6

Developing Somalia's Essential Package of Health Services: An Integrated People-Centered Approach

Mohamed A. Jama, Abdullahi A. Ismail, Ibrahim M. Nur, Nur A. Mohamud, Teri Reynolds, Reza Majdzaheh, John Fogarty, Andre Griekspoor, Neil Thalagala, Marina Madeo, Sk Md Mamunur Rahman Malik, and Fawziya A. Nur

ABSTRACT

Somalia has a universal health service coverage index of 27 out of 100—significantly below the regional average of 57. Nonetheless, the country has committed to achieving progress toward universal health coverage targets by redesigning its essential package of health services (EPHS). The services package, tailored to address disparities in access to health services among communities including those in security-compromised areas, represents the minimum possible but has the capacity to respond to the most critical health challenges faced by the Somali people. Its integrated, people-centered approach is a key characteristic of this services package.

INTRODUCTION

Somalia has emerged from a long period of conflict that has rendered fragile the country's health system and continues to affect the delivery of health services. Over the past decade, the Federal Ministry of Health and Human Services (MoHHS) has embarked on a process of rebuilding and transforming the country's health system with the goal of improving access to essential health services for all and achieving universal health coverage (UHC) by 2030.[1]

Somalia is in the initial stages of a demographic and epidemiological transition, characterized by relatively declining maternal, infant, and child mortality and

by life expectancy at birth that has reached 56.5 years (54.0 for men and 59.2 for women).[2] Despite a decline in the maternal mortality rate from an estimated 732 deaths per 100,000 live births in 2015 to 692 per 100,000 live births in 2020, the ratio remains alarmingly high (UN MMEIG 2020).[3] Similarly, the infant mortality rate fell from 86 deaths per 1,000 live births in 2014 to 75 deaths per 1,000 in 2019, yet it remains well above that of many neighboring countries.[4] Somalia lags behind its neighbors in coverage, as indicated by its low UHC service coverage index score of 27 out of 100, compared to the regional average of 57 (WHO and World Bank 2023).

The health sector in Somalia faces significant financial challenges, with public spending estimated at a mere 17 percent of total health expenditure. A combination of private spending and donor support accounts for most of the country's health expenditure, at 43 percent and 40 percent, respectively, of total health spending (GBD Health Financing Collaborator Network 2020). With per capita gross domestic product of US$445 in 2021, Somalia's economy relies heavily on remittances and international aid, with very limited domestic public financing options.

Added to those challenges is Somalia's growing population. Its population was estimated at 15.6 million in 2019, and its total fertility rate averaged 6.9 children per woman.[5] Individuals under 15 years of age make up nearly half of the population, and people under 30 make up three-quarters.[6] The high growth rate of 3 percent poses significant challenges for the health sector to keep up with the population.

Implementation from 2010 to 2019

The first EPHS, developed in 2009, was designed to address high rates of mortality and morbidity and to serve as the prime mechanism for an organized and standardized strategic service provision by directing available resources to EPHS implementation (UNICEF 2009). Uptake increased when complementary demand creation, household visiting, and outreach clinics initiatives were integrated into EPHS delivery. Those initiatives were accompanied by considerable innovations in the models of community care, with community health workers in primary health units and female health workers conducting household visits, and patient referrals, with creative use of mobile phone technology for data collection and for reporting.

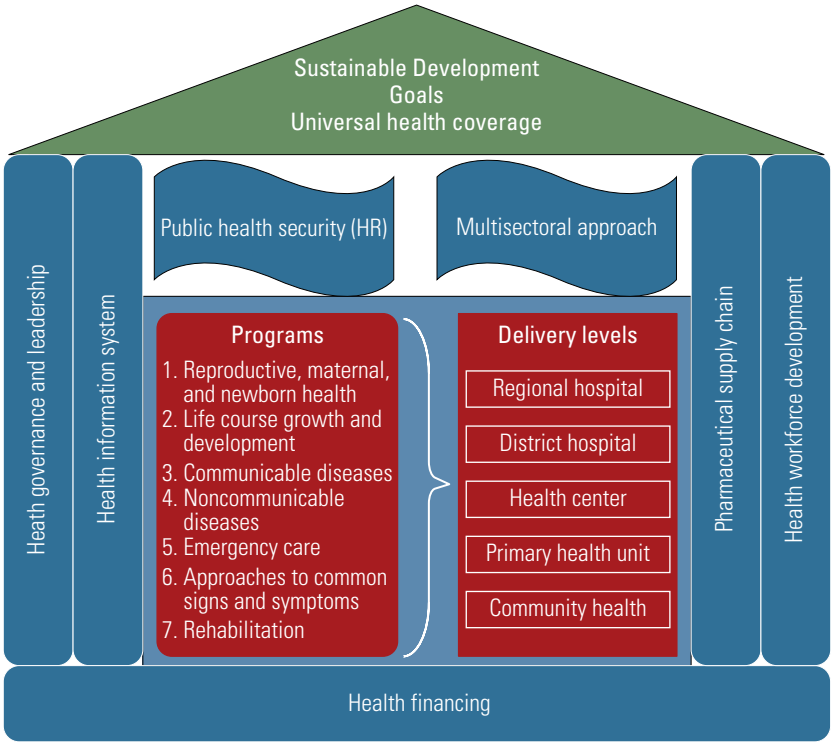
Between 2010 and 2019, the EPHS covered an estimated 45 percent of the population in 47 out of 98 districts in the country (MoHHS 2020). Those substantial gains in service provision saved lives, notwithstanding the challenges encountered. Significant improvements in the capacity of regional and district health management teams were observed. The institutionalization of regular supervision using management tools such as score cards and checklists, quality assessment tools, procurement and supply chain management tools, and human resource management

tools substantially enhanced the implementation of the services package. Even with those positive impacts, availability of the full package was limited by significant funding gaps, weak health system capacity, and lack of access to some areas due to security challenges. Furthermore, lack of resources meant that interventions in noncommunicable diseases, mental health, and trauma care remained unfunded despite the increasing disease burden.

Political Commitment as a Means for Achieving UHC

A change of government in February 2017 ushered in a renewed commitment to social and economic development as elaborated in Somalia's ninth National Development Plan (MoP 2020). Following the development of the Second Phase Health Sector Strategic Plan of 2017, which defined key priorities of the sector necessary for increasing access to health services, and the UHC road map of 2018, Somalia planned to revise the 2009 EPHS (MoHHS 2017, 2018)—figure 6.1. It made that decision on the basis of extensive review of experience, available evidence, the disease burden, the country context, and the lessons learned from the design and the fragmented and inefficient implementation of the 2009 EPHS. The decision was also informed by the improving political and security situation, and the reengagement with the World Bank, which opened new funding opportunities for the health sector.

Figure 6.1 Somalia's Road Map to Universal Health Coverage 2030



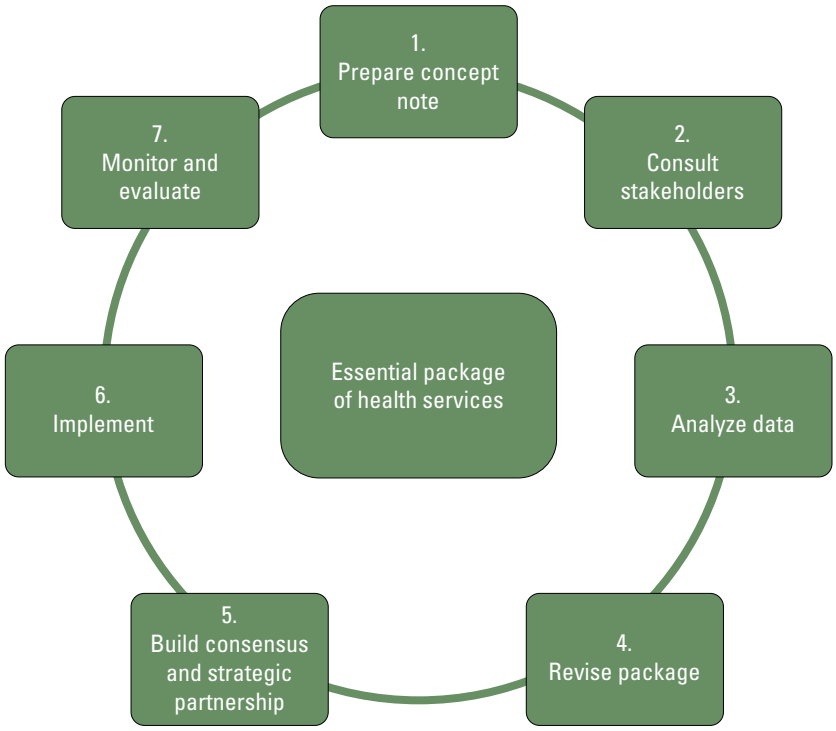
Source: Original figure created for this publication.

Despite that commitment, the EPHS revision process faced challenges because key stakeholders held different positions regarding the prioritization and financing of the package, the geographic scope and population coverage, and the delivery model. The situation necessitated an intensive policy dialogue to build consensus on the breadth of coverage and services in the package, which took 18 months to finalize.

THE EPHS REVISION PROCESS

As the first step of a more comprehensive plan for moving toward UHC, stakeholders made a collective decision to revise the services package in Somalia. A concept note was developed, and a multidisciplinary team constituted to lead the revision process (refer to figure 6.2 for the steps of the process).

Figure 6.2 Steps in Somalia's 2020 EPHS Revision Process



Source: MoHHS 2018.

Note: EPHS = essential package of health services.

Ownership and Governance

The decentralized management of Somalia's health care system necessitates the close collaboration and leadership of the subnational health management teams that play critical roles in planning, organizing, and implementing the EPHS at district and community levels. Somalia's revision process of the EPHS exemplified the power of building consensus and fostering collaboration among stakeholders. It entailed inclusive and in-depth discussions with all

stakeholders, culminating in a harmonious agreement on the sequencing and scope of the package. That collective endeavor ensured the seamless and successful rollout of the revised EPHS, even amid resource constraints, significantly advancing the health care landscape in Somalia. Certain health services were thoughtfully prioritized for public accessibility, focusing on financing from available domestic and external resources. The dedication to equitable access extended to nomadic and security-compromised areas of the country, underscoring a solid commitment to enhancing health care accessibility and equity for all Somalis.

Somalia's heavy reliance on donor funding comes with disproportionate influence of development partners. That influence can potentially undermine country ownership and erode the principles agreed on in the 2005 Paris Declaration on Aid Effectiveness and the 2008 Accra Agenda for Action.[7] Nonetheless, development partners can play a pivotal role in shaping EPHS design and in strengthening the institutional capacity of the government in a way that strengthens the stewardship of the public sector and the delivery of homegrown solutions that are likely to succeed, instead of perpetuating past failed donor-driven solutions and approaches in many low-income countries (Noor 2022).

Stakeholder Consultation

Recognizing the need to address fragmented external aid, achieve synergy and alignment with national health priorities, and forge consensus on the prioritization and financing of highly cost-effective interventions that could address the leading causes of high mortality and morbidity in Somalia, MoHHS established an inclusive and participatory coordination structure and consultative process for the EPHS revision (Jama et al. 2023). The Federal MoHHS invited all key stakeholders to nominate representatives to a government-led task force, with members chosen for their technical expertise and knowledge of the health sector in Somalia. A concept note described the scope and purpose of the EPHS revision process, along with a timeline and the expected contribution to the different stages of the planning cycle, such as evidence generation (data collection and analysis), priority setting, implementation strategy, and monitoring and evaluation.

The resulting task force included representatives from MoHHS at the federal and state levels, the Ministry of Finance, civil society organizations, the private sector, academia, and development partners (the Canadian, German, Italian, and Swedish Embassies; Gavi, the Vaccine Alliance; the Global Financing Facility; the Global Fund; the UK Foreign, Commonwealth and Development Office; the United Nations Children's Fund and Population Fund; the World Bank; and the World Health Organization). The task force examined the adequacy of the components and scope of the 2009 EPHS against the burden of disease and the evolving health needs of the Somali people, actively soliciting, analyzing, and incorporating stakeholders' contributions and feedback early in the process.

Data Sources

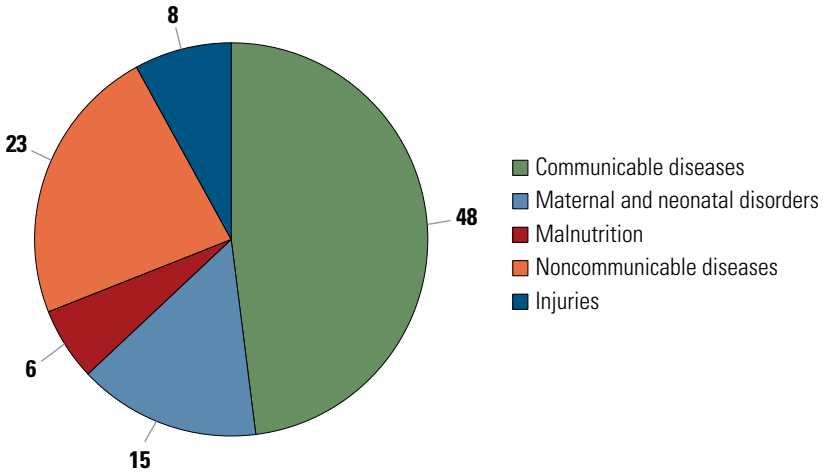
The Global Burden of Disease database[8] and national data were used to prioritize services to address diseases with the highest burden of mortality and disability. Semistructured interviews conducted with public health experts helped develop a preliminary list of conditions of public health concern and hazards related to emergencies. Common symptomatic presentations at the primary care level were identified and shared with a broader group of managers, experts, and service providers for feedback through a web-based platform.

Somalia's Health and Demographic Survey of 2020 provided data on maternal and child health indicators, including use of services and vaccination coverages.[9] Because of the lack of information on baseline coverage for some noncommunicable diseases, the analysis used an assumption of 5 percent. A study reviewed service provision data and included interviews with implementers to find gaps in the 2009 EPHS. Information from the third edition of *Disease Control Priorities* and other materials highlighted cost-effective interventions and assisted with service prioritization (Glassman, Giedion, and Smith 2017; Hall et al. 2018; Jamison et al. 2018; Reich 2016; Tan-Torres Edejer et al. 2003).

Summary of Analysis Findings

Communicable diseases account for 48 percent of disability-adjusted life years in Somalia (figure 6.3), Tuberculosis, meningitis, acute hepatitis, measles, and other respiratory and infectious diseases make up nearly half of the communicable disease burden.[10] The order of the other causes of disability-adjusted life years is communicable diseases, noncommunicable diseases, maternal and neonatal disorders, malnutrition, and injuries.

Figure 6.3 Percentages of Causes of Disability-Adjusted Life Years in Somalia



Source: Original figure based on data from Institute for Health Metrics and Evaluation, "Global Burden of Disease Study 2019 (GBD 2019) Data Resources," https://ghdx.healthdata.org/gbd-2019.

Priority-Setting Processes and Criteria Used

A deliberative process that accounted for people's health needs, economic realities, and societal preferences defined a set of evidence-informed, prioritized, individual, and population-based interventions including promotive, preventive, curative, rehabilitative, and palliative care and intersectoral actions. The guiding principles for the process highlighted consideration of (1) services that are likely to have the greatest impact on health outcomes, (2) services that are highly cost-effective and affordable within the available resources, and (3) services that can be scaled up and that give equal access to nomadic, rural, and urban populations.

Prioritization of the interventions took into account several important factors: (1) association with the high burden of disease; (2) cost-effectiveness information from the literature (Glassman et al. 2016; Glassman, Giedion, and Smith 2017; Tan-Torres Edejer et al. 2003; Waddington 2013) and from a generalized cost-effectiveness analysis for 106 proposed interventions given the limited data in the literature; and (3) the technical skills and infrastructure required for the interventions.

As a result of the priority-setting process, the 2020 EPHS is divided into a core package and an extended package. The core package constitutes a minimum service entitlement to be made available to most Somali people, whereas the extended package contains additional interventions to be progressively implemented when additional resources become available.

Scope and Content

The overarching goal of the revised EPHS was to achieve progressive expansion of and access to equitable, efficient, affordable, and quality essential health services, delivered as close to the communities they serve as possible—particularly nomadic, rural, and internally displaced populations. Certain elements of the EPHS design are specifically oriented to allow dynamic shifting of services to alternate delivery platforms and facilitate adaptation to different populations during implementation. The revision process was informed by several factors, including the evolving health needs of the Somali population, the gaps identified through a review of the 2009 EPHS, and the increasing strategic emphasis on progress toward UHC. Its overall objective was to develop an implementable package that responds to the priority health needs of the Somali people.

DESIGNING AN IMPLEMENTABLE PACKAGE

Development of the revised EPHS progressed from data to dialogue to decision-making underpinned by principles such as country values, inclusiveness, equity, effective collaboration, and partnership. Recognizing that it is the actual implementation of a package that results in effectiveness, key package design elements to support service delivery implementation included entries expressed as services rather than diseases, which supported translation to the delivery context, including monitoring and mapping of health worker competencies.

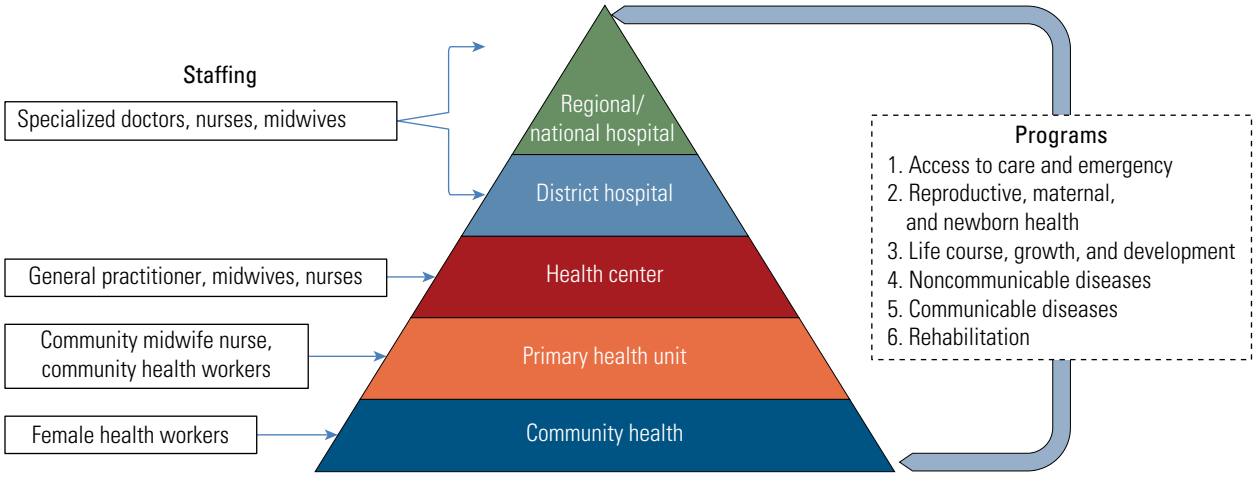
The task force used normative guidance from the third edition of *Disease Control Priorities* (Jamison et al. 2018) and the World Health Organization's UHC Compendium.[11] The task force adopted an integrated service delivery approach covering complementary elements including the response of the health system to people's demands, the continuum of care across delivery platforms, and a package design that supported implementation.

The task force adopted a rationalized architecture of interventions with consistent and nested levels of granularity for different needs. It formulated services with adequate detail and organized them to support mapping of relevant human and material resources required for implementation. This activity guided decisions about the appropriateness of the total list of services assigned to a given platform.

The structures of the package allowed for visual representation of the relationship of services across platforms (that is, related interventions were aligned across rows, and interdependent interventions were reviewed and prioritized together). The structure also supported mapping to integrated channels of service delivery.

A visual mechanism to indicate links to burden of disease was used and included a color coding system for services that addressed the top causes of death and disability. The mechanism allowed for ongoing consideration of that criterion as others were discussed. Arrows indicated progressive goals for implementation—both for the initial delivery platform and for the intended shift to the optimal delivery platform once health capacity is strengthened and funding becomes available. Figure 6.4 illustrates Somalia's health services pyramid.

Figure 6.4 The Five Delivery Platforms of Somalia's Health Care System



Source: Original figure based on MoHHS 2021a.

Emphasizing Integrated People-Centered Health Services

Somalia's EPHS 2020 was built on the notion that frontline health workers deliver care across a range of conditions based on the demands of people. People routinely seek care for symptoms (for example, cough or fever) rather than for diseases (for example, pneumonia or tuberculosis), and many of those symptoms and

syndromes are managed and even resolved without a specific diagnosis. The task force therefore highlighted the importance of including demand-driven services for common symptoms and syndromes to avoid distortion of services delivery based only on diseases and to ensure a package responsive to people's demands.

All interventions proposed were highly cost-effective and considered as a minimum set of services. The package was deemed affordable based on costing analysis, and none of the selected services was excluded from the list. During the implementation plan, however, a core list of services was selected for initial implementation; an expanded list of interventions will be added to ensure progressive realization of services.

Costing and Impact Analysis

Somalia's 2020 EPHS contains 412 interventions aggregated into six program areas:

- Emergency care and approaches to common signs and symptoms
- Reproductive, maternal, and newborn health
- Life course, growth, and development
- Noncommunicable diseases
- Communicable diseases
- Rehabilitation and palliative care.

The cost of the interventions was estimated using the OneHealth Tool (OHT).[12] The costing exercise determined the impact of some interventions for which OHT impact data were available. The scope of cost estimates included the (1) cost of drugs and other supplies, (2) capital and recurrent costs of health institutions, (3) cost of remunerating health staff participating in EPHS implementation, (4) logistics costs, and (5) program costs.

OHT uses a three-step process to estimate drug and supply costs. First, it estimates potential numbers of patients/recipients of interventions based on user-defined target populations and intervention coverages. Second, it estimates the average cost of supplying drugs and other supplies of an intervention based on the user-defined treatment inputs, management protocols, and unit prices of drugs and other supply items. Third, it multiplies the number of patients/recipients of intervention by the average cost of managing a patient to produce the drugs and supply estimates of the intervention. That procedure was repeated for all interventions in the package throughout the costing period to obtain annual costs.

The proposed cost scenario did not envisage new construction of health facilities. Annualized capital costs of existing health facilities and the medical equipment and furniture attached to them were estimated as rehabilitation cost requirements. Estimates of the running costs of the facilities—electricity, water, and so on—were based on current reported expenditures. Relevant baseline and target numbers of infrastructures and respective cost parameters were obtained from MoHHS sources and entered into OHT for analysis.

Human resource costs were estimated using salary rates provided by MoHHS. Because the number of health workers would increase over time to fill staffing gaps

and meet facility-based standards, the costing analysis factored that increase into the human resource costs over the projection period. Because of data constraints, logistics costs were calculated as a percentage (25 percent) of drug and supply costs. However, human resource and infrastructure costs related to the regional drug supply stores were estimated using the actual parameters.

The analysis considered that creating an enabling environment would require certain types of activities. Consequently, it calculated (using the "quantity × price" approach) the cost of program activities related to (1) the adaptation of guidelines to suit the revised EPHS package; (2) in-service training related to the EPHS; (3) supervision of the EPHS implementation; (4) monitoring and evaluation, including the adaptation of the information system; and (5) health promotion and community mobilization. It enumerated the resource requirements of each activity according to the nature of the activity and past program experiences in Somalia for similar activities, obtaining that information and various unit costs from implementation partners.

The impact analysis of EPHS scale-up in Somalia used OHT impact modules and was based on scaling up the interventions from baseline population coverage of 45 percent to 80 percent coverage in 2030. Looking at the key resources required, the cost analysis suggested a gradual scale-up of the implementation of the 2020 EPHS interventions across the five delivery platforms. At the baseline (2020) with existing coverage, EPHS implementation would cost US$105 million. That cost would gradually increase to an estimated US$626 million in 2030 at universal coverage (table 6.1). The 2030 figure reflects an estimated per capita expenditure of US$33, with the largest portion of the cost increase attributed to the expansion of priority intervention coverage for people currently not covered and to account for projected population growth.

Table 6.1 Costs of Implementing Somalia's EPHS 2020, by Cost Item, 2020–30
US dollars, million

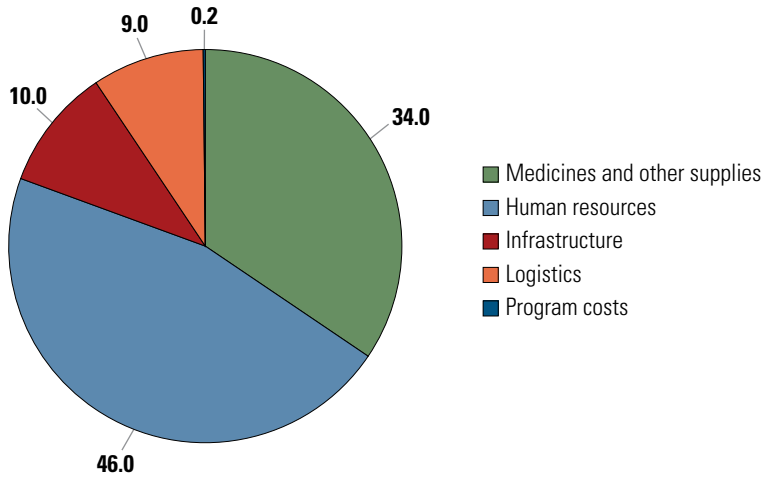
Cost item	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total human resources	48.2	54.1	60.2	66.6	73.2	80.0	87.2	94.6	102.3	110.3	118.6	895.3
Total infrastructure, all facilities	10.5	10.7	11.0	11.2	11.4	11.7	12.0	12.2	12.5	12.8	13.0	128.9
Infrastructure rehabilitation	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	53.6
Maintenance and operations, all existing facilities	6.1	6.3	6.4	6.5	6.7	6.8	7.0	7.1	7.3	7.5	7.6	75.3
Total medicines and supplies	36.0	43.3	54.3	68.2	85.7	107.8	136.7	174.4	223.9	288.9	375.1	1,594.3
Total logistics	9.6	11.7	14.8	18.9	24.1	30.7	39.6	51.5	67.4	88.6	117.3	474.2
Warehouse	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.1
Logistics workers	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	6.5
Drug transportation	9.0	11.1	14.2	18.2	23.4	30.1	38.9	50.8	66.6	87.9	116.6	466.6
Total program	0.2	1.5	1.1	1.3	1.2	1.3	1.3	1.3	1.3	1.4	1.5	13.3
Grand total	104.6	121.3	141.5	166.1	195.6	231.6	276.7	334.1	407.3	501.9	625.5	3,106.0

Source: Adapted from table 6 in MoHHS 2021a.

Note: EPHS = Essential Package of Health Services.

The largest share of the EPHS implementation cost is attributed to human resources at 46 percent, followed by medicines and other supplies at 34 percent (figure 6.5). Infrastructure and logistics costs account for 10 percent and 9 percent, respectively. The distribution of those resources is similar to results identified in a 2014 costing study of the EPHS in Somalia (Blaakman 2014). Analysis of EPHS implementation costs by facility type shows that community, primary health unit, and health center levels of care would consume nearly 80 percent of EPHS implementation costs (figure 6.6).

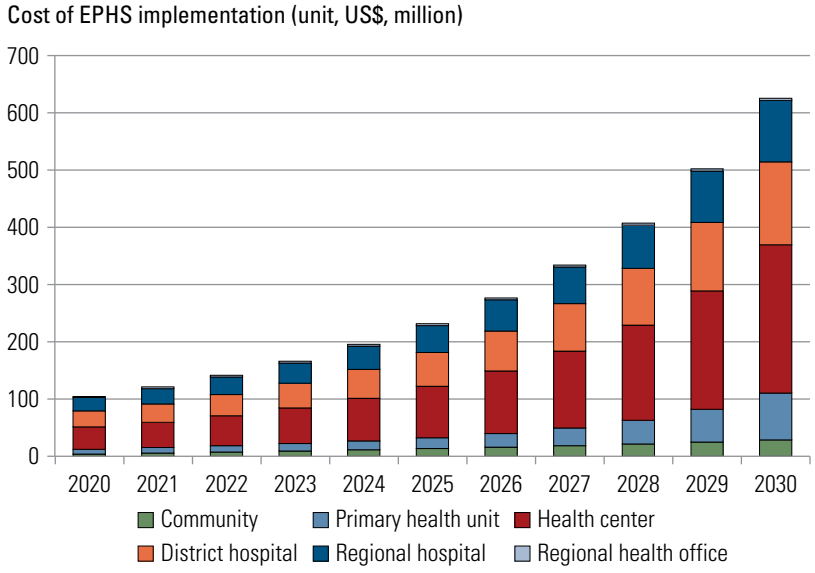
Figure 6.5 Percent of Estimated Baseline Cost of EPHS, by Cost Component, 2020



Source: Adapted from figure 3 in MoHHS 2021a.

Note: EPHS = essential package of health services.

Figure 6.6 Total Cost of EPHS Implementation, by Type of Facility, Somalia, 2020–2030



Source: Adapted from figure 7 in MoHHS 2021a.

Note: EPHS = Essential package of health services.

The revised EPHS was designed to be flexible and adaptable to resource constraints, with core and extended scenarios to support progressive realization and future expansion of the services package. The design allows for the need to ramp up capacity and for flexible operationalization for different contexts that may have distinct platforms or constraints, including geographical or security constraints affecting access.

Linking with Monitoring and Evaluation

MoHHS adopted a right-to-health approach with an emphasis on ensuring access for the most vulnerable. The EPHS sets the direction for the development of an implementation plan that progressively adds more services of increased quality made available to more people.

At the time of the EPHS design, the country did not yet have a unified and standardized national Health Information Management System, or a harmonized list of indicators. The EPHS implementation plan sets measurable objectives that can be monitored with a well-established information system. It gives special attention to sex-disaggregated data and data on vulnerable populations. It also includes mechanisms designed to enhance access to EPHS services, including an integrated disease surveillance system and complaint mechanisms.

The EPHS design process was used as the entry point to define the purpose and scope of the system. It supports an area-based, district health management approach with supportive supervision as a cornerstone for implementing the package and improving overall accountability. Users of the information include facility managers who oversee quality improvement processes, health management teams that manage EPHS implementation and plan services based on population health needs, and national authorities who report achievements, increase accountability, and design incentives.

Routine data collection systems, complemented by surveys and community-based surveillance systems and mechanisms to collect qualitative information, constitute the basis of an integrated health information system (table 6.2). District Health Information System 2 (DHIS2),[13] already introduced in Somalia, is used to calculate a range of key performance indicators that monitor trends in outputs, use, and coverage such as the number of outpatient department visits (per person per year), proportion of births attended by skilled health personnel, or immunization coverage levels.

The Integrated Disease Surveillance and Response system complements the Routine Health Information System collected through DHIS2 to manage alerts, investigations, and response to potential epidemics. The system has defined indicators, including timeliness and completeness of the reporting, and investigations done within 48 hours build on the experience of the countries in the region (Fall et al. 2019).

A national list and mapping of all public and private health facilities obtained from Somalia's 2016 Service Availability and Readiness Assessment Survey and the Health Resources and Services Availability Monitoring System allow regular updating of facilities' functionality to support the humanitarian program (MoHHS 2016).[14] A standard list of key indicators was developed to monitor the number of health facilities offering specific services per 10,000 population and meeting minimum service standards based on tracer criteria for specific services, the percentage of the population living within a 5-kilometer radius or one hour's travel to a health facility, and the total number of beds per 10,000 population.[15]

Table 6.2 Overview of Data Sources Used to Improve Data Completeness and Quality for Somalia's 2020 EPHS

	Facility-based routine information and data			Household surveys	
M&E domain	**RHIS**	**IDSR**	**Facility mapping**	**SHDS**	**Expenditure, health-seeking behavior, and barriers**
Availability of package	✓		✓	✓	✓
Provider performance	✓				
Quality of services					
Use and barriers				✓	✓
Preparedness		✓			
Patient satisfaction				✓	
Service coverage	✓		✓	✓	✓
Financial protection					✓
Burden of disease	✓			✓	

Source: Original table developed for this publication.

Note: EPHS = essential package of health services; IDSR = Integrated Disease Surveillance and Response; M&E = monitoring and evaluation; RHIS = Routine Health Information System; SHDS = Somalia Health and Demographic Survey.

The data sources and indicators generated through those systems are integrated in comprehensive district and regional dashboards. Dashboards include indicators on service availability, their effective use, unmet needs, service quality, and outcome measures necessary for monitoring and evaluating the EPHS and quality of services and their impact. For accountability, the implementation strategy includes independent monitoring and evaluation by a third-party monitoring agency and a complaint resolution mechanism so that people can receive support in reaching a solution to problems.

Linking to Other Health System Functions

The EPHS translates the Second Phase Health Sector Strategic Plan of 2017 and the road map to UHC into an implementable package to address the significant gaps in service delivery (MoHHS 2017, 2018). The EPHS also serves as the foundation for improving the overall effectiveness of the health system's performance. The policy options elaborated in the revised Health Sector Strategic Plan of 2022 guide the health system strengthening strategy (MoHHS 2022).

Implementation of the EPHS has revealed a critical shortage and the unequal distribution of health workers, particularly in rural and nomadic communities. Those problems have led to a review of human resources for health, which identified priority areas for action related to production and deployment of critical midlevel health workers, including, but not limited to, midwives, nurses, and community health workers (MoHHS 2021b). Other reforms carried out by the government to ensure the delivery of quality health services to the Somali population include improving oversight and regulatory functions, and strengthening procurement and supply chain management, health financing, and public health management.

Strengthening Subnational Governance

Because regional and district health offices are key to ensuring successful implementation of the 2020 EPHS, regional and district health authorities have been tasked with ensuring that services are available and delivered effectively. Being close to the field, regional and district health offices are well positioned to hold providers accountable and to collect feedback on service delivery from users. They play a key role in informing policy makers on the need for package adjustments and delivery modalities, as well as in providing input on resource allocations in their districts.

District management teams serve as an interface with the community to generate demand and provide crucial oversight of resources to optimize service delivery, increase equity and efficiency, and improve how patients access and move through the health system. Those roles are defined in the revised EPHS (MoHHS 2021a).

Adapting the Package to Different Contexts to Foster the Humanitarian-Development Nexus

The design of the EPHS allows for a quick ramp-up of capacity as well as for flexible operationalization for different contexts that may have distinct platforms or constraints. Nevertheless, 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 to serve the population in the district. The package includes additional adaptations for nomadic populations to facilitate referral pathways and support transportation. Special considerations are applied for outreach and mobile facilities in insecure/limited accessibility areas.

Table 6.3 illustrates possible adaptations for district health and service delivery platforms in different operational contexts. Although some general benchmarks are proposed, they are adapted to local conditions. Adaptations are led by district health management teams responsible for assessing and managing the accessibility and functionality of the health facilities in their areas.

Table 6.3 Adapting Package Operationalization in Different Contexts, Somalia's 2020 EPHS

Context characteristics	Rural districts	Urban districts	Nomadic populations	Insecure and/or inaccessible areas
Operational context and local conditions	Lower population per district, with lower population density	Larger population per district, with higher population density	Populations that move across administrative boundaries of districts	Boundaries based on accessibility and security; areas served through humanitarian hubs
Assumption for adaptation	Local differences in population density need to be considered when planning locations for the facilities for upgrading the health network to progressively increase coverage of service availability based on 5 km distance and/or 1 hour travel time	More efficient to increase the capacity of one health center or district hospital to serve the catchment population within 5 km/1 hour travel, rather than rigidly adhering to the standards for rural contexts	For smaller nomadic populations, it is more efficient to invest in first aid and stabilization capacities of the community health worker, and transportation for referral	Referral pathways defined for each hub, whereby it may be desirable to upgrade a health center to district hospital or district hospital to regional hospital. Special consideration is given to support transportation to referral facilities
Community services	1 community health worker per 600–1,000 population	Same	Same	Same in accessible areas
Primary health unit	1 primary health unit per 7,500–10,000 population	Same	Same	Same in accessible areas
Health centers	1 health center per 20,000–30 000 population	1 health center per 30,000 to 50,0,000 population, with capacity adapted to catchment population within 5 km or 1 hour	Mobile clinic that follows the population, or flexible referral pathways to nearest health center with investment in transportation capacities within nomadic population	Mobile health and nutrition teams to provide services
District hospitals	1 district hospital per 120,000–150,000 population	1 district hospital per 150,000–300,000 population, with capacity adapted to catchment population within 5 km/1 hour	Flexible referral pathways to nearest district hospital, with investment in transportation capacities within nomadic population	District hospital in a town that serves as the humanitarian hub for a geographical area or upgrade to district hospital in the accessible area
Regional/ national hospital	Existing national, regional, or specialized hospitals			
Surge capacity or specialized treatment centers linked to acute or chronic emergencies	Temporary treatment centers in the event of epidemics, drought, or floods; nutrition rehabilitation units in the event of increased food insecurity. Additional temporary staff recruited for the duration of the increased health needs; in other cases, existing staff repurposed to temporary treatment centers. This adaptation inevitably affects the capacity to maintain services outlined in EPHS, requiring anticipation of further reprioritization in contingency plans to suspend temporarily noncritical services.			

Source: Original table based on MoHHS 2016.

Note: EPHS = essential package of health services; km = kilometers.

Linking to Service Delivery Reforms

The revised EPHS aims to address all high-burden conditions through simple, low-cost, high-impact interventions; establish demand-driven services to facilitate more accurate costing and integrated service delivery; link services to level of care; allow operationalization of 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.

Although the private sector plays a critical role in Somalia's health sector, it is largely concentrated in urban centers and focuses predominantly on clinical and surgical care. Somalia's private sector delivers an estimated 60 percent of health services and supplies 70 percent of medicines (Buckley, O'Neill, and Aden 2015). To realize the full potential of the private sector, the government is strengthening its regulatory bodies with the objective of ensuring the quality and safety of pharmaceuticals and medical devices (MoHHS 2021b).

Linking to Financing Mechanisms

During the EPHS revision process, Somalia encountered several challenges related to financial affordability, limited implementation capacity, and weak governance. Those challenges were compounded by the COVID-19 pandemic, which pressured the already-stretched service delivery capacity of the available resources to ensure the feasibility and success of the revised EPHS. Somalia has developed an investment case for the health sector as the main instrument to support transformation and financial reforms that can unlock and accelerate efforts to secure predictable financing for the delivery of the EPHS (MoHHS 2021c). Despite expectations for sustainable public financing in the long term, the short-term implementation of the EPHS will depend on a combination of domestic resources and sustainable and predictable foreign aid and private financing that can reduce the country's high out-of-pocket payments and their devastating impact on household income.

LIMITATIONS

Weak health system capacity, inconstant quality of care, data gaps and lack of financial information, limited analytical skills in economic evaluation and fiscal space analysis, and ensuring community consultation and institutionalization were some of the key challenges the EPHS revision process encountered. Although the Somalia Health and Demographic Survey of 2020 and the Global Burden of Disease database filled some of the data gaps, the absence of some critical data required the use of expert opinion, complemented by data extracted from other reports. In addition, to overcome the data gaps and fragmentation, the government developed an integrated Health Information Management System that uses a single digital platform—provided by DHIS2—for data collection, validation, and analysis. It has also deployed digital mobile solutions for data collection and reporting in remote areas.

LESSONS LEARNED

Achieving consensus on a prioritized, highly cost-effective package of health services that responds to the health needs of the people requires country preparation and

the establishment of a deliberative approach through structured coordination and an inclusive consultation process involving all stakeholders. Ensuring government ownership of EPHS design and implementation, and mapping potential financial resources available for EPHS service delivery, was an integral part of the EPHS development process and provided a clear road map for implementation.

National governments need to ensure that decision-making processes on package development are inclusive and participatory. Similarly, countries should also endeavor to achieve the target Abuja Declaration of 2001 by allocating sufficient domestic resources to the health sector and demonstrate value for money by improving transparency and accountability for results.

Implementation models must continue to prioritize the capacity of Regional and District Health Management Teams with supervision and integrated action planning and tracking at all levels. Similarly, expenditure tracking and strategic rationalization decisions need to be made annually by region and district to improve coverage (breadth) and to determine package size (depth).

The establishment of clear criteria supported by locally generated evidence on the prioritization of EPHS interventions is essential. Similarly, development of the package requires local capacity building for skills on burden of disease analysis, economic evaluation, and costing of the services packages.

The inclusion of implementation considerations and the ability to adapt the package to various local conditions as part of the design and organization of the EPHS facilitated the planning process of the district management teams. Similarly, the implementation of public administration reforms, including public financial management and establishment of functioning supply chain management, were deemed critical for the implementation of the package.

The establishment of a monitoring and evaluation mechanism, which includes the generation of evidence such as the UHC service index, was considered central for garnering the support of decision-makers and stakeholders.

Expanding the EPHS will require engagement of the private sector to enhance access to quality primary health care services. Similarly, the engagement of other sectors in the design of the package and the promotion of a multisectoral approach are necessary for tackling the social determinants of health.

ACKNOWLEDGMENTS

The authors express their gratitude to the Ministry of Health and Human Services of Somalia and the World Health Organization (WHO) for their invaluable assistance in improving the quality and completeness of the data used in this chapter. We also extend our thanks to the World Bank; the United Nations Children's Fund; and the Foreign, Commonwealth, and Development Office of the United Kingdom and Northern Ireland for their support and cooperation.

We are deeply grateful for the substantial contributions and suggestions from our colleagues in the Ministry of Health and Human Services at both the federal and state levels, as well as from colleagues at WHO and the World Bank country office.

In particular, we acknowledge our late friend and colleague, Dr. Peter Salama, executive director of WHO's Division for Universal Health Coverage – Life Course. Dr. Salama was a champion for global health equity, and his vision and unwavering commitment to delivering an effective, implementable package of health services in fragile and conflict settings, such as Somalia, were truly inspirational. Driven by his conviction and passion to serve populations in challenging circumstances, Dr. Salama, in collaboration with the Ministry of Health and Human Services of Somalia, brought together a team from WHO, the United Nations Children's Fund and Population Fund, the World Bank, bilateral donors, and civil society organizations in January 2020. That team initiated the design and implementation of a highly cost-effective package of health services in Somalia, which continues to save lives today. Dr. Salama was a great public health leader of our time. May his soul rest in eternal peace.

NOTES

1. One of the United Nations' Sustainable Development Goals; for more information, refer to United Nations, "The 17 Goals," https://sdgs.un.org/goals.
2. World Health Organization, "Global Health Observatory data repository," https://apps.who.int/gho/data/node.main.688?lang=en.
3. Also refer to the Somali National Data Archive, "Somali Health and Demographic and Survey 2020," https://apps.who.int/gho/data/node.main.688?lang=en (accessed July 10, 2022).
4. United Nations Children's Fund, "Country Profiles: Somalia," https://data.unicef.org/country/som/ (accessed December 22, 2021).
5. United Nations Population Fund, "World Population Dashboard: Somalia," https://www.unfpa.org/data/world-population/SO (accessed December 28, 2021).
6. Somali National Data Archive, "Somali Health and Demographic and Survey 2020."
7. Organisation for Economic Co-operation and Development, "Paris Declaration and Accra Agenda for Action," https://web-archive.oecd.org/temp/2021-08-02/73869-parisdeclarationandaccraagendaforaction.htm.
8. Institute for Health Metrics and Evaluation, "Global Burden of Disease Study 2019 (GBD 2019) Data Resources," https://ghdx.healthdata.org/gbd-2019.
9. Somali National Data Archive, "Somali Health and Demographic Survey 2020," https://microdata.nbs.gov.so/index.php/catalog/50.
10. Institute for Health Metrics and Evaluation, "Global Burden of Disease Study 2019."
11. World Health Organization, "UHC Compendium" (database), https://www.who.int/universal-health-coverage/compendium (accessed July 20, 2022).
12. Avenir Health, "OneHealth Tool," https://www.avenirhealth.org/software-onehealth.
13. For more information about DHIS2, refer to the University of Oslo's DHIS2 web page, https://dhis2.org.
14. World Health Organization, "Health Resources and Services Availability Monitoring System (HeRAMS)," https://www.who.int/initiatives/herams.
15. WHO, "AccessMod 5: Supporting Universal Health Coverage by Modelling Physical Accessibility to Health Care," https://www.accessmod.org.

REFERENCES

Blaakman A. 2014. "Cost Analysis of the Essential Package of Health Services (EPHS) in Somalia." HEART (Health & Education Advice & Resource Team), Oxford. https://assets.publishing.service.gov.uk/media/57a089e8e5274a27b2000305/Somalia-cost-analysis-of-the-essential-package-of-health-services-.pdf.

Buckley, J., L. O'Neill, and A. M. Aden. 2015. "Assessment of the Private Health Sector in Somaliland, Puntland and South Central." HEART (Health & Education Advice & Resource Team), Oxford. https://assets.publishing.service.gov.uk/media/57a0899bed915d622c0002e3/Assessment-of-the-Private-Health-Sector-in-Somaliland-Puntland-and-South-Central.pdf.

Fall, I. S., S. Rajatonirina, A. A. Yahaya, Y. Zabulon, P. Nsubuga, M. Nanyunja, J. Wamala, et al. 2019. "Integrated Disease Surveillance and Response (IDSR) Strategy: Current Status, Challenges and Perspectives for the Future in Africa." *BMJ Global Health* 4 (4): e001427. https://gh.bmj.com/content/4/4/e001427.

GBD (Global Burden of Disease) Health Financing Collaborator Network. 2020. "Health Sector Spending and Spending on HIV/AIDS, Tuberculosis, and Malaria, and Development Assistance for Health: Progress towards Sustainable Development Goal 3 (2020)." *The Lancet* 396 (10252): 693–724. https://doi.org/10.1016/S0140-6736(20)30608-5.

Glassman, A., U. Giedion, Y. Sakuma, and P. C. Smith. 2016. "Defining a Health Benefit Package: What Are the Necessary Processes?" *Health Systems & Reform* 2 (1): 39–50. https://doi.org/10.1080/23288604.2016.1124171.

Glassman, A., U. Giedion, and P. C. Smith. 2017. *What's In, What's Out? Designing Benefits for Universal Health Coverage*. Washington, DC: Center for Global Development. https://www.cgdev.org/publication/whats-in-whats-out-designing-benefits-universal-health-coverage.

Hall, W., I. Williams, N. Smith, M. Gold, J. Coast, L. Kapiriri, M. Danis, and C. Mitton. 2018. "Past, Present and Future Challenges in Health Care Priority Setting: Findings from an International Expert Survey." *Journal of Health Organization and Management* 32 (3): 444–62. https://doi.org/10.1108/JHOM-01-2018-0005.

Jama, M. A., R. Majdzadeh, T. Reynolds, I. M. Nur, A. A. Ismail, N. A. Mohamud, A. Griekspoor, et al. 2023. "Revising the Essential Package of Health Services through Stakeholder Alignment, Somalia." *Bulletin of the World Health Organization* 101 (11): 738–42. http://dx.doi.org/10.2471/BLT.23.289733.

Jamison, D. T., H. Gelband, S. Horton, P. Jha, R. Laxminarayan, C. N. Mock, and Rachel Nugent, eds. 2018. *Disease Control Priorities* (third edition), Volume 9, *Disease Control Priorities: Improving Health and Reducing Poverty.* Washington, DC: World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/527531512569346552/disease-control-priorities-improving-health-and-reducing-poverty.

MoHHS (Somalia, Ministry of Health and Human Services). 2016. "Service Availability and Readiness Assessment (SARA) of Somalia, 2016." Federal Government of Somalia, Mogadishu. https://moh.gov.so/so/pdfs/somalia-sara-report-2016/.

MoHHS (Somalia, Ministry of Health and Human Services). 2017. *Second Phase Health Sector Strategic Plan 2017–2021*. Mogadishu: Federal Government Somalia. https://www.somalimedicalarchives.org/media/attachments/2021/09/18/fgs-hssp-ii-2017-2021---final.pdf.

MoHHS (Somalia, Ministry of Health and Human Services). 2018. "Roadmap towards Universal Health Coverage in Somalia, 2019–23." Federal Government of Somalia, Mogadishu. https://extranet.who.int/countryplanningcycles/sites/default/files/country_docs/Somalia/final_draft_somali_roadmap_towards_uhc_2019-23-2.pdf.

MoHHS (Somalia, Ministry of Health and Human Services). 2020. "Implementation of the Somali EPHS 2008–2019." Report, Federal Government of Somalia, Mogadishu. https://moh.gov.so/so/wp-content/uploads/2024/08/Implementation-of-Somali-EPHS-2009-2019.-9-March-2020.pdf.

MoHHS (Somalia, Ministry of Health and Human Services of Somalia). 2021a. *Essential Package of Health Services (EPHS) Somalia, 2020*. Mogadishu: Federal Government of Somalia. https://reliefweb.int/report/somalia/essential-package-health-services-ephs-somalia-2020.

MoHHS (Somalia, Ministry of Health and Human Services). 2021b. "HRH Regulatory Landscape Mission Report September 30, 2021." Federal Government of Somalia, Mogadishu. https://moh.gov.so/so/pdfs/hrh-regulatory-landscape-mission-report_september-30-2021/.

MoHHS (Somalia, Ministry of Health and Human Services). 2021c. "Investment Case for the Somalia Health Sector, 2022–2027." Federal Government of Somalia, Mogadishu. https://moh.gov.so/en/wp-content/uploads/2022/11/Investment-Case-for-the-Somali-Helath-Sector.pdf.

MoHHS (Somalia, Ministry of Health and Human Services). 2022. *Somalia Health Sector Strategic Plan 2022–2026*. Mogadishu: Government of Somalia. https://moh.gov.so/so/wp-content/uploads/2022/11/Health-Sector-Strategy-Plan-III.pdf.

MoP (Somalia, Ministry of Planning, Investment and Economic Development). 2020. *Somalia National Development Plan 2020–2024*. Mogadishu: Federal Government of Somalia. https://mop.gov.so/national-development-plan/.

Noor, A. M. 2022. "Country Ownership in Global Health." *PLoS Global Public Health* 2 (2): e0000113. https://doi.org/10.1371/journal.pgph.0000113.

Reich, M. R. 2016. "Introduction to the PMAC 2016 Special Issue: 'Priority Setting for Universal Health Coverage.'" *Health Systems & Reform* 2 (1): 1–4. https://doi.org/10.1080/23288604.2016.1125258.

Tan-Torres Edejer, T., R. Baltussen, T. Adam, R. Hutubessy, A. Acharya, D. B. Evans, and C. J. L. Murray, eds. 2003. *Making Choices in Health: WHO Guide to Cost-Effectiveness Analysis*. Geneva: World Health Organization. https://iris.who.int/bitstream/handle/10665/42699/9241546018.pdf?sequence=1&isAllowed=y.

UNICEF (United Nations Children's Fund). 2009. "Essential Package of Health Services: Somalia 2009." Report 2, UNICEF. https://moh.gov.so/en/wp-content/uploads/2020/07/Essential-Package-of-Health-Services-2009.pdf.

UN MMEIG (United Nations Maternal Mortality Estimation Inter-Agency Group). 2020. *Trends in Maternal Mortality 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division*. Geneva: World Health Organization. https://www.who.int/publications-detail-redirect/9789241516488.

Waddington C. 2013. "Essential Health Packages: What Are They For? What Do They Change?" HLSP Institute, London. https://www.mottmac.com/download/file/6125?cultureId=127.

WHO (World Health Organization) and World Bank. 2023. *Tracking Universal Health Coverage: 2023 Global Monitoring Report*. Conference edition. Geneva: WHO and Washington, DC: World Bank. https://iris.who.int/bitstream/handle/10665/374059/9789240080379-eng.pdf?sequence=1.