

Priority setting in tuberculosis programme planning

Policy brief



World Health
Organization

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Suggested citation. Priority setting in tuberculosis programme planning: policy brief. Geneva: World Health Organization; 2025. <https://doi.org/10.2471/B09614>. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <https://iris.who.int/>.

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Design and layout by Inis Communication

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Acknowledgments

This policy brief was developed by Tauhid Islam and Debora Pedrazzoli, under the guidance of Farai Mavhunga and overall direction of Tereza Kasaeva, all from the World Health Organization (WHO) Department for HIV, Tuberculosis, Hepatitis and Sexually Transmitted Infections (WHO/HTH).

The following WHO staff provided input to the document: Jean Louis Abena Foe, Taghreed Adam, Nimalan Arinaminpathy, Pedro Avedillo, Annabel Baddeley, Hélène Barroy, Vineet Bhatia, Annemieke Brands, Dennis Falzon, Katherine Floyd, Nebiat Gebreselassie, Medea Gegia, Lice Gonzalez Angulo, Christian Gunneberg, Patricia Hall-Eidson, Karina Halle, Akudo Ezinne Ikpeazu, Jean De Dieu Iragena, Monique Kamphuis, Avinash Kanchar, Marek Lalli, Fuad Mirzayev, Linh Nhat Nguyen, Kyung Hyun Ohn, Altea Sitruk, Susan Sparkes, Lana Syed, Martin Van den Boom, Anna Vassall, Sabine Verkuijl, Kerri Viney, Rajendra Yadav, Askar Yedilbayev and Matteo Zignol.

WHO also gratefully acknowledges the contribution of the following experts: Celeste Garcia Edwards, Daisy Lekharu, Enos Masini, Jamhoih Tonsing, Mohammed Yassin (Global Fund to Fight AIDS, Tuberculosis and Malaria), Guy Stallworthy (Gates Foundation), Anurag Bhargava (Strategic and Technical Advisory Group for Tuberculosis; Kasturba Medical College Mangalore, Manipal Academy of Higher Education), Sarang Deo (Strategic and Technical Advisory Group for Tuberculosis; Indian School of Business), Victoria James and Yuliia Kalancha (WHO Civil Society Task Force on Tuberculosis) and Suvanand Sahu (Stop TB Partnership).

WHO thanks the peer reviewers for their invaluable feedback and input: Kobto Ghislain Koura (The Union) and Kathy Fieckert (KNCV Tuberculosis Foundation). Both experts were asked to submit a declaration of interest form to WHO. No competing interests were identified from the declarations of interests collected or throughout this process.

Background

Despite being preventable and curable, tuberculosis (TB) remains one of the leading causes of death worldwide. Every year, more than 10 million people fall ill with TB, and more than a million die from the disease. Almost one third of deaths among people living with HIV are due to TB. With hundreds of thousands of people developing multidrug-resistant or rifampicin-resistant TB (MDR/RR-TB) annually, TB is also a major contributor to antimicrobial resistance. About a quarter of the world's population has been infected with *Mycobacterium tuberculosis*, which increases the risk of developing TB disease (1, 2).

Between 2000 and 2023, TB treatment for HIV-negative TB disease, and the combination of TB treatment with antiretroviral therapy for HIV-associated TB, led to an estimated 79 million lives saved (2). Despite this progress, the TB epidemic continues to have a profound impact on both health and socioeconomic well-being. In recent years, global progress has been set back by disruptions caused by the coronavirus disease (COVID-19) pandemic, resulting in hundreds of thousands of excess deaths (2, 3).

All United Nations Member States adopted the World Health Organization (WHO) End TB Strategy, which has a goal of ending the global TB epidemic by 2030 (4). To accelerate progress towards the Sustainable Development Goals (SDGs), Member States adopted the political declaration of the first United Nations high-level meeting on the fight against TB (UNHLM) in 2018, with commitments to scale up action against TB (5). Building on this, Member States adopted a new political declaration at the second UNHLM in September 2023, where they committed to mobilize at least US\$ 22 billion annually for TB services and US\$ 5 billion annually for TB research by 2027 (6).

However, funding for TB services in low- and middle-income countries (LMIC) remains at a level that is far below these targets. In 2023, investments in TB in LMIC reached US\$ 5.7 billion, representing just 26% of the annual financing goal. This was also lower than the US\$ 6.0 billion available in each of the 3 previous years (2020–2022), highlighting a declining trend in TB financing.

In addition, in 2025, abrupt and significant reductions in international development assistance have placed recent gains at risk and threaten to reverse progress. Anecdotal reports from high TB burden countries suggest that these reductions are having significant impacts on TB programmes:

- **Staff layoffs**, especially across health and community workforces, are undermining TB service delivery and weakening TB supportive systems.
- **Gaps in technical support** are weakening various areas of national TB programmes (NTPs).
- **Drug supply chains** are being disrupted, owing to staff shortages and management issues.
- **Laboratory networks and diagnostic capacity** are being compromised by critical disruptions of supplies of consumables and paused procurement of essential equipment.
- **Impacts on data management systems** including health and logistics information systems are reducing data quality and availability, undermining evidence-based decision-making.
- **Disruptions to community engagement and community-led activities**, such as active case-finding and contact tracing, are delaying diagnosis and increasing transmission risk in some settings.

These disruptions are likely to result in a reduction in TB case notifications in some high TB burden countries. Immediate coordinated and strategic interventions, coupled with effective resource allocation, are required to safeguard essential TB services and sustain momentum towards ending the epidemic.



Countries routinely make strategic decisions on how best to allocate limited resources, ensuring that investments are directed towards preventing avoidable deaths, reducing suffering and achieving sustainable epidemiological impact through the strategic planning process. The WHO *Guidance for national strategic planning for TB* (7) offers a framework for such decision-making within the context of a broader national TB response. It promotes data-driven, people-centred approaches; alignment with broader health strategies; strong government stewardship; and robust multistakeholder and multisectoral collaboration. In the face of tightening budgets, the need for strategic prioritization is more urgent than ever. This document is intended to serve as a supplementary resource to the guidance for strategic planning. It aims to support countries in priority setting in the context of their national TB responses, amid constrained resources and a tightening funding landscape.

This document comprises three sections. **Section 1** provides an overview of the principles, processes and practical considerations for setting priorities in TB programme planning. **Sections 2 and 3** outline mitigation strategies to navigate current funding challenges while safeguarding the quality and continuity of life-saving TB services.

Development of the policy brief

The development of the policy brief was coordinated by a WHO internal working group comprising staff from WHO headquarters, and regional and country offices working on TB, HIV, health financing and health systems. The working group endorsed the proposed workplan developed by a core team at the WHO Department for HIV, Tuberculosis, Hepatitis and Sexually Transmitted Infections (WHO/HTH). A literature review was conducted to identify existing frameworks, methodologies, and best practices in priority setting, particularly within TB and broader health programming. The final draft of this document underwent peer review by external experts.



Section 1.

Priority setting in TB programming

Effective NTPs depend on strategic decision-making to direct limited resources towards the right people and the right interventions that will have the greatest impact. This involves trade-offs, grounded in data and contextual realities, to balance competing needs. Priority setting is a fundamental component of TB programme planning; it guides what services to deliver, for whom and in what sequence. It is a dynamic and iterative process that must be revisited at regular intervals to ensure that TB programmes remain responsive, strategic and aligned with available resources.

Prioritization should consider updated epidemiological data, programme performance, and the landscape regarding domestic or external funding, and should be performed at the following stages:

- during the development of the national strategic plan, typically every 3–5 years, to define long-term priorities and align with broader health sector goals;
- during annual or mid-term reviews of strategic plan implementation; and
- in response to external factors, such as health emergencies, economic downturns, humanitarian emergencies or significant changes in the funding landscape.

1.1. Challenges in TB priority setting

Decisions on resource allocation are shaped by health needs, as well as institutional structures, political considerations and the different values of multiple stakeholders in the TB response. Because of varying interests, the process of setting priorities can be complex, requiring a careful balance of subjective values and perspectives, and objective evidence.

The following are examples of challenges that can undermine effective priority setting:

- **Absence of clear objectives and targets:** Although many countries have defined long-term national goals aligned with the WHO End TB Strategy, the intermediate steps to achieve these goals are often missing or unclear. For example, strategic plans may not contain sufficient information on the intermediate objectives and milestones, and the operational aspects of programme implementation required to achieve them. Without this operational clarity, prioritization efforts risk being misaligned with the needs and interests of the various stakeholders, including affected communities, and may not adequately reflect implementation realities.
- **Data gaps and weak surveillance:** Incomplete or outdated epidemiological and economic data and health service coverage information can undermine the ability to make evidence-based decisions.
- **Short-term funding cycles and dependence on external financing:** Reliance on external funding with short timelines or a narrow scope can limit flexibility in priority setting, making it difficult to align with long-term domestic budgeting and planning processes, or respond to emerging evidence or local needs.
- **Institutional constraints:** Adapting priorities in response to new evidence or evolving needs can be challenging within existing institutional frameworks. Established policies, funding mechanisms or administrative procedures may limit the ability to shift resources or adopt innovative and flexible approaches in a timely manner, even when such changes could enhance impact and equity.

- **Limited stakeholder engagement and political commitment:** Priority setting requires collaboration across stakeholders and sectors directly affected by or responsible for TB responses. This includes NTPs, other health programmes, civil society and affected communities, health care providers, non-health ministries (e.g. finance, planning and social welfare) and researchers. Inadequate engagement of relevant stakeholders undermines the relevance, legitimacy and sustainability of prioritized interventions, and may hinder efforts to close gaps in equity and service delivery.

1.2. Key considerations in priority setting

In the face of constrained resources, competing demands and an evolving global health landscape, decision-making must be grounded in context-appropriate, evidence-based and pragmatic considerations. This is essential to ensure that TB responses are equitable, effective and sustainably integrated into national health agendas. The considerations outlined below are intended to guide this priority setting process and ensure that it is fully aligned with the guidance for strategic planning for TB (7).

Country ownership and leadership

Decisions on what is most important in the TB response should be firmly rooted in the specific needs, priorities and circumstances of each country. Locally led processes that engage and empower national and subnational stakeholders are essential to ensure that decisions are responsive, relevant and sustainable. Although global and regional frameworks provide valuable guidance, they should be adapted to align with the unique local context. In many settings, external financing plays a critical role in supporting TB responses. To maximize impact and ensure sustainability, such support must be aligned with, and integrated into, locally defined strategies and domestic budgeting and planning processes. Strengthening coordination between the government and development partners is essential to ensure that external investments reinforce, rather than override, country-led goals.

Quality of care

Maintaining the quality of care is essential for achieving effective and equitable health outcomes, including in resource-constrained settings. High-quality TB services ensure that people receive a timely diagnosis, appropriate treatment and care that is safe, people-centred and responsive to their needs. WHO recommendations offer a foundation for delivering effective, evidence-based, quality TB services, and they are intended to guide national policy-making and programming. In contexts of limited resources, WHO recommendations can be implemented in efficient ways by, for example, prioritizing areas with the highest burden, and tailoring service delivery models to best meet the needs of affected populations.

Equity and human rights

Efforts to strengthen TB responses must prioritize equity and human rights, ensuring that services reach underserved and marginalized populations without discrimination. This requires addressing geographical, socioeconomic, gender-related and other structural barriers to access. A rights-based approach emphasizes dignity, participation and accountability; it also obliges health systems to provide services that are available, accessible, acceptable and of good quality. Decision-makers should apply an inclusive lens when setting priorities and engaging affected communities and civil society in both planning and implementation.

Avoiding service fragmentation

All interventions across TB prevention, screening, diagnosis and treatment should be considered as essential, for all age groups. TB remains a potentially fatal disease if untreated, with a mortality rate of up to 50%. For example, prolonged disruptions to health services during the COVID-19 pandemic and its aftermath are estimated to have led to about 700 000 additional TB-related deaths worldwide between 2020 and 2023 (2). Fragmenting the package of essential services risks undermining the people-centred integrated approach required to address the epidemic. A comprehensive, coordinated and timely response is critical for delivering impact at scale and sustaining progress.

Contextual factors

Priority setting will depend on several contextual factors, including political processes and influences, at both national and international levels. Economic conditions, social and cultural dynamics, and levels of community engagement also shape what is feasible and acceptable. In addition, global developments such as pandemics, conflicts, migration and technological advances can strongly influence TB priority setting and implementation.

Health system context

Health system capacity is key to determining the feasibility and sustainability of the proposed interventions; it ensures that interventions align with existing infrastructure and workforce capabilities. Such capacity includes the following:

- **Infrastructure readiness:** Facilities should be adequate to support the implementation of existing and new TB interventions. For example, expanding TB diagnostic services requires sufficient and appropriate facilities to accommodate the required tests.
- **Medical products and technologies:** A reliable supply of essential medical products and technologies is critical for TB control. For example, effective diagnostic expansion requires dependable supply chains for test kits.
- **Workforce capacity:** The availability of trained health care professionals must be considered when prioritizing interventions. For example, introducing specialized treatments without skilled human resources can lead to inefficiencies and poor service delivery.
- **Financial and logistical resources:** Priority interventions should be supported by adequate funding, and consideration of feasibility and resource distribution mechanisms (including public financial management systems). For example, if a country prioritizes community-based TB care, financial and logistical support must be in place to facilitate implementation of outreach services.
- **Health information systems:** Data collection and monitoring systems should be capable of tracking progress, evaluating outcomes and informing decision-making. Robust surveillance systems ensure that priority interventions are effectively targeted and implemented.

Strengthening the integration of TB services within primary health care as a pathway to UHC

In settings with a high burden of TB, integrating TB services into primary care can offer a sustainable approach to expanding equitable access and ensuring that care reaches those most in need. Although full integration may be a medium- to long-term objective, certain components (e.g. symptom screening, referral pathways, contact tracing and treatment adherence support) can be embedded into routine primary care services in the short term. Embedding TB prevention, diagnosis and treatment within existing health services improves efficiency; it also promotes continuity of care across the health system and promotes integrated points of access where individuals can receive medical care and benefit from being connected to social protection programmes (8). These approaches help to mitigate the financial hardship associated with TB, while also advancing broader UHC goals.

1.3. The approach to priority setting for TB programmes

A practical framework to support priority setting in TB programmes can draw on WHO's PRIORITI framework (Fig. 1), which is an eight-step approach for structured, transparent, inclusive and evidence-informed priority setting in health. PRIORITI builds on existing priority setting frameworks, including WHO's earlier "data, dialogue and decision approach", which is often referred to as the "3Ds" (9). The 3Ds approach reflects learning from experience in providing support to countries to make decisions on resource allocation through evidence-informed priority setting. The PRIORITI framework will be published in the forthcoming PRIORITI: (interim) guidance on evidence informed priority setting for health service packages, programmes and plans. An earlier version of the framework was applied to global evidence-informed priority setting and operational guidance for HIV, viral hepatitis and sexually transmitted infections (10). Although different countries may apply these components to varying degrees and in different sequences, together they represent a comprehensive and adaptive framework for evidence-informed, inclusive and results-oriented planning processes.

Fig. 1. PRIORITI framework for evidence-informed priority setting



Four fundamental procedural principles – transparency, participation and inclusion, evidence responsiveness and accountability – should guide the priority setting process. These principles are outlined in Box. 1.

Box 1. Procedural principles to guide priority setting processes (10)

Transparency

Decision-making processes, decisions and reasons supporting decisions should publicly communicated in an accurate, honest, understandable and timely manner.

Participation and inclusion

To the greatest extent possible, priorities should be set with the meaningful involvement or representation of policy-makers, technical experts, civil society and those expected to be affected by such decisions. Participation and inclusion of those expected to be affected will facilitate calibration of decisions to the extent to which the intervention or service is accepted, culturally appropriate and trusted by the communities it is intended to serve. Opportunities should also be provided to revisit and revise decisions based on stakeholder input and feedback.

Evidence responsiveness

Decisions should be informed by the best available evidence, including TB surveillance data, disease burden estimates, feasibility and cost-effectiveness analysis. Evidence should be assessed against each of the decision-making principles. Decisions should be regularly reviewed and revised based on evolving data and considerations of populations likely to benefit or to be unfairly disadvantaged.

Accountability

Those responsible for setting priorities should be answerable for the decisions and actions. Priorities should be made with clearly defined objectives and responsibilities, communicated transparently and based on reasons that can be understood by the affected communities. They should be translated into concrete outcomes, such as actionable policies, budget allocations and operational plans.

In addition to the procedural principles, four fundamental ethical principles should guide priority setting for services or interventions: efficiency, equity, social and economic impact and feasibility. These ethical principles, outlined in Box 2, should be

interpreted and operationalized, considering existing obligations (e.g. human rights instruments, treaties and national laws), and providing explicit and clear justifications if there is any departure from such obligations.

Box 2. Ethical principles to guide priority setting (10)

Efficiency

Available resources should be used to maximize health outcomes and minimize harm. This requires assessment of the effectiveness and overall health impact of an intervention or service. Such an assessment can be expressed, for example, in terms of disability-adjusted life-years (DALYs) saved or quality-adjusted life-years (QALYs) saved; the basis of the assessment must be clarified when applying the principle, and must reflect the population's valuation of health improvements.

Efficiency seeks to maximize population health outcomes with available resources. It therefore requires assessment of cost-effectiveness (i.e. the magnitude of population health gains relative to costs) compared with alternative uses of the health care resources. The intervention or service chosen should be the most cost-effective among alternatives, because that intervention maximizes population health within resource constraints.

In some instances, maximizing population health outcomes also requires examination of the proportion of an overall budget consumed by an intervention or service (i.e. financial sustainability and budget impact). This is necessary because interventions and services that consume a large portion of the budget could crowd out several alternative impactful interventions and services.

Efficiency assesses how much a service or intervention can reduce morbidity and mortality. High-impact interventions have strong evidence of effectively preventing disease or saving lives (e.g. through large trials or meta-analyses) and are likely to address large proportions of the population in need. Interventions with a lower impact may target less prevalent causes or have more limited efficacy and effectiveness.

A highly cost-effective intervention or service has a low cost per health outcome unit (e.g. QALYs averted, DALYs averted or cases of disease prevented). Some interventions and services may maximize short-term population health outcomes but have fewer optimal health effects or lower cost-effectiveness in the long term, or vice versa. For example, forgoing preventive interventions in favour of treatment interventions may produce worse population health outcomes in the longer term. If delaying an intervention or service in the short term substantially increases morbidity and mortality, this should be reflected in the assessment of its health impact. Greater priority should be given to interventions that prevent irreversible harm, such as death or long-term disabilities, since this cannot be rectified or compensated for in the future.

It is important to consider efficiency alongside equity. Prioritization based only on efficiency can obscure inequalities in the distribution of health outcomes, emphasizing overall gains while neglecting the needs of marginalized or underserved populations.

Equity

It is important to ensure that allocation decisions do not discriminate for or against individuals or populations based on characteristics such as race, ethnicity or religion.

Prioritized interventions and services should not create or exacerbate existing disparities in health or in the social determinants of health between groups, but should instead strive to reduce such inequities. This often entails giving priority to people at the greatest risk owing to structural disparities, or to people who face barriers to accessing interventions and services. An intervention or service that scores high on equity preferentially reaches people who are most disadvantaged or at greatest risk of becoming significantly worse off, as well populations at high risk and people in vulnerable situations (e.g. people living with HIV, people with diabetes, people with mental health conditions, people from sexual and gender minorities, people with substance use disorders, people who are undernourished, people in prisons and other places of detention or incarceration, miners, mobile and migrant populations, and the urban and rural poor) or regions with high disease burden and inadequate services (11). Lower equity scores indicate that an intervention

primarily benefits groups that are already better off or has little impact on reducing existing disparities.

Social and economic impact

Interventions should aim to create benefits beyond health, such as improving productivity and education, and reducing poverty, while avoiding negative social or economic effects. At the same time, the health sector should play a key role in protecting people from the financial hardship caused by illness, which should be considered together with equity issues.

Improving or worsening health can have a significant effect on non-health, social and economic outcomes, such as educational attainment and economic productivity. The allocation of health care resources should enhance these social and economic effects. In addition, the allocation of health care resources should minimize potential economic burdens on households, such as income loss from illness or financial hardship from out-of-pocket payments. However, these effects apply to most health interventions

and should therefore only be considered in setting priorities for specific services with an exceptionally negative or positive impact beyond the equity considerations mentioned above.

Feasibility

Feasibility is the practicality of implementing the intervention with existing infrastructure and human resources, and within health system capacity.

Allocation of resources should prioritize interventions that can be delivered with the lowest requirements and demands on existing health system infrastructure and capacity. An intervention scoring high on feasibility and health system capacity can be delivered without requiring additional capital investment in facilities, infrastructure or human resources. Conversely, a lower feasibility and health system capacity score indicates that an intervention cannot be delivered immediately within the existing infrastructure and available resources but would require additional investment.

1.4. Examples of criteria guiding decision-making during prioritization

Countries should balance epidemiological, economic and social factors when planning for interventions and services for TB. This requires collecting and analysing quantitative evidence (e.g. burden of disease, cost-effectiveness, budget impact and resource needs), and evaluating qualitative criteria (e.g. fairness, equity, acceptability and patient satisfaction). The prioritized interventions and services should reflect value judgements, evidence-based discussions and trade-offs in reaching the final decisions.

Criteria for priority setting should be defined through a consultative process that is based on local context and stakeholder views, and they should reflect the ethical principles presented above in Box 2. Additional criteria may be

considered based on national values and other contextual factors. The relative weight assigned to each criterion will differ across settings.

1.5. Making strategic choices for ending TB

Priority setting is an iterative, adaptive process that must respond to evolving epidemiological, social and economic contexts. Continuous monitoring is essential to ensure that priorities remain relevant and interventions effective. Systematic tracking of the indicators set in the national strategic plan can help foster accountability and provide the high-level feedback needed to refine priorities, adjust interventions and allocate resources over time. Embedding this process within an inclusive, data-driven framework strengthens accountability and ensures that the TB response remain effective, efficient and aligned with evolving national priorities.



Section 2.

Mitigating the impact of reduced financing on TB programming

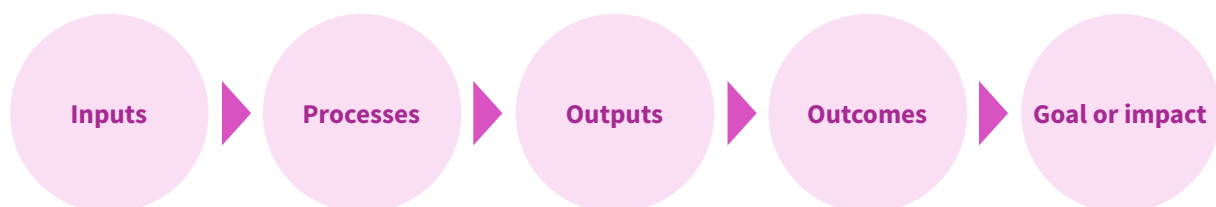
In the face of evolving financial pressures and competing priorities, sustaining and expanding TB services requires a deliberate, strategic approach to resource mobilization and to improving programmatic efficiency. Section 2.1 outlines three complementary mitigation approaches to sustain or scale up TB services in accordance with national fiscal context, while Section 2.2 provides a mitigation framework.

2.1. Mitigation approaches aligned with the TB programme logic model

To safeguard essential TB services and sustain momentum towards ending TB, NTPs should

implement targeted mitigation strategies in line with the logic model of TB programme planning (Fig. 2). This model maps financial investments (expenditure) to key components of programme delivery: inputs (e.g. trained health workers, diagnostics and drug supplies), processes (e.g. screening, contact tracing and patient support), outputs (e.g. services delivered) and outcomes (e.g. reductions in TB incidence and mortality). Identifying the most vulnerable links in this chain enables more strategic resource allocation. Given the interdependence of these components, mitigation strategies should be tailored to national priorities, resource availability and evolving programme demands.

Fig. 2. The logic model of TB programme planning



Depending on the nature and severity of resource constraints, one or more of the following complementary approaches may be adopted to maintain programme impact:

- **Mobilizing additional resources** – Mobilizing additional domestic and external funding.
- **Enhancing efficiency and impact** – Maximizing efficiency and resource use.
- **Targeted critical interventions under severe constraints** – Making short-term, life-saving prioritizations in acute emergency contexts.

These approaches are not mutually exclusive, but should be considered as part of a flexible, adaptive framework that aligns with local economic reality, health system maturity and TB epidemiology.

Each approach relies on evidence-based decision-making, integrated service delivery and political leadership. Whereas some settings may prioritize long-term investment and service expansion, in some cases it may be necessary to safeguard life-saving TB services through efficient reallocation or phased prioritization. In all cases, the goal remains to protect and advance progress towards the End TB Strategy (4) and related global commitments.

The remainder of this subsection explores each of the approaches to support evidence-based, decision-making during TB programming.

Approach 1: Mobilizing additional resources

Health programmes, including those for TB, are facing significant financial pressures, with budget cuts from both domestic and external sources posing serious risks to the sustainability of progress made to date. It is therefore critical to identifying strategies to maintain and, over time, potentially increase the funding required to sustain or scale up service provision. Examples of options to raise

additional domestic health funds or diversify funding sources include (12):

- improving efficiency in tax administration and increasing tax collection; this includes exploring innovative financing mechanisms such as special levies on large and profitable companies, currency transaction levies, diaspora bonds, voluntary solidarity contributions via mobile phones, excise taxes on tobacco and alcohol, and tourism taxes;
- improving debt management;
- strengthening public financing mechanisms;
- reprioritizing government budget allocations towards health; and
- expanding and diversifying sources of development assistance for health.

Some of these strategies require time to implement, particularly those that may require changes to national or subnational legislation (e.g. increasing tax and special levies), while others (e.g. reprioritizing within existing health budgets or advocating for efficiency gains) may provide more immediate benefits. Driving these efforts requires strong political commitment, strong leadership and multisectoral collaboration. Annex 1 provides detailed immediate, medium-term and long-term actions for mobilizing and diversifying financial resources.

Approach 2: Enhancing efficiency and impact

Reports suggest that 20–40% of health resources are lost to inefficiencies (13). Addressing these inefficiencies is critical for improving accountability and maximizing impact. An efficiently organized health sector seeks to minimize resource use (inputs) while maximizing health outcomes (outputs), with every investment delivering the highest value (Box 3).

Box 3. Technical and allocative efficiency (14)

Efficiency can be categorized as either technical or allocative:

- **technical efficiency** refers to doing things right and thus achieving the maximum output with a given input (e.g. pooled procurement of TB medicines and diagnostics improves technical efficiency by lowering costs and ensuring reliable access to quality-assured products); and
- **allocative efficiency** refers to doing things right by allocating resources to interventions that yield the greatest benefit (e.g. targeted screening among high-risk groups where the yield is likely to be highest).

Improving efficiency across health programmes

Many health programmes in LMIC operate independently, often aiming to rapidly scale-up and focus delivery of services. Although this approach has yielded important gains, it can also limit efficiency and long-term sustainability of priority interventions, especially as health systems evolve towards more integrated, people-centred models (15).

Challenges to the effective integration and sustainability of services include the absence of sector-wide coordination for budgeting, planning and implementation; and separate information systems and supply chains that are often driven by fragmented funding flows, which hinder service integration, particularly at the primary care level. Other challenges may include duplication of efforts across disease-focused programmes, competition for limited human resources, weak accountability mechanisms and difficulties in aligning donor priorities with national health strategies. Together, these issues contribute to inefficiencies, inequities in service delivery and reduced capacity of health systems to respond to emerging needs in a sustainable manner.

Integrated TB service delivery within a health system that is oriented towards primary health care (PHC) and aimed at UHC offers the most sustainable long-term approach for addressing and supporting TB-related issues. Integration is not a quick fix – it depends on the maturity of both the health system and the TB programme context; nevertheless, countries should consider how this transition applies to their specific context (8). The process of integration can start by identifying areas of undue duplication between TB programme functions and the rest of the health system; the areas identified can form the basis for integration and alignment of funding flows.

Improving efficiency within TB programmes

Inefficiencies within TB programmes often occur in:

- administrative costs (e.g. high overheads due to overlapping or fragmented health service delivery systems);
- health products (e.g. pricing, procurement and supply chain management);

- health workforce (e.g. absenteeism, capacity gaps and an inappropriate skill mix); and
- leakages (e.g. fraud, corruption and inefficient public financial management systems).

These inefficiencies are context specific, and thus require a thorough situation assessment to identify inefficiency hotspots, update national or subnational plans, implement the necessary reforms and monitor progress.

Implementing cost-effective strategies

Efficiency gains should never come at the expense of quality of care. WHO's various guidelines for TB prevention and care reflect the recommendations based on the latest available evidence. These recommendations should be implemented through different operational strategies adapted to local context while considering cost-effectiveness.

WHO's consolidated guidelines provide information on the effectiveness, safety and cost of TB prevention and care options, which should allow countries to make informed choices based on budget constraints and expected outcomes (16–22). The integrated health tool for planning and budgeting (IHT) provides planners with standardized methods to assess resource needs and costs, estimate health impact, compare scenarios and map costs to financing sources. The TB module of IHT supports this analysis by streamlining TB-related costs in line with the latest WHO guidelines and recommendations, and by including default estimates and cost inputs that can be adapted by the user (23).

Approach 3: Targeted critical interventions under severe constraints

In scenarios of severe funding constraints, such as during response to natural or human-made emergencies, TB programmes may need to adopt short-term, life-saving measures based on triage principles. A staged approach can be applied, with an initial focus on preventing mortality by ensuring treatment continuation, followed by a gradual expansion of efforts in patient enrolment, case detection, screening and prevention. The overarching goal is to maintain critical services while working towards restoring and eventually strengthening programme functionality.

2.2. Mitigation framework

Programmes can adopt a mitigation framework to categorize activities into different groups; for example, as shown in Table 1.

This categorization should be evidence-based and achieved through inclusive dialogue. The resulting decisions must then be translated into actionable steps to guide programme priorities during resource constraints. The categorization will be context specific and thus may differ in different settings.

Table 1. Categorization of activities

Category	Description
Must do	Critical actions that are essential and non-negotiable
Should do	Important actions that add significant value but are not essential
Could do	Optional actions that are nice to have but are not necessary and can be delegated to others
Will not do in the current circumstances	Actions that are intentionally deprioritized owing to constraints and can therefore be deferred



Section 3.

Priority actions for an integrated and effective TB response

All TB-specific activities should be guided by the End TB Strategy (4) and aligned with the targets set therein, as well as the commitments made under the UNHLM (6). The End TB Strategy offers a comprehensive package of evidence-based interventions and a monitoring framework that can and should be adapted to the specific context of each country (4).

Successful implementation of the End TB Strategy requires intensified, coordinated action both within and beyond ministries of health, and active collaboration with all relevant stakeholders, including other government sectors, civil society, affected communities, technical partners and donors. When prioritizing interventions and services for TB, national programmes should consider:

- alignment with the pillars of the End TB Strategy: integrated, patient-centred care and prevention; bold policies and supportive systems; and intensified research and innovation;
- country-specific adaptation of the essential intervention package, to maximize relevance and impact; and
- strong multisectoral accountability, to ensure sustained progress towards global and national TB targets.

The success of a TB programme relies on a solid foundation built through robust baseline assessments, the readiness of both the health system and the TB programme, and the availability of adequate resources to support the attainment of ambitious goals. This section outlines priority actions aligned with WHO guidance, organized according to the three pillars of the End TB Strategy.

3.1. End TB Strategy Pillar 1: Integrated, people-centred care and prevention

This subsection presents priority actions and supporting rationale to sustain TB prevention, screening, TB infection prevention and control, diagnosis, treatment and care, and prevention and care for TB-related comorbidities amid funding constraints. It emphasizes high-impact and cost-effective interventions to maintain TB services.

TB prevention

Pillars 1 and 2 of the End TB Strategy recommend several complementary preventive interventions, including active TB case-finding, TB infection control, prevention and care of HIV and other comorbidities and health risks, access to universal health care, social protection and poverty alleviation. When financial resources are limited, it may seem pragmatic to reduce preventive measures and instead focus on treating people who present with TB. However, this may only defer the problem and result in increased transmission, higher disease burden and greater health system costs in the long term. For example, during the COVID-19 pandemic, despite the need to direct resources to managing people with the disease, it was still important to devote resources to COVID-19 vaccination and other measures to prevent transmission.

TB preventive treatment (TPT) reduces progression from TB infection to TB disease by at least 60%, with protection typically lasting many years. TPT also enhances the overall cost-effectiveness of TB screening (17). The following measures can reduce costs or improve effectiveness of TPT interventions:

- Shorter regimens – WHO strongly recommends shorter TPT regimens, because they are easier to complete and they reduce costs for both programmes and patients (17). If 3HP (a regimen that includes isoniazid and rifapentine) has been introduced, efforts to scale it up should continue. Where 3HP is not in use, rifapentine-based regimens should be introduced to the programme, initially at a small scale if necessary; this can be achieved by addressing common barriers such as registration of rifapentine and health care worker information. The cost of a full 3HP treatment is about US\$ 7–10 and fixed dose combination tablets facilitate administration.
- Expansion and follow-up – If rifapentine-based regimens have not yet been introduced or scaled up, and the health programme has already invested in the scale-up of 6H (isoniazid daily for 6 months), the programme should keep expanding its use and encourage follow-up of people on treatment at every health service encounter. The cost of the full treatment for 6H is US\$ 3 with solid tablets.
- Testing for TB infection – The effectiveness of TPT in contacts aged 5 years and older can be maximized by employing recent tests of TB infection (costing US\$ 1.50 per test), thus reducing unnecessary treatment and costs.
- TPT for contacts of people with MDR-TB – Preventing MDR-TB among contacts is a priority and WHO now strongly recommends the use of 6-Lfx (levofloxacin for 6 months) for this purpose. The cost of a full treatment is about US\$ 5–9 with solid tablets.

Recommended TPT options are summarized in the WHO operational handbook on TB prevention (24) – see Table 3 of that handbook, which is readily available on the WHO Knowledge Sharing Platform (25).

The bacille Calmette-Guérin (BCG) vaccine remains important in countries with a high incidence of TB (21). Such countries should consider reinforcing or maintaining BCG coverage, especially in neonates and vulnerable groups, as part of broader immunization strategies, in collaboration with their national immunization programme.

Screening

Systematic screening narrows the TB case detection gap, reduces TB prevalence and transmission, and protects individuals who are at the highest risk of disease and mortality. It is cost-effective when used in populations at increased risk of TB, and thus should be reinforced rather than rolled back when health systems are challenged. It is essential to maintain screening as part of contact investigation and for case-finding among people with HIV and other high-risk groups.

The following measures can reduce costs or improve effectiveness of TB screening interventions:

- Targeted screening – Screening should be targeted to groups who are at highest risk of TB and represent the greatest burden of TB (especially missed cases). The ScreenTB tool (26) can help countries determine how best to prioritize screening efforts.
- Use of chest X-ray (CXR) – Use of CXR greatly improves the accuracy of TB screening. CXR is a classic “integrated diagnostic” tool; thus, investment in the technology can benefit many other clinical pathways and strengthen health systems. It is widely available in health facilities; also, portable equipment is now available that facilitates access to CXR and makes it more affordable.
- Use of computer-aided detection (CAD) – CAD on CXR should be exploited to speed up decision-making at point of care and reduce waste in diagnostic confirmatory tests. There are now six CAD software products approved for use by WHO (27), three of which are included in the Global Drug Facility catalogue (28).
- Optimization of investments – Optimizing investments in equipment (hardware and software) for TB screening can help to reduce overall TB burden and future disease incidence.
- Use of symptom screening – Screening for symptoms in people at risk still has value for case detection and ruling out TB, but the examiner needs to understand its limitations.
- Improvements in screening – Screening with a molecular WHO-recommended rapid diagnostic test (mWRD) may be reserved for people with advanced HIV (18).

TB screening algorithms with information on their comparative performance can be readily accessed via the WHO Knowledge Sharing Platform (29).

TB infection prevention and control

Many of the basic principles of TB infection prevention and control (IPC) relate to the behaviour of patients and health care workers, and do not require special equipment. Actions include:

- implementing many of the administrative controls that do not incur extra costs; for example:
 - separating individuals with symptoms of TB at health care centres (e.g. using different clinic hours or routing);
 - starting appropriate TB treatment early;
 - appointing dedicated personnel to ensure that TB IPC measures are adhered to;
- maximizing natural ventilation, and reserving special equipment for areas where it is needed most;
- educating patients on cough etiquette and how to make best use of masks (30); and
- facilitating the availability of particulate respirators (N95 or equivalent respirators) for health care workers – advice on how to increase the lifespan of respirators is available via the WHO Knowledge Sharing Platform (31).

Diagnosis

It is critical that NTPs achieve universal access to initial, quality-assured TB testing using WHO-recommended diagnostics for all people who screen positive for TB, and universal access to quality-assured drug susceptibility testing (DST) among people with bacteriologically confirmed TB. Prioritization should use a data-driven, stepwise approach to programme revision that maximizes opportunities for financing, identifies efficiencies in current practices and informs equitable programme updates tailored to local needs.

Specifically, programmes should:

1. Review current and trend-based data on national and subnational strategic priorities, local epidemiology, above-site to site-level testing system infrastructure, and technology and human resource investments, to establish a testing demand and capacity baseline.
2. Promptly share that baseline information through consultations with relevant stakeholders in TB, other health programmes (e.g. HIV, hepatitis and diabetes) and laboratory bodies (e.g. public health institutes, technical

working groups, and supply and logistics departments), to identify actionable areas of individual and shared strengths and needs. As a priority, programmes should identify integrated services that benefit both patients and programmes.

Countries that have completed recent diagnostic network optimizations or diagnostic network assessments may use the respective datasets. Where these data are not available, countries may instead refer to the manual for selection of mWRDs produced by WHO in collaboration with the Global Laboratory Initiative (32). The manual provides guidance on data sources and analyses to guide test selection, integrated and disease-specific placement strategies, and making associated revisions to diagnostic algorithms.

In deciding on outputs from reviews and consultations under conditions of increasing or significant resource constraint, it is useful to consider the following practical, cost-saving approaches:

- **In settings of low drug-resistance risk and prevalence:** Lower cost, robust low-complexity manual nucleic acid amplification tests (NAATs) can be used for decentralized laboratory-based diagnosis of TB without the need for equipment service and maintenance. Only samples that are bacteriologically confirmed would require linkages for follow-on DST.
- **In settings with a high volume of testing and supported by sample transport systems (e.g. urban systems):** Moderate-complexity NAATs can be used for the initial diagnosis of both TB and drug-resistant TB (DR-TB); such tests can be accessed by integrated hub-and-spoke sample transport networks, provide volume-based decreases in unit test costs, and leverage existing multidisease testing sites where instruments, commodities, quality-assurance programmes and testing staff can be shared between programmes.
- **For children:** Pulmonary TB in children can be diagnosed with treatment decision algorithms, especially at peripheral levels of the health care system (21). A clinical diagnosis should be allowed in children if the results of bacteriological testing are negative. For children without HIV or with unknown HIV status, the easiest-to-collect recommended sample type (respiratory or stool) should be tested with available low-complexity NAATs. An initial positive result may guide treatment initiation; only those with negative results require further testing and evaluation.

- **For people living with HIV:** People of all ages living with HIV can be tested for TB with low-cost, urine-based, point-of-care lateral flow urine lipoarabinomannan (LF-LAM) tests. An initial positive result may guide treatment initiation; only those with negative results require further testing and evaluation.
- **For drug-resistance testing:** Decentralized molecular tests can be used for the detection of resistance to rifampicin, isoniazid and the fluoroquinolones; this approach costs less than culture-based DST and sequencing. Some algorithms may then lead to culture or sequencing, but only for patients at risk of second-line anti-TB drug resistance or in need of individualized treatment.
- Hospitalization should be limited to cases where it is medically necessary; the overall emphasis should be on decentralized, ambulatory and people-centred care models that make services more accessible and acceptable to patients.
- Adherence support is essential for treatment success and cost-efficiency. This includes offering psychosocial, material or digital support tailored to individual patient needs. Tools such as video-observed therapy (VOT), short message service (SMS) reminders and digital medication monitors can play a key role in helping patients complete their treatment. Expanding the use of digital health technologies for communication, case management and patient support is also important.
- Consistent and uninterrupted access to TB medicines remains a critical requirement, because stock-outs can severely disrupt treatment and contribute to poor outcomes and drug resistance.
- In parallel, all people with TB should receive health education and counselling to ensure they understand their diagnosis and treatment plan; this supports adherence and empowers individuals in their care journey.
- Alongside TB treatment, people with TB and undernutrition should be offered nutritional interventions as a therapeutic measure. This should be prioritized only for those with mild, moderate or severe undernutrition, which should be objectively assessed and then monitored throughout TB treatment.

Treatment and care

Availability of treatment for both drug-susceptible TB (DS-TB) and DR-TB in alignment with WHO guidance is fundamental to effective TB care. Considerations when prioritizing include the following:

- Treatment regimens should prioritize shorter durations wherever possible, because these can improve adherence and treatment outcomes. Shorter regimens also decrease the burden on health care systems, thereby reducing the costs associated with patient care, support and monitoring (20).
- In terms of specific treatment regimens, several priorities stand out. It is essential to maintain the availability of the well-known standard 6-month regimen (2HRZE/4HR¹) (20). The use of the 4-month regimen for children and adolescents with non-severe TB (2HRZE/2HR²) is a priority, because it reduces treatment burden while maintaining efficacy. For adolescents and adults with DS-TB, the 4-month HPMZ regimen (2HPMZ/2HPM³) is an important alternative that should be promoted. In the case of DR-TB, shorter regimens are strongly recommended where feasible. The BPALM regimen⁴ is prioritized for patients aged 14 years and older with MDR/RR-TB or pre-extensively drug-resistant TB (pre-XDR-TB), whereas the 6-month BDLLfxC regimen⁵ is preferred for younger adolescents, children and pregnant women.

Prevention and care for TB-related comorbidities

WHO has issued several recommendations on prevention and care for people with TB and comorbidities, including for people with HIV, diabetes and undernutrition. WHO's Framework for collaborative action on TB and comorbidities provides guidance on which comorbidities to prioritize in a country context if this has not already been done (33). Examples of criteria for prioritization include the causes and distribution of morbidity and mortality; cost implications; ethical, equity and human rights considerations; and acceptability. In alignment with the structure

¹ The 2HRZE/4HR regimen has an initial phase of 2 months of isoniazid (H), rifampicin (R), pyrazinamide (Z) and ethambutol (E), followed by a continuation phase of 4 months of isoniazid and rifampicin.

² The 2HRZE/2HR regimen has the same initial phase as 2HRZE/4HR, but the continuation phase is reduced to 2 months.

³ The 2HPMZ/2HPM regimen has an initial phase of 2 months of isoniazid (H), rifapentine (P), moxifloxacin (M) and pyrazinamide (Z), followed by 2 months of isoniazid and rifapentine.

⁴ The BPALM regimen is composed of bedaquiline (B), pretomanid (Pa), linezolid (L) and moxifloxacin (M).

⁵ The BDLLfxC regimen is composed of bedaquiline (B), delamanid (D), linezolid (L), levofloxacin (Lfx) and clofazimine (C).

of the national health system and the local epidemiological context, countries should prioritize the integration of care for people with TB and comorbidities into existing programmes and services. This approach enhances efficiency, ensures continuity of care and strengthens health system responsiveness to complex patient needs; however, quality should be monitored.

3.2. End TB Strategy Pillar 2: Bold policies and supportive systems

This subsection presents major actions and supporting rationale across four cross-cutting components that are essential for strengthening the TB response:

- political commitment, resources and programme management;
- engagement of communities, civil society and the private sector;
- UHC and integrated service delivery; and
- social protection and addressing the socioeconomic determinants of TB.

In times of financial constraint, bold policy decisions and a robust system play a pivotal role in ensuring cost-effective TB programme delivery. However, the extent to which this can be achieved depends heavily on the existing policy landscape, the degree of policy implementation, and the maturity and resilience of health and governance systems. This pillar of the End TB Strategy is grounded in the principles of leadership, coordination and inclusive partnership.

Political commitment, resources and programme management

Strong political leadership is vital to ensure that TB services are protected, sustained and integrated within broader health and development agendas. An effective TB response must extend beyond the health sector; it requires multisectoral action to address both the upstream determinants (e.g. poverty, undernutrition, HIV, diabetes, smoking and mental health) and the broader social and economic impacts of TB. Social protection measures are an integral part of this approach. NTPs must maintain their leadership and coordination roles to sustain momentum, particularly during periods of fiscal pressure, ensuring that TB remains a priority on the national health and development agenda.

- To prevent reversal of progress towards ending TB, it is essential to sustain a strong commitment to the End TB Strategy and UNHLM targets. Country ownership should remain a central priority, with WHO country offices and other in-country partners playing a supportive role where needed.
- Aligning funding (both external and domestic) to identified and prioritized TB-related services and functions is important for addressing health financing constraints. Annex 1 outlines key actions – both immediate and medium to longer term – in health financing that are needed to support critical services and safeguard progress towards UHC.
- Regular programme reviews and strategic planning are key components of the programme management cycle (34). Various steps may be taken to reduce costs, including using hybrid models (e.g. virtual and targeted in-person review), leveraging existing data sources, limiting in-person fieldwork, involving local stakeholders and integrating TB reviews with other diseases (e.g. HIV) where applicable.
- Implementing a TB programme requires a multidisciplinary and multisectoral approach. The major sectors to be involved depend on the local context, but may include finance, justice, labour, social welfare, housing, mining and agriculture. Following the publication of the Multisectoral accountability framework for TB in 2019 (35), 123 of the 30 high TB burden countries reported that they had a multisectoral review mechanism in place. Multisectoral collaboration is a priority and may even open the door for additional funding.

Engagement of communities, civil society and the private sector

A strong coalition with communities, nongovernmental organizations (NGOs) and other civil society organizations is important for TB programmes because a robust alliance could transform policies, help to mobilize additional resources, design and roll out national TB plans, undertake local actions to reach all people needing TB prevention and care, and monitor local progress. Efficient community systems strengthen service delivery and reduce duplication (36). A strong public–private mix is essential to broadening access to TB services, particularly in the context of constrained funding environments (37).

The following are examples of measures that can reduce costs or enhance effectiveness:

- Mapping stakeholders and their contributions that are relevant to the national TB response, in partnership with community service organizations and people affected by TB.
- Integrating TB activities and outreach into broader community health programmes and community networks where applicable, leveraging multidisease platforms (e.g. HIV and nutrition).
- Avoiding activities for which there is no evidence of cost-effectiveness, such as generic campaigns and fragmented financing for community health workers and volunteers.
- Engaging with the private sector and strengthening public-private mix strategies.

UHC and integrated service delivery

UHC ensures that all individuals receive the health services they need without experiencing financial hardship. In high TB burden countries, TB treatment coverage serves as a key indicator for tracking progress towards UHC. Integrating TB services into the broader UHC agenda, especially through PHC that is accessible and close to people's daily lives, can significantly accelerate progress towards ending the TB epidemic (8). Integrated health service delivery reduces inefficiencies, enhances care coordination and improves the patient experience (38).

TB often coexists with a range of comorbidities and risk factors, including HIV, alcohol use disorders, undernutrition, tobacco smoking and diabetes (2, 33). Addressing these health-related risks is vital for effective TB prevention and care, and it can be achieved by organizing services around the needs of the affected people. Importantly, strategies must be tailored to the local context and aligned with the maturity and capacity of the country's health system.

The following are examples of measures that can reduce costs or enhance effectiveness:

- Integrating TB services into UHC benefits packages and aligning them with other priority health programmes can improve efficiency, optimize resources and enhance patient-centred care.
- Embedding essential TB interventions into primary care while simultaneously strengthening referral systems to higher levels of care ensures continuity and reduces service fragmentation. However, such integration requires careful, phased planning – particularly under financial constraints – to avoid overburdening systems and to allow for gradual scaling. Transition

planning is critical to prioritizing key TB services at the primary level in the short term.

- Achieving a collective commitment to UHC by 2030 requires a health workforce that is equipped to provide the full range of essential health services (39). Opportunities should be considered for North-South and South-South collaborations, and public-private partnerships on training and investment. The End TB Strategy also advocates for blended training approaches, including e-learning, to expand access to high-quality, flexible education and accelerate workforce development (40).

Rights-based approaches should underpin TB services. These approaches are essential for reducing access barriers, combating stigma and advancing health equity.

Social protection and addressing the socioeconomic determinants of TB

The TB epidemic is profoundly shaped by social and economic factors. Populations living in poverty, in overcrowded and poorly ventilated housing, experiencing food insecurity or working in unsafe environments face a significantly higher risk of TB infection and disease progression (41).

There are three compelling reasons to prioritize continued investment in social protection:

- **Global political commitment:** About half of all people affected by TB face catastrophic costs (2), a challenge closely associated with unfavourable TB treatment outcomes. Social protection measures help to reduce this burden by covering health care expenses or compensating for lost income. Economic models indicate that both TB-sensitive and TB-specific social protection initiatives can partially protect households from catastrophic expenditures across a range of low- and middle-income settings (42). Considering the above facts, the End TB Strategy target of zero catastrophic total costs and the political declaration of the UNHLM (6) includes a pledge to ensure that 100% of people affected by TB receive health and social benefits. This target remains unmet for nearly half of the global population.
- **Fundamental human rights:** Access to social protection is a basic human right, critical for reducing health disparities and achieving equitable outcomes.
- **A smart public health investment:** Expanding social protection accelerates progress towards ending TB by complementing biomedical interventions. Evidence suggests that social

protection can reduce TB exposure and transmission by up to 40%, cut the risk of household disease development by 50% and improve treatment outcomes (42). Moreover, the return on investment is substantial, with every US\$ 1 invested yielding an estimated US\$ 43 in economic and health benefits (43).

The following are examples of measures that can reduce costs or enhance effectiveness:

- In the context of financial constraints, establishing and strengthening functional working relationships with the sectors responsible for social protection programmes can potentially increase coverage of benefits for people and households affected by TB. Such action may not need additional resources.
- Social support programmes include TB-specific social support in the form of stipends, food baskets or transport vouchers. National programmes should consider prioritizing (or continuing) such programmes for people affected with TB based on the local need and data. For example, in many instances people affected with DR-TB are prioritized because evidence suggests that such people are more likely to face catastrophic costs.

Monitoring and evaluation

Reliable data are essential to track progress towards the milestones and targets of the End TB Strategy (4).

Monitoring and evaluation (M&E) efforts should be strategically prioritized to enable countries to have the necessary information to assess progress, identify gaps and inform decision-making. This involves not only maintaining the core surveillance systems that underpin routine data collection but also strengthening those systems where necessary, and selectively implementing additional data-generating activities (e.g. national surveys), based on context-specific needs and resource availability. The prioritization of these M&E components is essential to support evidence-based action.

- **TB surveillance – maintaining current systems.** To ensure effective TB M&E, maintaining current TB surveillance systems needs to be a top priority and must be sustained. These systems are vital for routine and timely data reporting, which underpins effective planning, prioritization and delivery of TB services. Efforts should be made to consolidate and coordinate surveillance activities with other health programmes to ensure that inputs are fully leveraged across the system.
- **TB surveillance – strengthening current systems.** Strengthening existing surveillance systems is also important and should be pursued when feasible. Recommended improvements include developing or enhancing digital case-based surveillance, closing reporting gaps across care facilities and addressing data-quality issues. However, these efforts may be deferred in settings with limited resources, to protect essential functions.
- **National TB prevalence surveys.** In the years leading up to 2030, surveys are needed in some countries to understand the current burden of TB disease in the population and to assess trends in TB disease burden since the last survey (and thus progress towards the End TB Strategy target for reductions in TB incidence). WHO has published epidemiological criteria that can be used to assess whether a repeat survey is relevant (44). Among the subset of countries that meet the criteria, prevalence surveys can be deferred in favour of more immediate priorities. To reduce the cost and logistical burden, WHO is also exploring ways to leverage infrastructure already developed for active TB case-finding (e.g. mobile CXR equipment and community engagement networks) in a few pilot countries.
- **National surveys of anti-TB drug resistance.** Ideally, levels of resistance to anti-TB drugs should be monitored using routine TB surveillance data that are based on routine diagnostic testing (including for drug resistance) among all people diagnosed with TB. Periodic surveys are relevant in countries that have not yet reached sufficiently high levels of coverage of routine diagnostic testing. Currently, this mostly applies to some countries in the WHO African Region.
- **National surveys of costs faced by households affected by TB.** Reducing to zero the percentage of TB-affected households facing catastrophic costs due to TB is one of the three high-level targets of the End TB Strategy (4). To measure the status of progress towards this target, national surveys are relevant in all countries. Findings can inform actions needed to improve timely access to TB diagnosis and completion of treatment, including measures needed beyond the health sector (e.g. social protection). Although these surveys are relevant in all countries, they can be delayed when necessary. In the meantime, model-based estimates, which are available for all LMIC that have not yet conducted a survey, can provide useful insights to guide national strategies, including interventions that extend beyond the health sector (e.g. social protection policies).

3.3. End TB Strategy Pillar 3: Intensified research and innovation

To end TB, continued innovation is essential, including the development of new diagnostics, drugs, vaccines and novel delivery strategies. Even in the context of financial constraints, sustaining momentum in global TB research is critical. Any pause or cancellation of vital research and innovation efforts would significantly delay progress towards eliminating the disease. Although some countries may need to defer operational

or implementation research owing to resource limitations, they can still play a pivotal role in shaping and advancing the global research agenda by voicing demand and fostering collaboration.

Conclusion

This document presents foundational principles to inform national priority setting in TB programming amid constrained resources. It will be updated based on lessons learned and the evolving landscape to support countries in sustaining effective, equitable and resilient TB responses.

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Annex 1: Health financing operational guidance to navigate funding shifts and sustain UHC progress

The guidance below outlines the key actions to be taken by ministries of health in low- and lower-middle income countries. They relate to health resources (both external and domestic) aimed at addressing current health financing constraints, to support critical services and safeguard progress towards universal health coverage (UHC). The actions are targeted for health ministries and they require engagement at the sectoral level, in coordination with finance authorities. They focus on areas for assessment, and on key policy measures as an input into overall decision-making

processes; such measures include dialogue between health and finance authorities, within-sector prioritization and donor-related funding allocations. The actions are differentiated into those that should be taken immediately, and those that are for the medium to longer term. Importantly, immediate-term measures should consider the longer term consequences on the configuration of health financing systems, and the impact of the measures on equitable coverage to protect the poor and most vulnerable (1).

Table A1. Urgent actions to respond to funding shocks

	Main actions	Detailed approach
External resources	• Rapidly map funding and its use	Rapidly map funding freezes and cuts, flows and channels (including on-budget versus off-budget support and budget holders), to comprehensively understand funding needs; ensure that health and finance ministries are aware of donor funding; and identify opportunities for consolidation, reprogramming and re-channelling.
	• Initiate donor dialogue to realign aid priorities	Engage in dialogue with donors for urgent shifts in aid priorities, to realign the remaining aid in accordance with local priorities based on context-specific evidence on cost-effectiveness and equity considerations.
	• Explore new opportunities for external funding	Identify new opportunities for external funding, including by engaging with philanthropies.
Domestic resources	• Rapidly assess domestic macro fiscal and health financing environment	Rapidly assess the macro fiscal and health financing landscape by analysing recent trends in government revenue, and overall public expenditure and health spending in relation to GDP, both on a per capita basis and as a share of government spending.
	• Set new priorities for health budgets and use mid-term reviews or contingencies	Engage in dialogue with leadership for setting new budget priorities within the health sector across the government budget; also, proactively contribute to the mid-term review of the budget and, if applicable, supplementary budgets or activation of emergency contingency funding to mitigate immediate funding shortfalls and to sustain equitable coverage for critical cost-effective services.
	• Optimize the use of existing health budget allocations by improving public financial management	Fully use existing health budget allocations by identifying areas for immediate action in public financial management, including the timeliness of cash flow requests and improving fund disbursement.
	• Implement safeguards to prevent increases in out-of-pocket spending	Put into place safeguards against increased out-of-pocket spending for critical services by: • incentivizing supply-side efficiency measures, including shifting funding to critical services and populations; and • if relevant, establishing policies to eliminate user charges for critical services or population groups.

	Main actions	Detailed approach
All resources	Evaluate new domestic revenue and borrowing options	Evaluate additional sources of revenue (including health taxes) and explore with finance authorities potential avenues for additional concessional borrowing to augment fiscal capacity (such borrowing will depend on debt status).
	Review service benefits and target coverage	Rapidly review the benefit package and critical and non-critical service lists of programmes, considering local context, evidence on cost-effectiveness, equity, the need to ensure coverage to vulnerable groups and other criteria to ensure equitable and impactful resource allocation, in collaboration with relevant purchasers, providers and stakeholders (WHO-CHOICE).
	Identify integration opportunities to reduce duplication and improve efficiency	Identify functional areas for integration by targeting duplication, overlaps and parallel services (including human resources and commodities), and assess the impact on cost.
	Create a roadmap for integrating donor-funded services into PHC	Develop an integration framework and roadmap to carefully guide adjustments in health financing structures that are needed to support the integration of donor-funded vertically delivered services into multipurpose PHC delivery platforms.
	Estimate the costs of transition from external to domestic funding	Establish processes for evaluating scenarios and rapidly estimating the resource requirements and costs of transitioning previously externally funded services to domestic programmatic funding, including revising the scope of the health service package, unit costs and prices.
	Identify technical efficiency gains to inform smarter purchasing	Evaluate areas for improving technical efficiency in delivery and resourcing, in addition to those related to integration, and assess how this affects costs. Use this information to inform shifts in purchasing to drive implementation.

GDP: gross domestic product; PHC: primary health care; WHO-CHOICE: World Health Organization CHOosing Interventions that are Cost-Effective.

Table A2. Medium to longer term actions to respond to funding shocks

	Main actions	Detailed approach
External resources	Align donor aid modalities with national public financial management systems	Work with donors to support changes in financing modalities and realignment of aid (specifically, realignment of the funds that are channelled outside the budget with domestic planning and public financial management systems and processes).
	Plan the transition of donor-funded inputs into domestic systems	Consider transition process and pricing of donor-funded inputs; for example, consider costs related to human resources and their financial implications by focusing on salary alignment with domestic pay scales, cadre integration, and provider payment and contracting modalities. Establish transitional domestic procurement mechanisms as necessary, retaining (if possible) the benefits of pooled procurement systems.
	Negotiate new aid terms and explore transitional and blended financing	Discuss opportunities with donors for changing terms (e.g. co-financing requirements) and transitional financing to cover shifts in system reintegration, including through blended finance modalities. Work closely with multilateral development banks to target investment to best buys at the right price and to achieve the right terms of lending (degree of concessionality).

	Main actions	Detailed approach
Domestic resources	Strengthen domestic revenue through tax reform and administration	Advocate for improving tax administration and explore the potential for strengthening tax design, broadening the tax base and limiting tax loopholes and exemptions, to improve public sector revenue capacities overall and allocations to health in particular.
	Explore debt restructuring and innovative relief mechanisms	Engage in dialogue regarding debt restructuring and relief initiatives, including debt swaps.
	Analyse the effects of trade policy and explore local manufacturing	Assess the broader impact of recent decisions on trade policies (including the impact on purchasing of medical products), and consider regional and local manufacturing options, to clearly convey the financial implications to finance authorities for further budget adjustments.
	Improve public financial management systems, and align financial and health information	Streamline public financial management procedures within existing regulatory frameworks, ensuring that available domestic resources are better allocated and executed within the health sector, and ensuring that financial monitoring and reporting are consolidated through established financial information systems linked to health information systems, to enable accountability for results.
	Revise provider payment methods and allocation	Consider revising provider payment methods and rates, resource allocation formulae and purchasing arrangements (including through contracted NGOs), and shift to output-based payment methods to ensure the efficient use of resources and alignment with evolving service needs and models of care.
	Expand or assess insurance contributions based on the context	Strengthen revenue in countries with mandatory health insurance systems by increasing contribution rates or the applicable base in collaboration with government tax authorities. In countries without social health insurance systems, consider the advantages and disadvantages of these sources, depending on the level of labour market informality. In both cases, assure alignment with UHC goals, especially considerations of coverage equity.

	Main actions	Detailed approach
All resources	Consolidate financing schemes and harmonize purchasing functions	Reduce financial fragmentation through the planned consolidation of existing financing schemes (if relevant, social health insurance agencies) and harmonization of health purchasing functions; also consider the risks of new employment-based insurance mechanisms.
	Identify systemic efficiency gains across inputs and services	Identify sources of additional efficiency gains, including systematic shifting to generics, revisions of human resources practices and system orientation towards primary care services.
	Integrate transitioned services into national expenditure frameworks	Fully integrate transitioned services into domestic medium-term expenditure frameworks and strategic plan costing (including all sources of funding).
	Institutionalize evidence-informed priority setting and review of the benefit package	More broadly, revise benefit packages as part of institutionalized domestic evidence-informed priority setting processes connected with budgeting and broader public financial management processes; also review purchasing mechanisms, provider payment systems and price negotiation.
	Streamline expenditure reporting and ensure public accountability	Consolidate expenditure reporting into existing and streamlined tracking, monitoring and accountability processes. Ensure transparency and budget literacy to enhance accountability to populations, including through leveraging digital platforms and digitization movement to ensure that health financing data flows are complete, accurate and timely.
	Transition to national procurement and strengthen supply chains	Transition to and strengthen domestic procurement modalities and supply chains, and engage in commodity price renegotiation to ensure that low-cost options are used, including through regional pooling.

NGO: nongovernmental organization; UHC: universal health coverage.

Reference for Annex 1

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For more information, please contact:
Global Programme on Tuberculosis and Lung Health
World Health Organization
Avenue Appia 20, CH-1211 Geneva 27, Switzerland
Email: gtbprogramme@who.int
www.who.int/tb