

DRAFT



Ministry of Health
Federal Republic of Somalia

Essential Package of Health Services Somalia, 2020

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List of Acronyms

COPD	Chronic Obstructive Pulmonary Disease
DALYs	Disability Adjusted Life Years
DCP3	Disease Control Priorities III
DHMT	District Health Management Team
DHS	District Health System
EPHS	Essential Package for Health Services
EWARN	Early Warning, Alert and Response Network
GDP	Gross Domestic Product
HeRAMS	Health Resources Availability and Monitoring Systems
HSSP	Health Sector Strategic Plan
IDSR	Integrated Disease Surveillance and Response system
MoH	Ministry of Health
NCDs	Non Communicable Diseases
NDP	National Development Plan
NGOs	Non-Governmental Organizations
OOP	Out of Pocket Payments
RHIS	Routine Health Information System
RHMT	Regional Health Management Team
SARA	Service Availability and Readiness Assessment
SHDS	Somali Health and Demographic Survey
SDGs	Sustainable Development Goals
UHC	Universal Health Coverage
YLDs	Years Lost due to Disability
YLLs	Years of Life Lost

FOREWORD

Insert here

Vision, Mission and Values of the Ministry of Health

Vision Statement of the Ministry of Health

All people in Somalia attain the highest possible health status, which is a right of all citizens and an essential requirement for a productive nation contributing to peace, social and economic development.

Mission of the Ministry of Health

To achieve Universal Health Coverage (UHC) by ensuring the provision of equitable, accessible, efficient, affordable and quality essential health and nutrition services as close to the communities and families as possible, particularly to the mothers and children in nomadic and rural areas and the Internally Displaced Person (IDP).

Values of the Ministry of Health

- Ownership & Leadership
- Transparency and accountability
- Equity
- Effective collaboration and Partnership
- Participation and engagement of communities
- Gender sensitivity and women empowerment

Executive Summary

Somalia is committed to the achievement of Universal Health Coverage (UHC). The implementation of the EPHS 2020 is expected to address the burden of diseases responsible for the high morbidity, mortality and disability afflicting the Somali people, particularly the most vulnerable segments of our population, women, children, the Internally Displaced persons and the elderly.

The EPHS 2020 for Somalia, is a product of intensive consultations between the Ministries of Health and the health partners across the country. It builds on experiences and learning from the implementation of the earlier version of EPHS developed in 2009, looks into experiences and learnings from countries in the continent and around the world who are facing similar social, political and economic circumstances, and emerging from decades of protracted conflict as Somalia is.

The technical body of the EPHS 2020 is built upon analysis of the burden of diseases and the most recent Disease Control Priorities (DCP3), and it is anchored on the UHC compendium of the World Health Organization, for which Somalia can represent one of the frontrunners in the implementation. It provides a platform for implementation of UHC which is crucial towards achievement of SDGs and a framework based on which, prospectively, policy and strategic decisions and priorities will be made.

Implementation of the 2009 EPHS was partial and lacked uniformity partly due to challenges related to coordination, health financing, health system capacity, security and access, and weak stewardship and oversight by health authorities.

The implementing partners selected aspects of EPHS that are aligned with their fields of specialty (e.g. nutrition), funding opportunities and donor requirements – ease of demonstrating and attributing results – or funding priorities. This contributed to inequalities in service delivery, limited access to health services to the disadvantage of majority of rural, nomadic and displaced populations and fragmentation of health services. These were further exacerbated by poor health seeking behaviour by the population, widespread poverty and low per capita expenditure on health and nutrition sector, estimated at US\$ 11.2, in 2019.

In 2019, Somalia launched a Roadmap towards Universal Health Coverage (2019-2023) and a more robust essential package of health services was required to reverse these trends and put the country on a progressive path towards achievement of SDGs by 2030.

The process of development of EPHS 2020 was launched and involved extensive consultations with stakeholders alongside a review and analysis of gaps in the 2009 EPHS, incorporating additional services in line with WHO normative guidance, DCP3, and partners recommendations. This process has involved an analysis of the burden of disease and assessment of health needs, review of evidence on the cost-effectiveness of key interventions, assignment of selected services for each service delivery platforms, identification of core services and development of a mechanism to allow for progressive realization and dynamic adaptation of services.

The Ministry of Health and the health partners have invested significant resources and time in redesigning the service package, determining priority health programmes, identifying the most cost-effective interventions and carefully examining the affordability and feasibility of the package.

The revised EPHS 2020 therefore aims to address all high-burden conditions through simple, low cost-high impact interventions, establish demand-driven services to facilitate more accurate costing, facilitate integrated service delivery, link services to level of care/platform of delivery, allow dynamic adaptation to operationalize the package in variable contexts with distinct delivery platforms, provide a foundation for service planning, workforce mapping and training competencies, support progressive realization and account for the need to increase service delivery capacity over time and support expansion to additional services when additional resources become available.

The government is cognizant that addressing the health system constraints is a pre-requisite for the successful implementation of the EPHS. It has identified areas for intensified technical support which are deemed critical for the effective delivery of the service package.

The projected cost of EPHS 2020 implementation was developed. It is estimated that the initial, baseline cost will be about US\$ 105 million (per capita expenditure of US\$7.4), with the largest share of this being attributed as follows; human resources (46%), medicines and other supplies (34%), infrastructure development (10%) and logistics costs 9%. The distribution of these resources is similar to the results identified in a 2014 costing study of the EPHS in Somalia at that time. This cost is expected to gradually increase to reach an estimated per capita expenditure of US\$ 33 by year 2030, with the largest proportion of cost increase being attributed to the expansion of priority intervention coverage to cover bigger population (both current non covered and projected population growth) with essential health services. Analysis of EPHS implementation cost by facility shows that nearly 80% of EPHS implementation costs would be consumed by primary health care institutions (District hospitals, Health Centres, Primary Health Units, and the Community based interventions).

The investment in the EPHS 2020 implementation is expected to deliver proportionate benefits to the population. For instance, maternal mortality ratio is expected to decline from 632 deaths per 100,000 live births in 2020, to 332 deaths per 100,000 live births by the year 2030; an almost 50% reduction. Similarly, neonatal, infant and under-five mortality rates are expected to decline from 122, 77 and 38 per 1,000 live births in 2020, to 63, 42 and 20 deaths per 1,000 live births by the year 2030 respectively. The impact of these benefits will include increased child survival rates, improved population productivity and improved life expectancy, among others.

Comprehensive implementation guidance is currently under development – including overall plan and tools for operational planning progressive expansion, strategic investments, management and monitoring – in order to optimize the impact of the EPHS 2020 and avoid partial implementation witnessed in the 2009 EPHS. The plan is expected to involve development of governance mechanisms and enhanced regulation of the sector to increase

transparency and accountability. It will also require quality assurance, for services; improved financing systems and revision of purchasing mechanisms; while at the same time expanding numbers and skills of health personnel to ensure the engagement of sufficient and competent health workforce in the service delivery.

Monitoring and evaluation mechanisms including the use of balanced score cards (BSC) will be enhanced in order to track performance and implementation progress; extensive capture and use of health data and assessment of community health needs and assets will inform decisions, planning and on-course adjustments. Sustained engagement and commitment of the competent national and sub-national authorities will be essential for sustainable progress.

It is our expectation that implementation of EPHS 2020 will catalyse improvement in equity and access to Primary Health Care in Somalia, as the backbone of Universal Health Coverage and Health Security. We also hope that through improved health financing, all existing health programmes will be adjusted to align with the delivery of the EPHS 2020 across the five delivery platforms. We expect our health partners will implement the standardized service packages, and will work closely with the Ministry of health at Federal and State levels for the full implementation, monitoring and evaluation of the essential package of the health services across Somalia.

Current Context and Rationale

Somalia is emerging from a long period of conflict that has brought public health infrastructure to a state of near collapse. Over the past decade, the Federal Ministry of Health in collaboration with health partners has embarked on a process of health system rehabilitation with the goal of ensuring access to essential health services for all.

The goal is to put the country onto a path towards achievement of equity in health service delivery, and to lay the foundation for progress towards Universal Health Coverage (UHC) 2030. Core health indicators suggest some early successes, though much work remains to be done.

Although they remain very high, maternal, infant and child mortality rates are gradually declining. In 2015, the maternal mortality ratio was estimated at 732 maternal deaths per 100,000 live births [1], a remarkable improvement from 1,600 deaths per 100,000 live births a decade earlier (estimate for 2004-2005) [2], and 850 maternal deaths per 100,000 live births in 2013-2014 [3]. In 2018-2019, the maternal mortality ratio further declined, although modestly, to an estimated 692 maternal deaths per 100,000 live births [4]. The proportion of births assisted by skilled health personnel has increased from 9% (2016-2017 data) [1], to 32% in 2020 [4] which could partially explain the gradual reduction in maternal mortality over the past decade.

Although infant and child mortality rates remain the highest in the region, under-five mortality has improved to 117 deaths per 1000 live births [4], from 200 deaths per 1,000 live births in 2009-2010, and 142 deaths per 1,000 live births in 2013-14 [3]. The infant mortality rate at 74 deaths per 1,000 live births [4], has also improved from 119 deaths per 1,000 live births in 2009-10 and 91 deaths per 1,000 live births in 2013-14 [3].

Demographic Changes

Somalia is in the initial stages of an epidemiological transition, characterized by declining maternal, infant and child mortality and increasing life expectancy at birth. The Population of Somalia is estimated at 15.6 million (2019) [1] (this is projected from population estimates of 2014 [5] with total fertility rate at an average of 6.4 children per woman (range of 5.7 to 7.1 in different regions) [5]. Life expectancy at birth is estimated at 58 years (2019 data), [1] and it is estimated that 45.6 percent of the population is under 15 years of age, and 75 percent is under 30 years of age [5]. The majority of the young --including neonates, infants, children under the age of five, adolescents and youths—are users of health services. A significant proportion of children under the age of 5 suffer acute malnutrition every year, and child stunting and wasting is identified as one of the major impediments to healthy growth and development.

In addition, the country has an estimated 2.6 million Internally Displaced Persons [6], a number that fluctuates frequently due to recurring natural disasters, especially drought and famine.

Universal Health Coverage (UHC) and Uptake of Health Services

Since the ratification of the Sustainable Development Goals (SDGs) in 2015, Somalia has increasingly emphasized the strategic importance of SDG target 3.8 on UHC with a focus on access, quality and financial protection. Somalia is considered one of the Least Developed Countries, with a GDP of US\$ 7.3 billion in 2017, GDP per capita at US\$ 499 and a poverty headcount rate of more than 51 percent in 2016 [7]. Somalia's annual per capita government health and nutrition expenditure (including official development assistance) was around US\$11.2 in 2019 [8]. It is estimated that over 40% of the population lives on less than US\$1 a day and 73% on less than US\$2 per day [9]. Communities have little or no disposable income to be used as out-of-pocket payments (OOP) for health services, and cost is a major barrier to uptake of health services in Somalia.

As part of the effort to progress towards UHC and following a UHC index assessment showing only 22 percent of Somali population having access to essential services [7], Somalia launched the Health Sector Strategic Plan (HSSP-II) 2017-2021, and the Somali Roadmap for achieving UHC 2019-2023, demonstrating strong political commitment and paving the way for the roll out of UHC in the country. The current EPHS revision process is fundamentally driven by and oriented to the goals, principles and targets outlined in these strategic documents. The 2020 update of the EPHS aims to optimize the balance among the three dimensions of UHC-- i) services coverage; ii) population coverage; and iii) financial protection-- and to align with the strategic direction set out in the *Somali roadmap for achieving UHC 2030*.

Lessons Learned from the EPHS 2009

In 2009, Somalia developed its first Essential Package for Health Services (EPHS) through a broad consultative process with key actors, including MoH, donors, United Nations Agencies, Non-Governmental Organizations (NGOs). The 2009 EPHS was based on the first edition of *Disease Control Priorities* (DCP1) and national strategic and policy documents available at the time. It also borrowed from many international standards and experiences of countries emerging from long years of conflict and had developed and implemented national packages of essential health services with remarkable improvements in key health indicators.

All services included in the EPHS document were deemed essential for the Somali people, but the operationalization of the 2009 EPHS faced coordination and financial challenges, and its implementation was fragmented, limited geographically and inconsistent across the country.

A recent desk review found that some of the 2009 package components were not implemented or not rolled out as intended, while at the same time, scarce resources were expended to implement other services that were not part of the EPHS [10]. Areas for potential improvement identified by the review included aspects of the package itself and aspects of implementation.

Regarding the content and structure of the package, the review identified the following gaps:

- i. Programmatic limitations in high-burden health areas, including family planning, nutrition, non-communicable diseases (encompassing respiratory, cardiovascular and neoplastic conditions, as well as diabetes, mental health, oral health and injury);
- ii. Lack of services associated with the core continuity and coordination functions of primary care
- iii. Lack of explicit services for common symptomatic presentations in primary care and emergency care, such as cough, pain or difficulty breathing;
- iv. Absence of some specific priority interventions (based on a comparison with the essential UHC and highest priority packages of the updated Disease Control Priorities, 3rd edition (DCP3));
- v. Lack of inter-sectoral interventions;
- vi. Package organization inadequate to support coordinated referral and movement across the health system; and
- vii. Package design unsuited to guide progressive realisation and dynamic adaptation to variable contexts across the country.

In addition, the review noted that cost-benefit and cost effectiveness analyses were not complete.

The review also identified substantial gaps in the implementation of priority interventions at all levels—including at community, primary health centre, health centre and district and referral hospital levels—and highlighted several implementation challenges. As mentioned above, demand and uptake of health services remain low, and cost was flagged as a major barrier, given the low government per capita spending on health, and the low penetration of private medical insurance schemes.

While the EPHS program has improved the quality and capacity of service delivery, the shortage of qualified staff, limited bed capacity, lack of specialists and poorly-managed referrals remain key implementation challenges. Staff in “EPHS districts” (where the package was funded and implemented) were much more motivated than those with no EPHS program, as they received more in-service and on-the-job training opportunities and were regularly paid. Even within EPHS districts, however, supervision was limited, and uneven staff performance and poor staff retention persist.

In summary, the effort to operationalize the 2009 EPHS has suffered from gaps in package content, the lack of a package structure purpose-designed for the context, inadequate staffing and physical infrastructure, inflexible funding compounded by donor interest and priorities and limited strategic vision for program sustainability and integration with other sectors, including the non-for-profit private sector.

Finally, the ability to identify and mitigate barriers to implementation of the EPHS has been limited by inadequate resources, poor coordination and the lack of a user-friendly mechanism for monitoring and evaluation for use by all relevant partners. Such a system, which could include a scorecard, would provide policymakers, managers and other decision makers with

information on areas of strength and challenges to be addressed and would help to evaluate the impact of the EPHS [11].

Development of the EPHS 2020

The current effort to revise the Somalia EPHS was motivated by the driving factors described above, including the evolving health needs of the Somali population, the gaps identified through review of the 2009 EPHS, and the increasing strategic emphasis on progress towards UHC and other SDGs. The overall objective is to develop a sustainable service delivery strategy that responds to the priority health needs of the Somali people, building on the lessons-learned from experience with the EPHS 2009 and incorporating the most recent evidence-based tools.

The EPHS 2020 aims at consolidating the health gains of the EPHS 2009 while extending the highest impact package to as many people as possible with protection from financial hardship. The recognition that resources are finite and prioritization essential is implicit in this effort, and the EPHS 2020 aims to prioritize (i) services likely to have the greatest impact on major health problems of the Somali people, (ii) services that are cost-effective in addressing the problems faced by majority of the population and (iii) services that can be scaled up to give equal access to nomadic, rural and urban populations.

The development of the EPHS 2020 has progressed from data to dialogue to decision guided by the following principles:

- The process should be impartial, democratic, inclusive and based on country values.
- Decisions should be open, transparent and based on clearly-defined criteria.
- Trade-offs should be clearly data-driven and evidence-based.
- Planning should be linked to robust financing mechanisms and effective service delivery mechanisms that lead to measurable health outcomes.
- The overarching goal is the progressive introduction of a standardized package to be used by all stakeholders across the country.

The design of the EPHS 2020 supports a range of use cases and aims to:

- Address the high-burden conditions (at a minimum through simple, low-cost interventions, such as pain control)
- Explicitly account for common symptomatic presentations at the primary level of the health system (demand-driven services) to facilitate more accurate costing
- Formulate and organize content to facilitate integrated service delivery
- Link services to level of care (platform of delivery) to support effective referral and ensure coordination of services across lower to higher-level platforms
- Easily communicate what services are covered and where they are delivered
- Allow dynamic adaptation to operationalize the package in variable contexts with distinct delivery platforms

- Formulate content to provide a foundation for service planning, workforce mapping and training competencies and ensure enough detail to provide a foundation for contracting, monitoring and evaluation
- Support progressive realization and account for the need to increase service delivery capacity over time (for example, by introducing newly added services initially at higher levels of the health system with later expansion to lower levels once capacity increases)
- Support expansion to additional services (and/or further dissemination of included services) when additional resources become available.

Task Force

This effort was undertaken by a task force consisting of a core team from the Ministries of Health, federal and state level, the World Bank, the World Health Organization, UNICEF and the Department for International Development (DFID), under the leadership of the Ministry of Health, and, with a full participation of all stakeholders. The task force adopted an approach which examined the adequacy of the components and the scope of Somali EPHS (2009) against the burden of disease of the country, the evolving health needs of the Somali people in addition to the normative guidance from WHO and DCP3.

Results from the Burden of Disease Analysis & Health Needs Assessment

The burden of communicable diseases and maternal, neonatal and nutritional conditions in Somalia has declined from 80,112 DALYs lost per 100,000 population in 2000 to 44,122 in 2019. However, the burden of non-communicable diseases decreased slightly from 16,058 DALYs lost per 100,000 population in 2000 to 14,879 in 2019 [11] It means that Somalia is still faced with communicable diseases and maternal, neonatal and nutritional conditions. While there is a reduction in disease burden per population, NCDs trend is almost constant. With increasing life expectancy, the NCDs will play a prominent role in Somalia's health.

Health Needs Assessment

The revised EPHS must address the health needs of the Somali people. Defining a valid list of health needs is a fundamental step in choosing a need-based set of high impact priority services. The health needs of Somalia are defined by three components:

1. *Diseases with a high burden*

Examining the burden of diseases at the national level and considering different categories of the population, including nomadic communities who represent 26 percent of the Somalia population.

2. *Public health concerns*

These include vaccine-preventable diseases, some communicable diseases in control, elimination, or eradication phases that, while their current burden is not high, potentially constitute a hazard, and

3. *Hazards as consequences of emergencies*

Potential health needs following man-made or natural emergencies such as conflict, drought, storm, and floods might not have a huge burden in a particular time. Still,

they can flare up as a result of emergencies with potentially high impact on the health of people and the health system.

The revised EPHS responds to the real needs of the Somali people with attention to the social determinants of health and the key components of health security. The current package contains the relevant service interventions that can have a significant health impact. However, reaching the desired coverage level with good quality of the services shall remain a major challenge for the government and the health partners. So, reviewing the health needs versus existing services is a crucial step in revisiting this service package.

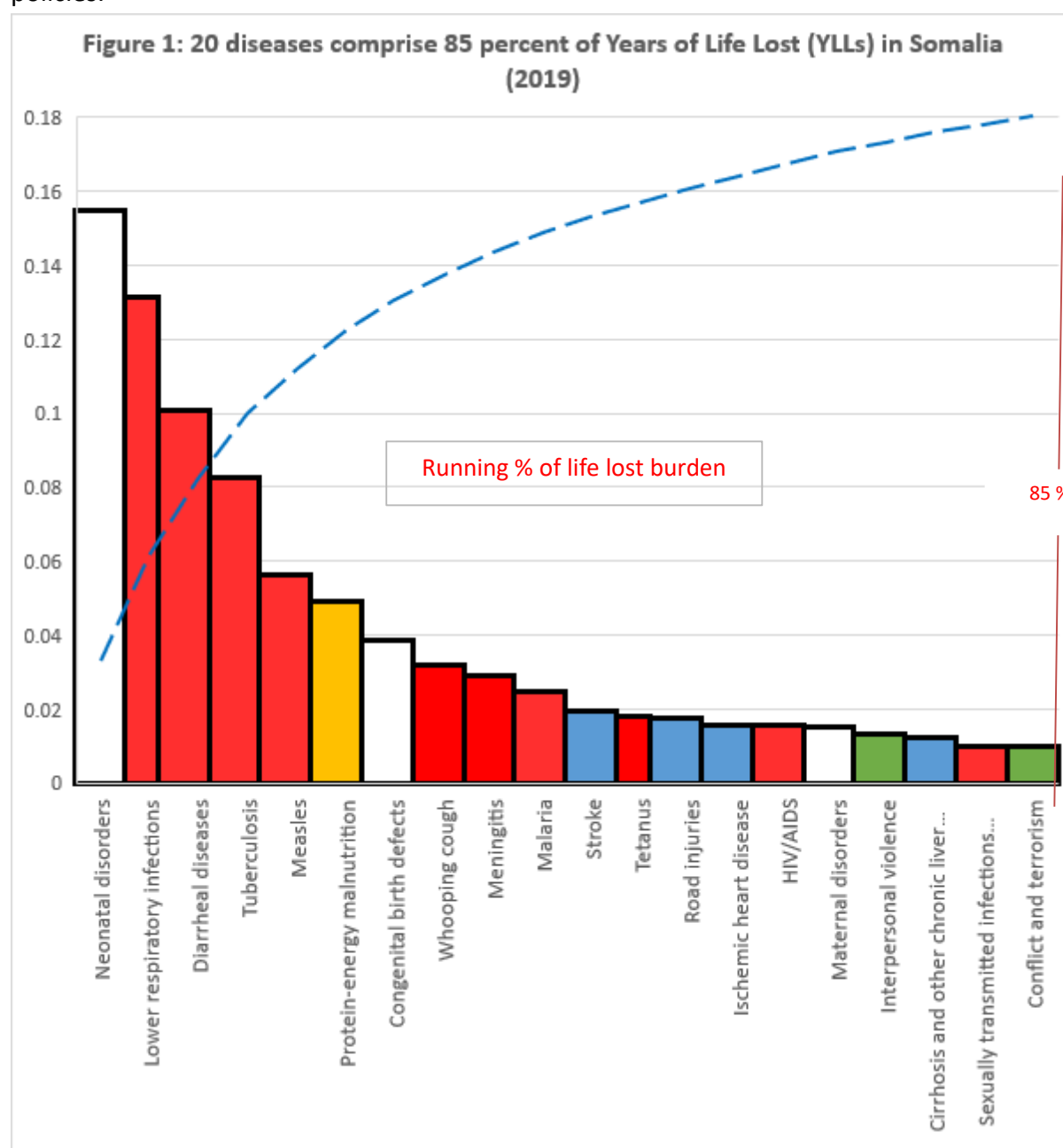
The revision of Somalia EPHS used the latest Somalia data from the Global Burden of Diseases estimates (2019) complemented by the available national data [11]. The causes of death and disability were listed and sorted according to their share in the disease burden.

Figure 1. shows the top 20 causes of Years of Life Lost (YLL) due to premature mortality. People in Somalia are suffering from a disproportionate burden of communicable diseases (red columns) as the leading cause of death which is responsible for more than 45 percent of YLL. Vaccine-preventable diseases such as measles and whooping cough pose significant burden, an indication of the low coverage of vaccination.

Providing these services were considered as high priority in the EPHS. Based on the recent Somalia Demographic and Health Survey (SDHS) 2020, the coverage of Measles, BCG, and Pentavalent vaccines are 23, 12 and 12 percent. The coverage of the tetanus toxoid in pregnant women is 22 percent [4].

The other important causes of death are maternal and neonatal disorders (white column) and nutritional energy-protein malnutrition (orange column). It shows the need for effective coverage of essential public health measures and the importance of tackling social determinants of health in Somalia, which is not a part of package but must be in intersectoral

policies.



	Neonatal and maternal disorders
	Communicable diseases
	Injuries
	Nutritional disorders
	Non-communicable diseases

While EPHS included the relevant services in response to the neonatal and maternal deaths and also malnutrition, the coverage of health services is not satisfactory. As an example, the SDHS estimated that 11 percent of pregnant women are covered by the daily iron and folic acid supplementation or deworming has 4 percent coverage. Since the data on newborn care is not complete and does not allow judgment on the leading cause of YLD, neonatal mortality.

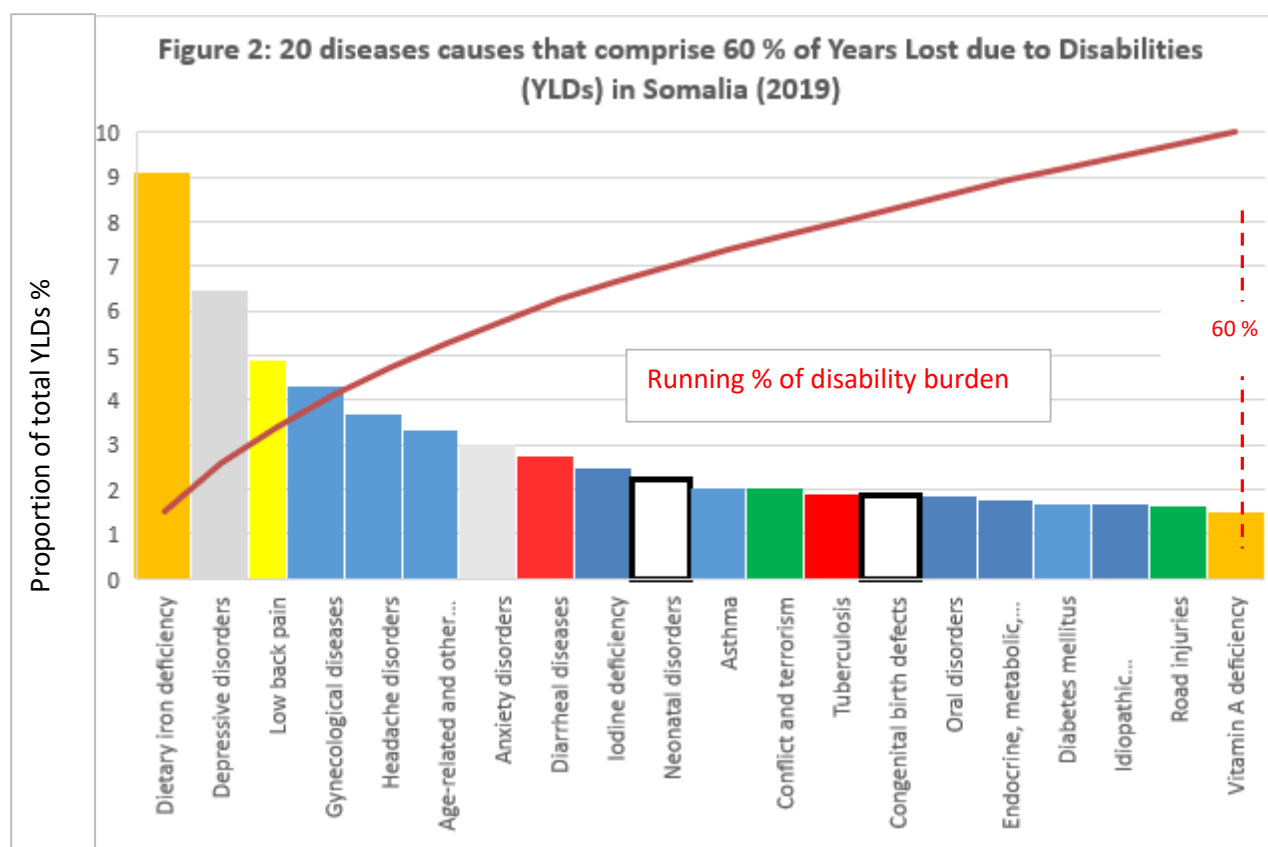
Among the top 20 causes of YLL, excluding causes of maternal mortality, injuries are more dominant in males (10% versus 5% in females). A variety of causes, including interpersonal violence and conflict are responsible for these causes of deaths, which illustrates the importance of a multi-sectoral approach to the country's health needs and needed quality services for trauma and emergency care.

Figure 2 illustrates the Years Lost due to Disability (YLD). It shows the prominent contribution (62 percent) of NCDs in YLDs of Somalia. The lack of data on coverage and quality of NCD services (e.g., cardiovascular, asthma and chronic obstructive pulmonary disease (COPD) and diabetes) limited this analysis.

From the beginning, it was apparent that some of the services related to chronic conditions which were not include in the EPHS 2009 need to be considered in the revised EPHS. Mental health, for example, is one of leading causes of YLDs and needs a more systematic approach, including measures for anxiety, which is the 4th cause of YLD in Somalia.

The findings were examined by disease thematic area experts in separate in-depth interviews which revealed that malaria and visceral leishmaniasis are endemic in the northern part of the country, and schistosomiasis and leprosy are more frequent in the south region. These were added to the list of health needs. The experts were also asked about any disease with public health concerns and all-hazards risks as the consequence of man-made or natural disasters.

These two steps were followed by a desk review of the published reports, including the national health information management and disease surveillance data in addition to the most recent health surveys conducted in the country. The prevalence or incidence of the leading health outcomes were extracted and added if they were missing in the list of health needs. The final list (table 1) was classified into communicable, maternal and child health, nutrition, emergency, trauma and injuries and non-communicable diseases. This list was used in the later stage for drafting the EPHS's services. A set of evidence-based interventions was proposed for each priority health needs item, considering the cost-effectiveness, affordability and feasibility of implementation of the service in Somalia.



	Nutritional disorders
	Musculoskeletal disorders
	Mental health disorders
	Other non-communicable diseases
	Neonatal disorders
	Communicable diseases
	Injuries

Table 1: Health needs in Somalia based on the burden of disease, public health concerns and hazards as consequences of emergencies

Communicable		Maternal and child health	Emergency, trauma and injury
Lower respiratory infections	Viral haemorrhagic fever (Chikungunya, Dengue fever and Rift valley fever) Typhoid Brucellosis Vaccine-preventable diseases Scabies	Neonatal disorders: preterm birth, sepsis and neonatal disorders and encephalopathy due to asphyxia and trauma	
Diarrheal diseases			Road injuries
Tuberculosis and MDR-TB			Violence
Measles			Conflict and terrorism
Whooping cough			Self-harm
Meningitis		Maternal disorders: including haemorrhage, hypertensive disorders, abortion and miscarriage, sepsis and obstructive labour, uterine rupture and ectopic pregnancy, gestational diabetes	Drowning
Malaria			Animal contact
Tetanus			Exposure to mechanical forces
HIV/AIDS			Adverse effects of medical treatment
Intestinal nematode infections			Fire, heat, and hot substances
Visceral leishmaniasis			Poisoning
Fungal skin diseases			Falls
Upper respiratory infections			Environmental heat and cold exposure
Unsafe water source		Congenital birth defects	
Unsafe sanitation		Sudden infant death syndrome	
No access to a handwashing facility		Gynaecological diseases	
Unsafe sex		Low birth weight and short gestation	
Urinary Tract Infection		Suboptimal breastfeeding	
Cholera/ Acute Watery Diarrhea		Family planning	
Trachoma		Female genital mutilation	
Rabies		Jaundice	
Schistosomiasis (in the south)		Child marriage and early pregnancy	
Hepatitis B and C			
Leprosy (in the south)			

Table 2: Health needs in Somalia based on the burden of disease, public health concerns and hazards as consequences of emergencies

NCD			Nutrition
Stroke		Conduct disorder	Protein-energy malnutrition
Cirrhosis and other chronic liver diseases		Drug abuse disorders	Dietary iron deficiency
		Oral disorders	Vitamin A deficiency
Diabetes mellitus		Drug use disorders	Protein-energy malnutrition
Chronic kidney disease		Bipolar disorder	Iodine deficiency
Malignant neoplasms		Other mental disorders	Severe and moderate acute malnutrition
Epilepsy		Particulate matter pollution	
Hypertensive heart disease			Micronutrient deficiencies
COPD		High systolic blood pressure	
Paralytic ileus and intestinal obstruction		High fasting plasma glucose	
Low back pain		Impaired kidney function	
Depressive disorders		High LDL cholesterol	
Headache disorders		High body-mass index	
Anxiety disorders		Tobacco consumption (Cig. and hookah) and Khat Chewing	
Hearing loss			
Blindness and vision impairment			
Dermatitis			
Asthma			
Upper digestive system diseases			
Chronic obstructive pulmonary disease			
Neck pain			

Developing the Essential Package of Health Services (EPHS) 2020

As described above, the EPHS 2020 is designed to support a range of use cases and meet specific requirements, including the ability to facilitate integrated service delivery, to address high-burden conditions and to support progressive realization and expansion of the package. To develop a package design that could meet these needs, the task force undertook a systematic process that included the following steps:

(1) The EPHS 2009 was reviewed and gaps identified. The services from the 2009 EPHS were reviewed and then mapped into the preliminary architecture of WHO's Universal Health Coverage Compendium of Interventions (UHCC) (planned for a launch in December 2020), allow systematic identification of gaps. The UHCC provides a structured and comprehensive list of health interventions with standardized formulations designed to ensure that all health areas are explicitly considered and that formulations are harmonized across health areas.

(2) Additional services were proposed to address gaps in the 2009 package. WHO normative guidance, DCP3, and partner recommendations were the chief sources for additional services.

(3) A burden of disease analysis and a health needs assessment were utilized to further guide the selection of the essential services. A visualization was created to highlight interventions that address the high burden diseases.

(4) Evidence on the cost-effectiveness of key interventions was reviewed and utilized to shape the package. This review focused on evidence that has emerged since 2009 and includes current WHO guidance as well as DCP3 content. Low-cost high-impact interventions that effectively address high burden diseases and conditions were then selected for inclusion in the package.

(5) Selected services were assigned to initial and optimal service delivery platforms, and interventions aligned across levels to facilitate effective movement across the health system.

(6) Core services were identified and a mechanism to allow for progressive realization and dynamic adaptation of services was developed. The 2020 EPHS provides both core and extended scenarios that support progressive realization and future expansion of the service package.

Programmatic Areas in the EPHS 2020

1. Access to care
 - a. Continuity, care planning and coordination
 - b. Emergency care
 - c. Approach to common signs and symptoms
2. Reproductive, maternal and new-born health
 - a. Maternal and new-born care

- b. Sexual and reproductive health
- 3. Life-course, growth and development
 - a. Childhood and adolescence, including nutrition
 - b. Older age and adults
- 4. Noncommunicable diseases
 - a. Health promotion and disease prevention
 - b. Cardiovascular and pulmonary diseases
 - c. Diabetes
 - d. Cancer
 - e. Mental health and substance use disorders
 - f. Injuries
 - g. Other NCDs
- 5. Communicable diseases
 - a. Immunization
 - b. Management of HIV, TB, Malaria, Hepatitis
 - c. Neglected tropical diseases
 - d. Respiratory infections
 - e. Gastrointestinal infections
 - f. Other infections
 - g. Outbreak surveillance
- 6. Rehabilitation

Organizing the Package to Align Services Across Levels (delivery platforms)

Aligning interdependent services from lower and higher-level delivery platforms ensures that service planning is coordinated and optimizes movement across the health system. Initial evaluation and referral for severe pneumonia or injury at the community level, for example, must be complemented by appropriate secondary services to be effective. This particular design ensures that interdependence of services is easy to visualize. In addition, this design allows users to ‘slide’ services to different platforms to accommodate context-specific and dynamic service delivery needs, such as those associated with changing capacity or evolving security considerations.

Core and Extended Services for Progressive Realization:

The 2020 EPHS was designed to indicate core and extended scenarios to support progressive realization and future expansion of the service package. This allows for the need to ramp up capacity and allows for flexible operationalization for different contexts that may have distinct platforms or constraints (including, for example, geographic or security constraints affecting access).

The core scenario is the foundation for priority implementation and includes those services that the government commits to make available to all Somali people in the short term. Time,

training and additional resources are needed to introduce new interventions, so services that are new to the 2020 package are initially assigned to platforms where there is likely to be near term capacity for successful delivery. The extended option supports expansion of select services by shifting to lower-level delivery platforms as capacities increase (for example, some services initially delivered only at health centres might be extended to the community level), as well as identifying priority services that the government aspires to make available in the medium to long term, as additional resources become available. Services that would optimally be delivered at a lower level when resources and capacity become available are indicated by arrows next to the intervention name indicating the shift to the optimal delivery platform.

The design of the EPHS 2020 allows for a quick ramp up of capacity as well as for flexible operationalization for different contexts that may have distinct platforms or constraints (e.g. geographic or security issues affecting access). While the package is intended to be delivered through a district Primary Health Care approach that includes standards on the number of delivery platforms per district, the operationalization must be adapted to variable context (e.g. rural vs urban).

Additional adaptations will be required, for example, for nomadic populations to facilitate referral pathways and support transport. Special considerations will apply in areas that are insecure or have limited accessibility. And additional temporary or mobile treatment facilities may be needed when there are sudden surges in health needs. Table 3 illustrates possible adaptations for district health and service delivery platforms in different operational contexts. While some benchmarks are proposed, these need to be adapted to local conditions. Adaptations should be led by local health authorities based on a district or regional health system assessment and feasibility analysis, with subnational implementation plans. This also should include an assessment of the current availability of functional facilities at different levels of services.

Table 3: Adapting package operationalization in different contexts

Context characteristics	District in rural context Lower population per health directs, with lower population density	District in urban context Larger population per health district, with higher population density	Nomadic populations Population that move across administrative boundaries of health districts	Insecure and/or inaccessible areas Boundaries based on accessibility and security; areas served through humanitarian hubs
Assumption for adaptation	local differences in population density need to be considered	More efficient to increase the capacity of one HC or	For smaller nomadic populations it will be more efficient to invest in first aid and stabilisation capacities of the	Referral pathways need to be defined for each hub, whereby it may be desirable to upgrade a HC to DH, or DH to RH. Special considerations should be

	when planning locations for the facilities for upgrading the health network to progressively increase coverage of service availability (based on with 5km distance and/or 1 hr travel time).	RHC/DH to serve the catchment population within 5km/1 hr travel, rather than rigidly adhering to the standards for rural contexts.	CHW, and transport for referral.	given to support transport to referral facilities.
Community services	1 FHW per Population	Same	Same	Same in accessible areas
Primary health Unit	1 PHU per 600-1.000 population	Same	Same	Same in accessible areas
Health Centre	1 HC per 20-30,000 population	1 HC per 20-30.000 population, with capacity adapted to catchment population within 5km/1hr	Mobile HC that follows the population, or Flexible referral pathways to nearest HC with investment in transport capacities within nomadic population	Where not possible to support fixed HCs: Mobile Health and Nutrition Teams that provide HC services
District Hospital	1 DH 120,000-150,00 per population	1 DH per 120,000-150.000 population, with capacity adapted to catchment population within 5km/1hr	Flexible referral pathways to nearest RHC/DH, with investment in transport capacities within nomadic population	Where not possible to support the planned DH in an administrative district: 1 DH in a town that services as the humanitarian hub for a geographic area Or upgrade a MHNT?? or HC to DH in the accessible area.
Regional/national hospital	Existing national, regional or specialised hospitals			
Surge capacity or specialised treatment centres linked to acute or chronic emergencies	Temporary treatment centres, e.g. when there are epidemics, floods, or nutrition rehabilitation units when there is increased food insecurity phase. Additional temporary staff can be recruited for the duration of the increased health needs, but in other cases, existing staff may be repurposed to these treatment centres. When this happens, there is an inevitable effect on the capacity to maintain services as per the EPHS, and further reprioritisation needs to be anticipated in contingency plans to suspend temporarily noncritical services			

The revised EPHS includes inter-sectoral actions, which are mostly cost-effective and have long lasting impact on the health outcomes. These inter-sectoral interventions are not included in the costing.

- Advocate and promote the ban of smoking in public places and indoor environment
- Mass education and awareness creation of the harmful effects of indoor air pollution
- Advocate policies and legislation Imposing high taxes on tobacco and other addictive substances
- Advocacy and enforcement of regulations against advertising and promoting tobacco use
- Promote handwashing and general hygiene through mass media and in schools
- Promote food fortification with, Iodine, Iron and folic acid
- Provide consumer education about the harmful effects on the consumption of food with high salt content and beverage with excess sugar
- Promote the use of seat belts in vehicles.
- Provide consumer education about the harmful effects on the consumption of food with high salt content and beverage with excess sugar

Facility Standards, Quality Management Processes and Clinical Support Tools

Services should be provided within a safe environment and respecting minimum quality standards to be of sufficient quality to be effective and trusted by the population. Failing to do so might result in services doing more harm than good or curbing confidence and hence demand for services by target population. For this reason, WHO definition of Universal Health Coverage explicitly calls for access to “quality services”. Quality is an essential attribute of services included in the package; and defining a service package calls for the simultaneous definition of minimum quality requirements.

Somalia will set minimum facility standards that will cover the below components (table 4). Their implementation will be managed by facility management teams, as part of a process of continuous quality improvement. Quality management interventions and clinical support tools will also be introduced and consolidated into a toolkit. This will include a capacity building program for both clinical and managerial/administrative staff. All these interventions, including the specification of minimum standards, tools and processes for quality improvement, will be described through ESPH implementation plan building on validated tools and standards applied in low-income country settings.

The MoH will also address adherence to both the delivery of the services as per the package and the quality standards.

Table 4: Dimensions for facility standards

Physical environment and resources: Adequate physical infrastructure & accessibility, adequate WASH, security (staff & patient, and of health facility assets)
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Patient and staff safety: Infection Prevention and Control, including PPE, safe injection (procedures and single use syringe/needle), (Medical) Waste management, including for sharps, medical Incident Reporting/adverse event monitoring

Clinical effectiveness: Adherence to standards, guidelines and protocols, including Standard Treatment Guidelines (STG) [12], clinical audit for correct diagnosis and treatment, triage, referral and counter-referral systems, emergency care and isolation

People rights and patient-centred Care: Communicating information about illness & treatment, and health promotion; comfort, dignity & respect, privacy & confidentiality, equity and Inclusiveness (gender, disability, age); protection of the poor, patient and community engagement: Transparency, accountability (including feedback mechanisms), participation;

Governance structure and facility management: Governance board and organogram, Non-clinical, non-therapeutic, administrative guidelines and standards; quality Improvement systems, HR management & good work (including staff training), financial management; equipment, pharmaceutical and supply management (including storage, cold chain, maintenance, etc.); medical record keeping; performance monitoring; health information system; surveillance, including EWARS; preparedness

Table 5: International standards for quality and safe care to inform Somali facilities standards

- Standards for hand hygiene [13] and Infection Prevention and Control (IPC) [14], [15]
- Standards for improving quality of maternal and new-born care in health facilities [16]
- Safe childbirth checklist [17]
- Minimum requirements for surgical care [18]

In addition, a toolkit with different specialised tools will be developed in addition to the general tools mentioned above, adapted from generic tools. Additional management systems will be implemented to look at quality and performance, and to allow additional providers to qualify for inclusion in future contracting approaches.

Cost of the Package.

The cost analysis of EPHS 2020 examines key required resources and suggests a gradual scale up of the implementation of a set of essential health interventions through the community, Primary Health Care Units (PHU), Health Centre (HC), District hospital, (DH) and Regional hospital (RH) levels across Somalia. Specifically, resources required include drugs and other supplies, infrastructure facilities, human resources, logistics, and program support activities. In order to achieve the objective of implementing EPHS 2020, a coordinated financial support

effort will be required to ensure the delivery of 412 interventions across the five delivery channels/platforms.

This section summarizes the methodology and the findings of a study that estimated the cost of EPHS 2020 implementation over the next decade.

Methods

The cost of EPHS 2020 was estimated using the OneHealth Tool (OHT) [19]. The OHT is a software that has provisions to produce separate estimates of different types of resources used in a health program.

When estimating the drugs and supply costs, OHT follows a three-step process. Firstly, OHT estimates the potential number of patients/ recipients of an intervention based on the user-defined target populations and intervention coverages. Secondly, the average cost of supplying drugs and other supplies of an intervention is estimated based on the user-defined treatment inputs, management protocols, and unit prices of drugs and other supply items. Thirdly, the number of patients/recipients of intervention will be multiplied by the average cost of managing a patient to produce the drugs and supply estimates of the intervention. This procedure will be repeated for all the interventions in a health package throughout the costing period to obtain the annual costs

The information required for the above estimates were obtained from the burden of disease estimates of Somalia [11], Somali health and Demographic survey 2020 [4], and from the scenario assumptions mentioned above. The treatment protocols were obtained from the Somali EPHS standard treatment guidelines [20], [12], [21]. The unit costs were obtained from several sources that include OHT defaults, international medical products price guides, and UNICEF drug price lists.

A set of program support activities that are required for improving the health-seeking behaviours of the people and enhancing the knowledge and skills of health care workers were also included in the scenario. The resources considered were

- a) The cost of drugs, vaccines, medical supplies, and diagnostic materials,
- b) The running and rehabilitation costs of existing health infrastructure, which includes buildings, medical equipment, furniture, vehicles, and IT equipment, related to EPHS activities
- c) the cost of employing health staff implementing EPHS activities,
- d) The cost of the logistics services associated with the EPHS service delivery, and
- e) The cost of program activities related to EPHS implementation.

OneHealth Tool (OHT) uses the “quantity x price” approach in the estimation of infrastructure costs. According to the reported data [19], 359 Primary Health Care Units (PHUs), 680 Health Centres (HCs), 72 District Hospitals (DHs), and 18 Regional Hospitals (RHs) and 18 Regional Health offices were found in the baseline year.

New constructions were not envisaged in the proposed cost scenario. Annualized capital costs of these health facilities, medical equipment, and furniture attached to them were estimated as the rehabilitation cost requirements. The running costs the facilities: electricity, water, etc... were estimated based on the currently reported expenditures.

Human resource costs were estimated based on the salary rates provided by the Ministry of Health. The number of health workers would be increased over time when the staff gaps are being filled to meet the facility-based standards. This increase was factored into the human resource costs over the scenario period.

As there were data constraints, the logistic costs were calculated as a percentage (25%) of drug and supply costs. However, human resource and infrastructure costs related to the regional drug supply stores were estimated based on the actual parameters.

The cost of program activities related to a) Adaptation of guidelines to suit the new EPHS package, b) Inservice training related to the EPHS, c) Supervision of the EPHS implementation, d) Monitoring and Evaluation including the adaptation of the information system, and e) Health promotion and community mobilization were considered as required for creating an enabling environment. These costs were calculated using the “quantity x unit cost” approaches. Resource requirements of each activity were enumerated based on the nature of the activity and the past program experiences in Somalia for similar activities. This information along with the various unit costs was obtained from implementation partners.

After reviewing various scenarios, the scenario envisaged by the Government involves the increase of the EPHS 2020 intervention coverages from its baseline levels in 2020 to reach 80% by 2030. Notably, eighty percent is also the Universal health care target for the same year.

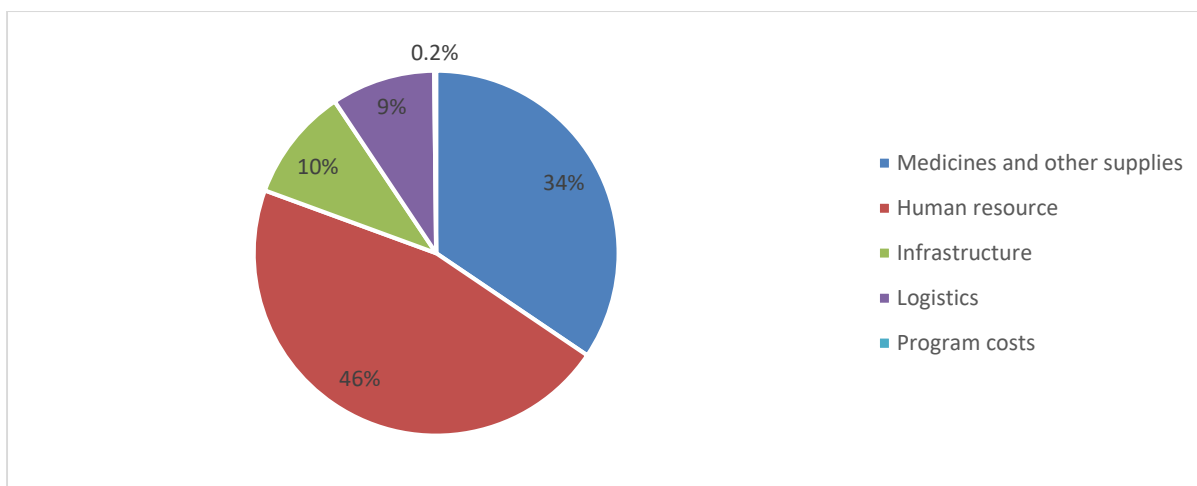
However, the EPHS 2020 is expected to fill the rehabilitation and maintenance needs of the existing facilities and equipment gaps. The number of health workers will be increased to meet the facility-based standards recommended for the EPHS 2020.

National Cost Estimates

Baseline Cost

The baseline cost reflects the EPHS 2020 program implementation cost in 2020 based on the service coverages and health system resources as at present. The total estimated baseline cost of EPHS 2020 is approximately US\$ Mn. 105. Figure 1 shows the composition of the baseline cost by its cost components.

Figure 3: Total estimated cost of EPHS 2020 (US\$ Mn) implementation in the current year, by cost components



The largest share of the EPHS implementation cost is attributed to human resources (46%) followed by medicines and other supplies (34%). The infrastructure and logistics costs account for 10% and 9% respectively. The distribution of these resources is similar to the results identified in a 2014 costing study of the EPHS in Somalia at that time [22].

Figure 4 presents an estimated increase in the costs of the EPHS 2020 implementation from 2020 to 2030. The largest proportion of cost increase can be attributed to the expansion of priority intervention coverage to reach more Somalis with essential health services.

Figure 4: Overall projected costs (US\$ Mn) of EPHS 2020 implementation from 2020 to 2030

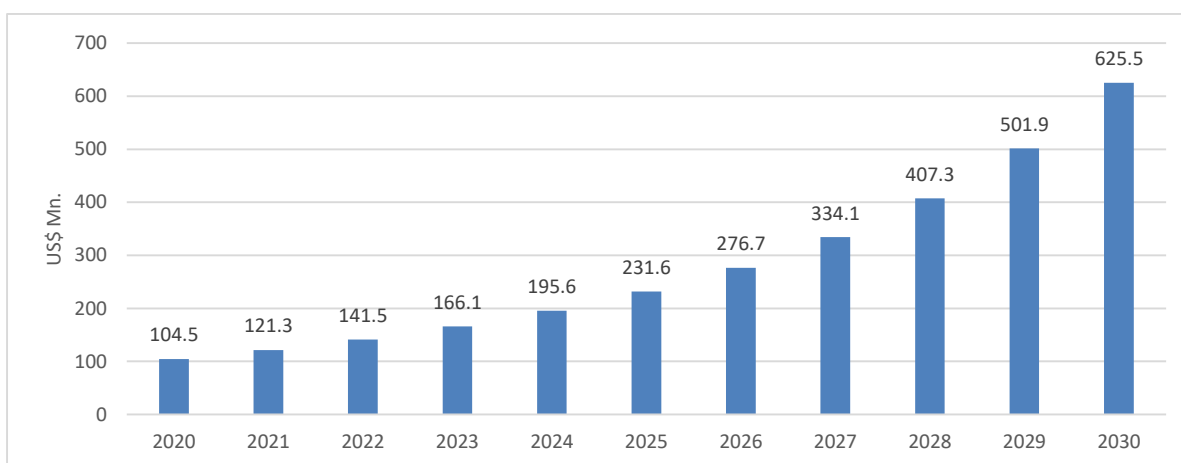
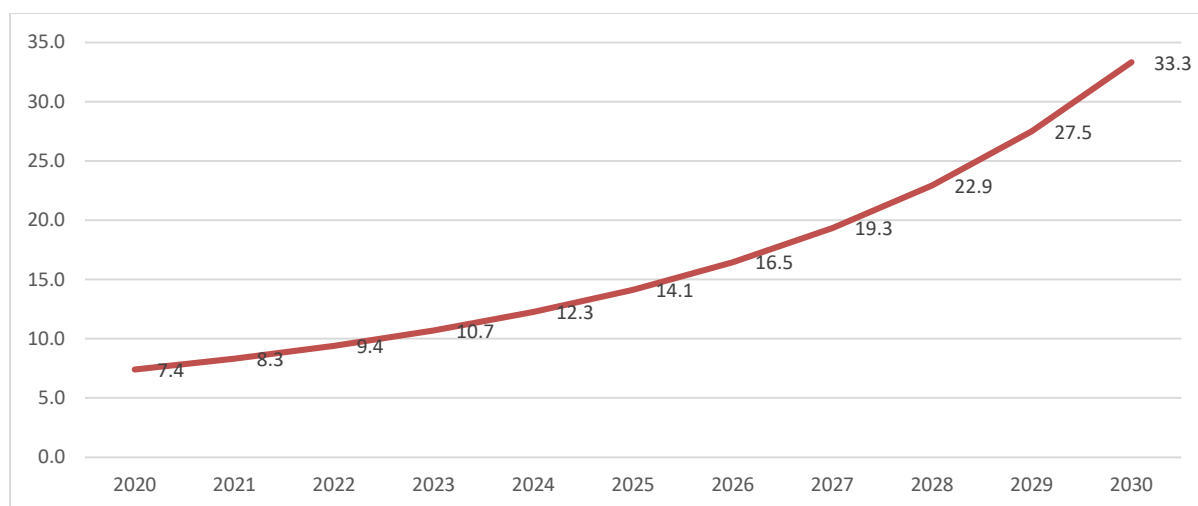


Figure 5 translates the above indicated total costs into per capita costs, based on projected population estimates. As a result, we estimate that the baseline per capita costs of 7.4 US\$ in 2020 would rise to 33.3 US\$ in 2030 under 80% coverage.

Figure 5: Per capita costs (US\$) of EPHS 2020 implementation from 2020 to 2030

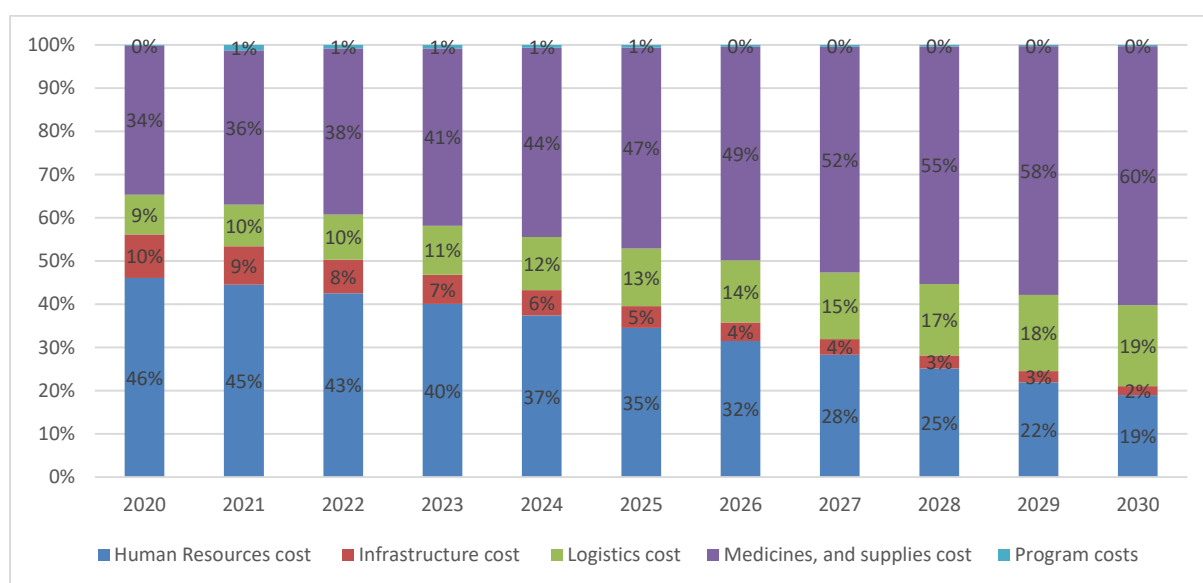


Furthermore, Table 6 and Figure 6 describe EPHS costs under the scenario by various types of cost components. While all cost components increase with time, their relative compositions of EPHS costs also seem to change over time. The percentage of drugs and supply costs is estimated to increase from its baseline value of 34% to 60 % by 2030. This is mainly due to the expected increase in intervention coverage from an average of 13% in 2020 to 80% in 2030. The percentage of logistic costs also increases proportionally to drugs and supply costs. Relative percentages of human resource costs and infrastructure costs seem to reduce as they are more fixed in nature and would not increase over time.

Table 6: Composition of EPHS 2020 implementation costs (US\$ Mn) from 2020 to 2030

Cost type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total Human Resources (Salaries) cost	48.22	54.09	60.22	66.59	73.20	80.04	87.19	94.59	102.30	110.30	118.58	895.34
Total Infrastructure cost of all facilities	10.49	10.72	10.95	11.19	11.44	11.69	11.95	12.21	12.48	12.76	13.04	128.93
Rehabilitation costs	4.36	4.46	4.56	4.66	4.76	4.86	4.97	5.08	5.19	5.31	5.42	53.63
Maintenance and Operating Cost of all existing facilities	6.12	6.26	6.40	6.54	6.68	6.83	6.98	7.13	7.29	7.45	7.61	75.29
Total Medicines, and supplies cost	36.03	43.33	54.32	68.16	85.69	107.82	136.65	174.43	223.86	288.90	375.06	1,594.26
Total Logistics cost	9.63	11.70	14.83	18.85	24.05	30.74	39.63	51.51	67.35	88.60	117.33	474.22
Total warehouse costs	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	1.11
Total worker costs	0.53	0.54	0.55	0.56	0.58	0.59	0.60	0.62	0.63	0.64	0.66	6.51
Drug transport costs	9.01	11.07	14.18	18.19	23.37	30.05	38.93	50.78	66.61	87.85	116.56	466.61
Total Program costs	0.18	1.50	1.14	1.30	1.19	1.27	1.25	1.32	1.30	1.38	1.46	13.29
Grand Total	104.54	121.35	141.47	166.09	195.57	231.56	276.66	334.07	407.30	501.94	625.47	3,106.03

Figure 6: Percentage distribution of EPHS cost components from 2020 to 2030



Analysis of EPHS implementation cost by facility shows that more than half of EPHS implementation costs would be consumed by primary health care institutions (HCs, PHUs, and the Community based interventions). Health centres seem to utilize the largest amount of EPHS resources followed by referral health centres (figure 7).

Figure 7: Total cost (US\$ Mn) of EPHS implementation from 2020 to 2030 by type of facility

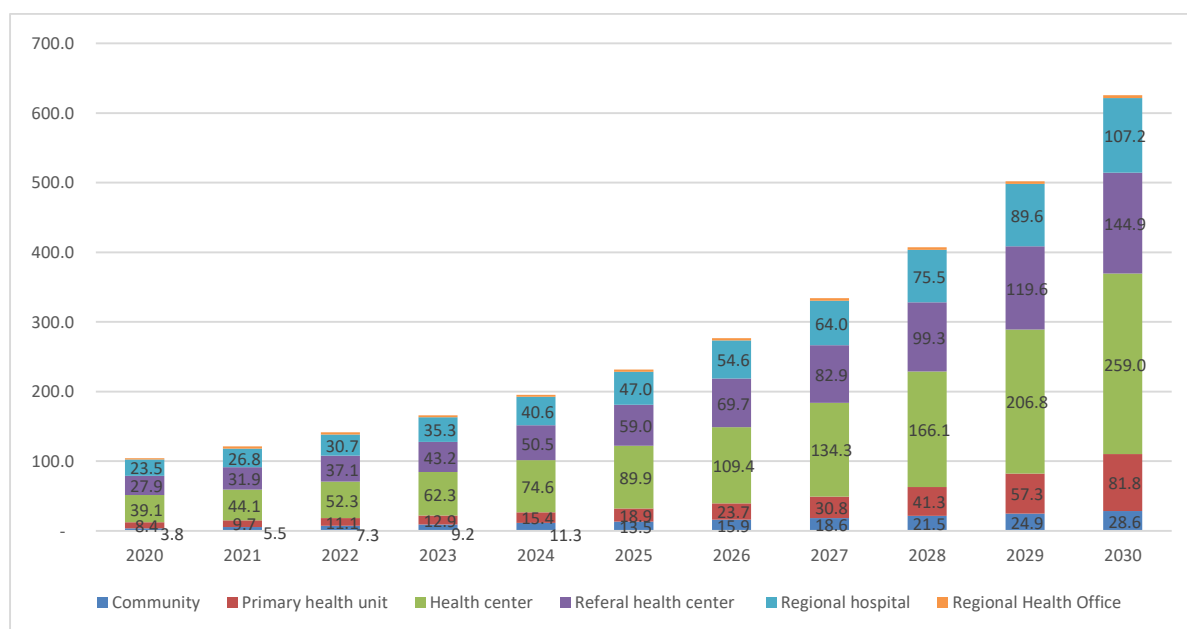


Table 7 presents the average annual per-patient visit based EPHS implementation costs of different types of facilities. These estimates were derived by dividing the total annual cost of the facility by the total annual number of interventions provided by that facility. There is a slight reduction of per patient visits cost over the years reflecting the potential economies of scale which is projected to occur with increasing service coverages across the period.

Table 7: Per patient cost (US\$) of EPHS implementation from 2020 to 2030 by type of facilities

Total	Community	PHU	HC	RHC/DH	Regional hospital
2020	0.45	0.42	3.41	4.25	14.39
2021	0.51	0.39	3.09	3.89	13.70
2022	0.53	0.35	2.95	3.64	13.14
2023	0.53	0.33	2.83	3.41	12.62
2024	0.51	0.32	2.73	3.20	12.13
2025	0.49	0.31	2.66	3.02	11.69
2026	0.46	0.32	2.61	2.87	11.10
2027	0.42	0.33	2.57	2.74	10.55
2028	0.39	0.35	2.54	2.62	10.08
2029	0.36	0.39	2.52	2.51	9.69
2030	0.32	0.44	2.51	2.42	9.37
Average from 2020 to 2030	0.40	0.37	2.63	2.81	10.78

Sub-National Cost Estimates

Sub-national cost estimates were also projected but only by applying population proportions given current data constraints. Disaggregated information on the baseline service coverages and infrastructure distribution details were not available at the time of this analysis. As a result, population proportions serve as proxy criterion for redistribution of total costs to regions. Table 8 presents the total costs by regions estimated based on the population sizes in each region.

Table 8: Total cost (US\$ Mn) of EPHS implementation in different regions from 2020 to 2030

Region	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Awdal	5.71	6.63	7.73	9.08	10.69	12.66	15.12	18.26	22.26	27.44	34.19
Bakool	3.12	3.62	4.22	4.95	5.83	6.90	8.25	9.96	12.14	14.97	18.65
Banadir	14.01	16.26	18.95	22.25	26.20	31.02	37.07	44.76	54.57	67.25	83.80
Bari	6.11	7.09	8.26	9.70	11.42	13.53	16.16	19.52	23.79	29.32	36.54
Bay	6.72	7.80	9.10	10.68	12.58	14.89	17.79	21.49	26.20	32.28	40.23
Galgaduud	4.83	5.61	6.54	7.68	9.04	10.71	12.79	15.44	18.83	23.21	28.92
Gedo	4.32	5.01	5.84	6.86	8.07	9.56	11.42	13.79	16.81	20.72	25.82
Hiraan	4.42	5.13	5.98	7.02	8.27	9.79	11.70	14.12	17.22	21.22	26.44
Lower Juba	4.15	4.82	5.62	6.60	7.77	9.20	10.99	13.27	16.18	19.94	24.85
Lower Shabelle	10.20	11.84	13.81	16.21	19.09	22.60	27.00	32.61	39.76	48.99	61.05
Middle Juba	3.08	3.58	4.17	4.89	5.76	6.82	8.15	9.84	12.00	14.79	18.43
Middle Shabelle	4.38	5.08	5.93	6.96	8.19	9.70	11.59	14.00	17.06	21.03	26.21
Mudug	6.09	7.07	8.25	9.68	11.40	13.50	16.12	19.47	23.74	29.25	36.45
Nugaal	3.33	3.87	4.51	5.30	6.24	7.38	8.82	10.65	12.99	16.00	19.94
Sanaag	4.62	5.36	6.25	7.34	8.64	10.23	12.22	14.76	17.99	22.17	27.63
Sool	2.78	3.23	3.76	4.42	5.20	6.16	7.35	8.88	10.83	13.34	16.63

Togdheer	6.12	7.11	8.29	9.73	11.45	13.56	16.20	19.57	23.85	29.40	36.63
Woqooyi											
Galbeed	10.54	12.24	14.27	16.75	19.72	23.35	27.90	33.69	41.07	50.61	63.07
National	104.5	121.3	141.5	166.1	195.6	231.6	276.7	334.1	407.3	501.9	625.5

A Closer View into the Costs of Drugs and Supplies

Overall cost analysis showed that with time the largest proportions of EPHS implementation costs would be invested in the drugs and other supplies.

Tables 9 and 10 show the main health conditions that resulted in the largest share of drugs and supply costs in 2020 and 2030. It seems that health conditions

related to nutrition and non-communicable diseases (NCDs) are leading drug and supply cost drivers. NCDs seemed to take precedence over nutritional activities when approaching 2030.

Table 9: Drug and supply cost drivers at the baseline (2020)

Intervention	Cost	Cost %	Cumulative cost %
Supplementary feeding for pregnant women with Moderate Acute Malnutrition (MAM)	3,214,454	9%	9%
Management of Asthma	2,928,811	8%	17%
Management of Diabetes	2,592,647	7%	24%
Supplementary feeding for lactating women with Moderate Acute Malnutrition (MAM)	2,539,221	7%	31%
Maternal nutrition assessment, counselling and provision of MMN during pregnancy	1,420,753	4%	35%
Management of moderate acute malnutrition (children)	1,278,309	4%	39%
Screening for hyperglycaemia and gestational diabetes	1,158,499	3%	42%
Abdominal pain, Gastritis, and GI bleeding	988,725	3%	45%
Management of injuries	921,834	3%	47%
Gall bladder surgery	884,315	2%	50%
Treatment of cases with established ischemic heart disease (IHD)	780,683	2%	52%
Management of hernia	751,667	2%	54%
Management of hypertension	702,394	2%	56%
Management of severe malnutrition (children)	697,601	2%	58%
Management of Bipolar disorder	645,164	2%	60%
Management of skin infections - Bacterial	616,127	2%	61%
Labour and delivery management	568,954	2%	63%
Pentavalent vaccine	560,651	2%	65%
Management of COPD	548,309	2%	66%
Advanced management of diabetes in pregnancy	532,981	1%	68%
Management of dental caries	531,111	1%	69%
Zinc (diarrhoea treatment)	464,939	1%	70%

Table 10: Drug and supply cost drivers at the end line (2030)

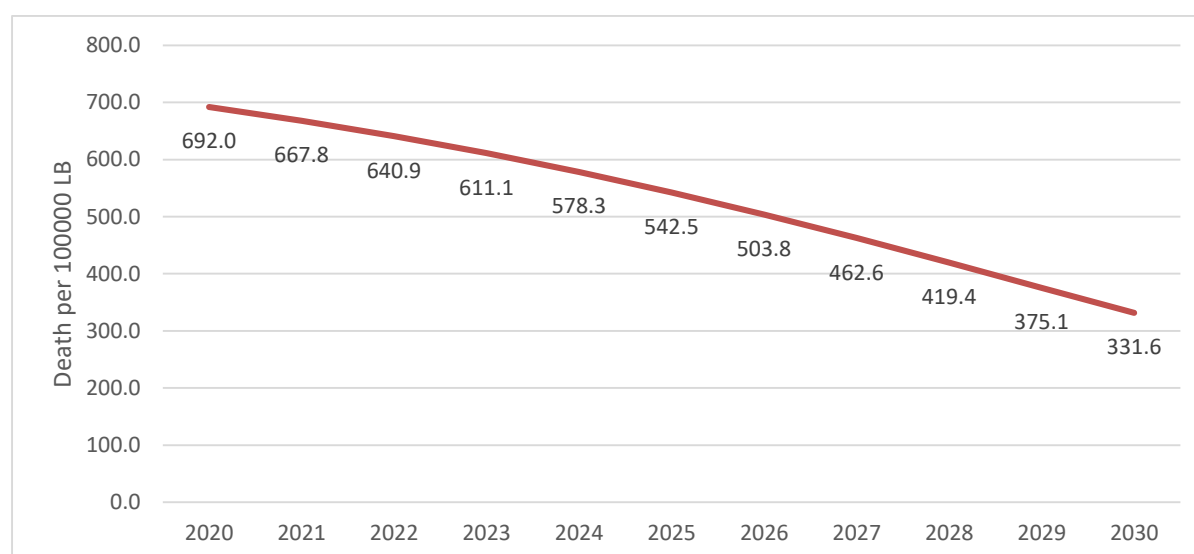
Intervention	Cost	% Cost	Cumulative cost
Management of Asthma	31,437,983	11%	11%
Management of Diabetes	27,859,289	10%	21%
Management of moderate acute malnutrition (children)	12,829,574	5%	26%
Abdominal pain, Gastritis and GI bleeding	10,613,015	4%	30%
Management of injuries	9,895,010	4%	33%
Gall bladder surgery	9,492,272	3%	36%
Treatment of cases with established ischemic heart disease (IHD)	8,736,866	3%	40%
Management of hernia	8,068,431	3%	42%
Management of hypertension	7,860,706	3%	45%
Supplementary feeding for pregnant women with Moderate Acute Malnutrition (MAM)	6,666,387	2%	48%
Management of skin infections - Bacterial	6,613,532	2%	50%
Management of COPD	6,609,130	2%	52%
Management of dental caries	5,700,964	2%	54%
Screening for hyperglycaemia and gestational diabetes	5,283,526	2%	56%
Management of opioid withdrawal	5,056,312	2%	58%
Supplementary feeding for lactating women with Moderate Acute Malnutrition (MAM)	4,783,901	2%	60%
Management of Appendicitis & other causes of acute abdomen	4,746,136	2%	62%
Maternal nutrition assessment, counselling and provision of MMN during pregnancy	4,389,391	2%	63%
Zinc (diarrhoea treatment)	4,308,851	2%	65%
Pentavalent vaccine	4,064,965	1%	66%
Management of severe malnutrition (children)	3,959,490	1%	67%
Voluntary counselling and testing	3,611,053	1%	69%

Impact of the EPHS investments

OneHealth tool can be used to assess the potential impacts that can be achieved by the above estimated financial investments. The following sections present the impact of EPHS on maternal mortality, child mortality (Under 5 mortality (U5MR), the Infant mortality rate (IMR), and Neonatal mortality rate (NNMR), child and maternal survival, nutrition, and the HIV epidemic.

Figure 8 shows that provided proposed intervention coverages are maintained, the maternal mortality ratio (MMR) of Somalia is expected to be reduced from the current level of 692 deaths /100,000 LB to 331.6/100,000 LB in 2030.

Figure 8: Estimated reduction of MMR over 2020 to 2030



A significant reduction of child mortality also seems to be estimated with the EPHS scale up. Figure 9 shows the pattern of child mortality reduction by implementation year by using three key indicators neonatal mortality rate (NNMR), infant mortality rate (IMR), and the under-5 mortality rate (U5MR).

Figure 9: Patterns of reducing child mortality rates from 2020 to 2030 by cost scenarios

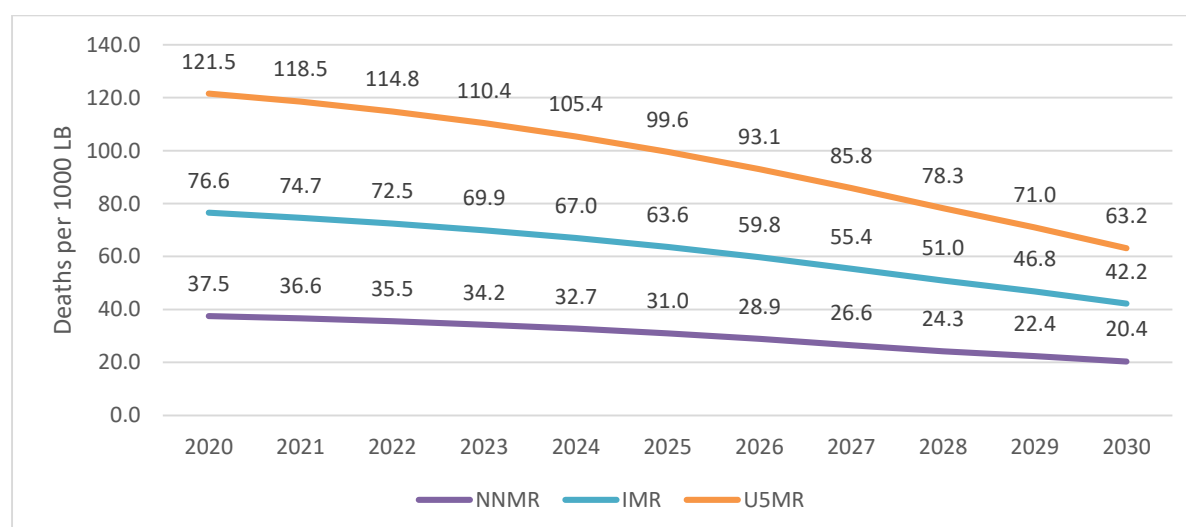


Table 11 shows the numbers of additional child and maternal lives saved due to the EPHS intervention scale up over time. More and more lives seemed to be saved with increasing interventions.

Table 11: Additional lives saved due to EPHS 2020 interventions

Type of target group	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Maternal lives saved	167	368	606	886	1,209	1,579	1,995	2,449	2,937	3,444
Child lives saved (0-59 months)	2,104	4,887	8,356	12,629	17,823	23,983	31,190	39,085	47,231	56,265

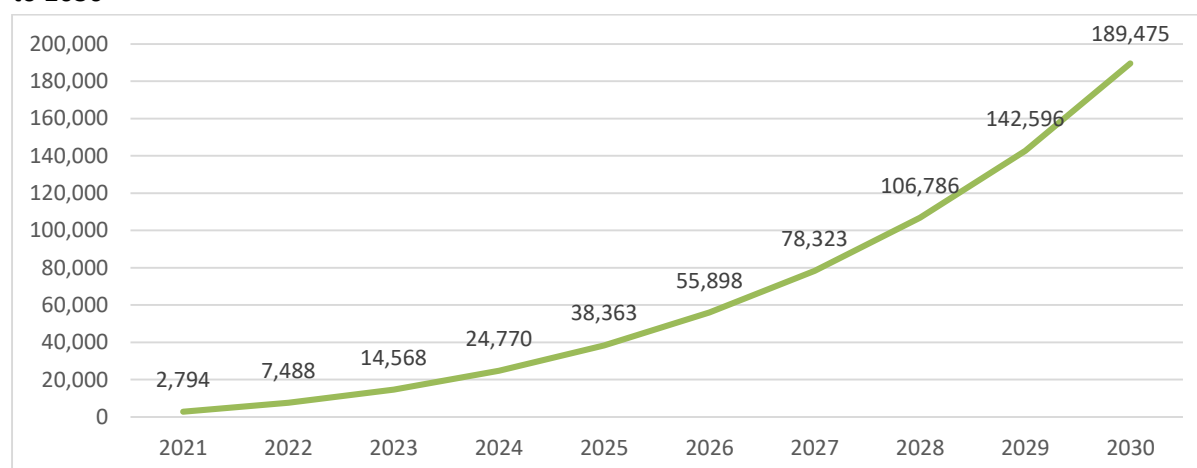
Considerable investments are associated with nutrition-related EPHS interventions. Tables 12 and figure10 shows that both global stunting and wasting rates among under 5 children are gradually declining with the EPHS scale up.

Table 12: Patterns of global stunting & wasting rates among 0 to 59 months children: Reductions attributable to EPHS 2020

Global stunting (<-2 SD) rate	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Global stunting (<-2 SD) rate Children (0-59 months)	41.0	40.9	40.6	40.4	40.0	39.7	39.3	38.8	38.2	37.5	36.6
Global wasting (<-2 SD) rate Children (0-59 months)	13.5	13.3	13.0	12.6	12.2	11.7	11.0	10.2	9.1	7.9	6.3

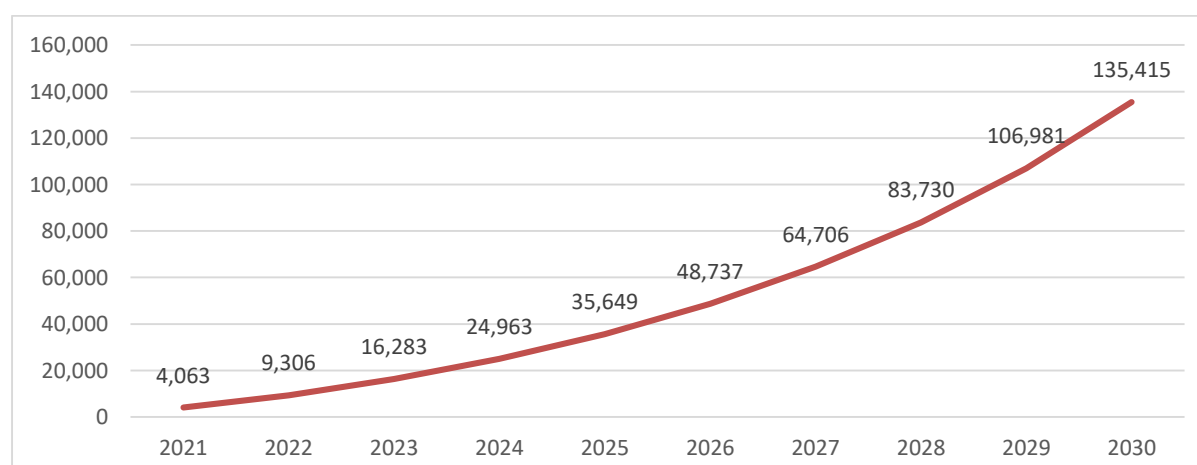
Figure 10 shows that more and more cases of stunting would also be averted by the EPHS intervention scale-up. In the second year of implementation around 2794 cases of stunting would be averted. As a result of the EPHS 2020 intervention scale-up, the numbers of stunting cases averted seems to exponentially increase over time.

Figure 10: Number of stunting (0-59 age group) that are averted due to EPHS interventions from 2020 to 2030



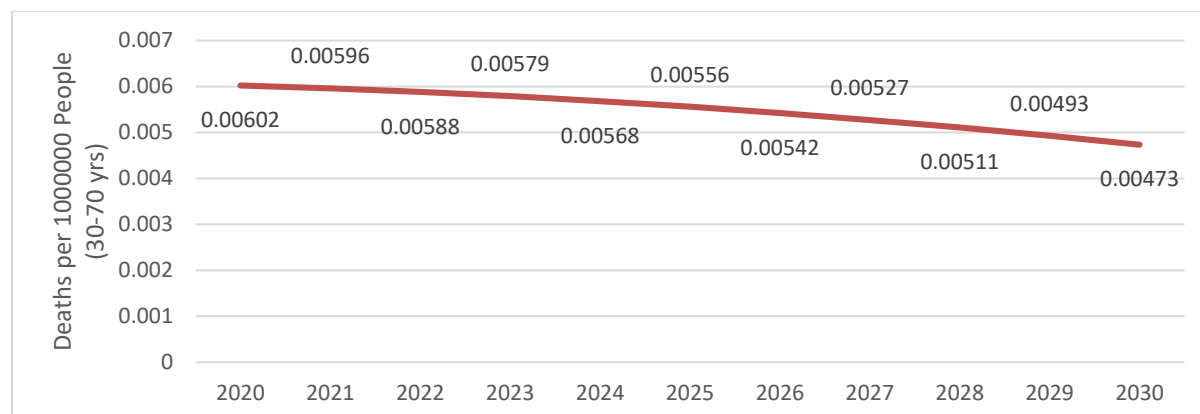
Many Non communicable Diseases (NCD) interventions are included in the EPHS 2020. Figure 11 shows how the number of healthy years lived among NCD patients is increasing over time.

Figure 11: Number of healthy life years enjoyed by NCD patients from 2020 to 2030



NCD interventions are expected to reduce the probability of dying from NCDs. Figure 12 shows the probability of dying of people in 30 to 70 years due to NCDs. The probability of dying due to NCDs would be reduced in all types of scenarios, where S2 and S3 show a relatively positive impact.

Figure 12: Annual probability of dying due to NCD in 30 to 70 year age group by cost scenarios.



Figures 13 and 14 shows a decrease in the projected number of deaths due to AIDS and the number of mother to child transmissions of HIV. Both of these indicators reflect the performance of HIV-related interventions, both of which are components of EPHS 2020.

Figure 13: Number of AIDS-related deaths from 2020 to 2030

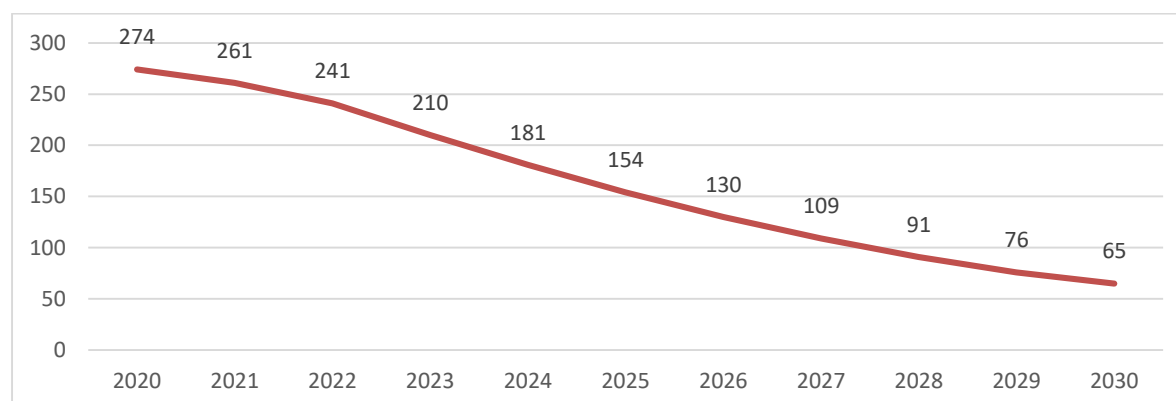
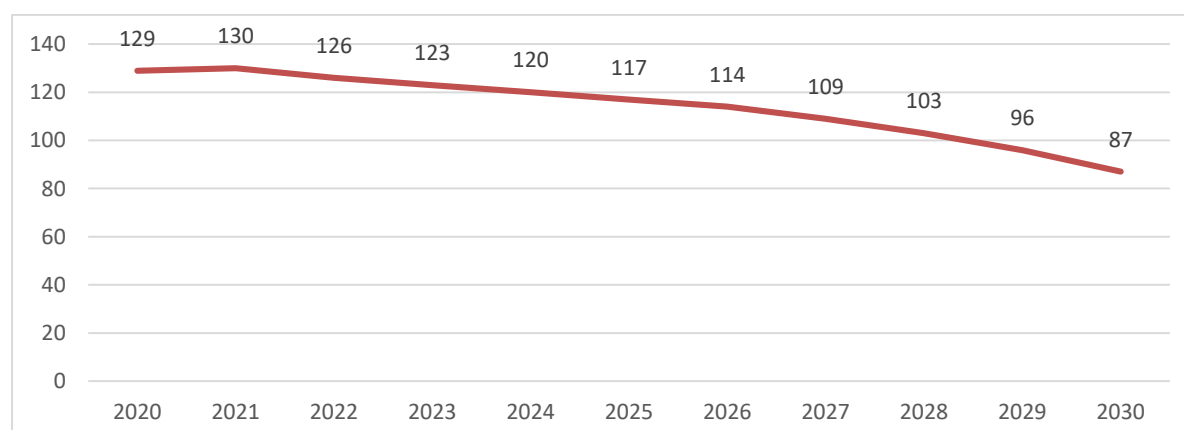


Figure 14: shows the projected impact of EPHS-2020 in the reduction of mother to child transmissions of HIV infection from 2020 to 2030



Cost estimates indicate that EPHS 2020 implementation over the next decade would require sufficient and predictable financial resources. However, the impact analysis attributes significantly positive health benefits to these investments. Data constraints have made it mandatory to estimate the costs based on assumptions. Therefore, it is important to revisit these estimates based on actual service coverages and other health system information are surfaced while the EPHS 2020 is being scaled up during the coming years.

The projected EPHS impact can be significantly improved in terms of timing and results. Options for accelerated results could include:

- a. Expanding the scope of EPHS implementation covering large populations in a geographic or administrative area, such as a whole region or state, with rapidly progressive implementation of the service package across all delivery platforms in the region while at the same time strengthening the regional and district management capacities. Experience in the country and elsewhere shows that the EPHS implementation – with maximum coverage – in a specific setting will have a much greater and rapid impact than the sum of partial implementation in the same setting.
- b. Ensuring the scope of EPHS implementation is fully taking on board the health emergency and humanitarian interventions

Considerations for implementation

A clear investment plan and modalities for implementation will be required to optimize the impact of the EPHS 2020. Mechanisms to monitor implementation progress in and to empower and hold accountable national, regional and district authorities will be established. The public also will be informed about their right to access to defined essential services via community leaders and civil society organizations. As highlighted previously, it will be critical that the essential services are of sufficient quality to be trusted and effective.

Consequently, an implementation plan for the EPHS 2020 will need to be fully developed. Such a plan will ensure that the EPHS does not remain aspirational and will seek alignment with all health system functions and include:

- Governance mechanisms and regulations to increase accountability and transparency;
- Quality assurance programs for services;
- Financing systems and revisions of purchasing mechanisms;
- Expanded training to ensure sufficient competent health workforce and management;
- Information systems to track implementation progress; and
- Community health needs and asset assessments to inform service planning.

The following section provides some key considerations for the implementation plan for the EPHS 2020.

Adopting a Rights-Based Approach: Progressive Realization and Community Engagement

As highlighted above, there remains a major gap between the services defined in the 2009 EPHS and the services accessible to most of the Somali people. Adopting a right-to-health approach means actively pursuing the progressive realization of universal access to essential services, with an emphasis on ensuring access for the most vulnerable. A well-defined EPHS sets the direction and an implementation plan ensures that progressively more services, of increased quality, are made available to more people. The Somalia EPHS will set measurable objectives that are monitored with a well-established information system. Special attention will be given sex-disaggregated data as well as data related to vulnerable populations. Mechanisms to enhance access to the services in the EPHS will be designed and could include community-led surveillance systems, a patient charter, complaint mechanisms, or ombudsman services.

Roles and Responsibilities of Subnational Health Authorities

Regional and district health offices are key to ensuring the successful implementation of the EPHS. Because of the varying realities on the ground, service delivery modalities will need to be tailored to local conditions (i.e. specific health needs, perceptions, cultural issues, and geographic barriers). Implementation mechanisms should be predicated on a mapping of available structures and current functionality, includes an analysis of private services.

District and regional health authorities will need to ensure that services in the EPHS are available and are effectively delivered. Being close to the field, the regional and district health offices are well positioned to hold providers accountable and to collect feedback on service delivery from the population of users. These offices also play a key role in informing policy makers on the need for package adjustments and delivery modalities, as well as providing input on resource allocations (i.e. making more or different resources available to a region or district). When required, they will need to take corrective action or communicate the need for policy adaptations to the national level.

Local authorities can also interface with the community to generate demand and can provide crucial oversight of resources to optimize service delivery. In particular they can determine what services are to be delivered where in order to increase equity and efficiency and improve how patients access and move through the health system. Services can be implemented based on health and health service needs and by prioritizing available resources for gradual implementation. These roles are defined below with a distinction between the regional and district level.

The Regional Health Office

The Regional Health Office provides linkage between national and district levels in areas that include, but are not limited to, policy, planning, financial management, supervision, personnel, and technical support services. Ideally, all health system support components operate together at the regional level, including governance and oversight; health workforce management; drugs & medical supplies; transportation; and preventive maintenance and repairs of infrastructure and equipment.

The Regional Health Management Team (RHMT), consisting of key professional and technical staff, provides stewardship for and supports the District Health Management Teams (DHMTs). The RHMT assists with management, planning and decision making of health service provision in the region, as well as for emergency risk management and preparedness. The RHMT is directly responsible for ensuring that the health policies and strategies of the national Ministry of Health are implemented, and the team assists with policy and planning inputs at the State level. The RHMT ensures bi-directional flows of information by providing feedback to the national Ministry of Health to inform planning decisions (need to go). The RHMT also conducts quarterly formative supervision visits in the region to identify bottlenecks in supply, barriers to access, and gaps in resources and provider competencies. This supervision can lead to the development of remedial plans in collaboration with DHO that optimize quality of care and improve continuity at all sites.

The key functions of the Regional Health Management Team are to:

- Oversee all health sector activities in the region
- Lead inter-sectoral collaboration with non-governmental organizations and development partners
- Provide guidance and support conducting regional and district health sector assessments
- Develop a regional EPHS implementation plan and an Annual Work Plan (AWP)
- Coordinate and monitor the implementation of regional health programs
- Oversee community participation in program development and establish feedback mechanisms
- Establish and strengthen governance and management structures
- Support districts with planning, implementation and monitoring of health program activities
- Facilitate on-the-job training activities for the health workforce
- Provide a quarterly review on health status
- Oversee regional implementation of essential public health functions, including health emergency and disaster risk management

The District Health Office

The District Health System (DHS) forms the foundation for the health sector and supports management, planning and decision-making related to health service provision at the local level. The DHS provides a critical role in implementation of EPHS. The DHS is directed and managed by the District Health Management Team (DHMT), which consists of key professional and technical staff who are based at the District Health Office. The DHMT is most directly responsible for implementing the health policies of the National Ministry of Health.

It can develop its implementation plans and propose methods to strengthen local service delivery, in line with national guidelines and available resources. The DHMT also ensures community engagement and provides feedback to inform new national policies and programs (via the Regional Health Office).

The roles and responsibilities of the DHMT are calibrated specifically to fulfil these objectives, and the specific key functions of District Health Management Team to:

- Oversee all health sector activities in the District and this includes the coordination of all health partners, the monitoring of health services, and a stewardship function for the district health offices;
- Foster inter-sectoral collaboration with non-governmental organizations and development partners in the district, including promoting partnerships with the private sector (e.g. Food retailers and transport services);
- Conduct a district health sector assessment, as a baseline for the EPHS implementation plan and as a reference for monitoring;
- Develop a District EPHS Implementation Plan and an Annual Work Plan (AWP) for the district in collaboration with NGOs, the private sector, and community representatives who can ensure that the most vulnerable have a voice. The implementation plan and yearly workplans will be informed by available evidence that includes community perceptions and assessed needs generated through participative approaches;
- Coordinate and monitor the implementation of the EPHS;
- Identify implementation challenges and seek corrective action;
- Conduct integrated support supervision visits in all public and private health facilities within the District and alert regional health offices of system issues that require corrective action through regional or national policies;
- Establish effective governance and management structures in the district (in line with national and regional policies for strengthened participation and accountability), engaging dialogue with community (including for example through hospital board), and ensuring effective feedback mechanisms
- Establish and strengthen governance and management structures in the district for essential public health functions, including health emergency and disaster risk management (e.g. Surveillance, EWARN, preparedness and contingency planning,)

- Ensure quality improvement interventions in the district. This includes monitoring the implementation of clinical support tools; supporting the implementation of facility standards, quality interventions and clinical support tools; calling on Regional Health Authorities for additional support to enable implementation; strengthening and monitoring referral and counter-referral mechanisms; and disseminating findings of health research and best practices in the district.
- Aggregate data from facilities and provide feedback on a monthly basis as part of a supportive supervision system, which strengthens facility governance and management;
- Provide a report on local health performance and health service priorities to the Regional Health Officer;
- Provide surveillance for rapid response to disease outbreaks in the district.

Information Systems to Improve Availability and Quality of Services

Various facility- and population-based information systems or tools exist to monitor and assess different dimensions of EPHS implementation. These provide data on the availability and quality of services; outputs and population coverage; utilization trends and barriers for access; and provider performance. These systems ideally also provide feedback on financial protection for access for the most vulnerable and on the shifting burden of disease.

The various information systems complement each other to produce the data necessary for the monitoring and evaluation required at different levels in the health system (from facility to national coordination and planning platforms) and in different conditions. Purpose-designed systems, for example, are needed for disaster risk management, including epidemic preparedness.

Applying an area based, district health management approach with supportive supervision will be a cornerstone for the implementation of the package. This approach should include active engagement with communities, providing a local voice in the design and implementation of services and improving overall accountability.

This section highlights essential information systems required by:

- Facility managers who oversee continuous quality improvement processes;
- District and regional health authorities who manage the implementation of the EPHS and plan services based on population health needs; and
- National authorities (e.g. MoH, social insurance, and regulators) who transparently report on achievements and increase accountability and design incentives (e.g. through contracting) at all levels of the health system.

Data Sources

Routine data collection systems complemented by surveys and community-based surveillance systems and mechanisms to collect qualitative information (e.g. focus group interviews on a regular basis) constitute the basis of an integrated health information system. Information will be collected on supply of services (including public health operations, service experience and care seeking behaviours) and demand for services (based on objective and perceived needs). Table 13 provide an overview of available data. These systems need to be strengthened. Their regular use by a broad range of stakeholders for a variety of purpose will serve as engine for improvement in data completeness and quality.

Table 13: overview of data sources

	Facility based routine information and data			Household surveys	
	RHIS	IDSR	Facility mapping	SDHS	Expenditure, health seeking behaviour and barriers
Availability of the package	√		√	√	√
Provider performance	√				
Quality of services					
Utilization and barriers				√	√
Preparedness		√			
People satisfaction				√	
Service coverage	√		√	√	√
Financial protection					√
Burden of disease	√			√	

Routine Health Information System (RHIS) collect information on services provided by the different types of delivery platforms. The IT platform used to upload and analyse this type of information is DHIS2, that has already been introduced in Somalia. This can be used to calculate a range of key performance indicators that monitor trends in outputs, utilisation and/or coverage such as for instance [23], [24]: number of outpatient department visits (per person per year), proportion of births attended by skilled health personnel, immunization coverage levels by vaccine.

The **integrated disease surveillance and response system (IDSR)** will complement the RHIM, to manage alerts, investigation and response to potential epidemics. Indicators for monitoring will be defined, including timeliness and completeness of the reporting, and investigations done within 48 hours.

A **national master list and mapping of all health facilities, public and private** will be made starting with available data from the SARA Survey of 2016 [25]. A Health Resources Availability and Monitoring Systems (HeRAMS) [26] system that allows regular updating of functionality of facilities is being implemented with support from the humanitarian program, and this needs to be extended to allow reporting from all facilities. The system scope and classification of facilities should initially be simple, based on criteria of functionality rather than what a facility is meant to be, and reporting on availability of the broader service groups. It should also have data on the key partner(s) supporting a facility or DHMT, and the source of funding allocated to the facility or district. A standard list of key indicators will be developed that can be monitored using this system, such as number of health facilities offering specific services per 10.000 population, and meeting minimum service standards based on tracer criteria for

specific services; percentage of the population living within a 5km radius (or 1 hour travelling distance) [27] of a health facility; total number of beds per 10,000 population.

The ***Somalia Demographic and Health Survey report*** (SDHS) was released in 2020. This survey improves data availability in Somalia. The geographically disaggregated information and other child health indicators will be released shortly. The SDHS is a comprehensive survey with some optional modules. In future, more questions will be added to collect data on other indicators as necessary, including financial protection indicators. One option the Ministry of Health plans is exploring is to invest in the institutionalization of the SDHS rather than conducting different types of surveys.

Catastrophic health expenditures and incidence of impoverishment are two main indicators to show financial protection for accessing services. The data for these two indicators can be collected through a comprehensive household income and expenditure survey (and link to the National Health Account) or a specific survey for the health expenditures. Interpretation of these indicators is not only dependent on the out of pocket payment but also the type of and frequency of services utilized. Therefore, it is necessary to also collect data on health seeking behaviour, looking as well at barriers for access and utilization of services other than financial ones.

The burden of disease analysis and health needs assessment revealed that trauma and injury contribute substantially to the burden of disease in Somalia. Consequently, measures that improve the quality of emergency care services can help optimize the impact of the EPHS 2020.

WHO has created a suite of tools and resources that are useful in supporting the development of effective emergency care systems. These include resources for use at the system level and in service delivery settings. Additionally, there are a range of clinical process guidance tools, which can be implemented at facilities to ensure that no life-threatening conditions are missed, and that timely, life-saving interventions are performed. Some relevant tools include:

Clinical Care Training Tools

- ***WHO-ICRC Basic Emergency Care (BEC) course*** is an open-access training course for frontline healthcare providers who manage acute illness and injury with limited resources. The course has been developed with ICRC and International Federation for Emergency Medicine (IFEM).
- ***WHO Emergency Unit Management (EUM) course*** teaches a systematic approach to management to improve quality of care in emergency units for senior clinical providers including nurses, clinical officers and specialists. The course builds important management skills in leadership, patient safety, emergency unit design, patient flow, quality improvement and common legal and ethical issues encountered in emergency units.

Clinical Process Tools

- **Checklists** are simple tools, designed for use in emergency units. They help review actions at critical points to ensure that no life-threatening conditions are missed, and that timely, live-saving interventions are performed. Developed and validated through extensive global collaborations, the Safe Surgery, Trauma Care and Medical Emergency Checklists are appropriate in any setting and can be easily adapted to local needs.
- **WHO Standardized Clinical Forms** improve care by ensuring a systematic and structured approach to every injured or acutely ill person. There are two versions of the form for trauma cases and for general emergency unit cases, each with a corresponding reference card to guide clinician use and ensure data quality.

Use of information for improvement

- ***Regional and district dashboards to inform service organization and planning***

Similarly, standard facility maps and indicators on infrastructure will be regularly monitored. These systems will generate automatically a number of reports to be used by relevant authorities.

The various data sources and indicators generated through these systems will be integrated in a comprehensive District and Regional Dashboards. The Dashboards will allow regular monitoring and will inform the elaboration of improvement plans. Dashboards will include indicators on service availability, their effective use (e.g. coverage indexes), unmet needs, service quality as well as service quality and outcomes measures. Ultimately, they provide the necessary information for Monitoring and Evaluation of EPHS implementation against measurable objectives (in terms of types of services, volume of services, and quality of services and their impact).

- ***Integrated quality assessment tool to support quality management processes in facilities***

A Health Facility Performance and Quality Assessment Tool (PQAT) will be developed that can be used by health facility management teams to assess and monitor implementation of health infrastructure standards, as well as the enabling conditions as discussed above. It will include indicators on efficiency, volume of services, staffing resources, users experience, etc.

The tool can also be used by the District Health Management, together with the NGO designated to support the facility, to do an External Assessment as part of supportive supervision. The findings are used to develop together with the facility management team a quality Improvement plan, clarifying what can be done at the facility level, as well as what additional support may be required from the supporting NGO and/or the DHMT.

A Balanced Score Card (BSC) that integrates and summarizes the results of current evaluation mechanisms will be developed.¹ The score card will integrate data and indicators from the different district level information systems described above. It will be part of an integrated performance management system that will have a limited number of easily understood and robust indicators representing the most important aspects of service delivery. The score card will assist the MOH to translate its vision, values, and strategies into a concrete form that demonstrates open and rational decision-making.

- **Accountability and transparency to the population:**

For accountability, an **independent complaint and resolution mechanism** will be established so that people can express concerns or complaints they have regarding the health services and so that they can be supported in reaching a solution to their problem (e.g. through ombudsman services). A system for sanctioning health sector actors for unacceptable decisions and actions should be in place. Greater transparency will be ensured on entitlements and with regards to co-payment (price transparency). A mechanism for informing the public about major decisions and actions in the health system will be established.

Public reporting on M&E of EPHS implementation plan: The public will also be regularly informed about degree of achievement of measurable objectives set for the gradual implementation of EPHS. Data will be disaggregated for gender and according to other key SDH variables. Mid-term evaluation of EPHS implementation plan and its review will be done through a participative process with all stakeholders engaged, including civil society representatives and representatives of district and regional management teams.

Third Party Monitoring: A Third-Party Monitoring system will be established to support the contracting systems, and to provide validation to the State and Federal Ministry for the reports generated by health facilities and DHMTs. Where possible, they will use the same tools as used by health facilities and district health management teams, such as the Performance and Quality Assessment Tool (PQAT) and the Balanced Score Card (BSC). This entity will be mainly collecting and verifying program output quality indicators.

Certification: When non MOH managed health facilities and providers are considered for contracting, a process will be created for such provider to submit an Expression of Interest with a self-declaration on how they meet a required set of standards for that level of service. These will then be validated through an independent assessment to certify the providers against selected quality standards.

¹ This can be informed by the outline for a Balanced Score Card (BSC) that had been drafted for the EPHS 2009, but that was not yet implemented

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EPHS 2020 interventions

Community	Primary Health Unit	Health Centre	Referral Health Centre (District Hospital)	National / Regional Hospital	Top 20 death (YLL) or disability (YLD)
					• 2009 Package • Proposed new intervention — Optimal if moved to lower level when resources allow DCP-E DCP3 EUHC DCP-H DCP3 HPP DCP-P DCP3 Packages WHO-UHC compendium
Access to care					
Continuity, care planning and coordination					
• Recognition and referral for higher-level management	• Recognition and referral for higher-level management	• Maintenance of care continuity through longitudinal provider relationship	• Management of complications, including structured communication with primary care practitioner on specialised and referral visits	• Management of complex multimorbidity and complications, including structured communication with primary care practitioner on specialised and referral visits	
		• Care coordination including referral and counter referral			
		• Review and monitoring of chronic therapeutic regimens for complications and adherence			
		• Assessment of individual characteristics (age, gender, chronic conditions) to determine screening and behavioral/environmental modification and care plans throughout the life course			
		• Targeted care coordinated with public health and social service programs to address needs related to social determinants of health			
Emergency care					
• Recognition and referral for danger signs in children and adults [DCP-P]	• Recognition and referral for danger signs in children and adults [DCP-P]	• Recognition and management of danger signs in children and adults [DCP-P] — • WHO Basic Emergency Care	• Triage on arrival at facility with validated instrument [DCP-P]	• Triage on arrival at facility with validated instrument [DCP-P]	
• Community-based first aid	• Community-based first aid		• Resuscitation with advanced life support measures, including surgical airway [DCP-H]	• Resuscitation with advanced life support measures, including surgical airway [DCP-H]	• User-activated dispatch of prehospital services [WHO UHC] • Ambulance transport with direct provider monitoring and clinical management of patient during transport [WHO-UHC] • Safe transport positioning (for airway and spinal protection when relevant) [WHO-UHC] • Protocol-based destination triage [WHO-UHC]
		• WHO Basic Emergency Care: Initial assessment and management difficulty in breathing	• Advanced initial assessment and management of difficulty breathing	• Advanced initial assessment and management of difficulty breathing	
		• WHO Basic Emergency Care: Initial assessment and management of altered mental status	• Advanced initial assessment and management of altered mental status	• Advanced initial assessment and management of altered mental status	
		• WHO Basic Emergency Care: Initial assessment and management of shock	• Advanced initial assessment and management of shock	• Advanced initial assessment and management of shock	
		• WHO Basic Emergency Care: Initial assessment and management of acute injury	• Advanced initial assessment and management of injury	• Advanced initial assessment and management of injury	
• Detection and early referral of metabolic emergencies [WHO-UHC]	• Initial management of metabolic emergencies [WHO-UHC]	• Advanced management of metabolic emergencies [WHO-UHC]			
• WHO Basic Emergency Care: Initial assessment and management of septic shock	• Advanced initial assessment and management of sepsis	• Advanced initial assessment and management of sepsis			
	— • Detection of sepsis [DCP-H]				
Approach to common signs and symptoms					

♦ Initial assessment and recognition of need for referral for common signs and symptoms	→ ♦ Initial approach to common signs and symptoms: fever; diarrhoea; headache; cough and dyspnea; skin lesions and rash; weakness or fatigue; chest pain and palpitations; genitourinary complaints; red eye and visual disturbance; ear pain and hearing disturbance; mood complaints; sleep disturbances; musculoskeletal pain; abdominal pain and GI bleeding; sinus, mouth and throat complaints; syncope; vomiting; gynecologic complaints; memory loss or attention problem; dizziness or vertigo; weight change; swelling, lump or mass; and general pain symptoms	♦ Advanced assessment and management of common signs and symptoms encountered in frontline care	♦ Classification of problem (differential diagnostic procedure for symptoms or syndrome) [WHO-UHC] ♦ Integrated set of procedures for acute undifferentiated complaints [WHO-UHC]
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Reproductive, maternal and newborn health					
Maternal and newborn					
• Promotion of safe motherhood: ---Identification, counseling and referral of all pregnant women ---Promotion of facility-based delivery assisted by skilled birth attendants ---Maternal nutrition assessment, counseling and provision of micro-nutritional supplements during pregnancy • Provision of specialized nutritious food and/or cash transfers as feasible in food insecure households] • Early recognition and referral for antenatal complications and emergencies	• Promotion of safe motherhood: ---Identification, counseling and referral of all pregnant women ---Promotion of facility-based delivery assisted by skilled birth attendants ---Maternal nutrition assessment, counseling and provision of micro-nutritional supplements during pregnancy • Provision of insecticide treated bednets (ITNs) in endemic areas • Provision of specialized nutritious food and/or cash transfers as feasible in food insecure households.] • Early recognition and referral for antenatal complications and emergencies	- All promotion of safe motherhood activities plus: • Coordinated antenatal visits (including four focused visits): ---Tetanus toxoid vaccination (TT2+) ---Promotion of post-partum family planning ---Maternal nutrition counseling with provision of micro-nutritional supplements and specialized nutritious food if available ---Assessment of fetal growth ---HIV and TB screening of pregnant women following national guidelines --- Early identification and referral of women at high-risk for complications --- Screening for hyperglycaemia and gestational diabetes --- Screening for anaemia ---Treatment of worms ---Screening and treatment for genito-urinary infections, including STIs ---Intermittent preventive treatment for malaria in pregnancy (IPTp) and provision of insecticide treated bednets (ITNs) in endemic areas ---Screening for hypertension in pregnancy and pre-eclampsia, antepartum haemorrhage and premature rupture of membranes • Initial management of pre-eclampsia • Initial management of antepartum haemorrhage	• All promotion of safe motherhood activities • Coordinated antenatal visits for pregnancy with complications, including provision relevant preventive therapies --- • PMTCT through antiretroviral therapy and safer infant feeding practices [in targeted areas] • Immediate initiation of ART for newly diagnosed HIV cases • Transfusion in pregnancy • Surgery for ectopic pregnancy • Advanced management of diabetes in pregnancy • Advanced management of pre-eclampsia • Advanced management of antepartum haemorrhage	• All promotion of safe motherhood activities • Coordinated antenatal visits for pregnancy with complications, including provision relevant preventive therapies • Transfusion in pregnancy • Surgery for ectopic pregnancy • Repair of FGM prior to delivery --- • Detection and management of fetal growth restriction [DCP-E]	
• Early detection of preterm labour and premature rupture of membranes [DCP-H]	• Early detection of preterm labour and premature rupture of membranes [DCP-H] • Postpartum iron and folate supplements	• Initial management of preterm labour and premature rupture of membranes, including administration of antibiotics [DCP-H] • Identification and incorporation of maternal birth preferences into birth plan • Management of labor and delivery in low-risk women by skilled attendants in facilities • Routine postpartum care of mother • Provide support for early initiation of exclusive breastfeeding and rooming in --- • Provide counseling on danger signs, hygiene practices and nutrition [WHO-UHC] --- • Provide counseling on contraception [WHO-UHC] • Recognition and initial management of postpartum complications, including sepsis and haemorrhage	• Advanced management of premature rupture of membranes --- • Management of preterm labor with corticosteroids [DCP-H] --- • Induction of labor post-term [DCP-E] • Management of labor and delivery in high-risk women, including surgical and assisted delivery techniques (CEmNOC) [DCP-H] • Spinal anesthesia • Hysterectomy for uterine rupture or intractable postpartum hemorrhage • Routine postpartum care of mother • Provide support for early initiation of exclusive breastfeeding and rooming in [DCP-P] • Provide counseling on danger signs and hygiene practices [WHO-UHC] • Provide counseling on contraception [WHO-UHC] • Diagnosis of postpartum complications • Management of PPH (with parenteral uterotonic agents, anti-fibrinolytic agents, and IV fluids) • Transfusion • Repair of perineal tears • Dilatation and curettage • Management of postpartum sepsis	• Advanced management of premature rupture of membranes • Advanced management of preterm labor [DCP-H] • Management of labor and delivery in high-risk women, including surgical and assisted delivery techniques (CEmNOC) [DCP-H] • Spinal anesthesia • Hysterectomy for uterine rupture or intractable postpartum hemorrhage • Advanced management of postpartum complications • Transfusion • Repair of perineal tears • Dilatation and curettage • Advanced management of postpartum sepsis	
• Referral for babies delivered at home to nearest health facility for evaluation, vaccinations, weighing, and registration	• Referral for babies delivered at home to nearest health facility for evaluation, vaccinations, weighing, and registration • Postnatal monitoring and follow up at days 1, 3 and 7 after birth • Provide support for early and exclusive breastfeeding • Administer routine birth vaccinations per national guidelines • Perform counseling and support for newborn care, including parental recognition of danger signs, responsive caregiving and follow-up • Early recognition of danger signs and illness with early referral	• Routine assessment and immediate essential newborn care ---Prevention of hypothermia including immediate drying after birth, skin-to-skin care, and wrapping ---Provide support for early and exclusive breastfeeding ---Administer routine birth vaccinations per national guidelines ---Perform counseling and support for newborn care, including parental recognition of danger signs, responsive caregiving and follow-up • Early recognition of danger signs and illness with early referral • Provision of cotrimoxazole to children born to HIV-positive mothers [DCP-E] • Neonatal resuscitation	• Comprehensive emergency newborn care, including all immediate essential newborn care plus neonatal resuscitation • Full supportive care for preterm newborns [WHO-UHC][DCP-E] • Nutritional care of babies without a mother • Recognition and management of neonatal sepsis, meningitis, pneumonia, and other SBI, including use of IV antimicrobial agents [DCP-H] • Management of neonatal encephalopathy and seizures [WHO-UHC] • Jaundice management with phototherapy [DCP-E]	• Comprehensive emergency newborn care, including all immediate essential newborn care plus neonatal resuscitation • Full supportive care for preterm newborns [WHO-UHC][DCP-E] • Nutritional care of babies without a mother • Recognition and management of neonatal sepsis, meningitis, pneumonia, and other SBI, including use of IV antimicrobial agents [DCP-H] • Management of neonatal encephalopathy and seizures [WHO-UHC] • Provide specialized follow-up of high-risk infants • Surgical treatment of birth defects and congenital anomalies [WHO-UHC] • Jaundice management with phototherapy [DCP-E]	
Sexual and reproductive health					

			• Surgical management of ovarian cysts • Repair of FGM induced damage	• Repair of complicated perineal tears • Surgical management of ovarian cysts • Repair of damage associated with FGM • Repair of obstetric fistula (WHO-UHC) • Interventions to address uterine prolapse [WHO-UHC] • Interventions to address uterine fibroids [WHO-UHC] • Interventions to address endometriosis [WHO-UHC]		
• Promote safe sex practices [DCP-E]	• Promote safe sex practices [DCP-E] • Provide vaginal lubricants to address vaginal dryness and dyspareunia [WHO-UHC] • Provide contact tracing for STIs	• Promote safe sex practices [DCP-E] • Provide vaginal lubricants to address vaginal dryness and dyspareunia [WHO-UHC] • Provide syndromic management of STIs • Provide counseling and testing for those with STIs • Provide partner notification and expedited treatment for common STIs [DCP-H] • Provide outpatient treatment for UTIs				
• Provide confidential reproductive health education, including for adolescents • Promote the avoidance of early marriage and early pregnancy and promote birth spacing • Improve cleanliness, comfort and dignity of women during menstruation with free and publically available sanitary towels	• Provide confidential reproductive health education, including for adolescents • Promote the avoidance of early marriage and early pregnancy and promote birth spacing • Improve cleanliness, comfort and dignity of women during menstruation with free and publically available sanitary towels • Provide counseling on family planning and contraceptive options • Provide short-acting hormonal contraceptives	• Provide confidential reproductive health education, including for adolescents • Promote the avoidance of early marriage and early pregnancy and promote birth spacing • Provide counseling on family planning and contraceptive options • Provide short-acting hormonal contraceptives • Provide emergency contraceptives [DCP-H]	• Insertion and removal of long acting reversible contraceptives [DCP-H]	• Insertion and removal of long acting reversible contraceptives [DCP-H] • Tubal ligation [DCP-H] • Vasectomy [DCP-H]		
		• Provide initial management for miscarriage or incomplete abortion	• Medical management of incomplete abortion (1st & 2nd trimester) [WHO-UHC] • Provide pharmacological termination of pregnancy [WHO-UHC] • Provide manual vacuum aspiration • Provide dilation and curettage	• Management of septic abortion [WHO-UHC] • Management of injury to the genital tract and internal organs [WHO-UHC] • Provide manual vacuum aspiration • Provide dilation and curettage		
Life-course, growth and development						
Childhood and adolescence						
• Parent support and training as part of comprehensive programmes		• Parent training and home visitation for high-risk families, for child maltreatment [DCP-E] • Parenting programs for early and middle childhood [DCP-P]				
• Provide growth monitoring and arrange referrals as needed	• Provide growth monitoring and arrange referrals as needed	• Provide growth monitoring and arrange referrals as needed				
• Promotion of complementary child feeding and diversification of foods • Nutrition counselling and screening	• Promotion of complementary child feeding and diversification of foods • Nutrition counselling and targeted supplementary feeding • Referral of children with pallor	• Nutrition counselling and targeted supplementary feeding • Nutritional support for acutely malnourished pregnant and lactating women				
• Targeted population-based intermittent iron and folic acid per national/WHO guidelines • Micronutrient supplementation per national/WHO guidelines • Provide food supplementation for food insecure households	• Targeted population-based intermittent iron and folic acid per national/WHO guidelines • Micronutrient supplementation per national/WHO guidelines • Provide food supplementation for food insecure households • Provide cash assistance to women and children in food insecure households [UNICEF]					
• Routine nutritional screening and referral with MUAC and evaluation for oedema	• Routine nutritional screening and referral with MUAC and evaluation for oedema • Supplementary feeding for moderate acute malnutrition	• Screening & referral for therapeutic care for severely malnourished children • Outpatient therapeutic programme for children with severe acute malnutrition and no complications • Supplementary feeding for moderate acute malnutrition	• Inpatient management of SAM associated with complications or serious infection • Supplementary feeding for moderate acute malnutrition	• Inpatient management of SAM associated with complications or serious infection • Management of severe acute malnutrition associated with serious infection (WHO-UHC)		
		• Screening for developmental disorders in children [DCP-P] • Provide parenting skills training for developmental disorders [DCP-P]		• Diagnosis of childhood mental disorders [DCP-P]		X-Management of developmental disorders
• Weekly IFA supplementation for adolescent girls • Life skills training in schools to build social and emotional competencies [DCP-P]						

Older adult						
† Home-based assistance for activities of daily living † Nutrition counselling, social care and support for older people						
NCDs						
Health promotion and disease prevention						
		† Integrated screening for NCDs based on individual characteristics through the life course [WHO-UHC]				
	† Counselling and behavioral modification on nutrition, healthy diet, and physical activity [WHO-UHC]	† Counselling and behavioral modification on nutrition, healthy diet, and physical activity [WHO-UHC] ← † Education on tobacco hazards, value of HPV and HBV vaccination, and importance of seeking early treatment for common cancers (DCP-P)	† Counselling and behavioral modification on nutrition, healthy diet, and physical activity [WHO-UHC] † Education on tobacco hazards, value of HPV and HBV vaccination, and importance of seeking early treatment for common cancers (DCP-P)	† Education on tobacco hazards, value of HPV and HBV vaccination, and importance of seeking early treatment for common cancers (DCP-P)		
Cardiovascular and pulmonary diseases						
		⦿ Perform periodic screening of adults and children for hypertension [WHO-UHC] ⦿ Monitor oral anti-hypertensive regimen	⦿ Initiate regimen for oral anti-hypertensive agents [WHO-UHC] ⦿ Perform ECG [WHO-UHC]	⦿ Management of complications of hypertension † Administer parenteral anti-hypertensive agents for hypertensive emergencies		
		† Monitor oral regimen for long-term medical management of heart failure and ischemic heart disease ← † Provide aspirin for all suspected cases of acute myocardial infarction [DCP-H]	† Initiate oral agents for medical management of heart failure and ischemic heart disease † Management of acute coronary syndromes with aspirin and unfractionated heparin [DCP-E]	⦿ Initiate oral agents for medical management of heart failure and ischemic heart disease (replaces Provide a Heart Failure Special Programme) ← † Management of acute coronary syndromes with aspirin, unfractionated heparin, and generic thrombolytics [DCP-E]	X-NRH Invasive management of acute coronary syndromes with percutaneous coronary interventions X-NRH Surgical procedures for valve repair and replacement X-RHC Chronic management of cardiac arrhythmias (WHO-UHC)	
		† Monitor oral regimen for chronic management of stroke [DCP-H]	† Initiate oral regimen for chronic management of stroke [DCP-H]	† Management of acute stroke	X-C Counselling regarding significant modifiable ischemic stroke risk factors (DCP-P) X-C Educating patient on signs and symptoms of an acute stroke and reasons to seek acute care (DCP-P)	
		⦿ Treatment of asthma and COPD with inhaled agents ⦿ Treatment of asthma and COPD with oral agents	⦿ Treatment of asthma and COPD with inhaled agents ⦿ Treatment of asthma and COPD with oral agents		X-HC Exercise-based pulmonary rehabilitation for patients with obstructive lung disease (DCP-P) X-C Self-management for obstructive lung disease to promote early recognition and treatment of exacerbations (DCP-P)	
Diabetes						
		← † Screening for diabetes among at-risk adults, [DCP-H] † Management of type 1 diabetes, including treatment with insulin [WHO-UHC] † Management of type 2 diabetes with oral agents and insulin [WHO-UHC] ← † Screening for diabetes complications	⦿ Management of type 1 diabetes, including treatment with insulin [WHO-UHC] ⦿ Management of type 2 diabetes with oral agents and insulin [WHO-UHC] ⦿ Advanced management of diabetes and complications of diabetes	⦿ Advanced management of diabetes and complications of diabetes	X-C Patient education for diabetes self-care (glucose monitoring, timed dietary intake, insulin dosing if indicated) (DCP-P) † Treatment of diabetic retinopathy with laser photocoagulation [DCP-E] † Retinopathy screening	
Cancer						
		← † Essential palliative care and pain control including oral immediate release morphine and medicines for associated symptoms [DCP-H]	† Expanded palliative care and pain control [DCP-H] ← † Psychosocial support and counseling services for individuals with serious, complex, or life-limiting health problems, and their caregivers [DCP-E]	† Expanded palliative care and pain control [DCP-H] ← † Psychosocial support and counseling services for individuals with serious, complex, or life-limiting health problems, and their caregivers [DCP-E]		
			← † Early detection by visual inspection of early stage cervical cancer [DCP-H]	← † Treatment by cryotherapy and colposcopy of early-stage cervical cancer [DCP-H]		
Mental health and substance use disorders						
	⦿ Support for families	← † Detection and referral for depressive disorders with validated interview based tools [WHO-UHC] ← ⦿ Monitor oral regimen for depression [DCP-H]	⦿ Provide psychological interventions for depression [WHO-UHC] ⦿ Initiate oral agents for depression [DCP-H] ⦿ Provide outpatient psychiatric treatment by mental health nurses	⦿ Provide psychological interventions for depression [WHO-UHC] ⦿ Initiate oral agents for depressive disorders [DCP-H] ⦿ Inpatient psychiatric care for depression	X-HC Medications for maintenance treatment of bipolar disorder (WHO-UHC)	

		↔ Detection and referral for anxiety disorders for all age groups using validated interview based tools [WHO-UHC] ↔ Monitor oral therapy for anxiety disorders [DCP-H]	✦ Provide psychological interventions for anxiety [WHO-UHC] ✦ Initiate oral agents for anxiety [DCP-H]	✦ Provide psychological interventions for anxiety [WHO-UHC] ✦ Initiate oral agents for anxiety [DCP-H]	X-PHU Cognitive behavioral therapy for persons with subthreshold symptoms of mood and anxiety disorders [DCP-P]
		↔ Monitor oral therapy of psychotic disorders [DCP-H]	✦ Initiate oral agents for psychotic disorders [DCP-H]	✦ Manage refractory psychosis with advanced oral agents [DCP-P] ↔ Administer IM & IV antipsychotic therapies [DCP-P] ✦ Provide inpatient psychiatric care for psychotic disorders	
	✦ Provide harm reduction services such as safe injection equipment [DCP-H]	✦ Provide screening and brief interventions for alcohol use disorders [DCP-E] ✦ Provide tobacco and qat cessation counseling and nicotine replacement therapy when relevant		↔ Manage alcohol withdrawal [WHO-UHC] ↔ Manage opiate withdrawal [WHO-UHC]	
✦ Promotion of avoidance of FGM ✦ Community-based prevention programmes for gender-based violence [DCP-H]	✦ Promotion of avoidance of FGM	✦ Psychosocial support, including supportive communication and problem solving [DCP-E]* ✦ Clinical assessment for survivors of violence, including documentation and evidence collection as appropriate	✦ Psychosocial support, including supportive communication and problem solving [DCP-E]* ✦ Clinical assessment for survivors of violence, including documentation and evidence collection as appropriate ✦ Provide medical and psychological care for victims of sexual violence, including PEP ✦ Special programme for violence mitigation	✦ Psychosocial support, including supportive communication and problem solving [DCP-E]* ✦ Clinical assessment for survivors of violence, including documentation and evidence collection as appropriate ✦ Provide medical and psychological care for victims of sexual violence, including PEP ✦ Special programme for violence mitigation ✦ Management of complications following FGM [DCP-E]	
Injury					
	✦ Basic life support, plus protocol based administration of oral fluids with adjustment for age and condition including malnutrition ✦ Early recognition and immediate referral for injury ✦ Initial wound care including cleaning and application of dressing	✦ Initial management and immediate referral for polytrauma (WHO Basic Emergency Care) ✦ Basic wound care, including suturing of simple lacerations ✦ Initial management of burns ✦ Analgesia, immobilisation, and referral for musculoskeletal injuries	✦ Basic initial management of polytrauma (WHO Basic Emergency Care) ✦ Implementation of WHO checklists for management of critically ill and injured patients ✦ Advanced wound care, including suturing of complex lacerations ✦ Management of burns with fluids and nutritional support including therapeutic feeding ✦ Analgesia, immobilisation, referral for musculoskeletal injuries ✦ Management of non-displaced fractures with closed reduction	✦ Advanced initial assessment and management of polytrauma [WHO-UHC] ✦ Implementation of WHO checklists for management of critically ill and injured patients ✦ Trauma laparotomy ✦ Nutritional support for those with major injury ✦ Basic skin grafting and release of contractures, including for burns ↔ Fracture reduction, external fixation and traction [DCP-H] ↔ Irrigation and debridement of open fractures [DCP-H] ✦ Open reduction and internal fixation for fractures [DCP-P] ✦ Trauma related amputations ✦ Burr hole to relieve acute elevated intracranial pressure [DCP-P]	X-C Basic initial syndrome-based management at scene and during transport for polytrauma (WHO-UHC)
		✦ Initial management of human and animal bites, including snake and dog bites ✦ Referral for rabies vaccine and anti-rabies serum	✦ Management of human and animal bites, including snake and dog bites ✦ Administer antivenin [DCP-E]	✦ Advanced management and surgical debridement of human and animal bites, including snake bites ✦ Administer antivenin [DCP-E] ✦ Full supportive care for snake bite envenomation [WHO-UHC]	
		✦ Early recognition and management of poisoning, intoxication and withdrawal syndromes	✦ Early recognition and management of poisoning, intoxication and withdrawal syndromes	✦ Early recognition and management of poisoning, intoxication and withdrawal syndromes	
Other NCDs					
				✦ Newborn screening for sickle cell disease [DCP-H] ↔ Retrospective identification of carriers of single-gene disorders (ie thalassemias) plus prospective (premarital) screening and counseling [DCP-E]	X-HC Case management of sickle cell disease (WHO-UHC) X-Standard prophylaxis against bacterial infections and malaria for sickle cell disease [DCP-H]
				✦ Management of bowel obstruction [DCP-P] ✦ Perform repair of perforations [DCP-P] ✦ Perform colostomy [DCP-P] ✦ Perform hernia repair [DCP-P] ✦ Perform surgical intervention for gastrointestinal bleeding [DCP-P] ↔ Perform appendectomy [DCP-P] ↔ Perform surgery for gallbladder disease [DCP-P]	X-HC Antibiotic management of Helicobacter as a cause of ulcers (DCP-P)
		✦ Perform intervention for relief of urinary obstruction (catheterization) [DCP-P]	✦ Perform intervention for relief of urinary obstruction (catheterization or suprapubic cystostomy) [DCP-P]	✦ Perform intervention for relief of urinary obstruction (catheterization or suprapubic cystostomy) [DCP-P]	

				← → Prescribe oral generic disease-modifying anti-rheumatic drugs (including MTX) for moderate to severe rheumatoid arthritis [DCP-H]		
- Screening of visual acuity - School based eye education	- Screening of visual acuity - Referral to ophthalmic assistants	- Screening of visual acuity - Referral to ophthalmic assistants	- Mobile eye camps (free treatment) - Surgical camps with visiting ophthalmologists (free cataract and other surgery) - Community based trachoma treatment in areas of high prevalence - Treatment of refractive problems ts (NB Fees are charged) - Cataract extraction and insertion of intraocular lens [DCP-H] - Surgery for trachomatous trichiasis [DCP-H]			
		- Epistaxis management [WHO-UHC] - Removal of foreign body [WHO-UHC]	- Audiological testing and monitoring (audiometry) [WHO-UHC] - Hearing aid trial and fitting [WHO-UHC] - Epistaxis management [WHO-UHC] - Removal of foreign body [WHO-UHC]	- Audiological testing and monitoring (audiometry) [WHO-UHC] - Hearing aid trial and fitting [WHO-UHC]		
		Monitor oral regimen for convulsive epilepsy therapy [DCP-H]	Initiate oral regimen for convulsive epilepsy[WHO-UHC]	Manage medication-resistant convulsive epilepsy		X-HC Management of prolonged seizures or status epilepticus (DCP-P)
			Provide post-stroke care, including care for those with paralysis	Provide post-stroke care, including care for those with paralysis		
		- Monitor oral regimen used for headache disorders [WHO-UHC] - Teach self-management treatments for migraine [DCP-E] - Management of chronic skin conditions (WHO-UHC)	Initiate oral regimen for headache disorders [WHO-UHC]	Manage medication-resistant headache disorders [WHO-UHC]		X-HC Acute management of migraines (WHO-UHC) X-HC Interventions for medication overuse headache disorders (WHO-UHC)
Communicable diseases						
Promote immunisation uptake and conduct defaulter tracing	- Promote immunisation uptake and conduct defaulter tracing - Provide routine age appropriate immunizations, as per national EPI policy and guidelines	- Provide routine age appropriate immunizations, as per national EPI policy and guidelines / Provide Targeted age-based and risk-based vaccinations for adults	- Provide routine age appropriate immunizations, as per national EPI policy and guidelines / Provide Targeted age-based and risk-based vaccinations for adults	- Provide routine age appropriate immunization, as per national EPI policy and guidelines / Provide Targeted age-based and risk-based vaccinations for adults		
Management of HIV, TB, Malaria, Hepatitis						
- HIV prevention and promotion activities at the family and community levels - Promote activities to decrease stigma for PLHIV - Promote of safe sex practices - Social support for PLHIV	- HIV prevention and promotion activities at the family and community levels - Promote activities to decrease stigma for PLHIV - Promote safe sex practices	- Community-based HIV testing, counselling and referral [DCP-E] - HIV testing in high-risk groups, including for new diagnoses of TB and STI - Referral for PrEP for high risk groups - Co-trimoxazole prophylaxis for P carinii infection - Early recognition and referral opportunistic infections in PLHIV - Nutritional support for PLHIV including screening for malnutrition	- Provider-initiated testing and counseling for HIV, STIs, and hepatitis [DCP-H] - CD4 testing and clinical monitoring - Provision of PrEP for high risk groups [DCP-E] - Immediate initiation of ART for newly diagnosed HIV cases - Management of side effects and toxicity of ARVs - Co-trimoxazole prophylaxis for P carinii infection - Screening and treatment of opportunistic infections - Screening and treatment for HIV in at-risk newborns	- CD4 testing and clinical monitoring - Provision of PrEP for high risk groups [DCP-E] - Immediate initiation of ART for newly diagnosed HIV cases - Management of side effects and toxicity of ARVs - Co-trimoxazole prophylaxis for P carinii infection - Screening and treatment of opportunistic infections - Management of HIV in pregnant women - Screening and treatment for HIV in at-risk newborns		X-RH Treatment failure management including with second and third line antiretroviral therapy (WHO-UHC)

● Provide community-based TB education ✦ Perform active case finding for TB [DCP-H]	● Provide community-based TB education ✦ Perform contact tracing [DCP-E]	✦ Screen for TB in high risk groups, including children and PLHIV ● Provide isoniazid preventive therapy to high-risk groups according to current WHO guidelines [DCP-H] ● Perform sputum AFB testing ● Prescribe first-line treatment for drug-susceptible TB per current WHO guidelines ● Refer treatment failures for assessment of drug-resistant TB ● Arrange for DOTs including administration by responsible care-givers	✦ Provide molecular diagnostics or culture for diagnosis of drug-susceptible and drug-resistant TB [DCP-P] ✦ Advanced management of TB treatment failures	→ ✦ Manage MDR TB and XDR TB as per WHO guidelines [DCP-H] ✦ Perform surgical intervention for TB [WHO-UHC]	
✦ Distribute and promote use of ITNs in high prevalence areas [DCP-P] ✦ Treat malaria with ACTs or other first-line combination [DCP-P]	● Distribute and promote use of ITNs in high prevalence areas [DCP-P] ● Provide active case finding during epidemics ● Treat malaria with ACTs or other first-line combination [DCP-P] ● Utilize national protocols for malaria prevention and treatment	● Diagnose malaria with RDTs or microscopy [DCP-P] ● Treat malaria with ACTs or other first-line combination [DCP-P] ✦ Early detection of severe malaria and referral [DCP-H]	● Diagnose malaria with RDTs or microscopy [DCP-P] ● Treat malaria with ACTs or other first-line combination [DCP-P] ● Manage severe malaria	● Manage severe malaria	
		✦ Hepatitis B vaccination for high risk populations including health workers ✦ Screening for Hepatitis B/C among clinical at risk group and vulnerable populations (WHO-UHC)	✦ Hepatitis B vaccination for high risk populations including health workers ✦ Screening for Hepatitis B/C among clinical at risk group and vulnerable populations (WHO-UHC)	✦ Hepatitis B vaccination for high risk populations including health workers ✦ Screening for Hepatitis B/C among clinical at risk group and vulnerable populations (WHO-UHC)	
Neglected tropical diseases					
	● Provide treatment for scabies ● Provide de-worming campaigns	● Provide control programmes for leishmaniasis, schistosomiasis, and elephantiasis in endemic areas ● Provide community based trachoma treatment in areas of high prevalence ● Treatment of helminthic infections (deworming)	● Treatment of helminthic infections (deworming)		
Respiratory infections					
● Manage common upper respiratory tract infections ● Early recognition and treatment for pneumonia, with referral for danger signs [WHO-UHC]	● Manage common upper respiratory tract infections ● Early recognition and treatment for pneumonia, with referral for danger signs [WHO-UHC]	● Empiric treatment for non-severe and severe pneumonia [WHO-UHC] ✦ Diagnosis and initial management of bronchiolitis [WHO-UHC] ✦ Diagnosis and management of measles without complications [WHO-UHC]	● Treatment for non-severe and severe pneumonia [WHO-UHC] ✦ Management of bronchiolitis [WHO-UHC] ✦ Management of measles with complications [WHO-UHC]	→ ✦ Management of acute ventilatory failure [DCP-E]	- X-PHU Case management of bronchiolitis (WHO-UHC) - X-HC Management of severe acute exacerbations of asthma and chronic obstructive pulmonary disease (WHO-UHC)
● Provide supportive treatment for common colds	● Provide supportive treatment for common colds	✦ Treat acute pharyngitis to prevent rheumatic fever [DCP-E]			
Gastrointestinal infections					
✦ Promote hand washing, safe disposal of faeces, safe water, household sanitation practices	● Promote effective sanitation practices ● Provide rehydration with ORS for uncomplicated gastroenteritis ● Refer severe cases of dehydration for inpatient management ● Treat with zinc for 10 – 14 days	● Provide antiprotazoal therapies ● Provide antibiotics for complicated gastroenteritis ● Provide case management and reporting for acute watery diarrhoea [WHO-UHC]	● Provide antiprotazoal therapies ● Provide antibiotics for complicated gastroenteritis ● Provide case management and reporting for acute watery diarrhoea [WHO-UHC]		X-PHC Assessment of diverticulitis (WHO-UHC)
Other infections					
	✦ Early recognition and referral of common infections	✦ Early recognition, empiric management and referral of CNS infections ✦ Manage ear infections [WHO-UHC]	● Management of CNS infections	● Management of CNS infections	
		● Management of eye infections (WHO-UHC)	● Management of eye infections (WHO-UHC)		
✦ Oral health promotion [DCP-P]	● Referral of dental problems	✦ Oral health promotion and treatment [DCP-P] ✦ Dental extraction [DCP-E] ● Drainage of dental abscess [DCP-E] ● Referral of dental problems	✦ Dental extraction [DCP-E] ✦ Drainage of dental abscess [DCP-E] ✦ Manage dental emergencies		
✦ Provide early recognition and referral for urgent soft tissue infections	● Provide treatment for common skin infections ✦ Provide early recognition and referral for urgent soft tissue conditions	✦ Provide early recognition and initial management for urgent soft tissue conditions ✦ Provide incision and drainage of superficial abscess [DCP-E]	✦ Management of urgent soft tissue conditions, including necrotizing infections		
Outbreak surveillance					

✦ Provide public information programmes for infectious disease outbreaks [DCP-E] ✦ Identify high risk individuals in infectious disease outbreaks (case-finding) [DCP-E]	✦ Identify high risk individuals in infectious disease outbreaks (case-finding) [DCP-E] ✦ Provide weekly reporting (and daily during outbreaks) of suspect cases by health facilities as per WHO protocol	✦ Provide rapid surge of service delivery capacity under provincial/regional coordination [WHO-UHC] ✦ Utilize standardized response to epidemics for diseases of public health concern ✦ Ensure epidemic preparedness with training, stocks, networks, and supply lines ✦ Utilize communication and coordination plans ✦ Utilize preparedness plans that include isolation areas in health facilities with dedicated latrines, water supply and waste disposal ✦ Provide public awareness campaigns ✦ Provide targeted vaccination for select diseases	✦ Provide rapid surge of service delivery capacity under provincial/regional coordination [WHO-UHC] ✦ Provide and implement Mass Casualty Management protocols [WHO-UHC] ✦ Utilize surge triage with validated instrument [WHO-UHC] ✦ Provide case-based syndromic surveillance in emergency units [WHO-UHC] ✦ Provide comprehensive facility outbreak preparedness plans [DCP-E]	✦ Provide outbreak preparedness, surveillance, and response [WHO-UHC] ✦ Provide health worker training and simulation exercises for outbreak events		
Rehabilitation						
		✦ Provide and train patients in the use of basic assistive products [DCP-E]	✦ Provide and train patients in the use of basic assistive products [DCP-E] ✦ Provide exercise programs for common musculoskeletal disorders [DCP-E]	✦ Provide rehabilitation for motor functions [WHO-UHC] ✦ Provide rehabilitation for voice and speech functions [WHO-UHC] ✦ Provide rehabilitation for swallowing [WHO-UHC] ✦ Provide rehabilitation for self care [WHO-UHC]		- X-Identification of people with disabilities and referral to nearest services for physical rehabilitation - X-Physical mobilization and strengthening activities following acute injury or illness and guidance in use of rehabilitation equipment e.g. crutches, wheelchair etc - X-HC/RHC Training, retraining, and exercise programs that address musculoskeletal injuries and disorders, including chronic low back and neck pain [DCP-E]