Ministry of Health
Federal Republic of Somalia

Investment Case for the Somali Health Sector 2022–2027

WORLD BANK GROUP

GLOBAL FINANCING FACILITY

Acknowledgements

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	antenatal care
BEmONC	basic emergency obstetric and newborn care
CEmONC	comprehensive emergency obstetric and newborn care
CHW	community health worker
DHIS	District Health Information System
EPHS	Essential Package for Health Services
FGM/C	female genital mutilation/cutting
FGS	Federal Government of Somalia
FHWs	female health workers
FMoH	Federal Ministry of Health
GFF	Global Financing Facility
HeRAMS	Health Resources and Services Availability Monitoring System
HIPC	heavily indebted poor countries
HIV	Human Immunodeficiency Virus
HMIS	health management information system
HR	human resources
HRH	human resources for health
HRMIS	human resource management information system
HSSP	Health Sector Strategic Plan
IDA	International Development Association
IDP	internally displaced persons
IDSR	integrated disease surveillance and response
IFC	International Finance Corporation
IFMIS	integrated financial management information system
IT	information technology
LMIS	Logistics Management Information System
mCPR	modern method contraceptive prevalence rates
MMR	maternal mortality ratio
MNCH	maternal newborn and child health
NGO -	non-governmental organization
NHPC	National Health Professionals Council
NMRA	National Medicines Regularity Authority
NMSA	New Medicine Supplies Agency
NNMR	neonatal mortality ratio
PFM	public financial management
PHC	primary health care
PMTCT	prevention of mother-to-child transmission
PMT	project implementation team
RMET	resource mapping and expenditure tracking
RACI	Responsible, Accountable, Consulted and Informed
RCRF	Recurrent Cost and Reform Financing Project
RMNCAH	reproductive, maternal, newborn, child and adolescent health
PNC	postnatal care
PPD	public-private dialogue

PSE	private sector engagement
SARA	service availability and readiness assessment
SBA	skilled birth attendance
SDG	Sustainable Development Goals
SDHS	Somali Demographic and Health Survey
SGBV	sexual and gender-based violence
S-HSCC	Somali Health Sector Coordination Committee
SOPS	standard operating procedures
STI	sexually transmitted infection
TA	technical assistance
TB	tuberculosis
TBA	traditional birth attendant
TPM	third-party monitoring
TWG	technical working group
U5MR	under-five mortality rate
UHC	universal health coverage
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Executive Summary

Somalia's efforts to improve the health and welfare of its population face substantial challenges related to conflict, climate, and poverty. Since 2012, with the provisional constitution, the government has worked to strengthen institutions and governance, and in March 2020 Somalia regained access to regular support from international financial institutions (IFIs), including the World Bank Group. Improvements in health and nutrition outcomes are being slowly realized, but effective strategies must operate within an environment of an extremely limited financial base; insufficient and poorly distributed human resources, health infrastructure, equipment, drugs and medical supplies; and limited public sector capacity to perform key health stewardship functions. Efforts to expand access to quality essential services are also constrained by low educational attainment, severe gender disparities, inadequate access to power, water, transport and information, and persisting security concerns. Against this backdrop, development assistance to the health sector has not been well coordinated nor government-led, and often it has operated in parallel to government institutions instead of building the capacity of these institutions.

The government and its development partners have committed to reduce this fragmentation, partly by collectively focusing on the delivery of an Essential Package of Health Services (EPHS) which prioritizes access, coverage, and quality of cost-effective health interventions known to have the greatest impact on Somalia's burden of disease. In 2020, all parties worked together to update the EPHS. Implementation of the 2020 EPHS is expected to improve equity and access and contribute to the attainment of universal health coverage (UHC) by increasing the coverage's depth (the share of services covered), breadth (the proportion of the population covered), and height (the extent of financial protection).

The Government of Somalia, represented by the Federal Ministry of Health (FMoH), has engaged with the Global Financing Facility for Women, Children and Adolescents (GFF), recognizing that the GFF objective of accelerating efforts to end preventable maternal, newborn, child and adolescent deaths by 2030 aligns with the health sector's commitment to the EPHS. The Investment Case for the Somali Health Sector identifies the key reforms needed to accelerate delivery of the EPHS within available resources. Investments and policies of the FMoH, and the financial, physical, and technical contributions from Federal Member State (FMS) Ministries of Health, development partners and the private sector should all be aligned in support of these investment priorities.

This Investment Case (IC) is intended to (i) create a shared understanding of bottlenecks, reforms, and financing; (ii) increase focus by prioritizing reproductive, maternal, neonatal, child and adolescent health and nutrition services through the EPHS and the key priorities of affordable health system reform required to achieve EPHS coverage; (iii) reduce fragmentation by aligning available government and donor financing to these priorities; (iv) increase funding by jointly advocating for new financing and linking Investment Case priorities to the national budget and planning process; and (v) improve accountability by setting achievable targets that will be jointly monitored and tracked.

This Investment Case was developed through a collaborative process led by FMoH. The Investment Case prioritizes services and system reforms that can be implemented *within available resources*. A situation analysis has informed this prioritization, but as the costs and resources available are determined, priorities may be revisited and/or the timelines for implementing key reforms revised to accommodate resource and capacity constraints.

The Investment Case responds to Somalia's burden of disease and the unique characteristics of its health system. The burden of disease continues to be dominated by maternal, neonatal, and child deaths, malnutrition, and communicable disease, even as the proportion attributable to noncommunicable disease is growing, specifically with hypertension, diabetes, and mental health disorders.

Somalia's maternal, neonatal and child death rates are among the highest in the world. These outcomes are influenced by Somalia's fertility rate, also one of the highest globally, together with a lack of access to quality maternal health care. Not only is this high fertility a challenge for reproductive, maternal and child health and survival, but the resulting large family sizes and population growth further exacerbate poverty. Rapid population growth makes it difficult to ensure nourishment, education, public services, and opportunities for every Somali, reduces women's participation in the workforce, further stretches limited resources, and strains the natural environment.

Reaching all Somalis with essential health services is the government's core priority, but the existing health care system has limited reach. Nonstate actors play a substantial role. Expanding partnerships with these nonstate actors—by contracting NGOs to deliver essential services and by strengthening the public sector's ability to regulate for-profit service providers—is thus an overarching strategy.

Through a consultative process, five areas for system reforms have been prioritized and should determine financing priorities. These reforms are the levers the public sector will employ to accelerate progress of health and nutritional outcomes for women, children and adolescents:

1. Strengthened health financing and financial management
2. Strengthened health workforce
3. Improved essential medicine and supply chain
4. Improved information systems, and
5. Effective engagement of the private for-profit sector.

The government recognizes that nonstate actors—NGOs and for-profit providers—can help expand access to essential services if resources (human resources, infrastructure, drugs and medical supplies) are available and if providers are incentivized, regulated, and compensated in a manner that helps ensure quality and equity. The FMoH and FMS ministries of health will take advantage of the reach of these service providers to expand coverage and will prioritize developing the public sector's institutional capacity to manage the sector's finances and to perform key stewardship functions. Those stewardship functions include the public sector's regulatory role, collecting and utilizing health information, communicating to leaders and the public, and managing partnerships.

Today, many NGO-run service providers operate with external resources and using their own standards, information systems, and priorities. Engaging them under explicit service-delivery agreements and shifting external aid into government-managed contracts (rather than parallel grants to NGOs) make up one potentially cost-effective strategy. The government will thus contract non-governmental organizations to deliver the defined essential package of health services across facilities within a single region, charging the contractor with staffing, supplying, and managing facilities to deliver. In some settings, FMS may also test "contracting-in" arrangements with some public-sector providers. The ministries of health at both the state and federal levels will need to develop the capacity to tender and to manage contracts, to monitor performance, and to hold providers accountable for results.

Human resource constraints severely limit the health sector's ability to deliver the EPHS. Standardizing qualifications and terms of reference across cadres, accreditation and licensing, producing, deploying, monitoring, remunerating and retaining staff are priorities. Similarly, managing the supply chain and ensuring that pharmaceuticals and medical supplies meet quality standards, are cost-effectively procured and distributed, and are available at service delivery points when needed is a priority. Core reform strategies include strengthening inventory and logistics management, building procurement capacity, and improving regulatory oversight, including through the National Medicines Regulatory Authority.

Strengthening information management underpins many of the reform priorities, and the Investment Case recognizes that collecting and analyzing sectoral data and information is a critical stewardship function. Routine data collection is required not only to anticipate health needs, monitor trends, measure results, and evaluate the impact of strategies, but also to support human resource initiatives, effectively operate the supply chain, and regulate service providers—both those contracted to deliver services on behalf of the public sector and those operating independently. A core focus of the Investment Case is improving health management information systems (HMIS): further integrating vertical information systems into the district health information system, expanding coverage across all facilities, and strengthening capacity to generate and utilize data. The Investment Case also appreciates the need to support intermittent surveys to fill information gaps.

The government will also strengthen its capacity to regulate and influence the practices of for-profit providers. While the Contract Management Unit will support contractual partnerships, a Private Sector Engagement Unit will expand the ways in which government engages with the private sector. There is a clear need to better ensure the quality of services offered by for-profit providers. Strengthening regulatory and accreditation systems and capacity, by both the government and professional bodies, is thus a reform priority. Investments will be made in capacity building, training, and technical assistance focusing on clinical quality as well as business management.

To create efficiency gains, priority will be given to the most cost-effective services, to contracting out services, to strengthening quality assurance, to improving the deployment of human resources, drugs and medical supplies, and to the effective use of health information. The purchaser-provider split will partly characterize reform financing strategies, as will initiatives to better align donor financing with the government's EPHS and contracting-out strategy, channeling a greater share of development assistance through the government budget. To facilitate this transition from donor support to parallel programs, it will be essential to build public financial management, expand health financing and contract management capacity, and increase transparency. However, even with successful efforts to expand fiscal space through efficiency gains, the total financial resources available for health will be insufficient. Thus, priority reforms will include initiatives aimed at expanding the total resource base; the Investment Case is intended to assist in justifying greater investments in the sector, not only from donors but also as a share of public expenditure.

The total costs of the Investment Case and identification of the available resources may influence implementation timelines for the Investment Case. The government and its partners are pragmatic and understand that the full EPHS might not be delivered all at once. Rather, financial and institutional capacity limitations may dictate an incremental roll-out of both the package of services and some of the key reforms prioritized in the Investment Case. Rolling out the EPHS in phases will also allow for learning and adjustment.

Implementation and monitoring of the Investment Case will be overseen by the Somali Health Sector Coordination Committee, whose membership includes representatives of WHO, the World Bank, and the GFF. The Policy and the Planning Department will lead with inputs from technical working groups from all departments of the FMoH. This Investment Case includes a Results Framework intended to support the monitoring of implementation and evaluation of results. Annual and semi-annual meetings at the national and subnational level will monitor progress, share best practices among implementation partners, evaluate problems, and develop solutions. The state ministries of health and stakeholders will meet quarterly to monitor progress on priority indicators at the state level so as to identify the actions and initiatives required to improve performance in specific areas. Lastly, a Joint Annual Review (JAR) will be conducted on an annual basis by the MoH in collaboration with development partners. This review will concentrate on the extent to which the objectives of the Investment Case and health sector strategies have been achieved and will accordingly make recommendations regarding how EPHS implementation can be continually improved.

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1. BACKGROUND

1.1. Why an Investment Case?

Somalia became a GFF (Global Financing Facility for Women, Children and Adolescents) country in 2019, building on momentum within the government and the health sector to address Somalia's health challenges. As part of the GFF process, countries develop an "Investment Case" as a foundational instrument to support transformational changes by identifying priority reforms that can unlock and accelerate efforts to deliver a prioritized package of services within existing resources. The ministries of Health and Finance, along with partners and the private sector, can then commit to aligning their financing behind the priorities outlined in the Investment Case.

While the Investment Case is *aligned* with the national strategic plan, it is not the equivalent. Rather, the Investment Case aims to:

- **Create a shared understanding** by collectively identifying bottlenecks, reforms, and financing to accelerate progress in women's, children's, and adolescents' health;
- **Increase focus by prioritizing** reproductive, maternal, neonatal, child, and adolescent health and nutrition (RMNCAH-N) services through Somalia's Essential Package of Health Services (EPHS), the key health system reform priorities required to achieve effective coverage with these essential services to be implemented with available resources;
- **Reduce fragmentation** by aligning available government and donor financing to these priorities;
- **Increase funding for Investment Case priorities** by jointly advocating for new financing, particularly from domestic resources, and linking Investment Case priorities to the national budget and planning process; and
- **Improve accountability** by setting **achievable targets** that will be jointly monitored and tracked by the Somali Health Sector Coordination Committee.

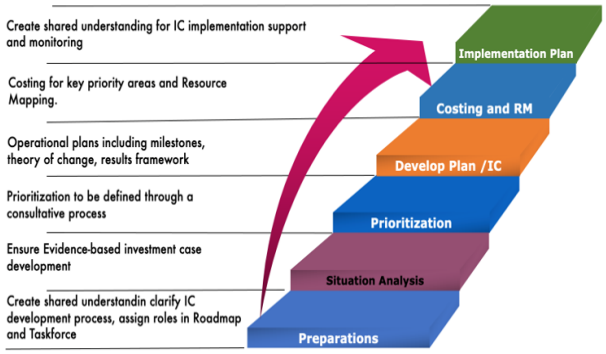
1.2. The Investment Case Development Process

The Investment Case development process has been iterative. As depicted in *Figure 1*, priorities defined through a consultative process were built on an evidence-based situation analysis. The process creates a shared understanding of the implementation plan's needs for support and how the work should be monitored. The operational plans, including milestones, theory of change, and the results framework, are foundational.

The Federal Ministry of Health (FMoH) has led the development process with support from partners. In October 2019, the Somali health authorities, Federal Member States, and partners met in Addis Ababa, agreed on priorities for the Investment Case, and developed a roadmap. In November 2020, a Task Force was established with the objectives of supporting the Investment Case development process, providing technical inputs, and participating in a consultative process chaired by the Director of Planning. The Task Force comprised about 20 members, including FMoH officials, financiers including GAVI; the Global Fund for AIDS, TB and Malaria; the UK's Foreign, Commonwealth and Development Office (FCDO); the Italian Agency for Development Cooperation, the World Bank, the GFF; UNICEF; WHO; UN Population Fund (UNFPA); and private sector and civil society representatives. It has met regularly, with weekly meetings between November 2020 and end-March 2021.

1.3. Structure of the Investment Case

Figure 1. The IC Development Process



This document out-lines the Investment Case process, sectoral needs, and agreed strategies to invest in health in Somalia. It first describes the current situation in Somalia. The situation is continually evolving, and some of the data and evidence are dated, but the Situation Analysis provides context on the constraints and challenges that are anticipated to impact Investment Case implementation. The analysis describes the context in which the country is working to improve outcomes not only for women, children and adolescents but also for adult men. It notes the current burden of disease with regard to maternal and reproductive health, neonatal and child health, nutrition, communicable disease, non-communicable disease and the social factors which affect these health outcomes. It then describes the current health care system, describing how services are delivered, the resources available to deliver services—manpower, physical inputs and financing, and how the system is overseen, that is, the stewardship of the system.

The Investment Case makes the case for five key reform priorities. These are required to improve effective coverage of essential health services by increasing the reach and availability of the EPHS. As the steward of the sector, the FMoH, together with the ministries at the Federal Member States, is responsible for guiding the country toward universal health coverage (UHC). The priorities reflect the levers the public sector will employ to strengthen results: financing, human resources, the supply chain to ensure medicines and medical supplies, and the effective engagement of all service providers by working with nonstate actors.

The Investment Case recognizes the need for a clear implementation strategy that defines roles and responsibilities, accountabilities, and timelines. The implementation and monitoring section details how results monitoring will provide continual feedback on key reforms and implementation strategies. Lastly, the Investment Case identifies the costs and considers the affordability of strategies and timelines. Options for bridging resource gaps are identified, along with the need to revisit priorities, implementation plans, and timelines if resource gaps persist.

The Investment Case is expected to influence investments in the sector. The Investment Case should be linked to the national budget process and should serve as a reference for dialogue around domestic and external resource mobilization. Its utility is in making the case for targeted country-led, coordinated investments to improve RMNCAH-N outcomes.

2. SITUATION ANALYSIS

2.1. Country Context

Somalia has experienced prolonged conflict for three decades and is among the poorest countries in the world–with a nominal GDP per capita of $327.* An estimated 69 percent of the population lives on less than US$1.90 per day, with many more living just above this poverty line.[1] Limited per capita resources are further constrained by population growth and a reduction in the annual economic growth rate due to the impact of COVID-19. One out of every five Somalis had to stop working following the outbreak of COVID-19, and four out of every five households reported a reduction in their income from wages.[2] Annual growth, which had been approximately 2.8 percent between 2016 and 2020, contracted by an estimated 1.5 percent in 2020. The economy is highly dependent on foreign remittances (about one-third of GDP) which have also been harmed by the pandemic.

Somalia is transitioning toward increased stability through institutional and political reforms. The federal system established under the 2012 provisional constitution carved out four new Federal Member States, resulting in a total of six new states under the Federal Government of Somalia (FGS).† The government has strengthened institutional structures through the adoption of reforms and improved governance. After 30 years outside the international financial system, in March 2020 Somalia qualified for the Heavily Indebted Poor Countries (HIPC) Initiative Decision Point, reopening access to regular concessional financing from the International Development Association (IDA) and other International Financing Institutions, along with investments of private capital, including those from the International Finance Corporation (IFC).

Somalia's recurrent natural disasters and conflict in specific geographic areas continue to hamper development efforts. Crippling droughts from 2016 to 2017 and again in 2019, together with protracted and ongoing armed conflicts, have resulted in the internal displacement of more than 2.6 million people and widespread hunger. Cyclical floods and droughts are increasingly common, and their co-existence poses a substantial hazard. In addition, the spread of COVID-19 across Somalia in 2020 and 2021 further constrained the already fragile health system by diverting the available limited resources toward controlling the pandemic.

Somalia's population is growing rapidly, with an annual population growth rate of almost 2.8 percent, resulting in a doubling of the population every 24 years. Somalia's total population is estimated to be 15.4 million,[3] of which 46 percent live in urban areas.[4] High fertility has resulted in a young population, with 66 percent of the population under 19 years of age and 78 percent under 30.[5] Youth unemployment is high and educational attainment limited, with only 16 percent of the population completing primary school and 7 percent completing secondary school.[6]

Somalia is highly dependent on foreign aid (*Figure 2*). In 2019, donors contribution in on-budget support comprised 43 percent ($168.8 million) of the public budget (57%).[7] In 2021, the government proposed to spend US$666 million. Donor grants, which could finance up to 60 percent of the total expenditure, are dominated by project grants, which make up 41 percent, with budget support covering the remaining 19

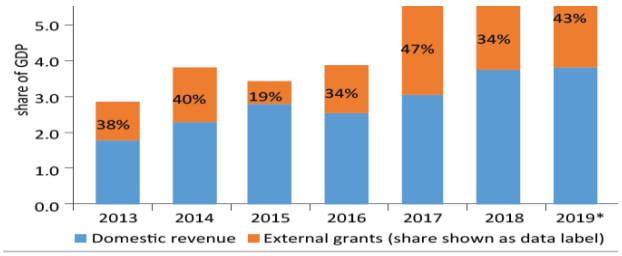
* The real GDP per capita is $876.99 (PPP). Source: International Monetary Fund, *World Economic Outlook* (Washington, DC: 2020).

† The New Federal Member States are: Galmudug, Hirshabelle, Jubbaland, and South-West State (SWS). Existing areas that became states include Puntland and Somaliland; the latter considers itself independent from Somalia but is not recognized.

percent. Overreliance on donor grants, particularly for budget support, to finance operations could prove risky in 2021, given the political environment.[8]

In 2009, Somalia identified an Essential Package of Health Services (EPHS). This first EPHS covered the delivery of health services in Somalia's emergency context and included six core and four additional programs. The core programs were: (i) maternal, reproductive, and neonatal health; (ii) child health; (iii) communicable disease surveillance and control; (iv) first aid and care for the critically ill and injured; (v) treatment of common illness; and (vi) HIV, STIs and TB. Four additional programs were: (i) management of chronic disease and other diseases; (ii) care for the elderly and palliative care; (iii) mental health and mental disability; and (iv) dental health and eye health.

Figure 2. Total government revenue, domestic and external, as share of GDP, 2013 to 2019



Source: Staff computations based on FGS MoF data.
Note: Data for 2013–18 are actual; data for 2019 are budgeted.

In 2020, the government updated the EPHS to a more comprehensive package of health services. The implementation of the EPHS 2020 is expected to address the burden of diseases most responsible for the high morbidity, mortality, and disability afflicting the Somali people, particularly the most vulnerable–women, children, internally displaced, and the elderly population. The government anticipates that implementation of EPHS 2020 will catalyze improvements in equity and access and support the aim of universal health coverage (UHC).

The 2009 EPHS did not reach the entire population as a result of constraints related to funding and implementation capabilities. Statistics published by the WHO in 2017 indicate that the EPHS partially covered around 47 of 89 districts (population of 5.7 million), about only 41 percent of the population. The main obstacles confronting the EPHS implementation in Somalia have included (i) the constrained institutional capacity and stewardship role of the MoH; (ii) inefficiencies, inadequacies and unsustainability in terms of funding; (iii) human resources deficiencies; (iv) insufficient and inequitable availability of services; (v) substandard service quality; (vi) fragmentation, lack of coordination and harmonization among key stakeholders; and (vii) a weak health information system.[9]

2.2. Burden of Disease

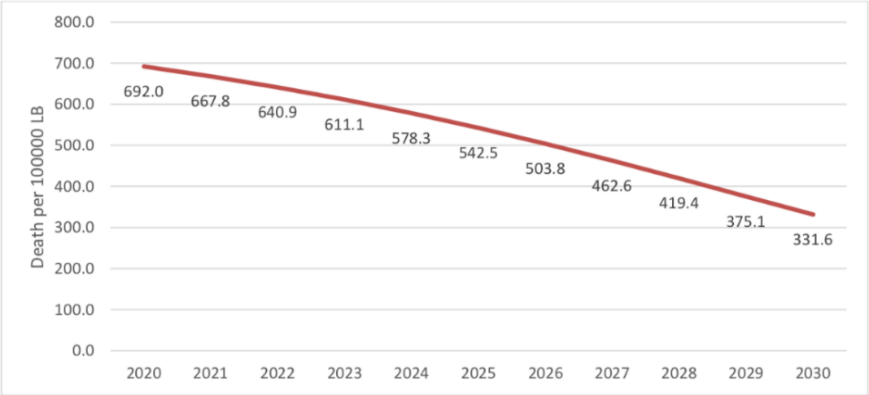
2.2.1. Reproductive, Neonatal, Maternal, Adolescent and Child Health and Nutrition

Reproductive and maternal health

Somalia's maternal mortality ratio (MMR) is still one of the highest in the world, although it continues to decline. MMR has declined from 1,210 (per 100,000 live births)* in the 1990s to 692 in 2019.[10] Figure 3 shows that, so long as the proposed intervention coverage under the EPHS 2020 is implemented at scale, MMR in Somalia is expected to fall to 331.6 (per 100,000 live births) by 2030.

* http://data.worldbank.org/indicator/SH.STA.MMRT.

Figure 3. Estimated reduction in maternal mortality ratio, 2020 to 2030



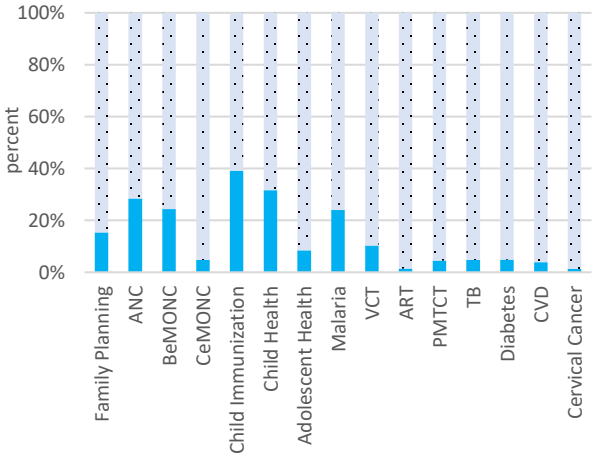
Source: EPHS 2020 report

The leading causes of maternal mortality in Somalia are similar to the global and regional causes. Pregnancy and childbirth-related complications—such as postpartum hemorrhage, obstructed labor, pre-eclampsia/eclampsia, and sepsis—are the main direct causes of maternal morbidity and mortality.[11] There are many country-specific contributing factors, such as inadequate access to Basic Emergency Obstetric and Newborn Care (BEmONC) and to Comprehensive Emergency Obstetric and Newborn Care (CEmONC), high fertility rates, low contraceptive use, and the practice of female circumcisions. Poverty, longstanding civil war, and harmful cultural practices contributes to Somalia's extremely high maternal mortality.

Although the rate of skilled birth attendance has been increasing consistently each year, only one-third of births are attended by skilled birth attendants (SBAs). Meanwhile, deliveries in hospitals or health facilities continue to be very limited across most of Somalia; only one-fifth take place in health facilities. According to 2020 data, only 31.9 percent of Somali women gave birth with an SBA – far lower than neighboring countries and the average for sub-Saharan Africa.[12]

Availability of both comprehensive and basic emergency obstetric and newborn care (CEmONC and BEmONC) is limited. According to the 2016 Somali Service Availability and Readiness Assessment (hereafter SARA 2016), CEmONC services were only offered in 37 percent of hospitals and 1 percent of facilities. Facilities offering both BEmONC and CEmONC only had a subset of the essential items. BEmONC had 53 percent of essential items available, while CEmONC had only 20 percent of the items available. There was a higher likelihood of facilities in urban areas having any kind of EmONC services as compared to rural ones. [13] *Figure* 4 shows the percentage of facilities in Somalia with readiness to deliver the specified services, including BEmONC and CEmONC.

Figure 4. Service readiness of health facilities, by service type



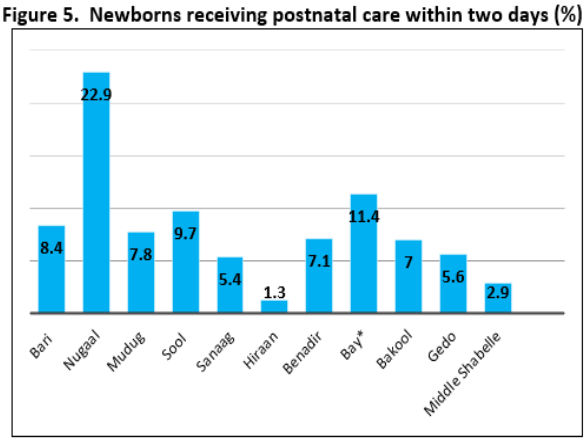
Note: Each column shows the percentage of all facilities (blue fill) with the capacity to deliver the indicated health service. Data source: The Somalia Service Availability and Readiness Assessment Survey, 2016 (EPHS, 2020).

Only one in three Somali women ages 15-49 received one antenatal care (ANC) visit with a skilled provider during their last pregnancy, and only one in four women had the desired four ANC visits. Recent data show that 68 percent of women indicated that they did not go for any ANC visits and that generally, younger mothers ages 20-34 received more ANC from skilled providers than older women ages 35-49 (33% and 25% respectively). [14] While recent data available through sources such as the 2020 Somalia Demographic and Health Survey (SDHS) provide important insights into ANC coverage, there are currently no further data available regarding the differences in ANC coverage in public and private facilities.

The uptake of ANC provision is limited due to the readiness of health facilities, education levels, and geographic access. As shown in *Figure 4,* Somalia's 2016 SARA reports that only 28 percent of health facilities offer ANC for pregnant women and women of childbearing age. More educated women are approximately three times more likely to receive ANC services from skilled providers as compared to their uneducated counterparts. A larger percentage of nomadic women delay ANC to the last trimester—19 percent reported that they made their first ANC visit in or after the eighth month, as compared to 9 percent and 8 percent among women in urban and rural households, respectively. At least seven out of ten women face at least one problem in accessing health care when they need it; 65 percent of women perceive the lack of money as a barrier, while 62 percent perceive the distance to a health facility as a barrier. Education and wealth are associated with the utilization of delivery services at health facilities: 69 percent of those with higher education deliver at health facilities, whereas 16 percent of those with no educational background deliver at health facilities. [14]

The uptake of postnatal care (PNC) services in Somalia is also poor. Recent data shows that 89 percent of mothers and 90 percent of newborns did not receive any postnatal check-up. [14] Only 9 percent of mothers had a postnatal check-up during the first four hours after delivery, and of those who received care, 10.5 percent received it within the first two days of delivery. Similarly, only 8.5 percent of newborns had a check-up within the first three hours of delivery and only 9.5 percent within the first two days. Further, disparities based on populations, income, education, and location are substantial. For example, urban women are much more likely to receive PNC (19%) within the first two days than women in nomadic settings (3%). Additionally, women with higher levels of education are more likely to receive PNC within two days of delivery (49%) than women with no schooling or education (7%).[14] As shown in *Figure 5*, there are significant disparities between the regions in PNC for newborns, ranging from almost 23 percent of newborns in Nugaal receiving PNC within two days compared to 1 percent in Hiraan. No further data is currently available that demonstrates the differences in PNC coverage between public and private facilities. [14]

Figure 5. Newborns receiving postnatal care within two days (%)



Source: SHDS, 2020

Neonatal Mortality

Between 1990 and 2015, Somalia's neonatal mortality ratio (NNMR) remained at around 45 deaths per 1,000 live births. Although more recent data are unavailable, according to 2015 data, Somalia's NNMR had declined to 40 deaths per 1,000 live births, still making it the highest in the world, up to 30 percent

higher than neighboring Sudan and Ethiopia.* The main causes of neonatal mortality reported in Somalia include birth asphyxia and trauma, prematurity, and sepsis.[15] The lack of quality ANC, PNC, BEmONC, and CEmONC, as well as the acute gaps in the provision of essential neonatal services included in these packages, such as neonatal resuscitation (available at 31% of facilities), are key contributing factors in Somalia's high rate of neonatal mortality.

However, with implementation of the full EPHS 2020, Somalia's NNMR is expected to fall dramatically over the next decade. As shown in *Figure 6*, with the scale-up of EPHS, NNMR is projected to decline to 20 deaths per 1,000 live births, representing a 45 percent reduction over the decade.

Figure 6. Somalia's NNMR, IMR and U5MR, 2020 - 2030

Source: EPHR report 2020

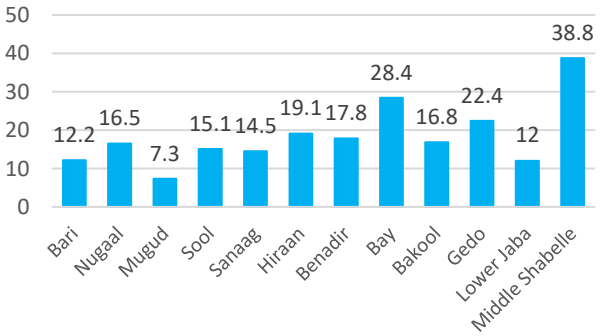
Adolescent Health

Adolescent girls (ages 10–19) are at high risk of child marriage, early pregnancy, female genital mutilation/cutting (FGM/C) and mental health issues. All of these conditions limit their ability to access required health services, obtain an education, and acquire needed life skills. Adolescence is a critical phase in a young woman's development, and assuredly adolescents constitute a vulnerable group, as the majority lack the information and necessary skills for self-protection when they reach their sexual maturation. In addition, family disruption and the crisis of internally displaced persons (IDPs) have increased the prevalence of gender-based violence by exacerbating existing social and economic inequalities and further limiting educational opportunities for girls.

Recent data indicate that 12 percent of Somali girls ages 15-19 have already given birth to a child, and 2 percent are pregnant with their first child, although there are large differences between regions. Two percent of girls age 15 have already started childbearing, and there are significant differences in background characteristics.

In nomadic areas, 19 percent of girls ages 15-19 are already mothers or pregnant with their first child, whereas in urban areas the proportion is 11 percent. Nineteen percent of girls ages 15-19 without education also have had a baby or are pregnant, compared to 2 percent of girls with higher education. Twenty percent of girls ages 15-19 in the poorest households have started childbearing, compared to 9 percent of girls of the same age in the wealthiest households. There also are wide disparities between the regions, as shown in *Figure 7*. In Mudug, for example, only 7 percent of girls ages 15-19 have begun childbearing, compared to almost 30 percent in Bay and almost 40 percent in Middle Shabelle. [14]

Figure 7. Adolescent childbearing rates, by region



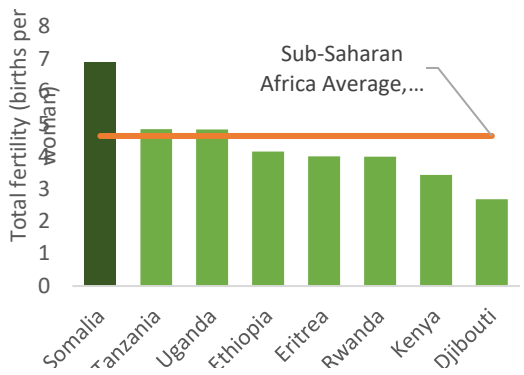
Note: Childbearing rate is in percentage of girls ages 15 to 19.
Source: SHDS 2020

* UNIA estimates.

Family Planning

Somalia has one of the highest total fertility rates in the world, after Niger (6.9 children per woman). At the same time, Somalia's rate dropped significantly between 1990 and 2020, from 7.2 children per woman to 6.9. [14] The rate remains significantly higher than that of all countries in the immediate region and among the highest in all of Africa. More than 90 percent of women interviewed in the SHDS 2020 consider six or more children to be the ideal family size. Both this desired family size and the actual fertility rate are considerably higher compared to the average fertility rate of 4.6 in sub-Saharan Africa as well as to Somalia's immediate neighbors, Kenya (3.4) and Ethiopia (4.1), as shown in *Figure 8.*

Figure 8. Total fertility rates for Somalia and selected countries



Note: Each column represents the average number of children born to each woman ages 15–49.
Source: Adapted from Somalia Economic Update, 2021

At 3 percent, Somalia's population growth rate is one of the highest in the world. Extrapolating this rate to the future means that Somalia's population will double every 24 years.[16] Available data indicate that there is limited interest in reducing births, as evidenced by the desired ideal family size of 10.8 or more children. While there is more acceptance of birth spacing, with total demand for birth spacing at 38 percent, use of modern contraceptives is extremely limited with a contraceptive prevalence rate of only 1 percent among all women and 7 percent among currently married women. Although birth spacing is featured as a priority in health plans, policies, and strategies, its focus is very limited and it is prioritized only as a way of preventing maternal deaths. It is not prioritized as a key driver of managing a healthy and productive population, empowering women and offering them choices over their fertility.

Almost two out of every three ever-married women (63%) have heard of at least one method of contraception. Interestingly, modern contraceptive methods are more well-known than traditional methods* (62% compared to 17% for both ever-married and currently married women). Knowledge of contraception is highest among older women, with about half of girls ages 15-19 having heard of contraceptive methods. Women in urban areas are more likely to know of contraceptive methods, and women with higher education are best informed about contraception—90 percent of the most educated having heard of at least one method.

Table 1. Key birth spacing indicators in Somalia, by region

Indicator	Bari	Nugaal	Mudug	Sool	Sanaag	Hiraan	Benadir	Bay	Bakool	Gedo	Lower Juba	Middle Shabelle
Total fertility rate	6.1	7.0	6.3	7.9	7.7	8.1	6.4	7.4	9.2	7.4	7.3	8.0
Modern contraceptive use (%)	1.9	1.9	1.1	0.9	0.8	0.0	0.8	_	0.0	0.5	0.3	0.1
Unmet need for birth spacing (%)	35.1	43.4	36.2	38	36.9	36.2	31.8	_	_	38	38.5	34.9

Source: Somali Health and Demographic Survey 2020.

* Modern methods include the pill, the intrauterine device (IUD), injectables, implants, the male and the female condom, the diaphragm, the lactational amenorrhea method (LAM), and emergency contraception. Traditional methods include rhythm (periodic abstinence) and withdrawal.

Somalia's low modern-method contraceptive prevalence rate (mCPR) is due to several reasons, including socio-cultural and religious views on using any nontraditional birth spacing methods, which leads to very little demand for services. Previous campaigns to increase demand for services have only been partially effective, and supplies remain erratic. According to data from the organization Family Planning 2020 (FP2020), short-term methods are the most popular, with long-acting methods making up less than 10 percent of all modern methods. The use of contraceptive implants is almost nonexistent, although in other sub-Saharan African countries, the dramatic rise in implants in recent years is attributed to significant increases in mCPR.

Meeting the unmet demand for family planning would make a difference. Thirty-eight percent of currently married women have a demand for (wish to practice) birth spacing, although only 3 percent of the potential demand for birth spacing is being met. Unmet need is higher among older women than their young counterparts but is effectively the same in rural and nomadic areas as in urban areas, with urban areas at 36 percent and both rural and nomadic areas at 37 percent each. [14]

Child Health

Child mortality in Somalia is among the highest in the world. With one out of nine Somali children dying before turning five. Somalia's under-five mortality rate (U5MR) improved little over a 15-year period, between 1990 and 2005.[*] By 2015, U5MR had decreased to 137 deaths per 1,000 live births, although this remained the highest mortality rate globally. Currently, the U5MR is 121.5 per 1,000 live births—still higher than the sub-Saharan Africa average of 76 deaths per 1,000 live births.[†]

However, with the scale-up of full EPHS 2020, forecasts indicate that Somalia's U5MR rates could drop by almost 50 percent by 2030. As shown in Figure 6 above, the U5MR is expected to be reduced from 121.5 deaths per 1,000 live births in 2020 to 63.2 deaths per 1,000 live births by 2030. [14]

Pneumonia, diarrheal diseases, measles, tuberculosis, malaria, malnutrition and neonatal disorders are among the leading causes contributing to the high infant and child mortality rate in Somalia. For children showing symptoms of ARI (acute respiratory infection) and diarrhea, 22.5 percent and 47.5 percent of their parents, respectively, sought advice from a health provider. Thirty-seven percent of children under the age of five with a fever sought treatment and 24 percent were treated with an antibiotic. However, the source of care for different child health conditions between public and private facilities is not currently known. According to SARA 2016, only 34% of public health facilities were ready to provide preventive and curative child health care services for the under-five.

Only10 percent Somali children aged between 12-23 months have received all basic immunizations (one BCG vaccine, three doses of pentavalent and polio vaccines, and one dose of measles vaccine). 60 percent of children of the same age have received no vaccines of any kind.[14] The 2016 SARA survey revealed that less than half (49%) of public health facilities provided routine immunization, while outreach immunization services were offered by only 13 percent of the facilities.[‡]

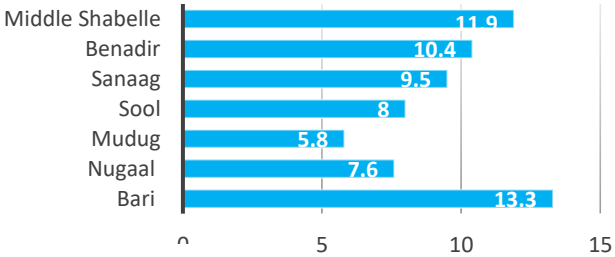
[*] According to UNIN estimates, in 1990, there were 180 under-five deaths out of every 1,000 live births. By 2005, there were 174 death per 1,000 live births.

[†] UN Inter-agency Group for Child Mortality Estimation (UN IGME) in 2020.

[‡] According to WHO, a child is considered fully vaccinated if he/she has received a BCG vaccination against tuberculosis, three doses of diphtheria, pertussis, and tetanus (DPT) vaccine, at least three doses of the polio vaccine, and one dose of measles vaccine.

Children in urban settings generally have a higher rate of vaccination as compared to those children whose mothers are uneducated and are from the rural areas. As shown in *Figure 9*, immunization coverage across states remains very low, with several states having less than 10 percent immunization coverage, especially Mudug, Nugaal, Sool, and Sanaag. [14]

Figure 9. Immunization coverage, by region



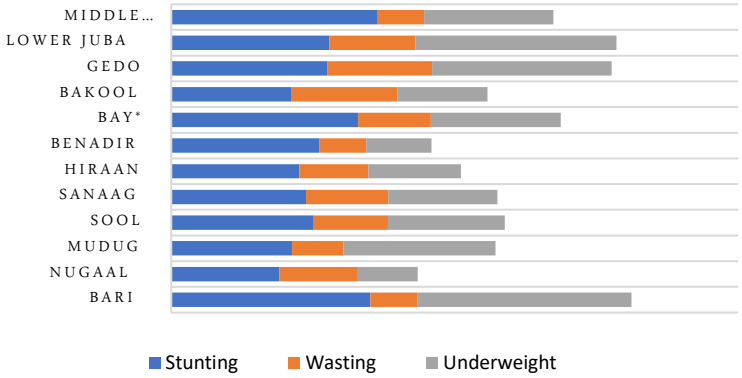
Source: SHDS

The provision of routine immunization is confronted by operational challenges such as inaccessibility, insecurity, and the shortage of a trained health workforce. An additional challenge is the low density of health service delivery outlets and the insufficient workforce, especially in rural areas with inadequate community demand for health care services. In addition, various contextual issues affect the Expanded Program on Immunization (EPI) delivery, such as recurrent natural emergencies (drought and flooding); surges in security incidents; and disease outbreaks, such as polio, measles, and acute diarrheal disease/cholera.

Nutrition

Approximately 28 percent of all Somali children under five are stunted compared to the sub-Saharan African average of 33 percent. An estimated 23 percent of all children under five are *underweight* (i.e., too thin for their age), while 12 percent are *wasted* (i.e., too thin for their height), compared to the SSA average of 17 percent and 7 percent respectively. As shown in *Figure 10*, there are wide differences across the regions of Somalia.

Figure 10. Malnutrition rates in Somalia, by region



Source: SHDS, 2020.

Poor nutritional practices are commonplace across Somalia, and these in turn dramatically diminish opportunities for good nutritional status from birth. Women's nutrition is vital for their health and pregnancy outcomes, while early childhood malnutrition has been linked to children's long-term human capital outcomes. According to the SHDS, 15 percent of women age 15-49 are underweight. Nomadic areas have the highest percentage of underweight women (26%), followed by women in rural areas (16%), compared to 14 percent of women in urban areas. [14]

According to the WHO classification, as of 2019 the prevalence of anemia was very high, denoting a severe public health problem in Somali children and women. More than 40 percent of women and children were anemic and over 26 percent had iron deficiency anemia, while 34 percent of children and 11 percent of women had vitamin A deficiency. Risk-factor analysis shows that in both population groups, anemia is mainly driven by nutritional factors, such as iron and vitamin A deficiencies. About 65 percent

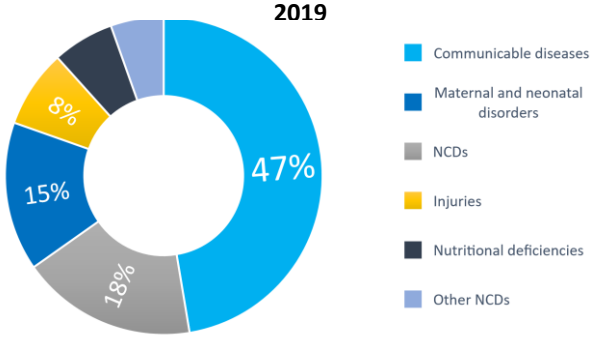
of the anemic children and women also have ID, which is a larger proportion than reported from most countries in Sub-Saharan Africa.[17]

2.2.2. Communicable Disease

Although the communicable disease burden has declined from the 2009 levels of 52 percent (as a share of all Disability Adjusted Life Years (DALYs)), Somalia's communicable disease burden remains high at 47 percent in 2019, compared to the East African regional average of 40 percent (*Figure 12).*[18] Tuberculosis, meningitis, acute hepatitis, measles, and other respiratory and infectious diseases account for the largest single category (37%) of the communicable disease burden. The prevalence of vaccine-preventable diseases such as measles is a result of Somalia's low vaccination rates.[19]

The HIV/AIDS prevalence among Somalia's adult population is low, at about 0.55 percent, with an estimated 2,370 annual deaths.[20] However, the actual prevalence may be higher as a result of undetected infections. Stigmatization against people living with HIV/AIDS affects care seeking and the provision of services to populations most at risk.

Figure 11. Distribution of total DALYs by type of disease, 2019



Source: Global Burden of Diseases, 2019

Malaria represents a risk to the Somali population, with the highest risk in the northeastern regions. The malaria prevalence rate is 1.9 percent nationally, with 11.2 percent in northeastern regions, 0.02 percent in northwestern regions, and 0.5 percent in central and southern regions. Malaria parasite prevalence is above the national average in the states of Bari (31.7%), Bakool (11%), Bay (2.3%), Nugal (3.05%), and Mudug (2.8%).[21] Of the estimated 1.8 million children under five, approximately 400,000 live in malaria-endemic areas and 900,000 live in high and very high epidemic areas. Of the average total of 524,000 pregnant women per year, 113,000 are living in malaria endemic areas and 249,000 are living in high to very high epidemic areas.[22]

Tuberculosis incidence has declined from an overall estimated incidence of 286 per 100,000 population per year in 2010 to 266 as of 2019.[23] The estimated TB mortality rate stands at 67 per 100,000 population,[24] and according to the 2020 SHDS, 3 percent of household members in Somalia have TB, with higher-than-average rates in urban areas and among males. [14] TB affects all age groups, but the infection rate is highest in the 15–44-year-old age group.

Non-communicable diseases (NCDs)

While NCDs such as diabetes, cancers, and cardiovascular disease are an increasingly important public issue in Somalia, the major causes of mortality and morbidity continue to be RMNCAH-N and communicable diseases. At the same time, there has been an upward trend in the burden of non-communicable diseases, which has increased from 19 percent in 2009 to 23 percent in 2019. Cardiovascular diseases, diabetes, congenital birth defects, urinary and gynecological diseases, and mental disorders account for more than half of all NCD related DALYs in Somalia. [25] The most commonly

diagnosed chronic health problems in Somalia are hypertension and diabetes. Approximately 33 percent of all individuals have high blood pressure, while 20 percent have diabetes diagnosed by a physician according to the SHDS 2020.

One in every three Somalis is estimated to be affected by a challenge related to their mental health. There is little reliable and comprehensive data on mental health problems in Somalia due to limited research capacity and poor collection of routine data in health centers. In some settings, almost all Somalis have been confronted with at least one violent event, including witnessing severely injured people, being caught in a combat zone and being near shelling or mortar attacks during the previous two months (94%).[26] Despite this, there are only a few health facilities offering mental health services. Out of a total population of 15 million, there are only three psychiatrists and 25 nurses who trained to deal with mental health issues.[27] As a result, most people turn to traditional and spiritual healers for treatment.

Social Determinants

1. **Gender disparities in Somalia are among the worst in the world, characterized by limited access to formal education, high rates of sexual and gender-based violence (SGBV), as well as a nearly universal prevalence of FGM/C among women.** The impacts and costs of SGBV on human potential, as well as health and well-being, are severe and present a significant barrier to development. By 14 years of age, almost all girls have experienced FGM, with little variation across age and education groups.[14] A 2016 GBV survey commissioned by the World Bank and the United Nations (UN) partners found that 17 percent of women have experienced some form of non-partner physical or sexual violence, while intimate partner violence is a common lifetime experience, affecting 36 percent of women interviewed. The impacts and costs of GBV on human potential, as well as health and well-being, are severe and present a significant barrier to development.

The EPHS prioritizes clinical assessment for survivors of violence. This includes documentation and evidence collection; providing medical and psychological care for victims of sexual violence, including post-exposure prophylaxis (PEP), and managing complications following FGM, such as recurrent infections, difficulty urinating and passing menstrual flow, chronic pain, an inability to get pregnant, complications during childbirth, and fatal bleeding.

Somalia's adult literacy rate is the lowest in the world and is extremely low among women: 72 percent of adult women living in rural areas and 59 percent of those in urban areas have never received any formal schooling.[14] The distances which students must travel to school increase the risks of gender-based violence, creating additional barriers to girls accessing education services. Also contributing to low literacy are the country's extremely low education enrollment rates. Primary gross enrollment is estimated to be 23.4 percent, significantly below the average for sub-Saharan Africa.[28] Secondary school attendance is lower than primary education. Most schooling, with the exception of Puntland and Somaliland, is provided by non-state actors, and families pay out of pocket.

Limited access to basic services creates additional health risks and undermines service delivery. Only about one-fifth of the population has access to electricity. Over two-thirds of urban households have access to basic water services, but only 20 percent of rural households do, and less than 10 percent have basic sanitation or hygiene services.[29] Since 1991, electricity service has been managed by the private sector, and Somalia has higher tariffs compared to neighboring countries Kenya and Ethiopia.

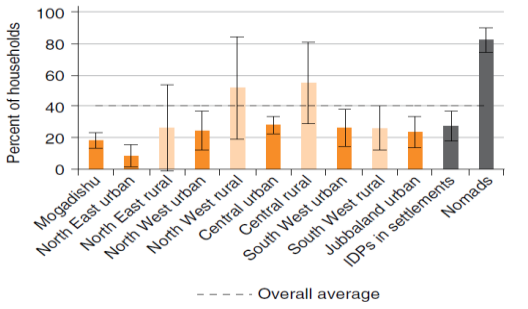
Somalia is particularly vulnerable to climate change. Somalia is at the top of the list of 167 countries for overall vulnerability to climate change relative to "coping capacity."[*] Somalia is highly vulnerable to drought, floods, and cyclones. The country's average annual temperature is expected to increase by approximately three degrees Celsius by the end of the current century. Climate plays a key role for Somalia's economy and livelihoods, as livestock raising and crop farming are the main sources of employment and economic activity, and 60 percent of Somalis live in rural areas as nomadic or semi-nomadic pastoralists, leaving them more vulnerable to climate impacts. Further, declining ground water levels are anticipated to drive up water prices, increasing the likelihood of a conflict over water.

Communities and families are continually displaced from their homes due to conflict and natural disasters. Conflict and violence displaced an estimated 300,000 people in 2020.[†] Devastating droughts, often followed by flooding, repeatedly impact the country, expanding the need for humanitarian assistance, expanding both urban settlements and IDP camps. Locusts have destroyed crops, and flooding and drought have devastated livestock displacing farmers. Covid-19 also influenced displacement patterns as IDPs avoided sites hosting people from different areas for fear of overcrowding and infection.

2.3. The Somali Health System

Geographic distance to health facilities is a key barrier preventing access to health and nutrition services, with 62 percent of Somali women citing distance from a health facility as the major barrier to accessing health care.[‡] Geographic access is especially challenging for nomadic and rural populations, as seen in *Figure 12*, which shows that substantially more people in rural and nomadic areas must travel more than 30 minutes to a health facility than those in urban areas.[30] Nomadic and rural populations make up most of Somalia's households: seven out of 10 Somali women ages 15–49 identify themselves as nomadic, and six out of 10 as rural residents. [14] Because people in rural areas are further away from health facilities, they may delay care or be completely unable to access a health facility due to distance, transportation difficulties and the lack of ambulance services for referrals between health facilities.

Figure 12. Distance to health facilities: Percent of households (>30 minutes distance), by region

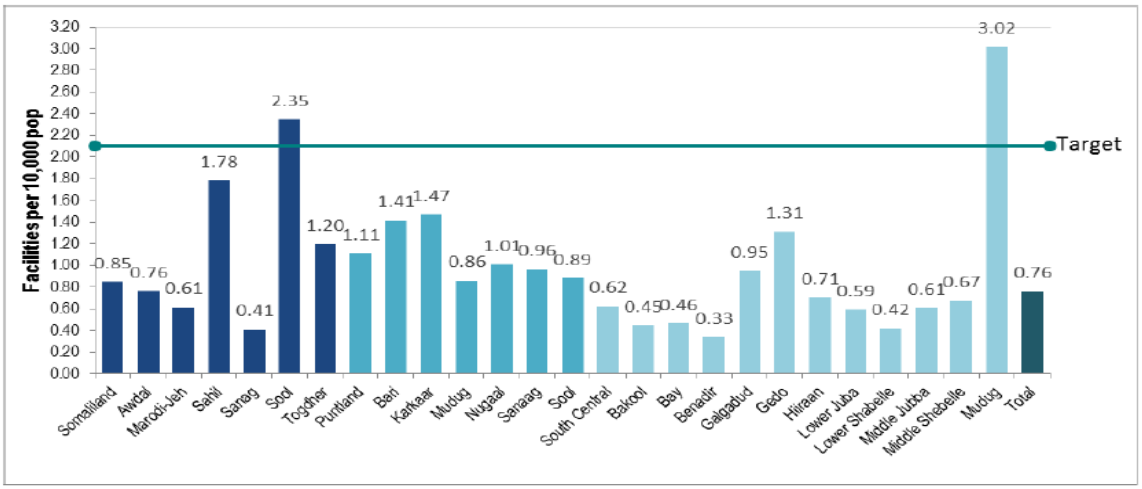


Source: Authors' calculations based on the SHFS 2017–18.

In addition, limited geographic access across much of Somalia is exacerbated by the limited number of health facilities in total (*Figure 14*) and by regular insecurity, which makes travel challenging or even impossible.

[*] http://www.cgdev.org/page/mapping-impacts-climate-change.
[†] https://www.internal-displacement.org/countries/somalia.
[‡] https://www.internal-displacement.org/countries/somalia.

Figure 13. Health facility density (per 10,000 pop), by region



2.3.1. Service Providers

Somalia's public sector has limited reach and function in the provision of personal health services. A small share of the total population has access to a publicly owned or financed health care facility. According to the 2016 SARA survey,[31] out of a total of 1,074 public health facilities only 799 were operational and accessible.

NGOs are numerous, supported by multiple funding sources, and are spread across Somalia supporting a large share of the delivery of essential health services, often through public health facilities. Along with support for facilities, NGOs work through community health workers and outreach initiatives that take services closer to communities, especially those that are harder to reach, including vulnerable groups such as conflict-affected communities, pastoralists, and IDPs. There is not a good census of NGOs and their coverage, nor is there an organizing body to represent NGOs. While humanitarian NGOs working in the health sector are coordinated through the UN health cluster and health sector development coordination is organized by the Ministry of Health, integration of the two spheres is inconsistent. Gaps in what organizations do and where they operate persist, limiting the ability of federal and state health institutions to lead or partner effectively with these largely donor-financed entities.

At least 60 percent of health services and 70 percent of the country's medicines are estimated to be delivered by the private sector, primarily in urban areas. Following the 1991 civil war in Somalia, the private healthcare sector dramatically expanded to include individual private pharmacies, specialized clinics, and hospitals in the main cities and which increasingly have state-of-the-art equipment and provide laboratory diagnostics, clinical surgery, and dentistry. There is also continued growth in smaller private sector clinics and pharmacies across Somalia, and private healthcare training institutions. However, the large majority of private health facilities are in urban areas, and only a small minority in the rural areas. Data from a comprehensive assessment carried out in 2017 estimated that there were almost 3,300 private health facilities in Somalia.[32] The composition of the private-sector facilities in the same assessment was 6 percent hospitals, 32 percent clinics, 4 percent diagnostic centers, and 58 percent pharmacies.

The for-profit sector is large, complex, and multi-layered, with a combination of collaboration and fierce competitors in a large and profitable health market. Important private health sector actors include manufacturers of medicines whose drugs and products are sold across Somalia. Most importers and wholesalers are the few very large and powerful businesses that operate as key importers for the big manufacturers. These same importers and wholesalers typically own the primary distributors as well, who control the supply of medicines and products to the private sector across Somalia. There are also several smaller – and often informal – distribution networks and operators that play a role in transporting medicines and products across Somalia, including between states. Traditional healers and attendants are also widely used as private sector providers.

Coordination among the different cadres and types of private providers is nascent and capacity is limited, despite the emergence of more formal associations of private sector providers and health practitioners over recent years. For example, some partial franchising models have been supported by United Kingdom's Foreign, Commonwealth and Development Office (FCDO), although the number of private providers in such networks has been relatively small.[*] Other organizations, such as the Swiss Development Cooperation, have provided some support to the growth of other networks such as *Caafinet*, which is a locally led network of private-sector clinics in southern Somalia.

There are significant gaps in the quality of private sector care evidenced in part by widespread concerns from patients and health workers–regarding health services, drugs, and technology quality. As the 2015 FCDO assessment of the private sector notes, "the private sector represents some of the best and the worst of health care provision" in Somalia.[33] This is exacerbated by low levels of education on the part of consumers and/or patients, a reliance on word of mouth, a lack of branding, and a lack of public sector regulation or guidance to the public on how to identify high-quality treatment. The lack of functional regulatory mechanisms underlines health service quality challenges.

2.3.2. Human Resources

Somalia's ability to deliver the EPHS will continue to be undermined by its severe workforce shortage–and ensuring that those who are qualified are employed and retained. Somalia's human resource quotas are well below the global standards recommended by WHO and the Sustainable Development Goals (SDGs) index: there are only 4.28 physicians, nurses, and midwives per a population of 10,000, compared to the global standard of 44.5 per 10,000. According to the FMoH, despite continuous prioritization and investments over recent years, Somalia still has a gap of around 20,000 midwives, even as approximately 2,000 qualified midwives recently graduated from national midwifery schools.

There are very large differences in the numbers of health workers across regions and different levels of the health system. For example, the number of qualified nurses can range between 6 and 19 in public hospitals and between 2 and 6 in public health centers. In more rural and difficult to access regions, the availability of qualified health workers drops even lower, further undermining the delivery of essential health services. Other recent analysis indicates that some of higher-level health facilities, which typically have lower consultations, are often overstaffed compared to busier lower-level facilities, which see high numbers of consultations.[34]

[*] FCDO's support to PSI, for example, helped to set up the Bulsho Kaab Network (meaning "community helper") which was a social franchise of 50 pharmacies.

Where qualified, trained, and supported health workers are available, they are often not deployed effectively. Utilization remains low, and opportunities to formally integrate trained cadres in the health system remain very limited. Out of the more than 2,000 midwives who have been trained by UNFPA and the FMoH, for instance, only 58 percent are now formally employed, despite the great shortage of midwives across the country. Low levels of deployment are largely attributed to insufficient funding to support newly trained staff to be actively integrated into the workforce.

Despite policy efforts, such as the HR Policy of 2016-2021 and the 2019 Midwifery Deployment and Retention Policy, the retention of health workers in the sector continues to be a systemic challenge. This is due to limited renumeration, professional development opportunities, and on-the-job-training and support, to staff being overworked in busier facilities, and to substantially unequal distribution of health workers between urban, rural, inaccessible and insecure locations. As shown in the EPHS 2020, health workers who were supported under the previous EPHS were much more motivated than those that were not supported.

Harmonized job titles, job descriptions, compensation packages or remuneration pay scales are not in place in public sector facilities. The Health Deployment Policy has the primary purpose of harmonizing job titles and pay across cadres, but with such a large share of staff working in public facilities being financed by donors and NGOs, it has not been used by the Ministry of Health to coordinate partners' support and resources.[*]

The availability of HR data and use remains limited, and the sector lacks a comprehensive HR information system. Due to these data limitations, there are significant challenges regarding the tracking of public health personnel and licensed private health workers, which undermines the ability of the FMoH to carry out effective labor planning for the entire health sector. Although the current health management information system (HMIS), known as District Health Information System 2, does have a staff module, the form is overly cumbersome and has the lowest completeness rate of all summary forms. Historically, there has been limited collection and use of monthly HR data at the health facility level. Nevertheless, the 2020 - 2021 DHIS2 review simplified the HR staffing form for health facilities, which will now provide quarterly updates on staffing numbers and staff trainings at the facility level.

There is little dialogue between the Somali health authorities, financiers, and partners on payments for health worker salaries and salary "top-ups." Consequently, salaries are not standardized and benchmarked as outlined in the Health Deployment Policy. Recent analysis indicates that government contributions represent a very low proportion of the total expected salary for most cadres, although the amounts are not clear and data are not available. In some states, top-ups from programs make up the full salary, with no domestic contribution. Partners' salaries and top-ups to health workers continue to vary widely across Somalia, as do cases of duplicative salary payments to the same health workers, resulting in significant wastage of essential resources. Standardizing salary levels requires dialogue between the government, financiers, and partners.

[*] Recent analysis from 14 regions in Somalia carried out by the SHINE Supply program, for example, found the use of 155 job titles among health care workers compared to the original 20 job titles for essential health care workers in the 2009 Essential Package of Health Services.

2.3.3. Essential Medicines and Supplies

The pharmaceutical supply chain serving public sector facilities is underdeveloped.[*] The 2015 Somali Supply Chain Master Plan provides a useful summary of the shortcomings in the national supply chain, citing as key concerns (i) poor quantification, (ii) distribution inefficiencies, (iii) security problems in transportation within Somalia, (iv) poor drug management practice in health facilities, and (v) unwanted/unsolicited product donations. The Master Plan also highlights that the absence of a strong regulatory function is a critical constraint on the pharmaceutical sector as a whole.

According to the HEART report, there are considerable differences in the way supply chain management is organized and controlled at the state level, with greater organization in Somaliland and Puntland. Currently, there is a Pharmaceutical and Supply Chain Unit at the FMoH, and there are supply chain units in each of the federal member states' ministries of health responsible for the technical coordination and implementation of pharmaceutical and supply chain related policies and plans, in close collaboration with other departments and other stakeholders. The donor-driven nature of supply chain planning and operations across the country has not created either the technical or financial space for the development of management and coordination capabilities at either state or federal level. Important policy documents—including the National Medicines Policy, the legislation for a new medicines regulatory body, the updated EPHS and standard operating procedures for the supply chain -- describe how Somalia's supply chain could operate in the future, but there is not yet a clear high-level vision for how the different federal and state institutions will divide the various supply chain functional responsibilities between them.

The medicine supply chain suffers from the twin problems of stock-outs and overstocking. According to the Master Plan, 44 percent of government facilities surveyed reported that their usual order fill rates were lower than 50 percent. The Logistics Indicators Assessment Tool (LIAT), which focused on HIV, TB, and malaria items, reported that 81 percent of the inventory items assessed were either overstocked or understocked according to the facility stockholding parameters. Based on findings across 28 health facility assessments, LIAT also reports very high stock-out rates (unquantified) for malaria items, with lower but still significant (more than 20%) stock-out rates for HIV and TB items. There are two major contributing factors to these performance problems: (i) poor data management and use in the supply chain; and (ii) long procurement processes. The inaccessibility of several districts and health facilities also contributes to poor commodity access.

There are substantial discrepancies between health facility records and information in the Logistics Management Information System (LMIS). The LIAT assessment reports that no health facility records were available to compare with LMIS entries for malaria products, and that more than 90 percent of TB and HIV facilities had data discrepancies. As a result of these discrepancies, resupply decisions are based on inaccurate data, leading to overstocks and shortages. The LMIS is currently paper based, which is appropriate for Somalia's current supply chain maturity levels but provides opportunity for errors.

Supply chain infrastructure throughout Somalia's public sector is limited in volume and variable in quality. Functional warehouses exist at the federal level, and also in Puntland and Somaliland, although warehouse standards are below pharmaceutical grade. Other states function with no or very low standard warehousing.

[*] Assessment of the Somali Health Commodities Supply Chain of TB, HIV and Malaria products in Somalia (LIAT Assessment undertaken by Mannion Daniels, supported by the Global Fund), consisting of (i) Somali Pharmaceutical Supply Chain Assessment (HEART); (ii) Somali Government Supply Chain Master Plan; and (iii) Targeted Data Quality Review (DQR) (Global Fund supported assessment undertaken by Khulisa Mgt Services).

The LIAT assessment found that half of facilities surveyed meet 80 percent of good storage requirements and half did not. The facilities surveyed in this assessment are likely to have received donor support to improve storage conditions; storage conditions are likely much worse for facilities not providing AIDS, TB, or malaria services. FGS procurement processes prevent the supply chain from quickly responding to needs. Cumbersome procurement processes, insufficient procurement personnel and skills, and a weak drug regulatory function all contribute to this problem.[35]

The majority of supply chain functions are carried out at the facility level by medical personnel (largely, nurses and medical officers). Pharmacists, pharmacy technicians, and logistics specialists are in short supply. The HEART report estimates that there may be fewer than 150 university educated pharmacists in the country. At the federal level, the skills and experience required to take on more of the procurement and management functions do not yet exist and will likely take several years to develop.

2.3.4. Financing of the Health Sector

Somalia's annual per capita government health and nutrition expenditure (including official development assistance) was around US$6 in 2019. Communities have little or no disposable income for out-of-pocket payments (OOPs) for health services, yet almost half of all households (48%) finance health expenses using their own income. The reliance on out-of-pocket payment means households often have to deplete savings, sell their assets, or borrow money.[36] Sixty-five percent of women cite lack of financial access as the main barrier to health services, and finances are the biggest obstacle cited by women of reproductive age (15–49).[14]

While reliable and accurate health financing data are lacking, Somalia's estimated US$10-12 per capita annual public expenditure on health is far below the global standard for health sector investment.[37] The FGS budget for health in 2020 was US$9.4 million, corresponding to approximately 0.18 percent of GDP, and 1.9 percent of the US$494.7 million total government expenditure (*Table 2*). As a result, health sector resources are primarily funded through out-of-pocket payments or through external aid. Donors support over 90 percent of health service delivery costs, including health worker salaries, drugs and commodities, and operations and management of healthcare facilities.[38]

FGS has very low capacity to mobilize tax revenues, due to weak tax collection capacity, political instability, and a predominantly informal economy.[39] In addition, health is not a high priority and has historically received less than 3 percent of the overall government budget (*Table 2*). The fiscal environment is characterized by a high public-sector wage bill, significant defense spending, and low spending on social sectors such as health and education. Identifying a sustainable path to increasing revenues to fund non-security sectors and efficiently allocate resources across states is a critical challenge. Although security remains an important challenge and a major driver of expenditures in Somalia, government spending is expected to slowly be reoriented.[40]

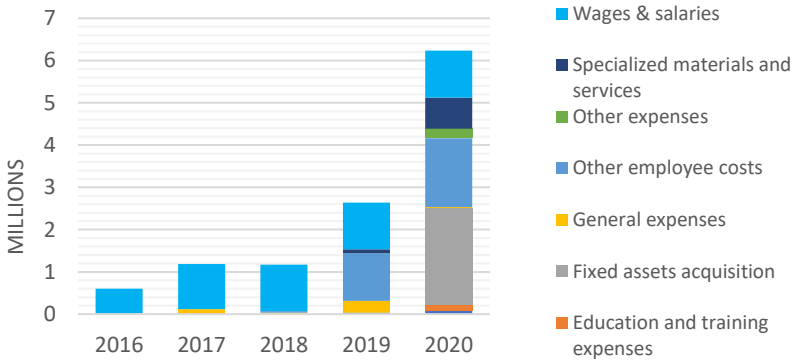
Table 2: Summary of federal government expenditure on health, 2018-2020 (in US$)

Year	Total government expenditure	Health expenditure			Health budget	Health budget as % of govt. expenditure	Health budget as % of GDP
2018	286,066,601	1,168,173			4,393,320	1.5%	0.09%
2019	314,014,117	2,638,841			7,260,440	2.3%	0.15%
2020		494,747,681	6,235,712	9,350,466	1.9%	0.18%	

Sources: Total expenditures: Government Budget Utilization Report, Federal Government of Somalia, 2019; health expenditures: Ministry of Finance, Revenue Explorer, accessed at https://mof.gov.so/fiscal/REVexplorer.html; health budget: Government Budget Utilization Report, Federal Government of Somalia.

The government's budget and expenditure on health have increased steadily over the last five years, arriving at US$6.2 million in 2020 (*Figure 16*). While expenditure has historically focused on employee costs, in the last year health expenditures diversified to include education costs, fixed asset acquisition, and procurement of materials and services.

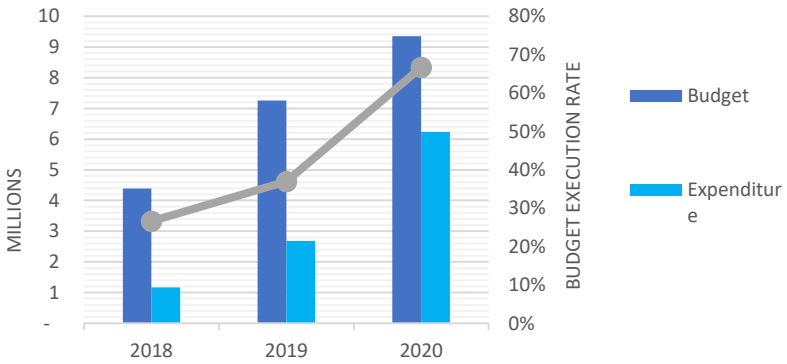
Figure 14. Ministry of Health expenditure, by cost category, 2016-2020 (US$ millions)



Source: Ministry of Finance, Revenue Explorer; accessed at https://mof.gov.so/fiscal/REVexplorer.html.

Budget execution, while increasing over the last three years, remains a bottleneck. In 2020, the disparity between the amount budgeted toward health and actual expenditure disbursed by the MoH was 33 percent (*Figure 17*).

Figure 15. Ministry of health budget and expenditure, 2018-2020 (US$ millions)



Sources: Budget Utilization Report, Federal Government of Somalia; Expenditures from Ministry of Finance, Revenue Explorer, accessed at https://mof.gov.so/fiscal/REVexplorer.html.

Somalia has made strides in improving public financial management, particularly in recent years. In 2014, the FGS and the international community established the Financial Governance Committee, aimed at building confidence and improving the transparency and accountability of Somalia's financial governance.[41] In 2016, the Somalia Financial Management Information System was launched with the support of development partners. The FGS has established an external audit function, increased budget and salary payment reliability (especially for the FGS), reduced cash advances, and made fiscal data more publicly available.[42]

In 2017, the Somali government led a public financial management (PFM) self-assessment. This resulted in the PFM Capacity Strengthening Initiative, which had the objective of improving the efficiency and effectiveness of PFM processes and systems to provide timely, transparent, and accurate financial information across the public sector.[*] In 2019, the Somalia Revenue Administration Act was enacted, creating measures to improve tax administration. Progress has also been made in restoring the Office of the Auditor General and in auditing financial statements.[43]

Since 2020, the FMoH has worked to develop budget stewardship, leadership, and managerial functions, although the ministry remains highly reliant on externally supported technical assistance. The FMoH has progressively handled annual increases in budget and expenditures and developed a number of PFM tools, including a chart of accounts, a draft financial implementation manual, and various PFM guidelines and tools. A small team of finance officers has been established at the FMoH, including accountants, financial analysts, and an internal control specialist. There are imminent plans to hire a PFM specialist. The FMoH has developed a manual system of linking the internal budgeting system with the Ministry of Finance's (MoF's) integrated financial management information system (IFMIS) to create routine budget and expenditure data, which are published on the MoF website. In 2020, the closure of accounts and annual financial report were completed using an online tool created in the FMoH. Moving forward, the FMoH aims to link the internal budgeting system with the MoF IFMIS to create routine budget and expenditure data.

The FMoH lacks the capacity to produce the routine, basic health financing data that are required for strategy development and policymaking. Currently, it is unable to conduct comprehensive annual resource mapping and expenditure tracking exercises. Somalia has not established a process to conduct and institutionalize National Health Accounts, resulting in critical gaps in information at the national and global level. Furthermore, the FMoH needs a qualified health finance unit to develop, implement, and monitor a Health Financing Strategy, in line with the country's national health strategy and goals.

At present, development assistance to Somalia is channeled only very partially through government systems, raising issues about prioritization, efficiency, accountability, coordination, and harmonization of external financing. With donors providing most funding outside government systems, the FGS role in programmatic decisions is limited, which can constrain its ability to effectively build capacity and leadership in government institutions. Strong coordination and use of government systems are needed to avoid fragmentation, duplication of services, and weak coordination between levels of care. For example, with many donors funding service delivery by directly contracting providers to deliver EPHS services without government involvement, there are differences in service delivery models and contracting arrangements across the country. These undermine efforts to standardize the package of services and

[*] http://www.mof.gov.so/wp-content/uploads/2014/10/Somalia-PFM-Self-assessment-report-strategy-April-4-2013-Final.pdf

clinical treatment protocols throughout Somalia and create challenges in harmonizing health worker pay scales.

The establishment of the FGS in 2012 has improved the population's confidence in the government, but significant challenges remain concerning transparency, corruption, and weak PFM. The government's ability to combat corruption and demonstrate accountability is paramount, both for Somali citizens and for donors hesitant about using the country's financial systems to channel funds through the Treasury. Donors will need to actively promote the use of country systems by closely working with the government in building effective government institutions. This will require a major departure from the current status quo in which donors' collective efforts exacerbate fragmentation, duplicate efforts, and increase transaction costs.[44]

2.3.5. Stewardship and Public Health

The public sector is the steward of national health and is responsible for core functions which will not, or cannot, be taken on by nonstate actors. While the private sector can provide health services, and public funds can ensure financial protection and influence the behaviors of the private sector, the public sector must perform the core stewardship functions of defining and enforcing policy and standards, conducting intelligence (information gathering, analysis and feedback), communicating (to the public and to leadership and to actors whose actions affect health outcomes), and leading on partnerships (global, regional and domestic).

M&E, Surveillance, Research

Federal and state systems and structures for conducting critical information and intelligence functions are inadequate. The public sector has not yet established sufficient capacity to monitor population health and to conduct disease surveillance. Information on population health is largely collected by intermittent donor-commissioned studies and surveys. Donors have not built the capacity of Somalia's FMoH or FMS ministries of health to routinely collect household-based health information and to conduct surveys and research. The existing HMIS is fragmented, with three different data servers serving different locations, making it difficult to consolidate data, validate data accuracy and completeness, and analyze and use data. Data review is uncoordinated, as it is conducted at the district and regional level as well as the state and federal level.

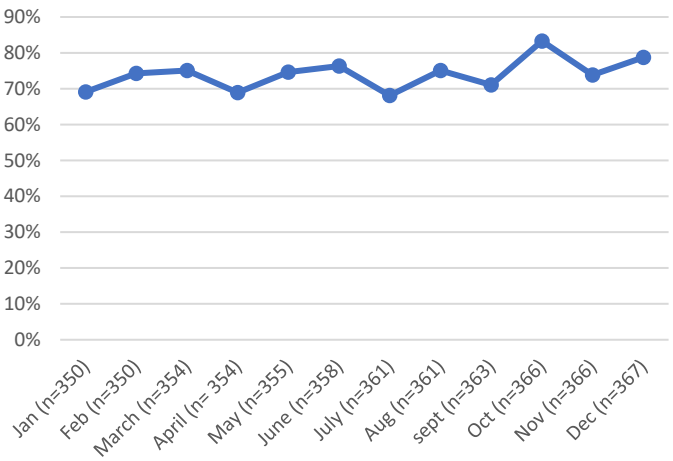
While development partners provide important contributions to the HMIS system, there is considerable fragmentation of partner support, creating overlaps and gaps between partners. Vertical data collection and reporting requirements have proven to be ineffective, expensive, and time consuming. Global Fund financing, implemented by UNICEF, currently provides much of the support for Somalia's HMIS system, including financing regional level staff, registers, and a 2020-2021 update of the DHIS2 system. SHINE partners and Save the Children provide HMIS support within the geographic areas they cover. Other partners provide support for HMIS related to specific content areas, including WHO (emergency response), UNFPA (family planning), and SPIDER (a global organization focused on digital HMIS funded by Sweden to work in Somalia). Capacity development, data quality improvements, and support for HMIS staff positions varies. Each partner has its own data quality improvement methods, data standards and timelines for data submission. While the 2020-2021 DHIS2 review (see below) will further streamline and integrate existing parallel systems—including systems for tracking data on nutrition, community health, disease surveillance, tuberculosis, HIV, some aspects of human resources, and supply chain

management—the integration has not yet been implemented. Some partner-specific reporting and vertical parallel systems remain, specifically the Health Resources and Services Availability Monitoring System (HeRAMS).

There has been a concerted effort to build Somalia's District Health Information System (DHIS2) initiated in June 2016. The DHIS2 is expected to unify data gathering and help all partners to use the same source data across the country. The system has since been rolled out to most health public facilities, core vertical data systems are being integrated into DHIS2, and the system has been established as the primary source for routine facility-based data. While it has made considerable progress during its short implementation period, challenges remain, including substantial fragmentation among partners supporting the HMIS system, substantial gaps in HMIS staff capacity, limited use of data for planning and decision making, persistent data quality gaps, inconsistencies in data collection, and gaps in HMIS management. An update of the DHIS2 system is currently in process.

While the DHIS2 system covers most of Somalia's public health facilities, not all regions are fully covered. The system, via paper forms at the facility level, and electronic data entry from the district or regional level upwards, has been rolled out in 379 facilities in Southwest, Hirshabelle, Jubbaland, and Galmadug States. However, there is a lack of clarity as to which facilities currently exist in Somalia, those that are expected to report in the DHIS2 system, and those that do report in the system. For example, the 379 facilities reporting exceed the total number of facilities identified in these states, according to the most recent facility census, which was in 2016. There is also considerable variation in the number of facilities projected to report by region. For example, only one facility in the Middle Juba region reports in the DHIS2 system. Inaccurate numbers of facilities projected to report in some regions and gaps in reporting at all levels of the system indicate further work is needed to fully roll out the system throughout the country. Given the country's security situation and logistics challenges, the timeliness of reporting is relatively strong (*Figure 18*). However, there are indications that the number of facilities reporting exceed the number projected to be required to report into the DHIS2, resulting in inflated reporting rates.

Figure 16. Timely reporting (percent of health facilities), by month, 2020



Source: DHIS2 2020

Data quality challenges persist, as indicated by a large number of data errors and outliers in the DHIS2 system. Outliers in the DHIS2 system are underlined by persistent inaccuracies between health facility registers and monthly summary sheets, with an average of only 50 to 60 percent of summary forms reporting data consistent with registers. Outliers and data errors are not routinely addressed impacting the overall quality of the data, and automatic data validation rules are currently not being used in DHIS2 to capture and address easily identifiable data errors. This suggests that many additional errors are present in Somalia's DHIS2 summary data.

There are substantial HMIS staff capacity gaps in Somalia. While most regions have HMIS officers, two out of sixteen regions do not. With support from partners, approximately 30 percent of districts have district HMIS officers, while 70 percent do not. The number of HMIS staff, particularly at the regional level, is associated with gaps in data quality. Competencies are inconsistent across staff in similar positions; some HMIS staff have received considerable and overlapping training, while some received no training and others were trained in areas unrelated to their information system job. Partner mapping (as captured in *Annex D*) showed that much of the training conducted is on a specific topic or within a specific geographic area.

Due to a lack of clarity in roles, there are conflicting functions between HMIS positions, particularly between the regional and state levels. State and regional level HMIS officers report identical descriptions of their respective positions, indicating no differentiation in the roles of the two levels. HMIS staff pay is inconsistent between different HMIS staff positions and also between HMIS staff working at similar levels but in different areas of the health system. Health facilities and regions receive little supportive supervision from higher levels to help them strengthen HMIS activities. The presence of HMIS staff in some districts has raised expectations that district HMIS offices will become the norm in all districts, but with approximately 100 districts in the country, that aim exceeds available resources. However, district HMIS officers may make sense in areas with large geographies or specific access issues.

There are limited standards and policies available to guide data protection, information sharing, and knowledge management among partners and the government. Through the health component in the World Bank Recurrent Cost and Reform Financing Project (RCRF), the Ministry of Health drafted an instruction guide on the use of technology infrastructure in community-based health services and management, including mobile-based data collection and reporting, However, a wider data sharing and protection policy to guide use of health information management is recommended.

Policy, Regulatory & Standard Setting

The capacity of the public sector to perform standard regulatory functions including registration, licensing, and inspections is almost nonexistent. Where laws and regulations do exist, most are either not finalized and officialized and therefore not used to enhance regulation, while anecdotal evidence suggests many health service providers do not have any formal training in health. The Heath Professional Committee Act/Law 19 was intended to establish the National Health Professionals Council (NHPC) to give life to the law through inspections, registration, and licensing, but this has not yet happened.[*] Other bodies, such as the National Pharmacy Regulatory Authority and the Public Health Inspectorate – all of which are essential to support a more functional and better regulated market -- require more support to be fully functional.

The lack of government regulatory capacity is particularly impactful for the private sector, which operates essentially outside the realm of the government. The private sector has traditionally operated in isolation from the public sector, primarily because there have been few incentives to work together. However, recent studies suggest that the private sector is keen to collaborate, and the public sector is

[*] Parliament passed the NHPC Act in July 2020, and the setting up/operationalization of the agency is the next step. After the approval of the Somali National Medicines Policy (May 2014), no major progress was made toward the establishment of a National Medicines Regulatory Authority. A draft Medicines Drug Regulatory Act (2018) has yet to be passed by the Cabinet to go through the Parliament for readings and approval.

keen to engage.[45] The main challenge preventing such engagement between the public and private sector is the difficulty of defining the modalities to do so, rather than any lack of willingness to dialogue.

The regulation of Somalia's health workforce remains a challenge, including the accreditation and quality standards of training institutions, the registration of health facilities, and the regulation of the health workforce at all levels in both the public and private sectors. While there has been an expansion of training colleges and schools for most cadres across Somalia, their regulation presents new challenges. Support from some partners for certain cadres and schools is mitigating these risks, as might the new NHPC Act. In addition, efforts have focused on enhancing the capacity of various networks and associations, such as the Somali midwifery associations, as part of an ongoing effort to increase quality and enhance regulations for specific cadres.

While regulation of the pharmaceutical sector is universally recognized as a critical area requiring reform, there has been little progress in improving Somalia's medicine regulatory system and functions since a WHO mission and assessment in 2017. According to a recent report produced by the Federal Ministry of Health and the World Bank,* Somalia's regulatory system is still rated by WHO at Maturity Level 1, which is the lowest level. The 2017 WHO report had made four key recommendations, which are mostly unimplemented. The most notable progress has been in the drafting of the new Medicines Act, including the establishment of the National Medicines Regulatory Authority (NMRA), which will have control over importation and licensing of local wholesalers and retailers but will require sufficient financing to give its enforcement capability.

The 2015 Supply Chain Master Plan recognizes that the estimated 80 percent of medicines consumed by the public and private sectors are supplied through private channels which are currently unregulated resulting in a lack of information on the quantity, quality, pricing, and supply reliability of the pharmaceuticals and giving the pharmaceutical sector a substantial amount of leeway. As a result, the Somali pharmaceutical sector is likely to resist the passing and implementation of the Medicines Act and will need to be considered as a key constituent in the implementation plan.

Communications

The public sector has a responsibility to inform, educate, and empower the populace, but the communication function needs strengthening at the federal, state, regional, and district level. Each administrative level does not yet fully have the mandates, structures, and competencies to inform the public, for example on actions required by households, communities, markets, or schools to prevent or respond to outbreaks or disasters. Some communications will be related to emergencies (e.g., updates on COVID), and some should be routine (e.g., smoking cessation). Public health structures do not need to incorporate extensive in-house communication skills, as the public sector can contract specialized support, but each level of the system needs to know its responsibilities and should be able to oversee communications which might be outsourced (e.g., immunization or behavior change campaigns). The FMPH has some experience and competencies related to the major donor-supported public health initiatives (e.g., with polio vaccination) which can be built upon. Much of Somalia's burden of disease is affected by social determinants, and cost-effective interventions include effective Social & Behavior Change Communication.

* Somalia – Gap Analysis and Development Plan for Building a Competent and Functional National Medicines Regulatory System, 2021.

Partnerships and Coordination FMPH

The public sector has the exclusive authority to forge partnerships with Somalia's neighbors, to represent the government in regional and global forums (e.g., AFRO, WHO) and to engage with health sector partners, including civil society organizations, development assistance agencies, NGOs, and for-profit health care providers. Only the Somali health authorities have the authority to partner with other sectors, that is, with government entities responsible for areas that affect health and nutrition outcomes, such as education, water, roads, power, environment, and public safety. These leadership roles are assumed, but the explicit roles and responsibilities are still emerging given the fairly recent establishment of Somalia's federal government.

Health sector coordination in Somalia is limited. Mechanisms for coordinating the health sector between the government and development partners are fragmented, and the large proportion of health sector financing that is off the government's budget fuels coordination challenges. To address these issues, FMoH and the Federal Member States, in close coordination with development partners and with the support of GFF, developed the Somali Health Sector Coordination Committee (S-HSCC). The S-HSCC is anticipated to encompass the Somali health sector's other fragmented coordination mechanisms. Key challenges to coordination include the committee's limited role dealing with information beyond information sharing.

3. KEY REFORM PRIORITIES AND STRATEGIES

The Investment Case' s overarching strategic priority is to expand health service access and coverage with the Essential Package of Health Services (EPHS). To attain this goal, the government will strengthen its stewardship functions and contract providers to deliver the EPHS. It will prioritize investments in specific system reforms required to support this goal.

Through a consultative process with the Federal Ministry of Health (FMoH), Federal Member States, Somali Health Authorities, development partners, CSO (Civil Society Organization) and private sector representatives, five priorities system reforms have been identified. These reforms do not constitute all necessary investments in Somalia's health sector, but they are expected to have the most bearing on improving results for key target populations and should determine financing priorities for both on- and off-budget resources. These reforms reflect the levers to be employed by the public sector as the steward charged with enabling the delivery of the EPHS. They should accelerate progress of health and nutritional outcomes for women, children and adolescents. An overarching priority is to support the engagement of nonstate actors to deliver EPHS. The five supportive reform levers and strategies agreed upon are:

1. Strengthened health financing and financial management
2. Strengthened health workforce
3. Improved essential medicine and supply chain
4. Improved health information system, and
5. Effective engagement of private sector providers.

3.1 Ensuring the Delivery of EPHS

The priorities for reform recognize that Somalia has a unique opportunity to build the government's stewardship role, while enlisting nonstate actors to expand EPHS coverage. Given the diversity of service providers engaged in health care across Somalia and limitations in public sector resources and capacity, the government will adopt a purchaser-provider split model. In this model, the FMoH and Federal Member States' ministries of health (MoHs) will build their stewardship and financing competencies while contracting out to nongovernmental organizations (NGOs) and regulating service delivery by the private for-profit sector as a cost-effective means to expand access and coverage. The government's role will prioritize policy and standard setting, regulatory and contracting capacity, resource management, and the management and use of information.

The public sector will ensure access to quality essential services for all households by contracting nonstate actors, largely NGOs, to deliver services to a defined population. The EPHS enables the interventions delivered in urban, rural, nomadic, and internally-displaced-person (IDP) environments to vary, thereby offering sufficient flexibility to adapt the operations for varying contexts. To improve efficiency and accountability, each region will be allocated to a single NGO service provider. This will result in a reduction in transaction costs and improved economies of scale, and will ensure that the contracted NGO is accountable for results.

This approach requires establishing structures and competencies in a Contract Management Unit to manage the contracting out and delivery of the EPHS. The scope of work for a new unit will focus on procurement of services, contract management, monitoring of provider performance, and coordination of development assistance. The unit will report to the director general of the MoH. The staffing structure

of the Unit will have clear lines of decision making and the staff positions needed for successful contract management at the national and subnational levels. Specific activities of the unit will include: (i) procurement, including initiating and executing procurement of contractors; (ii) monitoring and supervising contracts, including developing a framework (indicators and results framework) on how to monitor performance and improve coordination among agencies; (iii) institutionalizing contract management, including supporting the government in developing any necessary contract management policies, supporting functional arrangements in ministries and agencies across levels of the federation, and strengthening institutional and human resource capacity.

The implementation of the EPHS envisages an incremental and sequenced rollout of the package. As the government may not possess sufficient resources (internal and external) for the simultaneous implementation of all components of the EPHS, deploying the components of the EPHS in a sequential and integrated manner may provide various benefits (*Table 3*). Along with limited funding, constraints include the operational and technical capabilities of the health authorities at each level, capacities of the implementing partners, and the lack of available human resources required to implement the complete EPHS. Therefore, the implementation strategy has envisaged an incremental and sequenced rollout of the package of services by firstly expanding health services for the most vulnerable populations (Annex C, EPHS). Additionally, this strategy prioritizes financing of the most cost-effective health interventions and enables services that have been delivered through vertical approaches to be integrated into the EPHS. A phased roll-out of EPHS interventions can also assist in the development of capacity, sequentially addressing capacity limitations and organizational problems, particularly staff availability (Annex E).

Table 3. Programmatic priority areas in the EPHS 2020

1. Access to care 1a. Continuity, care planning and coordination 1b. Emergency care 1c. Approach to common signs and symptoms	**2. Reproductive, maternal and new-born health** 2a. Maternal and new-born care 2b. Sexual and reproductive health	**3. Life-course, growth and development** 3a. Childhood and adolescence including nutrition 3b. Older age and adults
4. Communicable diseases 4a. Immunization 4b. Management of HIV, TB, Malaria and Hepatitis 4c.Neglected tropical diseases 4d. Respiratory infections 4e. Gastrointestinal infections 4f. Other infections 4g. Outbreak surveillance	**5. Non-communicable diseases** 5a. Health promotion and disease prevention 5b. Cardiovascular and pulmonary diseases 5c. Diabetes 5d. Cancer 5e. Mental health and substance use disorders 5f. Injuries 5g. Other NCDs	**6. Rehabilitation**

The government envisions that primary EPHS donors will be mapped to specific geographic regions, and only a single EPHS donor will have responsibility for a whole region. Donors are expected to support all Phase 1 EPHS interventions in the designated region(s). Donors supporting vertical programs associated with EPHS will need to ensure that their support is aligned and coordinated with the EPHS to prevent services from being fragmented and duplicated. If any partner would like to finance fewer interventions,

they will discuss with the MoH for their agreement and will work through the main EPHS implementer in the region.

Existing implementation modalities and vertical programs will be integrated in the EPHS platform by the MoH, which will also be responsible for harmonizing and standardizing delivery systems. Vertically implemented programs (TB, HIV, malaria, family planning, nutrition, among others) will be gradually integrated into the EPHS platform, where the roles and duties of those implementing the EPHS, and of donors and technical agencies, are clearly defined, in line with the *Strategic Plan for the Integration of HIV, TB and Malaria Services in the EPHS in Somalia*.[46] By assigning each region to a single NGO and single donor, the MoH will collaborate with development partners for the purpose of implementing all activities and interventions within the region through the designated NGO. For other vertical services, the MoH will closely cooperate with the relevant development partners to agree upon a roadmap.

The MoH will investigate potential options to expand service coverage and quality, especially for mothers and children in underserved areas, such as informal settlements and IDP camps, and for nomadic populations. The MOH will collaborate with development partners, particularly humanitarian partners to map existing services being provided to IDP and nomadic groups and integrate existing support under the contracted EPHS implementing partner. EPHS services will be provided to IDP and nomadic groups through community-based programs (using female health workers) as well as mobile clinics and outreach activities by the closest health facilities. Recognizing that it may not be possible to provide full EPHS package to IDP and nomadic groups, the selection of interventions for each group will be standardized by the MoH to allow IDPs and nomads to receive the most essential services. Flexible contracts will encourage implementing partners to develop creative interventions to facilitate the provision of EPHS services to rural, urban, nomadic, and IDP settings.

While focusing on improving the reach and coverage of EPHS interventions, the MoH will adopt specific strategies to improve quality of services. The overall strategy for improving quality will include the development of a health facility performance and quality assessment checklist and list of minimum EPHS standards (HR, secessional medicine, and equipment). The findings of assessments will be used by the health facility managers to assess and monitor health standards, as well as to develop a plan for improving quality, determining what can be achieved within the facility in addition to the level of support that the implementing NGO / service provider and the MoH may need to provide. The MoH will also develop a quality checklist that will facilitate frequent monitoring of the quality of services. All health facilities are expected to be visited at least quarterly. In addition, in the medium term the MoH will develop and roll out standard quality assurance/quality improvement processes for health facilities.

3.2 Strengthened Health Financing and Financial Management

The Investment Case aims to increase Universal Health Coverage (UHC), expanding the share of the population who have access to a package of essential services. Financial protection (the "height" measure of UHC) will be improved as the public sector finances the costs of the EPHS. The "breadth" of UHC will be expanded by engaging nonstate actors to deliver services across the country, while the "depth" will be increased with the gradual inclusion of the entire EPHS. While some Somalis may continue to self-finance care and may access services outside of the EPHS, the government will employ public resources and donor financing to reduce financial barriers and ensure nationwide access to the most cost-effective essential services at no charge.

Somalia's health sector is highly dependent on external aid, but the long-term vision for the country's health sector will involve significantly increasing domestic resources. The sector will endeavor to increase the share of the government budget allocated to health and to increasingly channel donor funding "on-budget." In the short- to medium-term, Somalia's health sector will remain heavily reliant on donor funding. The FGS continues to (i) build capacity and strengthen PFM systems throughout the public sector and (ii) enhance the efficiency in the use of limited available resources.

The MoH will collaborate with donors to ensure that the resources required to implement the 2020 EPHS are aligned. The MoH will adopt a strategic purchasing approach that incorporates a purchaser-provider split model. The MoH will provide stewardship, whereas nonstate actors (NGOs, private sector providers) and possibly public institutions will assume responsibility for providing health services through a contracting mechanism. Recognizing that a strategic purchasing approach in purchaser-provider split models can be hindered by inadequate systems and substandard implementation, development partners will closely cooperate with the MoH to strengthen its systems and capacity to perform the functions of contract management, financial management, health management information, monitoring, and coordination.

With the assistance of development partners, the MoH will establish a health financing unit to perform resource mapping and expenditure tracking (RMET) as well as activity mapping for identifying financial gaps and improving efficiency, among other functions. Without this staffing capacity, the FMoH has been unable to produce the routine, basic health financing data that are required for strategy development and policymaking or to conduct comprehensive annual resource mapping and expenditure tracking exercises. Furthermore, the FMoH needs a qualified health financing unit to develop, implement, and monitor a Health Financing Strategy, in line with the country's national health strategy and goals. In collaboration with development partners, national health accounts will be established to develop a framework for the collection, compilation, and analysis of data on all aspects of health expenditures in Somalia—incorporating overall spending levels, the origins of health spending, as well as the utilization of funds with regard to the types of services that are purchased and the purchaser.

The proposed interventions reflect an ambitious plan to strengthen health financing and public financial management in Somalia in both the short- and the medium-term. The focus of these interventions will be to build staffing and capacity of the MoH; establish essential PFM functions; develop a baseline for critical health financing data; and institutionalize the production and use of health financing data for the planning, budgeting, and policy-making process. Longer-term interventions, particularly relating to design of public health insurance to address the high level of out-of-pocket payments in Somalia, will not be addressed in this plan. However, as capacity is built and basic health financing functions are set in place, the feasibility of piloting social health insurance should be explored.

3.2.1. Increase domestic resources for health.

Identify potential additional sources of sustainable resources for health. The development of a prioritized investment case will serve as a critical tool to advocate for increased domestic resources to finance a prioritized, cost-effective EPHS. In addition to supporting the development of a health financing strategy, technical assistance should be provided to the Health Financing Unit to conduct an economic and fiscal space analysis for health and to identify options to increase domestic resources for health in the mid- to long-term.

Increase the prioritization of health in the government budget. The FMoH requires support to advocate for an increased share of health in the government's budget. To strengthen the dialogue with the Ministry of Finance (MoF) and advocate for greater prioritization of the health sector in the government budget, it is important for the sector to demonstrate a plan for efficient allocation of resources—such as the prioritized high-impact interventions included in the EPHS and the prioritization of frontline health services. Efforts to improve dialogue between the MoF and FMoH and other stakeholders are critical; a platform should be stablished for regular, open discourse at both federal and state levels.

Explore options to increase health-specific revenues, such as through hypothecated taxes. Technical assistance will be provided to investigate the feasibility of earmarking taxes for health, drawing on country experiences (e.g., the use of "sin" taxes on alcohol in Liberia and on tobacco in Mozambique, Sierra Leone, and Senegal; and the use of third-party motor vehicle insurance in Uganda).

3.2.2. Establish health financing capacity in the FMoH.

Establish a Health Financing unit in the FMoH. Improving the overall capacity of the FMoH in health financing, as a critical component of health system strengthening in Somalia, has wide-reaching implications and linkages across all areas of the Investment Case. A health financing unit should be established under the Department of Policy and Planning and formalized in the organizational diagram and reporting structure of the FMoH. The role of the health financing unit will be to develop and implement the health financing strategy and to work with the planning and M&E units to monitor and evaluate the strategy in line with the health sector plan. The key staff of the unit will be identified, with clear TORs spelling out roles and responsibilities for each person.

Build capacity of the health financing unit. With the health financing unit established, officers should be trained in key health financing and UHC concepts, where possible, taking part in globally recognized courses such as those offered by WHO or the World Bank. Officers should also receive individual training based on their TORs, so that there will be a cohort of skilled health financing practitioners with the required capabilities and competences needed to perform core tasks across the FMoH.

The health financing unit should lead the development of a health financing strategy, covering 2022 – 2027, to support the financing and delivery of the EPHS and to build a foundation towards UHC. Investment and technical assistance will be required to develop the strategy, including a detailed work plan, a monitoring and evaluation plan to track key health financing indicators, and key milestones in the development of PFM capacity.

The FMoH, with technical support, should establish and lead a technical working group (TWG) that will include core staff from the health financing unit, financiers supporting the Investment Case, and selected partners. As Somalia strives beyond meeting immediate humanitarian needs and toward the development of a resilient health system, coordination between financing agencies, implementing partners, and government is critical. The TWG can meet quarterly and serve as the main forum to assess progress against the work plan detailed in the health financing strategy.

Institutionalize the National Health Accounts and resource mapping & expenditure tracking (RMET): Technical assistance will be provided to the health financing unit to conduct routine RMET, including developing the data collection templates and analytical tools; training on use of these tools and conducting the RMET exercises; and support to the initial rounds of RMET to ensure timely production of quality results. Support will also be provided to conduct the National Health Accounts, and the data

collection processes and templates used by the National Health Accounts and RMET activities should be harmonized to ensure compatibility and avoid duplication of efforts.

3.2.3. Strengthen PFM systems and capacity.

Improving Somalia's overarching PFM system will require large-scale legislation and interventions across all sectors. The FMoH will need to build specific PFM capacity, both in terms of human resources and systems, to address targeted health sector PFM needs, and to contribute to sectorwide PFM reforms.

The FMoH needs to continue to build PFM, HR, and financial management systems and capacity. In the last two years, the FMoH has developed a small team of officers, including an accountant, internal control, and PFM specialist. However there remains a need for suitably qualified officers to perform critical PFM functions within the administrative/finance department of the FMoH. To begin, technical support will be provided to develop a PFM training program to build capacity at the individual level for planning and budget preparation officials, procurement officers, accountants and internal and external auditors to obtain the required capacities and characteristics (e.g., integrity). Staff should also be trained on PFM law, the financial management handbook, policies and guidelines, etc. Eventually, training will need to be cascaded to the Federal Member State level. Where applicable, requirements for specific accreditation should be established (i.e., completion of PFM accreditation certification).

Support the FMoH in conducting planning, budgeting, monitoring, and reporting. The finance and health financing units require capacity to produce good quality annual budgets, financial reports, and financial statements. The FMoH will produce detailed documentation for each stage of the planning cycle, including the frequency, timeline, persons responsible, and associated reports/deliverables. Templates for each document will be developed and standardized to align with the health financing strategy and other relevant documents. There should be a regular production of clear and concise budgets, financial statements, and key data produced in a format that is user-friendly for both internal and public consumption. The FMoH will implement a medium-term sector expenditure framework for health, as well as establish and institutionalize annual work planning and performance and budget reviews at both the FGS and Federal Member State levels.

Assess the feasibility of creating an online platform to link MoH and MOF financial management systems and software. Currently, the FMoH creates manual linkages between its budgeting system and the government's integrated financial management information system (IFMIS), using Excel. A web-based platform that creates an online linkage between the systems would reduce the time needed to make the connection and reduce the potential for error. In the longer term, an online platform can be expanded to link to the RMET data collection and analysis process.

3.2.4. Improve financial data use and transparency.

Disclosing basic budget and fiscal data is a critical step towards building the trust of the Somali people and the external aid community. As health financing and PFM systems and capacity are put in place, institutionalizing the use and publication of data is the next critical intervention. Production of high-quality financial data will ultimately have little impact if the information is not used for policy dialogue and decision-making. Transparency is key to building the government's legitimacy. Access to information on policies, administrative processes, and budgets is a necessary condition to build public and donor confidence in channeling funding on-budget.

The planning and budgeting cycle should incorporate specific points where data will be used to direct policy and decision-making, and to monitor and assess performance. The health financing unit will establish systems and procedures to use RMET and other relevant data to guide policy. For example, it will use RMET and other data to assess donor alignment with the investment case, determine allocative efficiency across priority areas, adjust budget allocation formulas, produce equitable distribution of resources across subnational areas, and monitor budget execution.

The publication of key expenditure and revenue data on the MoF website is an important step toward increasing accountability and transparency. This process should be continued, and the FMoH should further produce reports with key health-specific outputs that should be published on its own website. As RMET and National Health Account processes are institutionalized, the main findings should be published routinely. Making key fiscal data available to the public through Open Government Data portals will provide a platform for holding government accountable for the use of public funds. Support should also be provided to disseminate fiscal datasets (revenue and expenditure) in accessible formats that can be downloaded from public websites.

Support and strengthen accountability and participatory governance. Technical assistance will be provided to assist the FMoH in engaging with citizens, fostering a public dialogue, and building credible information systems, thereby helping the government move towards more transparent and inclusive political processes. The FMoH should identify and conduct engagement with civil society organizations in a routine, collaborative process, providing training on key health financing functions and outputs and discussing ways to communicate the information to the public. The FMoH can also tap into existing governance-related advocacy networks involved in broader governmentwide PFM reforms.

3.2.5. Improve allocative efficiency.

Prioritize financing for PHC and frontline health workers. Ensuring that adequate resources are spent on primary health care (PHC) and frontline health services is critical for UHC. Resource allocation should occur in a manner that ensures that essential services at the front lines are funded appropriately.

Frontline service delivery will be strengthened through continued support and salary to frontline staff and female health workers (FHWs), with an emphasis on those in remote and underserved areas. These activities will be undertaken in line with interventions described in the HR section of this Investment Case, which describes mechanisms to motivate and retain health workers in remote and underserved locations through financial incentives.

Reforms aim for a more efficient division of responsibilities between the public sector and nonstate actors. The Investment Case prioritizes the public sector's investments into building and implementing its stewardship functions, rather than duplicating the role of nonstate actors. Public-sector financing of service delivery contracts will both (i) better coordinate resources for service delivery and (ii) set cost and efficiency standards across regions and across NGOs service providers.

3.3 Strengthened Human Resources for Health

Several key approaches and interventions to strengthen human resources (HR) for service delivery have been prioritized in the Somali Investment Case. These approaches and interventions have been identified

as priorities to address the systemic challenges outlined in the bottleneck analysis. They are in line with national policies, strategies, and documents and have been developed through extensive analysis of available data and evidence and through extensive stakeholder consultations.

The Somali health sector investment case team performed a rapid analysis of the human resources for health (HRH) landscape in Somalia using a bottleneck analysis. Based on this analysis we have the following recommendations. The structure of these recommendations is modeled after WHO's *Guide to Rapid Assessment of Human Resources for Health.*[*]

3.3.1. Strengthen leadership and governance.

Policy: Assist the federal and state MoHs in implementing the newly passed HRH Act. The HRH Act is Somalia's first-ever law focusing on the health workforce. Both the federal HRH unit and the state HRH units do not have the adequate staffing or skills sets to properly implement this act. The FMOH and states will require technical assistance to develop policy, set standards, rules and norms to govern the health workforce. New policies should be prioritized based on what is causing the most harm to the Somali people. There is a general consensus that the three HRH issues causing the most harm are (i) the shortage and maldistribution of health workers; (ii) quacks pretending to be physicians; and (iii) suboptimal quality of care.

Strengthen the capacity of the HRH Department. Investments are needed to enhance and strengthen the stewardship capacity of the HRH Department in the FMoH and states so they can lead the HR subsector, and to improve coordination and delivery of the agreed priorities. The HRH units at the federal and state levels are understaffed, have little non-salary budget, and often do not have implementation plans. The first capacity-building action that needs to be taken is to expand HRH units' staff capacity to reflect the main HRH stewardship functions. In addition, HRH unit learning assessments can be conducted and learning plans can be created, with most training being done sustainably either online or through local health professional institutions. The HRH unit staff will then use their new knowledge to create standard operating procedures to enable their work to be done more quickly and consistently.

Establish an HRH TWG to improve communication and coordination of the HRH sub-sector. The HRH department will lead the coordination of the HRH sub-sector through the development of a functional and fit-for-purpose TWG. TWG membership will consist of core staff from the HR Department and financiers supporting human resources for health, as well as selected partners, such as schools, professional associations, and private employers. The HRH director at the FMoH will chair the TWG and be supported by an elected deputy.

3.3.2. Improve HR data availability and use.

Data collection and use need to be strengthened to properly manage the public health workforce and ensure that the private sector has an adequate workforce. Investments to support the availability of HR data and use of data are needed to enhance HR planning and management, including efficient use of existing health workers.

[*] https://www.who.int/hrh/tools/en/Rapid_Assessment_guide.pdf

Support the rollout/scale-up of DHIS2 HRH reporting. DHIS2 HRH is the most commonly used HR software by MoHs in Africa, and it is the most commonly used open-source HRH software by MoHs worldwide. Support is required to help the FMOH, state MoHs, and health facilities implement DHIS2 HR. HR reporting needs to be scaled up to support the planning, recruitment, training, and distribution of health personnel. A key element of this will be embedding the use of the data at different levels of the health system to ensure that local HR planning and decision-making are based on data. Support is required to ensure that the revised DHIS2 will provide quarterly updates on staffing numbers, attendance, and staff trainings at facility level. Investments will be required to support the HR Department to use the data in DHIS2 to make informed decisions

3.3.3. Consolidate and standardize jobs and salaries, and improve the distribution of essential health workers.

Performance and Distribution: Standardize job titles, redefine minimum qualifications and produce job descriptions. This activity will support the HRH Department of the FMoH and partners to consolidate job titles and positions to be fully aligned the EPHS 2020 staff categories. Minimum qualifications for each position will be defined and job descriptions amended made uniform across Somalia. In order to allay the concerns of existing health workers, health workers currently working in certain positions will be grandfathered into their positions. No one will lose their job through the standardization process.

For the purpose of efficiency and improving the distribution of health workers, the MoH will standardize salary scales and top-ups/incentives. This will incorporate the harmonization of salary scales and top-ups used by different projects and facilitate open dialogue between the MoH and financiers to agree on what rates are being paid, what resource gaps require investment and which partners will provide resources at standardized rates. To motivate and retain health workers in remote and underserved locations, the MoH will develop an incentive mechanism including financial incentives, hardship allowances, and professional development opportunities. Strategies will also explore prioritizing the training of people from medically underserved communities. Financial incentives will be formalized in national policy/guidelines agreed between the FMoH and financiers to ensure payments of such incentives are standardized and transparent. Criteria will be developed the optimal placement of health workers and health facilities to maximize health outcomes.

To ensure access to services, staffing norms must be driven by the utilization of services at each health facility level. The 2020 EPHS provides details on the staffing levels needed for the provision of service packages at all service delivery levels. Nevertheless, staffing levels in some health facilities do not conform to the guidelines, and there is a likelihood that health facilities may not be fully staffed in line with the EPHS staffing recommendations in the short term because of staffing shortage. NGOs will be authorized to hire (and redistribute) a minimum number of staff for every facility according to the utilization of services and the specific requirements of the area, however the core staff mix must adhere to the EPHS recommendations. Staffing levels can be progressively increased in line with the growth in the utilization of services. It should be noted that this approach is not intended to be restrictive; it may be necessary to deploy more staff than is recommended by the EPHS in certain health facilities.

Although all of health professions recognized in the EPHS need expansion and improvement, a set of priority primary care cadres will be focused on first as they will be able to quickly improve access to health services and health outcomes. These cadres include midwives, auxiliary midwives, auxiliary nurses, and community health workers. Currently there are not enough data on the number and location of employed (or self-employed) health workers, vacant established posts in the public and private system, the number and location of unemployed workers, and the training capacity of the schools to estimate how many of each cadre need to be trained in the next few years. Once Somalia has a functional HRH

reporting system, it will have the detailed data to properly estimate the gaps. SARA/HHFA 2021 is expected to provided information on HR gaps, especially for essential health workers and in remote health facilities. The information will help the MoH with developing HRH expansion plan.

Community-based female health workers—Marwo Caafimaad FHWs—are an essential provider of primary healthcare in Somalia and will be strengthened under the EPHS. The MoH and development partners will expand the number of skilled FHWs, particularly in regions where health facilities are limited by adopting a phased strategy. The rollout plan prepared by the MoH shall consider the regions in which FHWs are required the most.

3.3.4. Improve regulation of the health workforce.

The FMOH and states conducted an analysis of the current status of HRH regulations in Somalia. The analysis, supported by the World Bank, uses a modified version of the HRH regulation framework created by WHO and USAID. Based on this assessment, a costed implementation plan was developed. As a priority action from this plan, the general secretary of the National Health Professionals Council (NHPC), supported by the MoH, will create the job description for the NHPC staff and will hire and on-board staff. NHPC will carry out its core functions starting with: (i) the registration of health facilities so they can report HRH data, improve quality of care, and improve health worker occupational health; (ii) licensing of health professional workers so that their profession and practice location (both geography and public/private) are known; and (iii) the accreditation of health professional schools so that they can report HRH data and their quality can be improved. A critical first step to implementing the registration, licensing, and accreditation is to establish the NHPC, including hiring and onboarding the staff. In all the work that the NHPC does, it will create standard operating procedures to allow its staff to work more quickly and consistently.

The most important actions that need to be undertaken in the pre-service education system start with completing the comprehensive list of health professional schools and special training programs (such as residencies). Then the MoH, NHPC, and professional councils need to work with the schools to define the national standards for all critical health worker educational programs. For this, Somalia can look to the East African community, where they are creating regionally standardized training programs. Then the Ministry of Health and the NHPC can perform assessments of schools. Then the Ministry of Health and the NHPC can perform assessments of schools. The school assessments can be prioritized in several ways: the largest schools, the schools with the greatest interest and potential in expanding critical shortage cadres, or the schools that are seen to be graduating the lowest quality health workers. Once each school's assessment is complete, the school can create an improvement plan which is monitored and facilitated by the government and partners. After that, the MoH, NPHC, professional councils, and schools can create standard curriculum for each of the main cadres. Shared resources can also include shared laboratory spaces and libraries in larger cities.

3.4 Improved Essential Medicines and Supply Chain

Ensuring quality, value-for-money, and access to medicines and supplies when needed will be key to ensuring access to the EPHS. The key approaches and interventions required to strengthen the supply chain for medicines and health products have been distilled from several discussions within the Investment Case working group, with a supply chain subgroup and from the source documents in *Annex F*.

3.4.1. Strengthen leadership and governance for supply chain functions.

Establishing an overarching governance framework for the supply chain in Somalia. This will involve developing a high-level framework describing how each institution involved in Somalia's supply chain, including a harmonized health professions regulatory authority and the federal member states regulatory bodies, fits into a coordinated picture. Central to this effort will be the creation of a *Responsible, Accountable, Consulted and Informed* (RACI) matrix, a standard tool used to map organizational responsibilities to technical functions. The RACI shows who is responsible, who is accountable, who needs to be consulted, and who needs to be informed for each sub-function. This set of activities will also include creating a clear plan for the creation of the proposed new medicines supplies agency, the National Medicines Regulatory Agency (NMRA), including its staffing and financing needs and its full scope of operation.

Define supply chain strategy, update, and ensure implementation of the existing Supply Chain Master Plan and supply chain operational procedures and policies. This will begin with defining a coordinated strategy for Somalia's public health supply chain. The strategy defines institutional responsibilities, the desired role of the private sector and other key strategic points. The 2015 Master Plan will be updated using insights and suggestions contained in recent assessments as guiding material, based on the content of the new strategy. All supply-chain policies and procedures, including those related to distribution frequency and inventory control parameters, will be reviewed. The new amended procedures and policies will need to be disseminated and some training conducted with HWs to ensure their proper use. Procedures for reverse logistics and waste management should also be developed as part of this exercise.

Strengthening supply chain coordination. A coordination unit for supply chain within the Federal MoH and the states will be established. The purpose of this unit will be to address the existing fragmentation between vertical and parallel supply chains and start to oversee all of Somalia's supply chains. Part of this work will include creating a staffing and support plan, which will likely need significant support from donors over a number of years. This "orchestration unit" is an important step on the path toward enabling the government to assume expanded responsibility over supply chain activity across the country.

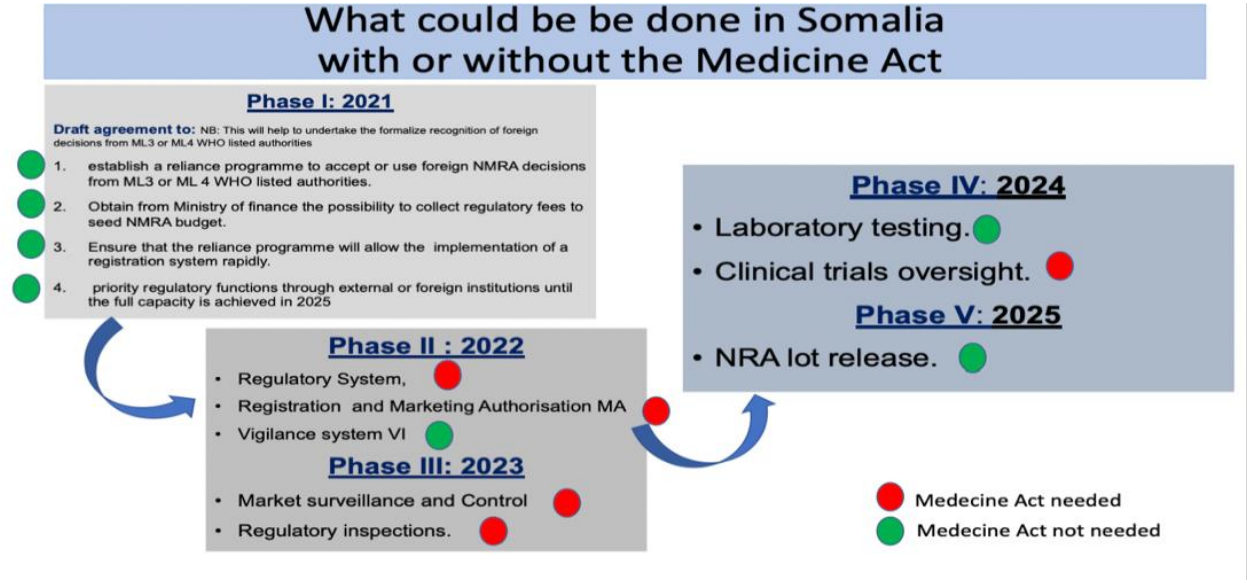
3.4.2. *Streamline the logistics management information system.*

Logistics network redesign. All assessments and discussions have pointed to a clear need to improve the existing paper-based Logistics Management Information System (LMIS) to be a comprehensive electronic LMIS (eLMIS). A first step in this process should be to redesign the logistics network based on the most current understanding of the country's needs – this involves looking at the rules for supply of products throughout the network and the resources required to implement those rules. The output of this first step should be a new network design (or validation of the existing one if no changes are really required).

Develop a new harmonized LMIS. Once the network design is agreed upon, the next step will be to create a specification for an eLMIS that will operate in the new network. The wishes of all partners, including the government, appear to be in support of a harmonized eLMIS that operates across all product groups. This should therefore be a key feature of the new specification. The eLMIS implementation plan will cover financing, sourcing strategy, selection, implementation, transition, and training.

3.4.3. Improve medicine regulations.

The recently completed joint FMoH and World Bank report on pharmaceutical regulation makes seven key recommendations, outlined below, which should form the basis of a plan for the pharmaceutical sector. The same report provides a phased roadmap and a detailed capacity building plan, both of which should inform priorities, activity sequencing and financing for FMoH and its partners. The report and its recommendations (*Annex G*) cover all aspects of strengthening medicine regulation, including institution building, policy and process improvement and human capacity needs (inter alia). The proposed 2021-25 roadmap, reproduced below, is split into initiatives which require the prior passing of the Medicines Act and those which can be implemented without the Act.



3.4.4. Strengthen Personnel, Financing and Performance Management

Recent assessments and discussions with partners point toward a critical shortage of qualified personnel working in the supply chain. An assessment of supply chain HR needs and a plan for hiring and deployment of new staff within the constraints of funding and market availability—at both the state and regional levels—will be undertaken. It is important that this exercise be conducted in the context of important strategic decisions, such as outsourcing functions to the private sector and the recruitment priorities that will be defined in the new supply chain strategy.

Strengthen budgeting and financing of pharmaceuticals and medical supplies. Under the EPHS contracts, NGOs will be expected to procure most pharmaceuticals and medical supplies (except for those directly supplier through vertical programs such as immunization, malaria, tuberculosis). Providing them with information on prices and linking them with reliable sources of commodities will better enable them to ensure value-for-money.

3.4.5. Collaborate with the Private Sector

Private-sector companies are already involved in Somalia's public health supply chains, delivering commodities to health facilities. There is a need to conduct a detailed market assessment of private-sector

capacity in key sectors (particularly transport and warehousing) to understand the immediate potential for deeper private-sector partnerships. The outcome of this activity will be a strategy that uses the assessment insights to determine where the private sector can most effectively play a role. It is worth noting that no single approach is likely to be effective in all parts of the country. Differences in accessibility, in particular, are likely to require different solutions.

3.5 Improved Information Systems

To improve Somalia's HMIS system, strategic HMIS investments are needed to address the challenges identified earlier. Based on the HMIS scoping exercise and discussions between the government and development partners, investments are needed in HMIS stewardship, data systems, and use of information for decision making.

3.5.1. Enhance HMIS stewardship.

Consistent and strengthened HMIS stakeholder coordination and activities are critical to ensuring adequate support for the HMIS system in Somalia. They are also critical to ensuring equal distribution of HMIS support across the country. Improved HMIS stakeholder coordination will help to increase efficiency by avoiding additional costs inherent in activity duplication and gaps.

There is a need to develop a government-led platform to coordinate HMIS stakeholders in the country. Such a platform should build off the existing health coordination infrastructure and act as a mechanism for decision making and coordination as well as review of data quality, timeliness, and reliability and discussions of data analysis and use. It will be important for the national level coordination structure to have Terms of Reference (ToRs) with specific objectives and deliverables.

Along with national level coordination, there is a need to coordinate HMIS stakeholders at the state level to ensure HMIS activities are implemented in all areas of each state without overlap. The structure will build from the work conducted by the national level coordination structure to ensure implementation of HMIS activities. The state-level coordination platform should meet on a quarterly basis, and should have ToRs.

To complement the short- to medium-term HMIS actions outlined in the Investment Case HMIS action plan here, it will be important to have a complete HMIS strategy. The HMIS strategy should cover longer-term actions including data privacy, data sharing, and HMIS policy as well as longer-term direction for HMIS in the sector. Ensuring interoperability of systems will also be important. While progress has been made in integrating vertical information systems in the recent DHIS2 review, there is a need to ensure that integration is fully executed, to ensure that the few remaining data bases (ex: HeRAMS) are fully integrated, and to ensure future vertical databases are not developed.

3.5.2. Improve data reporting and quality.

A single, updated set of HMIS standard operating procedures (SOPs) should be developed with the aim of ensuring that all aspects of the HMIS process are properly applied in all parts of Somalia. Such SOPs should cover all steps of the data process including collection, entry, cleaning, management, analysis, use, privacy, security, and sharing.

Support is needed to develop standardized data quality improvement (DQI) tools and processes as well as their harmonization across different health programs at all levels, down to the facility level. There is a need to establish rules for validating electronic data quality in DHIS2 and implementation procedures. Identified errors should also be addressed through follow-up of higher levels (e.g., regional, state, or national levels) with lower levels (e.g., health facility, regional or state level) to resolve the data error. DHIS2 data should also be 'locked' after a set time period, at which point only designated DHIS2 staff at the state and national level can make changes.

Track and increase the number of facilities reporting in DHIS2. Through coordination between partners and the government, utilize the updated, field-verified master facility list to be produced during the forthcoming 2021 / 2022 SARA survey to track which facilities are expected to report in DHIS2 and increase reporting to ensure that the DHIS2 system (through paper-based reports) is fully rolled out to all facilities.

Pilot digital data reporting. Extensive mobile phone coverage, in a context of transport and security challenges, underlines the potential of digital data collection to increase the availability and reliability of data in Somalia. At the same time, there is a need to strengthen core data quality processes, independent of digitization. The MoH will pilot digital data systems and support gradual integration and expansion of existing digital data systems for DHIS2 and patient data at the facility and community levels.

3.5.3. Strengthen HMIS staff capacity and system management.

Fragmentation and capacity gaps in the HMIS system will be addressed by standardizing HMIS staff roles and training. Also required is increased harmonization of trainings and the conduct of trainings in a consistent manner throughout the country. Specific investments required to improve HMIS capacity include unified HMIS roles and responsibilities, with the aim of ensuring that each HMIS staff member at every level of the system is aware of his or her responsibilities and can be held accountable for them. Improved coordination of technical assistance is also required for HMIS in Somalia to reduce gaps and overlaps. In addition, staff support from partners should be coordinated, with an emphasis on ensuring that there is a core team of HMIS staff at the federal level.

There is a need to invest in capacity in each region. To ensure that supervision and oversight of HMIS activities within each region are conducted in line with the SOPs, it will be a critical priority to have at least one HMIS officer. Additional needs will be assessed to ensure that core HMIS activities, including data entry, cleaning, analysis, supervision, and data quality assurance, are conducted within each region.

To ensure information technology (IT) equipment availability and eliminate gaps, the FMoH, together with the engagement of the Federal Member States and partners, will map IT equipment and software at all levels, based on an identification of needs within each area. The ministry will also coordinate stakeholders to identify and then fill IT equipment gaps within available resources. There is also a need to ensure DHIS2 platform maintenance and incorporation of software updates.

Increase the frequency and quality of supervision. With the objective of ensuring that facility, regional, and state level HMIS staff have adequate support to improve data quality, a standardized HMIS supervision checklist will be developed, including guidelines for the frequency of HMIS supervision visits at all levels down to the facility level. The checklist can also be used to guide the individuals entering the data, cleaning the data, and analyzing the data. A routine review of registers and summary forms between facility and regional level staff should be embedded into supervisory processes.

Harmonize training curricula and develop a capacity development plan. The FMoH, with the engagement of the FMS and partners, will develop a standardized HMIS training curriculum, drawing on materials available from Somalia and other countries, with a focus on ensuring that training modules are relevant to the technical capabilities of Somalia's DHIS2 system. The curriculum will cover core competencies and refresher skills at each level of the HMIS system. Each aspect of the HMIS system, including data collection, review, entry, cleaning, sharing, analysis, and use, will be covered in the training curriculum. The curriculum will also be adapted to cover all health programs. To routinize training, a standardized HMIS training schedule will be developed. In addition, there is a need to develop a capacity development strategy, one that identifies longer-term training and capacity develop needs.

3.5.4. *Address data gaps.*

To improve the quality of reliable data on different aspects of the health system, investments are needed in efforts to routinize and harmonize surveys. The paucity of survey data in Somalia has compromised stakeholders' understandings of the health sector and made actions to improve health sector performance difficult. Further, there is substantial potential to more effectively use existing resources spent on vertical surveys through improved coordination. Investments are needed to coordinate partners and ensure that (i) health facility assessments include quality of care, commodities, lab, staffing, supervision, waste management, infection prevention; and (ii) regular health facility assessments are conducted every three to five years.

Third-party monitoring (TPM) will help assess the performance of contracted service providers. The work of the contracted TPM firm will assist in verifying reports from service providers. The data from such TPM has proven invaluable in other settings to provide additional intelligence about what is actually occurring at the facility level. Third-party monitoring also provides credibility to results communicated to partners, to the public, and to internal stakeholders such as Finance. Investments will enable a TPM firm to provide an additional layer of project oversight and support to the MoH for the contracted private providers. Further enhancing the capacity of the MoH, the TPM firm will monitor and verify the performance and results of the contractors during health facility assessments. The TPM will report its findings to the Project Implementation Team and the Project Coordination and Implementation Unit at the federal Level.

3.5.5. Use data to improve service delivery.

The use of data is critical to improving health service delivery for improved health outcomes. Additionally, data use also improves data quality: when data are used, more attention is paid to data quality, and changes to improve data quality can then be made. Use and sharing data at the facility level helps facility staff understand why they collect data, improving data at the collection site.

Embed systems for data analysis, sharing, and use. To date, there has been little structure around data sharing, analysis, and use in Somalia. The FMoH with engagement of the FMS and partners will develop simple guidelines for data analysis, sharing, and use. The activity will also track implementation of the data analysis, sharing, and use guidelines and will ensure that data analysis and use are incorporated within the standardized HMIS training curriculum. A system to share data across levels within the system, from the national level through the facility level, will also be developed.

Functionalize regular review mechanisms. Routine review of data is essential to improve health service outcomes and data quality. Routine data use in annual and semi-annual meetings at the national and sub-national levels will help to better understand EPHS performance and make changes based on data.

- **Every quarter**, state-level stakeholders will meet to monitor progress on priority indicators at the state level.
- **Every quarter**, S-HSCC will meet to undertake a detailed review of priority indicators at the national level. The role of this review is to identify the actions and initiatives required to improve performance in specific areas.
- **Once a year**, there will be a joint review of health sector performance based on the triangulation of different data sources, including DHIS2, HFA, resource mapping, NHA, LMIS, and IHRIS. It is at this level, if necessary, that course corrections and changes to priority areas can be agreed, in order to ensure the achievement of the intended impact. On an annual basis, current indicators will also be assessed and high-priority indicators considered for addition to DHIS2.

Data visualization and analysis are foundational for improved data use. A DHIS2 dashboard will be developed for investment case and key health indicators to strengthen data visualization. A semi-annual monitoring bulletin will share data, which will be shared among stakeholders. A quarterly regional results monitoring scorecard will provide updates on priority indicators.

3.6 Effective Engagement of the For-Profit Private Sector

The distribution and reach of non-state actors, including the for-profit sector, presents significant opportunities for quality health services to be delivered at scale across the country. Priority reforms build on the existing extensive reach and infrastructure, which has the potential to make a large contribution toward meeting Somalia's UHC goals through a "mixed health system."[*] Partnerships with for-profit providers offer opportunities to cofinance inputs, to crowd-in capital from other sources—including the private sector itself—and for innovations and specialized medical care to made available.

There are now significant and important opportunities for the FMoH and FGS to increase their governance of the sector, including by regulating private providers. For the potential of the private sector to be realized, efforts are required to address affordability, standardization, and regulation and to build coordination and communication between the public and private sectors.

The Investment Case prioritizes increasing the scale of quality health services delivered by the private sector by building government capacities at the FMoH and state levels to monitor and support service providers, improving the operating and regulatory environments, and extensively strengthening the technical and operational capacities of the private sector. Increased capacities of the public and private sectors, supported by TA, will facilitate public-private dialogue to increase engagement, coordination, and information exchange. As a result, common plans of action, policies, and strategies will be developed to support greater public and private partnerships. As capacities and engagements are increased over time, the feasibility and piloting of small-scale contracting models with the for-profit private sector to deliver high-impact EPHS services may also be assessed and tested in selected urban areas.

[*] https://www.who.int/publications/i/item/strategy-report-engaging-the-private-health-service-delivery-sector-through-governance-in-mixed-health-systems

Box 1: Principles for effective private sector engagement within a mixed health systems approach

WHO PRIVATE SECTOR ENGAGEMENT ROADMAP

The WHO has recognized the great potential for government engagement with the private sector to deliver Universal Health Coverage (UHC). After consultations with the Advisory Group on the Governance of the Private Sector for UHC, the WHO drafted a Roadmap outlining six governance behaviors critical to private sector service delivery governance. The recommendations and roadmap are presented in alignment with these six principles.

1. **Build understanding** - Collection and analysis of data to align priorities for action.
2. **Deliver strategy** - Agreed sense of direction and articulation of roles & responsibilities
3. **Enable stakeholders** - Institutional framework that empowers the actors.
4. **Foster relations** - Working together to achieve shared objectives in a new way of doing business.
5. **Align structures** - Organizational structures to align with policy objectives.
6. **Nurture trust** - Mutual trust amongst all actors as accountable participants

3.6.1. Enhance MOH capacity to engage with the private sector.

Establish a Private Sector Engagement (PSE) Unit under the Department of Policy and Planning to "drive" the public-private dialogue (PPD) process. The PSE Unit will work closely with the Contract Management Unit, but its role will be broader, leading engagement with the private sector including developing and implementing relevant strategies and tools. The unit should serve as the secretariat for the PPD platform and perform important functions to establish and maintain direction for the process. The PSE Unit will be supported with technical assistance in addition to funds to institutionalize the secretariat.

Develop PSE policies. Building on a PSE analysis carried out in 2020 with support from the World Bank, Global Fund, Gavi and UNICEF,[47] the PSE Unit, with support from partners, will develop a private-sector policy, private-sector strategy, and roadmaps that will define how the public and private sectors can more effectively work together to deliver quality health services across Somalia.

3.6.2. Enhance communication, coordination, and policy between public and private sectors.

PPD will bring together public and private sector stakeholders to improve key aspects of the health sector, such as regulation, quality, service provision access and affordability of health services and products. The process will facilitate public and private sector stakeholders to jointly identify bottlenecks to enhanced quality service delivery by private sector players and develop a shortlist of reforms or remedial actions to improve the operating environment. Steps to establish PPD capacity include these three:

1. ***Establish the PPD platform*.** The PPD process will be launched by identifying who in the public and private sectors should participate, establishing the rules of engagement, defining the purpose of the PPD process. Setting its direction will define the different health system issues to be addressed through this mechanism (e.g., health financing, labor planning, and quality regulations). The PPD partners will be trained in core competencies (e.g., active listening, negotiation, conflict resolution, and accountability) to function effectively.

2. **Scan the operating environment to identify where to "house" the PPD platform.** Somalia's PPD process will be established by first identifying where the PPD mechanisms should reside. Other country experience demonstrates that PPDs are best suited at a ministerial level, within the office of the Federal Minister of Health. This PPD will serve as the primary platform for public and private members to address a range of health system issues relevant to both sectors and to openly communicate, share information and data, and report on progress against strategies focused on the private sector.

3. **Support the PSE Unit to "drive" the PPD process.** The unit can serve as the secretariat for the PPD platform and perform important functions to establish and maintain direction for the process. The PSE Unit will be supported with technical assistance to acquire skills needed to perform "backbone" functions in addition to funds to institutionalize the secretariat (e.g., staff, systems, meetings).

3.6.3. Improve regulation and accreditation.

Investments are required to support the nascent regulatory functions of MOH and to develop stronger frameworks to enhance the private sector's practices and quality. The priority will be to start with a regulatory regime that can be introduced in a gradual and phased approach, which can be improved over time. Given the limited existing capacity and huge need, the MoH and partners agreed that the Investment Case will support, establish, and build the capacity of regulatory and accreditation bodies with focus on NHPC and the NMRA. Each of the regulatory bodies explained in detail in HRH and SMC sections.

3.6.4. *Improve quality standard of private sector services.*

As many private sector networks are nascent and have very limited capacity – both technically and organizationally – investments are required to strengthen networks.

Assess organizational and technical capacity. The multiplicity of private-sector networks and associations will be comprehensively mapped and categorized, highlighting their primary functions and current and potential future roles in service delivery and the wider health sector. Their technical and organizational capacity will be assessed to determine what gaps exist, and what technical, financial and operational support will be required. The mapping and capacity assessments will highlight which few private providers and associations are to be supported with a range of training, technical support, capacity building, and operational inputs.

Organize and structure the private sector. The MoH will explore options to incentivize private-sector actors to form representative, subsector-specific bodies (e.g., associations for medical professional groups, hospital/provider groups or pharmaceutical groups), which can effectively represent the private sector and participate in policy dialogue. This activity will include capacity building and technical support to establish and develop the capacity of the association's Boards of Directors, establish/strengthen the secretariat, and perform membership services such as in government affairs, professional networking, and training (e.g. business and clinical skills).

Build capacity of selected private providers. Capacity building and the provision of technical support will be specific to each network and association's assessment results. However, based on the known

limitations of the private sector, capacity building, training and technical assistance may focus on priority areas such as contracting, compliance, clinical quality and quality assurance, resource mobilization, financial management, and cost containment. Where feasible, longer-term strategic and business plans will be supported and developed for some private networks.

3.6.5. *Assess and pilot contracting options with the private sector.*

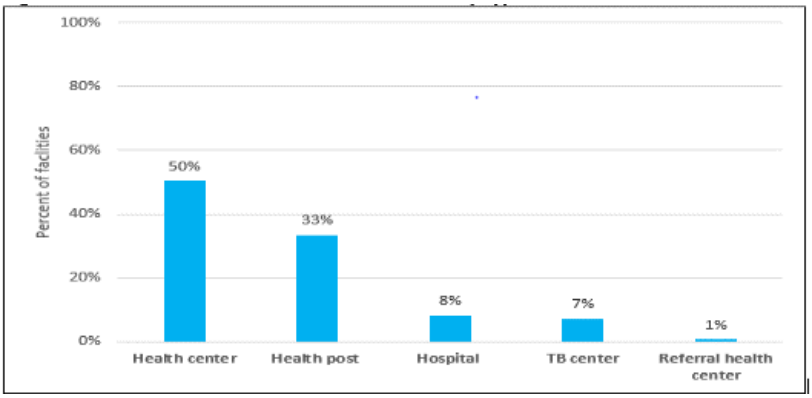
Assess the feasibility and piloting of contracting models with the for-profit sector. Comprehensive feasibility assessments will be carried out to determine which different contracting models and options should be pursued through pilots. Recommended models will be incorporated into a long-term road map that will provide guidance to the public and private sectors on the possible contracting models and arrangements that are most appropriate to pursue.

Pilot a contracting model. In urban areas, where the private sector operates at the greatest scale, the MoH and partners will pilot the contracting of private sector networks. This will help to address the limited service delivery capacity in the public sector and build on the private sector infrastructure and reach. The intention is to build on small successes, focusing on improving primary healthcare services before engaging in larger contracts between the public and private sectors. Contracting models will be piloted based on the findings from feasibility assessments and will likely begin with approaches that may not require significant financial resources, for example engaging private sector providers to provide vaccines or birth spacing commodities. The service level agreements need to be structured in a mutually beneficial way for both the public and private sector.

4 IMPLEMENTATION AND MONITORING

Under the updated EPHS, services will be delivered primarily through a five-tiered, public healthcare delivery system ("EPHS delivery platforms") consisting of (i) national/regional hospitals, (ii) district hospitals, (iii) health centers, (iv) primary health centers and (v) the community (including female health workers). These are administratively managed at the regional level with support from the Federal Member States and the FMoH. While there is no current data available on the number of facilities under each of the five EPHS delivery platforms,* according to the 2016 SARA survey there were 1,074 public facilities distributed across Somalia. Health centers accounted for 50 percent of all public facilities, health posts for 33 percent, and hospitals for 8 percent (*Figure 19*).

Figure 17. Distribution health facilities in Somalia by type, 2016



Source: SARA, 2016.

As outlined in the EPHS Implementation Strategy (2021), four criteria have been developed to enable the services to be expanded in a sequential order. These correspond with the complexity and pressure of population health requirements with evidence-based policies based on the underlying concern regarding how the limited resources could be optimized to enhance public health, deal with inequities, and ensure sustainability:

1) Services focused on addressing the primary factors causing morbidity and mortality in Somalia.
2) Cost-effective services that can be provided throughout the country.
3) The necessity to have equity in ensuring the provision of key health services to everyone, particularly those living in poverty.
4) Long-term sustainability of the services as the funding provided by donors begins to decrease going forward, considering the government's capacity to sustain a minimum level of health services.

Based on the incremental rollout and sequencing criteria, the implementation of the EPHS will occur in two phases, with the first phase commencing in 2021. The duration of this phase will depend on health system capacity and performance and the availability of resources, which will be continuously assessed over an estimated four to five years. During the first implementation phase, further interventions can be incorporated based on the experiences gained from the preliminary implementation, which include availability of resources (staff, equipment and funds), full implementation of first-stage interventions, -service coverage, availability of the required staff and equipment in the health facilities, and the capacity of the MoH and its implementing partners.

The Investment Case will be managed by the existing Somali Health Sector Coordination Committee (S-HSCC), particularly the Director of Policy and Planning in the FMoH, who serves as the main focal point,

* Data is expected to be sgoon available through the forthcoming SARA survey, 2021/22.

with support from other members of the HSCC, including other members of the FMoH and partners. The MoH will ensure that the S-HSCC will serve as a core platform for maximizing the process of coordinating and integrating all health sector related issues, including the implementation of the EPHS activities, to foster a shared approach to evaluating EPHS issues, as well as to offer direction, guidance, and general leadership to the Investment Case.

The Policy and the Planning Department, with the input from technical working groups from all departments of the FMoH—including RMNCAH-N technical working groups (TWGs) and coordination committees that will be established within the health sector—will be responsible for guiding and discussing the execution of the health system components in the Investment Case. These TWGs will ensure the technical coordination for the implementation mechanism of the Investment Case.

The FMoH will establish routine data use in annual and semi-annual meetings at the national and sub-national levels to better understand EPHS performance and make changes based on data. This forum will be beneficial for monitoring progress in terms of health and nutrition indicators, sharing best practices among implementation partners, evaluating problems that emerge, and developing solutions to overcome such problems.

Quarterly, the state Ministries of Health and stakeholders will meet to monitor progress on priority indicators at the state level. In addition, S-HSCC will meet quarterly to undertake a detailed review of priority indicators at the national level. The role of this review will be to identify the actions and initiatives required to improve performance in specific areas. A Joint Annual Review will be conducted on an annual basis by the MoH in collaboration with its development partners. This review will concentrate on the extent to which the Investment Case objectives and the HSSP-III 2022-2027 objectives and indicators have been achieved as a whole and, accordingly, will make recommendations regarding how the EPHS implementation can be improved.

5 RESOURCE REQUIREMENTS

(to be competed after costing)

5.1 Costs of Implementing the Investment Case

5.2 Available resources

5.3 Bridging the resource gaps

5.4 Implications for reform priorities (further prioritization and phasing)

Annex A. Results Framework

The results framework (RF) consists of set of indicators: Outcome level indicators and process indicators. The process indicators are based on specific milestones. Once the milestone is achieved the indicator will be replaced with a new/next step indicator. Current process indicators are focused only on first step milestones.

	Indicator	Baseline (date)	Target 2027*	Source	Frequency	Responsible Department	Definition	Numerator and denominator	Notes and assumptions
Expanded delivery of EPHS	Percentage of pregnant women who received first antenatal care visit before 12 weeks gestation	31%		HHS DHIS2 trend for routine monitoring	Biennial (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Antenatal care coverage (at least one visit) is the percentage of women aged 15-49 with a live birth in a given time period that received antenatal care provided by a skilled health personnel at least once during pregnancy, as a percentage of women age 15-49 years with a live birth in a given time period.	**Numerator**: Number of women aged 15–49 years with a live birth in a given time period who received antenatal care from skill health personal at least once before 12 weeks of gestation. **Denominator**: Total number of women aged 15–49 years with a live birth in the same	Baseline: SHDS 2020
	Percentage of pregnant women who received at least 4 antenatal care visits	24%		HHS DHIS2 trend for routine monitoring	Biennial (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Antenatal care coverage (at least four visits) is the percentage of women aged 15-49 with a live birth in a given time period that received antenatal care four or more times as a percentage of women age 15-49 years with a live birth in a given time period. Available survey data on this indicator usually do not specify the type of the provider, therefore, in general, receipt of care by ANY provider is	**Numerator**: Number of women aged 15–49 years with a live birth in a given time period who received antenatal care four or more times. **Denominator:** Total number of women aged 15–49 years with a live birth in the same period.	Baseline: SHDS 2020
	Percentage of births attended by skilled health personnel in a health facility	21%		HHS DHIS2 trend for routine monitoring	Biennial (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Percentage of live births attended by skilled health personnel in a health institution among all birth in the population.	**Numerator**: Number of births attended by skilled health personnel in the health institutions. **Denominator:** The total number of live births in the same period	Baseline: SHDS 2020
	Proportion of women who have a postpartum contact with a health provider within 2 days of delivery	11%		HHS DHIS2 trend for routine monitoring	Annual (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Proportion of women who have postpartum contact with a health provider within 2 days of delivery	**Numerator**: Number of women who received postpartum care within two days of childbirth. **Denominator**: Total number of women aged 15–49 years with a live birth in the specified time period.	Baseline: SHDS 2020
	Proportion of newborns who have a postnatal contact with a health provider within 2 days of delivery	9.5%		HHS DHIS2 trend for routine monitoring	Biennial (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Percentage of newborn that receive post natal assessment by a qualified health worker within 48 hours of birth	**Numerator**: Number of newborns who received postnatal care within two days of childbirth. **Denominator**: Total number of live births in the specified time period	Baseline: SHDS 2020
	Modern contraceptive prevalence rate	0.9%		HHS DHIS2 trend for routine monitoring	Biennial (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Percentage of women aged 15–49 years, married or in union, who are currently using, or whose sexual partner is using, at least one method of modern contraception	**Numerator**: Number of women using or partner using a contraceptive method. **Denominator**: Number of women married or in a union	Baseline: SHDS 2020
	Percentage of children under one year of age who received Pentavalent 3	12%		HHS DHIS2 trend for routine monitoring	Biennial (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Percentage of children who received all three doses of Pentavalent vaccination by their first birthday	**Numerator**: Number of children under one year of age receiving Pentavalent 3. **Denominator**: Total number of children under one year of age	Baseline: SHDS 2020
	Number of outpatient department (OPD) visits per person per year (disaggregated by children <5, female, and total)	0.30		DHIS2	Quarterly	TPM/M&E and HMIS units	Number of outpatient department visits per person per year.	**Numerator**: Total number of outpatient department visits per year. **Denominator**: Total population	Baseline: DHIS2 2020

- Target will be defined based on HSS III targets

	Indicator	Baseline (date)	Target 2027*	Source	Frequency	Responsible Department	Definition	Numerator and denominator	Notes and assumptions
	TB treatment completion rate	0.87		HHS DHIS2 trend for routine monitoring	Biennial (coverage) quarterly DHIS2 trend	TPM/M&E and HMIS units	Number of new and relapse cases that were notified and treated in a given year, divided by the estimated number of incident TB cases in the same year, expressed as a percentage	**Numerator**: Number of new and relapse cases notified and treated in a given year. **Denominator**: Number of estimated incident cases in the same year	Baseline: DHIS2 2020
	Percentage of regions with EPHS service delivery contract	TBD		administrative reports	Annual	??	Percentage of regions with EPHS service delivery contract	**Numerator**: Number regions with EPHS service delivery contract. **Denominator**: Total number of regions.	
	Quality of care score	TBD		HFA	Annual	TPM/M&E	TBD	TBD	The quality of care indicator will defined based on third-party health facility assessment
Health Financing and Financial Management	Annual Resource Mapping Expenditure Tracking Conducted and Report Published	0	1 per year	RMET report	Annual	HFU	Resource mapping and expenditure tracking (RMET) conducted and disseminated by the FMoH each year		
	Health Financing Unit stablished and staffed	No	Yes	HFU					
	Proportion of domestic and external resources allocated for services delivery that are aligned with the EPHS	TBD	TBD	RMET report	Annual	HFU	Percentage of the total resources (domestic and external) for service delivery allocated on the implementation of EPHS interventions	**Numerator**: Total resources (domestic and external) spent on implementation of EPHS intervention. **Denominator**: Total budget (domestic and external) for services delivery	The baseline and target will be defined after RMET 2021
	Percentage of contracted service providers paid on time (within 45 days of receipt of reports and invoices) (or other PFM indicator)	0	TBD	FM report	Annual	FM unit	Percentage of contracted service providers paid on time (within 45 days of receipt of reports and invoices)	**Numerator**: Number of EPHS contract paid within 45 days of receipt of report and invoices. **Denominator**: Total number EPHS contracts	
Strengthened Human Resources for Health	% of health facilities reporting HR complete set of data based on defined standards of DHIS2	30%	TBD	DHIS2	Quarterly	HMIS	Percentage of public health facilities reporting HR complete set of data based on defined standards of DHIS2	**Numerator**: Number health facilities submit HR data based on DHIS2 standards **Denominator**: Total number of health facilities	
	% of health facilities with minimum required staff (disagg by rural and urban)	TBD	TBD	HFA and DHIS2	Annual	TPM/HMIS	Percentage of all EPHS health facilities that meet minimum staffing requirement as defined by national standard	**Numerator**: Number EPHS health facilities that meet minimum staffing requirement as defined by national standards **Denominator**: Total number of EPHS health facilities	The baseline and target will be defined after HHFA 2021

	Indicator	Baseline (date)	Target 2027*	Source	Frequency	Responsible Department	Definition	Numerator and denominator	Notes and assumptions
	Percentage of EPHS implementers following MOH standard salary guideline for health workers	0	TBD		Annual	HR unit	Percentage of development partners follow MOH standard salary guideline for health workers	**Numerator**: total number EPHS (interventions) implementers following MOH standard salary guideline for health workers **Denominator**: Total number of EPHS (interventions) implementers	The target will be defined after RMET 2021
Improved Essential Medicines and Supply Chain	% of facilities submitting supply chain data through the LMIS in line with established quality and frequency standards	0	TBD	LMIS	Annual	pharmaceutical and supply chain unit	Percentage of total public health facilities (hospital and clinics) that report into the LMIS each month	**Numerator**: Number of public health facilities that report into the LMIS each month. **Denominator**: Total number of public health facilities.	
	Percentage of health facilities with no stock out of essential medicines (form the tracer list) in the last one month.	TBD	TBD	HFA	Annual	TPM/M&E	Percentage of Health facilities without any of the tracer medicines missing in the last one months	**Numerator**: Number of health facilities that had no stock-outs of tracer medicines within the last one month. **Denominator**: Total number of health facilities	Baseline and target will be set after first TPM health facility assessment
	National Drug regualatory authority established (Yes/No)	No	Yes				National Drug regualatory authority established (Yes/No)		
Health Management Information System (HMIS)	Percentage of health facilities that submit timely and complete HMIS reports according to national guidelines	TBD	90%	DHIS2	Quarterly	M&E and HMIS units	Percentage of public health facilities that provide complete and timely reports into DHIS2 by the 15th of the following month.	**Numerator**: Number of health facilities that submit timely and complete DHIS2 reports by the 15th of the following month **Denominator**: Total number of active health facilities	
	Essential health service delivery monitored on a regular basis, with quarterly review of results/progress to inform efforts to strengthen	0	4 (annual target)	Minutes of the review meeting	Quarterly	M&E and HMIS units	At least one meeting per quarter where data/results on delivery/utilization of Essential Health Services are reviewed by the Ministry of Health with partners, with corrective actions identified	**Numerator**: Number of review meetings held by each quarter. **Denominator**: expected number of meetings per year	
	A semi-annual monitoring bulletin report triangulate different results developed and disseminated. (Yes/No)	0	2 (annual target)	Bulleting	six monthly	M&E and HMIS units	A semi-annual monitoring bulletin report triangulating different data sources is developed and disseminated		
Engagement of Private sector	proportion of registered private sector licensed in a specific year	**0**	TBD	PSE unit report	Annual	PSE unit	Number of private sector providers registered and licensed each year by the NHPC	**Numerator**: Number of private sector providers registered and licensed each year by the NHPC. **Denominator**: Total number of private providers registered	
	PPD planform established and meet at least once every 3 months	**0**	4 (annual target)	PSE unit report	Annual	PSE unit	PPD planform established and meet at least once every 3 months		
	Private Sector Engagement (PSE) Unit established (Yes/No)	No	Yes				Private Sector Engagement unit is stablished in the FMOH		

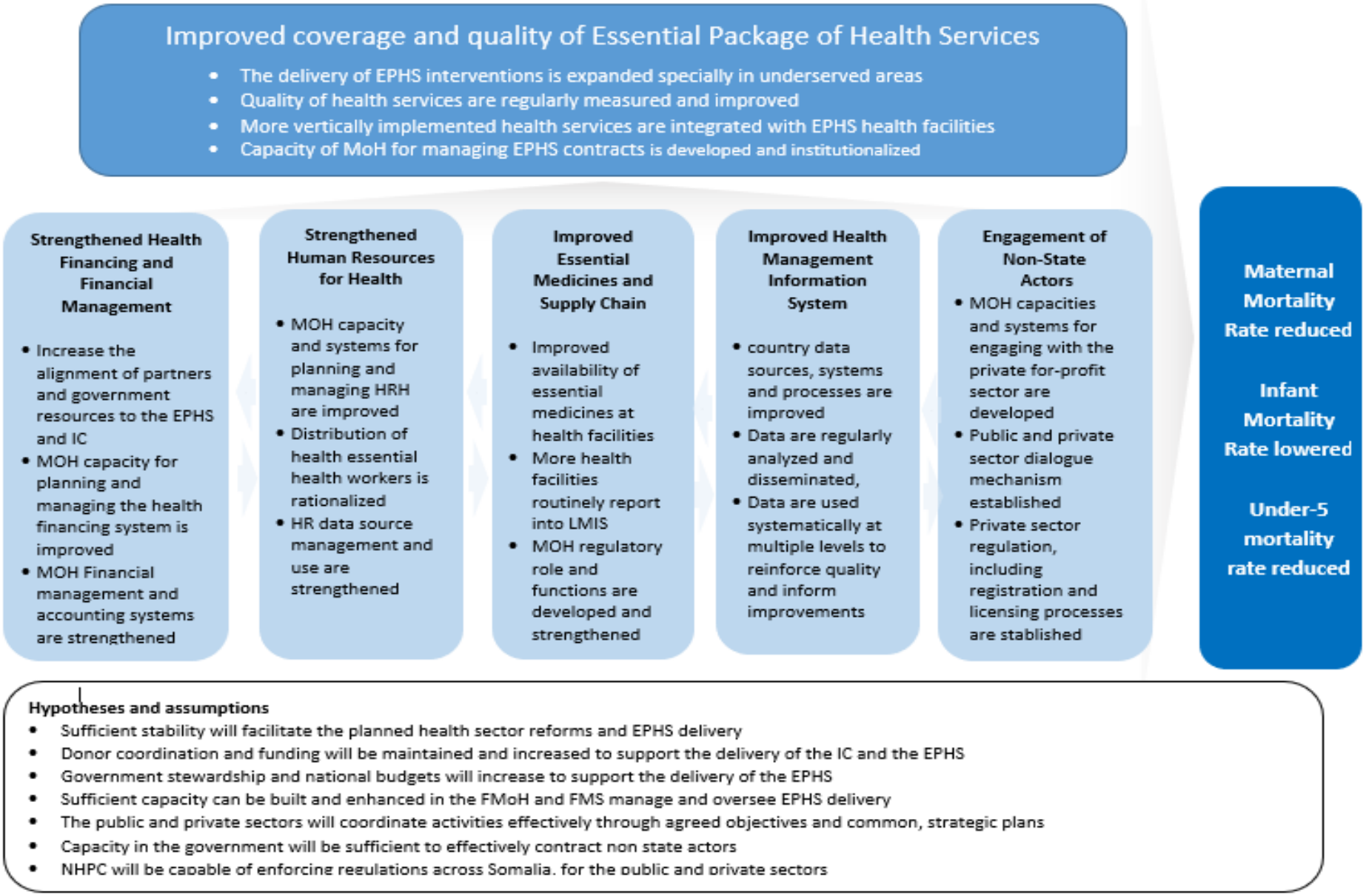
*** Target will be defined based on HSSP III targets**

Progress indicators are based on rolling milestones, so they are divided into different phases. The progress in RF indicators will be reviewed on annual basis. When a first phase indicator is achieved it will be replaced with a new next milestone indicator.

Progress indicators		
	Step 1 indicators	**Step 2 indicators**
EPHS	Roadmap for integrating vertical health care services into EPHS platform is developed (at least for one region)	
	Contracting unit established at FMOH	
	Contract management section established at FMS	
	EPHS quality checklist developed	
	EPHS minimum standards (HR, medicine, equipment) developed	
	Contract management manual developed	
HF	Health Financing strategy completed and agreed upon by FGS, all FMS, and stakeholders	
	Health Financing technical working group established and meets four times during one year	
	Domestic Resource Mobilization (DRM) study conducted	
	An online platform to link MOH and MOF financial management systems software is created	
HR	Standardized salary package, including basic salary, seniority and incentive mechanism for remote facilities, is developed and indorsed by main DPs	
	Standard job description with title, minimum qualification and competencies developed for EPHS staff	
	NHPC counsel established at federal and state levels	
	Criteria and protocol for registration of health workers and health facilities are developed	
Pharmaceutical and supply chain	RACI matrix developed	
	SC master plan updated	
	National harmonized LMIS developed	
	Regulations, standard operating procedures and necessary tools (e.g. data collection/reporting forms and regulatory databases/ registers for central and State level) for registration of medical products developed	
HMIS	HMIS strategy developed and agreed upon by FGS, all FMS, and stakeholders	
	HMIS SOPs developed/updated, agreed upon by FGS, all FMS, and stakeholders, and distributed to facility level throughout the country	

	Harmonized DQI Process and Tools developed, agreed upon by FGS, all FMS, and stakeholders	
	Percentage of active facilities in the MOH master health facility list (denominator from 2021/2022 HHFA)	
	Data analysis, sharing, and use guidelines developed, agreed upon, and shared between partners	
Private sector engagement	PPD platform is established	
	Private sector mapping is conducted	
	Feasibility study for contracting provide sector is conducted	

Annex B: Theory of Change



Annex C: EPHS Interventions Phasing

Please see the PDF file

Annex D: Core HMIS Partners' Primary HMIS Activities

Partner	Activities
UNICEF / Global Fund	• Printing of registers, summary sheets and other tools • Support for national, state, regional, and district level supervision • Support for national, regional, and some district level staff and IT equipment • Support for trainings on DHIS data collation and entry as well as data usage and analysis • Support for the forthcoming Health Sector HMIS and M&E strategy • Support for national and state HMIS meetings • Linkages of DHIS2 system with malaria and HIV data • 120 tablets supplied to facilities, Community Health Workers, and Immunization Teams
UNICEF / GAVI	• Support for data quality improvement activities with a focus on immunization data including periodic EPI data reviews, supervision, and mentorship • Support for HMIS trainings and capacity development with a focus on immunization • Support for immunization reporting materials and SOPs • Operational research on immunization
WHO	• Risk mapping of emergencies • Facility functionality mapping • TA for HMIS staff to strengthen data collation, analysis, interpretation, and visualization for decision making
Spider / SIDA	• 100 health facilities in Puntland, Galmadug, and Benadir will receive support for an integrated digital HMIS system
SHINE	• Support for HMIS activities in project areas as needed, with variation by implementing partner. Support includes financing for district level positions, IT equipment, data quality improvement activities, data collection and entry, and data analysis and use.
World Bank Financed RCRF Project	• Support for collection of community level data • Digital community level data collection
UNFPA	• Financing for one HMIS position supporting reproductive health at Federal level and two laptops

Save the Children	• In project areas, HMIS capacity building training for national, state, district, regional, and facility staff on HMIS, data quality, coordination, supportive supervision, pharmaceutical reporting, HMIS resource management, etc.

Annex E: Required Distribution of Staff Type by Year

Staff type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Staff gap
Aux. Nurse	904	1147	1390	1634	1877	2120	2363	2606	2850	3093	3336	2432
CHW	1200	1428	1656	1883	2111	2339	2567	2795	3022	3250	3478	2278
Clinical officer	182	274	366	457	549	641	733	825	916	1008	1100	918
Com/Aux Midwife	1356	1532	1709	1885	2062	2238	2414	2591	2767	2944	3120	1764
Doctor-GP	163	184	206	228	249	270	292	313	335	357	378	215
FHW	1647	2421	3195	3969	4743	5516	6290	7064	7838	8612	9386	7739
Lab assistant	579	633	687	741	795	848	902	956	1010	1064	1118	539
Nurse	922	1144	1365	1587	1808	2030	2252	2473	2695	2916	3138	2216
Nurse ART counsellor	18	25	32	40	47	54	61	68	76	83	90	72
Nutrition coordinator	40	50	61	71	82	92	102	113	123	134	144	104
Nutrition nurse/Nutritionist	379	433	487	541	595	650	704	758	812	866	920	541
Pharm technician	561	615	669	723	777	830	884	938	992	1046	1100	539
Psychiatric nurse	40	43	46	50	53	56	59	62	66	69	72	32
Q Midwife	1049	1157	1265	1373	1481	1588	1696	1804	1912	2020	2128	1079
Q Nurse	1230	1338	1446	1553	1661	1769	1877	1985	2092	2200	2308	1078
Social worker	0	2	4	5	7	9	11	13	14	16	18	18
Surgeon caesarian	127	127	127	127	127	126	126	126	126	126	126	-1
Xray tech	18	25	32	40	47	54	61	68	76	83	90	72
Cleaners	184	384	584	783	983	1183	1383	1583	1782	1982	2182	1998
Data clerks	43	48	52	57	62	66	71	76	81	85	90	47
EPI district coordinator	40	43	46	50	53	56	59	62	66	69	72	32

Source: EPHS Costing Technical Report, 2020.

Annex F: Recommendation Matrix From Previous Assessments and Supply Chain Master Plan

Thematic area	Source documents Somalia Pharmaceutical and Supply Chain Assessment FGS Final Report, November 2020	Assessment of the Somali health commodities supply chain of TB, HIV & Malaria, Revised Final Report, May 2020	Somali SCM Global Fund PowerPoint, February 2021	Somali National Medicines and Medical Supply Chain Master Plan, August 2015	Convergence of recommendations across documents
Leadership & Governance	— Reinforce and institutionalize coordination of procurement and supply chain investments and activities.	— Strengthen Supply Chain Governance and Coordination under MOH leadership	— Support MoH governance of the commodities supply chain management — Enhanced oversight of key country supply chain functions — Set up committees	— Establish appropriate coordination mechanisms among all stakeholders. — Coordinate phase-in harmonization and integration of vertical programs and parallel supply chain activities currently done by individual development partners. — Revitalize MOH mandate to consolidate essential activities & have autonomous agencies in the states/zones	— Yes
Policy	— Update the National Medicine Supply Chain Master Plan	Support MOH to develop, print SOP's and job aids for the entire supply chain processes prioritizing the key processes. These SOPs and job aids should be disseminated to all storage facilities offering TB, HIV and Malaria services	— Update of the National supply chain master plan	— Clear policies and supportive legislations are in place, and known and adhered to by the users, supporting an effective national supply chain management master plan. —	— Yes
Regulation	— Improve Regulatory and Quality Assurance capacity — Establish National Medicines Supply Agency	Strategically and prioritize selected quick win activities towards supporting medicines regulatory systems strengthening activities jointly with other partners. Collaborate with the existing NMRA's and WHO in establishing and building laboratory capacity to conduct regular post-market surveillance and develop a Post Distribution surveillance and Pharmacovigilance strategy	— Develop a plan for establishment and reinforcement of the national regulatory authority. — Establish quality Control System, Pharmacovigilance system — Develop National Pharmaceutical policy		Yes ***Remarks*** *In the master plan, having in place pharmaceutical laws and regulations is listed as one of the thematic areas; and roles and responsibilities of Medicine Regulatory Authority are outline, however, regulation is not listed as one of the*

Thematic area	Source documents Somalia Pharmaceutical and Supply Chain Assessment FGS Final Report, November 2020	Assessment of the Somali health commodities supply chain of TB, HIV & Malaria, Revised Final Report, May 2020	Somali SCM Global Fund PowerPoint, February 2021	Somali National Medicines and Medical Supply Chain Master Plan, August 2015	Convergence of recommendations across documents
		across TB, HIV and Malaria programs			*core component strategy areas and no strategies have been described.*
Human resource	— Increase human resources capacity	— Deepen Investments in Health Supply Chain Targeted Training, Mentorship, and Supervision:	— Assessment of human resource needs — Development of National strategic vision of the SCM — Capacity building	Define human resources needs and ensure adequate staff who are capacity built	Yes
Information management system	— Increase support for improvement of data quality and management	— Undertaking a logistics system re-design,	— Design of the Harmonized LMIS	— Design and implement and integrated Logistics Management Information System (LMIS) with simplified data collection and reporting tools/formats	Yes
Procurement, warehousing, and storage	— Develop a procurement and supply chain management strategy. — Establish National Medicines Supply Agency	Improve facility storage conditions by using quality improvement approaches by ensuring adequate storage conditions and addressing areas of weaknesses could be addressed and reinforced through regular and structured supervision visits	— Assess the current storage condition with regards to best storage condition practice — Plan to improve storage capacity and conditions	— Improve procurement transparency and accessibility to the system. — Establish required storage capacity based on efficiency principles	No ***Remarks*** *The recommendations in the Somalia Pharmaceutical and Supply Chain Assessment FGS Final Report, November 2020 and the master plan are broad enough to encompass procurement, storage & distribution while the TB, HIV and Malaria assessment focuses on storage at facility level*

Thematic area	Source documents Somalia Pharmaceutical and Supply Chain Assessment FGS Final Report, November 2020	Assessment of the Somali health commodities supply chain of TB, HIV & Malaria, Revised Final Report, May 2020	Somali SCM Global Fund PowerPoint, February 2021	Somali National Medicines and Medical Supply Chain Master Plan, August 2015	Convergence of recommendations across documents
Monitoring and Evaluation	M&E skills are mainly required at the central and regional level.	— M&E and Performance Management for Supply Chain	— Monitoring of key country supply chain functions	Performance of the supply chain master plan is monitored and evaluated at all levels so that corrective actions can be taken timely.	Yes
Financing				— Mobilize increased resources for essential medicines. — Establish capital fund. — Strengthen financial planning	***Remarks*** *Only the master plan covered financing.*
Private sector collaboration	Commodity Security Technical Working Group to support private sector participation and contribution to work with the Commodity Security Technical Working group	Public-Private Health Sector Collaboration	— Assess possibility of working with Private sector e.g. on outsourcing storage and/or distribution of commodities	Public-Private Partnership Initiative	Yes

Annex G: Key Recommendations From the World Bank/FMOH Report into Medicine Regulation

Note: The text below is copied verbatim from the report.

1. Promulgate urgently the Draft Medicines act,
2. Establish a National Regulatory Authority (NRA) task force with a team leader having regulatory expertise that will coordinate all regulatory activities in the country in close coordination with all Federal states until the official competent authority is formally established and empowered by the Law,
3. Request the NRA task force to urgently implement the proposed national capacity building plan to build regulatory competency for the whole country,
4. Empower the task force to initiate activities to gradually develop priority regulatory functions using as much as possible reliance on other competent regulatory system, develop mutual or unilateral recognition of other regulatory decision makers when possible, and harmonize with existing best practices of recognized functional regulatory system or international regulatory networks,
5. Request the FMOH and with the aid of existing UN agencies and partners to ensure that relevant budget and seed funding can be made available to implement the proposed road map and workplan.
6. Request FMOH to closely continue to engage and request all relevant and potential partners (AU NEPAD RCOREs, WHO, UNICEF, World Bank, International NGOs, and bilateral aid, etc.) to provide when available regulatory expertise and financial support from their own relevant and consistent priorities areas of work to develop the recommended regulatory functions.
7. Request the FMOH to ensure that NRA task force could submit quarterly feedback and report to the FMOH, Federal States and all relevant stakeholders, private and international agencies as well as NGOs to demonstrate progress and document constraints.

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