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MINISTRY OF HEALTH - ETHIOPIA

# ETHIOPIA HEALTH SECTOR TRANSFORMATION PLAN

## HSTP II (2020/21 – 2024/25 (GC)
## (2013 – 2017 EFY)

MID-TERM REVIEW
VOLUME I
COMPREHENSIVE REPORT

By Independent Review Team
8th May – 30th June 2023

Addis Ababa, 2023

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# ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| **AMR** | Antimicrobial Resistance |
| **ANC** | Antenatal Care |
| **BOFED** | Bureau of Finance and Economic Development |
| **CBHI** | Community Based Health Insurance |
| **CFR** | Case Fatality Rate |
| **CIARP** | Conflict Impact Assessment and Recovery and Rehabilitation Planning |
| **CLIP** | Clinical Leadership Improvement Plan |
| **COVID-19** | Coronavirus Disease 2019 |
| **CPD** | Continuing Professional Development |
| **CSC** | Community Score Card |
| **DH** | Digital Health |
| **DHIS2** | District Health Information System 2 |
| **DP** | Development Partner |
| **DRM** | Domestic Resource Mobilization |
| **DRS** | Developing Regional Stated |
| **e-RIS** | Electronic regulatory information system (e-RIS) |
| **eCHIS** | electronic community health info system |
| **EFDA** | Ethiopia food and medicine Agency |
| **EFY** | Ethiopian fiscal year |
| **EHSP** | Essential health service package |
| **EMR** | Electronic Medical Records |
| **EPI** | Expanded Programm on Immunization |
| **EPHCG** | Ethiopian Primary Health Care Clinical Guidelines |
| **EPHI** | Ethiopian Public Health Institute |
| **EPSA** | Ethiopian Pharmaceutical Supply Agency |
| **ESPA** | Ethiopian Service Provision Assessment |
| **EMR** | Electronic Medical Records |
| **EPPAD** | Ethiopian Pharmacists and Pharmaceutical Scientists Association in the Diaspora |
| **EPRP** | Emergency Preparedness and Response Plan |
| **EPSS** | Ethiopian Pharmaceuticals Supply Service |
| **EWF** | Emergency Workforce |
| **FMOH** | Federal Ministry of Health |
| **GBT** | WHO's Global Benchmarking Tool |
| **HCF** | Healthcare financing |
| **HCs** | Health Centers |
| **HEIs** | Health Equity and Inclusion |
| **HEP** | Health Extension program |
| **HF** | Health Facility |
| **HIAP** | Health in All Policies |
| **HIS** | Health information System |
| **HIV** | Human Immunodeficiency Virus |
| **HPs** | Health Posts |
| **HRH** | Human Resource for Health |
| **HRIS** | Human Resource information system |
| **HSTP** | Health Sector Transformation Plan |
| **IARs** | Intra-action reviews IARs |
| **ICT** | Information and Communication Technology |

| | |
|---|---|
| **IMS** | Incident Management System |
| **IP** | Implementing Partner |
| **IR/T** | Information revolution/Technology |
| **JCCC** | Joint Core Coordinating Committee |
| **JFA** | Joint Financing Agreement |
| **L/SCM** | Logistics & /Supply Chain Management |
| **LIP** | Leadership Improvement Program |
| **LMG** | Leadership Management Group |
| **MEs** | Medical Equipment |
| **MOFEC** | Ministry of Finance and economic Development |
| **NAG** | National Advisory Group |
| **NCDs** | Non-communicable diseases |
| **NGOs** | Non-government Organizations |
| **NHA** | National Health Account |
| **NHWA** | National Health Workforce Account |
| **PBF** | Performance Based Financing |
| **PFM** | Public Financial Management |
| **PFSA** | Pharmaceutical Fund and Supply Agency |
| **PHCU** | Primary Health Care Unit |
| **PHEs/M** | Public Health Emergencies/Management |
| **PPL** | Public Procurement List |
| **PPP** | Public Private Partnership |
| **PSNP** | Productive Safety Nets Program |
| **QI** | Quality Improvement |
| **RCCE** | Risk Communication & Community Engagement |
| **RDF** | Revolving Drug Fund |
| **REHF** | Resilience and Equity Health Fund |
| **RHB** | Regional Health Bureau |
| **RRU** | Revenue retention & utilization |
| **SDG PF** | Sustainable Development Goal Pooled Fund |
| **SHI** | Social Health Insurance |
| **TB** | Tuberculosis |
| **VRAM** | Vulnerability Risk Analysis and Mapping |
| **WorHO** | Woreda Health Office |
| **ZHD** | Zonal Health Department |

# PREFACE

**ETHIOPIA HEALTH SECTOR TRANSFORMATION PLAN II**

**MID-TERM REVIEW OF HSTP II**

30TH APRIL TO 30TH JUNE 30 2023

| | |
|---|---|
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**Core Members of the 2013 MTR Review Team with their funding agencies**

The independent team of this MTR was composed of 5 international and 9 national consultants, supported by 2 resource persons from WHO and African Resource Center. They were selected by the JCCC on the basis of their professional expertise and participated in their individual capacity. Bill and Melinda Gates Foundation, DFID, UNICEF, UNFPA, USAID, Netherlands Embassy and World Bank funded the involvement of these consultants. As an *independent* review team, the opinions and suggestions in this report are solely the responsibility of the authors and do not in any way commit or imply the agreement of the MOH or any of the other stakeholders operating in the Ethiopian health sector.

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**Abebe Alebachew,** on behalf of MTR team members.

# EXECUTIVE SUMMARY

Ethiopia has been through a number of challenges including COVID-19, conflict, internal displacement, and other public health emergencies like cholera during the implementation of Ethiopia's second Health Sector Transformation Plan (HSTP II). Ethiopia had one of the highest number of COVID-19 cases in Africa, with a total of 491,979 reported COVID-19 cases and 7,568 cumulative COVID-19-related deaths. The COVID 19 test positivity rate and case fatality rate were 10% and 1.5%, respectively. Ethiopia was able to reach almost all households nationwide to test, isolate, and treat COVID-19. In addition to the COVID-19 pandemic, there have been several other public health emergencies during HSTP II implementation, such as a measles outbreak in 29 woredas, surges in malaria cases and outbreaks, as well as a cholera outbreak in Oromia and Somali regions. Furthermore, a total of 48 hospitals, 543 health centers, 2,652 health posts, 5 blood banks, 2 EPSA hubs, 68 woreda and zonal health offices and 248 ambulances were either looted, damaged or destroyed due to the conflict. The conflict also affected private health facilities and pharmacy/drug stores in conflict-affected areas. More than 5 million people have been internally displaced from their homes due to the conflict. Despite these disruptive shocks, the country was able to largely maintain health service provision, a sign that the health system is becoming more resilient.

HSTP II has five Transformation Agendas (top priorities), one of which is quality and equity. As a result of the efforts made in the last 2.5 years, there is evidence showing declines in disease incidence, prevalence, mortality (e.g., maternal mortality, some communicable diseases). The institutionalization of quality improvement (QI) practices, rolling out new services, especially specialty and sub-specialty services (mental health, home based clinical care, noncommunicable diseases, etc.) and the adaptation of service delivery models in response to emerging crises (e.g., COVID-19, conflict) are some of the achievements during the last two and half years. The best practices in this regard include deployment of 63 mobile health and nutrition teams to respond to conflict, pre-positioning of essential commodities, as well as evidence-based targeting of services to enhance the coverage and reach of health services to crisis-affected, vulnerable and/or marginalized groups. Improved outcomes that directly impact cause-specific mortality (e.g., HIV viral load suppression; TB treatment success) are also evident.

The establishment of the multi-sectoral engagement support team at MOH, was a laudable decision by leadership that promoted a whole government, whole society, whole business approach in responding to emergencies. Some of the achievements in this regard include expanding testing, isolation, and treatment capacity by creating makeshift centers (approximately 150) and engaging private sector. Twinning of hospitals in conflict-affected regions with hospitals from other regions; mobilization, training, and deployment about 2,000 volunteers and health care workers (HCWs) for responses to COVID-19, conflict, and other emergencies; digitalization of the Public Health Emergency Management (PHEM) system during COVID-19 response; expansion of Emergency Operations Centers (EOCs) at national, regional, and sub-regional levels; and the establishment and operationalization of national and regional PHEM call centers have all contributed to strengthening the resilience of the health system.

There is also progress in implementing the information revolution (IR), as evidenced by the initiation of the Model woreda strategy implementation in over 200 woredas, of which 10 are verified model woredas; institutionalization and local capacity built around the District Health Information System 2 (DHIS2) customization and deployment ; scaling of a digitized community health information system to over 8,000 health posts; and increased investment in telecommunications and information technology infrastructure and equipment. These has been driven by the development of the national digital health

blueprint and health information systems strategy as well as alignment of development partners (DPs) and implementing partners (IPs) around the government IR strategy, avoiding parallel investments and duplicative systems. During HSTP II, there has been increased leadership commitment for evidence-based decision making, reflected through the establishment of a Policy and Research Executive Office at the MoH, establishment of the national data management center at EPHI and undertaking of an annual data week from national to health facility (HF) levels. There is also improved capacity for data quality verification and use (e.g., for data reviews and performance feedback) at national and regional levels. The PHEM reporting rate also improved in some regions (Addis Ababa, Dire Dawa and Harari) through DHIS2. The health sector deployed a digital health project registration and app inventory system, wit 80 systems registered. The DHIS2 maturity level is increasing and fully owned at all levels of the health system. Electronic Medical Records (EMR) implementation has progressed, facilitated by improved digital health infrastructure and connectivity.

As part of the motivated, competent and compassionate workforce transformation agenda, Ethiopia has invested in pre-service education that increased availability of health workforce. Also, investment has increased to improve the quality of the health workforce through continuing professional development (CPD), as well linking CPD to license renewal. There has been an improved stock of health workforce. The total number of health workforce increased from 219,386 in 2012 EFY, to 342,889 in 2014 EFY, resulting in an increased health professional density from 1.16 in 2013 EFY to 1.23 in 2014 EFY. There is also a concerted effort to improve the capacity of existing workers, as evidenced by the effort of CPD integration into license renewal with 205 CPD providers and 37 CPD accreditors, as well as the establishment of professional standards for 31 professions. Progress has also been made towards standardizing curriculum and school accreditation, the development of draft motivation and incentive packages in consultation with health workers (pending approval), and the implementation of a national license examination.

Another transformation agenda for which the MOH has made significant strides is in health financing. There is concerted effort to mobilize additional domestic resources through co-financing, establishment of innovative financing (draft Resilience and Equity Health Fund (REHF)) and revising the list, costing and financing of exempted health services. The FMOH was able to mobilize 3.23 billion ETB during 2014 and 2015 EFY through co-financing with engagement of MOF. Nutrition (Seqota Declaration), immunization, HIV and Malaria have benefitted from co-financing from the federal government allocation. The ministry was also able to mobilize more than US$ 400 million for COVID response from government, development partners and the private sector. Furthermore, there are now resource mobilization units in 7 regions (e.g., Addis Ababa, Amhara and Oromia regions). A best practice has emerged in Oromia, where health center government budget allocation for drugs increased from ETB 180,000 to ETB 300,000. Risk assessment on the Sustainable Development Goal (SDG)-pooled fund (PF) was conducted and SDG PF Joint Financing Agreement (JFA) revised. Community-based Health Insurance (CBHI) implementation has also progressed substantially. The federal government has approved the CBHI proclamation that shifted membership from voluntary to mandatory. Due to high political commitment and community ownership in most regions: (1) CBHI coverage expanded (84% of 980 woredas) and 12.2 million households are covered (enrolment rate of 81%); (2) there is high membership renewal (93%), despite COVID and security challenges in some areas; (3) general subsidy increased from 10% to 25%; and (4) the CBHI benefit package revision is in the final stage. There are best practices in increasing indigents coverage through mobilization of community, cooperatives, development associations, and others to complement government subsidy, as well as integration of PSNP and CBHI program in indigents selection in Addis Ababa.

There are also significant efforts in strengthening governance and leadership. Different sub sector strategic plans and guidelines were developed, and the MOH was restructured. Ethiopia has become one of the first countries to complete its alignment diagnostic assessment and endorsed the action plan as part of Global alignment agenda. Leadership [systems, capacity and practices] received significant attention at all levels. Efforts are being made to implement social and managerial accountability initiatives (e.g., scaling up of the implementation of Community Scorecard (CSC) and Good Governance Index). There is also an effort to develop and implement different leadership capacity-building initiatives such as LIP, CLIP, and LMG. Enhanced leadership was reflected in the MOH's ability to lead and guide a well-organized COVID 19 response, and work to rehabilitate and ensure the existence of resilient health system in response to the conflict. Other leadership and governance strides relate to increased women's participation in leadership positions, implementation of merit-based assignment of Primary Health Care Unit (PHCU) directors in some regions, functional HF Governance Board in some regions; and the initiation of standardized grievance handling management in HFs.

As part of pharmaceuticals and medical devices, Demand-based forecasting and supply planning has been launched and rolled out at hospital level, which enforces the payment of costs on time. There is also a good indication that the management and coordination structure improved as the Pharmacy and Medical Equipment (ME) Directorate was promoted to Lead Executive Office (PMDLEO) in the new MOH structure; also, a Pharmacy and ME advisory board and supply chain steering committee were established. Overall, strategies and policy directions are being revised (e.g., Medicine Policy is under revision; Pharmaceutical and Medical Equipment roadmap is also under development; supply chain protocol was developed; Ethiopian Pharmaceutical Supply Service (EPSS) draft proclamation in final stages of development). The availability of essential medicines by level of health care is reported to be at 76% against its MTR target of 84%-90% performance. Availability of program essential medicines is reported to be 94%, while availability of revolving drug fund (RDF) essential Medicines was 84%.

The Ethiopian Food and Drug Administration (EFDA) focuses on products (food, medicine and medical devices) regulation, and the MOH is undertaking regulation on health providers and health workforce. EFDA's new organizational structure was approved, with an improved human resources and structure and establishment of a center of excellence (Kality) and Vaccine lab (Hawassa). The Development of guidelines for emergency use authorization of medicines for public emergency situations; medicines waste management and disposal directive; medicine donation control directive; and pharmacovigilance directive are some of the achievements. The system is being supported through an electronic regulatory information system (e-RIS). There is also improved Adverse Event reporting and the Agency is working towards achieving WHO's Maturity Level III (from Level I) to ensure vaccine production in Ethiopia. The health professionals and health/health related facilities regulation processes harmonized and its structure is upgraded to LEO level, 4 Desk, which is now better staffed. Addis Ababa, Gambella and Somali regions have independent regulatory structures; Addis Ababa City Administration regulatory office is reporting to the Mayor's Office, and is well budgeted and staffed. Some regions are enforcing regulations in registering and licensing health facilities: a license is required for health facilities to get supply of medicines and medical equipment in Amhara; in Dire Dawa, if facilities do not have a license, there will be no service provision. Overall, the proportion of HFs adhering to the minimum standard have been raised from 43% to 62% well beyond target of 48%.

Priority investment areas for public private partnership (PPP) in the health sector were identified and registered by the Ministry of Finance and Economic Cooperation (MOFEC), e.g., diagnostic services, medical gas plant, and oncology, and feasibility studies were conducted. PPP training was also provided

to the staff (levels 1 and 2). The MOH also developed and uploaded a private investment user guide on Ministry website, and it has conducted advocacy with the investment commission annually, as well as reviewed and followed up private investment proposals and investments. Some PPP projects were initiated (e.g., Menelik Hospital Dialysis Service); Specialty and sub-specialty services have started with private sector collaboration (e.g., Axon Stroke and Spine Center, Arsho Advanced Lab expansion, availing specific lab and pathology services in-country under Swiss Diagnostics), and there was also active collaboration and significant private-sector contributions to the COVID-19 emergency response.

The effort to promote traditional medicine is also showing some progress under HSTP II. There is now a Traditional Medicine structure at desk level in the MOH. Progress is being made in developing the following: a Traditional Medicines directive; Traditional medicines clinical trial guidance; Traditional medicine 10 years roadmap and Draft policy. Three traditional medicinal products are under clinical trial.

Although five transformation agendas were identified as high-level strategic priorities, the MTR team identified a major gap in terms of developing an implementation plan for the transformation agenda that can be implemented and monitored at all levels of the system. There was also a need for revisiting the transformation agendas in light of the multiple crisis and shocks experienced since the start of the HSTP II.

The shortfalls in basic quality (e.g., basic services, electricity, improved water, diagnostics), a suboptimal culture of evidence for action, and gaps in critical health system building blocks (e.g., financing, workforce, infrastructure, commodity supply) remain impediments that compromised health qualiy and equity, Suboptimal data quality (subpar timeliness (only 65%), low private health facilities reporting rate (35%); discrepancies in performance assessed via surveys and routine data), low birth (69%) and death (4%) notifications, irregularity of routine data quality assessments (RDQA)) coupled with low culture of information use has affected the levels of evidence-based planning and decision-making. Performance Monitoring Teams (PMTs) lack rigor beyond conducting meetings, suggesting a gap in their effectiveness in monitoring and evaluating the performance of health programs. Only 5% of health institutions have a sufficient number of health information system (HIS) personnel, indicating a shortage of skilled workforce in health information management. This is also affected by high turnover of staff due to dissatisfaction and demotivation. Weak governance of HIS and digital health, especially at the woreda (district) and lower levels; the maturity level of most digital health systems is still at an early stage in terms of their functionality, usability, and interoperability; weak engagement of the private sector in HIS strategy development and governance are the challenges identified in this report.

Despite previously mentioned strides, progress in domestic resource mobilization was low, especially with the government budget allocated for health at the federal level. The share of general government expenditure on health remains very low at national level (8.2%). The contribution of development partners has also decreased from its level of US$ 388.2 million in 2013 to US$ 316.2 million in 2014 EFY, this even worse for the SDG PG as it has decreased from US$ 87 million in 2013 to US$ 44 million in 2014 EFY. There is also slow progress in increasing CBHI coverage in developing regional states. The flat CBHI contribution rates remain regressive. The Social Health Insurance program for civil servants and pensioners hasn't started, mainly due to fiscal space-related challenges the country face due the current context.

Challenges in procurement and custom clearance, weak emergency LSCM (Logistics & Supply Chain Management) capacity compromised the efforts made to improve the quality and effectiveness of the health system. EPSS is overburdened, consequently has difficulty to provide equal and appropriate focus

for pharmaceuticals, medical devices and laboratory supplies which causes fragmented procurement, very limited maintenance capacity and weak contract management. There is also weak data visibility and ownership in the SCM, which is more visible in Emergency SCM system - limited budget, coordination and lack of storage infrastructure. The limited focus on the supply of non-PPL (list of pharmaceutical and medical devices outside the EPSS procurement list) products is one of the major challenges that hindered availability of the RDF commodities in PHC facilities. The delay or absence of reimbursement for exempted services and the infrequent reimbursement (every 3 months) from CBHI had further aggravated the supply deficiency in the HFs. There is weak pharmacy and program integration at all levels of the health care system compromising the public health programs performance at service delivery points Issues related to public procurement agency procurement directive is hampering the health commodities procurement throughout the health care structure.

The major challenges related to product regulation is related to (i) inadequate ability of EFDA to attract and retain experienced regulatory staff; (ii) existence of different structures at federal and regional levels making enforcement of EFDA's regulations in the regions and the lower-level structures difficult; (iii) lack of established regulatory system for safety and quality of blood, blood products , human tissues and organs and (iv) only 5 (42%) of local manufacturing companies are cGMP compliant. On the other hand, the major gaps in the health professionals and health and health related institutions regulatory include; (i) lack independency as it is organized in the MOH and diverse structures across regions, most lacking independence; (ii) absence of legal framework to implement regulations and the delay in establishing Health Professionals Council limiting the opportunity to have effective and an independent regulatory body; (iii) weakness in inter-sectorial collaboration especially with Ministry of Trade, Tourism, Environmental and Forestry, Customs, and Police to enforce regulatory measures; (iv) inadequate capacity to regularly inspect CPD centers and enforce quality of course content, trainers, training venue and infrastructure and (iv) existence of two sets of rules for regulating private and public HFs, with the former being more stringent.

There is fragmentation and duplication of efforts in many of the health system building blocks that requires effective coordination and leadership. These include service delivery fragmentations, leadership and other capacity building efforts, digital health initiatives (rollout of multiple systems with questionable functionality), and traditional medicines. Many efforts were compromised by delays in endorsing the legal frameworks/policy directions by the senior management of MOH. There is lack of health infrastructure structures in some RHBs that compromised the quality and effectiveness of the construction activities. There is also a sharp decline in budget hence the plan to construct 300 HCs did not materialize.

Health facilities do not have adequate human resource (HR) as per standards and motivation packages have not been equally implemented in all the regions. Competency assessments have not been fully implemented and there were gaps in the implementation of competency-based training that include inadequate skill labs, reading corners, and preceptors in hospitals. Unforeseen events such as conflict, COVID-19, and infrastructure issues have also influenced the implementation of the integration of CPD with licensing renewal, an effort that has not yet started in Benishangul Gumuz, Afar, and Amhara regions. The transition of the Integrated Health Information System (iHRIS) from the development stage to implementation stage is struggling. There is a gap in developing a clear roadmap to implementation of the national eHealth architecture. The HIS system is faced with inadequate health IT human resource capacity (skill mix, numbers, and skill), weak device management and tracking system. The management of different software systems in the supply chain is complex, and there is a high dependency on

partners for implementation. Although efforts initiated in traditional medicines, that there is lack of an inclusive and integrated policy framework and legislation for traditional medicines and practices which caused lack of protection and preservation of indigenous knowledge resulting in lack of trust among the traditional healers. Multisector coordination requires effort and commitment from all sectors, but not all sectors contribute equally and there is a gap in follow up by line Ministries and as there is lack regularity and structure. There is no guideline for implementation of health in all policy in Ethiopia and its implementation has not started. Lack of comprehensive private sector strategy with objective of improving quality of care and promoting medical tourism remains a gap.

**Key Strategic Recommendations:**

A major recommendation for next three years to enhance quality and equity are investing in the design and implementation of 'catch-up' initiatives to rebound from service disruptions and the effect of health shocks; Revisit the design of health service delivery architecture by setting measurable service norm/ standards (e.g., infrastructure, financing, HR) for each level of care and modality (e.g., static site, outreach, mobile health services, home visits/home-based care, telehealth) and develop PHC investment plan to implement revised EHSP and enhance the private sector investment and public-private partnerships to expand the availability and quality of health services and promote medical tourism is recommended to be a priority investment area.

MOH should work more to align its digitization efforts with and to leverage the potential of the broader digital Ethiopia strategy (national identification (ID), mobile payments, government connectivity); the functionality of the Information Revolution (IR) governance structures; develop and implement a structure that ensures competitive compensation, career development opportunities, and supportive working environments to attract and retain skilled HITs; Establish and enforce a robust legal and policy framework for the security, privacy, and confidentiality of patient-level data; developing and implementing a strategy (including the role of CMBP universities) on digital and AI-enabled healthcare approaches to enhance healthcare service delivery, diagnostics, decision support, and patient engagement; and work towards transitioning from electronic health information that encompasses interoperable systems, telemedicine, mHealth applications, and data analytics. This should be supported by developing a national data analytics platform; elevate the national data access and sharing guideline to a regulation level; strengthen integration of Quality Improvement (QI) and Performance Monitoring Teams (PMTs) at the health facility and enduring regularity of data verification processes. These should be supported by prioritized investment on digital health that include establishing effective partnerships with other government agencies such as Ethio-telecom; strengthening effective governance with engagement of regions and programs in the design and implementation; prioritizing investment in telemedicine, teleradiology, and other remote health service delivery mechanisms to enhance access to healthcare services; enhance the monitoring of the functionality of digital health systems and infrastructure and utilizing the data; expanding IT infrastructure at government health facilities, including the provision of computers, LAN, and connectivity; and invest on unified, integration and interoperability digital supply chain system with good maturity level. Government should ensure that all health facilities have the number of health workers as per standards and also design and implement incentives for CPD centres and accreditors to improve quality.

The sector should make supply chain management one of the top priorities in the upcoming Health Sector Development and Investment Plan (HSDIP), 2016- 2018EFY, with a clear strategic shift to (i) implement demand-based procurement and supply planning at each HF; (ii) restructure and capacitate the regional and down to woreda level pharmacy units; (iii) enhance end to end visibility of supply data from Health facilities to higher levels. The sector needs to conduct critical assessment of EPSS's current procurement operations and management of pharmaceuticals, medical equipment and Lab supplies and consider reorganization EPSS structures to ensure there is greater emphasis in managing the procurement of Pharmaceuticals, Medical equipment and lab supplies. Exploring, identifying and implementing different options of public-private partnership in pharmaceutical and medical devices supply chain management and services, particularly of the supplies outside EPSS list should be the priority. The sector should engage other government agencies and prioritize investment on promoting local manufacturing of commodities by creating a pooled fund in hard currency for the local manufacturers. Enhance the engagement of public procurement agency (PPA) to make the procurement directive conducive towards Medicines and MEs supply at all levels in the health system.

The major investments in both product and health professionals and facilities regulation is harmonization of the structures and enforcement between the federal and regional levels; develop and implement capacity development and retention plan to strengthen the capacity and human resource mix and numbers especially at lower level. In terms of product regulation, there is need to strengthen the regulatory harmonization with countries in the region (African Medicines Agency, IGAD, EAC) to expand suppliers base. In terms of health professionals and health facility regulation, there is a need to (i) formulate legal framework (ii) support regions to develop a more standardize regional regulatory structures; (iii) work towards an independent regulatory body (iv) in collaboration with the MOE, encourage pre-service training of medical professionals shift towards skill and competency-based approach.

The is a need to undertake a concerted leadership effort to improve advocacy at all levels, especially at the federal levels, for increased buy in at higher level political leaders for better allocation of resources to the sector as part of Program Based Budgeting and endorse the revised exempted service financing mechanism and implement an innovative Resiliency and Equity Health Fund (REHF). The Ministry, in collaboration with development partners, should mobilize the required funds from domestic and external sources as per the national reconstruction and recovery plan launched by the Ministry of Finance. Government and partners need to implement the harmonization and alignment action plan to address the gaps on alignment, resource utilization, reporting and accountability. There is also a need to developing an investment and implementation plan for EHSP after revision of norms and standards. Work towards accelerate the coverage of the poor Using PNSP system to identify the very poor; devise strategies to operationalize mandatory CBHI membership; develop a tailored CBHI strategy for emerging regions and conflict affected area. MOH/EHIS may also consider conducting a comprehensive political economy analysis of SHI implementation, especially on the feasibility of implementing SHI.

Integrating the leadership course contents across Leadership, Management, and Governance (LMG), Clinical Leadership Improvement Plan (CLIP), and Leadership Incubation Plan (LIP) and developing one training package and reduce fragmentation and duplication; and Strengthening of the legal Office through skills systems and structures should be the priority for strengthening leadership and governance. Undertake Health infrastructure need and capacity assessment to establish structure in regions. Align the priorities of construction efforts to proposed essential service investment plan (for construction and equipment); strengthen collaboration, coordination, and joint planning platforms with programmatic departments; and investing on building the capacities of infrastructure LEO through experience sharing visits and exposure to international architectural designs of health facilities are the priority investments recommended as part of infrastructure strengthening. Ratifying the draft National Traditional Medicine policy developing the associated legal framework and establishing an independent herbal regulatory system; Building the capacity of traditional medicine in terms of human resources (numbers and skills), infrastructure, and a system; and enhancing collaboration and create alignment among the multi-sectoral stakeholders is recommended to take traditional medicine efforts to the next level in the next three years. Getting approval and endorsement at the higher political decision-making level by undertaking a sustained political ownership and commitment to implement the Health-in All Policy and establishing an accountability framework at all levels of government are the major shifts recommended if health in all polices are to be implemented in Ethiopia. There is also a need to develop a clear private sector engagement strategy that aims at strengthening public-private partnership to promote medical tourism in Ethiopia through joint investment to improve quality of care. This among others should prioritize private sector engagement in specialty care, logistics management, local manufacturing of medicines and medical supplies and private sector capacity building with effective and regular engagement.

# 1

# Introduction

# 1. INTRODUCTION

## 1.1. Background to the 2023 MTR of HSTP II

### Background

The Ethiopian health sector has developed and implemented successive sector wide plans-referred as health sector development or health sector transformation plans since 1997. The latest plan is referred to as second Health Sector Transformation Plan (HSTP II) and has been implemented since July 2020.

The overarching objective of HSTP-II is to improve the health status of the population through; (i) accelerated progress towards universal health coverage; (ii) protecting people from health emergencies; (ii) woreda transformation and (iv) improve health system responsiveness. HSTP II set 76 targets to be realized; of which 73 of the have midterm targets. The plan has five transformation agendas-top priorities- and 14 strategic directions with 323 strategic initiatives to be realized, as reflected in Table 1.

**Table 1: Number of Strategic Initiatives by Strategic Directions**

| Strategic Directions | | # of Strategic Initiatives |
|---|---|---|
| 1 | Enhance provision of equitable and quality comprehensive health service | 193; 17 programs with their own specific strategic initiatives (58%) |
| 2 | Improve Public Health Emergency and Disaster Management | 14 |
| 3 | Enhance Community Engagement, Empowerment, and Ownership | 10 |
| 4 | Improve Access to Pharmaceuticals and Medical Devices and Their and their rational and proper use | 19 |
| 5 | Improve Regulatory Systems | 12 |
| 6 | Improve Human Resource Development and Management | 12 |
| 7 | Enhance Informed Decision-Making and Innovation | 18 |
| 8 | Improve Health Financing | 6 |
| 9 | Enhance Leadership and Governance | 10 |
| 10 | Improve Health Infrastructure | 6 |
| 11 | Enhance Digital Health Technology | 9 |
| 12 | Improve Traditional Medicine | 8 |
| 13 | Health in All Policies | 8 |
| 14 | Enhance Private-Sector Engagement in Health | 7 |
| | **Total** | **332** |

Ethiopia developed six five years health sector strategic plans over the last 25 years and conducted a 5 midterm review (MTR) for each of the sector strategic plans. This review builds from the experience gained so far in terms of process as well as timing.

## 1.2. Objectives of the MTR 2023 and Deliverables

The main objective of this MTR is to assess the level of performance and progress towards the objectives and targets of HSTP-II, and to draw lessons from successes and challenges of the implementation process. The process is expected to document key lessons learnt and experiences gained at all levels of the health system (federal, regional, zonal and woreda levels) and identify recommendations to improve the performance of the health system. The Specific objectives of the MTR are the following:

a) Assess the level of program performance against the midterm targets;

b) Assess the relevance and progress of implementation of HSTP-II strategic directions and initiatives;

c) Assess the progress of implementation of the five transformation agendas of HSTP-II;

d) To assess the effect of conflict and emergencies on the performance of the health system;

e) Assess effect of interventions on health outcomes/impacts; and

f) Identify facilitators, barriers and challenges during the implementation of HSTP-II.

The Terms of Reference (TOR) sets out in four phases of MTR deliverables:

a) Inception report: A report that includes all the preparatory phases of the evaluation, including design of methods and data collection tools

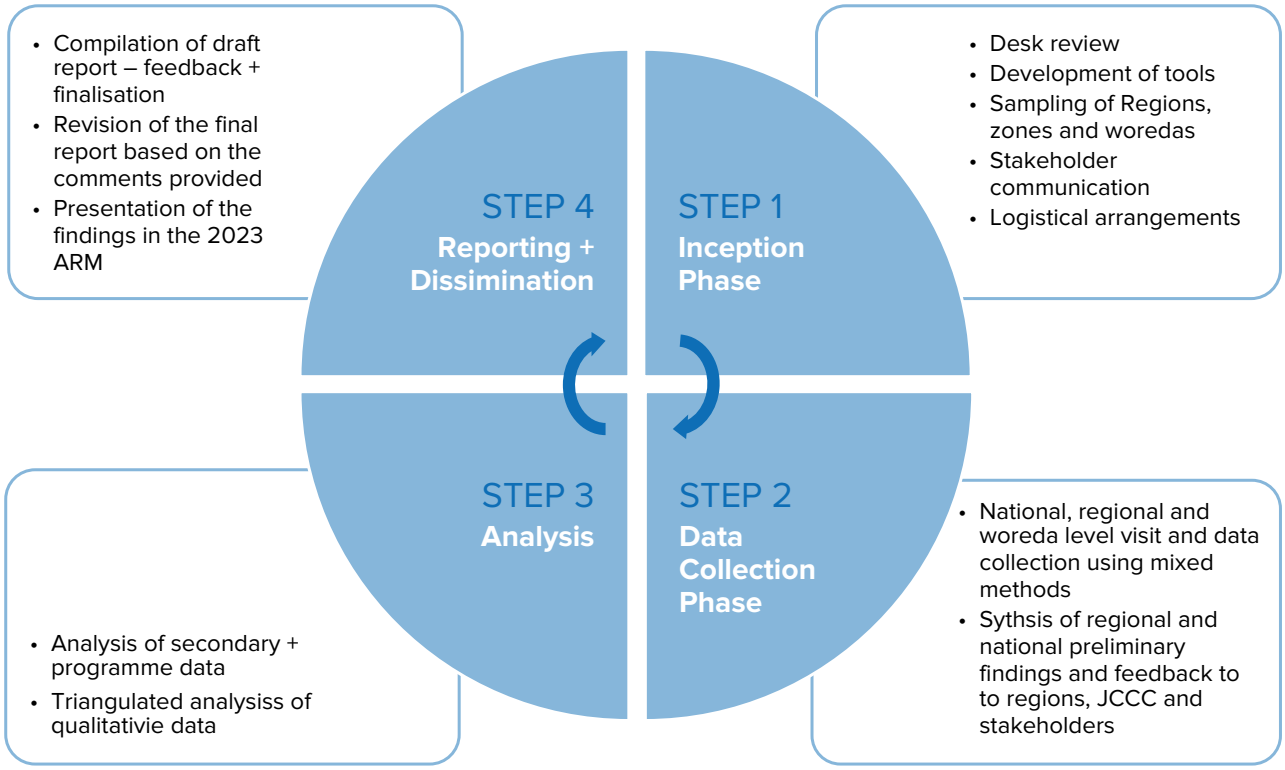
b) Regional reports: A report that includes quick analysis and key findings of each region for all the seven sub-teams/thematic areas;

c) Draft MTR report; and

d) Final Main report (Qualitative report, Quantitative report, Synthesized Report).

The TORs also set out the different processes and phases that the MTR team should follow in undertaking this review as outlined in figure 1.

**Figure 1: Four phases of the HSTP II MTR process**




## 1.3. Methodology of the MTR 2023

**Mixed-methods approach** - The evaluation team utilized a mix of quantitative and qualitative methods to collect analyze and triangulate information and data across multiple sources. Qualitative methods, including structured desk review and key informant interviews, were mainly used to collect information about the strengths, weaknesses and lessons learnt in the implementation of the HSTP II. Quantitative methods, using epidemiological and financial data, played a central role in answering the evaluation questions, in particular with regard to outcomes, impact and cost-effectiveness. Quantitative data was drawn from secondary sources, including DHIS2, epidemiological data (surveillance and research, when available), and financing data from government sources.

The specific data collection methods proposed for this evaluation include:

a) **Comprehensive desk review** – the desk review assessed a broad range of policy, strategy and planning documents related to the HSTP II. The team reviewed the HSTP II and its transformation agenda roadmaps, the 2013, 2014 annual and 2015 EFY six months review reports, other assessments and studies carried out in each thematic areas by government and its partners. The document review also included program level strategies, innovations and performance assessments and reviews carried out in the last two and half years. This assessment was supported by the review of relevant surveys and literatures including the DHIS2 data at different levels. In order to capture recent information on the performance alignment, the MTR team used the recent alignment diagnostic assessment report and did not request MOH and the DPs (through the HPN) to fill in the standard questionnaire used in earlier MTRs for that purpose.

b) **Semi-structured interviews with key stakeholders** – a broad range of stakeholders (different FMOH chief executive offices, MOH agencies, EPHI, regional, zonal, woreda and facility management teams, development and implementing partners both at the federal and regional levels, other sectors-MOF/BOFEDs, Planning and development; WOFEDs, Women affairs, MOLSA, etc.) were interviewed at different levels. Different semi-structured interview guides were developed tailored to specific sub-groups. The interviews provided the MTR team with detailed information on results, strengths, gaps and challenges in the implementation of the HSTP II at all levels. Key informants were selected from various organizations and institutions at the different administrative levels in consultation with federal and regional level MTR coordinators. The preliminary list of key stakeholders interviewed were highlighted as annex x.

c) **Questionnaire –** The MTR Questionnaire provided guidance for the interviews to be held with specific questions for each of the 14 Strategic directions and the 5 Transformation Agenda's for federal, regional, zonal, woreda, hospitals, health centers, community (including Health Post). The questionnaire assessed and verified to what extent HSTP II is relevant and on track to achieve its MTR targets and how far the Strategic Initiatives, as mentioned under each of the 14 SDs, have been able to contribute to the realization of targets set in the HSTP II. The tools helped to explore factors behind successes or the lack of it as well as strategic interventions to accelerate progress at all levels of the government structure to and generate evidences that will inform the draft three years Health Sector Development and Investment Plan (HSDIP). Another important aspect of the review is to document lessons learned that could be shared nationwide with other Regions.

**Analysis Methods**

The gathered information and data were analyzed, triangulated and crosschecked for validity of findings. The MTR team developed different analysis tools to ensure a rigorous and systematic analysis of quantitative and qualitative information. The core outcome and output targets indicated for each of the 14 SDs and 5 TA's of the HSTPII provided the quantitative basis for the MTR, and the information was generated from the routine sources of information. This was crosschecked whenever possible with survey data. In addition, the quality and reliability of this routine information was reviewed on the ground as part of this process. Furthermore, the more qualitative information coming from the interviews at the various levels was used to verify the validity of the quantitative information. The Strategic Affairs Executive Office filled in the figures for the three remaining columns (the achievement of the last two years and six months of this financial year). If no information is available, NA will be included, but the indicator was not removed. The team used three approaches to analyze data during the evaluation**.** First, the team explored and undertook different aspects of quantitative analysis (trend, percentages, shares, unit costs, etc.). Second, the team carried out a rolling analysis of the qualitative data generated from national, regional and woreda level interviews and the sample visits. At the end of each day of fieldwork the team members were meeting to review the field notes and develop an on-going tally sheet to log key findings. The team then discussed new findings and trends that may have emerged during the day and place them in to a findings, conclusions and recommendations matrix that was developed on an on-going basis during the fieldwork. Finally, the team conducted a joint analysis to systematically identify preliminary findings, conclusions and recommendations for all the key evaluation questions before leaving the region and share the findings to the regional level decision makers.

### Sampling of Regions, Zones and Woredas

The MTR team visited all regions. In the three bigger regions (Amhara, Oromia) two zones (one well performing and another less well performing) were selected. Within these zones, one well performing woreda and one less performing woreda was subsequently selected. The team also visited well performing and less performing facilities and communities within each woreda. In the other regions, while all other sampling frame remains the same, there was no visits to specific zones. In each region, two woredas were visited. The selection of the zones, woredas and health facilities was carried out by the regional teams in consultation with and guided by the achievements in the HMIS data (woreda transformation indicators). The regional visits followed the division of roles as outlined in Table 2.

**Table 2: Distribution of Core MTR team to regions**

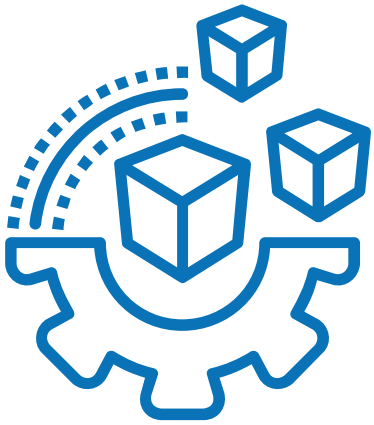
| | Region 1 | Region 2 |
|---|---|---|
| Team 1 | Tigray | Afar |
| Team 2 | Amhara | Amhara |
| Team 3 | SNNP | Sidama |
| Team 4 | Oromia | Oromia |
| Team 5 | Harar, DD, Somale | Harari, Diredawa Somale |
| Team 6 | Benishangul Gumuz | Gambella |
| Team 7 | Addis Ababa | South West Ethiopia |

Limitations

- Lack of national surveys to measure impact and outcome indicators
- Baseline mainly taken from the survey and the team use DHIS 2 information for results
- Security was an issue in some regions and the sampling were not carried out as planned in some regions.

# 2

# Transformation Agendas and Strategic Themes



# 2. TRANSFORMATION AGENDAS AND STRATEGIC THEMES

## 2.1. Transformation in Equity and Quality

### A. Major targets and their achievements

Ethiopia's health sector has been impacted by multiple, overlapping shocks that disrupted services. Hence, any assessment of performance on the Transformation Agenda on Quality and Equity must interpret progress and shortfalls, both planned and unexpected, through the lens of navigating the challenges in delivering equitable, quality health care in the midst of complex emergencies. The following table indicates performance against HSTP II targets related to quality. There are no specific HSTP II indicators that relate directly to health equity, although disparities in HSTP II indicators can shed light on key inequities in health care. This is examined further in a subsequent section.

**Table 3: Performance against HSTP II targets relevant to Quality Transformation**

**Legend for color codes in table**

- Achieved or more than 85% of its MTR targets
- Improvement over baseline and achieved more than 70% to 85% of the MTR targets
- Below 70% of the MTR targets
- No data available to assess progress

| Indicator | Baseline | Mid- term Target 2022 | End Target (2024/25) | Performance through Dec. 2022 | Performance (% achieved) against MTR Targets | Color Rating | Data Source |
|---|---|---|---|---|---|---|---|
| UHC Index | 0.43 | 0.5 | 0.58 | 0.38 | 0.76 | | World Health Statistics Data-2019 (Comparable estimates) |
| Proportion of clients satisfied during their last health care visit (Client satisfaction rate) | 46% | 60% | 80% | 75% | >100% | | 6 month parliament report(Average of (Good gov.+CSC+HR customer service satisfaction) ---proxy) |
| Proportion of health facilities (health centers and hospitals) with basic amenities: | 59% | 73% | 90% | | | | |
| a) Improved water supply | 76% | 86% | 100% | 53% | 62% | | Service Provision Assessment 2021–2022 Preliminary Report |
| b) Electricity | 61% | 78% | 86% | 54% | 69% | | Service Provision Assessment 2021–2022 Preliminary Report |
| c) Improved latrine | 16% | 31% | 50% | 73% | >100% | | Service Provision Assessment 2021–2022 Preliminary Report |
| d) Basic health care waste management services | | | | | | | |
| Number of new/improved technology (Diagnostics, Therapeutics, Tools, or Vaccines) transferred | 1 | 3 | 6 | | | | |

| Indicator | Baseline | Mid- term Target 2022 | End Target (2024/25) | Performance through Dec. 2022 | Performance (% achieved) against MTR Targets | Color Rating | Data Source |
|---|---|---|---|---|---|---|---|
| Proportion of health facilities implementing compulsory Ethiopian health facility standard | 0.53 | 0.65 | 0.8 | 0.62 | 0.95 | | 6 month parliament report |
| Proportion of patients with positive experience of care | 33% | 42% | 54% | 79% | >100% | | 6 month parliament report |
| Institutional mortality rate | 2.20% | 1.90% | 1.50% | 2.74% | 24.5% | | DHIS2 -Six Months Data |
| Availability of essential medicines by level of health care | 79.2% | 84.0% | 90.0% | 76.0% | 90% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Health Security Index | 0.63 | 0.7 | 0.78 | | | | |

One of the major achievements during the last two and half years is the Institutionalization of Quality Improvement (QI) practices within health facilities. This is primarily driven by the development and implementation of key guidelines (e.g., Ethiopian Primary Health Care Clinical Guidelines [EPHCG], Ethiopia Hospital Services Transformation Guidelines [EHSTG]) and development and implementation of QI directives/initiatives, often utilizing internal revenue within health facilities. Given the context, the sector was also able to introduce some crisis adaptations (in response to COVID-19, conflict, etc.) strengthened service delivery, as evidenced by the enhanced clinical care capacities (e.g., emergency care, ICU, laboratory) and accelerated rollout of different service delivery modalities and innovations (e.g., multi-month dispensing of medicines; adaptation of differentiated service delivery models to facilitate equitable access in conflict-affected settings). Under HSTP II, there has been a proliferation of activities and initiatives to address quality in health care. however, shortfalls in basic quality (e.g., basic services, electricity, improved water, diagnostics, suboptimal culture of evidence for action, and gaps in health system building blocks (financing, workforce, infrastructure, commodity supply etc.) have limited the translation of QI efforts into quality transformations that ultimately result in improved health outcomes. The above shortcomings are particularly apparent in conflict-affected areas and Emerging Regions. Nonetheless, existing guidelines are driving service delivery improvements that not only expand the availability of some health services, but enhance quality. For example, as confirmed during regional field visits for the MTR (e.g., in Harari and Oromia), the EHSTG are informing the delivery of tertiary-level care and cancer services.

It is difficult, however, to explore quality transformations when available evidence reveals major shortfalls in the most-basic aspects of quality of care. All basic client services—maternal and child health services, family planning (FP) services and services for adult sexually transmitted infections (STIs)—are only available in 20% of all health facilities in Ethiopia.[1] There is minimal urban-rural difference in this regard (22% and 20%, respectively). The 2021–22 ESPA also revealed another important difference between public and private facilities: there is a major disparity in the availability of basic client services in public versus private facilities. Across the country, only 1% of private facilities offer all basic client services, compared with 24% of public facilities.[2] Although the availability of basic client services is

[1] Ibid., Table 3.3.
[2] Ibid.

suboptimal across the entire country, there is tremendous regional variation, with Somali and Dire Dawa having the highest rates of basic service availability (30% and 29%, respectively) and SNNP and Beninshangul-Gumuz having the lowest rates of basic service availability (11% and 13%, respectively).[3] Notably, Addis Ababa is amongst the set of locations where basic service availability falls below the national average (according to the 2021–22 ESPA). This unexpected finding warrants further attention to rigorously investigate service delivery dynamics in Addis Ababa, as well as consider how dynamics and service modalities in urban versus agrarian versus pastoralist settings impact quality and equity.

It should be noted that ESPA data collection was hampered by the conflict that emerged since the start of HSTP II implementation. According to the 2022 Ethiopia Conflict Impact Assessment, 76% of health posts, 50% of health centers and 83% of hospitals in Tigray damaged or destroyed. In Amhara, figures are 49% of health posts, 52% of health centers, 46% of hospitals, plus 5 blood banks damaged and 124 ambulances looted or damaged (see Table 2 later in this chapter for more information).

The MTR confirmed that there have been several QI achievements, but public perceptions of quality are mixed. According to the 2022 People's Voice Survey, respondents on average rated the quality of their last health care visit as 'poor' or 'fair,' with similar ratings assigned to elements of quality such as 'care competence' and 'user experience.'[4] A slightly higher proportion of respondents rated the overall public health system as 'excellent' (35%), compared to 33% rating the overall private health system as 'excellent.'[5] The proportion of adults rating the health system as 'fair or poor' was also slightly higher for the public health system than for the private health system (36% and 34%, respectively).[6] Considering the type/level of health facility, there are further public-private sector differences in perceptions of quality. Private-sector secondary health facilities are most likely to be rated as 'excellent' (75%), compared to only 46% of public secondary health facilities receiving such a rating. Quality ratings are far lower for primary health care facilities than for secondary facilities; only 40% of 2022 PVS respondents rated their last visit to a public-sector primary facility as 'excellent.'[7] The corresponding estimate for 'excellent' ratings for private-sector primary facilities is 53%.[8]

There are also differences in the public's perception of quality of care for specific components of primary health care. According to the 2022 PVS, delivery care was the PHC component with the highest share of 'excellent' ratings, followed by care for children (39%), care for chronic conditions (24%) and mental health care (20%).[9]

**B. Performance on Transformation in Equity**

There major initiative helped to prioritize the implementation of enhanced equity in HSTP II period is the development and finalization of the country's National Health Equity Strategic Plan (2020/21–2024/25) which has elaborated priorities and specific approaches. While there was a vision to cascade the plan to all levels and ensure that it is reflected in annual operational plans using the Woreda-based health sector annual plan, that vision was not fully realized at the time the MTR was conducted. Another achievement is the rollout of 'new' services (e.g., mental health, geriatric, home-based clinical care,

[3] Ethiopian Public Health Institute (EPHI), Ethiopia; Ethiopian Ministry of Health and ICF. 2022. Ethiopia Service Provision Assessment 2021–2022 Preliminary Report. Addis Ababa, Ethiopia: EPHI; Ethiopian Ministry of Health, Addis Ababa; Ethiopia; and ICF, Table 3.3.
[4] Under the domain of care competence, the PVS examined the following factors: provider skills, knowledge of past visits, explanations and equipment/supplies. Under the domain of user experience, the PVS examined factors: respect, courtesy, joint decisions, visit time, wait time and scheduling time.
[5] Ministry of Health. 2023. People's Voice Survey: Ethiopia Country Brief 2022.
[6] Ministry of Health. 2023. People's Voice Survey: Ethiopia Country Brief 2022.
[7] *Ibid*.
[8] *Ibid*.
[9] *Ibid*.

NCDs, NTDs, transplant services) which is positive step in promoting equitable access to health care across the life course, and in light of changing demographics, dynamics and health needs in the country.

### BOX 1. Highlights on Equity Transformation under HSTP II

- However, as described later in this chapter, the relatively low availability of some services that address **health needs for specific age cohorts** (e.g., adolescents and youth health), coupled with gaps in existing service packages (e.g., absence of interventions that explicitly address child injuries [a leading cause of child and adolescent mortality worldwide]; the absence of a systems approach to disability mainstreaming)[10] highlight **potential inequities affecting specific age cohorts, sociodemographic groups, etc.**
- Under HSTP II, it is clear that, while there is broadscale commitment to enhancing health equity, the following are critical considerations in narrowing the divide that exists between different parts of the country and different segments of society:
  - » **Persistent regional disparities in most HSTP II indicators**
  - » **Tremendous heterogeneity** across regions, which is attributable to **contextual factors** such conflict, drought, disease outbreaks, displacement, sociodemographics
  - » Variations in regional focus, e.g., some regions have focused on **service expansion**, some are in **'humanitarian' mode** and others in **recovery/restoration** mode
    - * This has major implications for achieving health equity.
- As noted in the National Health Equity Strategic Plan, there are cost implications to design and implement interventions that address social determinants of health, which are major drivers of equity.

Despite this complex mix of drivers and determinants of inequities in health, existing data largely focus on regional disparities and, to a lesser extent, gender disparities. The 2019 Mini Demographic and Health Survey (Mini DHS) provides some insights on health inequities, with three particular types of disparities observed across various health indicators (gender disparities; urban-rural disparities and regional disparities).[11] The National Health Equity Strategic Plan (2020/21–2024/25) highlighted that huge disparities in health status and utilization persist across other equity dimensions such as agrarian versus pastoralist lifestyle.[12] While there are tailored approaches (e.g., mobile health services, tailored strategies for TB detection and screening) for pastoralist, existing data systems such as DHIS2 are not adequately tracking equity dimensions and their impacts on health service utilization and health outcomes. Special assessments also shed light on a more-nuanced concept of equity. For example, mental illness is a condition for which equitable access is limited. The 2022 People's Voice Survey revealed that only 8.4% of persons who reported having 'poor' or 'fair' mental health received mental health care.[13]The PVS also provides insight on how ability to pay influences health care seeking and perceptions of quality. According to the 2022 PVS, only 55% of adults reported that they 'can afford good quality care if very sick."[14]

Socioeconomic background remains an important determinant of where (from which providers) adults in Ethiopia seek care. As expected, a higher share of persons from higher socioeconomic strata seek care from the private sector for the health care. The public sector is still the predominant source of

[10] https://www.unicef.org/health/injuries
[11] Ethiopian Public Health Institute (EPHI) [Ethiopia] and ICF. 2021. Ethiopia Mini Demographic and Health Survey 2019: Final Report. Rockville, Maryland, USA: EPHI and ICF.
[12] Noted on p. 27 of the National Health Equity Strategic Plan (SWOT Table)
[13] The 95% confidence interval for this estimate is 3.4 – 19.5%. SOURCE: Ministry of Health. 2023. People's Voice Survey: Ethiopia Country Brief 2022.
[14] The 95% confidence interval for this estimate is 48% – 61%. SOURCE: Ministry of Health. 2023. People's Voice Survey: Ethiopia Country Brief 2022.

health care (60%); however, as documented in the 2022 PVS, of the 2,799 adults sampled, 18% in the highest income level rely on private health facilities, compared with only 5% of respondents in the lowest income level.[15]

A special investigation on equity of quality reproductive health services in Ethiopia (Dinsa et al., 2022) found that overall quality of antenatal care (ANC) and family planning (FP) services were low, and there was "little variation in the distribution of the quality of these services between poor and nonpoor areas, urban and rural settings, or regionally." (Dinsa et al., 2022).[16] Further insights on the state of in-equity can be found from the upcoming national equity survey conducted by MoH and EPHI, which was not available during the HSTP II MTR.

### BOX 2. Considering equity in optimizing health worker benefit packages: Insights from Sidama

In Sidama Region, regional decision makers and experts at all levels were in agreement that creative solutions were needed to improve equity within the region, and that a reimagining of health worker benefits packages could advance efforts to achieve more-equitable health care. As confirmed during regional consultations for the MTR, the Regional Health Bureau (RHB) formulated a location-based health workforce benefit package and directives (including for support staff) that was aligned with a classification system that grouped locations within the region into three categories:

"A" = relatively better-off

"B" = medium

"C" = remote and underserved

This directive was approved by the Regional Council, and there are plans to implement it in the near future. While it is therefore premature to examine the effectiveness of the directive, it is an illustration of 'outside the box' thinking on how approaches to address gaps or shortcomings in key health system building blocks.

**Recommendations**

i. Invest in the design and implementation of 'catch-up' initiatives to rebound from service disruptions during the COVID-19 pandemic and other shocks (conflict, climate-related threats such as drought) since the start of HSTP II implementation.

   a) Strengthen regional capacity to ensure that regions can better align service delivery with their realities/needs on evidence-informed, adaptive management to capacitate sub-national stakeholders to better plan, manage & deliver services along the humanitarian-development-peace nexus (emergency, recovery, restoration, resilience) in different contexts throughout the country informed by an overarching Recovery and Rehabilitation Plan (RRP) (as a high-level priority for the country) to enhance health system resilience.

ii. Revisit the design health service delivery architecture by setting clear, measurable service norm/standards (e.g., infrastructure, financing, HR) for each level of care and modality (e.g., static site, outreach, mobile health services, home visits/home-based care, telehealth) and develop PHC investment plan invest on:

[15] Ministry of Health. 2023. People's Voice Survey: Ethiopia Country Brief 2022.
[16] Girmaye D Dinsa, Ermias Dessie, Sarah Hurlburt, Yosef Gebreyohannes, Catherine Arsenault, Bereket Yakob, Tsinuel Girma, Peter Berman & Margaret E. Kruk (2022) Equitable Distribution of Poor Quality of Care? Equity in Quality of Reproductive Health Services in Ethiopia, Health Systems & Reform, 8:1, e2062808, DOI: 10.1080/23288604.2022.2062808

a) rational infrastructure strengthening (rehabilitation, renovation, new construction)-including HEP optimization;

b) increased service availability (including slowly evolving services such as adolescent health, NCDs, mental health) in existing facilities &

c) introduction of new service delivery modalities

d) Optimize service integration and efficiencies in service provision

e) Strengthening referral services across the continuum of care nationally and at local levels

iii. Re-examine the health sector's role in the Woreda Transformation model, with a focus on multisectoral collaboration and collective leadership to achieve health goals.

iv. Invest further in public-private partnerships to extend health access:

a) Informed by a clear strategy on where and how to engage the private sector so that private sector contributions are strategic, actionable and monitored for their relevance, effectiveness and efficiency.

b) To achieve greater harmonization of quality and service standards among public- and private-sector health facilities

c) Define private-sector entry points and accountabilities with a comprehensive national health services map and real time referral systems

## 2.2. Information Revolution

During HSTP II, the sector targeted to improve the capability of the health system to generate and use high-quality data for evidence-based decision-making and advance towards better health systems performance. The main priorities of the information revolution have been investing on three main components: transforming a culture of high-quality data use; digitization of the health information system (HIS); and improving HIS governance. The degree to which these priorities have been realized is highlight in the table 4 below.

**Table 4: Performance table of information revolution**

| Indicators | Baseline | Midterm Target | HSTP-2 Target | Performance | | |
|---|---|---|---|---|---|---|
| Information use index | 52.50% | 67.10% | 85.00% | 60% | | IR report |
| Proportion of health facilities that met a data verification factor within 10% range for selected indicators | 82% | 90% | 95% | 88% | | RDQA |
| Proportion of births notified (from total births) | 35% | 55% | 80% | 69% | | DHIS2 |
| Proportion of deaths notified (from total deaths) | 3.40% | 18.00% | 35.00% | 4% | | DHIS2 |

### Relevance of the transformation agenda/ strategic direction to be included in the next three year plan

The need for the transition from the electronic health information era to digital health era is well recognized as the main rationales for the development of the blueprint. However, digital transformation was one of the missed opportunities as a result of overemphasis on digitizing the data and reporting systems. Although major efforts have been made to align the digital health blueprint, the HIS strategy, and the roadmap for the information revolution, the emphasis on the electronic health information system still dominates the agenda for changing the health care industry. The major recommendation is that the information revolution transformation agenda needs to be reframed as a digital health transformation agenda and should encompasses both digital health interventions and health information systems. This approach will help in better aligning it to the global strategic documents (WHO's digital health strategy). The country has an overarching digital Ethiopia strategy and all sectors, including health are aligning their digital transformation efforts with this guiding national strategy. The health sector has done this through the development of the digital health blueprint. Thus, the priority is very relevant but needs to be reframed from information revolution to digital transformation.

### Major achievements and drivers for success

The implementation of the IR model woreda strategy has been initiated in over 200 woredas (districts), resulting in approximately 10 verified model woredas with the focus on introducing information and communication technologies (ICTs) at the local level to enhance healthcare service delivery and data management. This is facilitated by the commitment of the Ethiopian government and the engagement of six local universities in the Capacity Building and Mentorship Program (CBMP- that provided technical assistance, training, and mentorship to woredas. The second major achievement in the IR is the institutionalization and local capacity development related to the customization and deployment of the District Health Information System 2 (DHIS2). Concerted efforts have been made to build local capacity to sustainably implement DHIS2 in Ethiopia, leading to improved data management and utilization at

the local level, contributing to strengthening the health information system. Similarly, the digitization of the community health information system, including the scale-up of the mobile-based digital solution in over 8,000 health posts has been seen as a major achievement despite the implementation challenges identified through the process. The national digital health blueprint and health information systems strategy was also developed to bring a holistic and systematic approach to digital health implementation in Ethiopia. The blueprint and strategy documents provide guidance for the integration and alignment of various digital health initiatives, ensuring coherence, interoperability, and scalability of the systems. This alignment ensures that investments and interventions from various stakeholders are coordinated and harmonized, avoiding parallel investments and duplicative systems. By aligning efforts, resources can be optimally utilized, and synergies can be achieved, leading to a more integrated and sustainable approach to digital health implementation. There has been increased investment in telecom and IT infrastructure, including the strengthening of the MoH data center, procurement of tablets and computers, and improvements in connectivity during the last two and half years. The enhanced telecom and IT infrastructure, coupled with the recent liberalization of the telecom industry, contributed to improved data transmission, accessibility, and security, and will create a better conducive environment for private sector engagement in digital health interventions and HIS initiatives.

**Major Gaps and challenges**

There are also major challenges that require further attention and improvements to fully harness the potential of digital technologies in the health sector. First, there is weak governance of HIS and digital health. Although platforms have been established, they are not fully functional, and there is a lack of clear governance structures at the woreda (district) and lower levels. This has resulted in poor local ownership and hindered effective decentralization of HIS and digital health initiatives. Second, the financing of the IR roadmap remains donor dependent and the share of government investment in these areas remains low, although strategies have been developed and costed. The maturity level of most digital health systems in Ethiopia is still at an early stage, requiring significant efforts and investments to strengthen their functionality, usability, and interoperability. It is also noted that the existing and planned digital health systems primarily focus on data collection rather than incorporating service delivery workflows. While data collection is important, integrating digital health technologies into service delivery workflows can streamline processes, improve efficiency, and enhance the quality of care.

Interoperability of digital health systems is another glaring gap identified in the mid-term review, which hampers data sharing, collaboration, and the integration of health information across various levels of the health system. The engagement of the private sector in HIS strategy development and governance is another challenge identified in the mid-term review. Private sector involvement can bring expertise, resources, and innovation to digital health initiatives. This has been evident in COVID-19 response. Many digital solutions for COVID-19 response were developed by private firms. Establishing effective partnerships and collaborations with the private sector can contribute to the development and implementation of sustainable and scalable digital health solutions in Ethiopia. There is a lack of evidence regarding whether the implementation of digital health strategies is bringing about cultural transformation (a shift in the mindset and behaviors of healthcare providers and stakeholders) in data use. Lastly, there are gaps in the motivation and retention of Health Information Technicians (HITs) who play a vital role in managing and maintaining digital health systems. Insufficient motivation and limited career development opportunities for HITs is reported to have resulted in workforce shortages and turnover, negatively impacting the sustainability and effectiveness of digital health initiatives.

**Recommendations**

i. Align with and leverage the potential the broader digital Ethiopia strategy such as the national identification (ID) program, mobile payments, government connectivity, and hosting infrastructure to strengthen synergies, resources can be maximized, and interoperability between different digital systems can be enhanced. Also leverage the national ID program for Master Patient Index (MPI) and implementing national health shared records to enables the seamless flow of patient information across healthcare settings, enhancing continuity of care and improving health outcomes.

ii. Strengthen the functionality of the Information Revolution (IR) governance structures, particularly by increasing the capacity of the Ministry of Health (MoH) to mobilize resources and coordinate HIS efforts at the national level. This should be supported and facilitated by Introducing accountability mechanisms around the quality of reported data and the outcomes with clear performance metrics, feedback mechanisms, and incentive structures.

iii. Foster and support decentralization and local ownership of HIS and digital health initiatives including woreda and health facility-level personnel, to take ownership of digital health initiatives fosters sustainability, adaptation to local contexts, and responsiveness to community needs. As part of capacity building, develop and implement a structure that ensures competitive compensation, career development opportunities, and supportive working environments to attract and retain skilled HITs.

iv. Establish and enforce a robust legal and policy framework for the security, privacy, and confidentiality of patient-level data, learning from best practices of other countries, to ensure the protection of sensitive health information and maintain public trust in digital health systems.

v. Develop a Total Cost of Ownership (TCO) for major digital systems, to have comprehensive understanding of the financial implications and requirements, with a particular focus on the electronic Community Health Information System (eCHIS) and Electronic Medical Records (EMR), assessing the full lifecycle costs of implementing and maintaining digital systems, including infrastructure, software, training, and support.

vi. Developing and implementing a strategy (including the role of CMBP universities) on digital and AI-enabled healthcare approaches to enhance healthcare service delivery, diagnostics, decision support, and patient engagement.

vii. Work towards transitioning from electronic health information that encompasses interoperable systems, telemedicine, mHealth applications, and data analytics. This should be supported by designing and implementing analytic platforms as well as build capacity that enables visualization of health data and leverage digital health technologies to enhance patient-centered care and improve health outcomes. Prioritize investment on building and deploying systems that promote remote data access, findability, use, reuse, and interoperability.

viii. Leverage the potential of the private sector (expertise, innovation, and resources) in digital health systems development, implementation, and support by working more on public-private partnerships and creating an enabling environment for private sector engagement.

## 2.3. Caring Respectful and compassionate health workforce

### Major targets and their achievements

The HSTP II plan set two targets for Human Resources for Health (HRH). One was the density of health workers and the other was the retention of health workers. Data for retention of health workers were not available at the national and the regional levels. The recent Federal Ministry of Health annual performance report of 2014 EFY indicated that nationally there were 13,117 General Practitioners, including specialists and sub-specialists, 70,246 Nurses, 21,993 Midwives, and 16,452 Health Officers (Table 5).

**Table 5: Selected Health Workforce (Core Health Workers) Distribution by Region in Ethiopia, 2013 EFY – 2014 EFY**

| Ser. No. | Region | GP+ (EFY) | | Nurses (EFY) | | Midwives (EFY) | | Health Officers (EFY) | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2013 | 2014 | 2013 | 2014 | 2013 | 2014 | 2013 | 2014 |
| 1 | Tigray | 913 | - | 6355 | - | 1504 | - | 1044 | - |
| 2 | Afar | 73 | 174 | 1090 | 1358 | 264 | 330 | 241 | 367 |
| 3 | Amhara | 2516 | 2680 | 12288 | 13505 | 5323 | 5756 | 3422 | 3675 |
| 4 | Oromia | 2535 | 2799 | 18900 | 18345 | 4700 | 5244 | 3338 | 3799 |
| 5 | Somali | 671 | 684 | 3268 | 4553 | 1839 | 2270 | 693 | 1319 |
| 6 | B/Gumuz | 102 | 90 | 1629 | 1618 | 580 | 633 | 219 | 219 |
| 7 | SNNP | 1,687 | 2124 | 11206 | 11941 | 3692 | 3802 | 3569 | 3293 |
| 8 | Sidama | 305 | 599 | 4127 | 4765 | 661 | 839 | 909 | 813 |
| 9 | S/W Ethiopia | - | 102 | - | 1656 | - | 542 | - | 450 |
| 10 | Gambella | 70 | 62 | 1153 | 1115 | 59 | 60 | 144 | 133 |
| 11 | Harari | 77 | 99 | 417 | 397 | 111 | 128 | 55 | 63 |
| 12 | Dire Dawa | 139 | 399 | 462 | 788 | 109 | 167 | 70 | 69 |
| 13 | Addis Ababa | 3086 | 3305 | 8929 | 10205 | 1513 | 2222 | 2891 | 2252 |
| | National | 12174 | 13117 | 69824 | 70246 | 20355 | 21,993 | 16595 | 16452 |

*Source: FmoH Annual Performance Report, 2013 EFY, and 2014 EFY*

The 2014 EFY Federal Ministry of Health annual performance report indicated that nationally one Doctor (General Practitioner, Specialist, or Sub-specialist), one Nurse, One Midwife, and One Health Officer was expected to serve 7,576; 1,415; 4,519; and 6,041 people, respectively (Table 6).

**Table 6: Selected Health Professionals (core health workers) to Population Ratio and population density by Region in Ethiopia, 2013 EFY – 2014 EFY**

| Ser. No. | Region | Health Professionals to Population ratio | | | | | | | | Health workers' density | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 GP+/ | | 1 Nurse/Pop. | | 1 Midwife/ | | 1 Health Officer/ | | | |
| | | Pop. (EFY) | | (EFY) | | Pop. (EFY) | | Pop. (EFY) | | Performance | |
| | | 2013 | 2014 | 2013 | 2014 | 2013 | 2014 | 2013 | 2014 | 2013 EFY | 2014 EFY |
| 1 | Tigray | 6,178 | - | 888 | - | 3750 | - | 5403 | - | 1.74 | - |
| 2 | Afar | 27251 | 11685 | 1825 | 1497 | 7537 | 6161 | 8256 | 5540 | 0.84 | 1.1 |
| 3 | Amhara | 8957 | 8536 | 1834 | 1694 | 4234 | 3975 | 6586 | 6225 | 1.04 | 1.12 |
| 4 | Oromia | 15414 | 14284 | 2067 | 2179 | 8314 | 7624 | 11706 | 10524 | 0.75 | 0.76 |
| 5 | Somali | 9471 | 9512 | 1945 | 1429 | 3456 | 2866 | 9170 | 4933 | 1.02 | 1.36 |
| 6 | B/Gumuz | 11501 | 13389 | 720 | 745 | 2023 | 1904 | 5357 | 5502 | 2.16 | 2.12 |
| 7 | SNNP | 9812 | 6457 | 1477 | 1149 | 4483 | 3607 | 4638 | 4165 | 1.22 | 1.54 |
| 8 | Sidama | 14653 | 7628 | 1083 | 959 | 6761 | 5446 | 4916 | 5620 | 1.34 | 1.54 |
| 9 | S/W Ethiopia | - | 32467 | - | 2000 | - | 6110 | | 7359 | - | 0.83 |
| 10 | Gambella | 7124 | 8302 | 432 | 462 | 8452 | 8579 | 3463 | 3870 | 2.86 | 2.66 |
| 11 | Harari | 3507 | 2792 | 648 | 696 | 2433 | 2160 | 4910 | 4388 | 2.44 | 2.49 |
| 12 | Dire Dawa | 3748 | 1343 | 1128 | 680 | 4780 | 3208 | 7443 | 7764 | 1.5 | 2.66 |
| 13 | Addis Ababa | 1222 | 1166 | 422 | 378 | 2492 | 1735 | 1304 | 1712 | 4.35 | 4.67 |
| National | | 8448 | 7576 | 1473 | 1,415 | 5,053 | 4519 | 6198 | 6041 | 1.16 | 1.23 |

*Source: FMoH Annual Performance Report, 2013 EFY, and 2014 EFY*

Ethiopia's national health workers density was 1.16 in 2013 EFY and 1.23 in 2014 EFY (Table 7).

**Table 7: Health workers' density at regional and national level in Ethiopia, 2013 EFY – 2015 EFY**

| Ser. No. | Indicators | Baseline | Target | Performance | | |
|---|---|---|---|---|---|---|
| | | | 2015 EFY Mid-year | 2013 EFY | 2014 EFY | 2015 EFY Mid-year |
| 1 | Tigray | | | 1.74 | - | |
| 2 | Afar | | | 0.84 | 1.10 | |
| 3 | Amhara | | | 1.04 | 1.12 | |
| 4 | Oromia | | | 0.75 | 0.76 | |
| 5 | Somali | | | 1.02 | 1.36 | |
| 6 | Benishangul Gumuz | | | 2.16 | 2.12 | |
| 7 | SNNP | | | 1.22 | 1.54 | |
| 8 | Sidama | | | 1.34 | 1.54 | |
| 9 | South West Ethiopia | | | - | 0.83 | |
| 10 | Gambella | | | 2.86 | 2.66 | |
| 11 | Harari | | | 2.44 | 2.49 | |
| 12 | Dire Dawa | | | 1.50 | 2.66 | |
| 13 | Addis Ababa | | | 4.35 | 4.67 | |
| | **National** | **1.0** | **1.6** | **1.16** | **1.23** | |

**Note:**

- Ethiopia's health professionals' density (for core health professional categories) considers Doctors, Health Officers, Nurses, and Midwives per 1000 population.
- The baseline for health workers' density is 1.0/1000, the target for Mid-Year 2015 EFY is 1.6/1000, and for 2017 EFY 2.3/1000.

The mid-term evaluation of HSTP II revealed that progresses has been made regarding a motivated, competent, and compassionate health workforce (MCC). The progress included an increment in the availability of the health workforce in the labour market due to a good focus on developing the health workforce through investment in pre-service and CPD, standardizing curriculum and training institution accreditation, and linking CPD with licensing renewal in most regions. Efforts to redesign/revise existing motivation/incentive packages/ mechanisms and implementation of national license examination were also some of the achievements made due to the implementation of HSTP II.

### Challenges

The mid-term review identified a number of challenges in ensuring the availability of an adequate number and mix of quality health workforce that are motivated, competent, and compassionate (MCC) to provide quality health service. Health facilities do not have adequate HR as per standards; motivation packages have not been equally implemented in all regions; competency assessments have not been fully implemented due to a lack of resources and standards; and there were gaps in the implementation of competency-based training that include inadequate skill labs, reading corners, preceptors in hospitals; and shortage of budget for health workforce training/education. In addition, unforeseen events such as conflict, COVID-19, and infrastructure issues also influenced the implementation of the integration of CPD with licensing renewal, and it was not started in B/Gumuz, Afar, and Amhara regions.

### Recommendations

i. Invest in ensuring all health facilities have the number of health workers as per standards, with low rates of absenteeism;

ii. Design and implement incentives and mandates to incentivize all stakeholders to emphasize CPD and consider it their own agenda.

iii. Change admission requirements for public and private health PSE programs so that trainees are enrolled based on their interests and compassion and their origin from medically under-served communities.

iv. Approve, budget for, and implement financial and non-financial retention and performance incentives

v. Financing: Need long-term increased, earmarked financing for HRH

vi. Accountability and Implementation Gap: Mandates are often not enforced. There have been gaps between policy and action.

## 2.4. Health Financing

### Achievements

One of the initiatives on the health financing transformation agenda is to mobilize sufficient and sustainable health finance. As part of this, at federal level, first, efforts are underway to increase resource allocation from federal government through innovative and exempted service financing to establish a national Resilience and Equity Health Fund (REHF) with the objective of introducing innovative financing (mobilizing domestic resources from sin taxes) to finance emergency responses, exempted health services, and activities that promote equity for socioeconomically disadvantaged groups. It is expected that the approval of REHF will increase the resources allocated to the sector, address the resource gaps in the three areas (emergency, exempted, and equity), and decrease dependency on external sources. Currently, a REHF document has been developed and shared with the Ministry of Finance and Ministry of Justice and their comments were fully addressed and they confirmed that they do not have any technical comments. As part of streamlining the provision and financing of exempted health services at the national level, a committee has been established and is currently working on refining the list of exempted health services, costing them, and devising the financing sources and mechanisms. The endorsement of REHF can alleviate the huge financial burden on health facilities related to the provision of exempted services that aren't currently getting reimbursement, especially in maternal and

child health services. This study on refining, costing and financing of exempted services will serve as an input in the implementation of REHF. Secondly, another achievement at federal level is the increment of co-financing from the Treasury as a result of strong engagement with the Ministry of Finance. Co-financing from the Treasury has increased from Birr 1.23 billion in 2014 EFY to Birr 2 billion in 2015 EFY for programs, and helped to include some of the priority programs into program based budgeting. The implementation of the Sekota Declaration, immunization, and HIV/AIDS are among the highest beneficiaries of co-financing of programs from the Treasury. Third, a user fee regulation No. 477/2021 was approved at the federal level for universities and tertiary hospitals, and a revision of the user fee was conducted, to allow facilities recover some of their costs. At regional levels, about seven regions have established separate resource mobilization units. Of these regions, Addis Ababa, Amhara, and Oromia regions have established the resource mobilization structure at the directorate level and are active in the mobilization of resources from communities and other sources, which helped to fill some gaps in the respective regions. The establishment of such a structure can strengthen DRM efforts and should be scaled up in other regions.

Apart from the efforts to improve domestic resource mobilization, there has been notable progress in improving the management of external resources. For instance, a risk assessment of the SDG PF management was conducted, and the SDG PF Joint Financial Arrangement was revised. In addition, the Channel 2 Administration Directive is about to be approved, and a public finance management manual was developed.

In addition to the efforts to mobilize additional finance for the sector, a number of initiatives on the health financing transformation agenda have been implemented. In this regard, priority investment areas for public-private partnerships (PPP) were identified (e.g., diagnostic services, medical gas plants, oncology) and registered by MOF, and feasibility studies were conducted. To facilitate the implementation of PPP, FMOH employees were also trained on PPP and completed levels 1 and 2. In order to enhance private investment in the sector, a private investment user guide was developed and uploaded to the Ministry website; advocacy is conducted with the Investment Commission every year; private investment proposals were reviewed; and follow-up of private investments were undertaken.

As part of improving efficiency, performance-based financing (PBF) is going to be piloted in Addis Ababa, representing the urban context, in SNNPR, representing the agrarian setting, and in the Somali region, serving as a learning ground for the pastoral areas. The design of the PBF approach has been finalized and is a modified version (related to the responsible body to purchase the health services) of the one implemented in Oromia region earlier. Further, in order to introduce an alternative provider payment mechanism to that of fee-for-service, a capitation method of provider payment that contains costs and reduces administrative burden has been piloted at the health center level and has shown promising results for scale-up at the national level. Recognizing the importance of strategic purchasing as one of the functions of health financing, an assessment was conducted on the country's health purchasing landscape (provider payment mechanisms and purchasing practices) for three major purchasers (FMOH, RHBs, and CBHI schemes) as an input for future intervention.

**Gaps and challenges**

It is fair to recognize the attention given to health financing by the Ministry as it is one of the five transformation agendas in the HSTP II, unlike the previous strategic plans. However, the implementation of the health financing transformation agenda initiatives (such as DRM) did not make major progress, particularly in relation to the high-level political advocacy and cascading it to regional level. Hence,

progress in domestic resource mobilization was weak, especially with the government budget allocated for health at the federal level and in the introduction and implementation of innovative financing. There are also concerns about the design and implementation of PBF with regard to the verification process, the sustainability of the financing to scale up at the national level.

**Recommendations**

As the progress in the implementation of health financing transformation initiatives is very limited, it recommended to develop an implementation plan and high-level political advocacy. As part of improving the domestic resources allocated to the sector, DRM structures at the level of the directorate, like that of Addis Ababa, Amhara, and Oromia regions, have to be scaled up to other regions. For this to happen, the Ministry needs to support regions in terms of creating awareness about the importance of such structures and also developing the capacity of staff at regional health Bureaus. With the scale-up of capitation at health centers level, the design of PBF needs to consider blending it with such type of provider payment mechanism.

## 2.5. Leadership and Governance

**Major targets and their achievements**

The major interventions planned as part of HSTP II to transform leadership under this transformation agenda are redesigning & restructuring the health system, institutionalizing accountability mechanisms, strengthening clinical governance, ensuring regulatory system autonomy, strengthening stakeholder engagement and partnership, building leadership capacity at all levels, and incorporating the Health in All Policies approach throughout the government.

In this regard there are good achievements in the last two and half years. First, MOH undertook an organizational restructure for the 2014 aiming at strengthening linkage and coherence between directorates and RHBs; provide better flexibility for making quick decisions; enhance the capacity to put health policies and initiatives into action. The Civil Service Commission approved a new structure, which has been implemented beginning 2023. The second important achievement is the development and approval of the alignment action plan, which make Ethiopia the first country to implement the alignment framework (maturity model) with engagement and ownership of all stakeholders. The MOH successfully conducted a diagnostic exercise that assesses a country's status against the domains of One Plan, One Budget, and One Report and then Alignment Action Plan were developed and approved by all stakeholders creating fertile ground to move towards the implementation phase. The main driver of the exemplary success of Alignment Framework is continues commitment of the top management of the MOH.

Another are of investment was building the capacity of leadership through Leadership Incubation Program (LIP) was initiated for MOH staff to enhance the MOH junior experts and team leaders who aspire to be leaders in the health system. 175 trainees have attended the LIP program out of which 47% are women on average. LIP is focused on creating leadership continuum accordingly, the program targets.

In terms of enhancing accountability, Community Score Card (CSC) is being implemented in 800 woredas, 2250 HCs (target was 746 woreda total 1020 HCs) in all regions, which met the MTR targets. Each woreda established Community council with 7 members withdrawn from community members, schools, religious teachers, civil servants, youth, and women, which meets on quarterly basis. This is reported to have resulted in strengthening a sense of ownership of the community. As a result, communities have been forthcoming in mobilizing funds to construct HFs, buy ambulance, covering salary of a driver until permanent solution is achieved. The CSC initiative has received a lot of awards and recognition in country as well as internationally including the African Leadership in Malaria (Initiative led by Uhuru Kenyata) recognized as the best community engaging program. Good Governance index is also being implemented in 64 hospitals nationally.

Well organized COVID-!9 Response: The MOH leadership was able to mobilize resources and create platforms to engage development partners, NGOs, civil society and private sector to effectively manage COVID-19 response without compromising the delivery of basic health services.

Post-Conflict Recovery efforts: The MOH leadership quickly engaged in the rehabilitation and resumption of services in conflict affected areas, mobilizing resources from all stakeholders including the diaspora community. The twinning of some hospitals with hospitals affected by the conflict a model innovation with significant impact.

**Gaps and challenges**

Although efforts made to foster leadership and governance, the effort remains fragmented and has limited coverage. Despite the efforts made, there is still low coverage of merit-based assignment of leaders at various levels. Inspite of the efforts made to strengthen alignment, , there is suboptimal alignment and increased number of program initiatives undermining the implementation of the alignment agenda . There is still a gap in effective planning and tracking mechanisms for leadership action plan.

**Recommendations**

i. Implement and fast track Alignment Action Plan

ii. Consolidate sub-sector programs and initiates within the sector to create enablers for alignment agenda.

iii. Expand and consolidate leadership development initiatives and track their status.

iv. Scale up CSC and managerial accountability tools and fast track their implementation status.

v. Prioritize institutionalization of action plan implementation mechanisms and tracking their implementation.

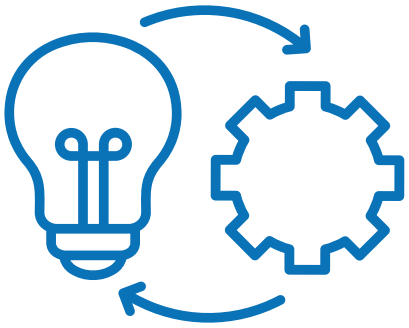
vi. Post- restructuring adjustments as needed ( professional mix ) and address other unintended consequences.

vii. Expand merit-based assignment at all levels.

viii. Foster and embrace stakeholders (development partners, NGOs, CSOs and private sectors ) engagement and contribution.

# 3

# Implementation of Strategic Directions (SD) of the HSTP II



# 3. IMPLEMENTATION OF STRATEGIC DIRECTIONS (SD) OF THE HSTP II

## 3.1. Enhance provision of equitable and quality comprehensive health service

### A. Crisis Impacts on Service Delivery

According to the 2022 Ethiopia Conflict Impact Assessment and Recovery and Rehabilitation Planning (CIARP), the conflict had disruptive impacts on health service delivery, with 1) damage to health infrastructure, 2) widespread looting of medical equipment and medicines, 3) insecurity, and 4) displacement of households and health workers. It is estimated that 3,217 health posts, 709 health centers and 76 hospitals were either partially or completely damaged in Afar, Amhara, Benishangul Gumuz, Gambella, Tigray and Konso zone of SNNPR.[17]

In Amhara, over 9,888 health workers fled from their duty stations during the conflict. The health workforce also suffered greatly due to the conflict. Table 8 presents findings from the CIARP that indicate the impacts of the conflict, with an emphasis on infrastructure.

**Table 8: Damage to Physical Infrastructure, According to Conflict-Affected Zone and Type of Health Facility**

| Region | Health posts | Health centers | Hospitals | Other infrastructure |
|---|---|---|---|---|
| Amhara | 1728 | 452 | 40 | • 5 Blood banks<br>• 8 Zonal Health Departments<br>• 56 Woreda Health Offices<br>• 124 damaged or looted ambulances<br>• 1 EPSA pharmaceutical store |
| Afar | 59 | 21 | 2 | • Unspecified quantity of damaged or looted drugs, equipment, medical supplies, motorbikes, patient and health facility records<br>• 20 ambulances damaged or destroyed<br>• 1 EPSA pharmaceutical store |
| Benishangul Gumuz | 172 (of which 155 were fully damaged) | 16 (of which 12 were fully damaged) | | • Unspecified quantity of drugs and medical supplies looted<br>• 51 ambulances damaged or destroyed |
| Oromia | 685 | 107 | | • 14 motorbikes and 53 ambulances damaged or looted |
| Konso Zone of SNNPR | 8 | 0 | 0 | |
| Tigray | 565 (76% of all health posts) | 113 (50% of all health centers) | 34 (82.9% of all hospitals) | |

*Source: CIARP Final Health Sector Report and Costs, 2022, Pages 11-14*

[17] Ministry of Health. 2022. Ethiopia Conflict Impact Assessment and Recovery and Rehabilitation Planning (CIARP).

In light of the above the following were illustrative impacts on service access and service delivery, as identified by the CIARP:[18]

- **Maternal and newborn health:** Pregnant mothers lost timely access to necessary and basic antenatal care and institutional delivery services
- **Child health, immunization and nutrition:** Children lost access to basic child health services, including immunization, Vitamin A supplementation, screening and treatment for malnutrition, and treatment of other childhood illnesses.
- **HIV:** People living with HIV missed their regular drug and treatment follow ups, including interruptions in drug refills.

**Conflict has also impacted social determinants of health.** A published study (Gessew et al., 2021) on the conflict's impact in Tigray noted disruptions in basic services such as ANC, supervised delivery, postnatal care and children vaccination, particularly during the first 90 days of the war. However, there were other byproducts of war that relate to social determinants of health such as destruction of livelihoods, widespread hunger and the heightened occurrences of sexual and gender-based violence during the conflict.[19,20]

[18] Ministry of Health. 2022. Ethiopia Conflict Impact Assessment and Recovery and Rehabilitation Planning (CIARP): Final Health Sector Report and Costs, p. 17
[19] Gesesew H, Berhane K, Siraj ES, et al The impact of war on the health system of the Tigray region in Ethiopia: an assessment BMJ Global Health 2021;6:e007328.
[20] The authors of the above study issued a later correction: Correction: The impact of war on the health system of the Tigray region in Ethiopia: an assessment

## B. Achievement and drivers of success

**Table 9: Performance against HSTP II targets relevant to Selected Service Delivery Areas**

### Legend for color codes in table

- Achieved or more than 85% of its MTR targets
- Improvement over baseline and achieved more than 70% to 85% of the MTR targets
- Below 70% of the MTR targets
- No data available to assess progress

| Indicator | Baseline | Mid- term Target 2022 | End Target (2024/25) | Performance through Dec. 2022 | Performance (% achieved) against MTR Targets | Color Rating | Data Source |
|---|---|---|---|---|---|---|---|
| **SD 1: Reproductive, Maternal, Neonatal, Child, Adolescent and Youth Health and Nutrition (RMNCAYH-N)** | | | | | | | |
| Maternal Mortality Rate - Per 100,000 live birth | 401 | | 279 | 267 | >100% | | Trends in maternal mortality, 2000–2020,2000 estimates by WHO, UNICEF, UNFPA, the World Bank Group, and UNDESA/Population Division |
| Under 5 Mortality Rate – per 1,000 LB | 59 | 51 | 43 | 47 | >100% | | Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation-2022 Report for 2021 GC |
| Infant mortality rate per - 1,000 LB | 47 | 42 | 35 | 34 | >100% | | Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation-2022 Report for 2021 GC |
| Neonatal mortality rate - per 1,000 LB | 33 | 28 | 21 | 26 | >100% | | Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation-2022 Report for 2021 GC |
| Contraceptive Prevalence Rate | 41% | 45% | 50% | | | | |
| Proportion of pregnant women with four or more ANC visits | 43% | 60% | 81% | 75% | >100% | | DHIS2 -Six Months Data Analytic Report |
| Proportion of deliveries attended by skilled health personnel | 50% | 62% | 76% | 71% | >100% | | DHIS2 -Six Months Data Analytic Report |
| Early Postnatal Care coverage, within 2 days | 34% | 53% | 76% | 32% | 60% | | DHIS2 -Six Months Data Analytic Report |
| Cesarean Section Rate | 4% | 6% | 8% | 5% | 83.3% | | DHIS2 -Six Months Data Analytic Report |
| Still birth rate (Per 1000) | 15 | 14.5 | 14 | 11.7 | >100% | | DHIS2 -Six Months Data Analytic Report |
| Proportion of asphyxiated newborns resuscitated and survived | 11% | 29% | 50% | 82% | >100% | | DHIS2 -Six Months Data Analytic Report |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Proportion of newborns with neonatal sepsis/Very Sever Disease (VSD) who received treatment | 30% | 37% | 45% | 42% | >100% | | DHIS2 -Six Months Data Analytic Report |
| Proportion of under five children with Pneumonia who received antibiotics | 48% | 57% | 69% | 75% | >100% | | DHIS2 -Six Months Data Analytic Report |
| Proportion of under five children with diarrhea who were treated with ORS and Zinc | 44% | 54% | 67% | 18% | 33% | | DHIS2 -Six Months Data Analytic Report |
| Pentavalent 3 Immunization coverage | 61% | 72% | 85% | 103% | >100% | | DHIS2 -Six Months Data Analytic Report |
| Measles (MCV2) immunization coverage | 50% | 64% | 80% | 83.3% | >100% | | DHIS2 |
| Fully immunized children coverage | 44% | 58% | 75% | 92% | >100% | | DHIS2 -Six Months Data Analytic Report |
| Mother to Child Transmission Rate of HIV | 13.40% | | <5% | | | | |
| Teenage pregnancy rate (%) | 12.50% | 10.00% | 7% | 14% | 12% | | DHIS2 |
| Stunting prevalence in children aged less than 5 years (%) | 37% | 32% | 25% | 39% | 5% | | National Food and Nutrition Strategy Baseline Survey-2023 |
| Wasting prevalence in children aged less than 5 years (%) | 7% | 6% | 5% | 11% | 57% | | National Food and Nutrition Strategy Baseline Survey-2024 |
| **Communicable Disease Prevention and Control** | | | | | | | |
| Proportion of people living with HIV who know their HIV status | 79% | 86% | 95% | 84.8% | 98.6% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| PLHIVs who know their status and receives ART (ART coverage from those who know their status) | 90% | 92% | 95% | 96% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Percentage of people receiving antiretroviral therapy with viral suppression | 91% | 93% | 95% | 96% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| TB case detection rate for all forms of TB | 71% | 76% | 81% | 87% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| TB treatment success rate | 95% | 95% | 96% | 96% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Number of DR TB cases detected | 642 | 967 | 1365 | 796 | 82% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Grade II disability among new cases | 13% | 9% | 5% | 9.9% | | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Malaria mortality rate (Per 100,000 population at risk) | 0.3 | 0.30 | 0.2 | 0.33 | | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Malaria incidence rate (per 1000 Population at risk) | 28 | 18 | 8 | 35.9 (29.4) | 28.2% | | DHIS2 -Six Months Data Analytic Report/ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22)/ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Noncommunicable Diseases and Mental Health** | | | | | | | |
| Premature mortality from Major Non-Communicable Diseases | 18% | 16% | 14% | | | | |
| Proportion of Women age 30 - 49 years screened for cervical cancers | 5% | 21% | 40% | 1.4% | 6.7% | | HEALTH AND HEALTH RELATED INDICATORS 2014 EFY (2021/2022GC |
| Mortality rate from all types of injuries (per 100,000 population | 79 | 73 | 67 | | | | |
| Cataract Surgical Rate (Per 1,000,000 population) | 720 | 1071 | 1500 | 555 | 52% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Proportion of hypertensive adults diagnosed for HPN and know their status | 40% | 50% | 60% | 59% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Proportion of hypertensive adults whose blood pressure is controlled | 26% | 41% | 60% | 80% | >100% | | 6 month parliament report |
| Proportion of DM patients whose blood sugar is controlled | 24% | 40% | 60% | 79% | >100% | | 6 month parliament report |
| Coverage of services for severe mental health disorders - | 5% | 16% | 30% | 26% | >100% | | Service Provision Assessment 2021–2022 Preliminary Report |
| Depression | 1% | 9% | 20% | | | | |
| Substance Use Disorders | | | | | | | |
| Proportion of Trachoma endemic woredas with Trachomatous Inflammation Follicular (T.F) to < 5% among 1 to 9 years old children | 26% | 49% | 77% | | | | |
| **Hygiene and Environmental Health** | | | | | | | |
| Proportion of households having basic sanitation facilities | 20% | 38% | 60% | 51% | >100% | | HEALTH AND HEALTH RELATED INDICATORS 2014 EFY (2021/2022GC |
| Proportion of kebeles declared ODF | 40% | 55% | 80% | 35% | 64% | | HEALTH AND HEALTH RELATED INDICATORS 2014 EFY (2021/2022GC |
| Proportion of households having hand washing facilities at the premises with soap and water | 8% | 31% | 58% | 36.5% | >100% | | 6 month parliament report |
| **HEP and Primary Health Care** | | | | | | | |
| Proportion of Model households | 18% | 32% | 50% | 23.5% | 73.4% | | 6 month parliament report |
| Proportion of health centers and primary hospitals providing major emergency and essential surgical care | 1.30% | 9.00% | 19% | | | | |
| Proportion of high performing Primary Health Care Units (PHCUs) | 5% | 19% | 35% | 26% | >100% | | 6 month parliament report |
| Proportion of health posts providing comprehensive health services | 0% | 5% | 12% | 22 Health Posts | 1.2% | | 6 month parliament report |

| Medical Services | | | | | | | |
|---|---|---|---|---|---|---|---|
| Outpatient attendance per capita | 1.02 | 1.35 | 1.75 | 1.47 | >100% | | DHIS2 -Six Months Data Analytic Report |
| Bed Occupancy Rate | 42% | 57% | 75% | 56% | 98% | | DHIS2 -Six Months Data Analytic Report |
| Proportion of patients with positive experience of care | 33% | 42% | 54% | 79% | >100% | | 6 month parliament report |
| Institutional mortality rate | 2.20% | 1.90% | 1.50% | 2.74% | 24.5% | | DHIS2 -Six Months Data |
| Percentage of component Production from total collection | 23.30% | 42.00% | 65% | 18% | 43% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| Ambulance Response rate | NA | 90% | 90% | 83% | 92% | | DHIS2 -Six Months Data Analytic Report |

The following are 'good practices' emerging during HSTP II implementation:

- Deployment of mobile health and nutrition teams during conflict (was previously just in pastoralist/ hard-to-reach areas; In 2023, development of Mobile Health Services guidelines for broader application in different settings)
- Pre-positioning of essential commodities for disease prevention and control in emergency hotspots
- Evidence-informed targeting based on disease incidence, program coverage and priority population groups (Done for service delivery areas such HIV, nutrition, TB, emergency services)
- Streamlined service packages to help sustain service delivery during shocks (e.g., as done for Neglected Tropical Diseases [NTDs])
- Intentional community engagement to maintain continuity of care during crises
- Public-private partnerships for laboratory services, dialysis and oxygen generation

Key drivers of achievements under HSTP II have been the leadership/buy-in within the MOH; deliberate and meaningful community engagement, particularly during shocks (e.g., conflict, COVID-19 pandemic, drought); nimbleness of local stakeholders and decision makers in mobilizing domestic resources and capacities to address service delivery challenges; and infusion of financial and technical support from development partners to advance priorities such as NTDs. As described in the next section, different programs are at different stages of evolution. However, there are also systemic issues that are impacting all programs, namely the following: Challenges with multi-sectoral coordination and accountability for issues needing non-health inputs (e.g., antimicrobial resistance (AMR), nutrition); Continuum of care shortcomings, e.g., (From screening to care/treatment (e.g., HIV cascade); maternal health cascade (multiple ANC visits to skilled delivery to timely postpartum care) and referral gaps (within facilities, across levels/tiers, across regions); the disruptive nature of external (i.e., non-health-sector-specific) factors such as:multiple, overlapping shocks (public health emergencies, insecurity/conflict, drought) disrupted service provision; macroeconomic issues such as inflation and disruptions in global markets, supply chains.

### C. Highlights on Each Program/Service Delivery Area

According to the 2021–2022 ESPA, the Ethiopian Ministry of Health (MOH) master list of active health facilities includes 27,036 facilities, of which 421 are hospitals (of which 333 are government facilities), 3,789 are health centers (most of which are government facilities), 5,252 are clinics (most of which are private) and 17,574 are health posts (all of which are government facilities).[21]

Excluding health posts, the most available services in Ethiopia's health facilities are emergency services (93%), curative care services for sick children (92%), diagnosis or treatment of sexually transmitted infections (STIs) excluding HIV (91%), diagnosis or treatment of malaria and noncommunicable diseases (84% each), and family planning (FP; 83%).[22] Service availability is suboptimal for RMNCH services such as normal delivery services (54%), child growth monitoring services (51%), child vaccination services/EPI (47%), Cesarean delivery, blood transfusion, and neonatology services (each at available in only 6% of all facilities), and intensive care unit (ICU) services (2%).[23]

Among health posts, service availability is highest for FP (including modern, fertility awareness, and sterilization methods) services (94%), followed by child vaccination services (90%); growth monitoring services, whether facility-based or via outreach (88%); curative care services for children under age 5, whether facility-based or via outreach (88%), antenatal care (ANC) services (80%), diagnosis or treatment of malaria (62%) and diagnosis, treatment prescription, or follow-up for tuberculosis (TB; 27%).[24]

The HSTP II provided strategic initiatives in various programmatic area. This review also assessed the relevance availability, equitable access, effectiveness and quality of each of the major programs Annex 1 provides a qualitative description of each program's progress vis-a-vis five domains: relevance, service availability, equitable access, effectiveness and service quality. The following section provides a concise overview of the performance of individual programs under HSTP II.

**Family Planning and Reproductive Health:** Driven by the country's Family Planning (FP) Guidelines (2020),[25] there has been progress in the expansion and reach of FP (e.g., via outreach; through greater postpartum FP access); health worker training, clinical mentorship and supportive supervision; and implementation of the Public Private Mix Implementation Guidelines for RMCAHN Services (2020). However, limited method choice; gaps in quality and responsiveness of services to the needs of key subgroups such as adolescent and young people and dwindling FP funding by donors are reported as major challenges.

**Maternal, Neonatal and Child Health (MNCH):** There have been strides in the expansion and strengthening of integrated community case management of newborn and childhood illnesses at health posts, expanded access of the neonatal care package, and safe delivery and improved management of maternal and neonatal complications (e.g., via introduction of ultrasound services at health centers (particularly in urban areas), maternity waiting rooms, community engagement in emergency transport and expansion of OR blocks in health centers). However, there are persistent supply-side gaps, e.g., in essential MNCH supplies, the full complement of required equipment in OR blocks and the health workforce. There also gaps in health service delivery related to important contributors to child morbidity and mortality (e.g., child injury prevention).

[21] Ethiopian Public Health Institute (EPHI), Ethiopia; Ethiopian Ministry of Health and ICF. 2022. Ethiopia Service Provision Assessment 2021–2022 Preliminary Report. Addis Ababa, Ethiopia: EPHI; Ethiopian Ministry of Health, Addis Ababa; Ethiopia; and ICF, p. 3.
[22] Ibid., p. 9.
[23] Ibid.
[24] Ethiopian Public Health Institute (EPHI), Ethiopia; Ethiopian Ministry of Health and ICF. 2022. Ethiopia Service Provision Assessment 2021–2022 Preliminary Report. Addis Ababa, Ethiopia: EPHI; Ethiopian Ministry of Health, Addis Ababa; Ethiopia; and ICF, Table 3.2.
[25] MOH (2020), National Guideline for Family Planning Services in Ethiopia.

**Immunization:** To date, the major HSTP-II focus has been on demand creation for immunization services (e.g., promoted during home visits and/or mobile health and nutrition services in hard-to-reach and conflict-affected areas), improving coverage, strengthening the vaccine supply chain and integration of immunization with other health services[26]. Stakeholders consulted for the MTR have highlighted that effective coverage has been difficult to achieve in hard-to-reach areas due to geographic inaccessibility and lack of transportation services such as motorbikes. As a result, the country has contended with occasional outbreaks of vaccine-preventable diseases.

**Adolescent and Youth Health:** There was an HSTP II vision to expand youth-friendly services, enhance parental skills and promote adolescent and youth life skills and healthy behaviors[27]. There have been strides in the provision of youth-friendly health services, weekly iron and folic acid supplementation, provision of school feeding and measurement of nutritional status, although strides are on a limited scale. However, lack of budget, inadequately trained health workers to address adolescent and youth health needs, increased cases of sexual and gender-based violence in conflict areas and delayed mainstreaming and integration of adolescent and youth health in other sectors (pace/scale of efforts were impacted by COVID-19 pandemic) are reported to have hindered further progress.

**Nutrition:** The first 2.5 years of HSTP-II implementation entailed enhancing and scaling nutrition services and expanding the Seqota Declaration (from 40 to 240 woredas) on multi-sectoral collaboration to end child undernutrition. Key achievements related to the First 1,000 Days initiative (e.g., deworming and micronutrient supplementation services, expansion of nutrition screening of children and pregnant and lactating women). Whilst there are still funding shortfalls, the Government increased its annual budget allocations for nutrition, complemented by financial and technical support from development partners. However, the country has made limited progress towards World Health Assembly nutrition targets. The National Food and Nutrition Strategy Baseline Survey, point prevalence estimates of child stunting, wasting, underweight and overweight are 39%, 11%, 22% and 6%, respectively.[28,29] Challenges relate to the complexities of a multi-sectoral nutrition response, impacts of shocks (e.g., drought, conflict, public health emergencies) and inadequate private sector engagement.

**Hepatitis:** Under HSTP-II, there were plans to initiate and expand hepatitis testing, treatment and viral load testing service at hospitals and health centers, integrating hepatitis services with other health services (e.g., HIV, TB, FP/SRH, MNCH). Major achievements relate to increased public **awareness and screening** (particularly via integration with HIV services). However, the hepatitis program has not been fully integrated with other health programs, and testing and treatment are available in only a few hospitals. Financial factors (e.g., high costs of hepatitis treatment) remains an impediment to service expansion and integration.

**Tuberculosis and Leprosy:** Key achievements under HSTP II have been strengthened TB case finding, contact tracing and screening services, as well as improved contact tracing of leprosy cases. Strides have been made in strengthening TB/drug-resistant TB diagnostic services (e.g., through a sample referral network, more-sensitive screening tools such as chest x-ray and GeneXpert, provision of community TB screening and treatment, passive case finding). The development of the TB national strategic plan, adoption of new technology, advocacy at all levels, private-sector engagement and launching of the

[26] MOH (2021), Ethiopia Health Sector Transformation Plan (2019/20-2024/25).
[27] MOH (2021), Ethiopia Health Sector Transformation Plan (2019/20-2024/25).
[28] Food science and Nutrition Research Directorate at the Ethiopian Public Health Institute (EPHI). National Food and Nutrition Strategy Baseline Survey: Key Findings Preliminary Report, March 2023.
[29] Stunting (chronic malnutrition) is defined as height-for-age below -2 standard deviations (SD), wasting (acute malnutrition) is defined as weight- for-height below -2 SD, underweight is defined as weight-for- age below -2SD and overweight is defined as body mass index-for-age above +1SD.

TB multi sectoral framework facilitated those achievements. Challenges include 1) various shocks (e.g., COVID-19 pandemic, conflict), 2) the flow of returnees from high-TB-prevalence countries, 3) contextual dynamics linked to equitable access (e.g., reaching pastoralists) and 4) budgetary gaps (e.g., to conduct a planned TB survey).

**Malaria:** Under HSTP-II, key achievements are improved malaria surveillance, improved screening and epidemic response, strengthened diagnostic services and vector control activities through community interventions. Evidence-informed targeting in implementing the Ethiopia Malaria Elimination Strategic Plan (2021–2025)[30] is a cornerstone of the program. Challenges have included shocks such as droughts and conflict, systemic gaps in key health system building blocks (e.g., supplies, health workforce, etc.) and maintaining malaria as a priority amidst other health-sector priorities.

**Prevention and Control of Neglected Tropical Diseases (NTDs):** There has been an expansion of NTD service availability, with services for arboviruses and rabies now available beyond the initial nine priority NTDs. The NTD program has effectively advocated for multi-sector engagement and elevated community awareness for NTD prevention and control. The major challenge is a lack of NTD integration; the NTD program is still a vertical program with limited government financing and a reliance on donor support.

**Prevention and Control of Non-Communicable Diseases (NCDs):** NCD prevention and control efforts focused on strengthening the enabling environment (enforcement of comprehensive policies, legislation and/or regulations [e.g., on tobacco and alcohol]; establishment of a multi-sectoral coordination mechanism) and expansion of NCD-related interventions within primary health care (PHC) through task shifting, task sharing and improved referral networks. Challenges relate to ensuring accountabilities and effectiveness of the multi-sectoral coordination and limited awareness-raising programs on NCDs and risk factors.

**Mental Health:** Under HSTP II, there was a vision to develop legislation, strengthen mental health care integration at each level of the health system, raise public awareness, establish a National Institute of Mental Health and ensure a continuous supply of essential medicines and diagnostic technologies[31]. Mental health service availability has expanded but there remain shortfalls in meeting the population's mental health needs (see section on Transformation Agenda 1). Relative to other health services, mental health is a lower priority, as reflected in limited budgeting and health workforce development in this domain.

**Hygiene and Environmental Health:** The hygiene and environmental health program focused on addressing environmental determinants of health to improve the quality of health services and health outcomes. The Health Extension Program (HEP) focused on improving the availability and utilization of basic sanitation services at household and community levels. Strides have also been made in improving water source quality and safety through water quality monitoring and surveillance systems, in collaboration with the water sector. However, continued progress is contingent upon the inputs of other sectors, and there have been challenges with multi-sectoral coordination and accountability.

[30] MOH(2021), Ethiopia Malaria Elimination Strategic plan (2021- 2025), Addis Ababa.
[31] MOH (2021), Ethiopia Health Sector Transformation Plan (2019/20-2024/25).

**Health Extension (HEP) and Primary Health Care (PHC):** Development of the HEP optimization roadmap has been a major milestone under HSTP II. Additionally, despite the multiple external shocks (conflict, COVID-19, climate-related threats) faced over the past 2.5 years, strides were made in community engagement, leveraging the influence and involvement of political leaders and other key stakeholders. HEP service packages were redefined and service delivery platforms were restructured, but actual implementation of the new packages have been suboptimal. Across regions, stakeholders consulted for the MTR mentioned the impracticality of newly defined HEP implementation strategies and the need for deeper analysis and contextual evidence, coupled with adequate budgeting and human resource allocation.

**Clinical Services:** The expansion of specialty and subspecialty services, as per the the country's National Specialty and Subspecialty Roadmap,[32] has been a major achievement under HSTP II. This includes expansion of surgical and anesthesia care, ophthalmology services and basic dental services. Major progress was also made in piloting the "system bottlenecks focused reform (SBFR)" in four hospitals, and in the expansion of operating rooms (ORs) in health centers to enhance access to surgical services. One area for which progress has lagged is developing and implementing the national medical tourism strategic plan.

**Pre-facility, Emergency, Trauma and Critical Care Services:** Various shocks have had disruptive effects on health service delivery, but a positive unexpected outcome of those shocks is the advancement of critical care over the past 2.5 years. There have been strides in standardizing and strengthening basic, advanced, ambulance and prehospital services. Some hospitals have included emergency, trauma and critical care services as part of QI, which has contributed to overall efforts to institutionalize QI. However, there remains a need to continue strengthening health system resilience and optimizing referral mechanisms within facilities, across facilities and levels of care, and across regions.

**Blood Transfusion Services:** As highlighted by stakeholders consulted for the MTR, there has been a strengthening of blood transfusion services, with intensified community awareness creation to promote blood donation/collection and strengthened quality-assured testing. However, there remains a limited number of blood donors.

**Laboratory and Other Diagnostic Services:** Laboratory quality management systems have improved over the past 2.5 years. Additionally, there has been an expansion of national proficiency testing and improved availability of national and regional lab infrastructure. Like critical care, the COVID-19 pandemic has proven to be a major impetus in directing greater stakeholder attention and investment in improving laboratory services.

**Antimicrobial Resistance (AMR) Prevention and Containment:** Progress has been made in AMR stewardship and awareness-raising on AMR and its adverse impacts. Sentinel sites are nodes of surveillance and research to inform AMR efforts. Challenges include supply gaps (e.g., lab reagents), finance and support from partners, multi-sectoral coordination (e.g., maintaining accountability for contributions from stakeholders outside the health sector), data quality from sentinel sites, and AMR-related capacity and buy-in across all regions.

[32] Ministry of Health, National Specialty and Subspecialty Service Roadmap 2020–2029, Ethiopia

**Quality in Health Care:** The earlier report section on Transformation Agenda 1 has already highlighted strides and persistent gaps related to quality of care. The development and implementation of the National Quality Strategy II (2021-25) has been a major enabler of achievements under HSTP II, with hospitals and, to a lesser extent, health centers being capacitated to conduct system diagnoses to identify problems and design and implement QI projects (in some cases, with their internal revenue). During regional visits, MTR teams confirmed the existence of structures and staff in hospitals with quality-of-care mandates.

**Equity in Health Service:** The MOH has conducted a health equity analysis and developed national equity strategic plan[33] that informed the development of evidence-informed equity program design. However, strides were not made in terms of mainstream and institutionalizing equity in the delivery and monitoring of health services. The major challenge and gap is a lack of contextualization of health service programs and service delivery models within different settings across the country. The forthcoming findings from EPHI's National Equity Assessment (not available for inclusion in the MTR analysis) will be a critical source of evidence to inform tailored strategies that address equity dimensions and are responsive to the needs and dynamics of known vulnerable and/or underserved subpopulations.

### BOX 4. Health Systems Diagnosis to Optimize Service Delivery: Insights from Oromia

- **The issue:** During a review of subnational accounts and Essential Health Services packages, the Oromia RHB identified serious fiscal gaps that contributed to 1) poor access to specialized and subspecialized services, 2) lack of essential diagnostic services, 3) poor referral coordination across border areas, and 4) deep-rooted equity issues. However, there was no comprehensive strategic document to inform a systematic approach to regional health capacity building.
- **The solution:** With early engagement of political leaders, line bureaus and partners in the region, the Oromia RHB developed a comprehensive regional health capacity evaluation plan that was informed by a desk review (e.g., of performance evaluations, SARA and SPA+ reports) -AND- comprehensive evaluation of all regional facilities against Ethiopian service standards. Local officials and sectors in Woredas, Zones and health facilities were also engaged in the diagnostic exercise. Findings were synthesized and presented at each administrative level, and finally submitted to the regional Bureau of Finance, wth the full knowledge and buy-in of the senior regional political leadership. Subsequently, a collaborative regional health capacity building plans and financing strategy were developed and submitted for approval.
- **The results:** The RHB raised awareness on the dire state of health facilities in the region and the financing required (only 49% of PHCs met premise standards, regional workforce was only 54% of required staff, only 49% of products were available at PHCs, practice gaps prevailed in General and Referral Hospitals). As a result of this compelling evidence, the regional cabinet 1) increased the health sector budget (and quota) to around 14% of government budget; 2) approved an additional budget of close to- 7Billion ETB, 3) raised the annual budget of HCs by almost close to 60%, and 4) endorsed the cluster-based regional service expansion plan (with specialty and subspecialty plan included).
- **Lessons learned:** 1) Early engagement of line bureau/offices, political and administrative leadership in the planning and designing of strategies is critical. 2) There is a huge need for evidence to inform resource allocation, priority setting and program implementation. It is essential to local advocacy and fostering political will to improve health service delivery. 3) Collaborative planning helps identify approaches that help boost domestic financing capacity and synergy in leveraging resources.

[33] Ministry of Health (2022), National Health Equity Strategic Plan 2020/21-2024/25, Ethiopia

**Recommendations – Priorities for Systems Strengthening, for Inclusion in Annual Planning**

i. Design and implement 'catch-up' initiatives and innovative service delivery platforms (e.g., mobile service delivery, telehealth) to address existing inequities in service delivery, service disruptions and backlogs.

ii. Integrate findings and assessments from regulatory bodies, assessments on service availability and other data sources to enhance regional planning processes to reflect all available contextual evidence.

iii. Establish strategies and targets/milestones to address identified gaps in health system building blocks, with a particular focus on optimizing the continuum of care for all programs/service delivery areas, e.g., via:

   a) Harmonization of minimum service standards for public and private facilities

   b) Functional referrals (across tiers/levels, between regions, within the same facility, between public and private facilities)

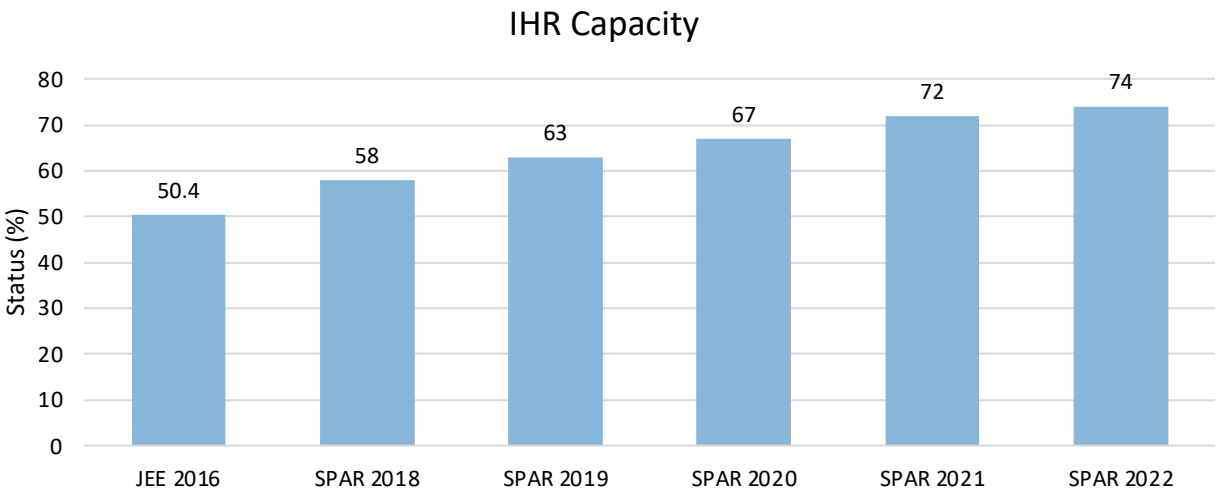
## 3.2. Improve Public Health Emergency and Disaster Management

Ethiopia has been plagued by multitudes of natural and man-made disasters over the past 3 years including the COVID-19 pandemic, conflicts throughout the country, the war in the north, IDPs, local epidemics (cholera, measles, vaccine derived polio virus, malaria, etc), flood, drought, locust, and many others. The Ministry of Health (MOH), as the lead agency for health emergencies, has been working it hits stakeholders in several fronts.

On the other hand, the MOH had developed and implemented a 5-year health sector transformation plan (HSTP-II) which included public health and disaster risk management (PHEM) and hence a midterm review (MTR). PHEM is among the major thematic areas evaluated. This brief report attempts to summarize the major findings and recommendations as shown below.

Progress of key performance indicators (KPIs): there were two KPIs included for PHEM and DRM. These are 'health security index' and 'proportion of epidemics controlled within the standard of mortality'. Ethiopia's health security index as measured by the annual SPAR (State Party Self-Assessment Annual Report) has progressed from the baseline 0.63 to 0.74 in 3 years and surpassed the expected 0.70 mid-term target (see figure 2). In terms of proportion of epidemics controlled within the standard mortality, only measles and cholera have a predetermined standard mortality.

**Figure 2: Summary Ethiopia's SPAR reports**




While the average case fatality rate for measles was 1.1% much lower than the standard 3%, the CFR for cholera was 1.45% which is higher than the standard 1%. Since, other diseases don't have standard acceptable mortality rate, it is difficult to measure this indicator.

The following are some of the achievements and enabling factors during major emergency management such as COVID-19 and conflict: Establishment of the Multi-sectoral engagement support team at MOH, which facilitated expanding testing, isolation, and treatment capacity by creating makeshift centers (approximately 150) and engaging private sector; reached almost all households nationwide to test, isolate, and treat COVID-19 through COMBAT; Twinning of hospitals in conflict affected regions with hospitals from other regions; mobilization, training, and deployment of thousands of volunteers and HCWs for COVID-19, conflict, and other emergencies; digitalization of the PHEM system during COVID-19 response; expansion of Emergency Operations Centers (EOCs) at national, regional, and sub-regional level; Vulnerability Risk Analysis and Mapping (VRAM) and Emergency Preparedness and Response Plan (EPRP) for over 300 woredas; national and regional PHEM call centers established and operationalized; domestic financing of COVID-19 and conflict.

Besides, the following are among the best practices and lessons learnt/identified during COVID-19, conflict, and other emergencies: (i) local production of hand sanitizer, non-medical masks, and oxygen during the COVID-19 pandemic by engaging HEIs and the private sector; (ii)establishment of scientific Advisory Council & Professional Associations Consortium; (iii) introduction of life and disability insurance for HCWs working on COVID-19; ( iv)initiation of ntra-action reviews (IARs) during prolonged/protracted responses provides useful lessons to improve response; (v)utilization of the Dagu system for PHEM-RCCE (Risk Communication & Community Engagement) has to be managed cautiously since information spreads fast and communication relies on honesty; and (vi)there are recurrent and prolonged PHEs in several regions despite response efforts.

On the other hand, there were persistent and recurrent challenges that affected the PHEM system. The PHEM system is an inverted pyramid when viewed from federal to HF level-resources where human capacity, systems are not available at the local level where actual emergencies occur. There is delayed, fragmented, and multiple resource mobilization structures during emergencies affecting multiple sectors and agencies. More importantly, there is no systematic budget for preparedness and response at all levels of the system including lack of contingency funding at all levels that often result in

delayed response to emergencies. This is further compromised with delays in procurement and custom clearance process for emergency commodities. There was also lack of emergency LSCM (Logistics & Supply Chain Management) capacity with high attrition, lack of database, and tracking mechanisms of trained surge for PHEM as well ad weak integrated and multisectoral risk profiling/VRAM and EPRP exercise. private facilities do not report regularly.

Emergencies/disasters have impacted the health system at different levels. For example, resources were shifted to pandemic or conflict-strain in the health system; regular provision of service & utilization was compromised in conflict affected areas & during COVID-19 (e.g., EPI program, HIV care & NCD services); there was fatigue of health professionals, private sectors, partners, volunteers, governmental sectors, and civic associations during the COVID-19 and conflict periods; and decline n general health seeking behavior for other health Services other than Covid-19.

**Recommendations**

Below is the list of major recommendations suggested to improve the PHEM system categorized based on the health sector building blocks.

**LMG**

- Revise the PHEM legal framework to ensure multisectoral (including PS) and multiagency coordination and collaboration.
- Empower PHEM officers in enforcing public health recommendations and reduce political interference.
- Align, revise, and capacitate the governance structure of the national and sub-national PHEM.
- Provide PHEM leadership and Incident Management System (IMS) trainings to national and sub-national PHEM staffs and other relevant management from the health system.

**Emergency Work Force**

- Design a health emergency workforce/volunteer management program that includes training, recruitment/mobilization, roster, tracking, retention, protection, deployment, and compensation strategy/framework at all levels.

**RF**

- Expedite the approval of REHF program to institutionalize domestic financing mechanism for PHEM.
- Facilitate financing (PPP, loan) of the private sector based on clearly identified gaps for priority PHE preparedness and response.

**SD**

- Integration of essential health services during an epidemic to minimize disruption of service continuity.

**LSCM**

- Engage Higher-education Institutions (HEIs), health agencies, and local and international private investors to produce emergency commodities.
- Develop an emergency logistics SCM capacity at the national and sub-national level either by modifying EPSS or establishing a separate entity for this purpose.
- Conduct regular resource mapping exercises for emergency commodities.

**HIS**

- Comprehensive digitalization of the PHEM system at all levels including multisectoral databases.
- Conduct and utilize IARs and AARs regularly.
- Conduct nationwide and localized RCAs for recurrent and prolonged PHEs.
- Advocate and facilitate joint multisectoral risk profiling for health hazards at all levels and prepare joint EPRPs.

## 3.3. Improve Access to Pharmaceuticals and Medical Devices and their and their rational and proper use

This strategic direction in HSTP II focuses on strengthening the pharmaceutical supply chain, pharmacy services, and medical device management systems to ensure uninterrupted availability and accessibility of safe, effective, and affordable medicines and medical devices that are needed to address the health problems of the community and ensure that they are used rationally. This strategic direction addresses reduction of pharmaceutical wastage and strengthening of systematic and environmentally friendly disposal of expired and damaged pharmaceuticals and non-functional medical devices. The direction also includes development and implementation of strategies that strengthen local manufacturing of medicines, medical devices, and standardization of procedures for procurement and management of medical devices.

**Table 10: Performance of the pharmaceutical and medical supplies**

| Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance EFY 2014 | Remark | Performance 9 months, EFY 2015 | Rating in Colors |
|---|---|---|---|---|---|---|---|
| Availability of essential medicines by level of health care | | 84% | | 76% (Dec., 2022) | | | |
| Availability of essential Program medicines @EPSS | 72.9% | 84% | 90% | 94% | | 94% | |
| Availability of essential RDF medicines @EPSS | 64.5% | 81% | 90% Tracer ARHB) | 84%(*64%@ HP; 82.3%@ HL& HC | | | |
| **Reduce wastage rate | 2.32% (RDF 1.65%, Program 0.51%) | <2% | | 0.74% @ EPSS (RDF 1.96%, Program 0.54%) | 2.9%@HFs Regional report; | *1.7% | |
| Increase proportion of essential drugs procured from local manufacturers | | | | 29% of expected amount | | | |
| Reduce procurement lead-time | | 210 days | | 202 days | | 202 days | |
| Supplier fill rate | | | 100% | 98.6% | 27.9%ARHB form EPSS | 30% St. Paul's Hosp. | |

**National joint supportive supervision report on pharmaceuticals supply chain management, January, 2023 by MOH and EPSS*

***Annual performance report, MOH, 2014*

MOH, as part of its recent restructuring, has restructured PMED from directorate to lead executive office (PMDLEO), that enabled the lead executive office to have sector oversight and coordination role in ensuring the availability of essential medicines and medical devices and promoting rational use working hand in hand with internal and external stakeholders (EPSS, EFDA, EPHI,AHRI and others). Establishment of the Pharmacy and ME advisory board at MOH with subsector based TWGs is expected to fill some of the gaps. A coordination platform with establishing supply chain steering committee, involving key supply chain stakeholders such as EPSS, EFDA, and MOH (PMDLEO, health programs and Finance and Procurement LEO) is a now in place, which gives special emphasis on strengthening the overall health program commodities supply at all levels. health program supply chain management coordination and governance protocol was also developed in April, 2023. there are ongoing efforts in revising policies and guidelines with in the Ministry and the agencies like revision of Medicine Policy; development of the national pharmaceutical and medical devices roadmap. EPSS's draft proclamation is at its final stage for ratification.

Ethiopia Pharmaceuticals Supply Services (EPSS) was established as a semi-autonomous public institution to supply quality assured and affordable pharmaceuticals to all public health facilities. Since its establishment, it has been building its capacity in human resource and supply chain systems at all levels. As a result, its capacity to procure, store, and distribute pharmaceuticals through the Revolving Drug Fund (RDF) and various health programs has increased significantly. The total value of the program and RDF pharmaceuticals procured increased from USD 282 million (2017) to USD 846 Million (2022). In

addition, the value of products distributed has increased from USD 369 million (2017) to more than USD 823 million (2022). The services procurement in value has increased significantly since 2020 due to the COVID-19 and conflict associated procurements and the sky rocketed global logistics cost. As a result, availability of essential medicines by level of health care was 76% at the end of December 2022 against MTR target of 84% . The tracer medicines availability of program essential medicines was 94% and that of RDF essential Medicines was 84% at EPSS Hubs as per the 2014 EFY annual performance report. The average availability of tracer drugs in hospitals and health centers was determined to be 82.3% where tertiary hospitals had the greatest availability of tracer drugs at 86%, while both general and basic hospitals had the lowest availability at 82%. MOH pharmacy and medical devices lead executive office (PMDLEO) in collaboration with EPSS launched the first phase demand-based forecasting and supply planning that is rolled out in 33 selected high volume federal and university hospitals on 150 health commodities which is supported by consumption-based Excel spreadsheet forecasting tool for medicines, medical supplies, lab reagents and oxygen. This initiative also introduced committed demand approach by the hospitals which enhances the functioning of supply chain functioning by creating shared financial burden among financers and procurers. The stakeholders and collaborators forum formed at EPSS had impacted the logistics operation positively and enabled EPSS to earn authorized economic operator certificate from the Ethiopian Custom's Authority and received a green light to have its own bonded warehouse which is expected to significantly reduce its demurrage cost. In addition, EPSS managed to have four ISO 9001-2015 certified warehouses and is also pursuing an encouraging initiative to outsource one of its non-core functions - transportation to Hubs and HFs.

Strengthening domestic pharmaceutical producers is one of the major initiatives in HSTP II. There are five cGMP compliant pharmaceutical manufacturers in the country. In the MOH annual performance report 2014 EFY, local producers have supplied pharmaceuticals worth of 197.2 million Birr to EPSS. This is only 29% of the expected amount. Currently, local manufacturing account only about 8% of the EPSS annual procurement.

Auditable pharmaceutical Transactions and Services (APTS), that introduces transparent and accountable pharmaceutical transactions and services, has reached to 361(e-APTS-38) in 2014 EFY health facilities from 117 in 2013 EFY. Different digital health-commodity management systems were developed and implemented at service delivery units and EPSS sites. Dagu, a software designed to manage supply chain functions at service delivery points, is implemented in 1106 health facilities. National supply chain end to end dashboard prototype is developed and implemented (2015 EFY, 9 months report). EPSS has completed the preliminary preparation to implement the enterprise resource planning(ERP) system by the end of this year which is expected to improve its financial, risk management and supply chain operations efficiency. An Antimicrobial resistance prevention and containment strategic plan, including human, animal and environmental health, is developed and sector specific work plan was also developed by Ministry of Agriculture, Ministry of health and the Ethiopian environmental protection Agency.

**Areas for further development**

There is Inadequate allocation and distribution of budget for pharmacy and Medica Equipment SCM and services at MOH and lower-level structures, despite the fact that the pharmaceuticals and medical devices hold the major financial share in the HSTP costing. This is more visible in the area of lack of adequate operational budget allocated for logistics, training and supply management, waste management and the pharmaceutical services. According to the survey by SmartChain, quantifications carried out by health facilities were not based on quality data and not in line with the budget allocated

for pharmaceuticals. The report highlighted that 3% of health facilities drive greater than 50% of the commodity sales in value while only 2% of commodities drive more than 50% of sales value of EPSS. This is further complicated by the existence of limited accountability throughout the system - The pharmaceutical and medical device market consumes huge resources which makes it an attractive target for abuse, corruption and unethical practices.

EPSS is overburdened and had diffused focus on medical devices and Laboratory reagents supply – EPSS has grown from 10-billion-birr business in 2010 EFY to 45 billion birr in 2014 EFY which makes it difficult for the agency to provide equal and appropriate focus for pharmaceuticals, medical devices and laboratory supplies and satisfy the ever-increasing demand. Although medical equipment and laboratory supplies management requires healthcare technology management which involves setting technical specification, installation, commissioning, operation and safety, maintenance and repair, contract management, utilization, decommissioning, and disposal, there is fragmented procurement, very limited maintenance capacity, and weak contract management (e.g., Placement- lab reagent received before the machine arrived and commissioned at the HF).

Issues of data visibility and ownership in the SCM – quality and accurate data at facility level is the basis for proper selection, quantification and forecast of the HF's demand (reconciling its need with the available budget) - this can efficiently be realized only through digitalization or automation of the flow of health commodities with in the health facility and making it accessible to the leadership and the higher-level structure in the supply chain thereby ensuring visibility and hence accountability. There is weak Emergency SCM system - Limited budget, coordination and lack of storage infrastructure.

RDF medicines accounts for 1272 (92.6%) items in the PPL as compared to the 101 (7.4%) program items. In addition, in 2014 EFY, EPSS has procured pharmaceuticals and medical supplies worth of 44.9 billion Birr. From the total procurement, the revolving drug fund accounted for 5.3 Billion Birr, health Programs accounted for 5.1 Billion Birr and aid accounted for 34.5 Billion Birr. Although, the RDF accounts for equivalent amount in value terms to program drugs, RDF was not given the necessary managerial attention and resources which ultimately compromises the primary health care service delivery which is the mainstay of the HSTP (universal health coverage ) and the national health policy. The limited focus on the supply of non-PPL (list of pharmaceutical and medical devices outside the EPSS procurement list) products is still a concern to be addressed. The delay or absence of reimbursement for exempted services and the infrequent reimbursement (every 3 months) from CBHI had further aggravated the supply deficiency in the HFs.

There are many system related challenges raised as part of this review. These include the concern that focus on community pharmacies (conflict of interest- percentage based compensation) led to a drift attention from the regular hospital pharmacy resulting in compromising the HFs pharmacy supply and service; weak pharmacy and program integration at all levels of the health care system compromising the public health programs performance at service delivery points; the malfunctioning of Drug and therapeutics committee(DTC), drug information services (DIS) and clinical pharmacy service in the HFs as compared to up to the standard set in the Ethiopian Hospital service guideline (EHSTG); there is inadequate Pharmaceutical Waste disposal system and practice throughout the health care system (MOH/EPSS procured Incinerators, few installed but not yet functional). There is also inadequate implementation of antimicrobial stewardship (AMS) and weakened intersectoral collaboration and coordination platform for AMR containment. It is also not cascaded down the health care system. Issues related to public procurement agency procurement directive is also hampering the health commodities procurement throughout the health care structure.

HSTP II Initiatives like establishment of international and regional pooled procurement and central order management system looks far-fetched to be achieved in the next three years as these requires readiness and agreement between the regional regulatory bodies and establishment of a mega warehouse or coordination system beforehand, respectively.

**Actions within three years**

There is a need to make Supply Chain Management one of the top priorities in the upcoming health Sector Development and Investment Plan (HSDIP), 2016- 2018EFY, with a clear strategic shift to:

- Implement demand-based procurement and supply planning at each HF - MOH/PMDLEO in collaboration with EPSS and partners should build the capacity of RHBs and lower-level structures so that HFs are well capacitated in selection, quantification and demand-based forecasting, taking into consideration the health facility's available budget. Each Health facility need to own this practice and be accountable.

- Restructure and capacitate the regional and down to woreda level pharmacy units in terms of skill and number – The pharmacy unit's structure appears wide at the federal level but very lean at the RHBs and lower levels structures. The organization of the pharmaceutical and ME unit across regional states and lower-level structures should be restructured and aligned with the new structure at the federal level.

- Ensure end to end visibility of supply data – with political commitment and ownership of supply data by enabling Health facilities to have automated SCMS for inventory management, quantification, ordering and report generation that creates intra-facility visibility and enable end to end visibility in the SCM.

- Conduct critical assessment of EPSS's current procurement operations and management of pharmaceuticals, medical equipment and Lab supplies so as to provide the necessary focus lacking on medical equipment and laboratory supplies. EPSS and MOH should even consider reorganization of managerial structures creating a greater emphasis in managing the procurement of Pharmaceuticals, Medical equipment and Lab supplies. In the future, this might evolve to a separate procurement service for each – through PPP or other appropriate modality based on study.

- Treat ME supply as a project management considering national aggregated acquisition (placement, lease, rent and medical equipment service) based on national medical equipment inventory, replacement plan & designed referral system.

- Centralize the national laboratory service to have appropriate lab equipment's and supplies demand and supply management - restructure, equip and expand the central lab at EPHI with chains/Hubs/ of labs throughout the country – at mapped and accessible sites with adequate array of sample collection points.

- The MOH needs to start developing an option on how to supply commodities which are outside of EPSS's Product Procurement List (PPL). Explore, identify and implement different options of public-private partnership in pharmaceutical and medical devices supply chain management and services.

- Revisit the community pharmacy initiative against its objective and management – to improve the efficiency and effectiveness of the initiative without compromising the regular pharmacy service within the health facilities.

- Digitalize and scale up APTS to e-APTS to improve the service delivery and reduce the professional's workload. Address the issue of indemnification for the pharmacy practitioners. Scaleup e-APTS implementation and make it the standard pharmacy practice throughout the public health system.

- Prioritize and invest on promoting local manufacturing - Restructure and revitalize the Bioequivalence center at the school of health sciences, school of pharmacy, AAU. The government need to support the local manufacturers to do bioequivalence tests by cost sharing mechanisms. MOH together with MOFED need to create a pooled fund (soliciting fund from agencies - global financing organizations- GFF, WB,GAVI, IMF and other bilateral agencies) in hard currency for the local Manufacturers as it does for EPSS. Incentivize cGMP compliant local manufacturers differently than the non- compliant ones.

- Emergency SCM need to be developed as a system – that is responsive, involving intersectoral collaboration and coordination (with political commitment) including the private sector.

- Integrate Pharmacy with public health programs, align and work in harmony.

- Develop HR capacity and infrastructure to revitalize the DTC, DIS and clinical pharmacy service in the HFs according to the Ethiopian Health Service Transformation Guideline and the pharmaceutical and medical equipment M&E framework.

- Reactivate the antimicrobial resistance (AMR) containment coordination platform at national level and roll it out to the regions and lower-level structures. Expand and strengthen antimicrobial stewardship(AMS) into the HFs.

- Engage Public procurement agency (PPA) to make the procurement directive conducive towards Medicines and MEs supply at all levels in the health system.

- Develop capacity, ensure to avail functional facility and establish separate management for pharmaceuticals and MEs waste management and decommissioning service

## 3.4. Improve Regulatory Systems

This strategic direction in the HSTP II, seeks to protect the public from health risks that arise from poor and substandard products and services. It focuses on ensuring the safety, quality, efficacy, and proper use of medicines; performance of medical devices; safety of food and regulation of tobacco and alcohol. It is the Ethiopian Food and Drug Authority (EFDA), with Proclamation No.1112/2019, that is responsible for these product regulation. Risk based regulation and transparent regulatory decision-making are among the strategies adopted by the authority. Based on the mandate given to the Authority, some of the performance of meeting the set targets are indicated as follows. HSTP II indicators on regulation show reasonable progress as most of them have achieved their MTR targets

**Table 11:Performance of Produte Regulation**

| Indicator | Baseline | Mid-term Target 2022 | Performance | | | Color Rating |
|---|---|---|---|---|---|---|
| | | | 2013 EFY | 2014 EFY | 2015 EFY | |
| Prevalence of unsafe and illegal food products in the market | 40% | 36% | | 37.2% | | |
| Percentage of substandard and falsified medicine in the market (Microbiological sample) | 8.60% | 7.00% | 13% | | 6.9% | |
| Inspection coverage of food establishment | 76% | 95% | 81.5% | 76% | 64.43% | |
| Number of registered food | 2739 | 7470 | 2,879 | 4,510 | 2,109 | |
| Consignment laboratory test coverage of food | 28 | 48 | 36 | 40 | 40 | |
| Post market surveillance coverage of food available in the market | 12 | 36 | 5 | 9 | 5 | |
| Number of food establishments that implement internal quality assurance system | 35 | 50 | 521 | 714 | 404 | |
| Inspection coverage of medicine manufacturers and suppliers | 75% | 85% | 95% | 66% | 48.7% | |
| Inspection coverage of medical devices manufacturers and suppliers | 40% | 100% | 50.4% | 100% | 70.55% | |
| Number of registered medicines/ vaccines | 4729 | 3220 | 1266 | 1007 | 579 (70%) | |
| Quality, safety and efficacy ensured of traditional medicines in the market | 0 | 6 | 0 | 0 | 0 (target 4) | |
| Consignment laboratory test coverage of health products | | | 2475 | 100% | 221 | |
| Post market surveillance coverage of health products | | | 352 | 417 | 223 | |
| Number of new local pharmaceutical manufacturers compliant with international GMP | | | | | | |

### Achievements & drivers of success

The ratification of proclamation 1112/2019 has enabled EFDA to focus on health products only and to be responsible to ensure the safety and quality of food, efficacy, safety and quality of medicine, and safety and performance of medical device, cosmetics, tobacco and tobacco products control. Following this EFDA is undergoing organizational restructuring at federal and regional level. Aligned with HSTP II, EFDA developed the second Food and Health products regulatory sector transformation plan (FHRSTP-II) which covers the period between 2013-2017 EFY (July 2020 -June 2025 and envisions to build a leading and excelled food and health products regulatory system.

The regulatory body is working towards ensures quality and safety of drug, food and medical equipment through registration, licensing and quality control systems. In addition, it has provided certificates of competency (CoC) to newly established health and health related services; conducted product-and risk-based post- license auditing inspections on domestic and foreign providers taking into consideration their previous performances because of shortage of man power and resources. Similarly, post-licensing inspections were carried out on food manufacturers, importers and distributors, some even have implemented internal quality management system (IQMS) in food facilities. In the case of controlling illegal food trade and food adulteration in the market, two approaches were used; market assessment and surveillance, and intelligence-based operations in collaboration with key stakeholders like regional health regulatory body and police on selected food items. The inspection of medicine has obtained ISO 17020 accreditation from the Ethiopian National Accreditation Organization. On the other hand, preparation was made to meet the requirements of ISO17025 accreditation for food laboratory, and application has been submitted for 10 parameters to the National Accreditation Office of Ethiopia. In addition, the authority maintained the ISO 17025 international accreditation of the main pharmaceutical laboratory during the fiscal year. EFDA is establishing food, medicine, and medical device quality control center, which will be built in Addis Ababa's Akaki Kaliti sub-city, with funding from the World Bank. It is also building a vaccine lab in Hawassa. EFDA has reviewed and dropped the practice of limiting the number of private importers (number of agents for one supplier) to the maximum of three only and has allowed the supplier to decide its own manageable number of agents, to promote availability of medicines in the private sector.

The regulatory information system (e-RIS) is in place enabling online GMP inspection application, registration (i-register), inspection and port clearance (i-clearance), i-import, online adverse effect(AE) reporting, I-verify, track and trace system to establish an effective, transparent, and accountable system that ensures adherence by all state and non-state actors to national health regulatory standards and legal frameworks. These digital systems are currently managed and supported by a partner. EFDA, has also developed a web-based food safety alert and notification system for rapid exchange of food safety incidents information among stakeholders, which enabled the public and organizations to report food safety incidents. Post marketing(PMS) was planned based on reagent availability and for port inspection there is a consignment list developed. The regulatory authority has very limited mini-labs at branch level to be used at the entry and exit ports. EFDA also developed different guidelines, directives and regulations like guideline for emergency use authorization of medicines for public emergency situations; medicines waste management & disposal directive, Medicine MA directive; medicine donation control directive and Pharmacovigilance directive to mention some. Improved adverse drug event(ADE) reporting with safety investigation task force and pharmacovigilance(PV) advisory committee has also been established at the regional and federal level, respectively. COVID 19 creates an opportunity for PV activities to receive better attention by the leaders and politicians as PV becomes mandatory to get COVID-19 vaccines into the Country. A serious adverse drug reaction investigation and causality assessment was conducted on about 13 cases of COVID-19 vaccination. Moreover, reports on vaccination safety and adverse events were collected from different parts of the country and submitted to WHO's database. This leads to the integration of PV into the public health programs(PHPs) and the formation of safety and regulatory committee led by EFDA which is cascaded down to the regions.; Currently, the ADE detection rate has increased to 35,000. Three traditional medicines are under clinical trial. The Ethiopian Food and Drug Authority prepare the regulatory standards and specifications for medicines and implement them upon its approval from appropriate organization. However, no official herbal remedy has yet been officially confirmed to ensure the overall quality of herbal medicines. In some regions EFDA work in collaboration and conduct plan alignment with the regional regulatory body.

**Challenges**

EFDA is still not able to attract and retain experienced regulatory staff, as it is subject to civil service regulations. As a result, it has Inadequate HR Capacity (in number and technical skill) and budget. Efforts to train regulatory experts in the universities is initiated, although, the lack of qualified staff affects all its functions negatively. EFDA's application, annual retention and inspection fees are very low compared to international standards, and do not even cover the costs of undertaking these activities. The fees collected are transferred to MOF and agency is not allowed to retain these fees.

The existence of different structures at federal and regional levels requires mutual understanding and agreement between them to enforce regulations. However, due to gaps in this area, there is inadequate enforcement of EFDA's regulations in the regions and the lower-level structures (issue of autonomy). The MTR team has observed role confusion between EFDA and regional regulatory body as the regional regulatory body is structured as FMHACA.

Although it was one of the initiatives currently, there is no established regulatory system for safety and quality of blood, blood products , human tissues and organs so far, though there is registration of such products;

Shortage of QC reagents and Mini labs due to procurement bureaucracy has affected its PMS, consignment tests and quality control tests for market authorization. Although, there is a huge improvement in ADR reporting associated with COVID 19 vaccines, there remains a lot in ADE reporting activities from other classes of medicines, pharmacovigilance communications also remain to be the biggest gap at RHB & HF level. According to the respondents, one of the reasons for delays in registration was attributed to inadequate understanding of registration guidelines by customers.

Currently, there are five cGMP compliant local manufacturing companies out of the twelve manufacturers in the country supplying their products to the local market, implying lenient regulatory enforcement by EFDA (42%). For successful pharmaceutical exports, the regulatory authority needs to be seen by the global community as applying strict regulatory controls. EFDA might thus have to enforce the remaining manufacturing companies to become cGMP compliant ASAP or close or suspend non-GMP manufacturers. The Regional Bioequivalence Center at the college of health sciences in Addis Ababa University is still not capacitated and functional to provide the anticipated services for the manufacturers. EFDA uses a number of electronic/digital applications for its activities, but the regulatory body is totally dependent on partners for its IT system development, data management and support. The 2018 Ethiopian Food and Nutrition Policy (FNP), identified food safety and nutrition as a governmental responsibility at the federal level. Despite an enabling policy framework, federal food safety regulation, enforcement, and compliance is spread across three Ministries (Ministries of Health, Agriculture, and Trade) and lack clarity and integrated approach.

**Recommendations – Actions within the coming three years**

i. Strengthen the regulatory harmonization not only with countries in the region (African Medicines Agency, IGAD, EAC) but also establish role clarity between EFDA and the RHB regulatory bodies by having a separate team for food and medicine regulation in the regional health bureaus;

ii. Developing and implementing a regulatory capacity development and retention plan that ensures the existence of specialized staff (numbers skills and mixes) that are capable to undertake the regulatory functions. Until adequate capacity is in place, EFDA need to continue outsourcing of the registration process to local capable universities and regulatory service providers.

iii. Enhance post-marketing surveillance or inspections not only on medicines and food but also on calibration of medical devices (e.g., blood pressure apparatus and test kits). EFDA need to work in collaboration with the RHB regulatory bodies and set similar minimum health and pharmacy service and regulation standards in agreement with the regions and effect law enforcement throughout the country.

iv. The regulatory body need to own and manage its regulatory information system so as not to be fully dependent on partners by building internal IT system development and support capacity to ensure data ownership, confidentiality and sustainability.

v. The regulatory body had developed a document with national measurable indicators that help to measure the performance of the sector for improvement(2021). There might be a need to add indicators that measure relevant outcomes especially that are related to the WHO Global Bench Marking Tool (GBT) indicators so that the regulatory body will be able to attain and improve on the minimum maturity level (Level lll) that designates the existence of stable, well-functioning and integrated regulatory system. Strengthen stakeholders' coordination to improve communication on medicine safety updates and Integrate PV indicators into DHIS-2 to ensure accountability and improve ADE reporting in the health system. Enhance awareness on importance of health regulation among the community using different communication platforms.

The second most important aspect of regulation planned in HSTP II is related to health professionals and services. The main targets were to strengthen the regulation of professional ethics and code of conduct of health professionals and traditional medicine practitioners; enforcing adherence of health and health-related facilities, both public and private to the Ethiopian health facility minimum standard; undertake competency assessment of all graduates before joining the health workforce; introduce and scale up clinical audits to ensure quality of practice in health facilities and engage private health care facility associations in health regulatory system .

The responsible body for regulation of health professionals, health and health related institutions is the Health and Health Related Institution and Professional Regulatory Lead Executive Office (HHRIPR-LEO) in the MOH. Before the launching of the new structure at MOH (January 2023), regulation of health professionals and institutions (health and health related) was organized under two separate Departments in the Ministry: The Health Professional Competency Assessment and Licensure Directorate and the Health and Health Related Regulatory Directorate respectively. This is a key achievement from the restructuring process which harmonized different regulatory activities, upgraded it to Lead Executive Officer level, organized it under 4 Directorates and was better staffed. Various regulatory documents are in place to provide legal framework for implementation. Accordingly, relevant proclamations, regulations, directives, and guidelines are available at the federal level as well as regional levels.

Registration and licensing of health professionals and traditional practitioners is conducted at the regional levels. The main strategy used is linking Continuous Professional Development (CPD) with licensing of health professionals in the last three years. License renewal is done every three years in most cases. However, in Oromia license renewal is done every five years. In order to renew license, health professionals need to accumulate 30 credit hours in CPD. There is good experience of close collaboration with professional societies. Societies are actively engaged in supporting different aspects of regulation i.e., designing strategies, guidelines, manuals, exam blueprint development, reviewing performance of graduates on COC etc...Furthermore, a Health Professional Council establishing proclamation was drafted by the MOH through support of a committee which comprised of wide participation from professional societies. The proclamation has passed through crucial steps of

formulation, review, presentation to the Attorney General Office and addressing comments from the latter. However, somewhere in the process, progress has stalled.

An assessment was made on health professional licensing practice in 365 hiring bodies (56% private , 44% public and 73% HFs) and reviewed 4991 files of health professionals (1581 from private and 3410 from public health organizations) (Alemneh et al, 2022). The assessment documented that there is no system for detecting fake licenses and controlling revoked licenses does not exist; about 33% of professionals work without license and 12% work with expired license; most human resource managers (88.2%) said that they had not received any training about health professionals' licensing; private institutions had better licensing practice than public counterparts and about 20% of hiring bodies had experience in hiring health professionals without a license.

Regulation of health and health-related facilities, both public and private (enforcing adherence to the Ethiopian health facility minimum standard). There are various progresses in terms of revising the current health facility standards and develop new standards for health and health related institutions.

The Ministry also has target of increasing proportion of HFs adhering to the Ethiopian health facility minimum standard from 43% to 48% in the current fiscal year. As of April 2023, the proportion has reached 62%, well beyond the target (2015 EFY 9-month report). However, a challenge reported is that most government HFs do not renew their license on time (MOH 2015; 9-month report). There are good experiences from the field in this regard. HFs in Amhara cannot get supply of medicines and medical equipment unless licensed. Similarly in Dire Dawa, facilities cannot operate unless licensed. Another major undertaking has been the development of a Master Facility Registry (MFR) to enhance informed decision making. The Registry is regularly updated and is a comprehensive list of all health facilities (private, government and NGOs) in the country. The MOH has been supporting regions in terms development of data collection tools, training for the data collectors and transferring of budget. Reconciliation of MFR with DHIS2 and eCHIS is in process.

MOH and regional regulatory bodies have developed guidelines and tools to help inspect such institutions. There is good experience from Addis Ababa FMHACA who have developed various guidelines and tools for regulating a range of health-related institutions. These documents have also been adapted by EFDA for federal level engagement. MOH has also developed a standardized inspection tool for four-star hotels using the international standard, reviewing literature, and scientific knowledge. Another key initiative is the designing of a Health Professionals Competency Assessment and Licensure program whereby first-degree graduates have to undergo a competency assessment exam and get registered and licensed before joining the workforce. Accordingly, competency assessment exams were developed initially for nine medical professions ((Medicine, Nursing, Health Officer, Nurse Midwife, Anesthesia, Medical Laboratory Technology, Pharmacy, Dental Medicine and Medical Radiology Technology). Later on, the competency exam system has expanded to four additional professions (Emergency and Critical Care Nursing, Psychiatric Nursing, Pediatrics and Child Health Nursing and Environmental Health Care Professions) increasing the list to 13. Consequently, between July 2019 and May 2022, 84, 848 professionals that graduated from public and private training institutions underwent competency assessment exam. Of these, only about 46% have passed the exam (APR, 2014). Assessment by MOH in selected HEIs (49 HEIs – 20 public and 29 private) has identified the main reason for the poor performance of graduates on licensure exams is the difference in the method of assessment used by higher education institutions (HEI) and that employed during licensing exams (MOH, 2021). The licensure exam uses a Blueprinting or table of specification approach, which allows developing an exam that encompasses content and learning objectives of a study program and

expected competencies. Assessment in selected HEIs has documented that 59% of assessed HEIs never used exam blueprint for academic assessment process and the ones that use exam blueprints are based on curriculum and course syllabus as against task analysis which is the approach employed in COC (MOH, 2021). The other challenge was awareness creation to students mainly focused on graduating class who do not have much time left to prepare before COC examinations (ibid).

Introduce and scale up clinical audits to ensure quality of practice in health facilities.

Clinical audits are key undertakings that would go a long way in improving quality of care. However, such audits have rarely been conducted by the Regulatory due to lack of professionals with diverse specialties and budget limitation to hire such expertise when required.

Engage private health care facility associations in health regulatory system. MOH regulatory unit has engaged the private health facility associations in the development of HF inspection tool. Structure of the regulatory bodies lack harmony between regions and in most cases there is no delineation between service provision and regulation functions. As it was mentioned above, the health professionals and institutions regulatory body is under the MOH at the federal level. Progress was made in formulating a proclamation to establish Health Professional Council that would assume regulation of health professionals based on global best practices. The plan is to have representatives from the government, societies, the public and other key stakeholders, and it provides an opportunity to have multi-disciplinary expertise. The draft proclamation was reviewed within the MOH and was shared with the Attorney General who provided comments. The Attorney General's comments have been incorporated and re-sent, however, the process stalled.

The Regulatory Units at federal as well as regional levels face capacity issues. There is budget limitation affecting the extent to which regulation activities are carried out as expected. For example, clinical audits which are key interventions to improve quality are rarely conducted at federal or regional level due to budget shortage to hire technical experts. At the federal level, the LEO also faces adequate staff skill mix i.e., they do not have physicians, pharmacists etc. as they cannot afford to hire and keep such experts. In addition, they do not have partners that support its interventions regularly. Currently, they only have one technical assistant (TA) and his contract with previous partners ended in September 2022 and he has not been paid since, but he is still working (as compared to 90% of existing staff hired as TA under Health Infrastructure LEO). During the restructuring, most of the staff chose to compete and move to other Directorates where there are better partner supports and hence better incentive mechanisms. The situation is worse in most of the regions.

At the regional level, Addis Ababa, Gambella and Somali Regions have independent Regulatory Bodies; in Gambella and Somali the Regulatory is accountable to the RHB (semi-autonomous). In Somali Region, there is regulatory structure down to the woreda level. In the other regions, the regulatory is organized just as one Directorate under the RHB. Exceptions are SNNP and Southwest Regions that have established the regulatory as an Authority under the RHB and they get budget directly from Bureau of Finance. Most of the regions are in the process of revisiting their structure and they are at the final stage in Dire Dawa to reformulate it towards independent body. Of the regional structures, the one in Addis Ababa is the strongest and the most independent. The Food Medicine and Health Care Administration and Control Authority in Addis Ababa City Administration is accountable to the Mayor's Office, gets its budget from Bureau of Finance, its well budgeted and staffed.

**Table 12: Typology of Health Regulatory Structure in Regions**

| Regions | Full Name of the Regulatory Body | Housing | Number of Staff and professional mix | |
|---|---|---|---|---|
| Tigray | Tigray food medicine and health care Directorate | Within RHB | 4pharmacy<br>1 MPH<br>5 Environmental MPH<br>5 HO MPH<br>1labratory | Licensure<br>2HO MPH<br>1Health service management<br>1HIT<br>TOTAL 19 |
| Afar | Food and medicine product and health and health related regulation directorate | Within RHB | 1 midwife<br>1environmental<br>2drugist | 3MPH<br>5 BSC nurse<br>1Msc<br>TOTAL 13 |
| Amhara | Food and medicine product and health and health related regulation directorate | Within RHB | 1MPH Enva<br>1MPH(Ho)<br>2MPH(Nurse)<br>2MPH(pharmacy) | licensing<br>1Mpr(nurse)<br>1HO<br>TOTAL 8 |
| Oromiya | Food and medicine product and health and health related regulation directorate | Within RHB | 1mph(HO)<br>4MPH(Enva)<br>1MPH<br>MSC and | 2MPH(Pharma)<br>1 MPH(midwives)<br>1 Environmental health<br>TOTAL 10 |
| Somali | Food medicine health care administration and control authority | Independent Authority | TOTAL | |
| Benishangul Gumz | Food and medicine product and health and health related regulation directorate | Within RHB | 5environmental<br>2 HO<br>1BSC nurse | 1 MPH<br>1phrmacy<br>1 BSc<br>TOTAL 11 |
| SNNPR | Food and medicine product and health and health related regulation directorate | Within RHB | 3 environmental<br>3 health officer<br>1professional nurse | 2 pharmacy<br>2 laboratories<br>TOTAL 11 |
| Sidama | Food and medicine product and health and health related regulation authority | Within RHB | 3 MPH<br>TOTAL | |
| South West | Food and medicine product and health and health related regulation authority | Within RHB | 2 nurse<br>1 health education and promotion | 1radiology<br>1 pharmacy<br>TOTAL 5 |
| Gambella | Food medicine health care administration and control authority | Independent Authority | 2 clinical nurse<br>1 druggist<br>1 pharmacy | 2 non health professional<br>TOTAL 6 |
| Harrari | Food and medicine product and health and health related regulation directorate | Within RHB | 2 environmental health<br>1 food technology | 1 nurse<br>3 pharmacy<br>TOTAL 7 |

| | | | | |
|---|---|---|---|---|
| Dire Dawa | Food and medicine product and health and health related regulation directorate<br>It is on the process of reform to be changed to semi-autonomous authority named food, medicine and health control authority. | Within RHB | 2pharmacist<br>1HO<br>8 environmental health<br>1 nurse | 1MSC in applied public health<br>1 environmental science<br>TOTAL 14 |
| Addis Ababa | Food medicine health care administration and control authority | Independent Authority | For health and food and drinking institution regulation<br>Lab 4<br>pharmacy 5<br>environmental 26<br>Nurse - 4<br>HO – 10 | professional licensing<br>HO - 8<br>nurse 3<br>pharmacy 2<br>midwives1<br><br>TOTAL 63 |

**Challenges and gaps**

General Health professionals and health and health related institutions regulatory bodies lack independency and legal framework to operate on a legal ground .The Regulatory is organized as a Lead Executive Office under the MOH. Similarly, regional regulatory structures are quite diverse and most lack indolence (they are Directorates under the RHB) and are not well budgeted and staffed. The best case is Addis Ababa which is independent, well budgeted and adequately staffed. The plan to establish HP Council went a long way but stalled, which limits the opportunity to have an independent regulatory body for health professionals with involvement of key stakeholders and expertise. The regulator lacks an adequate number of staff and the required professional mix such as physicians; pharmacists etc. are in dire shortage. It also faces shortage of budget and support from partners across the board (federal as well as in regions). Because of structural and capacity constraints, the regulatory function has not been as strong as expected. Key functions such as clinical audit does not take place, staffs are not able to conduct surprise inspections (evenings, weekends etc.) in health and health related institutions (no overtime payment). Regulatory bodies have not been able to attract and retain experienced staff.

There is a problem in inter-sectorial collaboration especially with Ministry of Trade, Tourism, Environmental and Forestry, Customs, and Police to enforce regulatory measures. There is a lack of framework for cross-sectorial collaboration within regions as well. Regulatory measures could potentially involve conflict with institutions that might not receive favorable feedbacks during inspection. Some of the feedback could go as far as closing institutions temporarily until the issues are addressed. There have been cases within regions whereby regulatory personnel have been physically harmed. Risk mitigation and protection measures remain to be developed and instituted.

There are many licensed CPD centers (200 plus) and about 40 accreditors. Neither the accreditors nor the Regulatory Body at the MOH has adequate capacity to regularly inspect CPD centers to ensure quality of course content, trainers, training venue and infrastructure etc. Cases of fraud and malpractice around CPD practice have been reported. Some CPD centers are considering it as a business, and it has been reported that certificates are being sold to professionals without attending training. There is a potential conflict of interest that could emanate from the practice of licensing the same institution as a CPD center and accreditor e.g., universities, professional societies. Graduates performed poorly on COC exams, with only 46% passing from 2011 to 2014. It was discovered that the majority of HEIs

do not have a mechanism in place to support individuals who fail, such as organizing tutorials, offering opportunities for clinical practice, and studying at the library. Health Professional licensing methods still have issues. Data shows it is typical to hire experts who do not have a license or whose license has expired. As compared to private competitors, public hiring officials have inadequate systems. itt was seen that limited proportion of medical doctors practice according to the code of Ethics. Related matter is increasing claims of ethical breach being reported specially around operation rooms and related professionals such as gynecologists, general surgeons and others. There are two sets of rules for regulating private and public HFs, with the former being more stringent. It has also been proven that the majority of public HFs do not renew their license.

**Recommendations for the next three years**

i. Support the endorsement of HP Council Proclamation. MOH should also support regions in the ongoing process of structure review to develop a more standardize regional regulatory structures.

ii. Strengthen ongoing efforts to strengthen CPD such as building verification mechanisms and establishing unique identifier ID, linking trainer center to regulatory information system and making hiring bodies accountable to record CPD related data of their staff as part of HR filing system.

iii. There is need to strengthen quality of pre-service training of medical professionals in collaboration with the MOE to focus on skill and competency-based approach and integrating medical ethics knowledge more effectively. Furthermore, MOH should work with HEIs to create better awareness among students and faculty about COC, reformulate exam modalities, and also arrange post licensure exam support to those that fail.

iv. MOH should push for uniform HP licensing renewal period. (Currently it is done every 3 years in SNNP but every 5 years in Oromia).

v. There is a need to develop legal framework upon which the regulatories operate.

vi. Consider moving to make regulatory body an independent body.

## 3.5. Improve Human Resource Development and Management

**Achievements**

The mid-term evaluation of HSTP II revealed that progresses has been made in improving human resource development and management. In the HSTP II period, improved capacity-building activities were observed. One of the main achievements was in continuous professional development (CPD). Several regions started to require CPD for license renewal and the FMOH accredited 205 institutional CPD providers and 37 CPD accreditors. In addition, at the national level professional standards were developed and approved for 31 professions.

Improved efforts on motivation and retention of the health workforce were made, such as the introduction and implementation of the special risk allowance payment guideline for COVID-19 workers, life insurance coverage for the health workforce in case of fatality, and conducting national recognition week for acknowledgment of all stakeholders involved in the response against COVID-19. In addition, the Federal Ministry of Health permanently employed many of the health professionals who had been temporarily deployed in the fight against the COVID-19 pandemic. An assessment conducted by Jhpiego

and Federal Ministry of Health on motivation, job satisfaction and associated factors among health professionals in the public health sector of Ethiopia indicated that the overall job satisfaction of health professionals was 67.5% (68.0% in health centers and 61.5% in hospitals), and it has increased by 14.3% between 2014 and 2022. The assessment also revealed that the overall annual attrition among all health professionals is 4.1% , and it has significantly decreased between 2014 (4.5%) and 2022 (3.5%) across the five professional categories (medical doctors, health officers, nurses, midwives, and anesthetists) that were assessed at both time points.

During the HSTP II period, the total health workforce employed in public health facilities showed an increasing trend; with 219,386 health workers employed in 2012 EFY, 301,710 in 2013 EFY, and 330,025 in 2014 EFY (excluding the Tigray region data). Based on 2014 EFY data, the total health workforce was about 342,899, including university hospitals and private health facilities. Of these workers, 221,046 (64%) were health professionals and the remaining 121,853 (36%) were administrative/ supportive staff. The national health workers density for core health professionals (Doctors, Health Officers, Nurses, and Midwives) has improved; increasing from 1.0 in 2012 EFY to 1.16 in 2013 EFY and 1.23 in 2014 EFY.

Improved results were also observed in strengthening health facility-based education and in-service training of existing health workers. These achievement included: integrating academic activities into service provision, integrating research into teaching hospitals; redesigning health workforce intake approaches through joint Ministry of Education and Ministry of Health planning and integration mechanisms; enhancing demand-driven health workforce forecasting, planning, and development; and empowering women in the health sector.

**Challenges**

Though the gains made in improving human resource development and management is undeniable, there is still gap in achieving the transformation agenda, strategic direction and initiatives, and targets related to human resources for health set in the HSTP II. The capacity-building process requires continuous effort because standards of care evolve over time and health workers frequently change jobs and need continued motivation. In order to meet quality goals, the FMOH and regions need to complete provider competency assessments on a regular basis, and improve health facility-based education. A number of improvements need to be made to pre-service education, as the mass training of health professionals has compromised the quality of education. Inadequate health workforce motivation, retention, and performance management mechanisms are still a concern due to a lack of budget and uniform motivation and incentive packages.

Low health worker density and inequitable distribution of health workers are also critical areas to be addressed. The national health worker density varies greatly from region to region and from rural to urban areas.

Other items on the unfinished agenda include: establishing a health professionals' council and engagement of health care workers, developing and implementing strategies to enhance health workforce safety, and women's empowerment, especially in leadership.

Finally, COVID-19 and the conflicts negatively affected human resource development and management. COVID-19 affected the availability and distribution of HRH with health workers dying, leaving the sector, and being pulled away from their regular stations to staff COVID units. In addition, the conflict in some regions especially in the northern part of the country resulted in death, disability, looting, rape, psychological trauma, displacement, and overburden on human resources for health.

**Actions within Three Years**

Based on the midterm, review the following recommendations are made to assist Ethiopia in meeting its HRH goals:

- Institutionalize a system providing incentives for HRH, especially for rural and remote areas.
- Emphasize the allocation of HRH budget and other resources to conflict-affected areas
- Strengthen and integrate information systems to ensure up-to-date HRH data and data sharing across the HRH sector

**Actions for Strengthening systems on annual basis**

- Align school goals with community needs & student interests
- Revise organizational and career structures in the health system
- Fully implement the HRH standards for health facilities
- Invest more in the PGE of physician surgical specialists and PSE of clinical officer surgical specialists.
- Generate resources for HRH from various sources (domestic, international, and other sources)
- Develop the capacity to absorb and utilize effectively and transparently both domestic and international resources.
- Integrate production, employment, and migration policies involving education, labor, and other relevant sectors.
- Professionalize the HRH field and Institutionalize HR management at all levels.

Below is the summary table with the various labour market elements of the health workforce life cycle and the recommended activity. The priority actions are highlighted in green.

**Table 13: Human resource market elements and major recommendations to address them**

| Labor Market Elements | Recommended Activity |
|---|---|
| Data/Analysis | • Strengthen and integrate information systems to ensure up-to-date HRH data and data sharing across the HRH sector |
| Policy/Planning/Regulation | • Professionalize the HRH field and Institutionalize HR management at all levels. |
| Financing | • Generate resources for HRH from various sources (domestic, international, and other sources)<br>• Emphasize the allocation of HRH budget and other resources to Special attention shall be given to HRH budgeting in conflict-affected areas |
| Professional Associations | • Incentivize professional associations to provide CPD |
| Pre-Service Education (PSE, PGE, CPD, IST) | • Align school goals with community needs & student interests<br>• Invest more in the PGE of physician surgical specialists and PSE of clinical officer surgical specialists. |
| Recruitment & Distribution | • Fully implement the HRH standards for health facilities |
| HRH Management | • Professionalize the HRH field and Institutionalize HR management at all levels. |
| HRH Performance | • Continue integrating PSE into health facilities |
| Burnout/Retention/ Retirement | • Institutionalize a system providing incentives for HRH, especially for rural and remote areas.<br>• Revise organizational and career structures in the health system |
| Managed Migration | • Sign bilateral agreements on the managed migration of health workers |

## 3.6. Enhance Informed Decision-Making and Innovation

### Major achievements and drivers for success

The mid-term review of the second Ethiopian Health Sector Transformation Plan (HSTP) highlights the implementation of initiatives to enhance informed decision-making and innovation in the health sector. This section examines the key findings of the mid-term review, showcasing the achievements and drivers of success in promoting evidence-based information decision-making and fostering innovation.

There is increased leadership commitment to evidence-based information decision-making by the MOH as this is demonstrated by establishment of the Policy and Research Executive Office in the new restructuring. This office serves as a dedicated entity to promote evidence-based policy formulation and decision-making. To improve the development of evidence-based policies and strategies, EPHI and AHRI are tasked with undertaking basic and operational research. A total of 139 and 64 research articles, respectively, have been published in peer-reviewed journals over the past two years by EPHI and AHRI. The majority of the 45 studies on COVID-19 that were started and finished have improved the application of evidence-based COVID-19 epidemic control and response measures. Additionally, EPHI has been working hard to create vaccine production packages and solutions that are compatible with both traditional and modern medicine. Accordingly, a total of 32,220 doses of the anti-rabies vaccine were produced in the EFY 2014. The TB vaccine development research, the COVID-19 vaccine effectiveness study, and the study on the Anopheles Stefani mosquito in selected urban areas are only a few of the studies that AHRI has been conducting. These research initiatives focus on addressing key health challenges, evaluating program effectiveness, and generating evidence to inform policy and practice.

The establishment of the national data management center at the Ethiopian Public Health Institute (EPHI) is another significant achievement. This center serves as a hub for data management and analysis plays a vital role in conducting analytics, modeling, and forecasting work in priority health areas. The commemoration of an annual data week from national to health facility levels is another good achievement. The data week activities promote the importance of accurate and reliable data for decision-making and reinforce a culture of data-driven decision-making at all levels of the health system. In terms of data reporting, improved reporting rates of Public Health Emergency Management (PHEM) data in Addis Ababa, Dire Dawa, and Harari through the District Health Information System 2 (DHIS2) was achieved. The review also notes improvement of the availability of quarterly data analytics reports at the national and regional levels. These reports provide feedback on performance and data quality, enabling stakeholders to track progress, identify gaps, and make informed decisions. The regular dissemination of data analytics reports strengthens data utilization and promotes a culture of accountability and continuous quality improvement.

Another area of success is the improved practice of data use for supplies forecasting. Evidence generated by all hubs of the Ethiopian Pharmaceuticals Supply Agency (EPSA) informs the procurement of supplies, ensuring an evidence-based approach to supply chain management. This improvement in supplies forecasting has resulted in a reduction in supply wastage, aligning with recommended ranges and improving the efficiency of the supply chain. Additionally, the mid-term review highlights the initiation of a performance management system for evidence-based planning and performance management at the EPSA and the Ethiopian Food and Drug Authority (EFDA). This system enables the monitoring of performance indicators, facilitates evidence-based planning, and supports performance management processes.

In conclusion, the mid-term review showcases significant achievements in enhancing informed decision-making and promoting innovation. The increased leadership commitment, collaboration with academic and research institutions, establishment of data management centers, data quality initiatives, improved data reporting rates, availability of data analytics reports, evidence-based supplies forecasting, and performance management systems are all drivers for success in promoting evidence-based information decision-making and fostering innovation in the Ethiopian health sector.

**Challenges and gaps**

Several challenges and gaps have been identified in the implementation of this strategic direction. The first key challenge identified is the suboptimal level of data quality. The findings indicates that the timeline of reports is only 65%, indicating delays in reporting. Additionally, there is a significant gap between survey results and routine reports, highlighting inconsistencies in data collection and reporting processes. A notable gap is the irregularity of routine data quality assessments (RDQA) at the national and regional levels, which are essential for ensuring data accuracy and reliability. The second challenge heighted is the low culture of information use for evidence-based planning and decision-making. Despite efforts to promote data-driven decision-making, there remains a gap in translating data into actionable insights and using evidence for planning and decision-making processes. The functionality of Performance Monitoring Teams (PMTs) is another area of concern. The review reveals that PMTs often lack rigor beyond conducting meetings, suggesting a gap in their effectiveness in monitoring and evaluating the performance of health programs. Low Health Management Information System (HMIS) reporting rates by private health facilities are identified as another challenge as only 35% of private health facilities have adequate reporting rates. This poses a barrier to comprehensive health information management and affects the accuracy and completeness of health data. The review

also reveals that birth and death notifications are minimal, with notification coverage of only 69% for births and 4% for deaths. This indicates a gap in the registration and reporting of vital events, which are crucial for planning and monitoring health interventions. Ethiopia has also limited capacity to conduct surveys, program evaluation, and other non-routine data sources due to lack of resources, expertise, and infrastructure. It is also reported that there is poor engagement of stockholders in research agenda identification and prioritization and hence there is gap in alignment of stakeholders' interests and challenges. There is also limited uptake of research output for policy planning and program design. Another challenge is the inadequate number of Health Information System (HIS) workforce. Only 5% of health institutions have a sufficient number of HIS personnel, indicating a shortage of skilled workforce in health information management. In addition, there is a high turnover of staff due to dissatisfaction and demotivation. The mid-term review has also highlighted the difficulty faced by the Ethiopian Pharmaceuticals Supply Agency (EPSA) in optimizing staff benefit packages due to legislative constraints.

**Recommendations**

i. Develop a national data analytics platform that generates and shares actionable insights on selected impact indicators, quality dimensions, and equity aspects;

ii. Elevate the national data access and sharing guideline to the regulation level.

iii. Aligning the planning timelines with regional planning and budget decisions to ensure seamless coordination and resource allocation;

iv. Strengthen Integrating Quality Improvement (QI) and Performance Monitoring Teams (PMTs) at the health facility level and promote department-level performance reviews; Expanding mentorship and coaching of PMT members to build their capacity to analyze, interpret, and use data

v. Ensure the regularity of data verification processes and implementing feedback mechanisms;

vi. Invest on advancing the use of emerging data analytics technologies, such as data science, machine learning, and artificial intelligence;

vii. Develop an open data access portal and providing online access to health data for researchers and citizens is another significant recommendation.

viii. Generating and disseminating evidence by triangulating data from routine and population-based sources

ix. Consider redesigning Health Information Technology (HIT) training and developing a new curriculum for data stewards that includes healthcare applications of emerging technologies.

x. Incentivizing improved organizational and individual-level performance by continuously monitoring, reviewing, and analyzing performance data.

xi. Develop a multi-year calendar of different national surveys, mobile resources, and timely conduct surveys and disseminate results

xii. Establish research advisory council, develop priority thematic areas for health research, mobilize funding for priority research areas, and prepare policy briefs and organize policy dialogues

## 3.7. Improve Health Financing

**Table 14: Progress in meeting health financing targets**

| Indicators | Baseline | 2015 (mid-year) Target | Achievement |
|---|---|---|---|
| OOP as a share of Total Health Expenditure(THE) | 31% | 28% | No Data |
| General Government expenditure on Health ( GGHE) as a share of total general government expenditure | 8.10% | 9% | 8.71 |
| Total Health Expenditure per capita (USD) | 33 | 37 | No Data |
| Proportion of Eligible HHs enrolled in CBHI | 49% | 63% | 81% |
| Proportion of Eligible HHs enrolled in SHI | 0 | 45% | 0 |
| Incidence of catastrophic health spending | 2.1 | 2% | No data |

As indicated in the above table, general government expenditure on health as a share of total general government expenditure is short of the target set. In fact, it has decreased in 2014 EFY to 8.71% from its level of 10.51% in 2013 EFY. On the other hand, progress in the coverage of community-based health insurance (CBHI) was much higher than the target set, which highly contributes to the achievement of universal health coverage, particularly at the primary health care level. Unlike the progress on CBHI, social health insurance (SHI) has not commenced and the target set has not been achieved. Progress on total health expenditure per capita, OOP as a share of total health expenditure, and the incidence of catastrophic health spending was not possible to measure as there was no data in mid-2015 EFY as the National Health Account was not conducted after 2012 EFY or 2019/2020.

### Relevance of the initiatives

The initiatives stated both in the transformation agenda and strategic directions are relevant, with the exception of reforming the cost recovery mechanism. With the current level of high government subsidy in the provision of health services at different levels of care, the low ability-to-pay of communities, and low health insurance coverage, moving from such a high level of subsidy to cost recovery doesn't seem feasible and timely. Rather, the move should be to strengthen the cost sharing mechanism through proper methods of user fee revision informed by the cost of health services and the ability to pay of the population. Further, although their relevance is unquestionable, there is repetition and overlap in initiatives between the transformation agenda and strategic direction. For example, performance-based financing and health insurance are included in both the transformation agenda and strategic direction initiatives. Further, there is a lack of clarity on the "reforming the role of FMOH in health financing to improve..." initiative stated in the strategic direction.

### Achievement

Resource mobilization from different sources for the COVID response was encouraging. It was possible to mobilize close to US$411.6 million in the 2013 EFY from government, local, and development partners. Further, development partners were flexible enough to shift resources for COVID-19 and other emergency responses. In addition, development partners (SDG PF contributors, Bilateral partners, UN organizations, the Global Fund, GAVI and Foundations) have also disbursed US$ 316.2 million in 2014 EFY, though it has decreased from its level of US$ 388.2 million in 2013 EFY. Revenue retention and utilization (RRU) has continued to serve as the lifeline of health facilities in the absence or inadequate

allocation of budgets for drugs and operational activities from treasury at various levels of health care. RRU contributes close to 25% of the health facilities' total budget. In addition to RRU, the increase in the annual drug budget from Birr 180,000 to Birr 300,000 for each health center in Oromia Region is worth mentioning as a big achievement. On the other hand, there are regions that only allocate around Birr 60,000 per year for each health center from treasury. In addition to budgets from the Treasury and RRU, some health facilities have initiated the mobilization of additional resources from communities and local organizations. For example, Kebado Primary Hospital in Dara Woreda, Sidama Region, mobilized the community to purchase CBC, ultrasound, and laundry machines to provide the services as per community demand. In other woredas, they mobilized funds from the community and used them to construct additional rooms based on community demand. Such initiatives are encouraging to mobilize additional resources and improve service delivery, particularly if they align with the community's interests. However, to ensure sustainability, it needs to be systematized.

There are efforts to improve efficiency as well. In this regard, a diagnostic assessment was conducted, and an action plan on alignment and harmonization (one plan, one budget, and one report) was developed and approved to improve the efficiency of resource utilization from development and implementing partners. A financial management manual has been developed and implemented, and the financial reporting system has also been revised to ensure accountability in addition to the existing practice of reporting statements of expenditure (SOE). Channel 2 administration directive was also developed in consultation with regional health bureaus and approved by FMOH management and has been submitted to the Ministry of Finance for approval. The directive puts conditionality before the transfer of funds to the regions to improve utilization and liquidity. Further, the World Bank has supported the recruitment and financing of about 80 personnel to be deployed at lower levels to improve utilization and liquidation. Progress has also been made in including health financing indicators in the DHIS 2. Eight health financing-related indicators are included in the DHIS2, which can improve decision-making at various levels. But regular and complete reporting of the health financing indicators in DHIS 2 needs improvement.

One of the tremendous advances in the health sector is the expansion of the community-based health insurance (CBHI) program which is providing access to millions of households and significantly reducing financial hardship. Despite various challenges in the last couple of years, such as the COVID-19 pandemic and conflicts, the CBHI program has made a lot of progress. The main drivers of success are high political commitment, community awareness, and ownership at all levels of the system. This is reflected, among others by the endorsement of the CBHI proclamation. This is a big achievement in the CBHI program's implementation as it gives legal foundation for roles, mandates, and accountability in CBHI implementation, including implementing compulsory membership, increasing coverage to the poor, higher-level pool formation, increasing the share of general subsidy, and establishment of reinsuring mechanisms for insolvent schemes.

The total CBHI woreda coverage (excluding Tigray) has reached 980 woredas in 2022/2023, which is 84.7% of all woredas in the country, and it is a big jump from the 70% baseline in 2020. As a result, close to 12.2 million households (56 million individuals) are enrolled in the program as of 2022/2023, which makes the enrollment rate 81% that surpasses the target set for 2025 (80% enrollment rate). Close to 2.2 million households (18%) of the CBHI members are indigent (their contributions are covered by the government). The CBHI program has consistently demonstrated high renewal rates in the last ten years; for instance, the national renewal rate in 2022/2023 was 93% and 100% in some regions. This has contributed to improving health service utilization and increasing the internal revenue of health

facilities. One of the major successes recorded in the HTSP II period is the shifting of financing sources of the general subsidy from development partners (SDG PF) to the federal government, and a 150% increment in the share of general subsidy (from 10% to 25%) by the federal government. This has helped the CBHI program to be financially sustainable and affordable for its members.

There is modest progress in strengthening the strategic financing function of CBHI. For instance, a strategic purchasing scoping review was recently conducted, the CBHI benefit package revision is in the final stage, and the capitation payment mechanism is piloted and now in the scale-up phase. There are also encouraging efforts to document the beneficiaries of the CBHI program disaggregated by gender and level of income (contribution households and non-contribution poor households).

### Box 5: Good Practices in CBHI

There are some good practices in selection and increasing the coverage of the poor, collection mechanisms and establishing higher level pools in different regions. These are:

a) Amhara, Oromia, and Sidama regions have tried to increase indigent coverage by mobilizing resources from communities, cooperatives, development associations, and factory owners to complement government subsidies for indigents. Though this might not be a sustainable approach, it can serve as complimentary financing mechanism until the full implementation of the CBHI proclamation that declared the government will cover the CBHI contribution for indigents.

b) Integration of PSNP and CBHI programs in indigent selection in Addis Ababa can be taken as a best practice for integrating social protection services. A similar approach can be scaled up in other regions for woredas that are part of the PSNP project.

c) The collection of CBHI contributions using the bank system in Addis Ababa and Amhara regions is encouraging and has to be scaled up to other regions after reviewing the performance.

d) Initiation of unified pools in Harari, Dire Dawa, Borena, Hawassa, and Halaba. The recent promising movement to establish a unified higher-level CBHI pool in some zones and regions is highly commendable, but it also needs a systematic assessment to document the successes and challenges and make timely corrective measures.

**Challenges and gaps**

The share of general government expenditure on health as a share of general total government expenditure is not progressing well. It is still below 9% and quite low compared to the target set. Looking at the share of the health budget in the total government budget at different levels of administration sheds light on the extent to which the challenge exists. In this regard, the share of total health budget to total government budget at the federal level is small (max. 6.6% in 2013 EFY) compared to regions allocation of 10-15% of their total budget, with the exception of Addis Ababa (7%). In addition to the small share of the health budget in total government expenditure at the federal level, even this small share has decreased over the last three years (6.6%, 5.9%, and 3.4% in 2013, 2014, and 2015 EFY, respectively). A further look at the share of the health budget in the government budget from domestic sources at the federal level shows that it was very small and ranges between 1.8% and 2.6%, i.e., 2.1%, 2.6%, and 1.84% in 2013, 2014, and 2015 EFY, respectively. The budget constraint is manifested in the visited health facilities by the absence or limited allocation of the operational budget.

As stated in both the transformation agenda and the strategic direction of health financing, revision of user fees is one component of domestic resource mobilization. However, there is limited or absenceof support from FMOH to regions on the methods of user fee revision, and participation of health facilities in the revision process is limited. The revision was not well informed by the cost of health services in most regions. For example, revised user fees for lab and procedure services don't cover the cost of health services in the Amhara region.

The contribution of development partners (SDG PF contributors, Bilateral partners, UN organizations, the Global Fund, GAVI and Foundations) has also decreased from its level of US$ 388.2 million in 2013 to US$ 316.2 million in 2014 EFY. Further to these total contributions, the contribution to the SDG PG has decreased from its level of US$ 87 million in 2013 to US$ 44 million in 2014 EFY. The decrease in SDG PG could partly be explained by the low disbursement of the committed funds, i.e., only 57% in 2014 EFY, and a shift of resources to humanitarian response. The decrease in the contribution of development partners is against a background of huge investment needs of 1,420.2 million USD to recover the damaged health infrastructure in conflict-affected areas (FMOH, CIAPR, June 2022). The challenge of the decrease in disbursement of funds by development partners is also coupled with low utilization and liquidation of these decreased disbursements (48% in 2013 EFY). Limited digitalization and inadequate personnel capacity are among the major challenges affecting the utilization and liquidation rates. In addition to the challenge of resource constraints in the sector, coordination among health financing components (or different projects) and stakeholders at the federal and regional levels is limited, which affects the effectiveness of the interventions.

The implementation of the Essential Health Service Package (EHSP) is constrained by the absence of a clear investment and implementation plan. As a result, the required service provision norms, costs, and financing mechanisms were not clearly identified, and the feasibility was not assessed. For example, there are generous lists of exempted health services in the ESHP, which constitute 549 interventions (53.8% of interventions listed in the EHSP).

Despite the commendable progress, there are major gaps and challenges in the design and implementation of the CBHI program. There is slow progress in narrowing inequality to access the CBHI scheme as progress in increasing CBHI coverage in developing regional states is slow; though the number of indigents is increasing year by year ( 1.6 million [in 2020/2021], 1.7 million [in 2021/2022], and 2.2 million [in 2022/2023]), the progress in the coverage rate is low compared to the target set (100%) for 2022/2023) and selection criteria are not standardized within and across regions. The current flat CBHI contribution rates (which don't account for the difference in ability-to-pay) are regressive, can potentially be a barrier to enrolment for people with low income, and reduce the revenue generation capacity of the CBHI schemes.

Overall the sector has weak purchasing function, the limitation of which is reflected in different ways. There is poor contract management (accountability) between CBHI schemes and health facilities mainly due to the lack of alternative service providers in rural settings, and lack of provider and purchaser split, which has contributed to poor accountability. Though the capitation pilot is encouraging, the overall progress in implementing alternative provider payment mechanisms (to the currently practiced fee-for service) is slow, particularly in hospital setting. In addition, the provider payment mechanisms in place including the capitation are not well linked to Quality Improving mechanisms. There is inadequate clinical audit practice, especially the quality of clinical audit is poor. The level of training and experience of experts assigned to do the clinical audit for the CBHI program is not well aligned with the level of services they can supervise, especially for services provided in general hospitals and above.

Although the enrolment rates and commitment of government at all levels is encouraging, the sustainability of the CBHI remains a challenge due to a number of factors. Mandatory CBHI membership is not yet operationalized, which affects the cross-subsidization of health risks and the revenue mobilization capacity of the CBHI. The low CBHI premium rate compared to the cost of care is endangering the financial suitability of CBHI schemes. For example, the assessment conducted by EHIS showed that about 214 of the 696 (30%) of sampled schemes spent more than 100% of their revenue in 2022, which is concerning. In 2021/2022, 46 CBHI schemes in the Amara region were insolvent, which was reduced to six schemes in 2022/2023 after the revision of the premium rate. There is alarming increases in the share of hospital expenditure in the last couple of years as the share of services they provided was around 15%, but received 42% of the annual national expenditure of CBHI schemes and in some regions, it is higher than 50%. There was low disbursement of targeted subsidy (from the region and zones to the woreda schemes) compared to the enrolled indigents for a given year and CBHI schemes didn't get close to 87 million birr in 2020/2021 and 44 million ETB in 2021/22. For instance, the regional level targeted subsidy disbursement in 2020/2021 was 21% in SNNPR, 50% in Benishangul Gumuz, 56% in Sidama, and 60% in Oromia and Dire Dawa. Similarly, the targeted subsidy disbursement was zero percent in Afar, 41% in Gambella, 48% in Sidama, 61% in SNNP, and 75% in South West in 20221/2022. Though the progress in the CBHI scheme's annual audit is encouraging, there is still room for improvement. The proportion of CBHI schemes that underwent an annual audit was 85% in 2020/21 and 74% in 2021/2022. The annual audit deficit findings ranged from 14 to 19 million birr, and around 50% was returned. The progress in establishing a unified and higher-level CBHI pool is slow, and there are different pooling arrangements in the regions. There is a gap in conducting a comprehensive risk assessment, estimating the likelihood for a given risk to happen and its level of impact on the sustainability of the CBHI program (low, medium, high, and very high risk), and developing a prioritized risk mitigation plan. Manual-based health insurance functions (such as member registration, claim adjudication, and payment) and poor data management systems could lead to inefficiency, increase the risk of fraud, and endanger the sustainability of CBHI schemes. There is inadequate CBHI structure and high staff turnover as the salary structure is unattractive compared to similar roles in other departments. The CBHI structure in most regions is still based on the pilot phase structure, and it doesn't account for the evolution of the program. Though there is no organized data, large numbers of CBHI schemes were reported as non-functional in conflict-affected areas.

Although there were recent preparation efforts to start the SHI program for civil servants and pensioners; it was decided to postpone it, mainly due to fiscal space-related challenges the country face due the current context.

**Recommendations for the next three years**

- Improve advocacy at all levels, especially at the federal levels, for increased buy in at higher level political leaders for better allocation of resources to the sector as part of Program Based Budgeting and endorse the revised exempted service financing mechanism and introduce innovative financing-Resilience and equity fund; The Ministry, in collaboration with development partners, need also to exert an extra effort to mobilize the required funds from domestic and external sources as per the national reconstruction and recovery plan launched by the Ministry of Finance.
- The FMOH should spearhead the development of methods of user fee revision and support regions capacity to use the methods for revisions of user fees and active and meaningful participation of health facilities in the process is important

- The government should play a leading role in the design of Channel 3 projects and their implementation and need to exert more effort in revitalizing the joint annual resource allocation practice among stakeholders and strengthening the coordination and governance of health financing components and stakeholders is critical.
- Revisiting the EHSP and developing an investment and implementation plan
- Standardizing exempted services across regions, developing realistic lists, devising alternative financing sources for services and strict enforcement of reimbursement to health facilities through the endorsement and implementation of the resilient and equity funds
- Push the shift to program-based budgeting at the lower level, as is the case at the federal level, and strengthen the integration of the resource tracking systems.
- Enhance access to the health insurance component especially to the CBHI, through: (i) accelerate the coverage of the poor through integrating mechanism of identification of the poor with social security programs such as PSNP (in PSNP districts) and enhance the coverage of indigents by enforcing the CBHI proclamation and introducing innovative approaches such as mobilizing resources from various stakeholders as a social responsibility; devising strategies to operationalize mandatory CBHI membership such as linking it with the provision of other social services; developing a tailored CBHI strategy for emerging regions that accounts for various contextual factors such as service availability, HCF reform status, pastoral settings, and health system capacity and develop a tailored strategy or support to revitalize CBHI in conflict-affected areas.
- Enhance CBHI sustainability through developing a road map that can guide the progressive realization of strong strategic purchasing functions; aligning the CBHI premium rate to reflect the cost of care; enhance the enforcement of targeted subsidy disbursements; strengthening the annual CBHI scheme audit practice and strict actions on audit findings; operationalize the CBHI re-insurer mechanism; and standardize the existing pooling arrangement and scale up pooling at the zonal and regional levels.
- There needs to be investment in fast-track the digitization of health insurance functions (member registration, claim submission and adjudication, reimbursement), especially in areas that started higher-level pooling; improve the CBHI data quality management, especially related to service utilization and claims and revisit CBHI structure and staffing as per the CBHI proclamation role and mandates.
- Conduct a comprehensive political economy analysis of SHI implementation, especially on the feasibility of implementing SHI in the near future.

## 3.8. Enhance Leadership and Governance

Concerted efforts were made to build leadership capacity through leadership incubation programs, CPD for leaders, and twinning. Modules were developed (woreda, Health Facility and senior leadership (MOH and RHB) under the leadership of the Human Resource Development (HRD) Directorate with the support of MSH. This module also focused on the four emerging regions and seven low performing zones from Amhara, Oromia, SNNP and Tigray Regions. They trained RHB, woreda, and health facility management. Between 2014 and 2021, about 2500 leaders have been trained excluding participants from MOH. There are leadership capacity building programs at regional and sub-regional levels but with varying degree of coverage and frequency. Trainings are also provided by Civil Service Bureaus, Kaizen Institute and the like. Efforts were also made to Mainstream gender in all health programs and

operations and empower women by ensuring their representation at all levels. Promote merit-based assignment of health facility leaders alongside gender equity goals. While the number of women in leadership positions is not yet 50:50, there are improvements at various levels. Although the majority of nurses are women, the ratio is much higher at leadership levels within HFs, especially in teams mostly supervised by nurses. In terms of LIP of total trainees 47% are females on average.

Efforts were made to standardize and institutionalize grievance handling and monitoring mechanisms at all levels. There are structures and initiatives for grievance handling at different levels of the health sector. In most institutions there are grievance committees accountable to the institution Head. Internal and external grievances are handled through these mechanisms. The partnership and coordination mechanisms among public sectors, private for profit, CSOs and NGOs exist and functioning. KIIs reported that the partnership and coordination that happened during COVID-19 response was a success.

The Health Service Delivery, Administration and Regulation Proclamation, a comprehensive legal framework developed with the participation of various directorates and with the overall guidance of Legal Services Directorate. Proclamation to establish health professional Council was another landmark legal framework that was formulated within the MOH and externally reviewed by the Ministry of Justice and the Attorney General. However, both proclamations have stalled without being endorsed by Parliament. Various Guidelines have also been drafted by the MOH and specific Departments within the MOH. At the regional level as well, some existing proclamations have been revised.

Some experiences were made to introduce financial and non-financial incentive mechanisms are to motivate the health professionals working at different levels of the health system in some regions. In HCs in Addis Ababa, they recently instituted incentive package for the leadership that includes housing and transport allowance of 6000 birr/month and duty opportunity of up to 240 hours/month.

Accountability Mechanisms : in addition to the successful expansion and implementation of Good Governance index and Community Score Card managerial accountability program (MAP) is piloted in 36 woredas in collaboration with Yale Global International. Social scheme (Hizb kinfe) initiated in ALERT Hospital. Social accountability – captures the three components (GGI, MAP, and CSC and is being developed as a comprehensive strategy to institute accountability.

Impact of public health emergency, conflict, and war. According to the assessment conducted in 2022, in the six regions affected by war and conflict, a maximum of 80% of the regional population is affected in Tigray and 20% of population affected in Konso Zone, SNNP (CIARP Study, 2022). The biggest impact of the conflict and war in different parts of the country in terms of Leadership and Governance Strategic Direction are health infrastructure damages. Apart from the infrastructure damage, regional findings show that leadership has crumbled in severely affected areas. ZHD/WorHO records and equipment were damaged or looted, and key staff and leadership were displaced. In such circumstances there is need to restore health leadership and consolidate staffing. In Tigray, salary or duty payment to staff or management has not yet started. In addition, regular operations such as regulation is not yet resumed. Mental health problems and post traumatic issues are prevalent among affected population including health leadership. The priority of the leadership is on post conflict restoration of infrastructure and service, reinstituting leadership and governance mechanisms, structures, and systems. Financial implications of providing policy support and institutional strengthening have been estimated at 11 million USD (CIARP, 2022). In terms of COVID pandemic, it has impacted many of the ongoing initiatives and implementations as it was mandatory to stop non-emergency related travels, supervisory visits, inspection, trainings, community, and technical committee meetings etc. In addition, there was shift

in leadership attention and resource allocation priority towards containing the pandemic. As a result, routinely planned activities suffered a great deal. However, the leadership has managed to foster strong multi-sectorial and multi-stakeholder collaboration, massive community awareness creation and mobilization, as well as substantial fund raising which resulted in a well-managed and successful COVID -19 responses. Some of the interviewees stated that they considered the pandemic as an opportunity that has helped the sector to realize its potential and build resilience.

**Challenges and gaps**

The leadership building efforts remain Fragmentation. Duplication could happen or hard to follow-up units/regions that fall through the crack in its implementation especially in DRSs. There is frequent turnover of staff in legal area as the main concern are incentives (limited field opportunity), limited opportunity for training and capacity building. Because directors do not follow the appropriate procedures in developing legal instruments (public consultations, stakeholder engagement, technical discussions, and other necessary steps) in drafting legal documents, there is continuous change of ideas which causes delay in the process. This is further compromised by the delays in endorsing the legal frameworks by the senior management of MOH; and sometimes, lack of firmness in decision-making.

**Recommendations for the next three years**

i. Integrating the course contents across Leadership, Management, and Governance (LMG), Clinical Leadership Improvement Plan (CLIP), and Leadership Incubation Plan (LIP) and developing one training package which includes such thematic areas as conflict management, resource management, team building, risk assessment and mitigation,

ii. Strengthening the leadership capacity through

iii. Coordinate with stakeholders to mobilize resources to provide training for the leadership,

iv. Focusing on the high impact health system leadership

v. The introduction of coaching to LIP attendees after they complete the training to ensure effectiveness of the training.

vi. Strengthening of the legal Office with additional staff and budget and capacity building,

vii. Empowering the legal unit by giving them the required autonomy with the enforcement of accountability and responsibility,

viii. Appreciation/ recognition of the efforts of the legal professionals.

## 3.9. Improve Health Infrastructure

**Table 15: Performance of health infrastructure**

| Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance till December 2022 | Color Grading |
|---|---|---|---|---|---|
| Proportion of health facilities (health centers and hospitals) with basic amenities (water, electricity, latrine,) | 59% | 73% | 90% | | |
| Improved water supply | 76% | 86% | 100% | 28% (HP)<br>58% (HC)<br>78% (PH) | |
| Electricity | 61% | 78% | 86% | 14% (HP)<br>62 % (HC)<br>85% (PH) | |
| Improved latrine | 16% | 31% | 50% | PHC | |
| Basic health care waste management services | 76% | 85% | | PHC | |

### Achievement and drivers of success

The main strategic direction under the Health infrastructure are construction, rehabilitation, and expansion of health facilities, developing standards, availing utilities, and setting up ICT infrastructure. In this regard, the main achievements include preparation of the design of health facilities that suits health service demand considering environmental, climate and geographic factors. The HI LEO developed a flexible design with special consideration to Afar, Somali, Benishangul-Gumz and Gambella Regions, which incorporated floor to ceiling elevation increase from 2.80 meter to 3.50 meter; open walls or big windows so that it is well lit and ventilated and an AC system. Furthermore, construction guidelines are developed. The standards for the primary health care units (health posts, health centers, primary hospitals) were developed. Following this standardization work, the priority of health infrastructure initiatives, currently; there are three types of HC on the ground. First, there is type A HC which is almost like a primary hospital and has physician residence. Second is type B HC which has 5 blocks, also called GTZ type. Third is the nucleus HC which are former clinics upgraded to HC level that has OPD and administration and service block. Now priority task is to upgrade nucleus HCs to type B. As of May 2023, there are a total of 18,428 functional health posts in the country.

In addition, construction of 56 second generation HPs have been completed and are ready to start service and 49 are undergoing construction (see table ...). Upgrading of second-generation HPs to comprehensive HP standard is just getting started with 5 ongoing projects in Oromia (1), Somali (2), Afar (1) and Sidama (1) Regions. There were 3675 functional HCs in the country. In addition, construction has been completed for 242 new HC and the construction of 48 are ongoing. There are 614 HCs that are upgraded out of which the 308 projects are completed and 306 are under construction. There are also 48 HCs under maintenance and 37 of which maintenance has been completed. Furthermore, there is expansion of OR rooms in 413 HCs, of which the work is completed in 366 and 47 are still ongoing. There were 395 hospitals, of which 26 were comprehensive specialized hospitals, 2 were referral hospitals, 101 were general hospitals, and 266 were primary hospitals (Table). Three new general hospitals are being built in Addis Ababa's sub cities of Kolfe, Nifas Silk, and Bole sub cities.

**Table 16: Number of functional and under construction Health facilities (HP, HCs and Hospitals) by Region, 2015 EFY**

| | Health Posts | | | Health Centers | | | Hospitals | | |
|---|---|---|---|---|---|---|---|---|---|
| Region | Functional | Completed[1] | Ongoing Construction | Functional | Completed | Ongoing Construction | Comprehensive Specialized Hospital | General Hospital | Primary Hospital |
| Oromia | 7,153 | 25 | 11 | 1,427 | 6 | 1 | 4 | 36 | 91 |
| Amhara | 3,725 | 2 | 20 | 885 | 0 | 6 | 8 | 18 | 82 |
| SNNP | 2,713 | 7 | 6 | 270 | 6 | 1 | 4 | 10 | 45 |
| Somali | 1,710 | 12 | 1 | 248 | 223 | 25 | 1 | 4 | 14 |
| Tigray | 743 | 0 | 6 | 230 | 0 | 1 | 2 | 15 | 29 |
| Afar | 348 | 3 | 0 | 106 | 4 | 2 | 0 | 1 | 9 |
| Sidama | 555 | 2 | 0 | 146 | 1 | 4 | 1 | 5 | 17 |
| South West | 828 | 2 | 3 | 130 | 1 | 1 | 0 | 4 | 12 |
| Benishangul | 433 | 2 | 3 | 66 | 0 | 6 | 0 | 2 | 5 |
| Gambela | 152 | 0 | 2 | 32 | 0 | 1 | 0 | 1 | 4 |
| Harari | 32 | 1 | 0 | 9 | 1 | 0 | 1 | 1 | 0 |
| Dire Dawa | 36 | 1 | 0 | 16 | 0 | 0 | 1 | 2 | 0 |
| Addis Ababa | | 0 | 0 | 110 | 0 | 0 | 7 | 9 | 0 |
| Total | 18,428 | 56 | 49 | 3,675 | 242 | 48 | 29 | 108 | 308 |

*Source: HI LEO, MOH May 2023*

The contribution of SDG fund has been crucial in the construction , as about 3,600 projects have been constructed using SDG funds, including the construction of About 5,000 staff houses in remote HCs. There are also other federal specialty projects that are currently under construction. These include government financed (i) Trauma center in ALERT Hospital with 500 bed, ICU about 60 beds (50% completion); AHRI laboratory center of excellence and research with about 40 labs and 120 offices up to 200 vehicle parking spaces, meeting hall. (99% completion); (iii) Diagnostic center in St Peter Hospital (lab, imaging, pathology). There are also other construction works ongoing on hospitals, EFDA quality assurance center, 13 regional laboratories etc.

There were Covid-19 related construction projects including the construction of 13 COVID-19 Projects (Point of Entry, Isolation center and Quarantine center) is completed and 11 COVID-19 Treatment centers, funded by World Bank, bid document evaluation was completed to proceed to the next milestone. There were also other projects that were completed over the past three years include: Of the 180-ergonomics work that was planned in 6 federal hospitals and Institutions accountable to MOH, 175 projects have been completed and the remaining 5 projects are at 85% completion; renovation of Black lion Hospital 9 Wards and Central kitchen and St. Paul Hospital Wards and Emergency, and St. Peter Hospital MDR wards funded by World Bank. MOH has supported an estimated 46 million birr for construction and renovation of health facilities for Amhara region, Somali region (three HC construction and one HP upgrading to comprehensive HP-CHP), Afar (one HP upgrading to CHP), Dire Dawa City Administration (one HP upgrading to CHP), Sidama region (HC renovation), Oromia region (HP upgrading to CHP and

7 HCs renovation) and Gambela region (Korgang HC renovation) (APR 2014). The MOH worked with the Ministers of Water and electricity to supply solar electricity to around 400 HCs with the support of WB. The sites are selected and budget approve, specification preparation finalized, and no objection is given by the WB and the next step is tendering. Safe water supply provision work availed to 501 HC by the end of 2014 EFY (ibid), with an estimated ETB 150 million investment. During the current fiscal year, even though there was no federal budget dedicated for provision of water supply, the sector managed to avail water supply for 40 HCs in collaboration with regions (2015 9-month report).

MOH HI LEO has 42 staff out of which 90% are technical assistants hired by the WB, of these 19 are supporting RHBs as focal persons. The structure of HI in regions is quite mixed. Oromia and Amhara have structure almost equivalent to the HI LEO in MOH organized as a Core Process (Oromia) and under Vice Bureau Head (Amhara). Somali region have HI Section; it has 8 staff and much better than the situation in other emerging regions but organized as a sub core process under Plan and Program. On the other hand, AA City Administration, SNNPR, Sidama and SW Ethiopia Regions do not have HI unit and they get support from regional Construction Bureaus. In regions that do not have Focal Points, the MOH assigns TA to follow up on projects constructed through matching fund modality and other projects financed through the MOH.

**Challenges and gaps**

Absence of HI structure in some RHBs. Health construction projects financed through regional budgets are executed by Construction Bureaus. Construction Bureaus have no specific department that follows up health projects. In addition, they lack experts with a specialty in managing health infrastructure which asks for unique expertise by way of familiarity with HF standards, knowing the service flow, types of equipment, etc. Hence, they face challenges in terms of meeting standards, considering the workflow, progress delay is commonly reported as Construction Bureau provides support to all line Bureaus. In addition, there is weak information flow to MOH as there is no reporting line between construction Bureau and the MOH. To address this challenge the solution adopted by MOH is assigning TA to follow up on projects constructed through matching fund modality and other MOH financed projects. There is also a sharp decline in SDG fund that has affected the construction sector as it was crucial source of finance. Because of fund limitation, the plan to construct 300 HCs did not materialize. In 2015 there were no new projects undertaken.

**Recommendations for the next three years**

i. Undertake Health infrastructure need and capacity assessment to establish structure in regions.

ii. Align the priorities of construction efforts to proposed essential service investment plan (for construction and equipment) to ensure that priority services are financed given the limited fiscal space. Strengthen collaboration, coordination, and joint planning platforms with programmatic departments right from the design development through the construction process to ensure that this proposed plan is implemented. Revisit the roadmap for the expansion of basic and comprehensive health posts in line with the investment plan.

iii. Invest in building the capacities of The HI LEO requires through experience sharing visits and exposure to international architectural designs of health facilities, and diagnostic centers.

## 3.10. Enhance Digital Health Technology

**Major achievements and drivers for success**

One of the key drivers of success identified in the mid-term review is the deployment of the digital health project registration and app inventory system. This system has facilitated the registration of approximately 80 digital health systems, ensuring proper documentation and source code submission. The selection and testing of these systems have paved the way for the implementation of sustainable digital health solutions in Ethiopia.

Increasing maturity level of the District Health Information System 2 (DHIS2) has been observed in the last two and half years driven by full ownership by the government and implemented down to the facility level. Its widespread implementation signifies the commitment to strengthening the digital health infrastructure and ensuring the availability of accurate and timely health data at all levels of the health system. The electronic Community Health Information System (eCHIS) is functioning in health posts where it is well-supported, including the provision of necessary devices. Positive results have been observed from the implementation of Electronic Medical Records (EMR) systems in healthcare facilities as 22 facilities have started the implementation process, with five health facilities operating in a paperless environment. A collaborative system development environment has been established, focusing on Bahmni EMR and DHIS2 to fosters innovation and enhance the quality of digital health solutions.

The capacity of the Ministry of Health's data center has been strengthened through the installation of a backup power generator, increased bandwidth, acquisition of high-end servers, installation of cooling machines, and the functionality of the Disaster Recovery Center (DRC) at St. Peter to support the growing digital health infrastructure and ensure the availability, reliability, and security of health data and digital health systems. Full digitization of regulatory core functions (such as licensing, product registration, and quality assurance) has been achieved, enhancing the traceability of data and improving cost-effectiveness. The implementation of a single windows system with strong interoperability across sectors is another significant achievement. This system enables seamless data exchange and integration between different health and non-health sectors, facilitating coordinated and holistic service delivery. Interoperability promotes data sharing, collaboration, and efficient decision-making processes.

**Challenges**

Several challenges and gaps in the implementation of digital health systems have been identified. One of the key challenges is the rollout of multiple systems at scale with questionable functionality and usability. For example, the electronic Community Health Information System (eCHIS) has faced challenges in terms of its functionality and usability. While some progress has been made with the entry of health workforce records at the national and regional levels, the transition of the Integrated Health Information System (iHRIS) from the development stage to implementation stage is struggling. This review findings show the absence of a clear roadmap for the implementation of the national eHealth architecture, that outlines the key milestones, timelines, and strategies for the implementation of the eHealth architecture. The development of foundational shared services has stagnated, with only 50% of the planned shared services being implemented with unknown timelines and resource commitments. The systems are challenged with inadequate health IT human resource capacity in terms of the skill mix, numbers, and skill sets of health IT professionals needed to support the implementation and sustainability of digital health systems. There is also weak device management and tracking system,

including maintenance capacity. The major reason for all the shortfall has been availability of limited of financial resources to scale up digital systems as per the plan. This lack of finances has resulted in a wide disparity in digital health implementation. Many of the digital health initiatives are taking place in Addis Ababa and other main cities of the country. There is a visible inequity in HIS and Digital health systems implementation. Limited multisectoral engagement outside of Ethio-Telecom has also been reported as another challenge. The management of different software systems in the supply chain is complex, and there is a high dependency on partners for implementation.

**Recommendations**

The major recommendations emphasize the importance of partnerships, governance, harmonization, innovation, regulation, capacity building, strategic planning, investment prioritization, infrastructure expansion, policy incentives, supply chain management, unified information systems, and interoperability. Implementing these recommendations will contribute for the advancement of digital health in Ethiopia and ultimately improve healthcare delivery and outcomes.

i. Establish an effective and functional partnerships with Ethio Telecom and other government agencies, such as the Artificial Intelligence Institute, and local universities to leverage their hosting infrastructure and services, reducing the costs associated with data hosting and management and to promote the adoption and use of emerging healthcare technologies, revolutionize healthcare delivery, improve diagnostics, and enhance patient care.

ii. Strengthening digital health investment prioritization processes and its effective governance that will lead and guide its prioritization and implementation process. This should be supported by close and effective joint work with Regional Health Bureaus (RHBs) to harmonize digital health structures across regions and levels (human resources; standardized digital health structures and processes). Programs need to also be actively engaged in digital health systems design and implementation (including (eCHIS) and Electronic Medical Records (EMR)) to ensure system design and functionality alignment with program requirements and goals. Revisit the digital systems implementation approach and strategy to include interventions beyond the initial deployment, adequate support, training, and supervision to ensure that digital health systems are effectively utilized and meet the needs of end-users. Continuous improvement efforts should focus on enhancing user experience and optimizing system functionality. Enhancing interoperability of systems, including interoperability across systems of different stakeholders, to facilitate seamless information flow, improve coordination, and enhance the overall functionality of the digital health ecosystem. It is also critical to strengthen the implementation of foundational shared services, such as the master facility list, the national health data dictionary, the national product catalogue, the master patient and provides index, and gradually move into shared health records.

iii. Prioritizing investments in telemedicine, teleradiology, and other remote health service delivery mechanisms to enhance access to healthcare services, especially in remote and underserved areas. This can be facilitated by a clear strategy that attracts private investment in digital health technologies, innovations, development, and implementation, especially with the context of liberalization of Ethio-telecom for additional resources, expertise. This should also include collaborating with emerging local and private digital hubs and innovation centers.

iv. Develop policies and guidelines to regulate and enhance awareness of digital self-care services to promote the adoption of digital self-care services, empowering individuals to actively engage in their own healthcare.

v. Enhance the monitoring of the functionality of digital health systems and infrastructure and utilizing the data for digital health program monitoring to provide insights into performance, identify areas for improvement, and inform evidence-based decision-making. This can be better facilitated through building internal capacity of government for system implementation, maintenance, and support ensures sustainability and reduces dependency on external partners.

vi. Expanding IT infrastructure at government health facilities, including the provision of computers, LAN, and connectivity. Reliable and secure infrastructure supports efficient data management, communication, and the integration of digital health solutions into routine healthcare processes.

vii. Invest on unified, integration and interoperability digital supply chain system with good maturity level that removes silos and multiple applications and ensures data security, accountability, and avoid theft of supplies at all levels.

## 3.11. Improve Traditional Medicine

In Ethiopia, the majority of populations rely on traditional medicine for basic health services, most of which are derived from herbs. Herbal medicines were detailed in National Health Medicine policy, as well as Science and Technology policies in 1993, and have been translated into legislation and regulation (recently as Regulation no. 1112/2019). Nevertheless, herbal medicines with a long history of traditional use in the country are sold without any restrictions in the open market without proven safety, efficacy and quality. This strategic direction in HSTP II aims at strengthening the registration, licensing, research, production, use, and integration of traditional medicine and traditional medical practices. Traditional medicine and practices are directly or indirectly related to protection of societal health, equitable distribution of public health care services, the right to exercise a profession, intellectual property rights, biodiversity conservation, and protection and promotion of indigenous knowledge and culture. This direction promotes public health by ensuring the safety, efficacy, and quality of locally produced traditional medicines and standardizing and regulating the practices of traditional healers.

**Achievements**

Traditional medicine is structured at desk level in the Ministry of health under pharmaceuticals and medical devices lead executive office. MOH has also reached an agreement to develop the Ethiopian Herbal Pharmacopeia in collaboration with Ethiopian Pharmacists and pharmaceutical scientists Association in the Diaspora (EPPAD) and memorandum of understanding (MOU) signed. Registration and Licensing of traditional healers started. Regions like Amhara, have established traditional healers' association. Three traditional medicinal products are under clinical trial. Efforts underway in developing guidelines, roadmap and policy: Traditional medicines directive, traditional medicines clinical trial guideline, traditional medicine 10 years roadmap and draft traditional medicine policy was developed that needs to be revisited and ratified by the responsible body.

**Challenges**

Currently the efforts made are more fragmented as there are too many stakeholders acting separately such as Health, Education, Agriculture, Environment, Industry, Culture & heritage, and others to exploit the rich source and untapped knowledge of traditional medicine in the country. KIIs in this review identified that there is lack of an inclusive and integrated policy framework and legislation for traditional medicines and practices. Due to this lack of legislation and enforcement, there is limited protection and preservation of indigenous knowledge resulting in lack of trust among the traditional healers and the researcher's impeding collaboration for validation of traditional remedies. There is also limited interest and support for traditional medicines specifically for R&D, training of professionals, practitioners and the community.

The HSTP II initiative to create incentive package for large scale production of scientifically validated traditional medicines in industries looks unattainable in the coming three years.

**Recommendations**

i. Revisit and ratify the draft National Traditional Medicine policy or integrate well in the new medicines and medical devices policy and develop the associated legal framework to establish an independent herbal regulatory system, that promotes and enforces legal protection for intellectual property rights and registration of indigenous knowledge rights in traditional medical practice.

ii. Build the capacity of traditional medicine in terms of human resources (numbers and skills), infrastructure, and a system to enhance the development of traditional healers' data base, conservation and documentation of medicinal plants, traditional medicine knowledge, and practices in the country.

iii. Strengthen the regulatory activity on traditional medicinal products and the practice. Create awareness on importance of health regulation among the community regarding traditional medicine practice.

iv. Enhance collaboration and create alignment among the multi-sectoral stakeholders in traditional medicine.

v. Establish center of excellence for traditional medicine and promote systems for information, training, and education on traditional medicine.

## 3.12. Health in All Policies

The HSTP major initiatives in promoting health in all polices include advocate for tor the inclusion of health and health-related perspectives in all relevant sectorial policies and regulation; utilize Multi-sectorial Woreda Transformation platform to enhance planning, budgeting, execution, and monitoring and evaluation of multi-sectorial development interventions in pilot woredas to implement the four L's (Livelihood, Lifestyle, Literacy and Longevity); advocate for allocation of sector-specific budget line for social determinants of health initiatives; scan existing policies and strategies from all sectors and identify priority collaborative areas for multi-sectorial engagement; conduct joint planning, monitoring, and evaluation of multi-sectorial actions, including evidence generation and use; develop and implement legal framework and implementation arrangement for effective implementation of multi-sectorial

actions; formulate lessons from existing multi-sectorial initiatives such as the One WASH program, Seqota Declaration, and multi-sectorial woreda transformation, and scale these up more broadly and promote environmental impact assessment to mitigate health impacts of huge projects.

Though Health In All Policy is not yet implemented , there is multisector engagement ongoing with One WASH, Nutrition and COVID-19 prevention and control, NCD, occupational safety in industry zones, one-stop services for victims of GBV, social and legal services for clients in some Hospitals. , effect multisector clusters are established within regions for emergencies. The clusters conduct joint planning, monitoring and evaluation of multi-sectorial initiatives such initiatives have contributed to availing water and power supply to HFs. KII at federal level and regional findings show that meaningful progress has not been made in terms of that multisector engagement to foster woreda transformation plans. While there is a draft Health in All Policy (HIAP) document but not yet endorsed.

**Challenges and gaps**

Health In All Policies and multisector coordination require effort and commitment from all sectors, but not all sectors contribute equally and there is a gap in follow up by line Ministries. Multi sectorial engagement lack regularity and structure. There is no guideline for implementation of health in all policy in Ethiopia. And as a result, there is budget limitation, limited awareness and knowledge about the health in all policies and limited gender mainstreaming for multisector activities.

**Recommendations for the next three years**

i. Get approval and endorsement at the higher political decision-making level and implement the Health-in All Policy

ii. Undertake advocacy for sustained political commitment and Familiarization of Health-in -All Policy at all levels to improve allocation of resources for multi sectorial engagement.

iii. Institutionalize coordination platform in MOH with clear guideline and political commitment.

iv. Establishments of Accountability framework – all stakeholder from federal down to community level

## 3.13. Enhance Private-Sector Engagement in Health

Policy framework and approaches to boost public-private health engagement were reviewed and approved. Generic PPP guidelines and tools were developed by the Ministry of Finance (MOF) and the health sector has also developed an implementation guideline and strategic framework that defines the scope, priorities, and steps of implementing PPP within the sector. To facilitate implementation to review and grant approval to PPP pipeline projects, a PPP Board from stakeholders (Ministry of Finance (chair), National Bank of Ethiopia, Ministry of Water, Irrigation and Electricity, Minister of Transport, Public Enterprises Holding and Administration Agency, National Planning Commission, Ministry of Peace, and two members from institutions representing the private sector) is also formed. In addition, a PPP Directorate General is also established within the MOF, and it acts as Secretariat to the Board. Within the MOH there is a Project Management, Partnership and Resource Sourcing Team under the Strategic Affairs Executive Office. The team has 4 staff fully dedicate for the task. In addition, all staff under the newly restructured PPP and Health Financing Desk are expected to support PPP undertakings. To This Unit oversees identification of priority interventions for PPP, develop concept notes, oversee pre-feasibility and feasibility studies, present to the Board and oversee implementation.

Create an enabling environment for the private sector to engage in health promotion, disease prevention, curative, rehabilitative, and palliative care. MOH leadership and staff, as well as several RHBs and hospital staff, have received training and awareness about the PPP concept and relevant documentation. In addition, the MOH has succeeded to convince the PPP Board on the importance of introducing PPP to avail selected specialty and other services as opposed to the inclination towards infrastructure projects. As a result, the MOH has managed to receive financial and technical support in the development of prefeasibility and feasibility studies. The sector identified priority areas for PPP as tertiary care - Specialty and sub-specialty services; diagnostic care; human resource development, logistics and local pharmaceutical manufacturing. Consultation with Investment Agency and exploring possibility of establishing within the industrial parks are on-going. Feasibility studies completed and approval by the board and processes are initiated to start Integrated diagnostic services in Saint Peter and Oncology services in Saint Paul hospitals through PPP arrangements, but actual services is yet to start. Likewise, the private sector has begun a variety of experts and sub-specialty services with MOH support in the current fiscal year including specialized stroke and nerve treatment under Axon Stroke and Spine Center; expansion of Arsho Advanced Laboratory ; laboratory and pathology services that were unavailable in-country by the Swiss Advanced Diagnostic Center; Pioneer Nuclear Medicine Center in process to start service and Roha Medical Campus (350 bed capacity), Washington Medical Center (500 bed capacity over two round expansion) are under construction and are expected to start Advanced Multispecialty Center including Oncology Service.

The corporate sector has actively participated, collaborated, and contributed significantly to the COVID-19 emergency response. The private sector has mobilized resources (both financial and in-kind) for the emergency response activity; played a critical role in treating patients and delivering COVID-19 laboratory testing services. Third, manufacturing industries were critical not only in the production of PPE and other hygiene and sanitation supplies but also in importing and distributing critical supplies. Although plans were made to construct about 14 centers with various specialties and serving as centers of excellence to attract medical tourism, the effort did not progress as expected.

The first draft of the Health Sector Private Sector Engagement Strategy is prepared with the participation of key stakeholders. The Strategy covers themes such as areas for them to engage in and incentive mechanisms. There is good public private collaboration in many regions such as active GO- NGO forums.

**Challenges and gaps**

Lack of prior experience and limited awareness on transactional PPP made it difficult to convince decision makers and get potential bidders from the private sector. Decision making is a time consuming process. MOF's Board of Directors meets quarterly, and sometimes biannually and as a result many studies are awaiting approval. Forex policy is strictly enforced and that limits the leveraging the potential of the private sector. The country's existing insecurity has a negative impact on the degree of interest from foreign investors. There is still inadequate private sector participation in commodity management system (warehouse management, distribution and last mile delivery while EPSS inefficiencies affect the availability of supplies.

**Recommendations for the next three years**

i. Finalize and approve the Health  Private Sector Strategy
ii. Strengthen support to the RHBs in creating PPP structures, rules, and implementation strategies.
iii. PPP should be expanded for logistics management systems, particularly to solve the massive gap in pharmaceutical logistics.
iv. Enhance Regular consultation and review meetings to enhance the effectiveness of the PPP
v. Facilitate and support Private sector capacity building
vi. Enhance partnership forum with private investors and health providers.

# 4

# List of annexes

# 4. LIST OF ANNEXES

## Annex 1: Summary of Service Delivery During First 2.5 Years Under HSTP II, According to HSTP II Components and Programs

| Components & programs | MTR insights on: | | | | |
|---|---|---|---|---|---|
| | **Relevance** (to health needs and dynamics) | **Service availability** (regressed, stagnant, expanded) | **Equitable access** | **Effectiveness** | **Service quality** |
| **Component 1: Reproductive, Maternal, Neonatal, Child, Adolescent, and Youth Health and Nutrition** | | | | | |
| **Program 1.1: Family Planning and Reproductive Health** | • Still relevant;<br>• Innovative designs to mitigate new and unmet needs, with some degree of success<br>• Scope for greater focus on fertility services for those who desire to get pregnant, not just child spacing or fertility limitation services.<br>• High level of support for this program at all levels | • Expanded but unmet needs remain; scope for further demand creation | • More people reached but unmet need in pastoralist areas and emerging regions<br>• Need for efforts to align with/be sensitive to lifestyle and cultural values | • Effective coverage lower than contact coverage due to supply interruptions in many rural areas and some population centers | • Generally rated high in interviews and reviews but room for improvement in terms of responsiveness and supply issues |
| **Program 1.2: Maternal, Neonatal and Child Health** | • Highly relevant, ranked high priority at all levels of the sector | • Expanded<br>• Great investment in expansion of access to operative deliveries, community case management of childhood illnesses<br>• Major expansion of neonatal services at community and facility but inadequate | • Inequity has decreased, with access expansion in previous emerging regions and pastoralist areas<br>• Gap remains in hard-to-reach areas, urban poor and slums<br>• widening unmet need in post- conflict areas | • Effectiveness varies by facility readiness, referral pathways , health seeking behavior<br>• Declines in national MMR and USMR but high levels of drop out from ANC to skilled birth attendance<br>• High rates of stillbirth and NMR (need to re-examine effectiveness of interventions delivered) | • Quality improvements since HSTP I (e.g., obstetric ultrasound, operative delivery access, improved referral) and capacity of staff<br>• Data gaps impede the ability to monitor service quality |

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| **Program 1.3: Immunization** | • Relevant<br>• High level of support from government and GAVI (global vaccine alliance) | • Regressed<br>• Frequent vaccine-preventable disease outbreaks<br>• Sizable proportion of children with zero vaccination<br>• Some success in addressing the above through campaigns and catch up programs | • Some progress in pastoralist areas and hard to reach groups, e.g., in urban slums, poor through mobile teams and Family Health Teams<br>• Huge unmet needs, service backlog post-conflict areas | • Unclear effectiveness due to recurrence of measles and Rotavirus outbreaks in areas with vaccinated children | • Needs to be improved due to gaps in supplies, data quality and cold chain management |
| **Program 1.4: Adolescent and Youth Health** | • Relevant at national level<br>• supply-side gaps need to catch up with increasing demand.<br>• School based and youth group programs remain relevant | • Stagnant<br>• Few successes in youth-friendly services at health facilities, particularly regarding FP and STIs | • Community-level interventions generally accessible<br>• Facility-based services not as accessible<br>• Interventions are not comprehensive; focus largely on SRH | • Low effective coverage | • Fair when available with clear guidelines and materials.<br>• No evidence on quality of these services being worse than services for other groups |
| **Program 1.5: Nutrition** | • Highly relevant, with a high level of political commitment and sector priority<br>• Program has been evolving to meet emerging needs and service gaps. | • Under-five services expanded, e.g. for y growth monitoring management of acute malnutrition<br>• Some expansion of maternal nutrition services<br>• Huge unmet need in drought- affected areas | • Growing inequity in access to services in areas that are not stratified as “high risk”.<br>• High case fatality rate (CFR) in some facilities with inpatient nutrition management/treatment services. | • Based on regional KIIs, community interventions highly effective but have low coverage<br>• High CFR (malnutrition-related) | • Clear service standards, staff capacity<br>• Major supply gaps re: inpatient nutrition management/treatment.<br>• Supply shortages |
| **Component 2: Prevention and Control of Communicable Diseases** | | | | | |
| **Program 2.1: HIV** | • Relevant<br>• Well-established platform with new service delivery modalities/ innovations (e.g., multi-month dispensing of medicines), as needed. | • Expanded package of interventions (e.g., integration of hepatitis services<br>• Expanded reach of services, e.g., for pediatric HIV services and PMTCT | • Strides with respect to equitable access but gaps remain for pediatric HIV cases, adolescents and youth, persons in urban slums | • Highly effective, as reflected in HIV cascade outcomes | • High quality, although supply interruptions reported in some instances (medicines, test kits) |

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| **Program 2.2: Hepatitis** | • Increasingly relevant since start of HSTP II, as reflected in policy and strategy | • Expanded via integration into routine services<br>• Treatment options for HIV patients (Hepatitis B)<br>• Little progress on Hepatitis C service access | • Widening inequity, despite expansion of screening, case detection– financial access barriers and poor service availability hinder access to people not living with HIV | • Largely ineffective because screening not yet properly linked with treatment<br>• Likely to improve with expansion of access and inclusion in CBHI/ waived services | • Poor quality for most clients; commodities not available for care<br>• People enrolled in HIV program enjoy end-to-end care but encounter difficulties with referrals for Hep. C management |
| **Program 2.3: Tuberculosis and Leprosy** | • Highly relevant<br>• Strong global support and investment in diagnostic capacity and new technology and approaches | • Expansion of TB services (case finding, screening, case detection, and treatment)<br>• Expansion of leprosy services to a lesser extent than TB | • Inequity appears to be narrowing<br>• Many hard-to-reach groups now accessing services through innovative approaches | • Highly effective; case detection has improved as did TB treatment outcomes<br>• Detection and management of Grade II disability also increasing for leprosy | • Service quality for TB generally high<br>• Reported supply issues. service readiness gaps (staff competence. infrastructure) for leprosy rehab |
| **Program 2.4: Malaria** | • Highly relevant, increased attention due to climate change impacts | • Expanded prevention, diagnosis and case management<br>• Malaria elimination program progressing well | • Interventions are risk based, with equity considerations<br>• Some challenges with access to facility based care<br>• Disrupted community interventions in conflict settings | • Generally effective, low case fatality despite the recent increase in incidence | • Generally of good quality, reported gaps in rapid diagnostic tests and other supplies (e g., medicines and LLITNs) |
| **Component 3: Prevention and Control of Neglected Tropical Diseases)** | • Relevant, enjoys strong partner support and clear strategy/ evidence guidance | • Expanded | • Interventions are risk based and equity considered in the design of interventions | • Generally deemed effective | • Good quality of services |
| **Component 4: Prevention and Control of Non-Communicable Diseases and Mental Health** | | | | | |
| **Program 4.1: Non-Communicable Diseases** | • Highly relevant<br>• Strong policy guidance but needs investment support to achieve goals and respond to changing demographics in the country | • Expansion of screening and case finding via outreach, community- and facility-level interventions<br>• Services integrated into PHC through the EPHCG. | • Inequities in access narrowing with increased service availability in PHC, and CBHI coverage<br>• Subpar access for people in hard-to-reach areas and urban slums. | • Effective but services need to be scaled | • Room for improvement in: access to diagnostics and medicines, referral linkages |

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| **Program 4.2: Mental Health** | • Increasingly relevant, especially given shocks such as conflict<br>• Reflected in national policy but full implementation not yet achieved | • Expanded services by availing these services at PHCs (close to 50% of health centers have outpatient mental health care)<br>• Few new rehabilitation centers have been functional in the past 2.5 years<br>• Stagnant inpatient care and counseling services | • Compromised due to budget and manpower shortfalls, limited oversight.<br>• Increased access to ambulatory care at PHC has narrowed inequity in rural areas somewhat<br>• Unclear tailoring to the needs of different age groups (e.g., adolescents/ youth) | • Fairly effective in ambulatory settings<br>• Much work needed in making interventions end-to-end (prevention, detection, care) and comprehensive (health and determinants) | • Scope to further improve service delivery in ambulatory settings (staff competence, capacity building, expanding access to more facilities) |
| **Component 5: Hygiene and Environmental Health (no sub-components/ programs)** | • Highly relevant, strong policy support, requires clear role delineation and strengthening multisectoral collaboration | • Small expansion in improving hygiene and sanitation at household level through HEP.<br>• Expansion in achieving “open defecation free” areas. | • Inequity has widened in some areas due to poor access to improved water sources, sanitary products, disruption of the HEP community platform in conflict-affected areas. | • HEP intervention aimed at improvement of water source safety and quality has been effective<br>• MTR consultations highlight ineffectiveness/ challenges with multi-sectoral collaboration | • Variable quality across regions/settings |
| **Component 6: Health Extension and Primary Health Care (no sub-components/ programs)** | • Highly relevant but requires continued investment in optimization to be responsive to community needs and dynamics | • PHC has expanded significantly (infrastructure, ‘new’ services (e.g., NCDs, mental health, operative delivery).<br>• Regression in access to health post services due to conflict-related destruction and slow progress of the HEP optimization | • Some increase in access through mobile health services for pastoralist and conflict-affected areas; Family Health Teams in urban slum<br>• Persistent access gaps in pastoralist areas, emerging regions and post-conflict areas | • PHC reforms (PHCG, EHCRIG) have been effective and expanded services and utilization<br>• HEW and the HEP performed well in response to shocks but stalled in the overall performance of the new packages and HEP optimization | • Room for improvement in facility services (responsiveness, diagnostic capacity, availability of commodities and staff competence)<br>• The quality of HEP interventions vary widely due to limited or inconsistent HR, logistical and technical support from Woreda and adjoining Health Centers |

| Component 7: Medical Services | | | | | |
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| **Program 7.1: Clinical Services** | • Highly relevant, strong focus and support | • Significant expansion of facilities and services<br>• New specialty and subspecialty services initiated across regions | • Narrowing gap for basic specialty services with increasing access at Primary and General Hospitals.<br>• Wide gaps in access to tertiary care and mental rehab.<br>• Inequitable access in hard to reach segments and emerging regions. | • The approach in building capacity of existing facilities and targeted expansion has been effective in expanding specialty service access.<br>• Sub-specialty service access requires a rethink. | • Quality has been slowly improving with the implementation of evidence based practice (EPHCG and clinical guidelines) and guidance (EHSTG).<br>• Big room for improvement in standardizing care at facilities |
| **Program 7.2: Pre-facility, Emergency, Trauma and Critical Care Services** | • Highly relevant, benefited most from renewed attention due to COVID-19 pandemic and conflict | • Significant expansion in ambulance service, trauma services and critical care | • Many rural centers, hard-to-reach areas lack access to critical care<br>• Referral pathways are inequitable for the private health facilities and areas close to regional borders | • Major city initiative and critical care expansion have proven effective in improving access and outcome. | • Some improvement noted in NICU service quality and established ICUs.<br>• Room for improvement in referral services and pre-facility care |
| **Program 7.3: Blood Transfusion Services** | • Relevant, needs a concerted effort across stakeholders to align with needs | • Infrastructure expansion (blood banks), expanded referral systems and networks<br>• Supply gaps for whole blood and components remain<br>• Conflict damaged/destroyed some blood banks | • Inequity remains wide<br>• Post-conflict areas require special attention | • Not effectively meeting needs, inconsistent availability | • Good records in terms of safety<br>• Component availability and use of technology are still major gaps |
| **Program 7.4: Laboratory and Other Diagnostic Services** | • Relevant, evolved well with the COVID-19 pandemic | • Significant expansion of national and regional infrastructure, increased service availability, standardization<br>• Very frequent interruption of essential tests due to supply chain issues. | • Improving, with expanding of back up labs across regions; capacity building of PHC and existing laboratories in Hospitals. Broad access to resource intensive imaging, hormonal and genetic tests<br>• Post-conflict areas require special attention. | • Highly effective.<br>• Private sector engagement and cluster approach being experimented with for access to resource intense tests. | • Generally high |

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| **Component 8: Prevention and Containment of Antimicrobial Resistance (AMR) (no sub-components/ programs)** | • Relevant, with strong policy support and global guidance, support from national surveillance systems improving but data quality issues need to be addressed | • Significant expansion of AMR surveillance, advocacy and multi-sectoral collaboration (some challenges remain with accountability for inputs from non-health sectors) | • Surveillance sites and technical support expanded to regions and hard to reach areas.<br>• Inequities still remain in availing surveillance data for clinical decision making | • Advocacy and collaboration with various sectors is slowly improving; work needed on collaboration with environmental actors.<br>• Surveillance findings are not effectively used for decision making. | • There are limitations in surveillance methodology and evidence generation for use. |
| **Component 9: Quality in Health Care** | • Highly relevant, priority agenda of the sector and has strong political commitment | • Health care quality programs, initiatives and projects have expanded significantly.<br>• Capacity building and support for service oriented QI projects have expanded in regions and facilities including PHCs.<br>• Gaps in data quality and use for decision making | • Support has been extended to include emerging regions and pastoralist areas, through national capacity building and regional equity strategies. However, huge gaps remain in technical capacity and access to fund projects and data systems. | • The EHAQ collaborative platform has been effective in coordinating COVID-19 responses, emergency and critical care pathways. However, the EPAQ has not been implemented at scale.<br>• Evidence based care has improved outcomes (decrease in ICU mortality and increased detection and enrolment into care for NCDs at PHCs) | • Variable across regions and facilities.<br>• Depends on technical capacity, logistic support and administrative capacity locally. |

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| **Component 10: Equity in Health Service** | • Rose in relevance in HSTP-II, new dimensions and issues have arisen during this period (e.g., related to heightened vulnerabilities of some population groups due to shocks such as conflict) | • There has been a shift in approach in meeting equity from mere geographic dimension to a comprehensive stratifiers. Clear national equity strategy endorsed and survey conducted. Technical and financial support, number of projects to support emerging regions have expanded while infrastructure expansion has stagnated. Equity gaps have been identified from the HSTP programs and projects designed to bridge the gap. | • Health service inequity has widened for people in post-conflict areas. Increased inequity is being observed in urban areas including immunization and other basic services.<br>• It is narrowing in other areas including surgical services and ambulatory care for NCDs and MH. | • The strategies have been effective in some emerging regions in narrowing access inequities.<br>• Narrowing facility readiness between urban and rural areas also points to the effectiveness of interventions.<br>• Some programs (e.g., TB, HIV) have reached people in urban slums and industry zones, ones hard to reach.<br>• The recent national strategy and shift in approach is in a very early stage of implementation, difficult to gauge effectiveness. | • The interventions are sound by design, however most under the new structure and strategy are in early phase. Existing strategies of stratifying risk and measuring risk in NTDs, TB-HIV, nutrition are of good quality. |

# Annex 2: Terms of Reference of the Mid Term Review of the HSTP II

## 1. Introduction

### 1.1. Background

The health sector of Ethiopia has developed and implemented sector wide strategic plans in the last three decades. The health sector of Ethiopia has developed and implemented long-term health-sector strategic plans for the last three decades. Four rounds of Health Sector Development Plans (HSDP I to HSDP IV) have been developed and implemented from 1997/98 to 2014/15. After the four rounds of HSDP, Ethiopia has developed and implemented the first health sector transformation plan (HSTP) that spanned from 2015/16 to 2019/20. During the HSDP I- HSDP IV and HSTP-I strategic periods, the sector has been conducting evaluations of the strategic plans and has been using the findings for designing and implementing strategies and interventions for better performance of the health sector.

The latest sector wide strategic plan, the second health sector transformation plan (HSTP-II), is a five years plan that spans for the period 2020/21 to 2024/25 (2012 EFY-2017 EFY). HSTP-II is developed as the first part of the 10-year health sector plan and it is developed with an extensive consultation with relevant stakeholders; and the strategies and targets are aligned with national and international development agendas and priorities.

The overarching objective of HSTP-II is to improve the health status of the population by realizing four objectives, including; 1) Accelerate progress towards universal health coverage; 2) Protect people from health emergencies; 3) Woreda transformation and 4) Improve health system responsiveness. The plan has identified ambitious but achievable targets that are aligned with national and international commitments. In order to achieve the objectives and targets, 14 strategic directions are identified to be implemented during the strategic period. The plan has defined five priority areas or transformation agendas. The five transformation agendas of HSTP-II are: 1) Quality and equity; 2) Information Revolution; 3) Motivated, Competent and Compassionate (MCC) health workforce; 4) Health Financing and 5) Leadership.

The monitoring and evaluation plan of HSTP-II outlines the importance of conducting regular monitoring and periodic evaluation of the implementation process by generating and using quality data for evidence informed decision-making. In addition, optimizing monitoring and review systems is one of the major implementation arrangements of the strategic plan. In the M&E plan, mid-term evaluation at the mid-year of the strategic period and end line review at the end of HSTP-II period are planned to be conducted. Monitoring and mid-term evaluation is critical component to ensure that implementation is proceeding as planned and to take appropriate action. Findings from regular monitoring and evaluations is essential to identify implementation challenges early so that appropriate interventions can be implemented towards achieving the objectives and targets of HSTP-II. Findings and recommendations from the MTR can be used to re-direct program implementation towards achievement of HSTP-II targets and objectives.

### 1.2. Scope of the MTR

The mid-term review will be conducted in all regions of Ethiopia to review the implementation status of HSTP-II from July 2020 to January 2023. The evaluation will be conducted in all regionsof Ethiopia. The mid-term review is expected to provide pertinent information on the progress and relevance of implementation of strategic directions, major initiatives, transformation agendas and initiatives, and progress towards the objectives and core targets of HSTP-II. It will assess the impact of conflicts and

emergencies on the health system. It will also identify challenges encountered, best experiences and lessons learned during HSTP-II implementation. The review will utilize collection and analysis of primary and secondary data. Actionable recommendations that can improve the outcome of HSTP-II in the remaining HSTP-II period are expected from the MTR. The impact of conflict and public health emergencies such as COVID-19, drought, flood and other emergencies on the performance of the health system will be assessed during the mid-term review. In addition, the MTR will document the coping mechanisms that the health sector has been using in responding to emergencies during the HSTP-II period.

## 2. Objectives

General Objective: The general objective of the MTR is to assess the level of performance and progress towards the objectives and targets of HSTP-II, and to draw lessons from successes and challenges of the implementation process.

The Specific Objectives: The specific Objectives of the MTR are to:

- Assess the level of program performance against the midterm targets
- Assess the relevance and progress of implementation of HSTP-II strategic directions and
- initiatives
- Assess the progress of implementation of the five transformation agendas of HSTP-II - To assess the effect of conflict and emergencies on the performance of the health
- system
- Assess effect of interventions on health outcomes/impacts
- Identify facilitators, barriers and challenges during the implementation of HSTP-II - Document key lessons learnt and experiences gained at all levels of the health system - Identify recommendations to improve performance of the health system

## 3. Expected results from the MTR

The final-result expected from the MTR is a comprehensive evaluation report, the “Main MTR report”. Before submission of the final report, interim progress updates and reports are expected at different periods of the review

- Inception report: A report that includes all the preparatory phases of the evaluation, including design of methods and data collection tools
- Regional reports: A report that includes quick analysis and key findings of each region for all the seven sub-teams/thematic areas
- Draft MTR report: Final Main report (Qualitative report, Quantitative report, Synthesized Report)

The comprehensive MTR report should include the following components:

- The level of progress of HSTP-II directions and initiatives, using core HSTP-II indicators
- Progress of transformation agendas of HSTP-II
- Effect of conflicts and emergencies on the performance of the health system

- Strengths and weaknesses of the health system & the implementation process of HSTP-II
- Major challenges of the health system
- Identification and documentation of best practices, and lessons learnt
- Recommendations/action points to be implemented in the remaining HSTP-II period

## 4. Methodology

### 4.1. Overall Methodology /General Approach

The evaluation will utilize a mixed method for data collection and analysis. It will apply qualitative and quantitative data collection methods. The qualitative data will be collected through desk review and by conducting key informant interviews using a semi-structured interview guides. It will mainly be used to assess the process of HSTP-II implementation, identify best experiences, success stories and challenges during implementation. The quantitative data collection will mainly employ collection of data from secondary data sources such as HMIS data, administrative program reports, surveillance data, financial data, human resource data, LMIS, regulatory information system (RIS) data, surveys (SPA+, EDHS…) and other available data sources.

Three types of final reports will be prepared: a qualitative report, quantitative and synthesized report. The overall process will include the following steps:

- Inception phase: During this step, the methodology will be designed; data collection tools and guides will be developed, sample regions, Woredas and facilities identified and logistics for data collection will be organized
- Data Collection Phase: Data collection team travels to data collection sites, data collection will be done, quick analysis of regional data will be conducted, regional briefing and de-briefing by the data collection team members will be performed
- Data analysis Phase: Analysis of qualitative and quantitative data will be done, triangulation of data from the different sources, interpretation of data etc..
- Reporting: Prepare draft reports, present for MOH team, presentation to JCCC, send it for comments and feedback, incorporate feedback from different sources, prepare final report
- Dissemination: The final report will be disseminated to a wide range of stakeholders using different media of communication. A national and sub-national level dissemination workshop will be organized, the report will be published and posted on MOH website for wider circulation

### 4.2. Study Design

A mixed design will be employed, both quantitative and qualitative methodologies. It includes use of data from different secondary sources, desk reviews, Key informant interviews (KIIs) at all levels of Ethiopia's health system, KII to selected stakeholders. A semi-structured key informant interview guide will be employed for the qualitative part of the assessment.

### 4.3. Study Area and Period

The study will be conducted in all regions of Ethiopia and data will be collected from all levels of the health system (all Regional Health Bureaus, Selected ZHDs, WoHOs, facilities and health posts/ communities). In addition, qualitative data will be collected from national and sub-national stakeholders. The assessment will be conducted from February 2023 to June 2023.

### 4.4. Sample Size and Sampling

Qualitative: The sample for the qualitative component of the study will be based on purposive sampling method. Qualitative data will be collected from all levels of the health system (RHBs to health posts) and from selected relevant stakeholders of the health system. In order to identify strengths and weaknesses from the different levels of the health system, institutions that have a good performance and low performance (Based on HMIS reports of selected indicators) will be selected and assessed. At each level, the heads or deputy heads, directors/heads of selected program units such as MCH, DPC will be interviewed as key informants.

- Region – All Regions to be assessed
    - Two Zones (High performing and Low performing)
    - Two Woredas (High performing and low performing)
    - Two facilities/PHCUs from each Woreda
    - Two health posts and selected households
- Selected conflict affected zones (1 zone from Amhara, 1 zone from Afar, 1 zone from Tigray)
- Stakeholders for qualitative key informant interview: One or two key informants fromline ministries, donors, DPs, CSOs, Professional associations, Universities, Private federation

### 4.5. Data Collection: Data sources and tools

Qualitative data collection: Semi-structured interview guides, interview key informants using semi-structured data collection tool

- KII with broad range of stakeholders
    - MOH to Facility level
        - » MOH Lead executives, executive offices and team leaders
        - » Region level: RHB staff, regional sectors: finance, Water…
        - » Staff of Zone and Woreda Health Offices
        - » Staff of Facilities
    - Agencies: EPHI, AHRI, EFDA, EPSS, Blood bank
    - Selected line ministries (PDM, MoF, MoWI, MoE…)
    - Donors and DPs/Members of HPN partners (WHO, UNICEF, CDC, USAID, Gates Foundation, CIFF, JSI, …)
    - CSOs (CCRDA, CORHA)
    - Professional associations (EPHA, EMA, EMWA, ENA)
    - Universities (AAU, UoG, JU, HU, HarU)
    - Private federation

Quantitative: Secondary data will be collected from secondary data sources such as HMIS, program reports, SPA+, surveillance data, financial data, HR data, LMIS, RIS, Surveys (SPA+, others).

Review of relevant documents

- HSTP-II document
- M&E Plan of HSTP-II
- Periodic reports to HPR, MPD, PMO
- Annual performance reports
- M&E digests
- Different program strategies and strategic plans
- Program evaluation reports, surveys, researches
- Others

Experienced experts drawn from MOH, RHBs and development partners, will collect the qualitative data. It will be tape-recorded and will be transcribed. Data analysis will included triangulation of data from the different sources collected.

**5. Reporting and dissemination of Findings**

- Three types of reports are expected from the MTR team. One quantitative report, one qualitative report and one Synthesis report
- The progress will be presented to MOH senior management and JCCC
- The findings will be disseminated in national and sub-national workshops - Presentation at the 25th ARM
- Will be published and disseminated via printouts and websites

**6. MTR Team and its composition**

The MTR will be conducted by both external and internal teams. The review requires a high level of technical expertise who are dedicated, experienced and competent. Experienced international and national technical experts who are familiar with the Ethiopian health system and Ethiopia's context are required to conduct the MTR. Therefore, once this TOR is endorsed, recruitment of consultants who will work as MTR team is essential.

- Composition of consultants: The consultants should be experts with a mix of professionals from different disciplines that includes: Public health experts, health economists, management/ leadership.
- The consultants team and the internal review team is expected to:
    - Develop data collection guides and tools
    - Collect data (with other data collectors drawn from MOH, RHBs, DPs)
    - Perform data management, analysis and interpretation
    - Prepare reports and Presentations

Seven sub teams and the areas that they will lead are described in the table below

**Table: MTR sub-teams and potential team members for each team**

| Sub-team | Strategic Directions and Transformation Agendas that are covered in the team | MTR team members |
|---|---|---|
| Team 1:<br>Quality and equity | SD: Enhance provision of equitable and quality comprehensive health services<br>SD: Ensure community engagement and ownership<br>Agenda: Quality and Equity | External: One international consultant; one national consultant<br>Internal: Staff from MCHD, DPCD, Nutrition, Primary health care; DPS working on service delivery |
| Team 2:<br>Public health emergency | SD: Improve health emergency and disaster risk management effect of conflicts, and emergencies such as COVID-19, drought, flood and other public health emergencies on the performance of the health system | External: One international consultant; one national consultant<br>Internal: Technical staff from medical services, EPHI, Blood bank, DPS working on public health emergency |
| Team 3:<br>Pharmaceuticals and medical supplies | SD: Improve access to pharmaceuticals and medical devices and their rational and proper use<br>SD: Improve traditional medicine | External: One international consultant; one national consultant<br>Internal: Staff from EPSS, PMED, DPS working on PMS |
| Team 4:<br>Health Financing | SD: Improve health financing<br>Agenda: Health financing | External: One international consultant; one national consultant<br>Internal: Staff from PCD, Finance, EHIA, DPS working on health financing |
| Team 5:<br>Information Revolution | SD: Enhance informed decision making and innovations<br>SD: Enhance digital health technology<br>Agenda: Information Revolution | External: One international consultant; one national consultant<br>Internal: Staff from Strategic affairs, digital health, EPHI, AHRI, DPS working on HIS and data systems |
| Team 6:<br>Leadership and Governance | SD: Strengthen governance and leadership<br>SD: Improve regulatory systems<br>SD: Improve health infrastructure<br>SD: Ensure integration of health in all policies and strategies<br>SD: Enhance private engagement in the heath sector<br>Agenda: Leadership | External: One international consultant; one national consultant<br>Internal: Staff from reform directorate, HRD, EFDA, DPs working on leadership and governance |
| Team 5:<br>Information Revolution | SD: Enhance informed decision making and innovations<br>SD: Enhance digital health technology<br>Agenda: Information Revolution | External: One international consultant; one national consultant<br>Internal: Staff from Strategic affairs, digital health, EPHI, AHRI, DPS working on HIS and data systems |
| Team 7:<br>Human resource for Health | 1. Improve human resource development and management<br>2. Transformation Agenda: MCC | External: One international consultant; one national consultant<br>Internal: Staff from HRD, HRA, DPs working on HRH |

## 7. MTR Governance Structure

### 7.1. Steering Committee

The steering committee will be responsible for the oversight of the MTR process and mobilization of resources. It will facilitate the mobilization of resources for the MTR from donors and development partners.

Members: Members will be staff at the leadership position from the following departments/units of MOH and donors/HPN partners. Members will be from Minister's office, State minister's Office (Program wing, system strengthening and CB), Strategic Affairs executive office, and donors/HPN Groups (USAID, CDC, BMGF, World Bank, WHO, UNICEF.)

- Chair: From Minister's Office
- Secretary: Director of Strategic Affairs Executive Office
- Members: Others

### 7.2. Core Team

The core team is a technical committee which will be responsible for a technical and administrative coordination of the evaluation process. It will coordinate logistics for the overall process, provide technical guidance and coordination of all the sub teams, in collaboration with the external review team members/consultants. The core team will reports the progress of the process to the steering committee, MOH management and JCCC platforms. Members of the core team will be technical experts from the different departments and agencies of MOH and from development partners. It includes technical members from minister's Office, State Minister's Office (Program wing, system strengthening and CB), Strategic affairs executive office, Maternal and child health lead executive office, Disease prevention and control lead executive office, Community engagement and primary health care lead executive office, Nutrition, HRD, Finance, and from all the agencies. Technical members from HPN and DPS include: WHO, UNICEF, JSI, ICAP, Path, etc.)

- Chair: Technical staff from strategic Affairs
- Secretary: TBD
- Members: Others

### 7.3. Technical Working Groups (MTR Sub teams)

As described above, there will be seven sub-teams which will be responsible for data collection, data management and analysis and report writing for the sub-team they are assigned. Each team will manage, analyze and report regional and national reports for the specific sub-team.

Members: Selected technical experts from all MOH directorates/departments, Agencies, development partners (HPN group), CSOs, professional associations and private association

Chair and co-chair of each team: International consultants will lead each sub-team and a technical expert from the lead directorate related to the sub-team technical area will be a co- chair of each sub-team.

## Annex 3: Work program of the MTR 2023

| Weeks | Main activities by the MTR Team | Support provided from FMOH and Regions/JCCC |
|---|---|---|
| 1 (8- 13 May | The team members explored the tools proposed in the Inception report, revised and finalized them; this created opportunities for capacity building to new team members on the overall process of the MTR. This created consensus and understandings about the tools, the process and the deliverables | • Preparation of meeting rooms<br>• Printing the final tool<br>• Scheduling meetings for federal levels interviews |
| 2 (15-20 May) | Collect information on the performance of the Federal level, where more strategic interviews related to the 14 SO's and the 5 TA's took take place, using the tools specifically designed for the Federal level using the agreed federal tools | • Transport for federal interviews<br>• Arrange transport for the field visits and per diems (logistics)<br>• Informing RHBs to arrange and facilitate the interview schedule |
| 3-4 (21 May- 03 June) | All Regions were visited, each during 4-6 days by one of the seven subgroups, using the respective tools for the various levels (Region, Zone, Woreda, facility and Community including HDA). There was a meeting with representatives from the various training institutions and (ii) representatives from the all partners (NGOs/CSOs, Implementing Partners and the Private sector) to attend a meeting at the office of the RHB.<br>Regional teams drafted their PPT and regional report on the basis of the format provided to them before their departure (Annex 5) and submit their regional reports | • RHBs/zones and woredas to facilitate the interview appointments<br>• Regions facilitate the selection of samples based on the provided sampling criteria<br>• Facilitate a meeting with TIs, NGOs/CSOs and the private sector<br>• RHBs facilitate the debriefing meetings at regional levels |
| 5 (June 5-10) | This week was exclusively dedicated to internal discussions, agreeing and coordinating the various findings, conclusions and recommendations by thematic areas.<br>The seven teams consultants prepared their respective presentations for the power to be discussed in a plenary session halfway that week to agree together on the overall findings, conclusions and recommendations of the MTR | Facilitate meeting rooms and necessary facilities |
| 6 (12-17 June) | The preliminary findings, conclusions and recommendation were presented to the MTR thematic area team members. The findings were revised and presented to all thematic experts from government, DPs and IPs to get feedback on the findings. The second revised PPT was also presented to the MTR Core group and steering committee and the JCCC and the Stakeholders and the necessary feedbacks collected | Arrange and call meetings<br>Arrange meeting rooms and other necessary facilities |
| 19-24 June | The different teams wrote write their respective chapters of the MTR and submit the draft report to the TL | |
| 24-30 June | The TL will consolidated the draft MTR report for steering committee and JCCC for their review and comments | |

## Annex 4: MTR Team Members

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## Annex 5: List of people / institutions interviewed at Federal level

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Mr. Zelalem Mamo, USP PQM, Country Director

Mr. Mengesteab W/Aregay, National Professional Officer, WHO

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## Annex 7: Main Indicators of HSTP II, based on the Result Framework

| | Indicator | Type of Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance till December 2022 | Peformance Rate Against MTR Targets | Rating in Colours | Data Source |
|---|---|---|---|---|---|---|---|---|---|
| | **General** | | | | | | | | |
| 1 | Life Expectancy at Birth (years) | Impact | 65.5 | | 68 | 68.7 | >100% | | World Health Statistics Data-2019 |
| 2 | UHC Index | Outcome | 0.43 | 0.5 | 0.58 | 0.38 | 0.76 | | World Health Statistics Data-2019(Comparable estimates) |
| 3 | Proportion of clients satisfied during their last health care visit (Client satisfaction rate) | Outcome | 46% | 60% | 80% | 75% | >100% | | 6 month parliament report(Average of (Good gov.+CSC+HR customer service satisfaction) ---proxy) |
| | **Reproductive, Maternal, Neonatal, Child, Adolescent and Youth Health and Nutrition (RMNCAYH-N)** | | | | | | | | |
| 4 | Maternal Mortality Rate - Per 100,000 live birth | Impact | 401 | | 279 | 267 | >100% | | Trends in maternal mortality, 2000–2020,2000 estimates by WHO, UNICEF, UNFPA, the World Bank Group, and UNDESA/ Population Division |
| 5 | Under 5 Mortality Rate – per 1,000 LB | Impact | 59 | 51 | 43 | 47 | >100% | | Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation-2022 Report for 2021 GC |
| 6 | Infant mortality rate per - 1,000 LB | Impact | 47 | 42 | 35 | 34 | >100% | | Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation-2022 Report for 2021 GC |
| 7 | Neonatal mortality rate - per 1,000 LB | Impact | 33 | 28 | 21 | 26 | >100% | | Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation-2022 Report for 2021 GC |
| 8 | Contraceptive Prevalence Rate | Outcome | 41% | 45% | 50% | | | | |
| 9 | Proportion of pregnant women with four or more ANC visits | Outcome | 43% | 60% | 81% | 75% | >100% | | DHIS2 -Six Months Data Analytic Report |
| 10 | Proportion of deliveries attended by skilled health personnel | Outcome | 50% | 62% | 76% | 71% | >100% | | DHIS2 -Six Months Data Analytic Report |
| 11 | Early Postnatal Care coverage, within 2 days | Outcome | 34% | 53% | 76% | 32% | 60% | | DHIS2 -Six Months Data Analytic Report |
| 12 | Cesarean Section Rate | Outcome | 4% | 6% | 8% | 5% | 83.3% | | DHIS2 -Six Months Data Analytic Report |
| 13 | Still birth rate (Per 1000) | Impact | 15 | 14.5 | 14 | 11.7 | >100% | | DHIS2 -Six Months Data Analytic Report |

| | Indicator | Type of Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance till December 2022 | Peformance Rate Against MTR Targets | Rating in Colours | Data Source |
|---|---|---|---|---|---|---|---|---|---|
| 14 | Proportion of asphyxiated newborns resuscitated and survived | Outcome | 11% | 29% | 50% | 82% | >100% | | DHIS2 -Six Months Data Analytic Report |
| 15 | Proportion of newborns with neonatal sepsis/ Very Sever Disease (VSD) who received treatment | Outcome | 30% | 37% | 45% | 42% | >100% | | DHIS2 -Six Months Data Analytic Report |
| 16 | Proportion of under five children with Pneumonia who received antibiotics | Outcome | 48% | 57% | 69% | 75% | >100% | | DHIS2 -Six Months Data Analytic Report |
| 17 | Proportion of under five children with diarrhea who were treated with ORS and Zinc | Outcome | 44% | 54% | 67% | 18% | 33% | | DHIS2 -Six Months Data Analytic Report |
| 18 | Pentavalent 3 Immunization coverage | Outcome | 61% | 72% | 85% | 103% | >100% | | DHIS2 -Six Months Data Analytic Report |
| 19 | Measles (MCV2) immunization coverage | Outcome | 50% | 64% | 80% | 83.3% | >100% | | DHIS2 |
| 20 | Fully immunized children coverage | Outcome | 44% | 58% | 75% | 92% | >100% | | DHIS2 -Six Months Data Analytic Report |
| 21 | Mother to Child Transmission Rate of HIV | Impact | 13.40% | | <5% | | | | |
| 22 | Teenage pregnancy rate (%) | Impact | 12.50% | 10.00% | 7% | 14% | 12% | | DHIS2 |
| 23 | Stunting prevalence in children aged less than 5 years (%) | Impact | 37% | 32% | 25% | 39% | 5% | | National Food and Nutrition Strategy Baseline Survey-2023 |
| 24 | Wasting prevalence in children aged less than 5 years (%) | Impact | 7% | 6% | 5% | 11% | 57% | | National Food and Nutrition Strategy Baseline Survey-2024 |
| | **Disease Prevention and Control** | | | | | | | | |
| 25 | Proportion of people living with HIV who know their HIV status | Outcome | 79% | 86% | 95% | 84.8% | 98.6% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 26 | PLHIVs who know their status and receives ART (ART coverage from those who know their status) | Outcome | 90% | 92% | 95% | 96% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 27 | Percentage of people receiving antiretroviral therapy with viral suppression | Outcome | 91% | 93% | 95% | 96% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 28 | TB case detection rate for all forms of TB | Outcome | 71% | 76% | 81% | 87% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 29 | TB treatment success rate | Outcome | 95% | 95% | 96% | 96% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |

| | Indicator | Type of Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance till December 2022 | Peformance Rate Against MTR Targets | Rating in Colours | Data Source |
|---|---|---|---|---|---|---|---|---|---|
| 30 | Number of DR TB cases detected | Outcome | 642 | 967 | 1365 | 796 | 82% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 31 | Grade II disability among new cases | Outcome | 13% | 9% | 5% | 9.9% | | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 32 | Malaria mortality rate (Per 100,000 population at risk) | Impact | 0.3 | 0.30 | 0.2 | 0.33 | | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 33 | Malaria incidence rate (per 1000 Population at risk) | Impact | 28 | 18 | 8 | 35.9(29.4) | 28.2% | | DHIS2 -Six Months Data Analytic Report/ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22)/ |
| 34 | Premature mortality from Major Non-Communicable Diseases | Impact | 18% | 16% | 14% | | | | |
| 35 | Proportion of Women age 30 - 49 years screened for cervical cancers | Outcome | 5% | 21% | 40% | 1.4% | 6.7% | | HEALTH AND HEALTH RELATED INDICATORS 2014 EFY (2021/2022GC |
| 36 | Mortality rate from all types of injuries (per 100,000 population | Impact | 79 | 73 | 67 | | | | |
| 37 | Cataract Surgical Rate (Per 1,000,000 population) | Outcome | 720 | 1071 | 1500 | 555 | 52% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 38 | Proportion of hypertensive adults diagnosed for HPN and know their status | Outcome | 40% | 50% | 60% | 59% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 39 | Proportion of hypertensive adults whose blood pressure is controlled | Outcome | 26% | 41% | 60% | 80% | >100% | | 6 month parliament report |
| 40 | Proportion of DM patients whose blood sugar is controlled | Outcome | 24% | 40% | 60% | 79% | >100% | | 6 month parliament report |
| 41 | Coverage of services for severe mental health disorders - | Outcome | 5% | 16% | 30% | 26% | >100% | | Service Provision Assessment 2021–2022 Preliminary Report |
| | Depression | | 1% | 9% | 20% | | | | |
| | Substance Use Disorders | | | | | | | | |
| 42 | Proportion of Trachoma endemic woredas with Trachomatous Inflammation Follicular (T.F) to < 5% among 1 to 9 years old children | Impact | 26% | 49% | 77% | | | | |

| | Indicator | Type of Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance till December 2022 | Peformance Rate Against MTR Targets | Rating in Colours | Data Source |
|---|---|---|---|---|---|---|---|---|---|
| | **Hygiene and Environmental health** | | | | | | | | |
| 43 | Proportion of households having basic sanitation facilities | Outcome | 20% | 38% | 60% | 51% | >100% | | HEALTH AND HEALTH RELATED INDICATORS 2014 EFY (2021/2022GC |
| 44 | Proportion of kebeles declared ODF | Outcome | 40% | 55% | 80% | 35% | 64% | | HEALTH AND HEALTH RELATED INDICATORS 2014 EFY (2021/2022GC |
| 45 | Proportion of households having hand washing facilities at the premises with soap and water | Output | 8% | 31% | 58% | 36.5% | >100% | | 6 month parliament report |
| | **HEP and Primary Health Care** | | | | | | | | |
| 46 | Proportion of Model households | Outcome | 18% | 32% | 50% | 23.5% | 73.4% | | 6 month parliament report |
| 47 | Proportion of health centers and primary hospitals providing major emergency and essential surgical care | Input | 1.30% | 9.00% | 19% | | | | |
| 48 | Proportion of high performing Primary Health Care Units (PHCUs) | Outcome | 5% | 19% | 35% | 26% | >100% | | 6 month parliament report |
| 49 | Proportion of health posts providing comprehensive health services | Input | 0% | 5% | 12% | 22 Health Posts | 1.2% | | 6 month parliament report |
| | **Medical Services** | | | | | | | | |
| 50 | Outpatient attendance per capita | Outcome | 1.02 | 1.35 | 1.75 | 1.47 | >100% | | DHIS2 -Six Months Data Analytic Report |
| 51 | Bed Occupancy Rate | Output | 42% | 57% | 75% | 56% | 98% | | DHIS2 -Six Months Data Analytic Report |
| 52 | Proportion of patients with positive experience of care | Outcome | 33% | 42% | 54% | 79% | >100% | | 6 month parliament report |
| 53 | Institutional mortality rate | Impact | 2.20% | 1.90% | 1.50% | 2.74% | 24.5% | | DHIS2 -Six Months Data |
| 54 | Percentage of component Production from total collection | Output | 23.30% | 42.00% | 65% | 18% | 43% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 55 | Ambulance Response rate | Output | NA | 90% | 90% | 83% | 92% | | DHIS2 -Six Months Data Analytic Report |
| | **Public Health Emergency Management (PHEM)** | | | | | | | | |
| 56 | Health Security Index | Outcome | 0.63 | 0.7 | 0.78 | | | | |
| 57 | Proportion of epidemics controlled within the standard of mortality | Outcome | 80% | 90% | 100% | 85% | 94% | | 6 month parliament report |

| | Indicator | Type of Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance till December 2022 | Peformance Rate Against MTR Targets | Rating in Colours | Data Source |
|---|---|---|---|---|---|---|---|---|---|
| | **Health System Input Indicators** | | | | | | | | |
| 58 | Availability of essential medicines by level of health care | Input | 79.2% | 84.0% | 90.0% | 76.0% | 90% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 59 | Prevalence of unsafe and illegal food products in the market | Outcome | 40.0% | 36.0% | 30.0% | 37.2% | -7% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 60 | Percentage of substandard and falsified medicine in the market | Outcome | 8.6% | 7.0% | 6.0% | 1.3% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 61 | Out of Pocket Expenditure as a share of total health expenditure (THE) | Outcome | 31.0% | 28.0% | 25.0% | 30.5% | -2% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 62 | General government expenditure on health (GGHE) as a share of total general government expenditure (GGE) | Outcome | 8.1% | 9.0% | 10.0% | 13.8% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 63 | Total health expenditure per-capita (USD) | Input | 33 | 37 | 42.2 | 36.3 | 98% | | NHA (2019/20) |
| 64 | Proportion of eligible households enrolled in Community Based Health Insurance (CBHI) | Outcome | 49% | 63% | 80% | 66% | >100% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 65 | Proportion of eligible civil servants covered by Social Health Insurance (SHI) | Input | 0 | 45% | 100% | 0 | 0% | | 6 month parliament report |
| 66 | Incidence of catastrophic health spending | Impact | 2.10% | 2.00% | 1.80% | | | | |
| 67 | Proportion of Primary Health Care Facilities implemented Community Score Card | Input | 61% | 74% | 90% | 61% | 82% | | 6 month parliament report |
| 68 | Information use index | Outcome | 52.50% | 67.10% | 85.00% | 60% | 89% | | 6 month parliament report |

| | Indicator | Type of Indicator | Baseline | Mid- term Target 2022 | Target (2024/25) | Performance till December 2022 | Peformance Rate Against MTR Targets | Rating in Colours | Data Source |
|---|---|---|---|---|---|---|---|---|---|
| 69 | Proportion of health facilities that met a data verification factor within 10% range for selected indicators | Input | 82% | 46% | 95% | In terms of facility, the result of data verification of 88%, 79%, 93%, 88%, 49%, and 71% of the Health Facilities were within the acceptable range for SBA, Penta3, Option B+ (Newly), New TB cases/all forms, under five pneumonia cases, and Malaria side/ RDT positive cases respectively | | | RDQA,2022 |
| 70 | Proportion of births notified (from total births) | Input | 35% | 55% | 80% | 69% | >100% | | DHIS2 -Six Months Data |
| 71 | proportion of deaths notified (from total deaths) | Input | 3.40% | 18.00% | 35.00% | 4% | 22% | | DHIS2 -Six Months Data |
| 72 | Health workers density per 1,000 population | Input | 1 | 1.6 | 2.3 | 1.23 | 76.9% | | ANNUAL PERFORMANCE REPORT 2014 EFY (2021/22) |
| 73 | Health care workers' attrition rate | Outcome | 6.20% | 5.40% | 4.50% | | | | |
| 74 | Proportion of health facilities (health centers and hospitals) with basic amenities (water, electricity, latrine,...) | Input | 59% | 73% | 90% | | | | |
| | Improved water supply | | 76% | 86% | 100% | 53% | 62% | | Service Provision Assessment 2021–2022 Preliminary Report |
| | Electricity | | 61% | 78% | 86% | 54% | 69% | | Service Provision Assessment 2021–2022 Preliminary Report |
| | Improved latrine | | 16% | 31% | 50% | 73% | >100% | | Service Provision Assessment 2021–2022 Preliminary Report |
| | Basic health care waste management services | | | | | | | | |
| 75 | Number of new/ improved technology (Diagnostics, Therapeutics, Tools, or Vaccines) transferred | input | 1 | 3 | 6 | | | | |
| 76 | Proportion of health facilities implementing compulsory Ethiopian health facility standard | Input | 0.53 | 0.65 | 0.8 | 0.62 | 0.95 | | 6 month parliament report |

**Volume II: Regional reports**

1. Addis Ababa
2. Afar
3. Amhara
4. Benishangul Gumuz
5. Dire Dawa
6. Gambella
7. Harari
8. Oromia
9. Sidama
10. Southern Nations Nationalities and Peoples (SNNP)
11. South West Ethiopia
12. Somali
13. Tigray

# ETHIOPIA HEALTH SECTOR TRANSFORMATION PLAN

## HSTP II (2020/21 – 2024/25 (GC)
## (2013 – 2017 EFY)