>7.5%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Net benefits attributable to WHO</td>
<td>308</td>
<td>679</td>
<td>53</td>
<td>55</td>
<td>28</td>
<td>122</td>
<td>114</td>
<td>101</td>
</tr>
</tbody>
</table>

RMNCH: reproductive, maternal, newborn child and adolescent health

a The achievement rate is set to 100% as the underlying analysis used a more conservative coverage target of 30% of unmet need as compared to other health areas which modelled more ambitious targets.
The central cost case for the investment analysis starts from the latest Programme budget for WHO for the biennium 2022–2023, which already incorporates some allowance for strengthening WHO’s activities. Biennial budgets are assumed to increase in real terms by 10% per biennium after that for 2022–2023. This figure is nearly equal to an increase of 5% per annum, which aligns with the findings of WHO’s 2021 global health financing report\(^5\), indicating that over the past two decades health spending has more than doubled, representing an average 5% increase per year. The total level of funding available to WHO over the period 2021–2030 was then calculated as the net present value of this funding stream at a discount rate of 3% per annum. On this basis, the net present value of future funding over the decade is US$ 33 billion.

With a net present value of the investment cost of US$ 33 billion, the benefit-cost ratio for the benefit estimates in Table 2 are 35.0–44.3. The lower bound of this estimate, 35.0, is taken as the base-case finding meaning that for every US$ 1 invested in WHO US$ 35 is returned in attributable benefits. This is a lower-bound estimate because, although the full cost of investment in WHO is included in the denominator, only a proportion of the relevant activities of WHO have been included in the calculation of benefits in the numerator. Even so, a return of US$ 35 for every US$ 1 invested is very high, representing excellent returns on investment.

In sum, the expected budget investment of US$ 33 billion in WHO over the coming decade is expected to contribute to generating net global public benefits of US$ 15.9 trillion, of which at least US$ 1.155 trillion would be directly attributable to the actions of WHO. This means for each US$ 1 invested a minimum return of US$ 35 in public benefit would be achieved.