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Accelerating the prevention, control and elimination of communicable diseases through integration: optimizing support from Gavi and the Global Fund

Executive summary

The COVID-19 pandemic has underlined the importance of resilient health systems to address emergencies while protecting essential health services. Coverage of highly cost-effective HIV, tuberculosis, malaria and immunization interventions has either stagnated in recent years or have been severely affected by the pandemic. The new strategies from the Global Fund to Fight AIDS, Tuberculosis and Malaria and Gavi, the Vaccine Alliance frame innovative approaches to increase coverage and reduce inequities, starting with vulnerable populations and underserved communities, including those with zero-dose children and key populations. This paper analyses how these contributions to increase coverage interact with the six building blocks of health systems: governance, financing, service delivery, health workforce, access to commodities, and health information systems:

- The governance and coordination mechanisms of Global Fund and Gavi support could be better coordinated to fit under national health policies, strategies and plans.
- The funding contributions of the Global Fund and Gavi could leverage more national financing and address inefficiencies in inputs and implementation that may come with earmarking.
- HIV, tuberculosis, malaria and immunization interventions could evolve from a programme focus to become integrated and person-centred, with the inclusion of interventions in essential packages delivered via platforms designed to reach all, including the underserved and most vulnerable.
- The Global Fund and Gavi could expand their contributions to in-service training and supplemental financial incentives for health care workers towards broader policies that attract health workforce, building early career capacity and ensuring retention.
- The Global Fund and Gavi have built effective mechanisms for market shaping, procurement and supply chains. National procurement and supply management units could use similar approaches to procure affordable health commodities of assured quality with adequate supply planning.
- The culture of data for decision-making, monitoring, evaluation and surveillance developed with the Global Fund and Gavi support could benefit a broader range of programmes and services.

Member States could increase their ownership of the planning, implementation, sustainability and transition processes from Global Fund and Gavi contributions. Specifically, they should: (1) start with national health policies and strategies to plan the contribution of the Global Fund and Gavi, including costed, multi-year, consolidated health system strengthening plans; (2) increase domestic financing, improve cross-programmatic efficiencies and work towards sustainability and transition; (3) include HIV, tuberculosis, malaria and immunization interventions in national essential health service packages using an integrated, people-centred approach based on primary health care (PHC) for universal health coverage (UHC), with appropriate referral mechanisms; (4) develop innovative, comprehensive human resources for health approaches to which the Global Fund and Gavi could contribute; (5) strengthen integrated national capacity for procurement and supply chain management; and (6) consolidate data systems used for monitoring and evaluation in the context of integrated disease surveillance and national health information systems. The WHO Secretariat will assist Member States with products and services that will contribute to these expected outcomes in countries.

Introduction

1. Global health initiatives provide international donor assistance for public health, with a primary focus on programme-specific goals in eligible countries. Among these initiatives, the Global Fund to Fight AIDS, Tuberculosis, and Malaria and Gavi, the Vaccine Alliance provide funding support to highly cost-effective, high-impact interventions in selected countries in the Eastern Mediterranean Region according to eligibility criteria. The Global Fund is a global, public–private multilateral financing mechanism that focuses on accelerating the end of AIDS, tuberculosis and malaria as epidemics. Gavi is an international public–private partnership whose mission is to improve access to immunization for children in low- and lower middle-income countries and accelerate access to new vaccines. Support from the Global Fund and Gavi to programme-specific work and health systems strengthening has had, and continues to have, a major public health impact. While the guiding principles and functioning of the Global Fund and Gavi are largely similar, their support to Member States differs in terms of eligibility, application mechanisms, implementation, monitoring, evaluation, sustainability and transition.

2. In 2000–2015, coverage of HIV, tuberculosis and malaria interventions in the Region increased. However, since 2015, progress has stalled. Progress in immunization has been continuous, but increased coverage may not be sustainable and may not lead to as comprehensive a health package as that desired by communities. Zero-dose children persist in and are a marker of communities often deprived of other basic services. They could be a starting point for efforts to strengthen equitable primary health care (PHC) while providing a measurable indicator of progress in overcoming barriers to access. As weak health systems prevent reaching programme-specific targets, the Global Fund and Gavi have also contributed towards strengthening health systems. However, these contributions are often fragmented by programmes and do not integrate well with the health system. Misalignments between external and domestic financial flows and service delivery objectives are a constraint on reaching coverage targets. Actual or perceived tensions between the coverage- and system-strengthening objectives can prevent innovation. Platforms that reach the largest number could be built upon to achieve universal health coverage (UHC) through integrated, people-centred health services.

3. The COVID-19 pandemic has highlighted that communicable diseases need to be addressed in a comprehensive way. Strong, resilient health systems must address health emergencies while protecting essential health services. As most HIV, tuberculosis, malaria and immunization interventions have stagnated in recent years or have been severely affected by the pandemic, the status quo will not lead to further progress. Optimizing support from the Global Fund and Gavi to Member States and WHO through approaches that are coordinated and aligned within overarching national health policies, strategies and plans could improve efficiencies and lead to a larger, more sustainable impact. Stronger PHC for UHC approaches (with appropriate referral mechanisms) to strengthening the health system may be a way to further increase coverage. Along with current polio transition efforts, we can integrate and consolidate capacities that were fragmented, including service delivery, surveillance and laboratory services *(1)*. The objective of this paper is to propose a way to accelerate the prevention, control and elimination of communicable diseases through the integration and optimization of support from the Global Fund and Gavi in countries that are eligible for such support, per the new strategies of these organizations. The approach proposed here may also apply to any countries that receive support from other donors and lenders for any health programme, and to the polio transition process.

Situation analysis

Overview

4. **The Global Fund.** In 2020–2022, the Global Fund raised US$ 14 billion from donor countries (93%), the private sector and foundations (7%). Of this, US$ 12.7 billion was available for country allocations. Allocations to the 15 countries of the Region eligible for support related to HIV, tuberculosis and malaria are based on disease-specific burden and income level. Proposals are developed through country coordinating mechanisms (CCMs) or by other coordinating mechanisms often led by United

Nations agencies in non-CCM countries. These mechanisms gather representatives from all sectors involved in the response to the diseases: government, civil society, academic institutions, experts, affected populations, private sector and other donors. Technical teams and independent panels review the proposals for subsequent approval by the Global Fund Board. The Global Fund then allocates funds to recipient countries and/or other in-country recipients (e.g. nongovernmental organizations and United Nations agencies). Between 2003 and 2022, the Global Fund disbursed US$ 2.78 billion for HIV, tuberculosis, malaria and health systems strengthening in the Region. Specific disbursements for resilient and sustainable systems for health (RSSH) amounted to US$ 51.4 million (2%). The allocation increased from US$ 530 000 000 in the 2017–2019 funding cycle to US$ 664 309 474 in the 2020–2022 funding cycle. Overall, in 2020–2022, US$ 175 122 848 was assigned to HIV (26%), US$ 263 655 524 to tuberculosis (40%) and US$ 225 531 102 to malaria (34%), with a support to RSSH that was usually included in the various disease-specific allocations. In the 2020–2022 allocation period, 85% of funds were allocated to Pakistan (US$ 278 million, 42%), Sudan (US$ 146 million, 22%), Somalia (US$ 85 million, 13%) and Afghanistan (US$ 58 million, 9%), with the remainder (US$ 97 million) distributed to the other 11 countries. In 2020, the Global Fund introduced the COVID-19 Response Mechanism (C19RM) to reinforce the response to the pandemic and mitigate its impact on HIV, tuberculosis and malaria programmes, including by supporting urgent improvements in health and community systems. During the 2020–2021 period, US$ 207.6 million was allocated to countries in the Region, including 10.7% to health and community systems. Global Fund support has increased coverage of interventions. However, since 2010 coverage and impact indicators have tended to stall, particularly since 2015, leaving a gap in progress towards the targets of the Sustainable Development Goals (SDGs). For HIV (SDG indicator 3.3.1), the estimated incidence of HIV infection increased from 0.05/1000 in 2015 to 0.06/1000 in 2020 (2030 target: 0.025/1000). For tuberculosis (SDG indicator 3.3.2), the estimated incidence only decreased from 118/100 000 in 2015 to 112/100 000 in 2020 (2030 regional target: 58/100 000). For malaria, (SDG indicator 3.3.3), the estimated incidence increased from 9.3/1000 in 2015 to 11.2/1000 in 2020 (2030 regional target: 0.93/1000). Crises, conflicts, emergencies and COVID-19 have further challenged progress because of the economic impact and disruption of health service delivery.

5. **Gavi.** Globally, for the 2016–2020 strategic period, Gavi disbursed US$ 1.42 billion, including US$ 383 million (27%) in health system support in 2020 *(2)*. For the 2021–2025 strategic period, direct contributions from donor countries (77%) and other sources (23%) raised US$ 8.8 billion. Countries design and develop proposals through a consultative process among the ministries of health, Alliance partners and extended partners. These are then reviewed and endorsed by interagency coordinating committees (ICCs) headed by each country's minister of health and regrouping partners *(3)*. Since its inception in 2000, Gavi has disbursed US$ 2 447 836 051 for seven eligible countries in the Region, with an increase from US$ 66 million in the 2000–2005 strategic period to US$ 900 million in the 2016–2020 strategic period. During the 2000–2019 strategic period, specific expenditures for health and immunization systems strengthening amounted to US$ 292 million. Since its inception in 2000, the seven Gavi-eligible countries in the Region (Afghanistan, Djibouti, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen) have made 43 introductions of new and underutilized vaccines, including those against hepatitis B, *Haemophilus influenzae* type B, pneumococcus, rotavirus, rubella, measles, typhoid and inactivated polio vaccine. Coverage increased in Gavi-eligible countries, but areas with zero-dose children and communities persist, reflecting their lack of health services. As a result, there is a gap in progress towards the SDG targets of ensuring 90% coverage by 2030. For the third dose of the diphtheria, tetanus and pertussis (DTP3) vaccine (SDG 3.b.1), estimated coverage in the Region increased from 80% in 2015 to 85% in 2019. For the second dose of measles-containing vaccine (MCV2) (SDG 3.b.1), estimated coverage increased from 69% in 2015 to 76% in 2020. For the third dose of the pneumococcus vaccine (PCV3) (SDG 3.b.1), estimated coverage increased from 50% in 2015 to 54% in 2019. While the COVID-19 pandemic has seen an unprecedented, rapid introduction of new vaccines against COVID-19, thanks in part to the COVAX Facility, it also led to major disruptions of immunization against other communicable diseases and reductions in vaccine coverage services from which the Region needs to recover. Between 2019 to 2020, DTP3 and PCV3 vaccination coverage in the Region dropped four and two percentage points, respectively.

6. In addition to funding made available to countries, the Global Fund and Gavi can also make funds available to the WHO Secretariat. However, mechanisms for WHO to receive funding from these two sources differ *(3).* In the case of the Global Fund, historically, because of its normative technical role, WHO has not been a principal recipient. Financial support to WHO usually takes place when recipient countries include WHO activities and/or staff support in the funding request to the Global Fund. Once approved, WHO becomes a subrecipient of the principal recipient. Additionally, as part of a cooperation and financing agreement for a strategic initiative, WHO headquarters may receive resources from catalytic investment funds that are transferred to regional and country offices so that WHO assists in the preparation of funding requests, including updating national strategic plans. This strategic initiative agreement can also fund WHO technical departments at headquarters and regional offices. In the case of Gavi, a consultative process among the ministry of health, Alliance partners and the Gavi Secretariat guides grant implementation. This includes arrangements on how ministries of health, Alliance partners or extended partners will implement different components of a plan based on their respective comparative advantages. Gavi then distributes the grant according to responsibilities for implementation. In addition, under its partners' engagement framework, Gavi funds different partners, including WHO and the United Nations Children's Fund (UNICEF), who provide targeted country assistance. Through that mechanism, per the Alliance model, Gavi supports about 200 staff member positions across the three levels of WHO, including 46 in the Eastern Mediterranean Region.

7. While countries have been successful in using Global Fund and Gavi support to increase coverage to a certain extent, innovations could further help in reaching full coverage in line with UHC. Closing the coverage gap using programme-specific approaches could be difficult and resource intensive. Furthermore, with any increase in size of the population at risk (including because of an increase in population size) and ecological changes, maintaining current coverage will require even more resources, posing a challenge in terms of sustainability. Alternatively, increasing efficiencies and providing the most marginalized populations with sustained access to a comprehensive health package could lead to further coverage gains. Reaching the unreached needs a focus on health systems strengthening towards a PHC for UHC approach (with appropriate referral mechanisms). The new Global Fund and Gavi strategies *(4)* call for people-centred approaches that seek to progressively provide more services to more people while limiting financial hardship, with a focus on the vulnerable and the underserved. WHO can propose approaches to increase coverage of key interventions for HIV, tuberculosis, malaria and immunization through a focus on the communities most in need in a logic of progressive universalism. Priorities include underserved communities such as those with zero-dose children as well as key and vulnerable populations that can be reached with the involvement of civil society and community organizations.

Analysis by health system building blocks

8. Reaching high coverage with HIV, tuberculosis, malaria and immunization interventions and strengthening the health system need to be synergistic objectives. WHO's regional team therefore analysed how the use by countries of the contributions from the Global Fund and Gavi interacts with the six building blocks of the health system – governance, financing, service delivery, health workforce, access to commodities, and health information systems. The result of this analysis identifies opportunities to design person-centred delivery systems that would prioritize the most deprived and vulnerable communities. For example, the IRMMA (identify–reach–monitor–measure–advocate) framework aids planners in designing health system interventions that target the specific barriers each community faces to reduce the number of zero-dose children *(5)*.

Governance

9. In most countries, directorates of public health (or equivalent structures) at ministries of health coordinate the input of the Global Fund and Gavi. In the Region, United Nations agencies are principal recipients of the Global Fund in 13 of 15 recipient countries because of crises, the impossibility of the ministries' receiving funds or the Global Fund's own Safeguard Policy. Similarly, Gavi can also provide funding through United Nations agencies and/or civil society organizations when ministries cannot

receive funds directly (for example, because of inadequate audit reporting). For the Global Fund and Gavi, programme-specific national strategies lead to proposals aligned with higher level development plans (for example, national health policy or strategy, national development plan or a poverty reduction strategy). The CCMs (in the case of the Global Fund) and the ICCs (in the case of Gavi) then endorse these proposals, with a varying degree of coordination between themselves, and ensure multisectoral involvement in grant management.

10. CCMs and ICCs have senior-level ministry of health representation and are meant to ensure that programme-specific proposals are aligned with country health sector strategies. However, proposals often remain disease- or programme-specific instead of being developed from national health policies, strategies and plans. Cross-cutting synergies are limited and there are missed opportunities to align with broader national priorities. Conflicting time frames in the grant-making cycles and fiscal planning cycles of recipient countries have led to the establishment of parallel systems for budgeting and auditing expenditures *(6)*. Further in the implementation cycle, the evaluations conducted tend to be technically deep while remaining narrow in scope *(7)*, missing opportunities to measure impact on the national public health strategy. Engagement of the Global Fund and Gavi in individual programmes can also weaken national governance in specific fields and decrease the chance of inclusion of investment in health as part of long-term development plans (World Health Organization, unpublished report on the transition of HIV, TB and malaria services from Global Fund to domestic resources in Tunisia, 2022). The involvement of United Nations agencies as principal recipients of Global Fund support and the presence of multiple principal recipients in the same country can also add to fragmentation. Implementation becomes project-based, driven by contracts between the principal recipient and the implementers, rather than system-based. In contrast, strong governance enhances sustainability and facilitates transition to national programmes after the withdrawal of funding. In Tunisia, for example, transition from Global Fund support can proceed smoothly because of a conducive overall governance structure and a political willingness to increase domestic allocation for health (World Health Organization, unpublished report of case-studies, 2022).

11. In 2019, WHO launched the Global Action Plan (GAP) for healthy lives and well-being for all, to strengthen collaborations among multilateral organizations and accelerate countries' progress towards the fulfilment of the health-related SDGs and targets *(8)*. In 2020, WHO launched a Regional Health Alliance as part of the GAP initiative. Improved coordination through GAP under strengthened governance can contribute to better strategic vision, planning, participation, effectiveness, efficiency, responsiveness, transparency, equity and accountability. The Regional Health Alliance could become a coordination platform to accelerate progress while strengthening health systems through the inclusion of cross-cutting programmes such as laboratory support. It would empower ministries of health to drive changes per their national health policy or strategy. Coordination of all contributions would make them fit into a national agenda before fitting them to donor-specific funding or monitoring cycles.

Financing

12. The opportunity for and availability of external funding can reduce opportunities to raise domestic financing. Hence, the Global Fund and Gavi are making efforts to advocate for increased domestic financing as part of the response. Domestic financial resources are most often directed to support the health workforce, while the Global Fund and Gavi are usually involved in procurement of commodities, health information systems, surveillance, monitoring and evaluation, and contracting with nongovernmental organizations (World Health Organization, unpublished report on human resources for health in Afghanistan, 2020). Increasing domestic investment is Key Performance Indicator 11 in the Global Fund 2017–2022 strategy *(9)*. For the implementation of the 2017–2019 allocation period, actual cofinancing investment exceeded target overall. Every income bracket saw high rates of cofinancing investment, with achievements over policy-prescribed levels that reached 122% (low-income countries), 129% (lower low-middle-income countries), 153% (upper low-middle-income countries) and 118% (upper middle-income countries). There was a 48% increase on average over the 2015–2017 actuals, which was marked for upper low-middle-income countries where government expenditures increased by almost 80% *(10)*.

13. In 2020, the Global Fund issued a guidance note on sustainability, transition and cofinancing *(11)*. The note outlined the role of countries and grant recipients in catalysing domestic resources, with the aim of fully transitioning from Global Fund support to domestic financing. To support this transition, Global Fund investments include a requirement for cofinancing from recipient countries, based on national income levels and disease burdens. The Global Fund requires a progressive increase in general government expenditure on health and a progressive uptake of key programme costs, including those funded by the Global Fund. As a cofinancing incentive, at least 15% of a country's allocation is conditional on additional national commitments towards disease programmes and/or health system strengthening activities *(10)*. Analysis of domestic financing in the Region indicates that for HIV, tuberculosis and malaria, the ratio of domestic allocation to external support varies by disease programme and country, ranging from 5 : 100 in Somalia and Yemen to more than 75 : 100 in Morocco, Egypt and Tunisia. Countries that are heavily dependent on Global Fund support, including Afghanistan, Djibouti, Somalia and Yemen, do not substantially increase their domestic financing over time. In contrast, in Pakistan, the ratio of domestic funding increased from 19.6 : 100 in 2013 to 45 : 100 in 2019. In 2014–2019, domestic funding for HIV, tuberculosis and malaria in Egypt, Morocco and Tunisia exceeded support from the Global Fund, signalling that they are getting ready to transition. Similarly, Gavi requires cofinancing from recipient countries to pay for new vaccines. The cofinancing requirement for low-income countries is US$ 0.20 per vaccine dose, without any annual increase. When a country's gross national income per capita exceeds the low-income threshold but remains below the Gavi eligibility threshold, the country moves to phase 1 of a transition. A phase 1 country's cofinancing remains at US$ 0.20 per dose for the first year, but then increases by 15% every year. Phase 1 countries transition to phase 2 when the gross national income per capita reaches or exceeds the Gavi eligibility threshold for three consecutive years. A phase 2 country's cofinancing amount increases 15% from the last year of phase 1 status to increase in a linear fashion to reach 100% of the price after five years. Gavi can offer flexibility or exempt a country from cofinancing obligations during crises or other situations that prevent a country from being able to pay.

14. Since 2010, the Global Fund and Gavi have complemented programme-specific support with allocations to strengthen health systems. However, these contributions could be further optimized. As HIV, tuberculosis, malaria and immunization programmes develop grant proposals, those working in these programme areas may wonder how resources disbursed in domains outside their control are accountable to programmatic-related goals and metrics. System-oriented investments also often involve distinct constituencies and different time horizons for change. Unlike Gavi, the Global Fund allocations for RSSH are often determined and distributed through HIV, tuberculosis and malaria programme areas. This can lead to inconsistent, programme-oriented approaches to system strengthening. Further, the contribution for RSSH can be difficult to map in terms of the cross-cutting way it strengthens the health system. Governance, financing, laboratory diagnosis and information systems tend to receive little funding *(12, 13)*. Limited investment of the Global Fund in health systems strengthening along with donor dependency for HIV, tuberculosis, malaria and immunization, economic collapse and weak governance prevented a number of countries from adopting sustainable strategies *(7)*. The Global Fund and Gavi now promote more integrated and system-oriented approaches. Their operating models could prioritize system-level investment areas and involvement of relevant stakeholders. Greater collaboration and partnership can synergize health system strengthening investments and programme investments. System-level investments should facilitate programmatic objectives *(14)*.

15. The Global Fund and Gavi usually provide support to specific programmes and disease-specific constituencies. While there are many good examples of improvement of efficiencies of health inputs, inefficiencies are still reported for many cross-cutting functions. WHO has developed a framework to conduct cross-programmatic efficiency analysis (CPEA). Analysis of data from seven African countries assessed in 2021 identified four key issues to address: uncoordinated planning and budgeting processes; fragmented inputs (for example, information systems, laboratories, health workers, facilities); misalignment between financing mechanisms and service delivery objectives; and programmatic objectives and priorities that are de-linked from overall health sector reforms *(15)*. In the Region, Pakistan is leading the way with a CPEA initiated in 2021, with a second phase scheduled for June 2022.

Overall, many Global Fund- and Gavi-supported programmes function with distinct financing, governance, service delivery and inputs that do not enable complementarity, integration, efficiency or potential sustainability in the absence of Global Fund or Gavi support. Addressing these inefficiencies could improve the use of resources available to increase coverage, as recommended by the GAP *(8)*. Countries in the Region need more CPEAs, which will lead to recommendations implemented as per an accountability framework that engages all stakeholders and governments. The resulting efficiency gains would further improve the cost-effectiveness of interventions supported by the Global Fund and Gavi.

Service delivery

16. UHC implies that people can benefit from the quality health services they need without financial hardship. The Global Fund and Gavi have advocated and contributed to the provision of services that are free at the point of delivery for the interventions included in their mandate. This contribution could fit within a broader strategy to enhance access to all needed health services. Options could include reconfiguring the model of care to enhance service coverage, improving quality and reducing financial hardship from the use of a predefined set of services and interventions in a nationally defined priority benefit package.

17. The Global Fund encourages applicants to explore opportunities and entry points for integration across the health system at different levels (for example, governance, management, financing and service delivery). While integration is encouraged, the nature of the support provides an incentive that can lead to the persistence of vertical approaches. Programmes supported by the Global Fund and Gavi can be reluctant to share resources with other programmes outside their control. The allocation for RSSH from the Global Fund that promotes integrated service delivery remains limited *(13)*. To address these issues, WHO could support a gap analysis of all health system strengthening investments and assist ministries of health in their prioritization work on HIV, tuberculosis, malaria and immunization, and beyond.

18. The 2017–2022 Global Fund strategy highlighted four clear opportunities for integrated service delivery through the lens of reproductive, maternal, newborn, child and adolescent health. These were: (1) antenatal care; (2) integrated community case management; (3) integrated sexual and reproductive health and HIV services; and (4) adolescent health (World Health Organization, unpublished report on human resources for health in Afghanistan, 2020). Various donors (for example, the Global Fund and the International Organization for Migration) also support packages such as integrated community case management that includes malaria and malnutrition. UNICEF supports packages that include diarrhoeal diseases, malaria, pneumonia and malnutrition disorders among children aged under five and pregnant women. Good progress has been achieved in implementing integrated community case management for malaria in Yemen with Global Fund support. The recruitment of community health volunteers enabled remote and vulnerable communities to access malaria services *(16)*. However, coordination of different agencies under the leadership of national authorities has not always been optimal, resulting in parallel work and missed opportunities to deliver all interventions. Integration of immunization services, specifically with PHC, remains country-driven and context specific (for example, contexts of fragility and conflict). Since 2022, Gavi has provided greater clarity on the advantages of integrating services and on how it can be meaningfully measured and tracked *(17)*. To regulate and harmonize the contributions of different agencies, ministries of health need strong teams with management skills and a solid strategy for policies and service delivery. Integrated service delivery needs to be supported through coordinated and pooled funding mechanisms. Such integrated approaches could address comorbidities (for example, cervical cancer and HIV, diabetes and tuberculosis). Common chronic care models for HIV, tuberculosis and noncommunicable diseases can be developed and built upon with other resources to reduce mortality from cardiovascular diseases, cancers, diabetes and chronic respiratory diseases. These should empower managers at the front line to flexibly allocate and account for funding according to objectives.

19. A major contribution of Gavi to service delivery consists of cash grants for human resources and health care worker incentives (see para. 23), transportation, equipment and logistics supplies. For example, direct investment by Gavi in supplemental immunization activities represented about US$ 195 million in grants for seven Gavi-eligible countries in the Region in 2012–2019 (10% of the total Gavi

allocation) *(2)*. Supplemental immunization activities increase vaccine coverage and prevent diseases and deaths. Specific investments for equipment and logistics may also strengthen the system in the long term. However, the long-term benefits of other expenses, such as transportation, are less clear.

20. The Global Fund and Gavi have contributed to improvements in health equity. Investments in HIV, tuberculosis, malaria and immunization have been among the most pro-poor interventions ever implemented. The tendency to engage civil society organizations in service planning and delivery, especially for HIV/AIDS, has increased demand among vulnerable and socioeconomically disadvantaged communities. Decentralization of services can also reduce differences in coverage between rural and urban areas. Global Fund and Gavi support can facilitate the inclusion of migrants in the provision of services *(7)*. However, the effects of Global Fund and Gavi support on coverage for interventions that are not included can vary *(12)*. Positive effects on non-targeted health services are likely when they have been explicitly planned or when the health system is robust, or both. The root causes of inequities must be addressed so that the most vulnerable and underserved individuals can be reached, such as communities with zero-dose children and key populations *(18)*. Reducing inequities and reaching the unreached represents progress towards the health-related SDG targets.

21. Through the promotion of guidelines, the Global Fund and Gavi have contributed to improving the quality of treatment and services for targeted interventions. The promotion of performance-based financing has been associated with improved quality of services in some cases, but in others the pressure to meet targets has produced distortions, led to compromises in quality and raised questions about integration within the broader health system.

22. Overall, beyond disease- and programme-specific improvements, Member States should work with the Global Fund and Gavi to identify additional opportunities to enhance access to broader health services. Leveraging their support could contribute to building necessary service delivery platforms and arrangements for PHC, including referral mechanisms. Efforts to reach zero-dose children could contribute to generating a delivery platform that can be used for other interventions. Community systems can benefit all vulnerable populations. This catalytic support could facilitate a progressive universalist approach, starting with a focus on targeted diseases and interventions to then allow for gradual, equitable expansion.

Health workforce

23. Governments in low- and middle-income countries may struggle to pay salaries that are commensurate with the value of the work of health care workers. Consequently, the Global Fund and Gavi occasionally support additional financial incentives for staff that can be linked to specific inputs, processes or outputs. However, uncoordinated incentives can be disruptive for the health workforce and can take health care workers away from the public sector. They can also be counterproductive as they can increase the expectations of health care workers and demotivate them with respect to regular work conducted in the absence of specific additional financial compensation.

24. A study analysed Global Fund investments in human resources for health in 2003–2017 in 13 countries of the Region. Average expenditure on human resources for health, including training, accounted for 28% (US$ 454 million) of the total Global Fund grant expenditure to the 13 recipient countries (US$ 1.6 billion over the period 2003–2017). However, detailed data analysis indicated that the actual investment in human resources for health was lower, with only 13% allocated to direct human resources for health activities such as salaries, training costs and technical assistance *(19)*. Human resources for health-related disbursements by the Global Fund in Afghanistan and Sudan were of a similar nature, including preservice and in-service training, recruitment of programme coordinators and staff, and top-ups for clinical staff. Reviews of Global Fund, Gavi and World Bank support for human resources for health-related activities at the country level suggest an opportunity for greater alignment, coordination and complementarity among the three agencies *(20)*. Human resources for health, particularly those in PHC settings, need to be better addressed, particularly as this building block is not mentioned in GAP **Error! Bookmark not defined.** While activities such as training are heavily

supported externally, policy reform receives less attention. A more coordinated strategy could improve the overall impact of external financing on the health workforce. It could expand support to preservice training and community health workers and to policies that would facilitate the recruitment and retention of health care workers, particularly in primary care. Failure to engage in a strong human resources policy can affect sustainability and complicate the transition of countries from reliance on the Global Fund to domestic financing *(21)*. The 2023–2028 Global Fund strategy proposes a renewed focus on human resources for health *(4)*.

Access to commodities

25. When the Global Fund and Gavi started their operations, the cost of health products limited access for those in need and constrained coverage increase in limited-resource settings. The price of medicines was an obstacle to scaling up testing and treatment programmes for HIV. Similarly, uncertain funding and demand for vaccines did not provide incentives for manufacturers to invest in new products at affordable prices for low- and middle-income countries. Vaccines available in high-income countries were introduced much later in low- and middle-income countries. Since these market forces did not always serve low- and middle-income countries well, the Global Fund and Gavi worked to improve the global availability and affordability of priority commodities based on WHO guidelines through market-shaping strategies. Optimized procurement based on WHO prequalification standards led to a price reduction for commodities of assured quality through increasing the availability of quality generic versions of key products. Gavi efforts to address market failure supported vaccines against 17 diseases, with a number of suppliers that increased from 17 in 2000 to 31 in 2021. In 2021, Gavi procured vaccines for 60% of the world's children. Between January 2021 and March 2022, through the COVAX Facility, it delivered over 1.4 billion doses of COVID-19 vaccines to 144 countries. Overall, the Global Fund and Gavi's market-shaping approach improved the predictability of demand and secured supplies at a price that low- and middle-income countries could afford *(22)*.

26. In some countries, investments in infrastructure, warehouses, distribution assets and information systems have also improved national supply chains. However, these country-level efforts can remain fragmented or duplicated, while leaving other programmes underserved. Contributions from the Global Fund and Gavi can also lead to multiple, parallel systems for procurement and supply chains. In some cases, countries miss opportunities to make use of international procurement systems. More middle-income countries could optimize their vaccine procurement through UNICEF. Tenofovir, an antiretroviral medicine used to treat HIV and hepatitis B virus infection, is another example of missed opportunities for optimized procurement. Global Fund procurement mechanisms organized for HIV can make tenofovir available at less than US$ 30 per year. Given its mandate on HIV, tuberculosis and malaria, the Global Fund does not financially support the procurement of tenofovir for hepatitis B programmes. However, low-income countries with a high burden of hepatitis B infection could potentially, but do not currently, use the Global Fund procurement mechanisms to procure this medicine at the same price, at their own cost, to treat hepatitis B infection. Countries instead often procure tenofovir at a much higher price through inefficient national mechanisms or through the private sector *(23)*. Poor coordination can also lead to under- or overstocking. Even after years of support by the Global Fund, inefficiencies in the national procurement system can remain a challenge to facilitate transition after withdrawal of support *(7, 24)*.[Error! Bookmark not defined.] Building national systems for forecasting needs, procurement, supply chain management, regulatory capacity and local production is key to a successful transition and would benefit a broader range of health interventions, including those for comorbidities and noncommunicable diseases.

Health information systems

27. The Global Fund and Gavi have fostered a culture of decisions based on data, with a strong focus on monitoring, evaluation and use of surveillance for impact assessment. For Gavi, the main mechanisms for tracking grants are its grant performance framework and joint appraisal reports. Other sources commonly used are evaluations, coverage surveys and contextual information primarily from direct contacts with partners and implementers. However, countries' implementation of grants from the Global

Fund and Gavi can also contribute to the fragmentation of information systems. Pakistan is now working on integrated disease surveillance to overcome this kind of fragmentation. In 2020, there were two separate surveillance systems for vaccine-preventable diseases and polio. The Global Fund's support to the health information system for malaria was restricted to specific districts with higher endemicity levels. This led to a two-tier documentation system that biased comparisons across districts and, in some situations, resulted in withholding essential interventions from districts previously covered by the Global Fund. Having different principal recipients of Global Fund support led to the implementation of parallel information systems for HIV. Finally, collection of tuberculosis data for the management of the Global Fund project was not fully streamlined with the standard systems. A comprehensive convergence plan is now aiming for integration of systems in Pakistan. In other WHO regions, the Health Data Collaborative has been making efforts for convergence of data systems towards integration *(25)*. However, there has been no experience of this approach in the Eastern Mediterranean Region *(24)*.

28. In 2021, the 68th session of the Regional Committee of the Eastern Mediterranean endorsed a resolution on integrated disease surveillance *(26)*. This resolution called on Member States to organize the progressive convergence of surveillance systems towards integration, in the broader context of health information systems. Surveillance includes systems conceived to detect and respond to outbreaks (for example, cholera and influenza) and systems guiding programmes to prevent, diagnose and treat diseases (for example, HIV, tuberculosis, malaria, neglected tropical diseases and vaccine-preventable diseases). Recognizing that at the source, in most cases, it is the same health care workers who collect primary data, the resolution calls for consolidation of the data collection processes at the health care facility level to build digitalized systems that improve local decision-making. Global Fund and Gavi support of the HIV, tuberculosis, malaria and immunization modules of DHIS2 constitutes a good practice to replicate and build upon as a step towards broader, comprehensive, integrated health information systems. Given the different, often parallel, digital data systems already in place, the proposed integration should both improve effectiveness and efficiencies while reducing the burden of documentation on health care workers (documentation can take up to a third of health care workers' time) *(27)*.

Conclusions

29. Our analysis of the six health system building blocks points to several conclusions. The Thirteenth General Programme of Work 2019–2023 and WHO's *Vision 2023* for the Eastern Mediterranean Region provide an opportunity to build on the disease and programme focus of the Global Fund and Gavi with the commitment to PHC for UHC.

- The different coordination mechanisms of the Global Fund and Gavi (CCMs and ICCs) could use additional opportunities to integrate with and contribute to the broader national health strategy, particularly through addressing the gaps in all health systems strengthening support.
- Ministries of health could increase their domestic financing and address inefficiencies secondary to earmarked donor funding.
- Ministries of health could use support from the Global Fund and Gavi to contribute to broader, more complete packages conceived according to specific types of beneficiaries towards people-centred and integrated care approaches that should improve coverage, with a focus on underserved and vulnerable communities.
- The Global Fund and Gavi have contributed to programme-specific in-service training and to financial incentives. A broader perspective on human resources for health rooted in a good understanding of health labour market conditions could further contribute to policies that would attract health care workers, build their capacity from the start of their career and retain them.
- The Global Fund and Gavi systems of global procurement and supply chain obtain affordable commodities of assured quality. Countries could take greater advantage of these systems or use similar optimized procurement approaches.

- The culture of data for decision-making, monitoring, evaluation and surveillance developed through Global Fund and Gavi support could benefit more programmes and services. This can happen at a reduced cost as investments in data systems have already been made, often on a redundant basis.

Recommended actions for Member States and for the Secretariat

Recommended actions for Member States

30. Strong national technical programmes remain irreplaceable in developing and managing evidence-based policies and strategies to accelerate the prevention, control and elimination of communicable diseases. However, equitable and efficient health system approaches could further increase progress towards SDG targets. Specific actions are given below.

- Designing national health policies, strategies and plans that will frame the contribution of the Global Fund and Gavi, through integrating the work of CCMs and ICCs in planning, financing, monitoring and evaluation as part of a consolidated multisectoral coordination mechanism, under the leadership of the health ministry. This could include a gap analysis of all health system strengthening support that would lead to a costed, multi-year consolidated plan.
- Increasing domestic public funding allocations to HIV, tuberculosis, malaria and immunization.
- Improving cross-programmatic efficiencies, ensuring sustainability and planning for transition.
- Including interventions in national essential packages of health services to which the Global Fund and Gavi could contribute.
- Using integrated PHC for UHC, people-centred care approaches (with appropriate referral mechanisms) to increase coverage and prioritize underserved communities characterized by zero-dose children for delivery.
- Building national capacities rooted in an understanding of health labour market conditions, strategic planning and implementation using innovative, comprehensive human resources for health approaches.
- Developing a national strategic plan to build an integrated capacity for procurement and supply chain management, including using global procurement systems and improving financial management.
- Consolidating data systems used for monitoring, evaluation and surveillance in the context of integrated disease surveillance and health information systems.

Recommended actions for the Secretariat

31. WHO will develop regional collaborative agreements with the Global Fund and Gavi and:

- frame a normative approach to embed the Global Fund and Gavi contributions into national health policies, strategies and plans, including gap analysis for all health systems strengthening support;
- convene consolidated coordination mechanisms (i.e. national compacts) *(28, 29)* at the WHO country office level to optimize contributions from the Global Fund and Gavi as part of a coherent national approach;
- provide technical support to increase and improve domestic public funding allocation and conduct CPEA;
- develop a model list of essential HIV, tuberculosis, malaria and immunization interventions for inclusion in national essential packages of health services, along with a template approach to reorganize services by beneficiary as part of people-centred models of care;
- facilitate analyses of health worker training needs and the health care labour market;
- assess and plan for consolidated national procurement and supply chain management; and
- propose roadmaps for the convergence of data systems (monitoring, evaluation, surveillance).

Monitoring and evaluation

32. Implementation should be guided by outputs, outcomes and indicators (Annex 1).

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Annex 1

Strategic directions, WHO outputs, country outcomes and indicators to increase the efficiency and impact of collaboration with Gavi and the Global Fund in the Eastern Mediterranean Region

Domain/topic	Strategic directions	Key WHO outputs	Country outcomes	Indicators	
				Baseline	Target
1. Governance	Start from the national health policy, strategy and plans to direct the contributions of the Global Fund and Gavi, including through a costed, multi-year health system strengthening plan	Normative approach to embed the Global Fund and Gavi contributions into national health policies, strategies and plans Gap analysis of health systems strengthening support	National health policy, strategy and plans embed the contributions, avoiding overlaps and duplication Costed, multi-year health system strengthening plan	Insufficiently coordinated input of the Global Fund and Gavi to national health policies, strategies and plans	National health strategy that embeds and optimizes the Global Fund and Gavi contributions with a costed, multi-year RSSH plan
	Integrate governance of Global Fund and Gavi contributions (planning, financing, monitoring, evaluation) in a single multisectoral coordination mechanism under the leadership of the ministry of health	Convening at WHO country office level	Global Fund and Gavi proposals are prepared, managed and monitored from a health systems strengthening, PHC for UHC perspective	Separate committees for the Global Fund and Gavi	Coordinated approach in the work of the committees
2. Financing	Increase and improve domestic public financing	Health financing progress matrix Fiscal space for health assessments	Increased allocation of domestic resources through the national health financing strategy	General government expenditure on health as a share of general government expenditure	Increasing overall public funding for health
	Identify areas to improve cross-programmatic efficiencies, in particular those related to sustainability and transition planning, including follow-up with policy actions to improve impact with available resources	CPEA guidance and technical support	Inefficiencies identified and eliminated	CPEA not conducted	CPEA conducted and recommendations implemented
3. Service delivery	Ensure inclusion of HIV, tuberculosis, malaria and immunization interventions in essential packages of health services	Model list of essential HIV, tuberculosis, malaria and immunization interventions for inclusion in national packages	Inclusion of interventions in the national package	No or heterogeneous inclusion of interventions in the national package	Essential package of care includes HIV, tuberculosis, malaria and immunization interventions
	Use integrated PHC for UHC, people-centred care approaches and community engagement to increase intervention coverage, starting with underserved communities characterized by zero-dose children	Template approach to service reorganization	People-centred PHC for UHC perspective (e.g. Pakistan, Sudan and Tunisia)	Programme- or disease-specific approach to interventions	Interventions repackaged per beneficiaries and delivery platforms

Domain/topic	Strategic directions	Key WHO outputs	Country outcomes	Indicators	
				Baseline	Target
4. Health workforce	Build capacity using innovative comprehensive human resources for health approaches	WHO-facilitated training needs analysis	Sustainable national capacity-building for HIV, tuberculosis, malaria and immunization interventions within the national human resources for health plan	Fragmented, short-term in-service training plan	Consolidated health workforce-centred investment plan to support education and training
		WHO-facilitated analyses of the health care labour market	National policy for incentives and supplemental remuneration	Uncoordinated approach to incentives	Coordinated approach to incentives and remuneration to support investment in decent jobs
5. Access to commodities	Develop national strategies to build an integrated capacity for procurement and supply chain management	National assessment and consolidation plan	National procurement and supply management unit conducting optimized procurement or buying from global procurement systems	Programme-specific procurement and supply chains	Strengthened national procurement and supply management unit irrespective of the funding source
6. Health information systems	Consolidate data systems used for surveillance, monitoring and evaluation	WHO-facilitated workplan to facilitate convergence of data systems	Consolidated data systems used for monitoring and evaluation in the context of integrated disease surveillance and health management information systems	Fragmented, programme-specific data systems for surveillance, monitoring, and evaluation	Progressive convergence of data system towards integration