

Somali

Service Availability and
Readiness Assessment
2016

Summary Report

Somali Service Availability and Readiness Assessment

2016 Report

Somali Health Authorities

World Health Organization

2016

Foreword

TBD by the Minister of Health and Labor

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Abbreviations and acronyms

ACT	Artemisinin Combination Therapy (against malaria)
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARI	Acute Respiratory Infection
ARV	Antiretroviral
BCG	Bacillus Calmette-Guerin
BEmOC	Basic Emergency Obstetric Care
CEmOC	Comprehensive Emergency Obstetric Care
CHW	Community Health Worker
CRD	Chronic Respiratory Disease
CS	Caesarian Section
CSPPro	Census and Survey Processing System
CVD	Cardiovascular Disease
DARS	Data and Research Solutions
DPT	Diphtheria Pertussis Tetanus
EmOC	Emergency Obstetric Care
EPHS	Essential Package of Health Services
EPI	Expanded Programme of Immunization
FP/BS	Family Planning/Birth Spacing
GAVI	Global Alliance for Vaccines and Immunization
GIS	Geographic Information Systems
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
HIV	Human Immuno-deficiency Virus
HMIS	Health Management Information System
HSSP	Health Sector Strategic Plan
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
IPT	Intermittent Preventive Therapy
ITN	Insecticide Treated Net
IUD	Intrauterine Device
JHNP	Joint Health and Nutrition Programme
MICS	Multiple Indicator Cluster Survey
MDG	Millennium Development Goals
MMR	Maternal Mortality Rate
MOH	Ministry of Health
NCD	Non-Communicable Diseases
NGO	Non-Governmental Organization
OECD	Organization for Economic Co-operation and Development
ORS	Oral Rehydration Solution
PHC	Primary Health Care
PLWHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother-to-Child Transmission
SARA	Service Availability and Readiness Assessment

STI	Sexually Transmitted Infection
TB	Tuberculosis
TOT	Training of Trainers
U5MR	Under-Five Mortality Rate
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Executive summary

The 2016 Service Availability and Readiness Assessment (SARA) for the Somali health sector was conducted to assess the current status of health infrastructure, service delivery and system resources in the country. This includes an overview of the availability of human resources, supply-chain system, technologies, service utilization and facilities' readiness to provide key health services.

A census of all health facilities was conducted with a total of 1074 facilities identified for inclusion in the survey. Of the 1074 facilities identified in the Master Facility List, 106 facilities were found to be non-operational and 169 were non-accessible. Therefore the SARA dataset includes a total of 799 operational and accessible health facilities.

The SARA assessment, being the first of its kind, was a key milestone for the health sector and provides significant information on the state of the health system and general service availability (e.g. density of health facilities and hospital beds, core health workers, service utilization), as well as the readiness of the facilities to provide an adequate level of services (measured by the availability of trained staff, diagnostics, equipment and medicines), both for general health services and for specific key health interventions (e.g. services for maternal health, neonatal health, child health, infectious diseases, and non-communicable diseases).

Overall, the availability of general service items in Somalia was low, and was particularly low for essential medicines. It was better in hospitals than in other facility types, and generally better in NGO than in government facilities. Likewise, service availability was generally better in urban than in rural areas.

General service availability

General Service Availability refers to the physical presence of the delivery of services and encompasses three domains of tracer indicators: health infrastructure, core health personnel and service utilization. General Service Availability is described by an index using the three areas of tracer indicators. The SARA survey revealed that the vast majority of regions are under-performing when compared to the global targets for each of the General Service Availability indicators. In addition, nationally none of the General Service Availability targets have been met and there is a large gap between current levels of service availability and suggested global targets. Nationally, there is less than 1 health facility per 10,000 population (0.76 facilities per 10,000 population), which indicates the country is 38% of the way towards achieving the facility density target of two health facilities per 10,000 population. In other words, Somalia has one health facility, regardless of level, for 13,158 thousand people. A national inpatient bed density of 5.34 indicates the country is 21% of the way towards achieving the inpatient bed density target of 25 inpatient beds per 10,000 population. Similarly, the national maternity bed density of 2.55 indicates that the country is 25% of the way toward achieving the maternity bed density target of 10 maternity beds per 1,000 pregnant women. Results from the health workforce domain show that nationally there are 4.28 core health workers per 10,000 population indicating that the country is 19% of the way towards achieving the health workforce density target of 23 core health workers per 10,000 population. In looking at the last domain, health service utilization, indicators demonstrate poor availability and access to health services in Somalia. Nationally, Somalia is 5% of the way towards achieving the outpatients visit target and 8% of the way toward achieving the hospital discharge target (10 per 100 population per year). When examining the areas of infrastructure, health workforce, and service utilization together, the overall General Service Availability index shows that on average, the country is only 18% of the way towards achieving the General Service Availability target.

General service readiness

General Service Readiness refers to the overall capacity of health facilities to provide general health services. It measures the availability of items necessary to provide basic services within the following five aspects: basic amenities, basic equipment, standard precautions for infection prevention, diagnostic capacity, and essential medicines. Across these domains, on average, overall general service readiness in Somalia was found to be 39%. In other words, of all the items that were considered particularly important for providing general services and that were enquired about during the survey, facilities in Somalia had on average only 39% of them.

Basic amenities

Basic amenities include power, improved water source, room with privacy, adequate sanitation facilities, communication equipment, access to computer with internet, and emergency transportation. On average, facilities had 42% of the items of basic amenities items that were enquired about. Hospitals were found to be better equipped than other facility types. Basic amenities were generally more available in non-government than in government facilities, and non-governmental facilities showed higher availability of items compared to governmental facilities, with the exception of communication equipment. On average, half of the basic amenities items were available among urban facilities, while less than one third were available in rural facilities. The availability of items of basic amenities was higher in urban than in rural facilities.

Basic equipment

Assessment of the availability of basic equipment was based on the presence of the following items: includes blood pressure machine and cuff, stethoscope, adult scale, infant scale, child scale, thermometer, light source, and neonatal bag and mask. On average, facilities had 58% of basic equipment items available. Hospitals had the highest availability of basic equipment items of all facility types, while health posts had the lowest availability of basic equipment items. Non-governmental facilities were found to have higher mean availability of basic equipment items compared to governmental facilities. Urban facilities reported greater availability of each of the 6 basic equipment tracer items compared to rural facilities.

Standard precautions for infection prevention

Assessment of the availability of standard precautions for infection prevention was based on the presence of the following items: sterilization equipment, safe disposal of sharps and infectious wastes, sharps box, waste receptacle, disposable syringes, disinfectant, hand-washing soap, alcohol based hand rub, latex gloves, masks, gowns, eye protection, and guidelines. On average, facilities had 62% of standard precautions items available. Hospitals had the highest availability of standard precautions items of all facility types, while health posts had the lowest availability of standard precautions items. Non-governmental facilities were found to have had higher mean availability of standard precautions items compared to governmental facilities. Urban facilities had greater availability of each of standard precautions tracer items compared to rural facilities.

Diagnostic capacity

Diagnostic capacity includes the ability to conduct the following tests: HIV RDT, hemoglobin, malaria RDT or smear, TB microscopy, blood glucose, syphilis RDT, general microscopy, urine pregnancy test, urine dipstick, DBS collection, and ALT and creatinine. On average, facilities were able to perform 19% of the basic diagnostic tests. As seen across other general service readiness

domains, diagnostic capacity was highest among hospitals and lowest among health posts. The availability of diagnostic tests was similar in government facilities compared to non-governmental facilities. Results also showed disparities between diagnostic capacity found in urban and rural facilities.

Essential medicines

Assessment of the availability of essential medicines was based on the presence of medicines that were considered to be particularly important and that were enquired about during the survey. The essential medicines domain is comprised of twenty essential medicines including amitriptyline tablet, amlodipine tablet or alternative calcium channel blocker, amoxicillin syrup/suspension/dispersible tablet, amoxicillin tablet, ampicillin injection, beclometasone inhaler, ceftriaxone injection, enalapril tablet or alternative ace inhibitor, fluoxetine tablet, gentamicin injection, glibenclamide tablet, ibuprofen tablet, insulin regular injection, metformin tablet, omeprazole tablet or alternative, oral rehydration solution, paracetamol tablet, salbutamol inhaler, simvastatin tablet or other statin, and zinc sulphate tablet. On average, facilities had 15% of the essential medicines. Hospitals displayed the highest essential medicines availability compared to all other facility types. There was no difference found in the mean availability of essential medicines between non-governmental and governmental facilities. As found with the other indicators of basic service readiness, mean availability of essential medicines was much higher among facilities located in urban areas compared to rural areas.

Maternal, neonatal, and child health services

For each service, the percentage of facilities offering the service was computed as a measure of the availability of the service. In addition, for facilities offering the service, readiness to provide the service was assessed based on the presence of a number of tracer items in the following domains:

- Guidelines and trained staff
- Equipment
- Diagnostic capacity
- Medicines and commodities

Family planning/birth spacing

Countrywide, less than a third of all facilities surveyed (28%) reported that they offered family planning/birth spacing services. Hospitals were most likely to offer this service compared to other facility types. Governmental facilities, and those located in urban areas, have greater availability of family planning/birth spacing services compared to non-governmental facilities and facilities located in rural areas. Overall readiness to provide family planning/birth spacing services was calculated at 55%, indicating that on average, facilities had about half of the 7 tracer items needed and enquired about for this service.

Antenatal care

Nationally, 66% of all facilities said they offered antenatal care (ANC) services. ANC services were most available in health centers and referral health centers compared to other facility types. Non-governmental facilities were slightly more likely to offer ANC services compared to governmental facilities and ANC services were more available in urban areas compared to rural areas. On average, facilities in Somalia that reported the availability of ANC had only 5 of the 11 items (45%) that were enquired about during the survey.

Basic emergency obstetric and newborn care

Fewer than half of facilities (46%) reported that they offered normal delivery services, with slightly more NGO facilities reporting the availability of delivery services than public facilities. The percentage of non-governmental facilities offering obstetric signal functions was slightly higher than government facilities in half of the categories of services (parenteral administration of antibiotics, assisted vaginal delivery, manual removal of retained products). Facilities located in urban areas were more likely to report the availability of offer obstetric and newborn signal functions and newborn signal functions compared to than facilities located in rural areas. Facilities that reported the availability of BEmOC services had only a subset of the items that were considered to be particularly important for offering BEmOC services and that were enquired about during the survey, with on average only 53% of the items available.

Comprehensive emergency obstetric care

Comprehensive emergency obstetric services were quite rare in Somalia, with only 37% of the hospitals and 1% of other facilities reporting that they offered the service. Hospitals were much more likely to offer comprehensive obstetric care services compared to other health facilities. Urban and rural disparities were evident, with facilities located in urban areas much more likely to offer CEmOC services across all categories. Facilities that reported the availability of CEmOC services had only a subset of the items that were considered to be particularly important for offering CEmOC services and that were enquired about during the survey, with on average only 20% of the items available.

Child immunization

Just under half of all the facilities in Somalia reported that they offered routine childhood immunization. The vast majority of referral health centers and health centers offered child immunization services. Health centers were found to be more likely to offer frequent (daily) outreach services for child immunization compared to other facility types. A greater percentage of non-governmental facilities offered daily child immunization services (both in-facility and outreach) compared to governmental facilities. Overall readiness to provide child immunization was 80%, indicating that on average, facilities had 11 of the 14 items needed for this service.

Child health preventive and curative care services

Nearly two-thirds of the facilities reported that they offered preventive and curative child health care services (66%). All referral health centers in the country reported providing preventive and curative child health care services for children under-five years of age. Health centers were the next category of facility most likely to provide this service. Non-governmental and urban facilities were much more likely than rural and governmental facilities to offer preventive and curative child health care services for children under five. Overall readiness to provide preventive and curative child health care services was 49%, indicating that on average, facilities had 9 of the 19 items needed for this service.

Adolescent health

The availability of adolescent health services was quite low in Somalia, with less than half of the facilities reporting that they offered the service (47%). The majority of hospitals provided adolescent health services (74%), while only 33% of referral health centers offered the service. Urban facilities were much more likely than rural facilities to provide adolescent health services. Overall readiness to provide adolescent health services was 30%, indicating that on average, facilities had just under 2 out of 6 of the tracer items needed for this service.

Infectious disease services

Malaria services

More than half of all facilities (57%) reported that they offered diagnosis or treatment of malaria. Referral health centers were the most likely to report the availability of malaria services (89%) than hospitals (81%), compared to only health posts (36%), and health centers (74%). Non-governmental facilities were slightly more likely to report the availability of malaria service compared to governmental facilities. Urban facilities were more likely than rural facilities to report the availability of malaria diagnosis or treatment for malaria. As is the case with most services, readiness for malaria was quite low in Somalia, with the facilities that reported offering malaria service having only 42% of the items that were considered particularly important for offering malaria services and that were enquired about during the survey.

HIV/AIDS

Only 18% of facilities reported that they provided HIV/AIDS counseling and testing services, and this was about equal between governmental and non-governmental facilities. HIV/AIDS care and support services were very limited countywide, with only 5% of facilities offering this service. Even fewer facilities offered antiretroviral prescription and client management services (3%). PMTCT services were available in only 11% percent of facilities nationwide. Hospitals were most likely to provide HIV/AIDS counseling and testing services and urban facilities were much more likely than rural facilities to provide this service. Overall readiness to provide HIV/AIDS counseling and testing services was calculated at 57%, indicating that on average, facilities had just under 3 out of 5 of the tracer items needed for this service. Overall readiness to provide HIV/AIDS care and support services was calculated at 52%, indicating on average, facilities had just over 5 of 10 tracer items needed for this service. Readiness to provide ART was found to be 48%, showing that on average, facilities had 3 of 7 items needed to provide this service. Readiness to provide PMTCT was calculated at 41%, suggesting on average, facilities had 4 of 10 tracer items needed to provide this service.

Tuberculosis

Only 8% of facilities in Somalia reported that they offered tuberculosis (TB) services. In other types of facilities, the percentage of facilities offering TB services was very low (9% of hospitals provided this service and only 1% of health centers). Non-governmental facilities were slightly more likely than governmental facilities to report the availability of offer TB services. Rural facilities were not likely to offer TB services compared to urban facilities. On average, facilities offering TB services had 7 of the 12 items (59%).

Sexually transmitted infections

Only one quarter of health facilities in Somalia reported offering sexually transmitted infection (STI) services, and these services were predominantly provided by hospitals, particularly located in urban areas. Non-governmental facilities were somewhat more likely to offer STI services compared to governmental facilities. Readiness to provide STI services was calculated at 42%, indicating that on average, facilities had 4 of the 7 items needed to provide this service.

Non-communicable disease services

Diabetes

Only 9% of facilities countrywide offered diabetes diagnosis and treatment services, and these services were mostly available in hospitals compared to other facility types. Non-governmental facilities were more likely than governmental facilities to provide diabetes services. Urban facilities were much more likely to offer diabetes services compared to rural facilities. Readiness to provide diabetes services was calculated at 54%, indicating that on average, facilities had 7 of the 13 items needed to provide this service.

Cardiovascular disease

Only 8% of all facilities in Somalia offered cardiovascular disease (CVD) diagnosis and/or management services. Hospitals were more likely than any other type of facility to offer CVD services. Non-governmental facilities were slightly more likely to provide CVD services than governmental facilities, and facilities in urban areas were much more likely to provide CVD services than those in rural areas. Readiness to provide CVD services was calculated at 49%, indicating that on average, facilities had just fewer than 6 of the 12 items needed to provide this service.

Chronic respiratory disease

Only 9% of all facilities in Somalia offered chronic respiratory disease (CRD) diagnosis and/or management services. CRD services were most available in hospitals compared to other facility types and least available in referral health centers. Non-governmental facilities were more likely to provide CRD services compared to governmental facilities. Facilities in urban areas were much more likely than those in rural areas to offer CRD services. Readiness to provide CRD services was calculated at 46%, indicating that on average, facilities had 5 of the 11 items needed to provide this service.

Cervical cancer

Cervical cancer services were very limited with only 2% of facilities offering this service. Hospitals and health centers were the only facility types offering cervical cancer services. Non-governmental facilities had greater availability of cervical cancer services compared to governmental facilities and these services were only available in urban facilities. Readiness to provide cervical cancer services was calculated at 67%, indicating that on average, facilities had 2 of the 4 items needed to provide this service.

1. Introduction

1.1 Overview of the health and social system

Located in Eastern Africa bordered with Ethiopia and Kenya (west), Djibouti and Gulf of Aden (north), and Indian Ocean (east), Somalia has a population of 12.7 million¹. Since the collapse of Siad Barre government in 1991, the Federal Republic of Somalia has experienced almost 3 decades of severe internal conflict, which have resulted in a collapsed and fragmented health care system and inadequate infrastructure. It is currently estimated that about 3.2 million people are in need of humanitarian assistance in the country. Somalia consists of 3 zones (Somaliland, Puntland and South Central), 18 regions and 89 districts. The three zones have varying administrative structures and Puntland and Somaliland have their own constitutions, presidents and parliaments². Health needs vary across Somalia though with many common challenges. Health care services and the systems that support these differ to a significant extent between the three zones.

1.2 Health status in Somalia

After almost three decades of conflict, Somalia is one of the world's most fragile states. It has some of the poorest health and development indicators both in the Africa region and globally. More than 60% of the population of Somalia lives in multidimensional poverty. Somalia did not achieve any of the health related Millennium Development Goals (MDGs) (4, 5 and 6). In 2015, the maternal mortality rate (MMR) was 732 per 100,000 live births³, the under-five mortality rate (U5MR) was 137 per 1000 live births⁴ and the infant mortality rate (IMR) was 85 per 1000 live births. Communicable diseases account for up to 54% of all causes of death among children under 5 years in Somalia. Recent estimates show more than 300,000 Somali children under-five suffer from acute malnutrition⁵. The total fertility rate is very high and increasing over time (6.4 in 2009-2010 to 6.7 in 2013-2014)⁶. Overall life expectancy at birth is very low at 55.47 years compared to 68 years in the rest of the region⁸ and one in seven children die before their fifth birthday. Health care service utilization data in the country remain limited, and most information that exists is based on MICS and other surveys conducted in the Somaliland, Puntland and South Central zones. Immunization coverage is among the lowest in the world; Somalia is ranking fourth among countries with lowest DPT3 coverage globally of 42%⁹.

Organization of the health care system

Somalia's Essential Package of Health Services (EPHS) was first implemented in July 2008 and provides the framework for the health care delivery system in the country. The EPHS includes six core programs that are to be delivered at all four levels of the health care system and four additional programs provided at the referral level (**Figure 1**).

¹ Population Estimation Survey for Somalia (PESS), 2014. PESS 2014 Projection.

² WHO Somalia, 2015. Strategic Review of the Somali Health Sector: Challenges and Prioritized Actions.

³ UNICEF, 2015. Maternal Mortality Estimation Interagency Group (MMEIG) 2015 Report.

⁴ UNICEF and WHO, 2015. Countdown to 2015: Maternal, Newborn and Child Survival 2015 Report

⁵ UNICEF, 2015. The Situation of Women and Children in Somalia.

⁶ UNICEF Somalia Statistics, 2010. World Bank Millennium Development Goals Global Data Monitoring.

⁷ UNDP, 2015. Human Development Report 2015.

⁸ WHO, 2015. Somalia Country Profile 2015.

⁹ WHO and UNICEF, 2015. Estimates of National Immunization Coverage (WUENIC) 2015.

Figure 1. Somalia's health care delivery system²

Health service delivery in Somalia is structured on a four tier system comprising of hospitals, referral health centres, health centres, and primary health units, all of which provide some elements of EPHS. Health centres, also referred to as maternal and child health centres, provide some preventive and curative care services for women and children alongside basic health services for the general population. Primary health units, or health posts, are intended to provide preventive and curative care services at the community level. However, many health posts do not operate fully due to human resource and infrastructure constraints². The EPHS is currently being implemented in 47 districts and 364 facilities using a phased approach. The Somali health authorities and partners envisage rolling out EPHS to cover all the Somali public health facilities.

Health service delivery is core (constitutional) mandate of the Ministry of Health (MOH) and various health partners do provide various form of support to the MOH to deliver health care to people in Somalia. The health partners include, donors, UN agencies, NGOs, faith based organizations, and civil society organizations which are operating in Somalia. A number of organizations also run and support public health facilities on behalf of the MOH. In addition to the public (government) owned facilities, there are number of privately owned facilities which deliver health care to the people in Somalia.

Policies and strategies to improve and support health care delivery in Somalia

In an effort to tackle the many of the health care challenges in the country, several policies and programs have been developed in support of Somalia's health sector in recent years. Such efforts include but are not limited to the EPHS framework, Somalia Nutrition Strategy (2011-2013), Somalia's zonal Health Sector Strategic Plans (HSSP) (2013-2016), Somali Health Policy (2014), and Somalia Humanitarian Response Plan (2015). Additional strategies have been implemented around: micronutrients, reproductive health, community-based health care, female genital mutilation, immunization, health workforce, drugs, behaviour change communication, and mental health². Somali health authorities and health partners are currently developing the HSSP2 (2017-2020).

Health programs and projects in Somalia

The major health programs and projects in Somalia include, but are not limited to: the Joint Health and Nutrition Programme (JHNP) (2012-16), the Global Alliance for Vaccines and Immunization (GAVI) (2012-16), the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), the polio eradication program, health consortium for Somali people, humanitarian/health cluster and nutrition programs.

1.3 Purpose of the survey

Prior to the Somali Service Availability and Readiness Assessment (SARA) survey implementation, limited information and evidence existed on health systems performance in the country, which is required to assist managers in decision-making, planning, implementing and monitoring health services. The 2016 Somali SARA survey was carried out in order to generate critical information on selected indicators for evidence-based decision making and tracking and monitoring progress of HSSP/EPHS activities in health facilities.

The primary objectives of the 2016 Service Availability and Readiness Assessment Survey are to generate the following information:

1. General service availability (accessibility of health services): health infrastructure (density of facilities and inpatient beds), core health personnel, and inpatient/outpatient service utilization.
2. General service readiness (capacity of health facilities to provide general health services): presence of basic amenities, basic equipment, standard precautions for prevention of infections, laboratory diagnostic capacity, and essential medicines.
3. Specific service availability and readiness (proportion of facilities providing specific key health interventions and their capacity to provide these services): availability of guidelines, trained staff, equipment, diagnostics, and medicines and commodities required to provide the service.
4. The status and functionality of support systems (supply chain, supervision, information system, transport/referral, repair/maintenance, community involvement/engagement among others) in the facilities.
5. Client satisfaction using exit interviews as a proxy indicator for quality of care.
6. Data verification of key routine data indicators to assess the performance of the routine health information system.

1.4 Methodology

Survey design

The 2016 Somali SARA was a census of all public health care facilities in Somalia. From April to August 2016, the Somali Health Authorities in collaboration with the World Health Organization (WHO), United National Population Fund (UNFPA), and United Nations Children's Fund (UNICEF) through the JHNP, GFATM, and GAVI Alliance Health Systems Strengthening Program conducted an assessment of all health facilities (hospitals, health centers, health posts and TB centers) across three zones (Somaliland, Puntland, and South Central) of Somalia. A comprehensive Master Facility List (MFL) was used to identify a total of 1074 facilities. The final MFL can be found in **Annex 1**. Of those, 106 facilities were found to be non-operational and 169 were non-accessible. The final census includes a total of 799 operational and accessible facilities. The facilities included in the Somali SARA (visited, non-operational and non-accessible) are detailed by zone and region in **Table 1** and **Table 2**. In addition, **Figure 2** and **Figure 3** provide maps detailing the location of facilities by operational status and facility type. Regional maps of facilities by type can be found in **Annex 2**.

Table 1. Facilities included in the SARA survey by zone and region, Somalia 2016

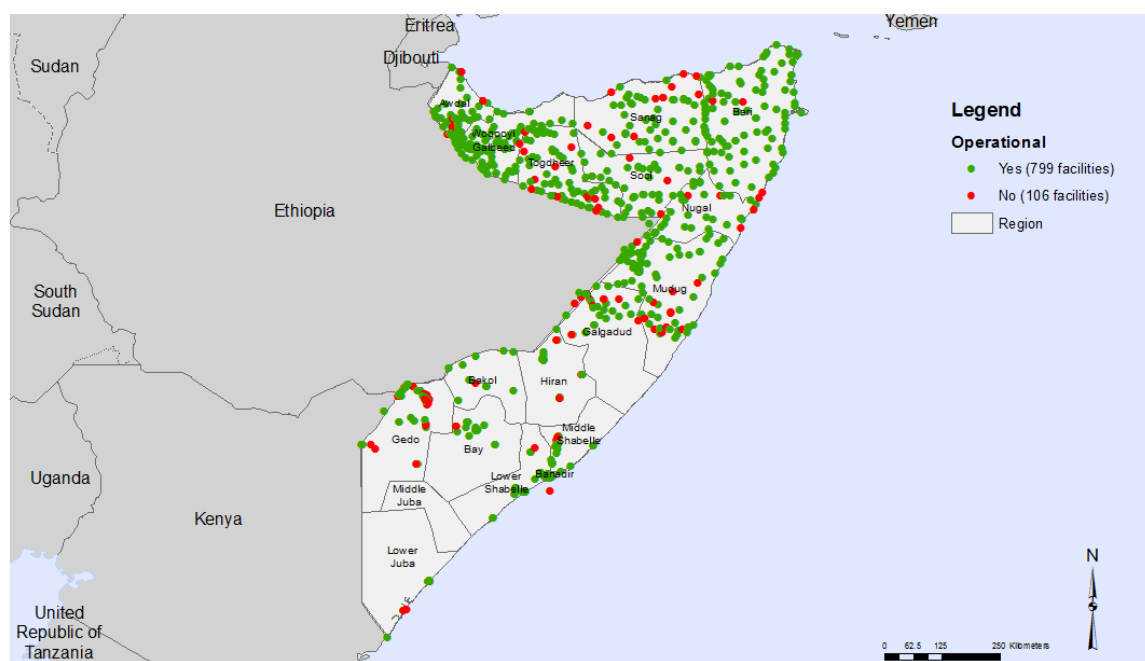
	Total number of facilities	Number of non-operational facilities	Number of non-accessible facilities	Number of facilities included in the analysis
Somaliland	305	23	0	282
Awdal	58	5	0	53
Marodi-Jeh	72	0	0	72
Sahil	32	1	0	31
Sanag	34	6	0	28
Sool	56	3	0	53
Togdher	53	8	0	45
Puntland	247	19	0	228
Bari	51	3	0	48
Gardafuu	17	0	0	17
Karkaar	42	0	0	42
Mudug	53	1	0	52
Nugaal	47	6	0	41
Sanaag	22	4	0	18
Sool	15	5	0	10
South Central	522	64	169	289
Bakool	18	1	5	12
Bay	39	1	7	31
Benadir	61	4	0	57
Galgadud	67	11	28	28
Gedo	92	23	33	36
Hiiraan	41	3	15	23
Lower Juba	33	3	13	17
Lower Shabelle	53	1	24	28
Middle Jubba	23	0	23	0
Middle Shebelle	40	4	14	22
Mudug	55	13	7	35
Total	1074	106	169	799

Table 2. Facilities included in the SARA survey by facility type, Somalia 2016

	Total number of facilities	Number of non-operational facilities	Number of facilities included in the analysis
Somaliland	305	23	282
Hospital	18	2	16
Referral health center	4	1	3
Health center	113	1	112
Health post	153	19	134

TB center	17	0	17
Puntland	247	19	228
Hospital	10	1	9
Referral health center	6	0	6
Health center	79	1	78
Health post	141	17	124
TB center	11	0	11
South Central	522	64	289
Hospital	53	3	33
Referral health center	0	0	0
Health center	309	22	193
Health post	116	36	36
TB center	44	3	27

Figure 2. Map of health facilities in Somalia by operational status, 2016



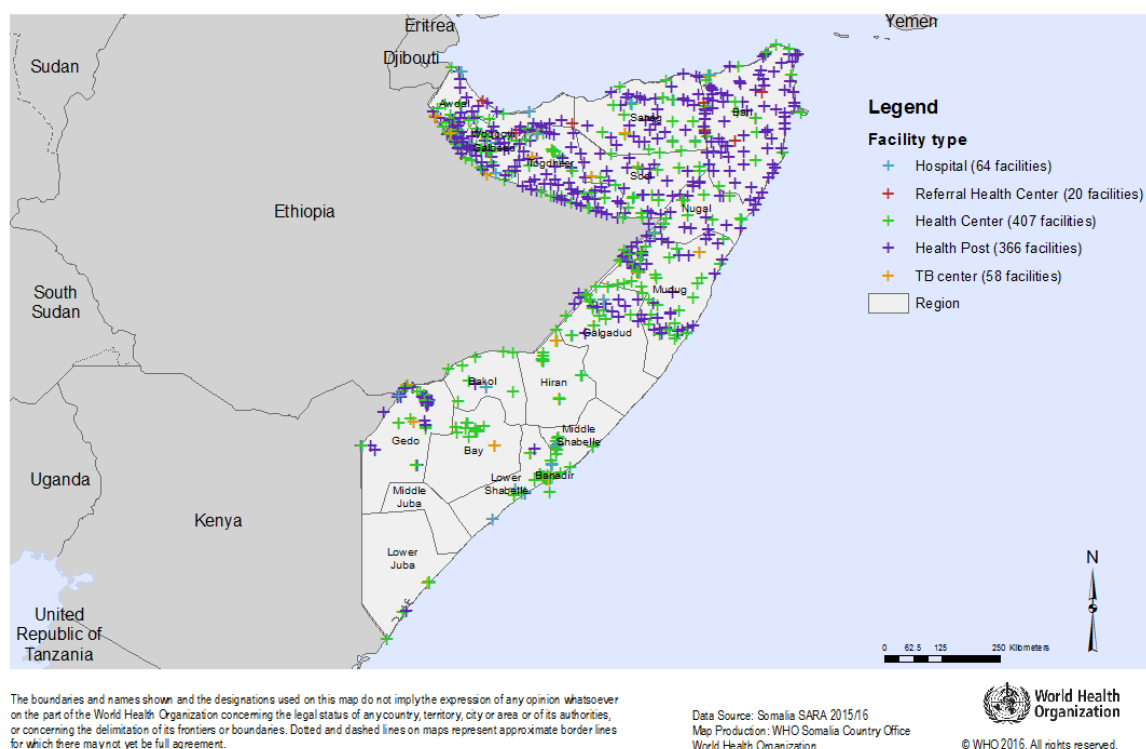
The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization



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Figure 3. Map of health facilities in Somalia by facility type, 2016



For non-operational facilities, the average time the facility has been non-operational varied from less than one month to more than six months, with the majority of non-operational facilities having been non-operational for more than six months (67%). Detailed information on the length of time facilities have been non-operational can be found in **Table 3**.

Table 3. For non-operational facilities, average time they have been non-operational by zone, Somalia 2016

	Less than one month	One to three months	Three to six months	More than six months	Don't know	Number of non-operational facilities
Zone						
Somaliland	4%	0%	9%	83%	4%	23
Puntland	0%	0%	16%	68%	16%	19
South Central	3%	6%	8%	61%	22%	64
Facility type						
Hospital	0%	0%	0%	100%	0%	6
RCH	0%	0%	0%	100%	0%	1
MCH	0%	0%	13%	58%	29%	24
PHU	4%	4%	8%	68%	15%	72
TB centers	0%	33%	33%	33%	0%	3
Total	3%	4%	9%	67%	17%	106

Questionnaires

The 2016 Somali SARA + DV questionnaires are based on the core SARA + DV questionnaires developed by WHO and were adapted to include health issues relevant to Somalia. Input was solicited from experts at the Ministry of Health, development partners, and key stakeholders including UN agencies and NGOs knowledgeable about the health services and service program priorities. The client satisfaction questionnaire was developed specifically for the Somali SARA survey implementation. After finalization of the questionnaires, all questionnaires were translated into Somali language. The translated questionnaires were reviewed and validated by an independent consultant to ensure consistency with the English version. All questionnaires used can be found in **Annex 3**.

The paper questionnaires were used to develop a set of electronic data collection forms using CSPro software. A core set of data collection forms developed by WHO was customized to account for Somali specific revisions to the questionnaires. Edits made to the paper questionnaires were incorporated into the CSPro application making sure to check for consistency of skip patterns and data range and consistency checks. In addition, the DV modules were adapted for those selected for the Somali SARA survey and the months for the DV review were adapted to include April, May, and June 2015. A separate, stand-alone CSPro application was designed for the Customer Satisfaction module.

Training and fieldwork

As part of the preparations and planning activities for the 2016 Somali SARA, a training of trainers (TOT) model was adopted to provide training to key staff from the MOH, United Nations (UN), and Data & Research Solutions (DARS). DARS is a Somali based research and consulting firm hired by WHO to support the SARA survey implementation. The trainings, led by an international expert consultant with experience training in SARA in many countries and co-facilitated by WHO staff and DARS, was intended to equip participants with the necessary skills for them to be in charge of the main training as facilitators. As preparations for the survey took longer than expected, three TOTs were held before the main training of data collectors in each zone.

Training of Trainers (TOT)

The first TOT and planning was held in June 2015 with a total of 49 participants from MOH, UN and DARS. The second TOT was held in September 2015 as a refresher course with a total of 21 participants from MOH, UN and DARS. The third TOT was held in March 2016 as a final refresher course before data collection commenced with a total of 25 participants from MOH, UN, and DARS.

Each TOT was conducted in Hargeisa, Somaliland and lasted for one week. Each training included classroom lectures and discussions, practical demonstrations, mock interviews, and field practice. The first two days of training were dedicated to train interviewers on the content and use of the SARA + DV paper questionnaires. The third day of training, participants were introduced to tablet computers and were trained on the basics of GPS collection, basic tablet functionality, and CSPro functionality on the tablets. In addition, participants conducted mock interviews in teams with both the paper and electronic questionnaires. The fourth day of training was a pilot test in which three health facilities were visited to test the paper and electronic tools as well as the data collection procedures. The fifth and final day of training was dedicated to wrap-up, remaining questions, and planning for the next steps to move forward to holding a training of data collectors in each zone and launching the data collection activities.

Data managers training

As part of the TOT conducted in both September 2015 and March 2016, a training of data managers was conducted to train the data managers on their roles and responsibilities as well as technical procedures for data management during data collection. The training of data managers included the following topics:

- Installing CSPro on a desktop
- Installing CSPro and configuring Android tablets to sync data
- Using a CSPro batch application to check for completeness and correctness of data
- Tracking facilities to monitor progress of data collection
- Concatenation of data files from multiple tablets
- Review of data sets in CSPro to check key fields
- Comparison of original data collection to supervisor validation

Pre-testing

At the end of each training of trainers, the paper and electronic questionnaires were pre-tested. The pre-testing sought to:

1. Test the questionnaires to detect any possible problems in the flow of the questions and to gauge the length of time required for interviews, as well as to identify any problems in the translations.
2. Test the computer programs to detect any problems.
3. Test survey logistics and applicability of the questionnaire contents as well as modifying and improving the instruments based on the pre-test outcomes.

After the pre-test, the questionnaires and computer programs were finalized for the main training of data collectors and supervisors.

Main trainings of data collectors and supervisors

The main trainings of data collectors and supervisors were conducted in each zone as outlined below and overall 74 data collectors and 37 supervisors were trained.

For Somaliland, a training of 22 data collectors and 11 supervisors was conducted from the 22nd to 29th of March 2016 held at Ambassador Hotel in Hargeisa. A pilot test was conducted on day five of the training and review and debrief were conducted the day after (day 6). The teams demonstrated that they gained sufficient knowledge and are well versed with survey tools.

For Puntland, a training of 20 data collectors and 10 supervisors was conducted from 27 March to 3rd of April 2016 at PDRC conference hall in Garowe. A pilot test was conducted on day five of the training and review and debrief were conducted the day after (day 6). The teams demonstrated that they gained sufficient knowledge and are well versed with survey tools.

For South Central, a training of 32 data collectors and 16 supervisors was conducted from 16th to 22nd of April 2016 at Giyajo Hotel in Mogadishu. A pilot test was conducted on day five of the training and review and debrief were conducted the day after (day 6). The teams demonstrated that they gained sufficient knowledge and are well versed with survey tools.

Data collection

Following the main trainings of data collectors and supervisors, 37 teams (11 in Somaliland, 10 in Puntland, and 16 in South Central) were formed. Each team consisted of a team supervisor, two

data collectors, and a driver. Each team was provided two tablet computers, one dedicated to the SARA + DV questionnaire and one dedicated to the client satisfaction questionnaire. Each team was given a list of facilities to visit, including name, type, and location. On average, data collection took one day for a small facility and one to two days for large facilities (mostly hospitals). Interviewers ensured that respondents were the most knowledgeable person for the particular service being assessed. Fieldwork supervision was coordinated by DARS. 37 representatives were responsible for field supervision and made periodic visits to teams to review work and monitor data quality. In addition, field supervisors conducted a verification exercise in 10% of facilities to assess quality of the data collected by field teams. Data collection took place from 05th April- 11th May 2016 in Somaliland, 13th April- 7th May 2016 in Puntland, and 30th April- 31st Aug 2016 in South Central.

Data processing

After completing data collection in each facility, the interviewers reviewed the electronic questionnaires before giving the tablet to the team supervisor who reviewed a second time. Once data collection was complete for a facility, the team supervisor sent the data to data management headquarters via the Internet and Dropbox syncing functionality. The data management team consisted of five individuals working from 3 locations. The data management team used a CSPro batch application to check for completeness and correctness of each data entry. Any inconsistencies, errors, or missing information were reported to the team supervisor for correction. In addition, the data team tracked progress towards completion of data collection using the Master Facility List to determine which facilities were missing data. At the end of data collection, all data was reviewed for correctness, completeness, and consistency of key fields before the dataset was finalized for analysis. The dataset was fully finalized in October 2016.

2. General service availability

General Service Availability refers to the physical presence of the delivery of services and encompasses three domains of tracer indicators: health infrastructure, core health personnel, and service utilization. Service availability is described by an index using the three areas of tracer indicators. This is made possible by expressing the indicators as a percentage score compared with a target or benchmark, then taking the mean of the area scores. General Service Availability does not include more complex dimensions of availability such as geographical barriers, travel time, and user behavior, which require more complex input data. Calculation of the General Service Availability indicators requires a census of all facilities as these measures require data that link the numerator (e.g. number of facilities) to the denominator (e.g. population size). The SARA survey collects some of the information required to calculate General Service Availability, however additional sources are often used, namely HMIS and other routine information systems. The data used for the Somali General Service Availability indicators comes from the Somali 2016 SARA, Somali Master Facility List (MFL), and Somali HMIS.

2.1 Health infrastructure

There are three indicators that measure the health infrastructure of a country: facility density, inpatient bed density, and maternity bed density. Facility density is primarily an indicator of outpatient service access. Inpatient bed density provides an indicator of inpatient services access. Maternity bed density provides an indicator of access to delivery services. For each of the health infrastructure indicators, density is calculated as the number per population. In addition, targets for each of the health infrastructure indicators have been set based on WHO guidelines. For facility density the target is two facilities per 10,000 population. For inpatient bed density, the target is 25 beds per 10,000 population. The global average is 27 beds per 10,000 population and lower- and upper- middle income countries have 18 and 39 inpatient beds per 10,000 respectively. For SARA, an arbitrary benchmark of 25 inpatient beds per 10,000 population is selected. For maternity bed density, the target is 10 maternity beds per 1,000 pregnant women. This target was calculated using the assumptions that there should be sufficient beds for all pregnant women with an occupancy rate of 80% (to account for the uneven spread of demand over time) and a mean duration of stay of 3 days. All data for calculating the health infrastructure indicators comes from the Somali MFL and 2016 Somali SARA survey. **Table 4** below shows how the density and scores are calculated for the health infrastructure indicators.

Table 4. Health infrastructure density and score calculations

Domain		Indicator	Target	Score (%) (n / target , maximum 100)
Health infrastructure				
<i>a</i>	Facility density	Number per 10 000 population (n)	2	$n / 2 \times 100$
<i>b</i>	Inpatient bed density	Number per 10 000 population (n)	25	$n / 25 \times 100$
<i>c</i>	Maternity bed density	Number per 1000 pregnant women (n)	10	$n / 10 \times 100$

Health facility density calculations by region are presented in **Table 5**.

- In Somalia nationally, there is less than 1 health facility per 10,000 population. Puntland has the greatest facility density at 1.11 per 10,000 population, and South Central has the lowest density at 0.62 facilities per 10,000 population.

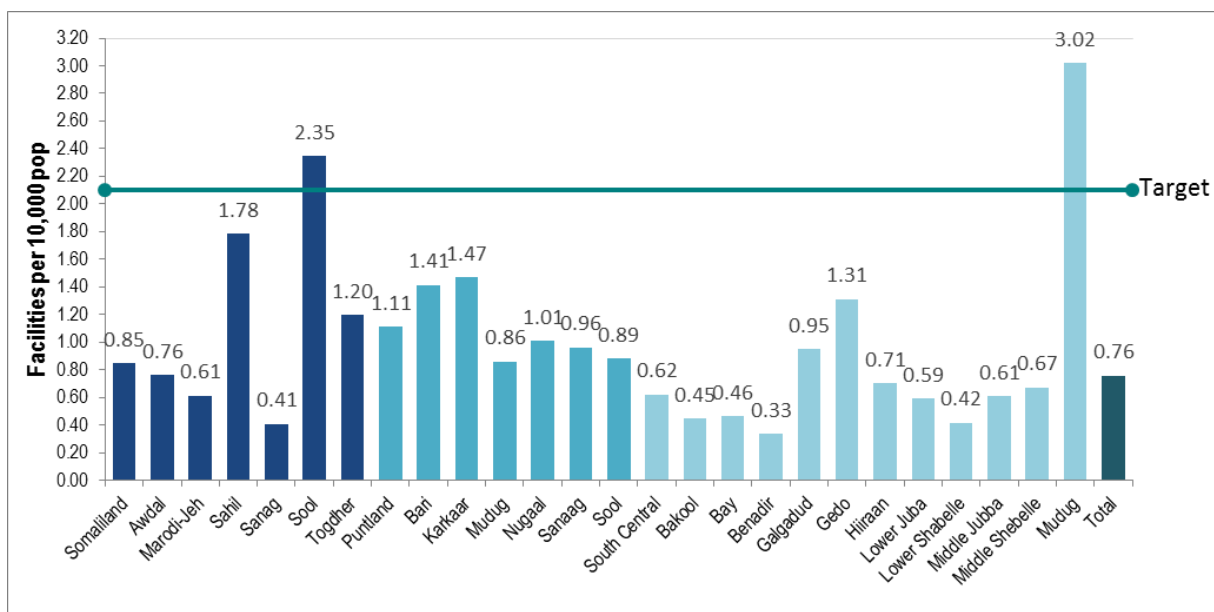
- The country, on average, is 38% of the way towards achieving the facility density target.
- Per zone, on average, Puntland is just over halfway to achieving the facility density target (55%), followed by Somaliland (42%) and South Central (31%).
- As shown in
- **Figure 4**, the vast majority of regions are under target for health facility density, with the exception of Sool in Somaliland (2.35 facilities per 10,000 population) and Mudug in South Central (3.02 facilities per 10,000 population).

Table 5. Health facility, inpatient bed, and maternity bed density indicators by zone and region, Somalia 2016

	Total number of facilities/10,000 population	Number of inpatient beds/10,000 population	Number of maternity beds per 1000 pregnant women	Facility density score	Inpatient beds score	Maternity beds score
Somaliland	0.85	6.51	3.61	42	26	36
Awdal	0.76	3.44	2.55	38	14	26
Marodi-Jeh	0.61	8.41	5.49	31	34	55
Sahil	1.78	14.95	4.34	89	60	43
Sanag	0.41	2.37	0.59	20	9	6
Sool	2.35	10.89	1.97	117	44	20
Togdher	1.20	7.31	3.48	60	29	35
Puntland	1.11	5.55	2.17	55	22	22
Bari	1.41	3.53	2.32	71	14	23
Karkaar	1.47	4.35	2.18	74	17	22
Mudug	0.86	9.09	1.18	43	36	12
Nugaal	1.01	4.90	3.66	50	20	37
Sanaag	0.96	4.60	2.02	48	18	20
Sool	0.89	1.77	1.77	44	7	18
South Central	0.62	4.75	2.17	31	19	22
Bakool	0.45	0.53	0.47	22	2	5
Bay	0.46	2.67	1.19	23	11	12
Benadir	0.33	7.55	1.78	17	30	18
Galgadud	0.95	12.59	1.70	48	50	17
Gedo	1.31	4.87	6.12	66	19	61
Hiiraan	0.71	0.35	0.54	35	1	5
Lower Juba	0.59	6.48	1.67	30	26	17
Lower Shabelle	0.42	2.88	4.14	21	12	41
Middle Jubba	0.61	N/A	N/A	31	N/A	N/A
Middle Shebelle	0.67	3.07	1.08	34	12	11
Mudug	3.02	7.12	4.79	151	28	48
Total	0.76	5.34	2.55	38	21	25

Note: Facility density included all operational facilities as well as non-accessible facilities as these were assumed to be functioning. Inpatient and maternity bed density were calculated based on the number of beds at accessible, operational facilities only. In addition, as all facilities in the Middle Jubba region were not accessible, no data is available on inpatient beds and maternity beds for this region.

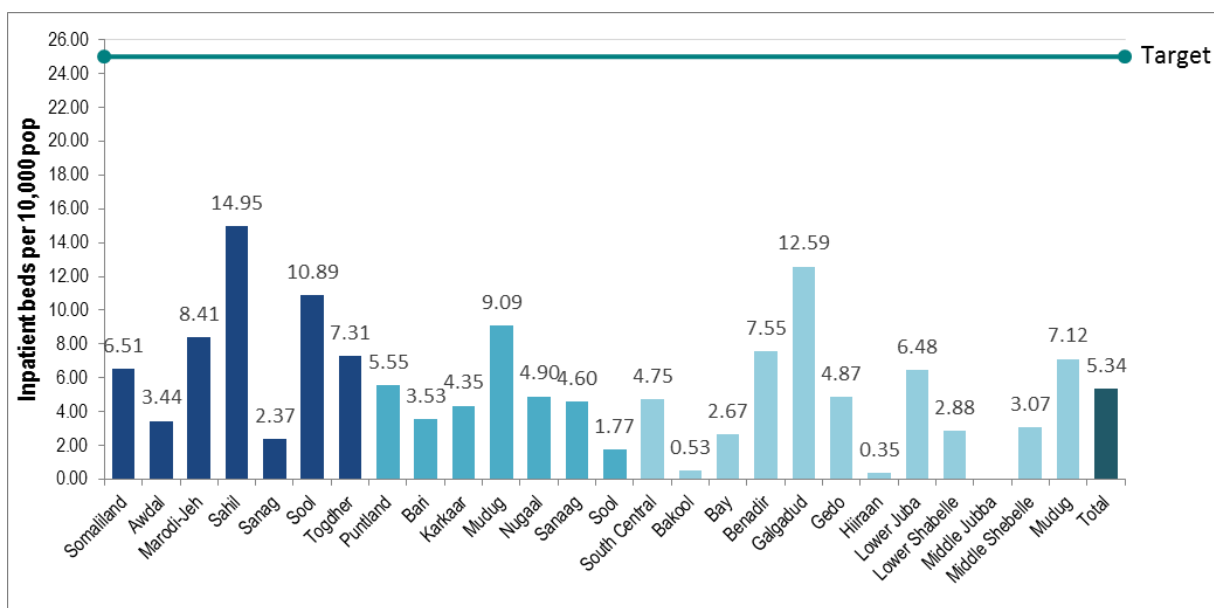
Figure 4. Health facility density per 10,000 population (target=2), Somalia 2016



Inpatient bed density is defined as the number of inpatient beds per 10,000 population. Inpatient bed density scores are calculated as the number of inpatient beds per 10,000 divided by the SARA benchmark of 25, multiplied by 100.

- Countrywide, there are 5.34 inpatient beds per 10,000 population. The inpatient bed density is highest in Somaliland at 6.51 per 10,000 population, and lowest in South Central at 4.75 per 10,000 population.
- The country, on average, is 21% of the way towards achieving the inpatient bed density target of 25 per 10,000 population.
- Per zone, on average, Somaliland is just over a quarter of the way to achieving the inpatient density target (26%), followed by Puntland (22%) and South Central (19%).
- As shown in **Figure 5**, all districts in the country are currently under target for inpatient bed density, with the highest scoring region being Sahil in Somaliland with 14.95 inpatient beds per 10,000 population.

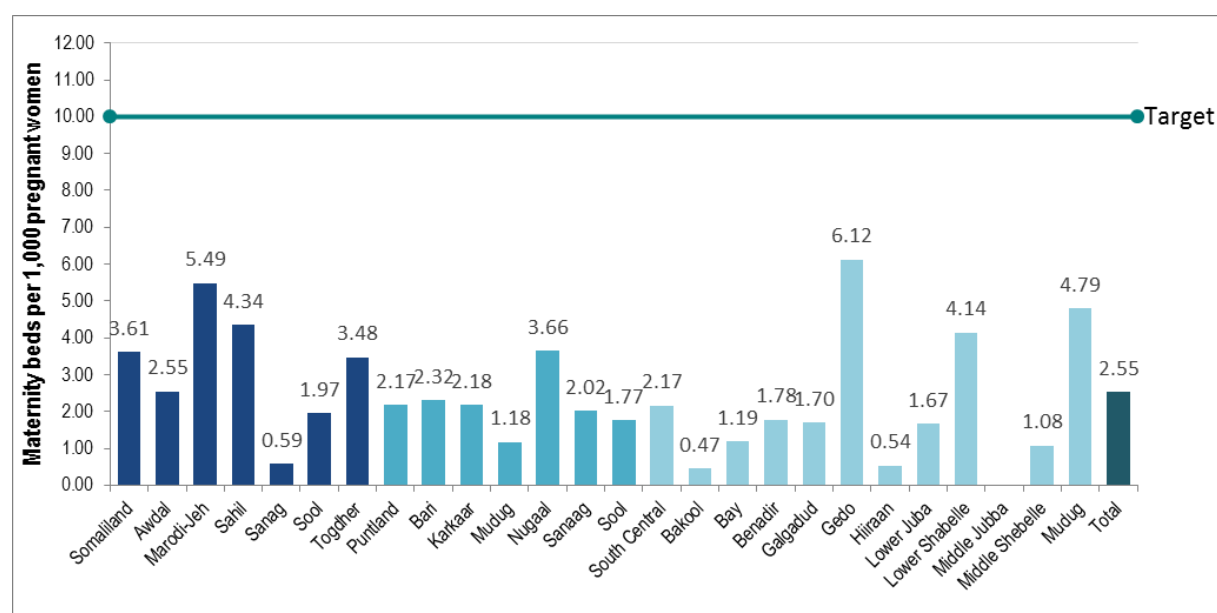
Figure 5. Inpatient bed density per 10,000 population (Target=25), Somalia 2016



Maternity bed density calculations assume there should be sufficient beds for all pregnant women with an occupancy of 80% and a mean duration of stay of 3 days. Maternity bed density scores are calculated as the number of maternity beds per 1,000 pregnant women divided by the target of 10 beds per 1,000 pregnant women, multiplied by 100.

- A total of 2.55 maternity beds per 1,000 pregnant women was calculated in Somalia. As seen with inpatient bed density, maternity bed density was highest in Somaliland, with 3.61 maternity beds per 1,000 pregnant women. Puntland and South Central share the same maternity bed density at 2.17 beds per 1,000 pregnant women.
- The country, on average, is 25% toward achieving the maternity bed density target of 10 per 1,000 pregnant women.
- Per zone, on average, Somaliland is just over a third of the way to achieving the maternity bed density target (36%), followed by Puntland and South Central (both at 22%).
- As shown in **Figure 6**, all districts in the country are currently under target for maternity bed density, with the highest scoring region being Gedo in South Central with 6.12 maternity beds per 1,000 pregnant women.

Figure 6. Maternity bed density per 1,000 pregnant women (Target=10), Somalia 2016



2.2 Health workforce

The health workforce domain is comprised of a single indicator: core health workforce density. Core health workforce density is based on the availability of the following core health care providers: generalist medical doctors, specialist medical doctors (anesthetist, obstetrician, and pediatrician), non-physician clinicians, nursing professionals, and midwifery professionals. For the health workforce indicator, density is calculated as the number of core health personnel per 10,000 population. In addition, a target for the health workforce indicator has been set based on WHO guidelines. For core health workforce density the target is 23 health workers per 10,000 population. All data for calculating the health infrastructure indicators comes from the 2016 Somali SARA survey. **Table 6** below shows how the density and scores are calculated for the health infrastructure indicators.

Table 6. Health workforce density and score calculations

Domain		Indicator	Target	Score (%) (n / target, maximum 100)
Health workforce				
d	Core health workforce density	Number per 10 000 population (n)	23	n / 23 × 100

- In Somalia, a total of 4.28 core health workers per 10,000 population was calculated. Puntland had the highest health workforce density at 5.02, compared to 4.38 per 10,000 population in Somaliland and 4.03 per 10,000 population in South Central (**Table 7**).
- On average, facilities are 19% of the way towards achieving the health workforce density target in the country.
- Non-physician clinicians/paramedical professionals represent the largest number of health workers in the country, followed by nursing professionals and community health workers (**Table 8**).
- Among specialist doctors, a total of 81 obstetricians, 53 anesthetists, and 46 pediatricians were counted in the country (**Table 9**).
- As shown in **Figure 7**, all regions in the country are currently under target for health workforce density, with the highest scoring region being Mudug in South Central with 11.14 core health workers per 10,000 population.

Table 7. Health workforce density per 10,000 population (Target=23), Somalia 2016

	Core health workforce per 10,000 population	Health workforce density score
Somaliland	4.38	19
Awdal	4.91	21
Marodi-Jeh	4.34	19
Sahil	7.70	33
Sanag	1.46	6
Sool	7.13	31
Togdher	5.63	24
Puntland	5.02	22
Bari	5.46	24
Karkaar	7.05	31
Mudug	4.36	19
Nugaal	4.80	21
Sanaag	4.66	20
Sool	3.01	13
South Central	4.03	18
Bakool	1.79	8
Bay	4.16	18
Benadir	6.84	30
Galgadud	3.92	17
Gedo	2.74	12
Hiiraan	1.74	8
Lower Juba	3.44	15
Lower Shabelle	3.58	16
Middle Jubba	N/A	N/A

Middle Shebelle	2.68	12
Mudug	11.14	48
Total	4.28	19

Note: Core health workforce was calculated based on the number of health workers at accessible, operational facilities only. In addition, as all facilities in the Middle Jubba region were not accessible, no data is available on core health workforce for this region.

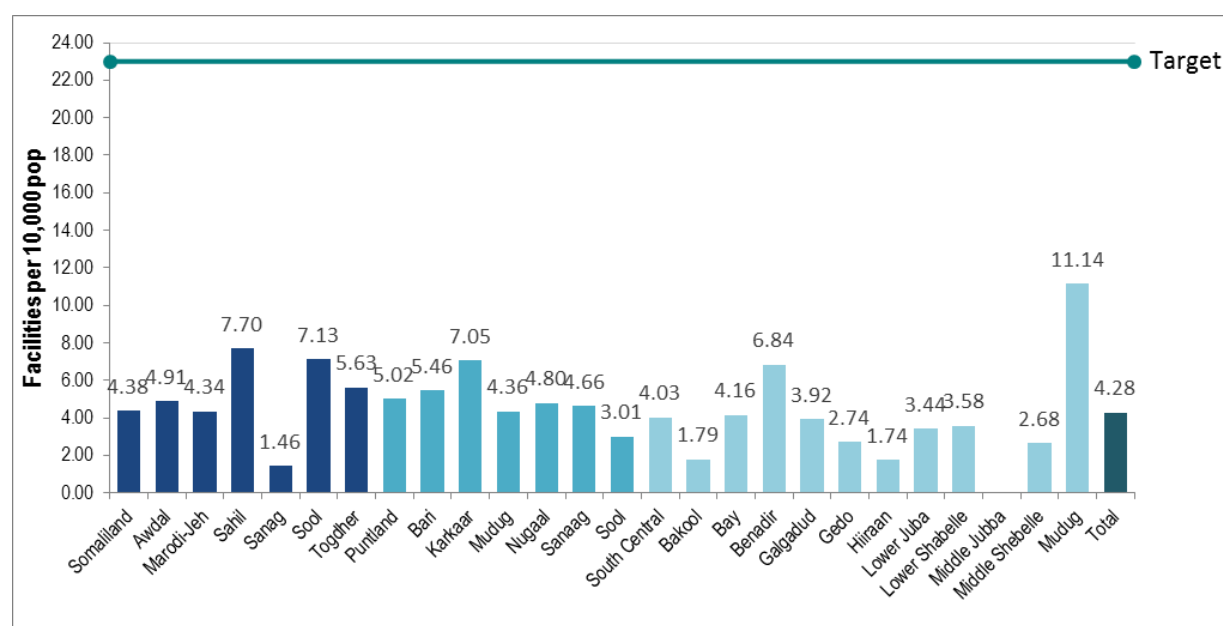
Table 8. Number of health workers by cadre, Somalia 2016

	Somaliland	Puntland	South Central	Total
Generalist (non-specialist) medical doctors	243	191	289	723
Specialist medical doctors	48	49	51	148
Non-physician clinicians/ paramedical professionals	472	528	2273	3273
Nursing professionals	763	512	1871	3146
Midwifery professionals	405	279	613	1297
Pharmacists	179	89	290	558
Laboratory technicians (medical and pathology)	175	95	277	547
Community health workers	624	250	1075	1949
Community based health workers	560	132	955	1647

Table 9. Number of specialist doctors by specialty area, Somalia 2016

	Somaliland	Puntland	South Central	Total
Anesthetist	16	16	21	53
Obstetrician	21	26	34	81
Pediatrician	4	10	32	46

Figure 7. Health workforce density per 10,000 population (Target=23), Somalia 2016



2.3 Service utilization

There are two indicators that measure the health infrastructure of a country: outpatient service utilization and inpatient service utilization. Outpatient service utilization is measured as the number of outpatient visits for ambulant care per capita per year and provides additional information on the availability of and access to outpatient services. Inpatient service utilization is measured as the number of hospital discharges per 100 population per year and provides additional information on the availability of and access to inpatient services. For each of the service utilization indicators, density is calculated as the number per population. In addition, targets for each of the service utilization indicators have been set based on WHO guidelines. For outpatient service utilization, the target is 5 visits per person per year. This target has been set based on the knowledge that in countries of the Organization for Economic Co-operation and Development (OECD), the average number of physician consultations per person per year is about six. For inpatient service utilization, the target is 10 discharges per 100 people per year. This target has been set based on the knowledge that in OECD countries, which have an ageing population, there are about 15 discharges per 100 population per year. **Table 10** below shows how the density and scores are calculated for the service utilization indicators. All data for calculating the service utilization indicators comes from the Somali HMIS from January-December 2015. As such, there are some data limitations that are noted below. Results should be interpreted with caution due to these data limitations:

- Incomplete reporting (80% completeness overall; 77% in South Central, 74% in Puntland and 92% in Somaliland).
- **For outpatient data, hospital data is not included for Somaliland and South Central.**
- **Discharge data is only available for select regions. Overall scores are only for regions with discharge data.**

Table 10. Service utilization density and score calculations

Domain		Indicator	Target	Score (%) (n / target, maximum 100)
Service utilization				
<i>e</i>	Outpatient service utilization	Outpatient visits per person per year (<i>n</i>)	5	<i>n</i> / 5 × 100
<i>f</i>	Inpatient service utilization	Hospital discharges per 100 per year (<i>n</i>)	10	<i>n</i> / 10 × 100

Table 11 shows the service utilization numbers (inpatient and outpatient) and scores by zone and region.

- A total of 0.23 outpatient visits per person per year were calculated in Somalia. Outpatient visits were about equal in Somaliland and South Central (0.22 visits per person per year and 0.21 visits per person per year, respectively), while Puntland had 0.31 visits per person per year.
- A total of 0.81 hospital discharges per 100 persons per year was found countrywide. Somaliland had the greatest number of hospital discharges at 0.76 per 100 persons per year, followed by Puntland with 0.74 per 100 persons per year.
- As a country, on average, Somalia is 5% of the way towards achieving the outpatients visit target and 8% of the way towards achieving the hospital discharge target.
- As shown in **Figure 8**, all regions fall far below the target of 5 outpatient visits per person per year. All regions also fall below the target of 10 hospital discharges per 100 population (
- **Figure 9).**

Table 11. Service utilization (outpatient visits and hospital discharges) by zone and region, Somalia 2016

	Outpatient visits per person/year	Hospital discharges per 100/year	Outpatient visits score	Hospital discharges score
Somaliland	0.22	0.76	4	8
Awdal	0.21	0.45	4	5
Marodi-Jeh	0.16	0.88	3	9
Sahil	0.52	1.06	10	11
Sanag	0.11	0.22	2	2
Sool	0.38	0.62	8	6
Togdher	0.37	1.85	7	19
Puntland	0.31	0.74	6	7
Bari	0.32	0.47	6	5
Karkaar	0.34	0.88	7	9
Mudug	0.41	1.76	8	18
Nugaal	0.26	N/A	5	N/A
Sanaag	0.09	N/A	2	N/A
Sool	0.12	N/A	2	N/A
South Central	0.21	0.48	4	5
Bakool	0.01	N/A	0	N/A
Bay	0.12	N/A	2	N/A
Benadir	0.35	1.24	7	12
Galgadud	0.25	N/A	5	N/A
Gedo	0.27	1.99	5	20
Hiiraan	0.12	N/A	2	N/A
Lower Juba	0.08	N/A	2	N/A
Lower Shabelle	0.15	0.29	3	3
Middle Jubba	0.09	N/A	2	N/A
Middle Shebelle	0.22	N/A	4	N/A
Mudug	0.70	N/A	14	N/A
Total	0.23	0.81	5	8

Figure 8. Number of outpatient visits per person per year (Target=5), Somalia 2016

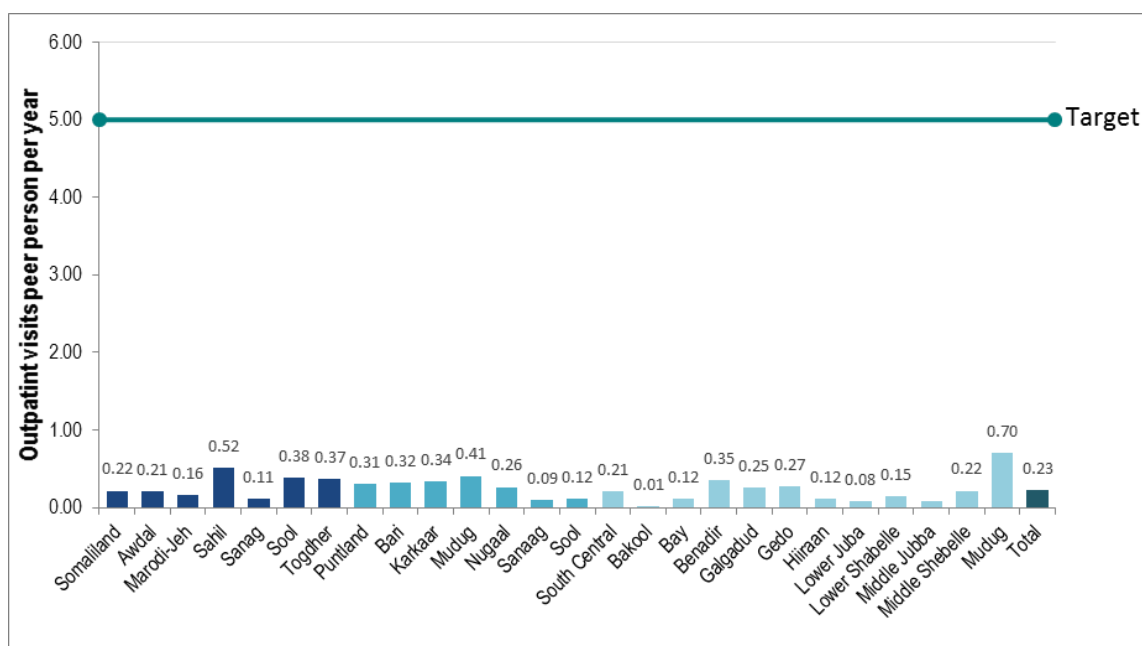
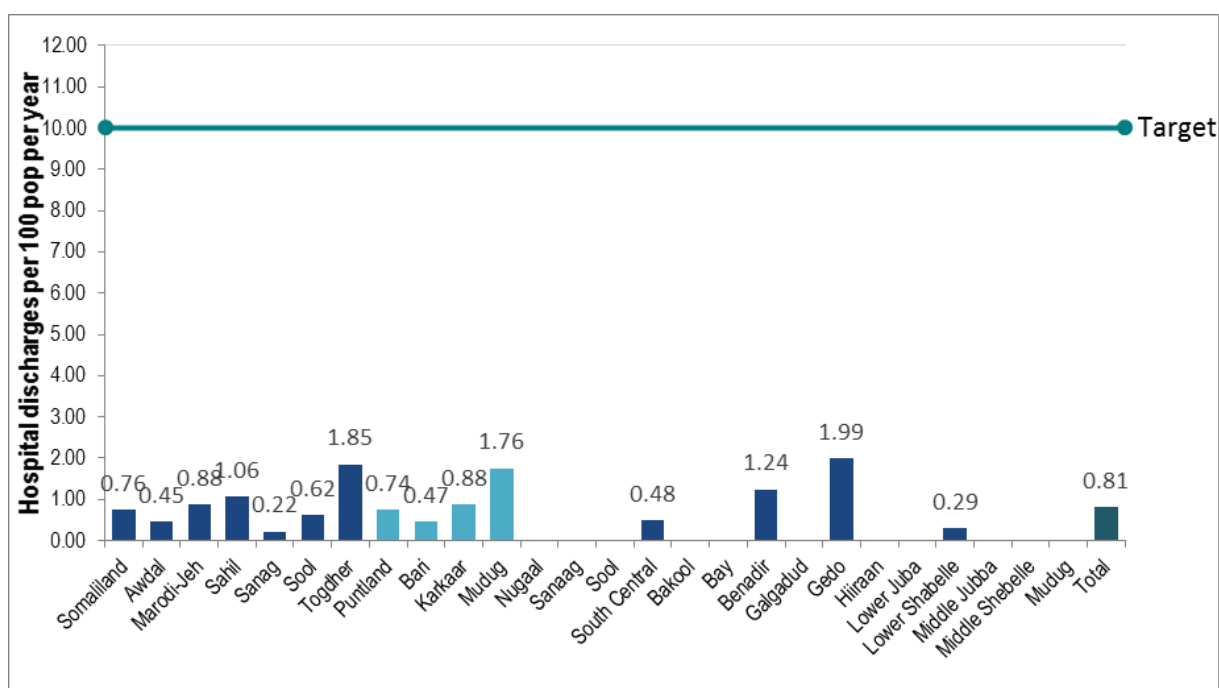


Figure 9. Number of hospital discharges per 100 population per year (Target=10), Somalia 2016



2.4 Service availability index

The service availability index is calculated using the six service availability indicators: facility density, inpatient bed density, maternity bed density, health workforce density, outpatient service utilization, and inpatient service utilization. The services availability index is the unweighted average of the three areas: infrastructure, health workforce, and utilization and is represented as a percentage score.

Table 12 shows how the domain indices and overall service availability index are calculated.

Table 12. Service availability index calculations

Index	Indicator	Target	Score
Service utilization			
Health infrastructure index	Average score of the three indicators: facility density, inpatient bed density, maternity bed density	100	$(a + b + c) / 3$
Health workforce index	Core health worker density	100	d
Service utilization index	Average score of the two indicators: outpatient visits, hospital discharges	100	$(e + f) / 2$
Service availability index	Unweighted average of the three areas: infrastructure, workforce, and utilization	100	$[(a + b + c) / 3 + d + (e + f) / 2] / 3$

Table 13 shows the service availability index for each of the three areas as well as the overall general service availability index.

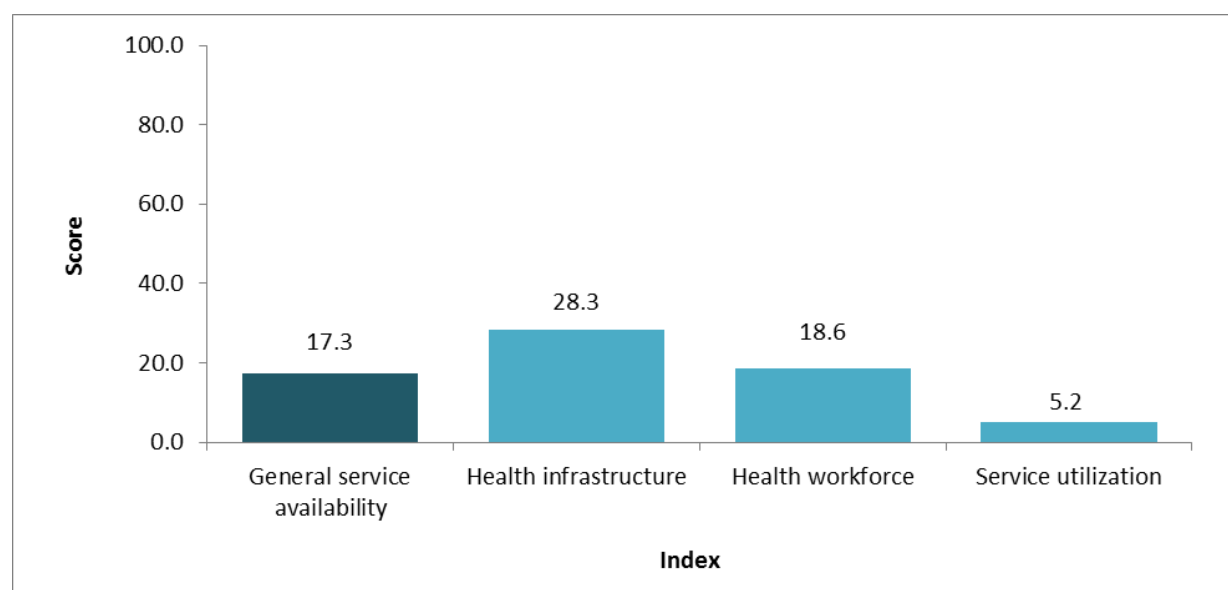
- On average, Somalia is 28.3% of the way toward achieving health infrastructure targets and 18.6% of the way toward achieving health workforce targets. Service utilization target achievement is much lower, with the country being 6.3% of the way toward reaching this goal.
- Overall, on average, Somalia is 17.7% toward achieving the general service availability target (**Figure 10**).

Table 13. General service availability index, Somalia 2016

	Health Services Infrastructure Index	Health Workforce Index	Service Utilization Index	Service Availability Index
Somaliland	35	19	6	20
Awdal	26	21	4	17
Marodi-Jeh	40	19	6	22
Sahil	64	33	10	36
Sanag	12	6	2	7
Sool	60	31	7	33
Togdher	41	24	13	26
Puntland	33	22	7	21
Bari	36	24	6	22
Karkaar	38	31	8	25
Mudug	30	19	13	21
Nugaal	36	21	5	21
Sanaag	29	20	2	17
Sool	23	13	2	13
South Central	24	18	4	15
Bakool	10	8	0	6
Bay	15	18	2	12
Benadir	22	30	7	19

Galgadud	38	17	5	20
Gedo	49	12	5	22
Hiiraan	14	8	2	8
Lower Juba	24	15	2	14
Lower Shabelle	25	16	3	14
Middle Jubba	10	0	2	4
Middle Shebelle	19	12	4	12
Mudug	76	48	14	46
Total	28.3	18.6	6.3	17.7

Figure 10. Service availability indices, Somalia 2016



3. General service readiness

General Service Readiness refers to the overall capacity of health facilities to provide general health services. Readiness is defined as the availability of components required to provide services such as basic infrastructure and amenities, basic equipment, standard precautions for infection control, laboratory tests, and medicines and commodities. This includes information on:

- **Basic amenities:** Power, improved water source, room with privacy, adequate sanitation facilities, communication equipment, access to computer with internet, emergency transportation
- **Basic equipment:** Blood pressure machine and cuff, stethoscope, adult scale, infant scale, child scale, thermometer, light source, neonatal bag and mask
- **Standard precautions for infection prevention:** Sterilization equipment, safe disposal of sharps and infectious wastes, sharps box, waste receptacle, disposable syringes, disinfectant, hand-washing soap, alcohol based hand rub, latex gloves, masks, gowns, eye protection, guidelines
- **Diagnostic capacity:** HIV RDT, hemoglobin, malaria RDT or smear, TB microscopy, blood glucose, syphilis RDT, general microscopy, urine pregnancy test, urine dipstick, DBS collection, ALT and creatinine
- **Essential medicines:** 20 essential medicines (amitriptyline tablet, amlodipine tablet or alternative calcium channel blocker, amoxicillin syrup/suspension/dispersible tablet, amoxicillin tablet, ampicillin injection, beclometasone inhaler, ceftriaxone injection, enalapril tablet or alternative ace inhibitor, fluoxetine tablet, gentamicin injection, glibenclamide tablet, ibuprofen tablet, insulin regular injection, metformin tablet, omeprazole tablet or alternative, oral rehydration solution, paracetamol tablet, salbutamol inhaler, simvastatin tablet or other statin, zinc sulphate tablet)

Details of the indicators and their definitions can be found in Measuring Service Availability and Readiness: Service Readiness Indicators¹⁰.

3.1 Basic amenities

Sufficient physical infrastructure and the availability of basic amenities are necessary for delivering quality services and for an effective and functional health care delivery system. Service readiness for basic amenities was assessed based on the availability of the following tracer items:

- Sanitation facilities
- Communication equipment
- Consultation room
- Improved water source
- Power supply (grid or generator)

¹⁰ World Health Organization. 2011. Measuring Service Availability and Readiness: Service Readiness Indicators. http://www.who.int/healthinfo/systems/SARA_ServiceReadinessIndicators.pdf

- Emergency transportation
- Computer with internet access

Figure 11 shows estimates for the availability of basic amenities and infrastructure at health facilities in the country.

- The majority of facilities had access to sanitation facilities (78%), while less than half had access to an improved water source (46%).
- Only 1% of facilities had all 7 basic amenities tracer items.
- Very few facilities had a computer with internet (10%) and less than a third of facilities (28%) had a power source.

Figure 11. Percentage of facilities with basic amenities items available (N=799), Somalia 2016

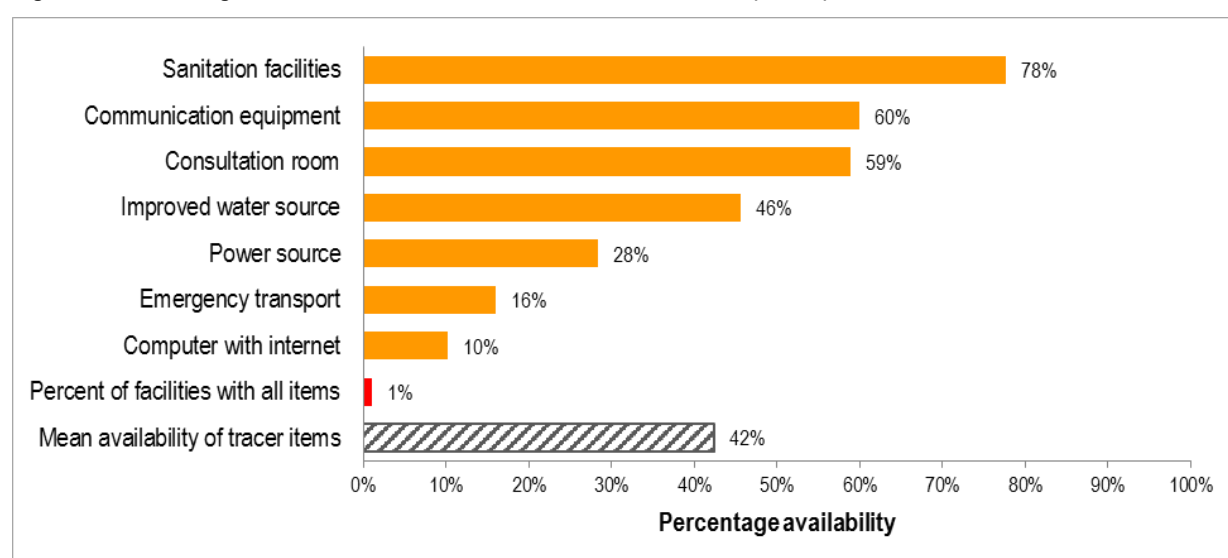


Table 14 shows the availability of basic amenities by region, facility type, managing authority (governmental vs. non-governmental), and urban vs. rural location.

Figure 12 below shows the availability of basic amenities by zone and region while **Figure 13** shows the variation in mean availability of basic amenities tracer items

- Hospitals were found to be better equipped than other facility types in terms of power source, consultation room, and computer with internet. However, only 9% of hospitals reported having all 7 basic amenities items.
- Availability of basic amenities items was greater among non-governmental facilities for all items except for communication equipment (50% compared to 64% of government facilities).
- Within Somaliland, the Sahil region had the greatest mean availability of basic amenities items (57%). In Puntland, the greatest mean availability of basic amenities items was found in Sool (47%), and in South Central, the greatest mean availability was found in Benadir (63%).
- On average, half of the basic amenities items were available among urban facilities, while only 30% were available in rural facilities.
- Compared to other types of facilities, health posts are lacking access to improved water sources (only 21% reported having access, compared to 58% of health centers, 56% of referral health centers, for example).

Table 14. Availability of basic amenities tracer items by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Power source	Improved water source	Consultation room	Sanitation facilities	Communication equipment	Computer with internet	Emergency transport	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions										
Somaliland	22%	38%	49%	72%	60%	9%	18%	0%	38%	282
Awdal	42%	68%	43%	72%	89%	9%	40%	0%	52%	53
Marodi-Jeh	32%	21%	64%	68%	43%	8%	6%	1%	35%	72
Sahil	13%	61%	100%	97%	77%	10%	39%	0%	57%	31
Sanag	0%	36%	32%	68%	89%	14%	11%	0%	36%	28
Sool	19%	30%	23%	66%	42%	6%	4%	0%	27%	53
Togdher	7%	22%	40%	71%	44%	7%	22%	0%	30%	45
Puntland	17%	36%	52%	75%	75%	5%	8%	0%	38%	228
Bari	10%	33%	29%	54%	44%	0%	8%	0%	26%	48
Gardafuu	0%	53%	18%	76%	94%	6%	6%	0%	36%	17
Karkaar	17%	40%	62%	88%	50%	7%	7%	0%	39%	42
Mudug	25%	40%	44%	69%	92%	4%	12%	2%	41%	52
Nugaal	17%	29%	93%	78%	90%	7%	10%	0%	46%	41
Sanaag	17%	39%	39%	89%	100%	17%	6%	0%	44%	18
Sool	40%	10%	80%	100%	100%	0%	0%	0%	47%	10
South Central	44%	61%	73%	85%	48%	16%	20%	2%	49%	289
Bakool	25%	17%	67%	75%	100%	42%	25%	8%	50%	12
Bay	39%	55%	81%	65%	77%	16%	13%	6%	49%	31
Benadir	63%	89%	74%	96%	49%	23%	44%	4%	63%	57
Galgadud	36%	25%	71%	79%	61%	14%	7%	0%	42%	28
Gedo	42%	44%	44%	67%	78%	0%	8%	0%	40%	36
Hiiraan	9%	83%	74%	96%	9%	13%	9%	0%	42%	23
Lower Juba	88%	35%	59%	94%	41%	12%	41%	0%	53%	17
Lower Shabelle	57%	96%	89%	96%	25%	32%	0%	0%	57%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	45%	91%	91%	100%	14%	14%	9%	5%	52%	22
Mudug	20%	29%	83%	86%	31%	3%	26%	0%	40%	35
Facility type										
Hospital	53%	67%	93%	90%	76%	55%	45%	9%	68%	58
Referral Health Center	11%	56%	89%	78%	78%	0%	67%	0%	54%	9

	Power source	Improved water source	Consultation room	Sanitation facilities	Communication equipment	Computer with internet	Emergency transport	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Health Center/MCH	39%	58%	71%	91%	59%	8%	19%	0%	49%	383
Health Post/PHU	5%	21%	32%	55%	59%	1%	6%	0%	26%	294
TB Center	53%	69%	73%	91%	55%	31%	7%	4%	54%	55
Managing authority										
Government	24%	40%	53%	73%	64%	8%	15%	1%	40%	565
Non-government	40%	59%	74%	88%	50%	15%	18%	2%	49%	234
Urban/Rural										
Urban	41%	57%	72%	88%	57%	16%	21%	2%	50%	492
Rural	8%	27%	37%	62%	64%	0%	8%	0%	30%	307
Total	28%	46%	59%	78%	60%	10%	16%	1%	42%	799

Figure 12. Availability of basic amenities by zone and region, Somalia 2016

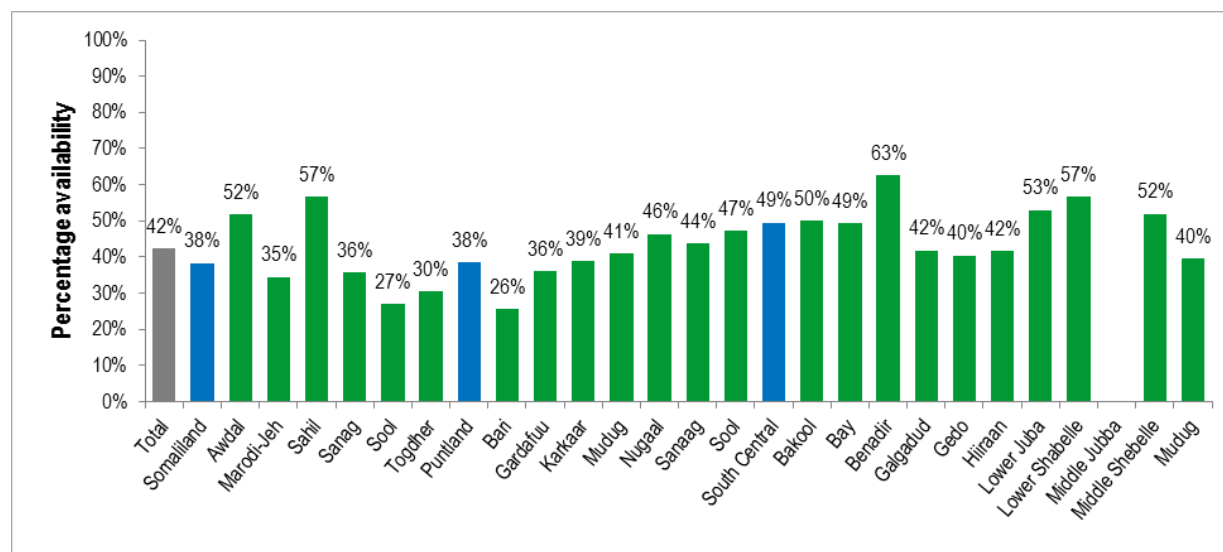
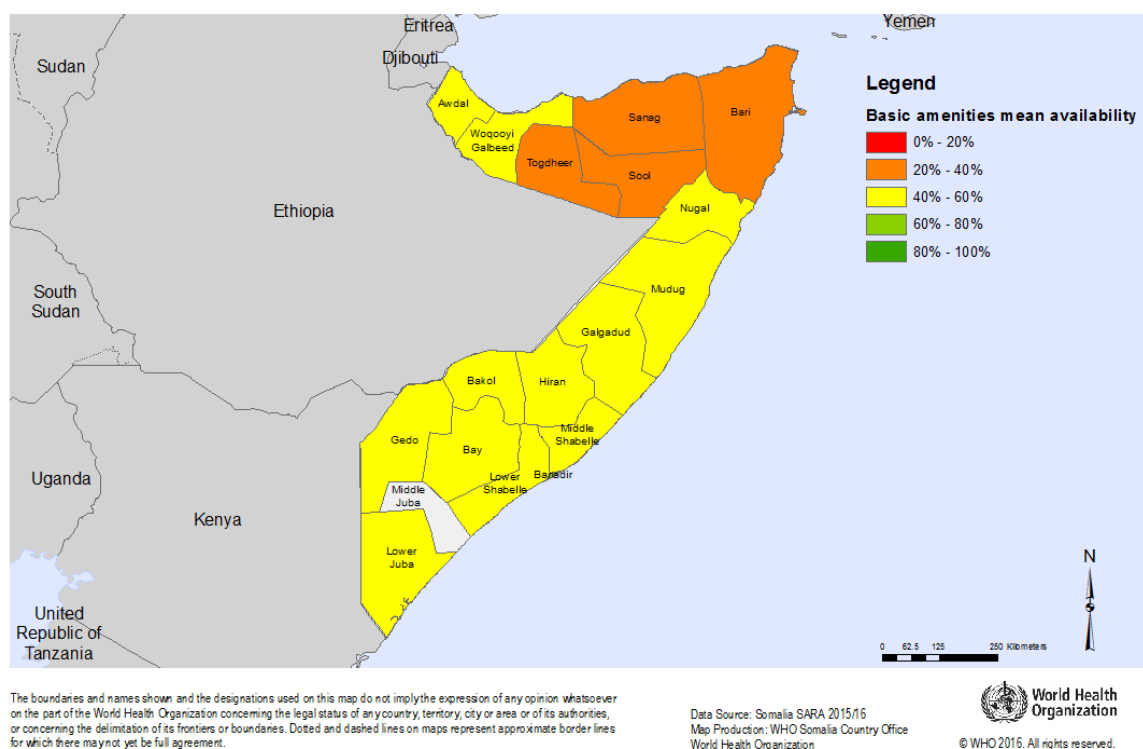


Figure 13. Map of the mean availability of basic amenities items by region, Somalia 2016



3.2 Basic equipment

Delivery of quality health services requires availability of functioning basic equipment. The World Health Organization (WHO) has proposed a list of basic pieces of equipment that should be available at a health facility to guarantee its readiness to deliver basic health services. Service readiness for basic equipment was assessed based on the availability of the following tracer items:

- Adult weighing scale
- Child weighing scale
- Thermometer
- Stethoscope
- Blood pressure apparatus
- Light source

Figure 14 shows the estimates for the availability of these basic equipment tracer items at the national level.

- On average, facilities had 3-4 of the 6 items, for an overall basic equipment readiness score 58 out of 100.
- The most commonly available items were thermometer (73%) and adult weighing scale (68%).
- Availability of a light source was the lowest indicator among the basic equipment tracer items, with only 22% of facilities overall reporting having this item.
- 16% of facilities were fully equipped with all 6 basic equipment items.

Figure 14. Percentage of facilities with basic equipment items available (N=799), Somalia 2016

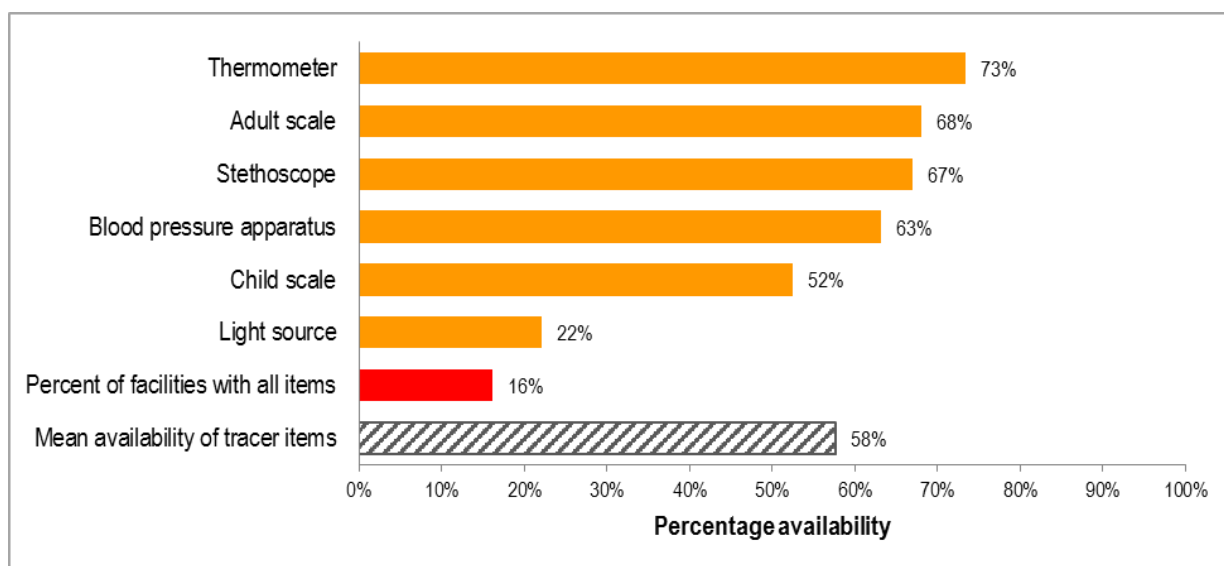


Table 15 shows the availability of basic equipment tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location. **Figure 15** shows the availability of basic equipment by zone and region while

Figure 16Figure 13 shows the variation in mean availability of basic equipment tracer items by region.

- Hospitals had the highest mean availability of basic equipment items (83%) compared to the lowest mean availability of basic equipment items found in health posts (28%). 43% of hospitals had all basic equipment items at the time of the survey.
- Non-governmental facilities were found to have higher mean availability of basic equipment items (67%) compared to governmental facilities (54%).
- Within Somaliland, Sahil had the greatest mean availability of basic equipment items (67%). In Puntland, Karkaar was found to have the greatest mean availability of items (76%) and Bakool in South Central reported the greatest mean availability of basic equipment items (82%).
- Urban facilities reported greater availability of each of the 6 basic equipment tracer items compared to rural facilities, with the greatest availability found in the following items: adult weighing scale (83%), stethoscope (83%), and thermometer (80%).

Table 15. Availability of basic equipment tracer items by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Adult scale	Child scale	Thermometer	Stethoscope	Blood pressure apparatus	Light source	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions									
Somaliland	62%	43%	69%	60%	60%	17%	15%	52%	282
Awdal	62%	47%	83%	55%	53%	15%	13%	53%	53
Marodi-Jeh	71%	50%	74%	64%	71%	22%	17%	59%	72
Sahil	90%	35%	84%	90%	71%	29%	29%	67%	31
Sanag	50%	29%	43%	43%	46%	7%	7%	36%	28
Sool	51%	43%	53%	53%	53%	13%	13%	44%	53
Togdher	51%	38%	71%	60%	60%	13%	11%	49%	45
Puntland	58%	46%	68%	58%	54%	21%	12%	51%	228
Bari	44%	25%	54%	44%	31%	15%	4%	35%	48
Gardafuu	29%	29%	53%	0%	24%	0%	0%	23%	17
Karkaar	83%	76%	74%	88%	81%	55%	31%	76%	42
Mudug	58%	44%	81%	48%	54%	10%	10%	49%	52
Nugaal	63%	44%	76%	68%	51%	22%	10%	54%	41
Sanaag	56%	50%	56%	72%	61%	22%	17%	53%	18
Sool	60%	70%	70%	90%	90%	0%	0%	63%	10
South Central	81%	67%	81%	80%	74%	28%	21%	69%	289
Bakool	92%	58%	92%	92%	92%	67%	50%	82%	12
Bay	84%	74%	81%	97%	94%	32%	23%	77%	31
Benadir	98%	74%	91%	88%	81%	44%	32%	79%	57
Galgadud	82%	71%	75%	75%	71%	14%	14%	65%	28
Gedo	47%	47%	53%	50%	47%	8%	8%	42%	36
Hiiraan	87%	70%	70%	83%	39%	22%	9%	62%	23
Lower Juba	65%	59%	82%	76%	82%	41%	35%	68%	17
Lower Shabelle	89%	64%	100%	89%	86%	29%	25%	76%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	91%	82%	73%	82%	82%	41%	23%	75%	22
Mudug	74%	63%	94%	77%	74%	6%	6%	65%	35
Facility type									
Hospital	90%	76%	90%	93%	91%	59%	43%	83%	58
Referral Health Center	89%	67%	100%	100%	89%	44%	44%	81%	9
Health Center/MCH	90%	78%	93%	91%	85%	31%	24%	78%	383

	Adult scale	Child scale	Thermometer	Stethoscope	Blood pressure apparatus	Light source	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Health Post/PHU	32%	21%	51%	30%	29%	5%	2%	28%	294
TB Center	82%	15%	36%	60%	58%	11%	4%	44%	55
Managing authority									
Government	62%	48%	71%	62%	59%	21%	15%	54%	565
Non-government	83%	64%	79%	79%	74%	25%	19%	67%	234
Urban/Rural									
Urban	83%	65%	80%	83%	76%	30%	22%	69%	492
Rural	45%	33%	62%	41%	43%	10%	7%	39%	307
Total	68%	52%	73%	67%	63%	22%	16%	58%	799

Figure 15. Availability of basic equipment by zone and region, Somalia 2016

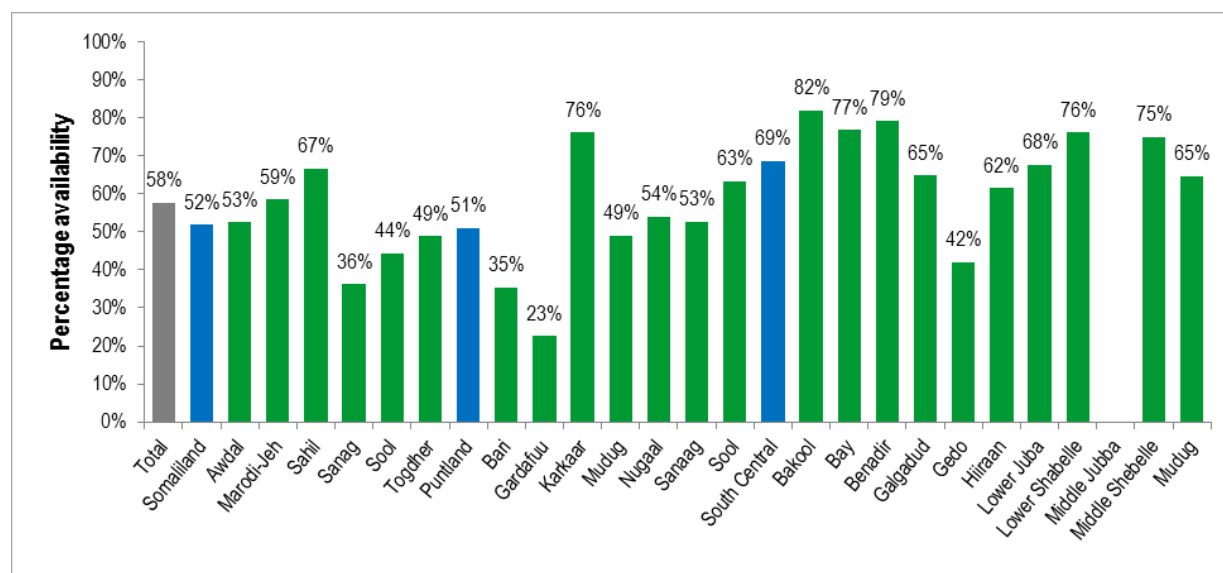
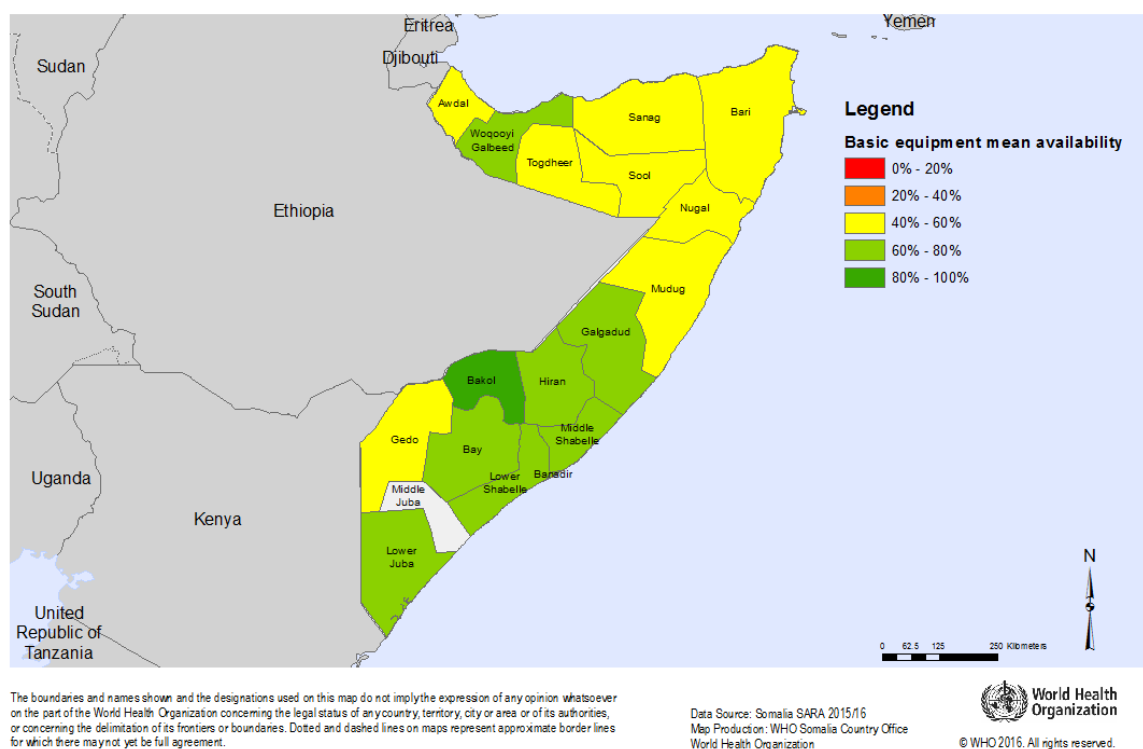


Figure 16. Map of the mean availability of basic equipment items by region, Somalia 2016



3.3 Standard precautions for infection prevention

Safety is an essential part of the health service delivery system. Health workers must be able to work in a safe environment and must be provided with all the safety training and equipment they need to carry out their duties. They must also be able to render services to their patients in the safest manner, which means using the best standards for safety precautions. Disposing of needles and medical products properly, sterilizing medical equipment appropriately and disinfecting restrooms and work areas are among the basic safety standard precautions expected in health facilities. Service readiness for standard precautions for infection prevention was assessed based on the availability of the following tracer items:

- Safe disposal of sharps
- Safe disposal of infectious wastes
- Appropriate storage of sharps wastes
- Appropriate storage of infectious waste
- Disinfectant
- Disposable or auto-destruct syringes
- Soap and water or alcohol-based hand rub
- Latex gloves
- Guidelines on standard precautions

Figure 17 shows the estimates for the availability of standard precautions for infection prevention at health facilities in the country.

- On average, facilities had between 5-6 of the 9 items for an overall standard precautions readiness score of 62 out of 100.
- Latex gloves were the most commonly available standard precautions item, with 72% of facilities reporting having this item.
- The majority of facilities reported appropriate storage of sharps waste and final disposal of infectious waste (68% and 67%, respectively).
- The availability of disinfectant was lower than any other standard precautions item overall, with less than half of all facilities (42%) reporting having this item at the time of the survey.
- Twenty percent of facilities had all 9 standard precautions items.

Figure 17. Percentage of facilities with standard precautions for infection prevention items available (N=799), Somalia 2016

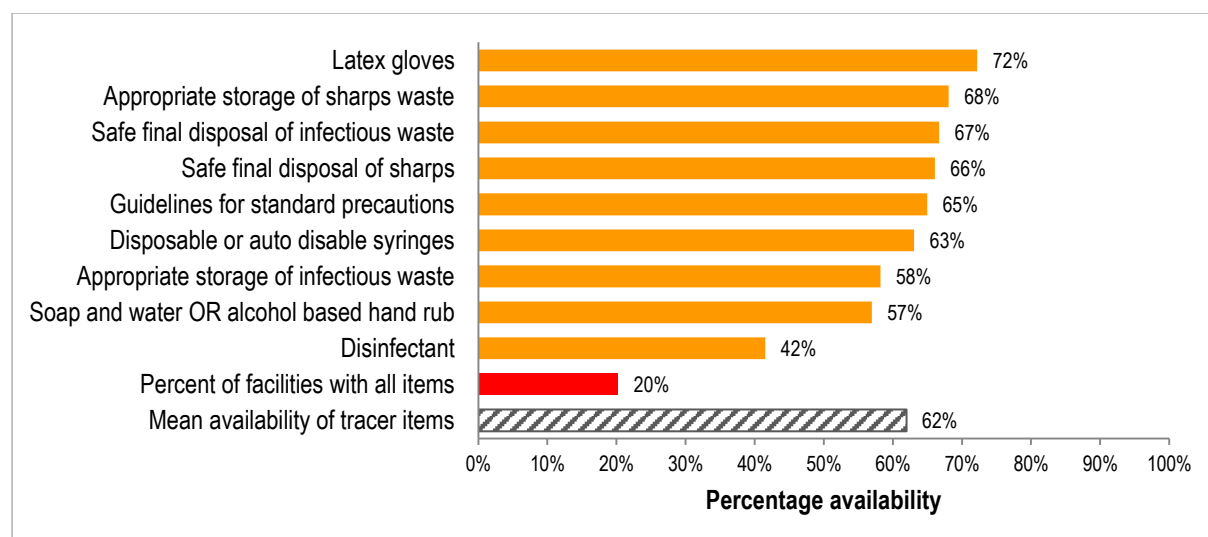


Table 16 shows the availability of standard precaution items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location.

Figure 18 shows the availability of standard precautions for infection prevention by zone and region while **Figure 19** shows the variation in mean availability of standard precautions tracer items by region.

- Nearly half of hospitals (48%) had all items needed for standard precautions for infection prevention. By comparison, only 2% of health posts had all of these items.
- Non-governmental facilities had a higher mean availability of standard precautions tracer items (76%) compared to governmental facilities (56%).
- The highest mean availability of standard precautions items in Somaliland was found in the Marodi-Jeh region (63%). In Puntland, Mudug had the greatest mean availability of standard precautions items (60%), and in South Central, the Lower Shabelle region had a mean availability of 93%.
- In urban areas, the majority of standard precautions tracer items were available on average (75%), compared to less than half in rural facilities (42%).

Table 16. Availability of standard precaution tracer items by region, type of facility, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Safe final disposal of sharps	Safe final disposal of infectious waste	Appropriate storage of sharps waste	Appropriate storage of infectious waste	Disinfectant	Disposable or auto disable syringes	Soap and water OR alcohol based hand rub	Latex gloves	Guidelines for standard precautions	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions												
Somaliland	57%	60%	59%	51%	33%	55%	44%	66%	60%	13%	54%	282
Awdal	75%	75%	64%	70%	32%	57%	42%	74%	51%	19%	60%	53
Marodi-Jeh	60%	65%	82%	64%	38%	69%	54%	75%	61%	14%	63%	72
Sahil	48%	61%	52%	58%	42%	48%	48%	74%	74%	10%	56%	31
Sanag	54%	61%	46%	29%	14%	57%	32%	39%	50%	7%	42%	28
Sool	45%	47%	51%	47%	47%	49%	51%	60%	55%	23%	50%	53
Togdher	56%	49%	38%	22%	16%	42%	24%	58%	71%	2%	42%	45
Puntland	65%	65%	62%	46%	23%	51%	50%	72%	63%	8%	55%	228
Bari	60%	63%	58%	35%	23%	56%	46%	77%	65%	6%	54%	48
Gardafuu	47%	41%	24%	29%	18%	24%	18%	53%	29%	6%	31%	17
Karkaar	60%	55%	76%	76%	17%	31%	64%	81%	74%	7%	59%	42
Mudug	79%	79%	62%	46%	17%	50%	65%	77%	69%	6%	60%	52
Nugaal	56%	59%	73%	44%	46%	71%	44%	63%	68%	20%	58%	41
Sanaag	83%	78%	44%	39%	17%	67%	44%	67%	56%	6%	55%	18
Sool	70%	90%	70%	20%	0%	50%	10%	60%	30%	0%	44%	10
South Central	75%	74%	82%	75%	65%	80%	76%	79%	71%	36%	75%	289
Bakool	50%	50%	92%	50%	33%	67%	58%	75%	42%	17%	57%	12
Bay	65%	68%	97%	77%	74%	97%	97%	87%	94%	32%	84%	31
Benadir	82%	86%	84%	84%	86%	89%	93%	81%	89%	51%	86%	57
Galgadud	79%	71%	82%	71%	29%	68%	54%	68%	46%	14%	63%	28
Gedo	56%	53%	67%	50%	44%	58%	47%	39%	53%	11%	52%	36
Hiiraan	78%	61%	91%	87%	70%	87%	83%	100%	61%	39%	80%	23
Lower Juba	71%	59%	65%	71%	59%	88%	82%	82%	76%	29%	73%	17
Lower Shabelle	89%	89%	96%	93%	96%	96%	96%	89%	89%	64%	93%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	77%	77%	91%	91%	82%	95%	91%	91%	91%	68%	87%	22
Mudug	89%	97%	63%	63%	46%	57%	49%	89%	49%	26%	67%	35
Facility type												
Hospital	86%	83%	97%	91%	74%	91%	79%	83%	74%	48%	84%	58

	Safe final disposal of sharps	Safe final disposal of infectious waste	Appropriate storage of sharps waste	Appropriate storage of infectious waste	Disinfectant	Disposable or auto disable syringes	Soap and water OR alcohol based hand rub	Latex gloves	Guidelines for standard precautions	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Referral Health Center	78%	100%	89%	89%	44%	100%	67%	78%	89%	22%	81%	9
Health Center/MCH	76%	76%	86%	74%	59%	92%	73%	77%	84%	28%	77%	383
Health Post/PHU	47%	49%	37%	27%	9%	17%	25%	60%	35%	2%	34%	294
TB Center	78%	75%	78%	76%	62%	75%	89%	93%	82%	33%	79%	55
Managing authority												
Government	61%	63%	63%	50%	32%	56%	49%	68%	63%	13%	56%	565
Non-government	78%	76%	81%	79%	65%	79%	76%	83%	70%	37%	76%	234
Urban/Rural												
Urban	75%	75%	81%	73%	57%	81%	74%	80%	75%	30%	75%	492
Rural	51%	53%	48%	35%	18%	34%	29%	59%	49%	5%	42%	307
Total	66%	67%	68%	58%	42%	63%	57%	72%	65%	20%	62%	799

Figure 18. Availability of standard precautions for infection control by zone and region, Somalia 2016

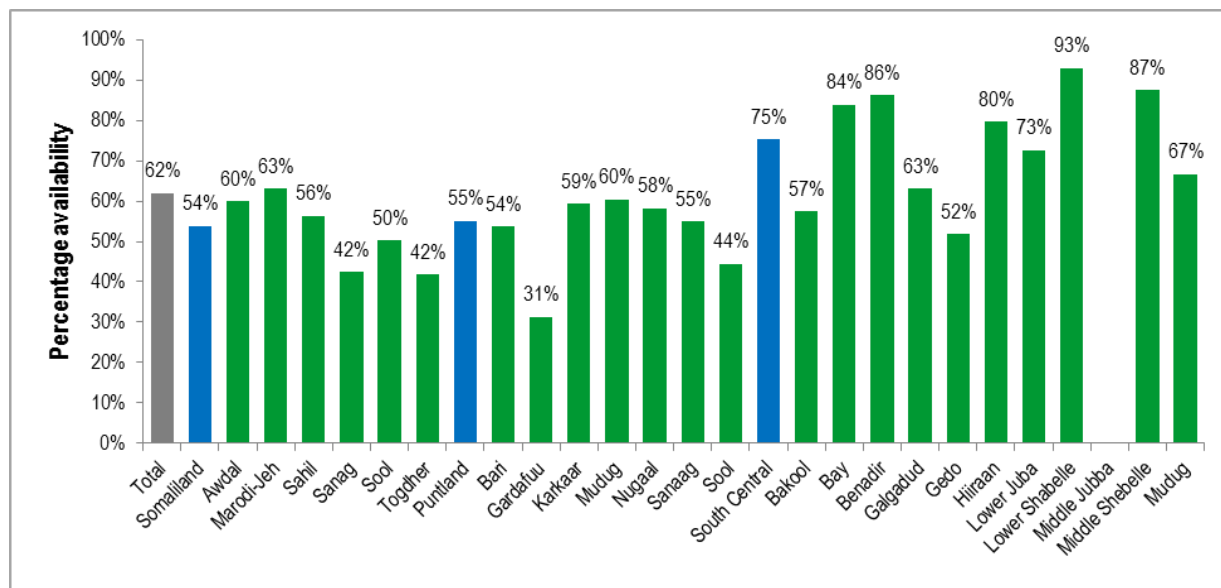
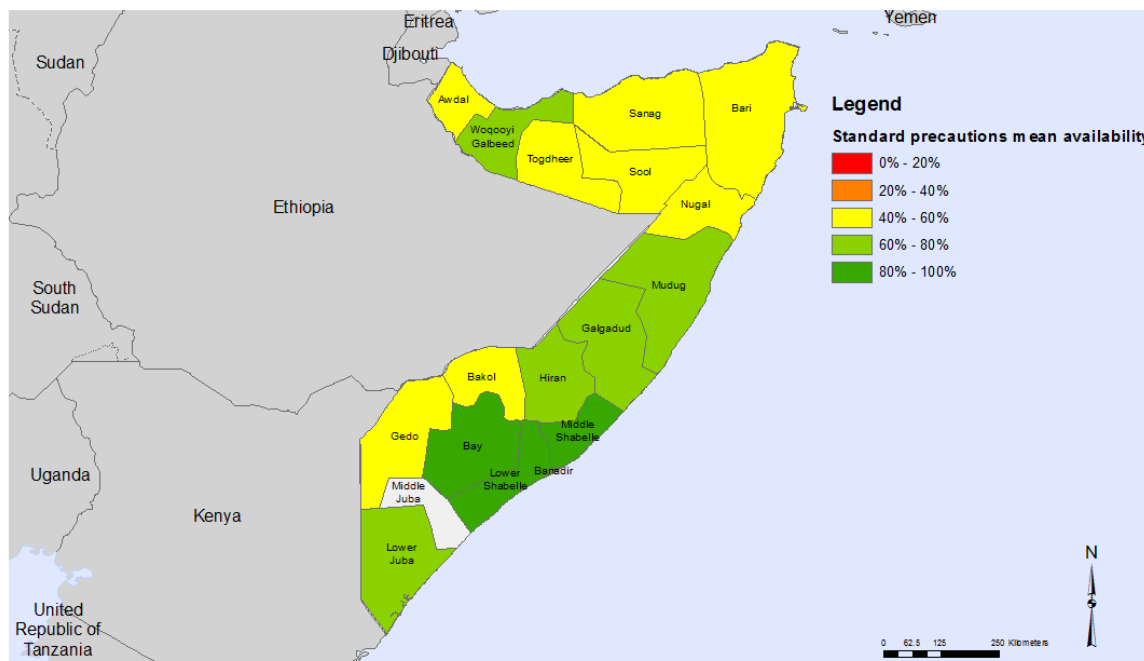


Figure 19. Map of the mean availability of standard precautions items by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization



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3.4 Diagnostic capacity

For any disease to be cured, it has to be first diagnosed correctly, which makes laboratories and diagnostics important elements of the health care delivery system in the country. Laboratory diagnostic capacity was assessed based on the capacity to conduct the following eight basic diagnostic tests on site at the facility:

- Hemoglobin
- Blood glucose

- Malaria diagnostic capacity
- Urine dipstick – protein
- Urine dipstick – glucose
- HIV diagnostic capacity
- Syphilis rapid test
- Urine test for pregnancy

Figure 20 shows the estimates for the availability of diagnostic capacity at health facilities in the country.

- The overall mean availability score for onsite laboratory tests is low at 19% (on average, only 1-2 out of 8 tests available).
- Only 4% of facilities are able to perform all eight diagnostic tests on-site.
- The most commonly available diagnostic test among all facilities was the malaria rapid test at around 51%.
- The least available diagnostic test at all facilities was found to be blood glucose (7%).
- All other diagnostic tests were available at less than 20% of facilities.

Figure 20. Percentage of facilities with diagnostic capacity items available (N=799), Somalia 2016

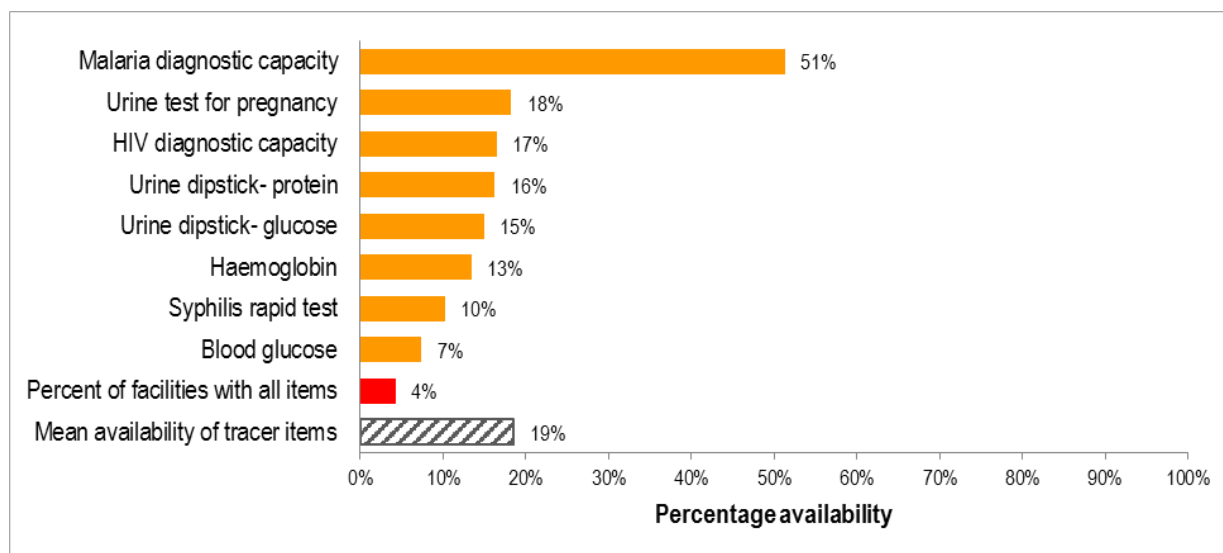


Table 17 shows availability of laboratory tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location.

Figure 21 shows the capacity of facilities to perform laboratory diagnostic tests onsite by zone and region while **Figure 22**Figure 19 shows the variation in mean availability of diagnostic capacity tracer items by region.

- 43% of all hospitals had all diagnostic items available, compared to 2% of health centers. No referral health centers, health posts, or TB centers had all diagnostic items.
- Mean availability of diagnostic items was similar in government owned facilities compared to non-governmental facilities (18% compared to 19%, respectively).
- Disparities between urban and rural availability are evident with 20% of urban facilities having the capacity to conduct hemoglobin tests on site compared to only 3% of rural facilities.
- In Somaliland, the Sahil region had the greatest mean availability of diagnostic items (28%). In Puntland, the Sanaag region had the greatest mean availability at 32%, and in South Central, the Benadir region had the greatest mean availability (41%).

Table 17. Availability of laboratory diagnostics tracer items by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Hemoglobin	Blood glucose	Malaria diagnostic capacity	Urine dipstick-protein	Urine dipstick-glucose	HIV diagnostic capacity	Syphilis rapid test	Urine test for pregnancy	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions											
Somaliland	10%	7%	50%	14%	14%	19%	8%	14%	5%	17%	282
Awdal	4%	4%	55%	8%	8%	9%	6%	8%	4%	13%	53
Marodi-Jeh	18%	15%	61%	25%	24%	22%	10%	22%	8%	25%	72
Sahil	23%	13%	45%	26%	26%	39%	26%	29%	10%	28%	31
Sanag	11%	7%	43%	11%	14%	14%	7%	4%	4%	14%	28
Sool	2%	2%	26%	2%	2%	8%	4%	4%	2%	6%	53
Togdher	4%	2%	60%	13%	13%	27%	2%	18%	2%	18%	45
Puntland	14%	5%	50%	15%	14%	10%	7%	16%	2%	16%	228
Bari	4%	0%	29%	4%	4%	4%	2%	8%	0%	7%	48
Gardafuu	0%	0%	35%	6%	0%	6%	6%	6%	0%	7%	17
Karkaar	12%	12%	83%	17%	17%	5%	7%	19%	0%	21%	42
Mudug	21%	4%	58%	15%	13%	21%	6%	13%	2%	19%	52
Nugaal	15%	2%	46%	24%	22%	7%	12%	22%	2%	19%	41
Sanaag	44%	17%	50%	39%	33%	17%	11%	44%	11%	32%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	16%	9%	54%	19%	17%	20%	15%	24%	6%	22%	289
Bakool	0%	0%	83%	0%	0%	0%	0%	0%	0%	10%	12
Bay	10%	10%	71%	13%	13%	13%	13%	23%	6%	21%	31
Benadir	37%	18%	65%	40%	39%	49%	32%	51%	12%	41%	57
Galgadud	18%	18%	39%	14%	18%	14%	14%	14%	11%	19%	28
Gedo	14%	0%	39%	11%	11%	6%	8%	14%	0%	13%	36
Hiiraan	9%	4%	61%	17%	4%	13%	13%	22%	0%	18%	23
Lower Juba	18%	12%	71%	35%	24%	24%	12%	41%	12%	29%	17
Lower Shabelle	18%	18%	64%	29%	25%	29%	25%	36%	4%	30%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	9%	0%	27%	5%	5%	14%	9%	5%	0%	9%	22
Mudug	3%	3%	37%	3%	3%	3%	3%	3%	3%	7%	35
Facility type											

	Hemoglobin	Blood glucose	Malaria diagnostic capacity	Urine dipstick-protein	Urine dipstick-glucose	HIV diagnostic capacity	Syphilis rapid test	Urine test for pregnancy	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Hospital	69%	57%	78%	69%	69%	67%	66%	66%	43%	67%	58
Referral Health Center	44%	33%	78%	44%	44%	33%	33%	33%	0%	43%	9
Health Center/MCH	15%	6%	67%	21%	19%	19%	10%	25%	2%	23%	383
Health Post/PHU	1%	0%	33%	2%	1%	1%	1%	3%	0%	5%	294
TB Center	4%	0%	5%	2%	2%	31%	2%	2%	0%	6%	55
Managing authority											
Government	14%	7%	51%	16%	16%	16%	9%	17%	4%	18%	565
Non-government	12%	7%	51%	18%	14%	17%	13%	21%	4%	19%	234
Urban/Rural											
Urban	20%	11%	58%	23%	21%	24%	15%	26%	7%	25%	492
Rural	3%	2%	41%	5%	5%	5%	3%	6%	0%	9%	307
Total	13%	7%	51%	16%	15%	17%	10%	18%	4%	19%	799

Food Crop	Percentage availability
Total	19%
Sorghumland	17%
Awdal	13%
Marochi-Jeh	25%
Sahil	28%
Sanag	14%
Sool	6%
Togdher	18%
Puntland	16%
Bari	7%
Gardafuu	7%
Karkaar	21%
Mudug	19%
Nugaal	19%
Samaag	32%
Sool	0%
South Central	22%
Bakool	10%
Bay	21%
Benadir	41%
Galgadud	19%
Gedo	13%
Hiriraan	18%
Lower Juba	29%
Lower Shabelle	30%
Middle Jubba	9%
Shabelle	7%
Mudug	7%

The map displays the diagnostic capacity mean availability across the regions of Somalia. The regions are color-coded as follows:

- Red (0% - 20%):** Awdal, Bari, Sool, Nugal, Mudug, Bakool, Gedo, Middle Juba, and Lower Juba.
- Orange (20% - 40%):** Woqooyi Galbeed, Togdheer, Sanag, Bay, Lower Shabelle, and Baraadir.
- Yellow (40% - 60%):** None.
- Light Green (60% - 80%):** None.
- Dark Green (80% - 100%):** None.

Neighboring countries and territories are labeled: Sudan, Ethiopia, South Sudan, Uganda, Kenya, United Republic of Tanzania, Djibouti, Eritrea, and Yemen. A scale bar indicates distances up to 250 Kilometers, and a north arrow is provided for orientation.

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management system, such as inappropriate selection, poor distribution, deterioration, expiry, and irrational use. Where medicines are available, price may be a barrier for the poor. Weak regulation of the pharmaceutical market is also associated with poor quality control, presence of fake and substandard medicines on the market, growing drug resistance problems due to irrational use, dispensing by unqualified practitioners, and self-medication in lieu of seeking qualified health care.

Facilities were assessed on whether they had the following 20 essential medicines observed at the facility and with a valid expiration:

- Amitriptyline tablet
- Amlodipine tablet or alternative calcium channel blocker
- Amoxicillin syrup/suspension/dispersible tablet
- Amoxicillin tablet
- Ampicillin injection
- Beclometasone inhaler
- Ceftriaxone injection
- Enalapril tablet or alternative ACE inhibitor
- Fluoxetine tablet
- Gentamicin injection
- Glibenclamide tablet
- Ibuprofen tablet
- Insulin regular injection
- Metformin tablet
- Omeprazole tablet or alternative
- Oral rehydration solution
- Paracetamol tablet
- Salbutamol inhaler
- Simvastatin tablet or other statin
- Zinc sulphate tablet

Figure 23 shows the estimates for the availability of essential medicines at health facilities in the country.

- On average, facilities had only 15% of the 20 essential tracer medicines available on the day of the assessment.
- Only 1% of facilities had all essential tracer medicines available.
- The most commonly available drugs were Gentamicin injection and Zinc sulphate (33%)

Figure 23. Percentage of facilities with essential medicines available (N=799), Somalia 2016

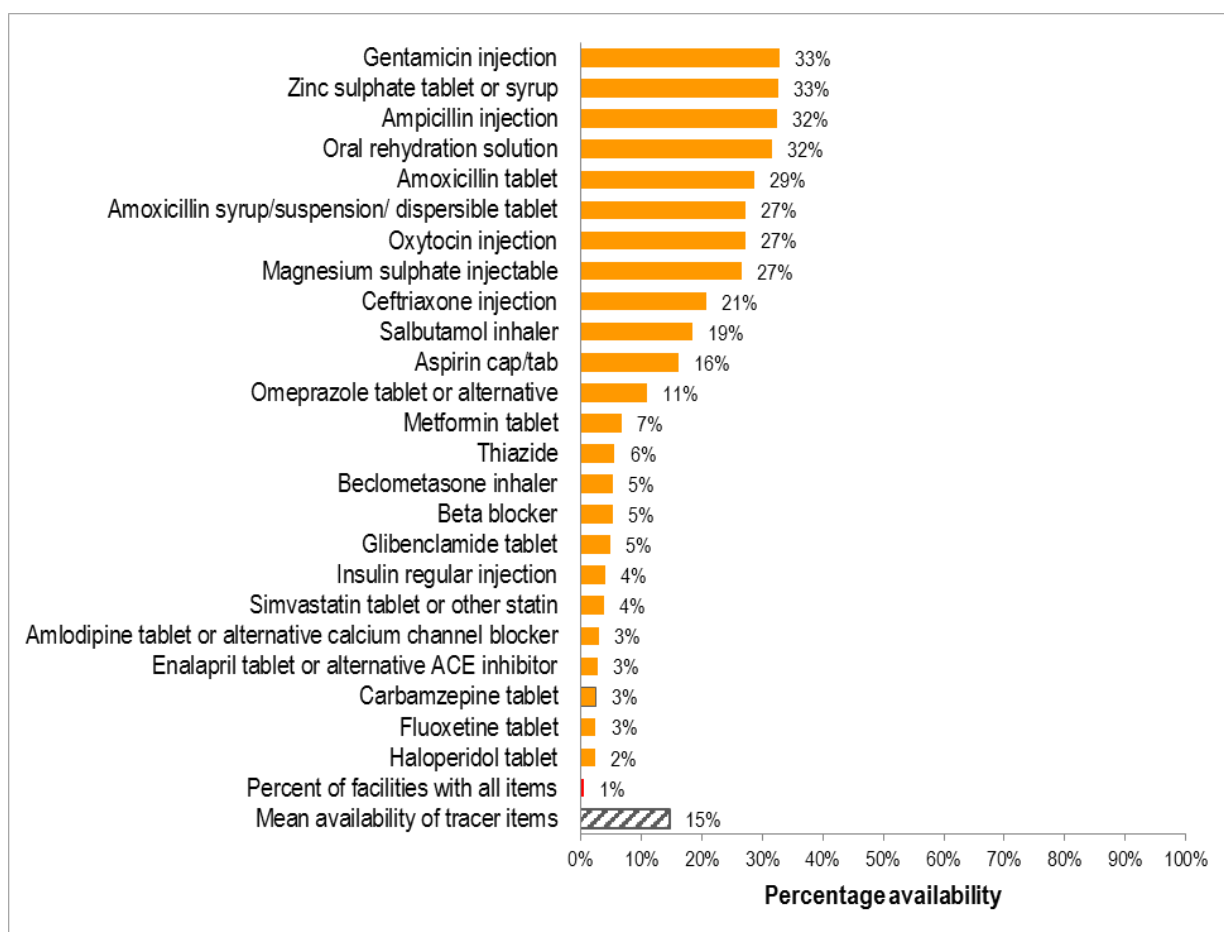


Table 18 and **Table 19** shows availability of essential medicines by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location. **Figure 24** shows the availability of essential medicines by zone and region while **Figure 25** shows the variation in mean availability of essential medicines tracer items by region.

- Only 5% of hospitals had all essential medicines, while no other category of health facility had all of the essential medicines available.
- There was no difference found in the mean availability of essential medicines between non-governmental and governmental facilities (both scored 15%).
- In Somaliland, the Marodi-Jeh region had the greatest mean availability of essential medicines (24%). In Puntland, the Nugaal region showed the greatest mean availability (17%), and in South Central, the Lower Juba region had the highest mean availability of essential medicines (31%).
- Mean availability of essential medicines was much higher among facilities located in urban areas compared to rural areas (19% vs. 8%).

Table 18. Availability of essential medicines by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016, Part 1

	Amlodipine	Amoxicillin syrup	Amoxicillin	Ampicillin injection	Aspirin	Beclometasone	Beta blocker	Carbamzepine	Ceftriaxone	Enalapril	Fluoxetine	Gentamicin
Regions												
Somaliland	2%	35%	34%	32%	11%	4%	5%	2%	26%	2%	1%	34%
Awdal	2%	40%	40%	43%	6%	4%	2%	0%	40%	0%	0%	47%
Marodi-Jeh	4%	65%	58%	46%	22%	7%	11%	3%	32%	6%	1%	39%
Sahil	0%	16%	6%	13%	13%	0%	6%	3%	6%	3%	3%	19%
Sanag	0%	4%	7%	14%	0%	7%	0%	4%	14%	0%	4%	29%
Sool	0%	8%	13%	25%	8%	0%	0%	0%	13%	0%	0%	19%
Togdher	2%	44%	47%	27%	7%	2%	4%	2%	33%	2%	2%	42%
Puntland	1%	19%	22%	28%	17%	4%	2%	1%	14%	1%	2%	29%
Bari	2%	17%	23%	27%	17%	6%	2%	2%	19%	2%	2%	25%
Gardafuu	0%	6%	6%	6%	6%	0%	0%	0%	6%	0%	0%	6%
Karkaar	0%	10%	12%	24%	14%	2%	2%	0%	7%	0%	0%	29%
Mudug	2%	29%	29%	37%	15%	10%	6%	2%	23%	4%	2%	35%
Nugaal	0%	34%	41%	39%	37%	2%	0%	0%	17%	0%	2%	41%
Sanaag	0%	11%	11%	17%	6%	0%	0%	6%	6%	0%	6%	22%
Sool	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	10%
South Central	6%	26%	29%	37%	21%	8%	8%	4%	21%	4%	4%	35%
Bakool	0%	17%	25%	33%	17%	8%	25%	0%	17%	0%	0%	42%
Bay	0%	45%	61%	52%	42%	0%	10%	0%	29%	0%	3%	48%
Benadir	7%	42%	42%	58%	33%	19%	7%	11%	39%	7%	11%	49%
Galgadud	0%	4%	7%	36%	0%	0%	0%	0%	4%	4%	4%	36%
Gedo	8%	22%	19%	31%	17%	8%	8%	6%	19%	8%	6%	28%
Hiiraan	9%	35%	39%	17%	17%	0%	13%	4%	13%	0%	0%	17%
Lower Juba	29%	35%	35%	47%	35%	35%	29%	18%	35%	18%	6%	47%
Lower Shabelle	4%	14%	14%	32%	4%	0%	4%	0%	14%	0%	0%	29%
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Middle Shebelle	5%	23%	27%	27%	27%	5%	5%	0%	18%	5%	0%	32%
Mudug	3%	9%	9%	17%	9%	3%	3%	3%	9%	3%	3%	20%
Facility type												
Hospital	16%	43%	48%	64%	33%	19%	28%	21%	47%	21%	21%	67%

	Amlodipine	Amoxicillin syrup	Amoxicillin	Ampicillin injection	Aspirin	Beclometasone	Beta blocker	Carbamzepine	Ceftriaxone	Enalapril	Fluoxetine	Gentamicin
Referral Health Center	0%	22%	44%	56%	11%	0%	0%	0%	33%	0%	0%	67%
Health Center/MCH	3%	41%	43%	53%	26%	8%	6%	2%	33%	2%	2%	54%
Health Post/PHU	0%	11%	11%	4%	3%	0%	1%	0%	3%	0%	0%	4%
TB Center	2%	0%	2%	2%	2%	2%	2%	0%	2%	2%	0%	2%
Managing authority												
Government	2%	28%	29%	32%	15%	5%	4%	2%	22%	2%	2%	33%
Non-government	6%	24%	27%	33%	18%	7%	8%	4%	18%	4%	4%	32%
Urban/Rural												
Urban	5%	32%	34%	43%	23%	8%	8%	4%	27%	4%	4%	42%
Rural	0%	19%	20%	16%	6%	2%	1%	0%	11%	1%	0%	18%
Total	3%	27%	29%	32%	16%	5%	5%	3%	21%	3%	3%	33%

Table 19. Availability of essential medicines by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016, Part 2

	Glibenclamide	Haloperidol	Insulin	Magnesium sulphate	Metformin	Omeprazole	ORS	Oxytocin	Salbutamol	Simvastatin	Thiazide	Zinc sulphate	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions															
Somaliland	3%	1%	2%	28%	5%	13%	39%	31%	20%	4%	6%	42%	0%	16%	282
Awdal	0%	0%	0%	36%	4%	15%	42%	34%	28%	0%	15%	42%	0%	18%	53
Marodi-Jeh	6%	0%	7%	33%	13%	28%	56%	40%	25%	4%	6%	63%	0%	24%	72
Sahil	6%	3%	3%	26%	3%	23%	29%	26%	0%	0%	0%	29%	0%	10%	31
Sanag	4%	4%	0%	21%	4%	0%	18%	21%	14%	4%	11%	18%	0%	9%	28
Sool	0%	0%	0%	23%	0%	0%	19%	25%	11%	0%	0%	19%	0%	7%	53
Togdher	2%	2%	2%	24%	4%	2%	53%	29%	29%	16%	4%	60%	2%	18%	45
Puntland	4%	1%	3%	20%	4%	7%	24%	17%	15%	2%	3%	26%	0%	11%	228
Bari	2%	2%	4%	15%	2%	6%	21%	15%	21%	2%	2%	21%	2%	11%	48
Gardafuu	0%	0%	0%	6%	0%	0%	6%	0%	6%	0%	0%	6%	0%	2%	17
Karkaar	5%	0%	5%	24%	5%	2%	10%	24%	14%	0%	7%	12%	0%	9%	42
Mudug	6%	2%	4%	23%	4%	12%	33%	19%	17%	8%	6%	33%	0%	15%	52

	Glibenclamide	Haloperidol	Insulin	Magnesium sulphate	Metformin	Omeprazole	ORS	Oxytocin	Salbutamol	Simvastatin	Thiazide	Zinc sulphate	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Nugaal	2%	0%	0%	29%	7%	12%	44%	24%	17%	0%	0%	54%	0%	17%	41
Sanaag	11%	6%	0%	22%	6%	6%	28%	6%	11%	0%	0%	28%	0%	8%	18
Sool	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	1%	10
South Central	8%	4%	7%	30%	10%	12%	30%	31%	20%	5%	7%	29%	1%	17%	289
Bakool	0%	0%	8%	58%	8%	0%	25%	33%	17%	0%	0%	25%	0%	15%	12
Bay	6%	0%	3%	48%	10%	16%	84%	48%	26%	0%	0%	58%	0%	24%	31
Benadir	7%	14%	4%	44%	12%	18%	42%	44%	40%	5%	16%	44%	0%	26%	57
Galgadud	4%	4%	4%	11%	4%	4%	7%	25%	7%	0%	0%	7%	0%	7%	28
Gedo	11%	6%	11%	25%	8%	8%	17%	22%	8%	6%	8%	17%	3%	14%	36
Hiiraan	9%	0%	0%	26%	13%	4%	43%	17%	22%	9%	4%	43%	0%	15%	23
Lower Juba	24%	0%	29%	35%	35%	35%	29%	41%	35%	29%	29%	35%	0%	31%	17
Lower Shabelle	4%	4%	4%	21%	4%	7%	18%	25%	11%	4%	4%	18%	0%	10%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	14%	0%	9%	23%	14%	23%	14%	27%	14%	5%	5%	23%	0%	14%	22
Mudug	3%	3%	6%	14%	6%	9%	9%	23%	6%	3%	3%	9%	3%	7%	35
Facility type															
Hospital	31%	14%	22%	53%	31%	31%	48%	57%	40%	21%	22%	50%	5%	36%	58
Referral Health Center	0%	0%	0%	56%	11%	11%	56%	56%	22%	0%	11%	67%	0%	22%	9
Health Center/MCH	5%	3%	4%	44%	8%	17%	49%	45%	31%	4%	8%	49%	0%	22%	383
Health Post/PHU	0%	0%	1%	2%	1%	1%	11%	2%	1%	1%	0%	13%	0%	3%	294
TB Center	2%	0%	2%	2%	2%	2%	0%	0%	2%	2%	2%	0%	0%	1%	55
Managing authority															
Government	4%	2%	3%	27%	5%	11%	33%	27%	19%	3%	6%	35%	1%	15%	565
Non-government	8%	2%	6%	27%	11%	11%	28%	28%	17%	5%	5%	26%	0%	15%	234
Urban/Rural															
Urban	8%	4%	6%	34%	10%	15%	37%	34%	24%	5%	8%	38%	1%	19%	492

	Glibenclamide	Haloperidol	Insulin	Magnesium sulphate	Metformin	Omeprazole	ORS	Oxytocin	Salbutamol	Simvastatin	Thiazide	Zinc sulphate	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Rural	1%	0%	1%	15%	2%	5%	23%	16%	9%	2%	2%	25%	0%	8%	307
Total	5%	2%	4%	27%	7%	11%	32%	27%	19%	4%	6%	33%	1%	15%	799

Figure 24. Availability of essential medicines by zone and region, Somalia 2016

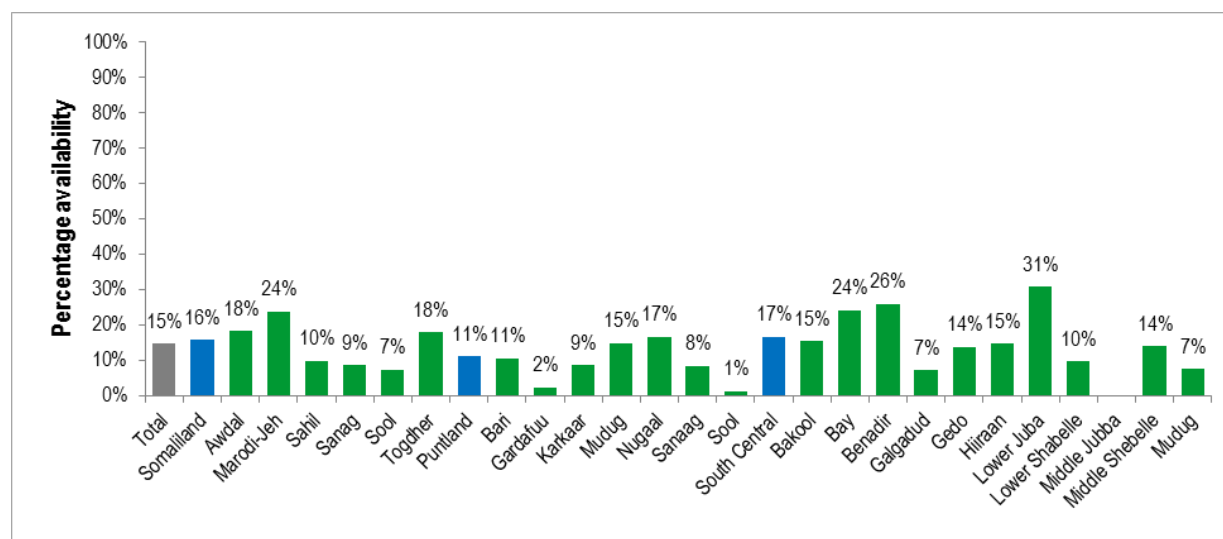
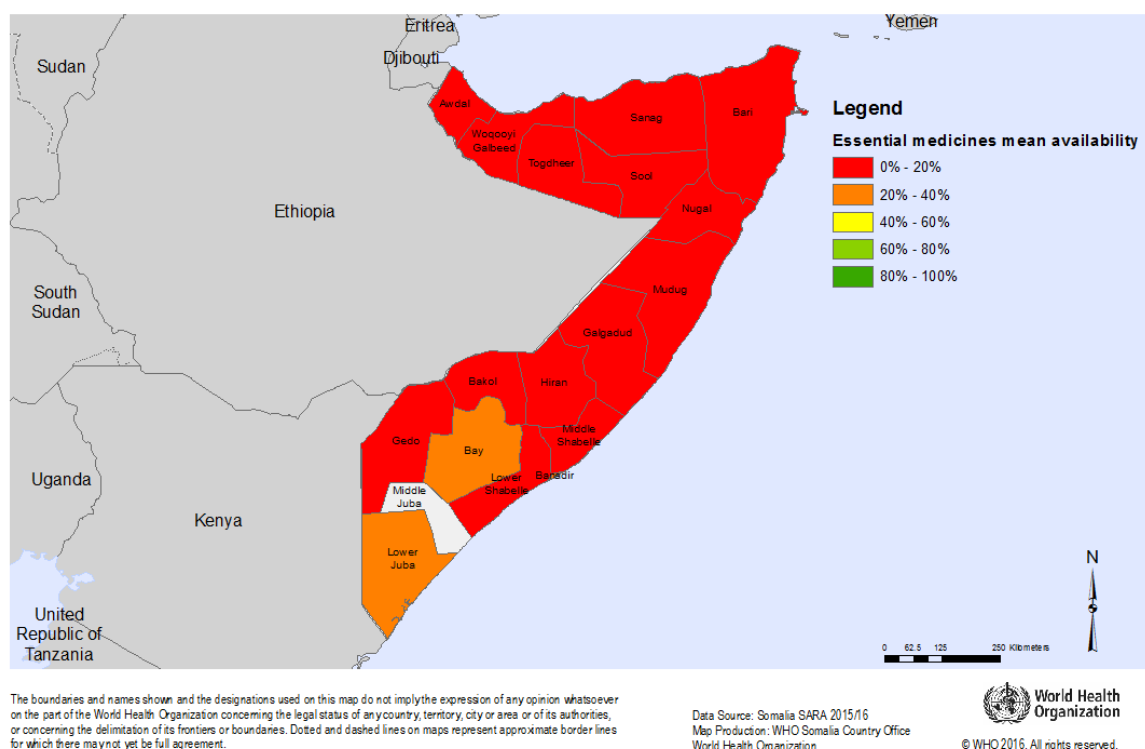


Figure 25. Map of the mean availability of essential medicine items by region, Somalia 2016



3.6 Supply chain

Information on facilities' supply, management and distribution of medicines and commodities can assist in planning and monitoring service availability. Identifying barriers or delays that exist within the supply chain will enable managers to use this information to improve access to essential medicines and commodities needed to provide quality health care services in Somalia.

Facilities were assessed on whether they had the following nine items/functions on the day of the assessment:

- Person responsible for managing the ordering of medical supplies
- Mechanisms (distribution system) used to determine facility's resupply quantities
- Methods (formula vs. no formula) used to determine facility's resupply quantities
- Availability of reporting on stock and consumption
- Main source of pharmaceutical commodity supplies
- Delivery method of pharmaceutical commodities supplies
- Transportation of products from medical stores to facilities
- Timing between ordering and receiving products
- Availability of a storage room

Figure 26 shows the availability of reporting, storage room and possible delays (waiting more than

two weeks for commodities) among health facilities in Somalia. **Table 20** shows main source of commodities and transport of commodities by region, facility type, managing authority (non-governmental vs. governmental), and by urban vs. rural location.

- The majority of facilities (77%) had a monthly reporting system in place whereby information on stock and consumption is shared. More than half of all facilities (57%) also had a storage room available for commodities.
- The majority of facilities reported having to wait at least 2 weeks to receive commodities once an order was placed (38% of all facilities received commodities within 2 weeks of ordering).
- NGOs/donors represent the main source of commodities in Somaliland (63%) and South Central (81%), while National Medical Stores provide the majority of commodities in Puntland (92%).
- The majority of non-governmental facilities receive their commodities from NGOs/donors (77%) compared to half of governmental facilities.
- 20% of all facilities must arrange delivery of their commodities.

Figure 26. Availability of reporting on stock and consumption, storage room and timing between ordering and receiving commodities (N=284), Somalia 2016

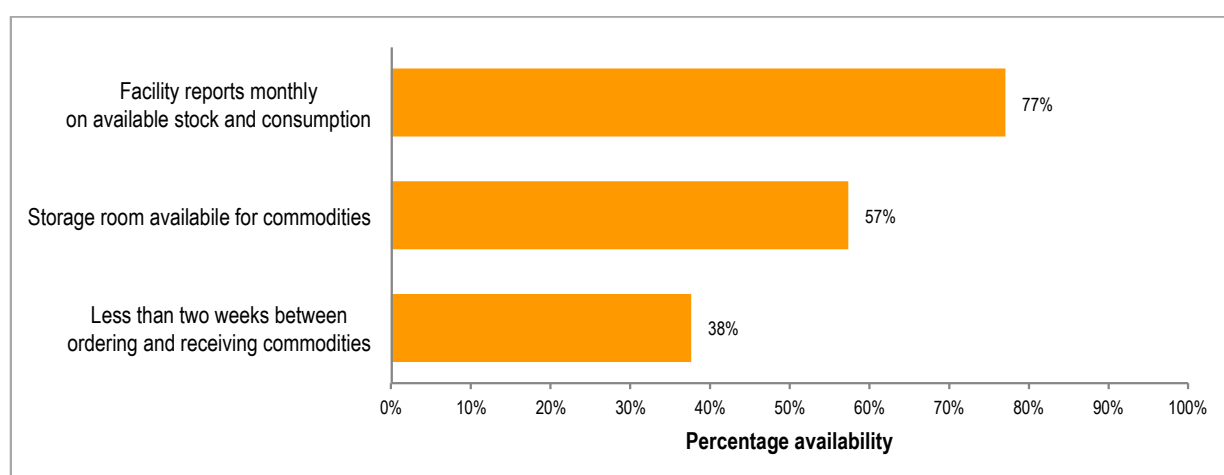


Table 21 shows the availability of storage room and the length of time between ordering and receiving commodities by region, facility type, managing authority (non-governmental vs. governmental), and urban vs. rural location

- 14% of all facilities showed significant delays between ordering and receiving commodities (more than 2 months). Among governmental facilities, 9% experienced this delay compared to 26% among non-governmental facilities.
- 15% of all facilities reported that they did not make orders for commodities at all.
- Facilities located in urban areas reported fewer delays in the time between ordering and receiving commodities (44% of urban facilities received commodities less than 2 weeks after ordering compared to 21% of rural facilities).
- In Somaliland, 36% of facilities had a storage room available for commodities. In Puntland, 66% of facilities had a storage room, and in South Central, 79% of facilities reported having a storage room for commodities.

Table 20. Supply chain: main source of commodities and transport of commodities by region, facility type, managing authority and urban vs. rural location (N=284), Somalia 2016

	Main source of commodities: National Medical Stores	Main source of commodities: Joint Medical Stores	Main source of commodities: NGO/Donors	Main source of commodities: Private sources	Main source of commodities: Other	Commodities delivered by supplier	Facility must arrange delivery of commodities	Other mechanism for commodity delivery	From central medical stores, local supplier delivers	From central medical stores, higher level delivers	From central medical stores, the facility collects	From central medical stores, other mechanism	Total number of facilities
Regions													
Somaliland	17%	4%	63%	7%	8%	82%	15%	2%	60%	47%	35%	3%	123
Awdal	9%	0%	87%	4%	0%	96%	4%	0%	61%	65%	30%	4%	23
Marodi-Jeh	2%	10%	53%	14%	20%	59%	35%	6%	41%	10%	47%	6%	49
Sahil	33%	0%	56%	11%	0%	100%	0%	0%	100%	11%	0%	0%	9
Sanag	20%	0%	80%	0%	0%	100%	0%	0%	80%	100%	20%	0%	5
Sool	70%	0%	30%	0%	0%	100%	0%	0%	80%	100%	70%	0%	10
Togdher	26%	0%	74%	0%	0%	96%	4%	0%	70%	81%	19%	0%	27
Puntland	92%	0%	8%	0%	0%	92%	8%	0%	74%	77%	21%	2%	62
Bari	82%	0%	18%	0%	0%	100%	0%	0%	64%	91%	27%	0%	11
Gardafuu	0%	0%	100%	0%	0%	100%	0%	0%	100%	100%	0%	0%	1
Karkaar	83%	0%	17%	0%	0%	67%	33%	0%	100%	100%	50%	0%	6
Mudug	94%	0%	6%	0%	0%	100%	0%	0%	100%	59%	6%	6%	17
Nugaal	100%	0%	0%	0%	0%	95%	5%	0%	50%	77%	5%	0%	22
Sanaag	100%	0%	0%	0%	0%	60%	40%	0%	80%	80%	100%	0%	5
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	9%	3%	81%	3%	4%	65%	33%	2%	38%	41%	74%	11%	99
Bakool	0%	0%	67%	0%	33%	100%	0%	0%	0%	0%	0%	100%	3
Bay	0%	0%	89%	4%	7%	67%	33%	0%	63%	63%	70%	0%	27
Benadir	12%	0%	88%	0%	0%	77%	23%	0%	23%	38%	65%	19%	26
Galgadud	50%	50%	0%	0%	0%	50%	50%	0%	50%	50%	100%	0%	2
Gedo	10%	0%	90%	0%	0%	50%	40%	10%	60%	20%	80%	20%	10
Hiiraan	0%	0%	90%	10%	0%	50%	50%	0%	0%	0%	100%	0%	10
Lower Juba	33%	17%	50%	0%	0%	67%	33%	0%	83%	67%	83%	0%	6
Lower Shabelle	0%	0%	67%	17%	17%	50%	33%	17%	0%	17%	67%	17%	6
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	17%	17%	67%	0%	0%	50%	50%	0%	33%	100%	100%	0%	6
Mudug	33%	0%	67%	0%	0%	67%	33%	0%	33%	0%	67%	0%	3

	Main source of commodities: National Medical Stores	Main source of commodities: Joint Medical Stores	Main source of commodities: NGO/Donors	Main source of commodities: Private sources	Main source of commodities: Other	Commodities delivered by supplier	Facility must arrange delivery of commodities	Other mechanism for commodity delivery	From central medical stores, local supplier delivers	From central medical stores, higher level delivers	From central medical stores, the facility collects	From central medical stores, other mechanism	Total number of facilities
Facility type													
Hospital	38%	6%	41%	6%	9%	63%	34%	3%	53%	50%	63%	3%	32
Referral Health Center	67%	0%	17%	17%	0%	83%	17%	0%	100%	67%	17%	0%	6
Health Center/MCH	28%	3%	60%	4%	5%	79%	20%	1%	51%	52%	50%	6%	205
Health Post/PHU	31%	0%	64%	3%	3%	92%	3%	5%	74%	49%	10%	8%	39
TB Center	50%	0%	50%	0%	0%	0%	100%	0%	50%	50%	100%	0%	2
Managing authority													
Government	39%	2%	50%	4%	4%	84%	14%	2%	63%	57%	34%	3%	207
Non-government	9%	4%	77%	4%	6%	64%	35%	1%	35%	36%	77%	12%	77
Urban/Rural													
Urban	32%	3%	54%	4%	6%	74%	25%	1%	50%	50%	55%	7%	204
Rural	28%	1%	65%	4%	3%	89%	9%	3%	70%	58%	20%	1%	80
Total	31%	3%	57%	4%	5%	78%	20%	2%	56%	52%	45%	6%	284

Table 21. Supply chain: storage room and length of time between ordering and receiving commodities by region, facility type, managing authority, and urban vs. rural location (N=284), Somalia 2016

	Length of time between ordering and receiving commodities: Less than two weeks	Length of time between ordering and receiving commodities: Two weeks to one month	Length of time between ordering and receiving commodities: Between one and two months	Length of time between ordering and receiving commodities: More than two months	Length of time between ordering and receiving commodities: Do not make orders	Storage room available for commodities	Total number of facilities
Regions							
Somaliland	26%	24%	7%	9%	33%	36%	123
Awdal	39%	35%	9%	17%	0%	26%	23
Marodi-Jeh	8%	8%	8%	12%	63%	31%	49
Sahil	22%	78%	0%	0%	0%	33%	9
Sanag	40%	40%	20%	0%	0%	80%	5
Sool	10%	0%	10%	0%	80%	30%	10
Togdher	52%	33%	4%	4%	7%	48%	27

	Length of time between ordering and receiving commodities: Less than two weeks	Length of time between ordering and receiving commodities: Two weeks to one month	Length of time between ordering and receiving commodities: Between one and two months	Length of time between ordering and receiving commodities: More than two months	Length of time between ordering and receiving commodities: Do not make orders	Storage room available for commodities	Total number of facilities
Puntland	47%	29%	10%	13%	2%	66%	62
Bari	91%	9%	0%	0%	0%	73%	11
Gardafuu	0%	0%	0%	100%	0%	100%	1
Karkaar	67%	17%	17%	0%	0%	83%	6
Mudug	41%	35%	6%	18%	0%	53%	17
Nugaal	32%	41%	14%	9%	5%	64%	22
Sanaag	20%	20%	20%	40%	0%	80%	5
Sool	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	46%	19%	12%	20%	2%	79%	99
Bakool	0%	33%	33%	33%	0%	100%	3
Bay	33%	15%	11%	41%	0%	59%	27
Benadir	77%	19%	4%	0%	0%	81%	26
Galgadud	100%	0%	0%	0%	0%	100%	2
Gedo	10%	20%	50%	20%	0%	90%	10
Hiiraan	50%	10%	20%	20%	0%	90%	10
Lower Juba	67%	17%	0%	17%	0%	67%	6
Lower Shabelle	33%	33%	0%	17%	17%	100%	6
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	17%	33%	0%	33%	17%	83%	6
Mudug	67%	33%	0%	0%	0%	100%	3
Facility type							
Hospital	53%	13%	9%	9%	16%	84%	32
Referral Health Center	33%	50%	17%	0%	0%	50%	6
Health Center/MCH	40%	25%	8%	13%	13%	58%	205
Health Post/PHU	13%	21%	15%	21%	31%	33%	39
TB Center	0%	50%	0%	50%	0%	50%	2
Managing authority							
Government	37%	25%	9%	9%	20%	49%	207
Non-government	39%	21%	12%	26%	3%	79%	77
Urban/Rural							
Urban	44%	23%	8%	12%	13%	63%	204
Rural	21%	25%	13%	19%	23%	44%	80

	Length of time between ordering and receiving commodities: Less than two weeks	Length of time between ordering and receiving commodities: Two weeks to one month	Length of time between ordering and receiving commodities: Between one and two months	Length of time between ordering and receiving commodities: More than two months	Length of time between ordering and receiving commodities: Do not make orders	Storage room available for commodities	Total number of facilities
Total	38%	24%	10%	14%	15%	57%	284

3.7 Supervision

Supervision visits to health facilities from a higher level in the health service can provide direct and timely feedback on the availability and quality of services. Supervisory visits can also help ensure that standards and protocols are followed and provide motivation and support for health care providers at facilities.

Facilities were assessed on their supervision capacity using the following five items:

- The last time a facility received a supervision visit from the higher level
- Supervision assessment of pharmacy (drug stock out, expiry, records, etc.)
- Supervision assessment of staffing (staff available and training)
- Supervision assessment of data (completeness, quality, and timely reporting)
- Supervision assessment of immunization

Table 22 shows the length of time since last supervision from the higher level.

- Non-governmental facilities were more likely than government facilities to have had a supervisor visit in the last month (39% compared to 33%). However, visits occurring within the last 3 months were higher among government facilities (32% compared to 16%) and after three months, the supervisory visits were about equal between non-governmental (22%) and government facilities (20%).
- A third of facilities in Somaliland received supervisory visits in the month of the survey, followed by 25% in the last three months, and 19% more than three months. 23% of facilities in Somaliland didn't know when their last supervision visit took place. The Togdher region was most likely to have had a supervisory visit in the last month (58%) compared to other regions.
- In Puntland, the majority of facilities reported supervisory visits in the last three months (40%), followed by 29% in the last month and 24% more than three months ago. Only 7% of facilities in Puntland did not know when the last supervision visit occurred. The Bari region was most likely to have had the most recent supervisory visit (54%) compared to other regions.
- 41% of facilities in the South Central zone reported their last supervision visit in the last month, followed by an equal proportion of facilities receiving supervision in the last three months (19%) and more than three months ago (19%). 20% of facilities in South Central did not know when the last supervision visit occurred.
- Urban facilities were more likely than rural facilities to have had a supervision visit in the last month (43% compared to 22%).
- Health centers were most likely to have had a recent supervision visit (47%), compared to health posts, which were least likely to have a very recent visit (18%).

Table 22. Supervision: length of time since last supervision visit from the higher level by region, facility type, governmental vs. non-governmental and urban vs. rural location (N=799), Somalia 2016

	This month	In the last three months	More than three months ago	Don't know	Total number of facilities
Regions					
Somaliland	33%	25%	19%	23%	282
Awdal	57%	23%	17%	4%	53

	This month	In the last three months	More than three months ago	Don't know	Total number of facilities
Marodi-Jeh	14%	14%	43%	29%	72
Sahil	29%	65%	6%	0%	31
Sanag	21%	54%	11%	14%	28
Sool	23%	4%	6%	68%	53
Togdher	58%	24%	11%	7%	45
Puntland	29%	40%	24%	7%	228
Bari	54%	33%	6%	6%	48
Gardafuu	0%	65%	24%	12%	17
Karkaar	12%	52%	29%	7%	42
Mudug	31%	25%	38%	6%	52
Nugaal	32%	44%	24%	0%	41
Sanaag	28%	39%	11%	22%	18
Sool	10%	50%	40%	0%	10
South Central	41%	19%	19%	20%	289
Bakool	33%	17%	17%	33%	12
Bay	48%	10%	19%	23%	31
Benadir	54%	32%	11%	4%	57
Galgadud	39%	4%	36%	21%	28
Gedo	14%	33%	3%	50%	36
Hiiraan	74%	0%	26%	0%	23
Lower Juba	53%	18%	24%	6%	17
Lower Shabelle	21%	25%	43%	11%	28
Middle Jubba	N/A	N/A	N/A	N/A	0
Middle Shebelle	64%	23%	5%	9%	22
Mudug	17%	14%	23%	46%	35
Facility type					
Hospital	43%	26%	17%	14%	58
Referral Health Center	44%	44%	11%	0%	9
Health Center/MCH	47%	21%	20%	12%	383
Health Post/PHU	18%	34%	21%	27%	294
TB Center	29%	35%	22%	15%	55
Managing authority					
Government	33%	32%	20%	15%	565
Non-government	39%	16%	22%	23%	234
Urban/Rural					
Urban	43%	25%	19%	13%	492
Rural	22%	30%	23%	25%	307
Total	35%	27%	21%	18%	799

Table 23 shows areas assessed by supervisor in the last three months by region, facility type, managing authority (government vs. non-governmental), and by urban vs. rural location.

- Of all facilities with supervisory assessment in the last 3 months, pharmacy was the predominant area of assessment (90%) and immunization was the area least assessed (62%).
- Supervision across the different areas was highest in referral health centers (100% in pharmacy, data, and immunization) compared to other facility types. Only 22% of health posts, for example, reported assessment in the area of immunization during the supervisory visit in the last 3 months.

Table 23. Areas assessed by supervisors among facilities with supervision in the last 3 months (N=495), Somalia 2016

	Pharmacy	Staffing	Data	Immunization	Total number of facilities
Regions					
Somaliland	86%	76%	80%	56%	163
Awdal	95%	86%	88%	71%	42
Marodi-Jeh	85%	95%	90%	75%	20
Sahil	97%	86%	83%	41%	29
Sanag	81%	48%	62%	29%	21
Sool	79%	64%	79%	71%	14
Togdher	73%	68%	76%	49%	37
Puntland	91%	64%	80%	46%	158
Bari	95%	52%	90%	45%	42
Gardafuu	91%	73%	55%	36%	11
Karkaar	96%	67%	85%	41%	27
Mudug	83%	66%	83%	48%	29
Nugaal	90%	77%	81%	52%	31
Sanaag	92%	42%	75%	42%	12
Sool	83%	83%	33%	50%	6
South Central	93%	80%	86%	83%	174
Bakool	100%	50%	83%	100%	6
Bay	94%	72%	83%	89%	18
Benadir	94%	84%	92%	73%	49
Galgadud	92%	92%	92%	75%	12
Gedo	88%	47%	71%	88%	17
Hiiraan	88%	76%	41%	82%	17
Lower Juba	92%	92%	100%	92%	12
Lower Shabelle	100%	92%	100%	92%	13
Middle Jubba	N/A	N/A	N/A	N/A	0
Middle Shebelle	89%	89%	95%	74%	19
Mudug	100%	100%	100%	100%	11
Facility type					
Hospital	90%	88%	95%	55%	40
Referral Health Center	100%	75%	100%	100%	8
Health Center/MCH	92%	80%	88%	93%	259
Health Post/PHU	87%	58%	68%	22%	153
TB Center	91%	83%	86%	9%	35
Managing authority					
Government	89%	71%	81%	55%	366
Non-government	92%	81%	85%	81%	129
Urban/Rural					
Urban	92%	78%	88%	73%	335
Rural	87%	65%	71%	39%	160
Total	90%	74%	82%	62%	495

3.8 General service readiness

General service readiness refers to the overall capacity of health facilities to provide general health services. Readiness is defined as the availability of components required to provide services in the following five domains:

- Basic amenities
- Basic equipment

- Standard precautions for infection prevention
- Diagnostic capacity
- Essential medicines

Figure 27 shows the mean general service readiness scores by domain.

- Among the five domains, the highest score was found in standard precautions for infection prevention at 62%, while the lowest score was found in essential medicines (15%).
- Overall general service readiness was found to be 39%.

Figure 27. General service readiness index and domain scores (N=799), Somalia 2016

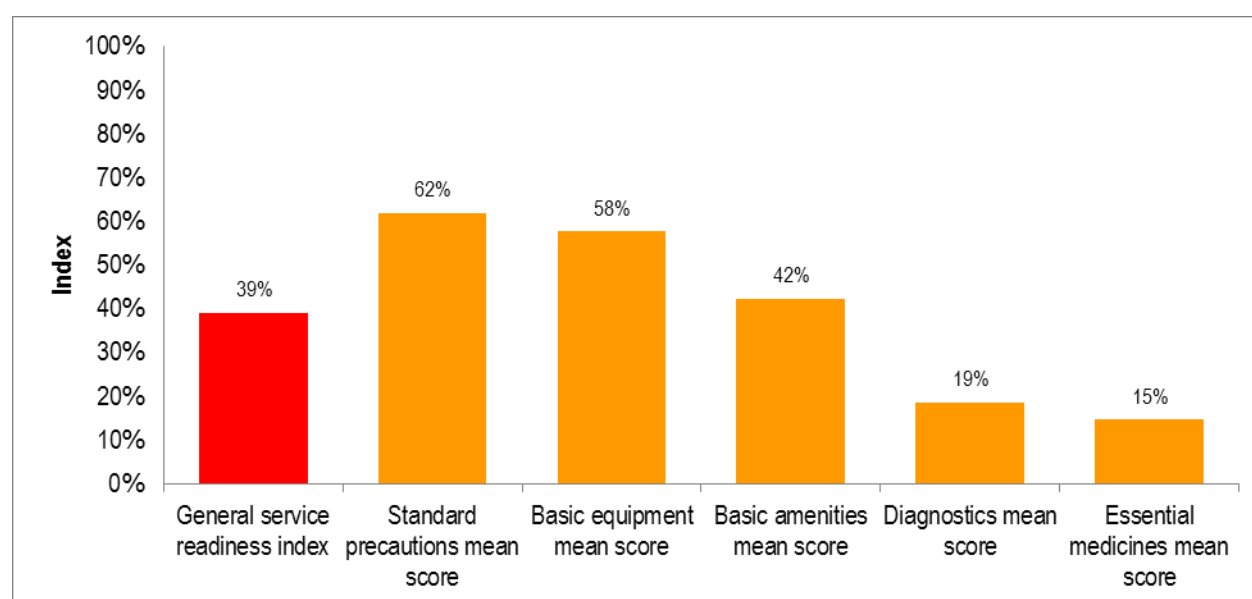


Table 24 shows the general service readiness scores by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location. **Figure 25** shows the variation in the general service readiness index by region.

- Across the five domains, hospitals scored higher in general service readiness than all other facility types. Overall, hospitals scored highest on the general service readiness index (68%), compared to health posts, which scored the lowest (19%).
- In four out of the five domains, non-governmental facilities scored higher than governmental facilities (basic amenities, basic equipment, standard precautions, and diagnostics). Essential medicines was the only domain in which non-governmental and governmental facilities scored the same (15%).
- Within Somaliland, the Sahil region scored highest in the domains of basic amenities (57%) and basic equipment (67%), while the Marodi-Jeh region scored highest in standard precautions (63%), diagnostics (25%) and essential medicines (24%).
- In Puntland, the Sool region scored highest in the basic amenities (47%) and basic equipment (63%) domains, while Mudug scored highest in standard precautions (60%), Sanaag in

diagnostics (32%), and Nugaal in essential medicines (17%).

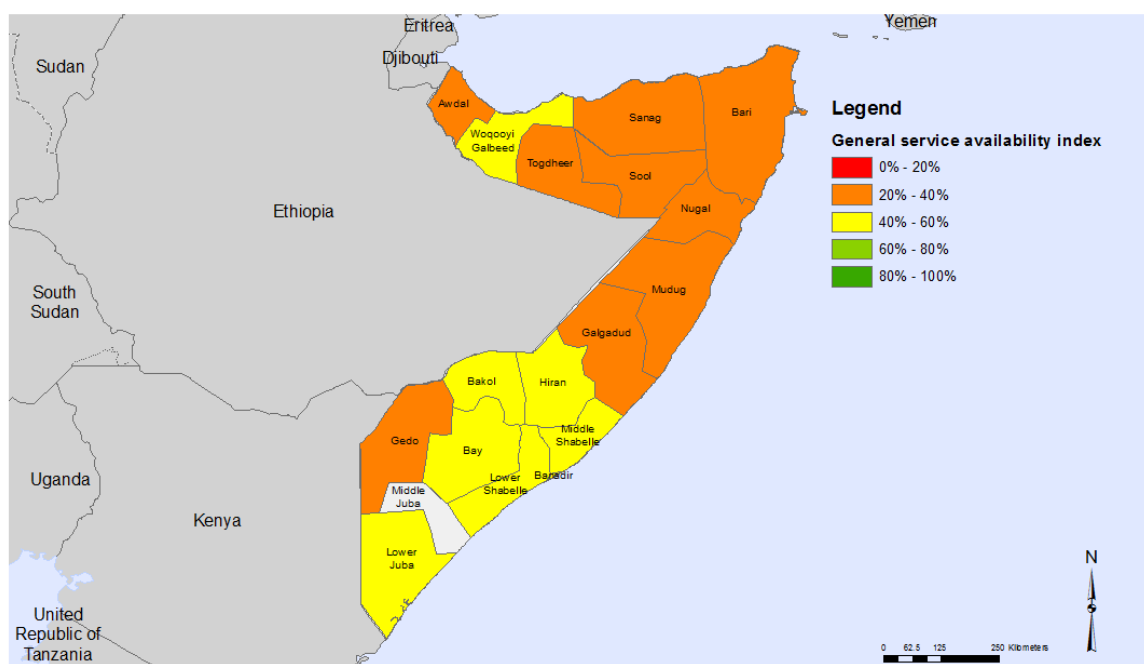
- In the South Central Zone, the Benadir region scored highest in two out of the five general readiness domains (basic amenities and diagnostics). The highest basic equipment score was found in Bakool (82%). Essential medicines readiness was highest in the Lower Juba region (31%). Standard precautions readiness was particularly high in the Lower Shabelle region (93%).
- Facilities located in urban areas performed consistently higher in all of the general service readiness domains compared to facilities located in rural areas. Overall, urban facilities scored 48% in general service readiness compared to 25% in rural facilities.

Table 24. General service readiness index and domain scores by region, facility type, managing authority, and urban vs. rural location (N=799), Somalia 2016

	Basic amenities mean score	Basic equipment mean score	Standard precautions mean score	Diagnostics mean score	Essential medicines mean score	General service readiness index	Total number of facilities
Regions							
Somaliland	38%	52%	54%	17%	16%	35%	282
Awdal	52%	53%	60%	13%	18%	39%	53
Marodi-Jeh	35%	59%	63%	25%	24%	41%	72
Sahil	57%	67%	56%	28%	10%	44%	31
Sanag	36%	36%	42%	14%	9%	27%	28
Sool	27%	44%	50%	6%	7%	27%	53
Togdher	30%	49%	42%	18%	18%	31%	45
Puntland	38%	51%	55%	16%	11%	34%	228
Bari	26%	35%	54%	7%	11%	26%	48
Gardafuu	36%	23%	31%	7%	2%	20%	17
Karkaar	39%	76%	59%	21%	9%	41%	42
Mudug	41%	49%	60%	19%	15%	37%	52
Nugaal	46%	54%	58%	19%	17%	39%	41
Sanaag	44%	53%	55%	32%	8%	38%	18
Sool	47%	63%	44%	0%	1%	31%	10
South Central	49%	69%	75%	22%	17%	46%	289
Bakool	50%	82%	57%	10%	15%	43%	12
Bay	49%	77%	84%	21%	24%	51%	31
Benadir	63%	79%	86%	41%	26%	59%	57
Galgadud	42%	65%	63%	19%	7%	39%	28
Gedo	40%	42%	52%	13%	14%	32%	36
Hiiraan	42%	62%	80%	18%	15%	43%	23
Lower Juba	53%	68%	73%	29%	31%	51%	17
Lower Shabelle	57%	76%	93%	30%	10%	53%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	52%	75%	87%	9%	14%	47%	22
Mudug	40%	65%	67%	7%	7%	37%	35
Facility type							
Hospital	68%	83%	84%	67%	36%	68%	58
Referral Health Center	54%	81%	81%	43%	22%	56%	9
Health Center/MCH	49%	78%	77%	23%	22%	50%	383
Health Post/PHU	26%	28%	34%	5%	3%	19%	294
TB Center	54%	44%	79%	6%	1%	37%	55
Managing authority							
Government	40%	54%	56%	18%	15%	36%	565
Non-government	49%	67%	76%	19%	15%	45%	234
Urban/Rural							

	Basic amenities mean score	Basic equipment mean score	Standard precautions mean score	Diagnostics mean score	Essential medicines mean score	General service readiness index	Total number of facilities
Urban	50%	69%	75%	25%	19%	48%	492
Rural	30%	39%	42%	9%	8%	25%	307
Total	42%	58%	62%	19%	15%	39%	799

Figure 28. Map of the general service availability index by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

 **World Health Organization**
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4. Service specific availability and readiness

In addition to assessing the offer of general services by health facilities, the SARA also measures the availability and readiness of health facilities to offer specific health interventions through consideration of tracer items that include trained staff and guidelines, equipment, diagnostic capacity, and medicines and commodities. The following key health services were assessed:

1. Maternal, neonatal, and child health
 - Family planning/birth spacing
 - Antenatal care
 - Basic emergency obstetric care
 - Comprehensive emergency obstetric care
 - Child immunization
 - Child health preventive and curative care services
 - Adolescent health
 - Essential medicines for mothers
2. Malaria services
3. Tuberculosis services
4. HIV/AIDS
 - HIV counseling and testing
 - HIV/AIDS care and support services
 - Antiretroviral therapy (ARV)
 - Preventing mother-to-child transmission (PMTCT)
5. Sexually transmitted infections (STI) services
6. Non-communicable disease services
 - Diabetes
 - Cardiovascular disease (CVD)
 - Chronic respiratory disease (CRD)
 - Cervical cancer
7. Surgical services
 - Basic surgery
 - Comprehensive surgery
 - Blood transfusion
8. Tracer medicines
9. Advance diagnostic services
10. High level diagnostic equipment

For each service, the percentage of facilities offering the service were computed as a measure of the availability of the service. In addition, for facilities offering the service, readiness to provide the service was assessed based on the presence of a number of tracer items in the following domains:

- Guidelines and trained staff
- Equipment

- Diagnostic capacity
- Medicines and commodities

The tracer items are considered to be a minimum set of items that are a prerequisite for the facility to be able to offer an adequate level of care. Service readiness is a key indicator for assessing and monitoring improvements and investments in service delivery. As for general service readiness, an overall readiness score was computed for each health service by calculating the average number of tracer items available.

4.1 Maternal, neonatal, and child health

The overall availability of maternal, neonatal and child health services in Somalia can be seen in **Figure 29**.

- Among MNCAH services in general, the most available were found to be child health preventive and curative care (66%) and antenatal care (66%).
- The least available service within MNCAH was comprehensive emergency obstetric care (24%).

Figure 29. Availability of MNCAH services (n = 799), Somalia 2016

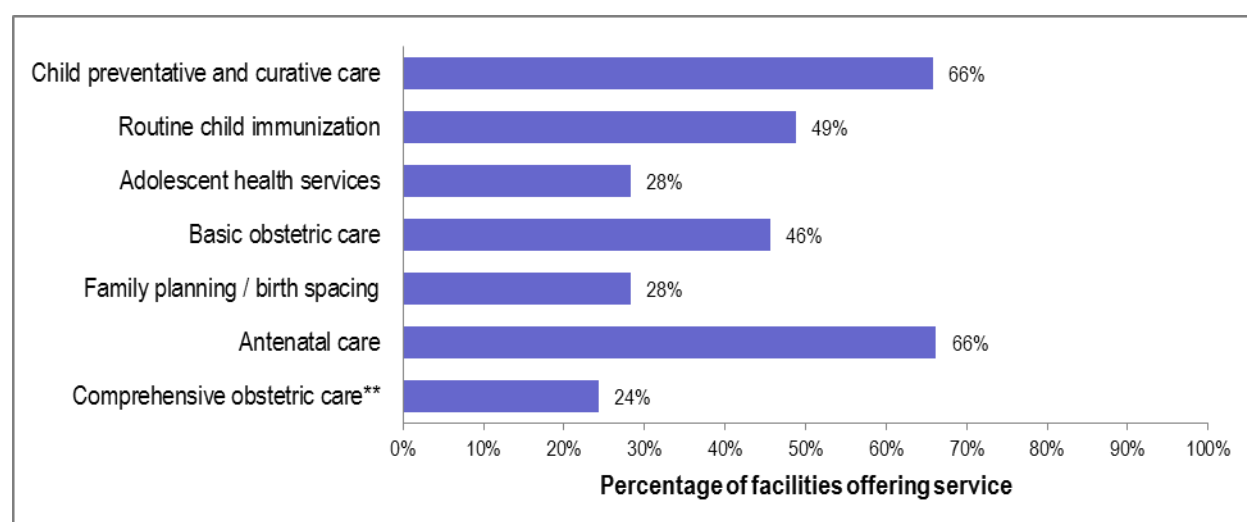
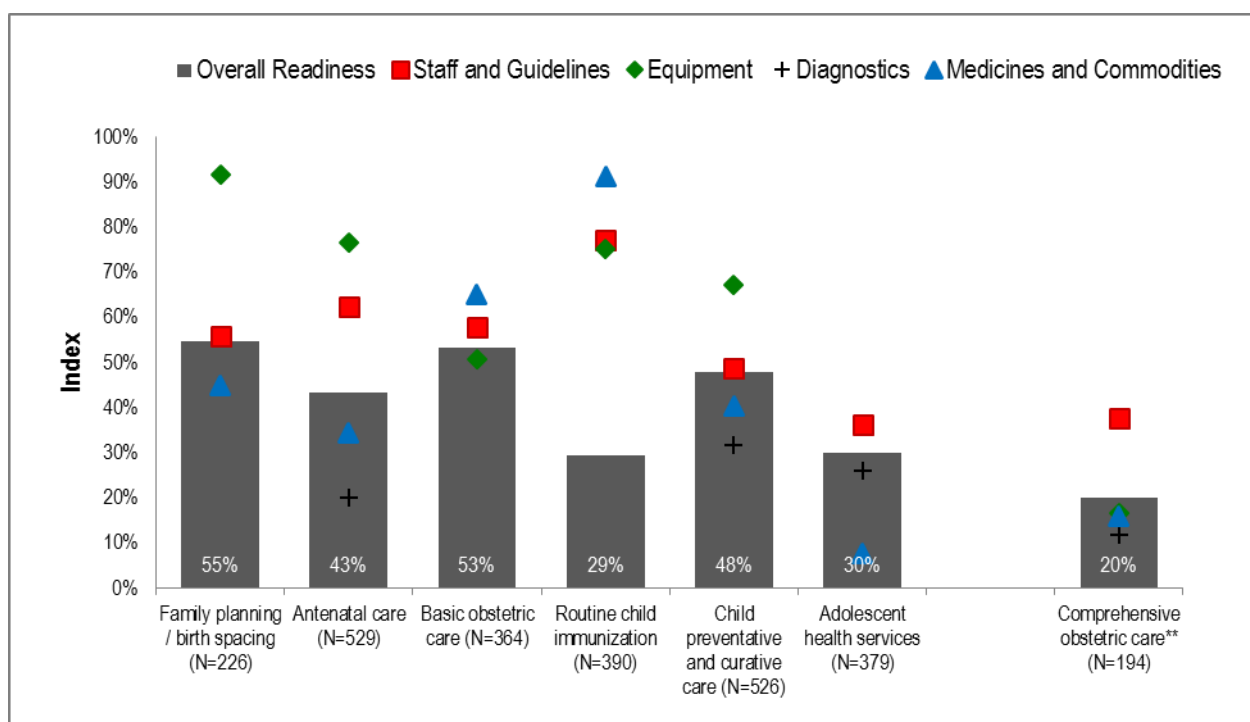


Figure 30 depicts the readiness of MNACH services for each type of service and domain.

- Within the MNACH category of services, overall readiness was highest among family planning/birth spacing services (55%), and lowest among comprehensive obstetric care (20%).
- Among family planning/birth spacing, antenatal care, and child health preventive and curative care, the highest readiness scores were found in the equipment domain and lowest in medicines and commodities.
- In contrast, services such as basic obstetric care and child immunization had the highest readiness scores in the area of medicines and commodities and lowest in the area of equipment.
- Readiness to provide adolescent health care and comprehensive obstetric care was highest in the domain of trained staff and guidelines, and lowest in the medicines and commodities domain.

Figure 30. Readiness to provide MNCAH services, Somalia 2016



* The readiness score corresponds to the average availability (%) of the tracer items of the four domains (« Staff and guidelines », « Equipment », « Diagnostic capacity » and « Medicines and commodities »).

** Only includes hospitals and health facilities offering caesarean section.

4.1.1 Family planning

Family planning reduces mortality and morbidity associated with pregnancy by preventing unwanted pregnancies, particularly high risk pregnancies among adolescents and older women, and by increasing birth intervals. Birth spacing of less than 24 months compared with spacing of 36 months carries with it greater risks of foetal, infant and childhood death, low birth weight and childhood under-nutrition. Somalia's Essential Package of Health Services (EPHS) includes family planning as a key component of maternal, reproductive and neonatal services provided by the health system. The tracer items required for family planning/birth spacing service readiness are outlined in **Table 25**.

Table 25. Tracer items for family planning/birth spacing services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines on family planning / birth spacing Staff trained in family planning / birth spacing in the past two years Family planning/birth spacing check-lists and/or job-aids
Equipment	<ul style="list-style-type: none"> Blood pressure apparatus
Medicines and commodities	<ul style="list-style-type: none"> Combined estrogen progesterone oral contraceptive pills Progestin-only contraceptive pills Injectable contraceptives Condoms

Service availability

Figure 31 shows the countrywide availability of family planning/birth spacing services. Nationally, less than a third of all facilities surveyed (28%) offered family planning/birth spacing services.

Figure 31. Percentage of facilities that offer family planning/birth spacing services (N=799), Somalia 2016

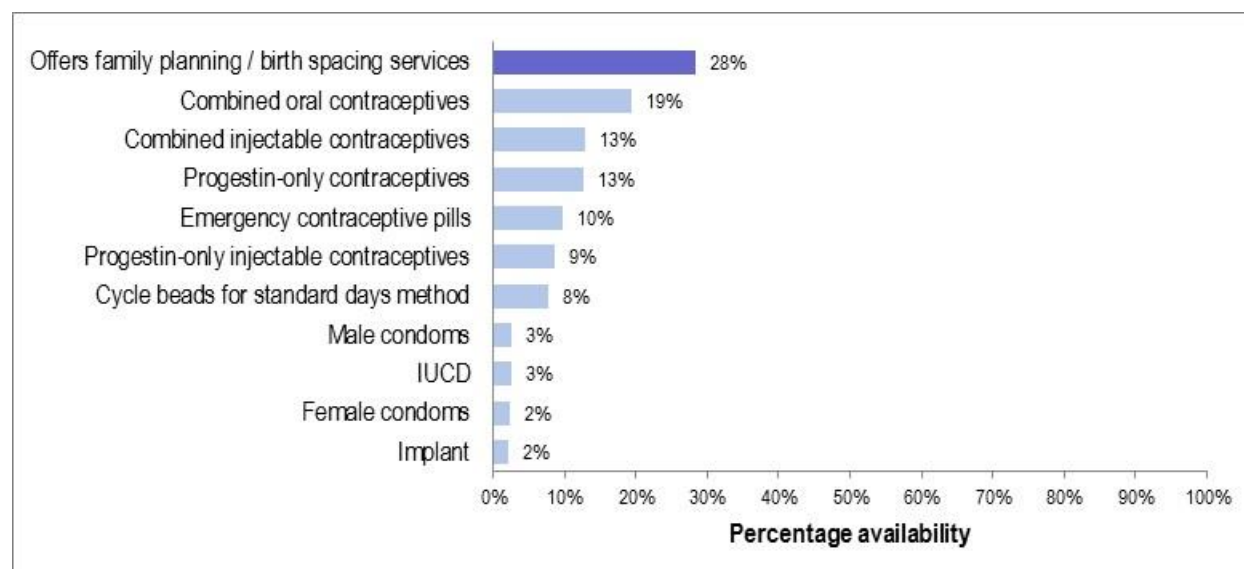


Table 26 shows the percentage of facilities offering key family planning services by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 32** shows the variation in family planning / birth spacing availability by region.

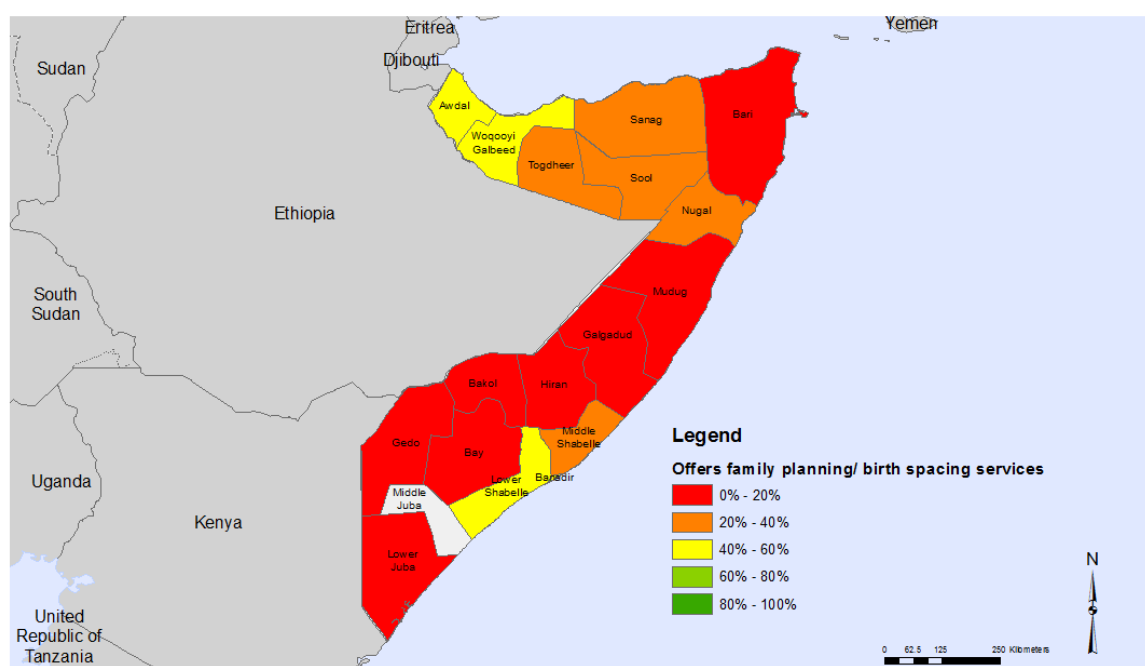
- Overall provision of family planning/birth spacing services in the country was very low (28%). Hospitals provided the greatest proportion of family planning/birth spacing services (52%), followed by health centers/MCH (47%).
- More government facilities offered this service compared to non-governmental facilities (31% vs. 21%).
- In Somaliland, 40% of facilities offered family planning/birth spacing services, with the Adwal region most likely to have these services available (47%) compared to other regions. The most commonly available type of family planning/birth spacing service offered in Somaliland was combined oral contraceptives (31%) compared to condoms (both male and female were unavailable in all facilities).
- Only 21% of facilities in Puntland offered family planning/birth spacing services, and the Sanaag region was the most likely location to offer this service (33%) compared to other regions. Combined oral contraceptive pills were the most available method of family planning in Puntland (15%) compared to male and female condoms (1%).
- In the South Central zone, only 22% of facilities offered family planning/birth spacing services, with the Lower Shabelle region more likely (46%) to offer this service compared to other regions. Combined oral contraceptives were the most available form of family planning (11%), compared to IUCD and implants (2%).
- Urban facilities were much more likely to offer family planning/birth spacing services (35%) compared to rural facilities (18%).
- Overall, the most commonly distributed contraceptives were combined oral contraceptives (19%), combined injectable contraceptives (13%), and progestin-only contraceptives (13%).

Table 26. Percentage of facilities offering key family planning services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers family planning / birth spacing services	Combined oral contraceptives	Progestin-only contraceptives	Combined injectable contraceptives	Progestin-only injectable contraceptives	Male condoms	Female condoms	IUCD	Implant	Cycle beads for standard days method	Emergency contraceptive pills	Total number of facilities
Regions												
Somaliland	40%	31%	20%	22%	14%	0%	0%	2%	1%	13%	11%	282
Awdal	47%	38%	23%	40%	17%	0%	0%	4%	2%	6%	8%	53
Marodi-Jeh	46%	33%	28%	4%	24%	0%	0%	3%	1%	4%	10%	72
Sahil	39%	32%	26%	29%	23%	0%	0%	0%	3%	29%	19%	31
Sanag	39%	39%	14%	36%	7%	0%	0%	0%	0%	14%	7%	28
Sool	26%	13%	8%	13%	8%	0%	0%	0%	0%	23%	9%	53
Togdher	38%	33%	20%	24%	2%	0%	0%	2%	2%	16%	16%	45
Puntland	21%	15%	8%	10%	6%	1%	1%	4%	3%	6%	9%	228
Bari	21%	13%	6%	6%	6%	2%	2%	2%	2%	8%	8%	48
Gardafuu	29%	0%	0%	0%	0%	0%	0%	0%	0%	12%	6%	17
Karkaar	12%	12%	12%	12%	7%	2%	2%	10%	7%	7%	12%	42
Mudug	25%	21%	13%	15%	6%	0%	0%	6%	2%	6%	12%	52
Nugaal	24%	22%	5%	10%	5%	2%	2%	5%	5%	2%	2%	41
Sanaag	33%	22%	11%	11%	11%	0%	0%	0%	0%	0%	17%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	22%	11%	9%	7%	6%	6%	6%	2%	2%	4%	9%	289
Bakool	17%	8%	8%	0%	8%	0%	0%	0%	0%	8%	17%	12
Bay	6%	3%	3%	0%	0%	3%	3%	0%	0%	0%	3%	31
Benadir	44%	30%	25%	16%	14%	18%	16%	2%	2%	5%	26%	57
Galgadud	14%	11%	7%	7%	7%	4%	0%	0%	0%	4%	7%	28
Gedo	17%	8%	8%	8%	8%	8%	8%	6%	8%	8%	8%	36
Hiiraan	17%	4%	9%	4%	4%	4%	4%	0%	0%	4%	4%	23
Lower Juba	18%	12%	0%	6%	0%	0%	0%	6%	0%	12%	0%	17
Lower Shabelle	46%	7%	0%	4%	0%	4%	4%	0%	4%	0%	4%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	23%	9%	5%	9%	5%	5%	5%	5%	0%	0%	5%	22

	Offers family planning / birth spacing services	Combined oral contraceptives	Progestin-only contraceptives	Combined injectable contraceptives	Progestin-only injectable contraceptives	Male condoms	Female condoms	IUCD	Implant	Cycle beads for standard days method	Emergency contraceptive pills	Total number of facilities
Mudug	3%	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	35
Facility type												
Hospital	52%	41%	33%	33%	26%	7%	5%	10%	10%	22%	28%	58
Referral Health Center	33%	33%	22%	33%	22%	0%	0%	0%	0%	22%	11%	9
Health Center/MCH	47%	32%	20%	21%	13%	4%	4%	3%	2%	12%	15%	383
Health Post/PHU	4%	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	294
TB Center	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55
Managing authority												
Government	31%	24%	15%	17%	11%	2%	2%	3%	2%	10%	11%	565
Non-government	21%	8%	6%	3%	3%	4%	4%	1%	1%	2%	6%	234
Urban/Rural												
Urban	35%	24%	17%	16%	11%	4%	4%	4%	3%	8%	13%	492
Rural	18%	11%	6%	8%	5%	0%	0%	0%	0%	7%	5%	307
Total	28%	19%	13%	13%	9%	3%	2%	3%	2%	8%	10%	799

Figure 32. Map of family planning / birth spacing availability by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

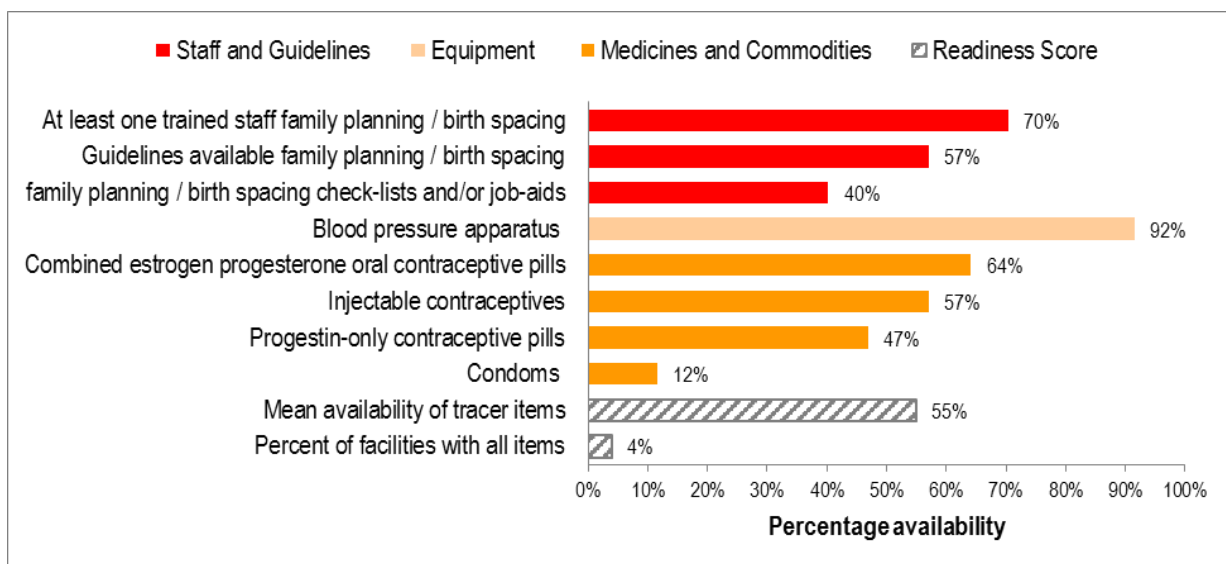
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Service readiness

Readiness to offer family planning/birth spacing services was assessed based on the availability of the 8 tracer items found in **Table 25**. **Figure 33** shows the percentage availability of these tracer items in facilities that offer family planning/birth spacing services (N=226).

- Only 4 percent of facilities had all 7 items needed to offer family planning/birth spacing services.
- On average, facilities had about half of the 7 tracer items for family planning, for an overall readiness score of 55 out of 100. More than half of facilities surveyed had combined oral contraceptive pills (64%) and injectable contraceptives (57%) available on the day of assessment, while availability of condoms was quite low (12%).
- Equipment such as a blood pressure apparatus was available in 92% of facilities.
- Seventy percent of facilities had at least one staff member trained in the past 2 years in family planning/birth spacing and just over half (57%) had family planning/birth spacing guidelines present at the facility.

Figure 33. Percentage of facilities that have tracer items for family planning/birth spacing services among facilities that provide this service (N=226), Somalia 2016



Service distribution

Table 27 shows availability of family planning tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 34** shows the variation in family planning / birth spacing readiness by region.

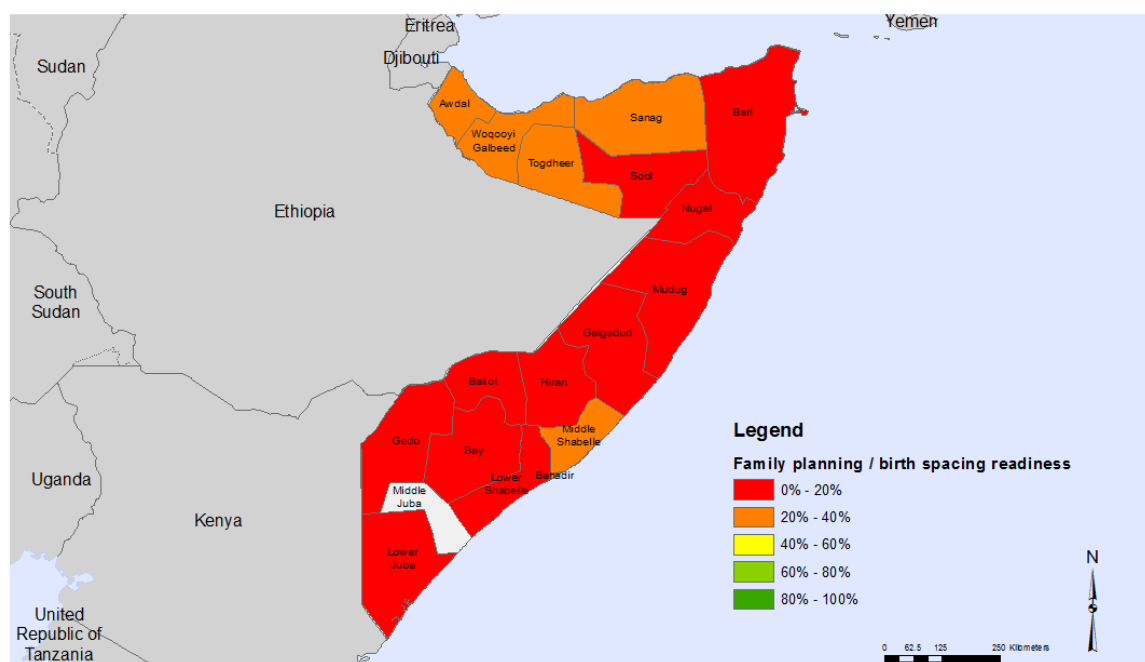
- The most readily available family planning/birth spacing service tracer item was a blood pressure apparatus (92% of all facilities), and the least readily available item was condoms (12%).
- Mean availability of tracer items was highest among health centers (75%) compared to all other facility types. As expected, mean availability was low in TB centers (13%).
- Government facilities performed higher in terms of mean availability of tracer items (58%) compared to non-government facilities (43%).
- Facilities located in urban areas had higher mean availability of family planning/birth spacing service items (57%) compared to rural facilities (49%).

Table 27. Availability of tracer items for family planning at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=226), Somalia 2016

	Guidelines available family planning / birth spacing	Family planning / birth spacing check-lists and/or job-aids	At least one trained staff family planning / birth spacing	Blood pressure apparatus	Combined estrogen progesterone oral contraceptive pills	Progestin-only contraceptive pills	Injectable contraceptives	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions											
Somaliland	68%	46%	73%	95%	79%	55%	71%	2%	1%	61%	112
Awdal	60%	28%	80%	84%	80%	52%	88%	4%	0%	60%	25
Marodi-Jeh	61%	39%	79%	94%	76%	67%	61%	3%	3%	60%	33
Sahil	100%	67%	83%	100%	83%	67%	83%	0%	0%	73%	12
Sanag	82%	55%	36%	100%	100%	45%	82%	0%	0%	63%	11
Sool	64%	50%	64%	100%	50%	36%	57%	0%	0%	53%	14
Togdher	65%	59%	76%	100%	94%	53%	65%	0%	0%	64%	17
Puntland	45%	29%	55%	84%	59%	39%	49%	10%	4%	46%	49
Bari	60%	40%	80%	70%	70%	40%	60%	20%	0%	55%	10
Gardafuu	20%	20%	0%	40%	0%	0%	0%	0%	0%	10%	5
Karkaar	100%	100%	100%	100%	100%	100%	100%	40%	40%	93%	5
Mudug	46%	23%	38%	100%	69%	46%	62%	0%	0%	48%	13
Nugaal	20%	0%	70%	90%	60%	20%	30%	0%	0%	36%	10
Sanaag	33%	17%	33%	83%	33%	33%	33%	17%	0%	35%	6
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	48%	40%	77%	92%	42%	38%	38%	29%	9%	51%	65
Bakool	0%	0%	100%	100%	50%	0%	50%	50%	0%	44%	2
Bay	50%	50%	0%	100%	50%	50%	0%	50%	0%	44%	2
Benadir	72%	60%	80%	96%	56%	48%	52%	48%	12%	64%	25
Galgadud	0%	0%	100%	100%	50%	50%	50%	0%	0%	44%	4
Gedo	50%	50%	83%	67%	67%	67%	67%	33%	17%	60%	6
Hiiraan	0%	0%	50%	75%	25%	50%	25%	25%	0%	31%	4
Lower Juba	67%	67%	100%	100%	33%	67%	67%	0%	0%	63%	3
Lower Shabelle	23%	15%	77%	100%	8%	8%	8%	8%	8%	31%	13
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	80%	60%	80%	80%	40%	20%	20%	20%	20%	50%	5
Mudug	0%	0%	0%	100%	0%	0%	0%	0%	0%	13%	1
Facility type											

	Guidelines available family planning / birth spacing	Family planning / birth spacing check-lists and/or job-aids	At least one trained staff family planning / birth spacing	Blood pressure apparatus	Combined estrogen progesterone oral contraceptive pills	Progestin-only contraceptive pills	Injectable contraceptives	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Hospital	60%	37%	77%	93%	73%	77%	70%	17%	10%	63%	30
Referral Health Center	67%	67%	100%	100%	100%	67%	100%	0%	0%	75%	3
Health Center/MCH	60%	42%	72%	94%	66%	45%	58%	11%	3%	56%	179
Health Post/PHU	15%	15%	38%	54%	15%	8%	8%	8%	8%	20%	13
TB Center	0%	0%	0%	100%	0%	0%	0%	0%	0%	13%	1
Managing authority											
Government	61%	41%	68%	91%	75%	53%	67%	9%	4%	58%	177
Non-government	43%	37%	78%	94%	27%	24%	20%	20%	4%	43%	49
Urban/Rural											
Urban	56%	42%	74%	92%	65%	51%	60%	14%	4%	57%	170
Rural	61%	34%	61%	89%	63%	34%	48%	5%	4%	49%	56
Total	57%	40%	70%	92%	64%	47%	57%	12%	4%	55%	226

Figure 34. Map of family planning / birth spacing readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

World Health Organization
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4.1.2 Antenatal care

Antenatal care (ANC) is essential to identify and treat problems during pregnancy such as anaemia and hypertension, as well as for preventive care such as folic acid and iron supplementation, intermittent preventive treatment (IPT) for malaria, and tetanus toxoid vaccination. The World Health Organization (WHO) recommends that in the absence of complications a woman should have at least four ANC visits, the first during the first trimester. **Table 28** outlines the tracer items necessary to determine ANC service readiness by domain.

Table 28. Tracer items for antenatal care services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines on antenatal care (ANC) Staff trained in ANC in the past two years ANC check-lists and/or job-aids
Equipment	<ul style="list-style-type: none"> Blood pressure apparatus
Diagnostics	<ul style="list-style-type: none"> Haemoglobin Urine-dipstick-protein
Medicines and commodities	<ul style="list-style-type: none"> Iron tablets Folic acid tablets Tetanus toxoid vaccine IPT drug ITNs

Service availability

Figure 35 shows the percentage of facilities offering key antenatal care services: iron supplementation, folic acid supplementation, intermittent preventive treatment in pregnancy (IPTP) for malaria, tetanus toxoid vaccination, monitoring for pregnancy-induced hypertensive disorder, and provision of misoprostol tablets for home births.

- Overall, 66% of all facilities offered these antenatal care services.
- Iron supplementation was available in a majority of health facilities (60%), followed by folic acid supplementation, multi-micronutrients supplementation and monitoring for hypertensive disorder in pregnancy (57%).
- Services such as offering LLIN and HIV testing as part of ANC were least available (12% and 15%, respectively).

Figure 35. Percentage of facilities that offer antenatal care services (N=799), Somalia 2016

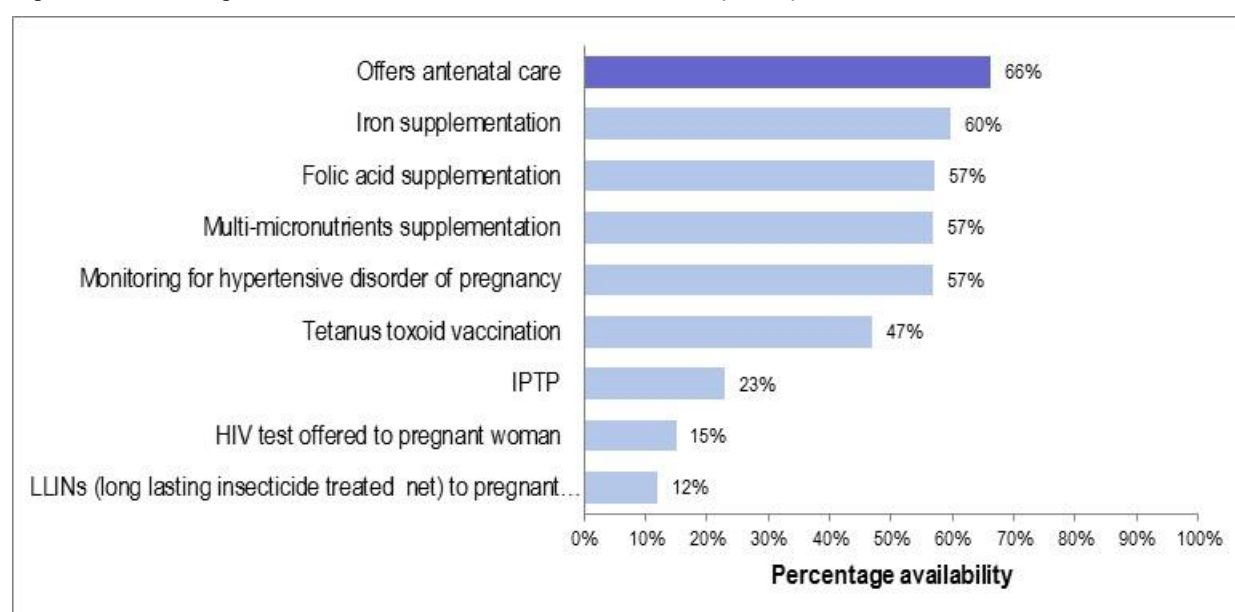


Table 29 shows the percentage of facilities offering key antenatal services by region, type of facility, managing authority and urban vs. rural location while **Figure 36** shows the variation in antenatal care service availability by region.

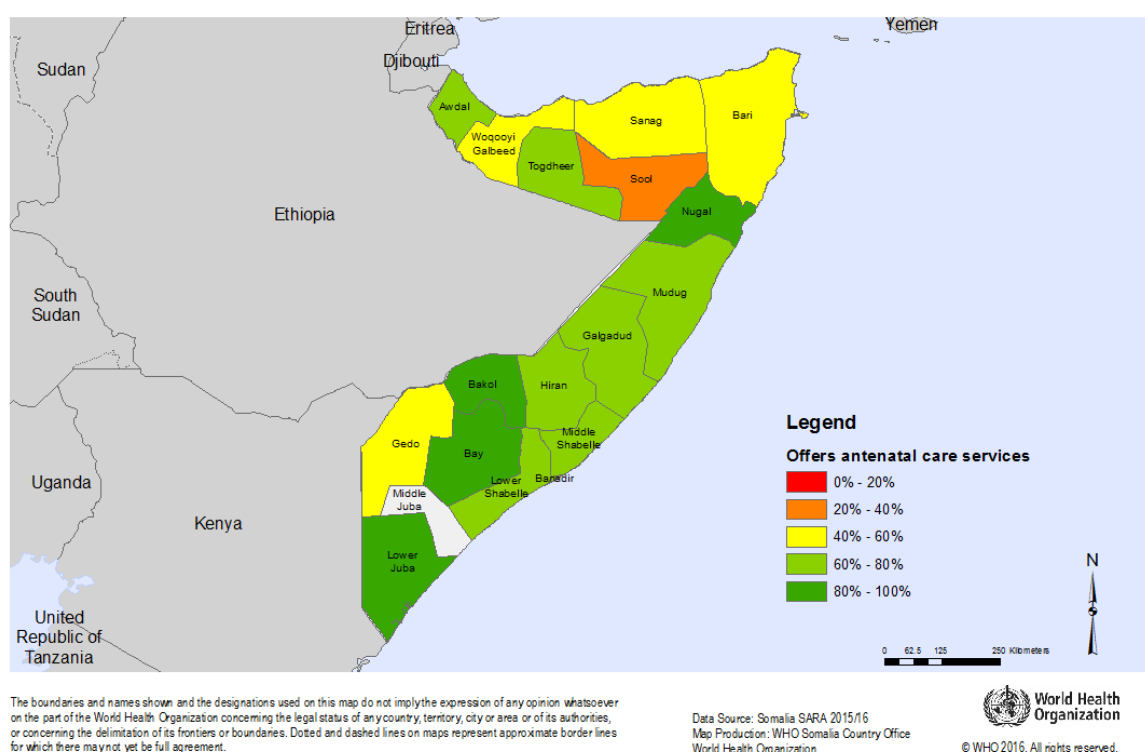
- The vast majority of health centers (93%) and referral health centers (89%) offered ANC. Less than half of all health posts offered this service (41%).
- Non-governmental facilities were slightly more likely (71%) to offer ANC services compared to governmental facilities (64%).
- ANC services were more available in urban areas (74%) compared to rural areas (53%).
- Countrywide, only 15% of all facilities offered HIV testing for women attending ANC appointments.
- In Somaliland, facilities in the Togdher region were more likely than other regions to offer ANC services (69%), followed by Marodi-Jeh (68%) and Awdal (66%).
- In Puntland, the highest proportion of facilities offering ANC was found in Nugaal (85%), followed by Sanaag (78%) and Mudug (77%).
- In South Central, All facilities in Bakool were found to offer ANC services, followed by 90% in the Bay region and 82% in Lower Juba.

Table 29. Percentage of facilities offering key antenatal care services by region, type of facility, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers antenatal care	Iron supplementation	Folic acid supplementation	IPTP	Tetanus toxoid vaccination	Monitoring for hypertensive disorder of pregnancy	Multi-micronutrients supplementation	HIV test offered to pregnant woman	LLINs (long lasting insecticide treated net) to pregnant women	Total number of facilities
Regions										
Somaliland	56%	51%	45%	6%	39%	50%	50%	16%	3%	282
Awdal	66%	60%	51%	11%	43%	60%	60%	8%	2%	53
Marodi-Jeh	68%	67%	63%	3%	44%	61%	61%	19%	3%	72
Sahil	39%	26%	26%	0%	35%	29%	29%	35%	3%	31
Sanag	46%	46%	43%	4%	36%	39%	39%	0%	4%	28
Sool	32%	28%	26%	13%	28%	30%	30%	8%	0%	53
Togdher	69%	64%	49%	2%	42%	64%	64%	24%	9%	45
Puntland	70%	57%	57%	11%	35%	62%	62%	11%	4%	228
Bari	52%	52%	50%	10%	33%	46%	46%	4%	8%	48
Gardafuu	71%	65%	59%	12%	24%	47%	47%	0%	0%	17
Karkaar	64%	64%	45%	10%	26%	64%	64%	5%	2%	42
Mudug	77%	37%	63%	12%	38%	69%	69%	17%	2%	52
Nugaal	85%	73%	73%	10%	49%	76%	76%	20%	5%	41
Sanaag	78%	67%	50%	17%	33%	61%	61%	22%	11%	18
Sool	70%	70%	50%	20%	20%	60%	60%	10%	0%	10
South Central	73%	70%	69%	48%	64%	60%	60%	17%	27%	289
Bakool	100%	100%	100%	33%	75%	83%	83%	8%	17%	12
Bay	90%	84%	74%	84%	77%	52%	52%	6%	35%	31
Benadir	79%	77%	77%	51%	72%	74%	74%	35%	14%	57
Galgadud	68%	61%	61%	36%	61%	64%	64%	7%	25%	28
Gedo	58%	53%	53%	50%	50%	50%	50%	19%	50%	36
Hiiraan	61%	61%	57%	35%	61%	30%	30%	0%	52%	23
Lower Juba	82%	76%	76%	65%	76%	71%	71%	35%	41%	17
Lower Shabelle	75%	71%	75%	36%	64%	50%	50%	32%	11%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	64%	64%	64%	59%	64%	64%	64%	14%	23%	22
Mudug	69%	66%	63%	31%	51%	63%	63%	0%	11%	35
Facility type										

	Offers antenatal care	Iron supplementation	Folic acid supplementation	IPTP	Tetanus toxoid vaccination	Monitoring for hypertensive disorder of pregnancy	Multi-micronutrients supplementation	HIV test offered to pregnant woman	LLINs (long lasting insecticide treated net) to pregnant women	Total number of facilities
Hospital	74%	69%	67%	40%	47%	64%	64%	40%	31%	58
Referral Health Center	89%	89%	89%	33%	78%	89%	89%	33%	0%	9
Health Center/MCH	93%	86%	82%	37%	86%	81%	81%	23%	18%	383
Health Post/PHU	41%	34%	32%	5%	4%	33%	33%	1%	3%	294
TB Center	2%	2%	2%	2%	2%	2%	2%	0%	2%	55
Managing authority										
Government	64%	57%	53%	14%	41%	57%	57%	15%	7%	565
Non-government	71%	68%	66%	44%	62%	56%	56%	14%	24%	234
Urban/Rural										
Urban	74%	69%	66%	33%	62%	64%	64%	21%	18%	492
Rural	53%	45%	43%	7%	23%	46%	46%	6%	2%	307
Total	66%	60%	57%	23%	47%	57%	57%	15%	12%	799

Figure 36. Map of antenatal care availability by region, Somalia 2016



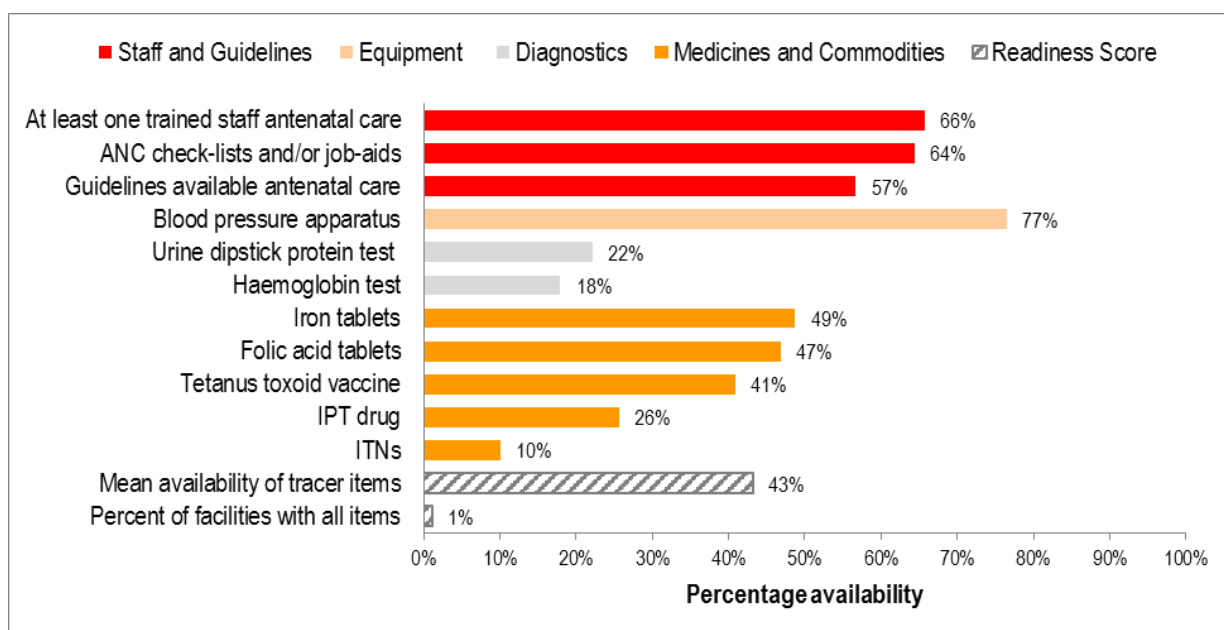
Service readiness

Readiness to provide antenatal care was assessed based on the availability of the 11 tracer items found in **Table 28**.

Figure 37 shows the percentage availability of these tracer items in facilities that offer antenatal care services (N=529).

- Only 1% of facilities had all 11 items.
- On average, facilities had fewer than 5 of the 11 tracer items, for an overall readiness score of 43 out of 100.
- Fewer than half of facilities offering ANC services had the necessary medicines available, including iron supplements, folic acid tablets, tetanus vaccine and IPT drugs.
- The majority of facilities demonstrated poor diagnostic capacity for testing urine protein (22%) and haemoglobin levels (18%).

Figure 37. Percentage of facilities that have tracer items for antenatal care services among facilities that provide that service (N=529), Somalia 2016



Service distribution

Table 30 shows availability of antenatal care tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 38** shows the variation in antenatal care readiness by region.

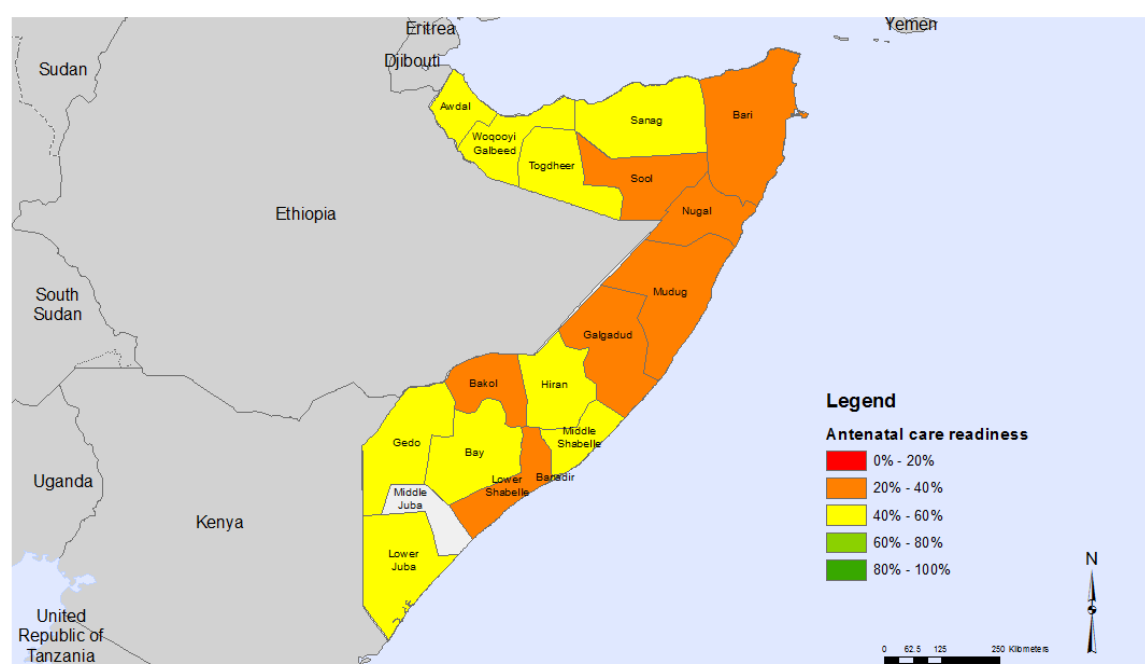
- In Somaliland, the majority of facilities (65%) had guidelines of available for ANC. The Marodi-Jeh region was the one area where less than half of facilities (49%) had ANC guidelines available. All facilities in the Sahil region reported having ANC guidelines available and mean availability of all tracer items was highest in this region (61%).
- In Puntland, about half of all facilities (51%) had guidelines available for ANC. Facilities in the Nugaal region were most likely to have guidelines (66%) compared to facilities least likely to have them, found in the Gardafuu region (25%). Mean availability of all tracer items was 34% in Puntland, with the Sanaag region performing the best (40%), followed by Muduug (38%) and Nugaal (38%).
- In South Central, just over half of all facilities (55%) had ANC guidelines available at the time of the survey. Regionally, facilities in Middle Shabelle were most likely to have guidelines (100%) and facilities in Galgaduud were least likely (11%). Mean availability of all tracer items for the zone was 45%, with the Benadir region having the highest mean availability (57%).
- No difference was found with respect to the mean availability of tracer items between governmental and non-governmental facilities (43%).
- By facility type, mean availability of tracer items was highest among referral health centers (61%), followed by hospitals (59%).
- Urban facilities were more likely to have all tracer items, across all categories, compared to rural facilities (urban mean availability=48% compared to 32% in rural areas).

Table 30. ANC readiness: Availability of tracer items for antenatal care at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=529), Somalia 2016

	Guidelines available antenatal care	ANC check-lists and/or job-aids	At least one trained staff antenatal care	Blood pressure apparatus	Hemoglobin test	Urine dipstick protein test	Iron tablets	Folic acid tablets	Tetanus toxoid vaccine	IPT drug	ITNs	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions														
Somaliland	65%	68%	69%	76%	14%	22%	68%	65%	54%	47%	7%	0%	50%	157
Awdal	69%	49%	77%	63%	3%	9%	57%	60%	63%	49%	6%	0%	46%	35
Marodi-Jeh	49%	67%	73%	73%	22%	33%	88%	86%	55%	73%	6%	0%	57%	49
Sahil	100%	100%	100%	92%	50%	58%	58%	33%	67%	8%	8%	0%	61%	12
Sanag	85%	85%	23%	85%	23%	23%	38%	38%	38%	15%	0%	0%	41%	13
Sool	88%	82%	65%	100%	0%	0%	41%	35%	47%	29%	24%	0%	47%	17
Togdher	52%	65%	61%	71%	3%	16%	81%	77%	48%	42%	3%	0%	47%	31
Puntland	51%	49%	54%	64%	18%	21%	36%	37%	30%	8%	4%	1%	34%	160
Bari	56%	56%	60%	52%	4%	4%	40%	40%	36%	20%	12%	0%	35%	25
Gardafuu	25%	17%	33%	25%	0%	8%	8%	8%	8%	0%	0%	0%	12%	12
Karkaar	44%	48%	52%	96%	19%	26%	22%	22%	22%	4%	0%	0%	32%	27
Mudug	53%	60%	75%	60%	23%	18%	43%	43%	35%	10%	3%	0%	38%	40
Nugaal	66%	51%	46%	54%	17%	29%	54%	57%	40%	6%	0%	0%	38%	35
Sanaag	50%	50%	29%	79%	57%	50%	36%	36%	29%	7%	14%	7%	40%	14
Sool	29%	14%	57%	100%	0%	0%	0%	0%	0%	0%	0%	0%	18%	7
South Central	55%	73%	72%	86%	21%	24%	44%	41%	39%	23%	17%	2%	45%	212
Bakool	17%	75%	17%	92%	0%	0%	25%	25%	17%	25%	0%	0%	27%	12
Bay	46%	46%	54%	96%	11%	14%	89%	75%	82%	54%	32%	0%	55%	28
Benadir	80%	87%	91%	89%	44%	44%	56%	56%	47%	24%	9%	2%	57%	45
Galgadud	11%	68%	79%	89%	26%	21%	11%	11%	11%	5%	0%	0%	30%	19
Gedo	71%	62%	76%	76%	24%	19%	48%	43%	38%	24%	33%	0%	47%	21
Hiiraan	50%	86%	50%	50%	14%	29%	71%	71%	71%	36%	57%	7%	53%	14
Lower Juba	79%	86%	86%	93%	21%	43%	36%	36%	36%	36%	29%	14%	53%	14
Lower Shabelle	67%	62%	76%	86%	14%	29%	24%	19%	19%	5%	5%	0%	37%	21
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	100%	93%	93%	93%	14%	7%	36%	36%	36%	7%	0%	0%	47%	14
Mudug	8%	75%	67%	88%	4%	4%	13%	13%	13%	8%	13%	4%	28%	24
Facility type														

	Guidelines available antenatal care	ANC check-lists and/or job-aids	At least one trained staff antenatal care	Blood pressure apparatus	Hemoglobin test	Urine dipstick protein test	Iron tablets	Folic acid tablets	Tetanus toxoid vaccine	IPT drug	ITNs	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Hospital	60%	70%	67%	98%	72%	72%	58%	56%	44%	30%	16%	5%	59%	43
Referral Health Center	88%	88%	88%	88%	38%	38%	75%	63%	75%	38%	0%	0%	61%	8
Health Center/MCH	68%	77%	74%	88%	16%	22%	55%	52%	52%	28%	11%	1%	49%	357
Health Post/PHU	22%	23%	40%	35%	3%	4%	26%	27%	3%	18%	4%	0%	19%	120
TB Center	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	18%	1
Managing authority														
Government	60%	60%	64%	72%	20%	23%	51%	50%	41%	28%	7%	0%	43%	364
Non-government	50%	74%	70%	87%	15%	21%	43%	39%	39%	21%	18%	3%	43%	165
Urban/Rural														
Urban	63%	74%	73%	85%	23%	28%	51%	49%	47%	27%	14%	2%	48%	366
Rural	44%	44%	49%	57%	6%	10%	44%	43%	28%	23%	1%	0%	32%	163
Total	57%	64%	66%	77%	18%	22%	49%	47%	41%	26%	10%	1%	43%	529

Figure 38. Map of antenatal care readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

World Health Organization
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4.1.3 Obstetric and newborn care

4.1.3.1 Basic obstetric and newborn care

Factors such as high fertility rates, early age of first birth, high prevalence of female genital mutilation (FGM), births attended by unskilled personnel and poor nutritional status among women of reproductive age in Somalia all contribute to obstetric complications in the country¹¹.

Improving access to emergency obstetric care is an effective strategy for the reduction of maternal and infant mortality, in which complications of pregnancy and childbirth are identified and referred to a higher level if necessary. Basic obstetric care signal functions include the following: (1) parenteral administration of antibiotics, (2) parenteral administration of oxytocics, (3) parenteral administration of anticonvulsants, (4) assisted vaginal delivery, (5) manual removal of placenta, (6) manual removal of retained products. Basic emergency obstetric care (BEmOC) includes capacity to provide these six signal functions with the addition of neonatal resuscitation. Basic newborn care signal functions include the following: (1) KMC for premature/very small babies, (2) Neonatal resuscitation, (3) Injectable antibiotics for neonatal sepsis, (4) Antibiotics for preterm or prolonged PROM, (5) Corticosteroids in preterm labor. **Table 31** outlines the tracer items necessary to delivery basic obstetric and newborn care by domain.

Table 31. Tracer items for basic obstetric and newborn care

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for essential childbirth care Guidelines for essential newborn care Staff trained in essential childbirth in the past two years

¹¹ WHO-EMRO, 2010. Country Cooperation Strategy for WHO and Somalia, 2010-2014 Report.

	<ul style="list-style-type: none"> • Staff trained in essential newborn care in the past two years • Staff trained in newborn resuscitation in the past two years
Equipment	<ul style="list-style-type: none"> • Blood pressure apparatus • Delivery bed • Soap and running water or alcohol based hand run • Gloves • Delivery pack • Infant weighing scale • Partograph • Sterilization equipment • Examination light • Suction apparatus • Emergency transport • Neonatal bag and mask • Manual vacuum extractor • Vacuum aspirator or D&C kit
Diagnostics	<ul style="list-style-type: none"> • Haemoglobin • Urine-dipstick-protein
Medicines and commodities	<ul style="list-style-type: none"> • Antibiotic eye ointment • Skin disinfectant • Intravenous solution with solution set • Injectable antibiotic • Injectable uterotonic • Magnesium sulphate (injectable)

Service availability

Figure 39 shows the percentage of facilities offering normal delivery services, the obstetric signal functions, newborn signal functions, and postnatal functions.

- Fewer than half of facilities (46%) offered normal delivery services.
- On average, facilities offered just over two of the six obstetric signal functions, for an overall readiness score of 35 out of 100.
- Mean availability of newborn signal functions showed that on average, facilities only offered one of the services, for an overall readiness score of 23 out of 100.
- Of the 7 BEmOC signal functions, assisted vaginal delivery and manual removal of placenta were the most commonly available services (39%), whereas parenteral administration of anticonvulsants was the least available (29%).
- Less than half of all facilities offered immediate and exclusive breastfeeding (45%).

Figure 39. Percentage of facilities that offer basic obstetric and newborn care, Somalia 2016

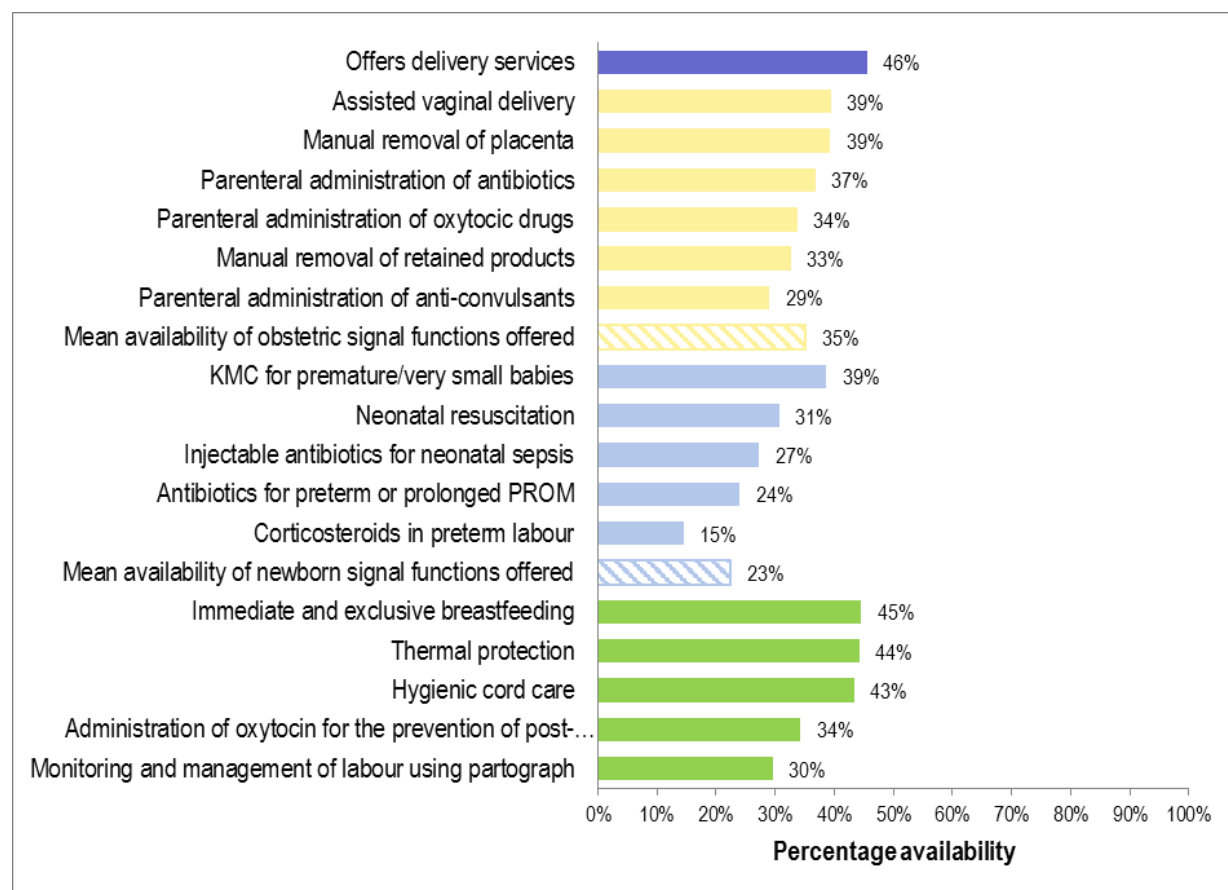


Table 32 through **Table 34** show the percentage of facilities with basic obstetric care availability by region, facility type, managing authority and urban vs. rural location while **Figure 40** shows the variation in delivery service availability by region.

- The percentage of non-governmental facilities offering obstetric signal functions was slightly higher than government facilities in half of the categories (parenteral administration of antibiotics, assisted vaginal delivery, manual removal of retained products). A greater percentage of government facilities offered parenteral administration of oxytocic drugs and parenteral administration of anti-consultants compared to non-governmental facilities, while and equal percentage of non-governmental and governmental facilities offered manual removal of the placenta.
- Overall, the percentage of facilities offering newborn signal functions was lower than the percentage of facilities offering obstetric signal functions. For example, 39% of facilities offered assisted vaginal delivery, compared to 31% of facilities offering neonatal resuscitation. Mean availability of all obstetric signal functions was 35% compared to mean availability of all newborn signal functions at 23%.
- Facilities located in urban areas were much more likely to offer obstetric signal functions and newborn signal functions compared to facilities located in rural areas. Mean availability of obstetric signal functions was 45% among urban facilities compared to 20% in rural areas. Likewise, mean availability of newborn signal functions was 29% in urban areas compared to 12% in rural locations.

Table 32. Percentage of facilities offering obstetric signal functions by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location

	Offers delivery services	Parenteral administration of antibiotics	Parenteral administration of oxytocic drugs	Parenteral administration of anti-consultants	Assisted vaginal delivery	Manual removal of placenta	Manual removal of retained products	Mean availability of obstetric signal functions offered	Total number of facilities
Regions									
Somaliland	38%	34%	34%	32%	36%	36%	29%	34%	282
Awdal	40%	36%	36%	32%	40%	40%	40%	37%	53
Marodi-Jeh	42%	40%	40%	36%	42%	40%	33%	39%	72
Sahil	26%	26%	26%	26%	26%	26%	23%	25%	31
Sanag	32%	29%	32%	32%	32%	25%	25%	29%	28
Sool	30%	30%	30%	30%	28%	30%	9%	26%	53
Togdher	51%	38%	36%	29%	42%	47%	40%	39%	45
Puntland	41%	33%	28%	24%	30%	38%	27%	30%	228
Bari	29%	25%	21%	15%	25%	25%	25%	23%	48
Gardafuu	41%	24%	24%	12%	35%	24%	35%	25%	17
Karkaar	29%	24%	29%	21%	29%	29%	24%	26%	42
Mudug	54%	38%	38%	27%	33%	52%	40%	38%	52
Nugaal	51%	44%	27%	39%	29%	49%	22%	35%	41
Sanaag	28%	28%	28%	28%	28%	28%	17%	26%	18
Sool	60%	60%	20%	20%	40%	60%	10%	35%	10
South Central	57%	42%	38%	30%	50%	44%	40%	41%	289
Bakool	100%	75%	42%	42%	75%	83%	83%	67%	12
Bay	81%	52%	45%	42%	77%	81%	81%	63%	31
Benadir	68%	58%	60%	46%	63%	60%	68%	59%	57
Galgadud	57%	32%	25%	21%	36%	32%	25%	29%	28
Gedo	33%	25%	28%	25%	31%	28%	31%	28%	36
Hiiraan	52%	17%	13%	22%	43%	48%	0%	24%	23
Lower Juba	47%	47%	47%	41%	47%	41%	35%	43%	17
Lower Shabelle	61%	61%	50%	21%	61%	36%	39%	45%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	36%	23%	23%	23%	23%	23%	27%	23%	22
Mudug	43%	34%	26%	17%	43%	14%	6%	23%	35
Facility type									

	Offers delivery services	Parenteral administration of antibiotics	Parenteral administration of oxytocic drugs	Parenteral administration of anti-consultants	Assisted vaginal delivery	Manual removal of placenta	Manual removal of retained products	Mean availability of obstetric signal functions offered	Total number of facilities
Hospital	76%	69%	67%	62%	69%	67%	64%	66%	58
Referral Health Center	89%	67%	67%	44%	67%	89%	67%	67%	9
Health Center/MCH	76%	62%	56%	49%	66%	65%	54%	59%	383
Health Post/PHU	7%	3%	3%	2%	5%	6%	4%	4%	294
TB Center	0%	0%	0%	0%	0%	0%	0%	0%	55
Managing authority									
Government	42%	36%	34%	30%	36%	39%	32%	35%	565
Non-government	53%	39%	33%	26%	47%	39%	35%	37%	234
Urban/Rural									
Urban	58%	48%	43%	37%	50%	49%	41%	45%	492
Rural	26%	20%	19%	17%	22%	23%	19%	20%	307
Total	46%	37%	34%	29%	39%	39%	33%	35%	799

Table 33. Percentage of facilities offering newborn signal functions by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location

	Antibiotics for preterm or prolonged PROM	Neonatal resuscitation	Corticosteroids in preterm labour	KMC for premature/very small babies	Injectable antibiotics for neonatal sepsis	Mean availability of newborn signal functions offered	Total number of facilities
Regions							
Somaliland	24%	30%	12%	33%	27%	21%	282
Awdal	23%	32%	4%	32%	23%	19%	53
Marodi-Jeh	28%	28%	17%	36%	38%	24%	72
Sahil	26%	26%	13%	26%	26%	19%	31
Sanag	29%	29%	11%	29%	21%	20%	28
Sool	25%	28%	25%	28%	25%	22%	53
Togdher	13%	38%	2%	44%	24%	20%	45
Puntland	20%	28%	12%	36%	21%	20%	228

	Antibiotics for preterm or prolonged PROM	Neonatal resuscitation	Corticosteroids in preterm labour	KMC for premature/very small babies	Injectable antibiotics for neonatal sepsis	Mean availability of newborn signal functions offered	Total number of facilities
Bari	13%	19%	10%	21%	15%	13%	48
Gardafuu	12%	12%	6%	35%	6%	12%	17
Karkaar	17%	26%	5%	29%	24%	17%	42
Mudug	33%	35%	23%	50%	23%	27%	52
Nugaal	27%	46%	20%	44%	27%	27%	41
Sanaag	17%	28%	0%	28%	28%	17%	18
Sool	0%	0%	0%	60%	20%	13%	10
South Central	27%	33%	18%	46%	32%	26%	289
Bakool	25%	33%	0%	75%	42%	29%	12
Bay	42%	35%	23%	68%	19%	31%	31
Benadir	44%	56%	32%	56%	54%	40%	57
Galgadud	25%	32%	11%	36%	29%	22%	28
Gedo	25%	28%	25%	31%	19%	21%	36
Hiiraan	9%	30%	13%	43%	13%	18%	23
Lower Juba	29%	35%	35%	41%	47%	31%	17
Lower Shabelle	32%	36%	7%	57%	39%	29%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	14%	23%	9%	9%	14%	11%	22
Mudug	9%	6%	9%	40%	31%	16%	35
Facility type							
Hospital	60%	66%	43%	74%	62%	51%	58
Referral Health Center	44%	67%	22%	78%	44%	43%	9
Health Center/MCH	38%	50%	23%	64%	45%	37%	383
Health Post/PHU	2%	3%	1%	5%	2%	2%	294
TB Center	0%	0%	0%	0%	0%	0%	55
Managing authority							
Government	25%	32%	15%	37%	27%	23%	565
Non-government	21%	27%	14%	42%	29%	22%	234
Urban/Rural							
Urban	31%	40%	19%	50%	35%	29%	492
Rural	13%	16%	7%	21%	14%	12%	307

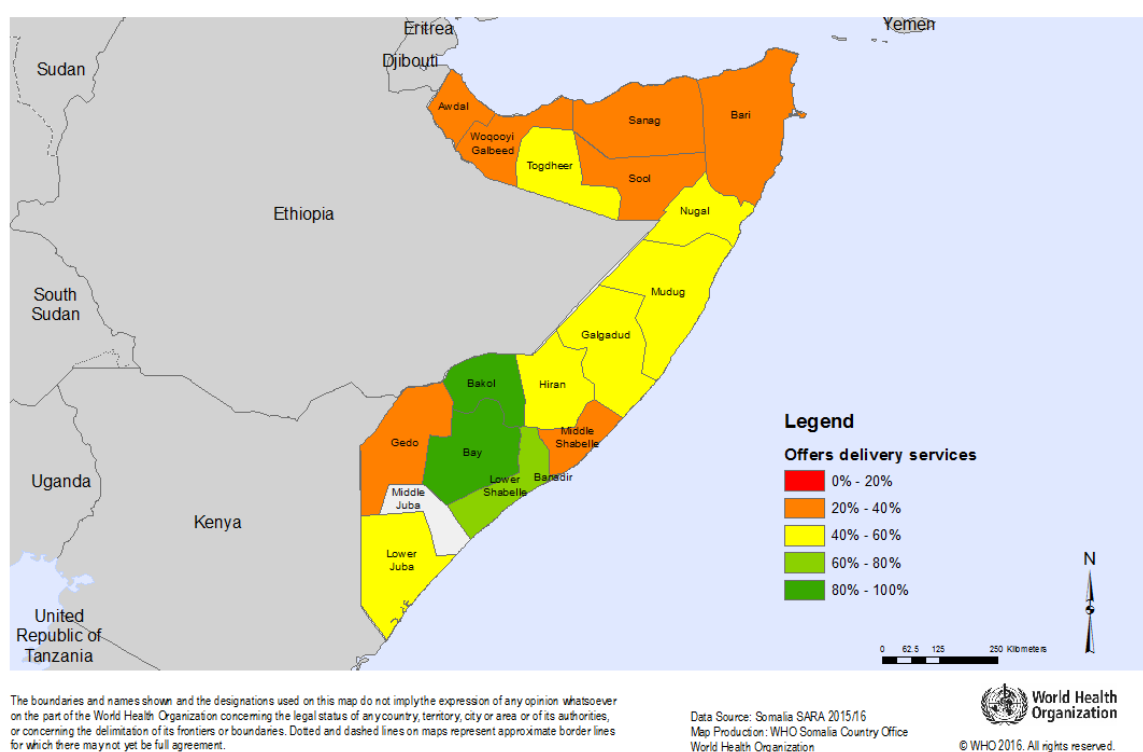
	Antibiotics for preterm or prolonged PROM	Neonatal resuscitation	Corticosteroids in preterm labour	KMC for premature/very small babies	Injectable antibiotics for neonatal sepsis	Mean availability of newborn signal functions offered	Total number of facilities
Total	24%	31%	15%	39%	27%	23%	799

Table 34. Percentage of facilities offering postnatal functions by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location

	Administration of oxytocin for the prevention of post-partum hemorrhage	Monitoring and management of labor using partograph	Immediate and exclusive breastfeeding	Hygienic cord care	Thermal protection	BEmOC (seven signal functions)	Total number of facilities
Regions							
Somaliland	35%	32%	37%	37%	37%	20%	282
Awdal	40%	38%	40%	40%	40%	26%	53
Marodi-Jeh	39%	32%	42%	42%	42%	18%	72
Sahil	26%	26%	26%	26%	26%	23%	31
Sanag	32%	25%	32%	32%	32%	21%	28
Sool	30%	30%	30%	30%	30%	8%	53
Togdher	38%	36%	47%	44%	47%	27%	45
Puntland	25%	23%	39%	39%	40%	12%	228
Bari	15%	17%	29%	27%	29%	13%	48
Gardafuu	12%	24%	35%	29%	35%	0%	17
Karkaar	21%	24%	29%	29%	29%	17%	42
Mudug	33%	31%	52%	50%	52%	12%	52
Nugaal	39%	24%	51%	51%	51%	12%	41
Sanaag	28%	22%	28%	28%	28%	17%	18
Sool	10%	0%	50%	60%	60%	0%	10
South Central	41%	33%	56%	53%	55%	18%	289
Bakool	50%	0%	100%	100%	100%	17%	12
Bay	52%	26%	81%	81%	77%	19%	31
Benadir	63%	63%	68%	65%	68%	32%	57
Galgadud	32%	29%	50%	54%	46%	14%	28

	Administration of oxytocin for the prevention of post- partum hemorrhage	Monitoring and management of labor using partograph	Immediate and exclusive breastfeeding	Hygienic cord care	Thermal protection	BEmOC (seven signal functions)	Total number of facilities
Gedo	28%	31%	31%	28%	33%	19%	36
Hiiraan	30%	9%	52%	43%	48%	0%	23
Lower Juba	41%	47%	47%	41%	47%	35%	17
Lower Shabelle	32%	39%	61%	61%	61%	7%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	32%	9%	36%	27%	32%	23%	22
Mudug	31%	26%	43%	43%	43%	3%	35
Facility type							
Hospital	69%	66%	74%	74%	74%	48%	58
Referral Health Center	44%	56%	89%	89%	89%	33%	9
Health Center/MCH	58%	48%	75%	73%	74%	26%	383
Health Post/PHU	3%	3%	5%	6%	6%	1%	294
TB Center	0%	0%	0%	0%	0%	0%	55
Managing authority							
Government	33%	30%	41%	41%	41%	18%	565
Non-government	38%	29%	53%	50%	51%	14%	234
Urban/Rural							
Urban	44%	38%	57%	55%	57%	21%	492
Rural	18%	16%	24%	24%	24%	10%	307
Total	34%	30%	45%	43%	44%	17%	799

Figure 40. Map of delivery service availability by region, Somalia 2016

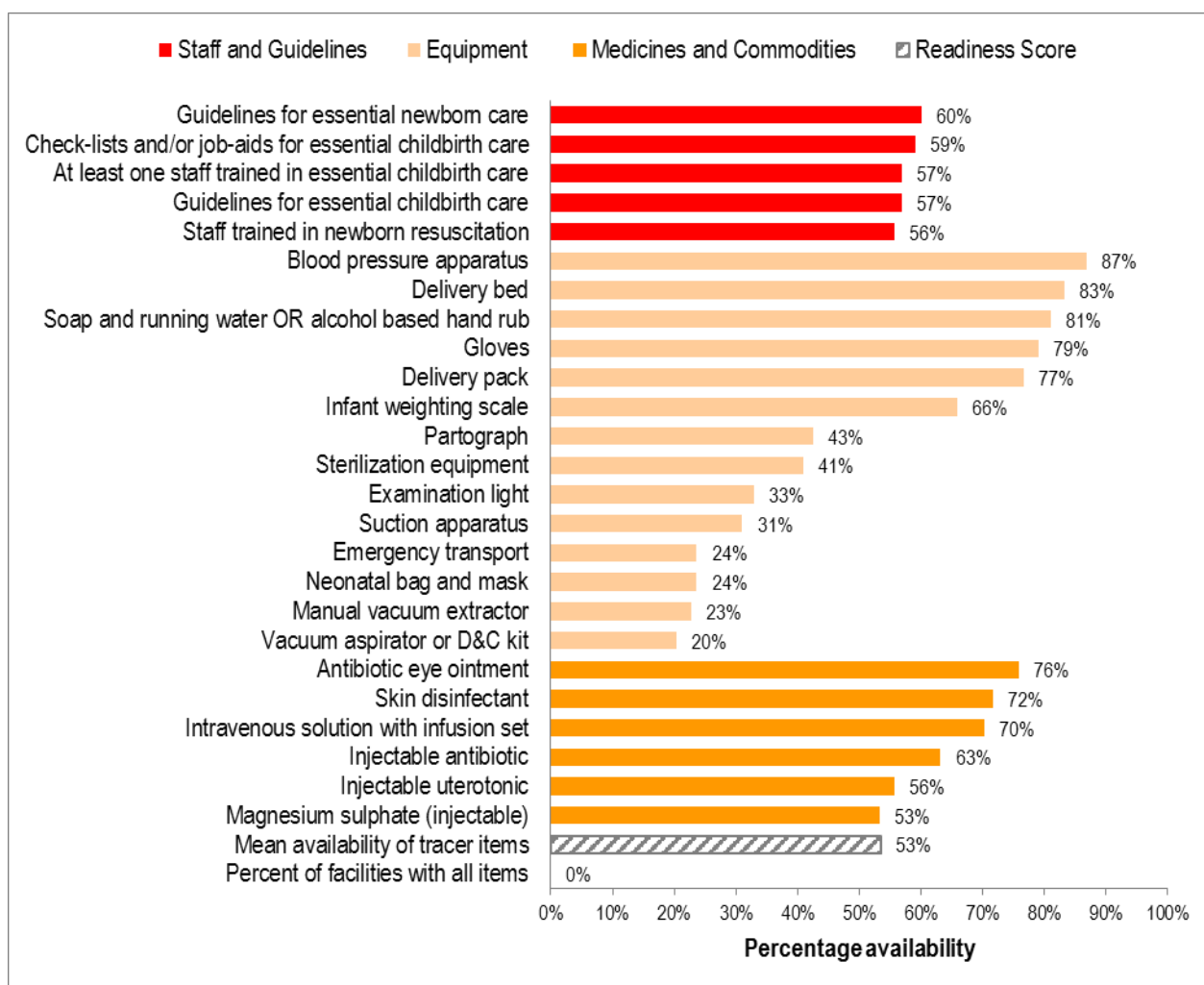


Service readiness

Readiness to provide basic obstetric and newborn care was assessed based on the availability of the tracer items outlined in **Table 31**. **Figure 41** shows the percentage availability of tracer items for basic obstetric and newborn care at facilities that offer delivery services (N=364).

- No facilities had all 25 tracer items. On average, facilities had 12-13 of the 25 items, for an overall readiness score of 53 out of 100.
- Within the staff and guidelines domain, guidelines for essential newborn care were more readily available (60%), compared to staff trained in newborn resuscitation (56%). In terms of equipment, the most available item was found to be blood pressure apparatus (87% of facilities had this item) compared to the least available item, which was vacuum aspirator or D&C kit (20%). Regarding medicines and commodities more than half of all facilities had all of the tracer items in this domain needed to provide delivery services.

Figure 41. Percentage of facilities that have tracer items for basic obstetric and newborn care among facilities that provide delivery services (N=364), Somalia 2016



Service distribution

Table 35, Table 36, and

Table 37 show readiness of basic emergency obstetric care by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while Figure 42 shows the variation in basic obstetric care readiness by region.

- Hospitals were generally better equipped to provide basic obstetric and newborn care services compared to other facility types. Mean availability of all tracer items was 69% among hospitals, followed by 62% in referral health centers, 53% in health centers, and 20% in health posts.
- Governmental facilities were much more likely than non-governmental facilities to have guidelines, trained staff, and medicines and commodities for basic obstetric and newborn care services. This was also found to be the case with some of the equipment items, though some were more available among non-governmental facilities (emergency transport, delivery pack, delivery bed, gloves, blood pressure apparatus, soap and running water/alcohol based hand rub). Mean availability of the tracer items was 55% among governmental facilities, compared to 50% among non-governmental facilities.
- Across all domains (guidelines and trained staff, equipment, and medicines and commodities), urban facilities were more likely than rural facilities to have the items necessary to provide basic obstetric and newborn care services. Overall, mean availability of these tracer items was 56% among urban facilities compared to 45% among rural facilities.

- In Somaliland, the greatest mean availability of tracer items for obstetric and newborn care services was found in the Sahil region (72%) and the lowest mean availability in the Togdher region (50%).
- In Puntland, the Karkaar region scored the highest in terms of mean availability of tracer items for basic obstetric and newborn care services (75%), compared to the lowest scoring region of Gardafuu (12%).
- Results from South Central show that the Benadir region performed highest in terms of mean availability of tracer items needed to provide basic obstetric and newborn care (70%) compared to the Bakool region (36%).

Table 35. Availability of tracer items (guidelines and trained staff) for basic emergency obstetric and newborn care at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=364), Somalia 2016

	Guidelines for essential childbirth care	Check-lists and/or job-aids for essential childbirth care	Guidelines for essential newborn care	At least one staff trained in essential childbirth care	Staff trained in newborn resuscitation	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions								
Somaliland	68%	70%	71%	69%	68%	0%	60%	107
Awdal	67%	48%	67%	57%	48%	0%	63%	21
Marodi-Jeh	63%	77%	63%	87%	93%	0%	63%	30
Sahil	75%	88%	88%	100%	100%	0%	72%	8
Sanag	67%	67%	67%	44%	44%	0%	55%	9
Sool	94%	88%	94%	69%	69%	0%	62%	16
Togdher	57%	65%	65%	57%	52%	0%	50%	23
Puntland	57%	55%	56%	42%	47%	0%	49%	93
Bari	64%	64%	57%	36%	50%	0%	50%	14
Gardafuu	14%	14%	43%	43%	0%	0%	12%	7
Karkaar	92%	83%	83%	75%	75%	0%	75%	12
Mudug	39%	46%	43%	32%	54%	0%	44%	28
Nugaal	76%	62%	67%	43%	38%	0%	56%	21
Sanaag	100%	100%	100%	60%	60%	0%	60%	5
Sool	0%	0%	0%	17%	33%	0%	21%	6
South Central	49%	54%	55%	57%	52%	0%	52%	164
Bakool	33%	67%	42%	8%	0%	0%	36%	12
Bay	40%	28%	32%	48%	44%	0%	47%	25
Benadir	77%	82%	74%	74%	79%	0%	70%	39
Galgadud	19%	50%	69%	63%	63%	0%	41%	16
Gedo	67%	50%	75%	50%	50%	0%	55%	12
Hiiraan	42%	17%	33%	33%	33%	0%	39%	12
Lower Juba	75%	100%	75%	75%	75%	0%	75%	8
Lower Shabelle	47%	41%	35%	71%	53%	0%	45%	17
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	75%	50%	63%	88%	75%	0%	45%	8
Mudug	7%	47%	53%	47%	20%	0%	43%	15
Facility type								
Hospital	57%	64%	64%	64%	68%	0%	69%	44

	Guidelines for essential childbirth care	Check-lists and/or job-aids for essential childbirth care	Guidelines for essential newborn care	At least one staff trained in essential childbirth care	Staff trained in newborn resuscitation	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Referral Health Center	50%	63%	63%	50%	50%	0%	62%	8
Health Center/MCH	59%	61%	62%	58%	55%	0%	53%	291
Health Post/PHU	29%	24%	24%	33%	38%	0%	20%	21
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority								
Government	62%	63%	64%	58%	59%	0%	55%	239
Non-government	46%	52%	53%	55%	49%	0%	50%	125
Urban/Rural								
Urban	58%	60%	61%	58%	57%	0%	56%	285
Rural	53%	54%	56%	53%	52%	0%	45%	79
Total	57%	59%	60%	57%	56%	0%	53%	364

Table 36. Availability of tracer items (equipment) for basic emergency obstetric and newborn care at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=364), Somalia 2016

	Emergency transport	Sterilization equipment	Examination light	Delivery pack	Suction apparatus	Manual vacuum extractor	Vacuum aspirator or D&C kit	Neonatal bag and mask	Delivery bed	Partograph	Gloves	Infant weighting scale	Blood pressure apparatus	Soap and running water OR alcohol based hand rub	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions																	
Somaliland	25%	47%	29%	87%	36%	23%	19%	32%	89%	64%	73%	70%	91%	72%	0%	60%	107
Awdal	48%	43%	33%	100%	19%	10%	5%	71%	95%	100%	90%	71%	95%	76%	0%	63%	21
Marodi-Jeh	3%	57%	37%	90%	60%	33%	33%	13%	93%	47%	73%	67%	90%	63%	0%	63%	30
Sahil	63%	63%	38%	100%	50%	25%	25%	38%	88%	75%	75%	100%	100%	88%	0%	72%	8
Sanag	33%	22%	22%	56%	44%	33%	44%	56%	78%	67%	56%	56%	89%	89%	0%	55%	9
Sool	13%	44%	38%	94%	31%	25%	6%	25%	88%	44%	88%	88%	88%	94%	0%	62%	16
Togdher	26%	43%	9%	74%	13%	17%	9%	13%	83%	61%	52%	57%	87%	52%	0%	50%	23
Puntland	19%	41%	34%	65%	28%	14%	15%	15%	75%	31%	78%	67%	82%	78%	0%	49%	93
Bari	21%	50%	36%	57%	14%	21%	21%	7%	86%	29%	86%	79%	79%	71%	0%	50%	14

	Emergency transport	Sterilization equipment	Examination light	Delivery pack	Suction apparatus	Manual vacuum extractor	Vacuum aspirator or D&C kit	Neonatal bag and mask	Delivery bed	Partograph	Gloves	Infant weighting scale	Blood pressure apparatus	Soap and running water OR alcohol based hand rub	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Gardafuu	14%	0%	14%	14%	0%	0%	0%	0%	0%	0%	14%	0%	14%	71%	0%	12%	7
Karkaar	25%	83%	67%	83%	50%	42%	42%	33%	100%	92%	92%	83%	100%	100%	0%	75%	12
Mudug	21%	32%	29%	46%	21%	7%	11%	11%	64%	25%	79%	61%	79%	82%	0%	44%	28
Nugaal	19%	38%	38%	86%	43%	10%	5%	29%	90%	29%	76%	81%	95%	86%	0%	56%	21
Sanaag	20%	40%	40%	100%	40%	20%	40%	0%	100%	20%	100%	100%	80%	80%	0%	60%	5
Sool	0%	33%	0%	83%	17%	0%	0%	0%	67%	0%	100%	33%	100%	17%	0%	21%	6
South Central	25%	37%	35%	77%	30%	27%	24%	23%	84%	35%	84%	63%	87%	88%	0%	52%	164
Bakool	25%	17%	58%	67%	17%	0%	0%	0%	42%	0%	83%	33%	75%	58%	0%	36%	12
Bay	16%	36%	20%	100%	20%	8%	20%	4%	84%	4%	84%	72%	92%	100%	0%	47%	25
Benadir	49%	64%	59%	95%	54%	51%	41%	41%	95%	64%	82%	87%	97%	97%	0%	70%	39
Galgadud	13%	25%	31%	50%	19%	6%	6%	19%	75%	38%	69%	56%	63%	63%	0%	41%	16
Gedo	17%	50%	25%	58%	67%	67%	75%	58%	67%	50%	50%	50%	75%	75%	0%	55%	12
Hiiraan	0%	8%	8%	67%	8%	8%	0%	17%	100%	0%	100%	83%	92%	92%	0%	39%	12
Lower Juba	50%	75%	63%	100%	63%	63%	63%	63%	88%	63%	88%	75%	75%	75%	0%	75%	8
Lower Shabelle	0%	29%	24%	71%	18%	18%	6%	18%	82%	29%	88%	41%	100%	100%	0%	45%	17
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	13%	25%	38%	0%	25%	13%	0%	88%	13%	100%	25%	88%	100%	0%	45%	8
Mudug	47%	13%	13%	67%	7%	20%	13%	7%	100%	60%	100%	47%	87%	93%	0%	43%	15
Facility type																	
Hospital	43%	84%	77%	84%	68%	45%	57%	48%	93%	59%	89%	73%	91%	91%	0%	69%	44
Referral Health Center	63%	75%	63%	63%	75%	38%	25%	25%	88%	50%	88%	88%	100%	100%	0%	62%	8
Health Center/MCH	21%	36%	28%	81%	26%	20%	15%	21%	86%	43%	80%	68%	90%	83%	0%	53%	291
Health	0%	5%	0%	10%	10%	10%	10%	10%	29%	5%	48%	10%	33%	29%	0%	20%	21

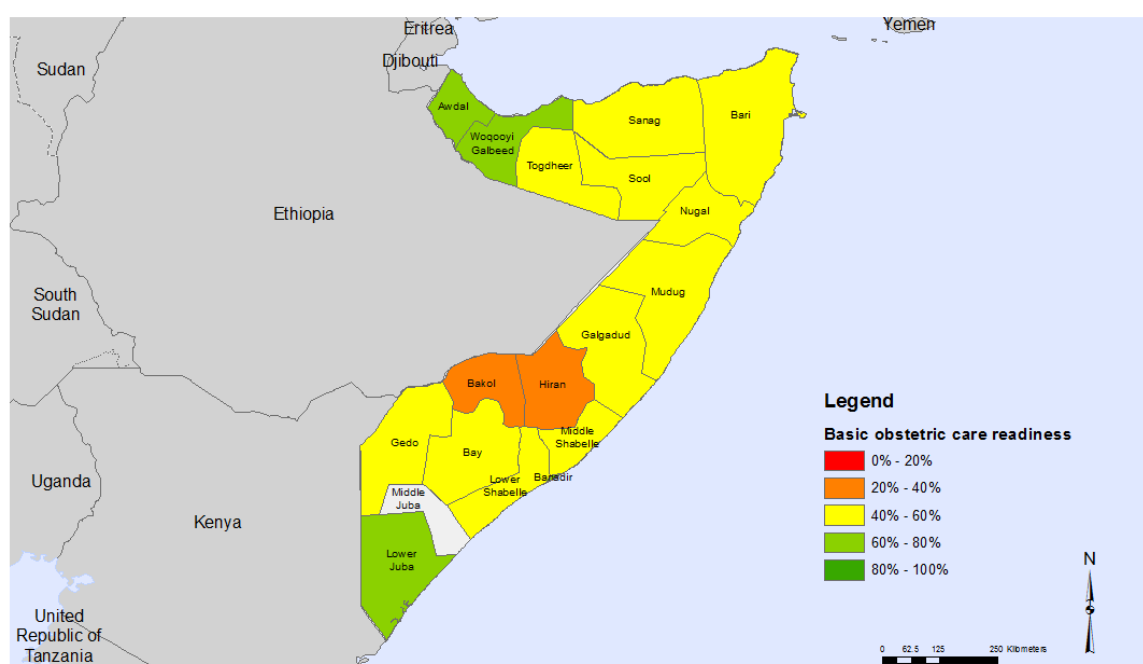
	Emergency transport	Sterilization equipment	Examination light	Delivery pack	Suction apparatus	Manual vacuum extractor	Vacuum aspirator or D&C kit	Neonatal bag and mask	Delivery bed	Partograph	Gloves	Infant weighting scale	Blood pressure apparatus	Soap and running water OR alcohol based hand rub	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Post/PHU																	
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority																	
Government	23%	45%	33%	76%	33%	23%	21%	26%	82%	48%	75%	68%	86%	76%	0%	55%	239
Non-government	25%	33%	32%	78%	28%	22%	19%	19%	86%	32%	86%	62%	88%	91%	0%	50%	125
Urban/Rural																	
Urban	27%	46%	37%	79%	33%	27%	23%	26%	88%	45%	84%	70%	91%	86%	0%	56%	285
Rural	11%	24%	18%	67%	23%	9%	11%	15%	66%	34%	62%	51%	73%	63%	0%	45%	79
Total	24%	41%	33%	77%	31%	23%	20%	24%	83%	43%	79%	66%	87%	81%	0%	53%	364

Table 37. Availability of tracer items (medicines and commodities) for basic emergency obstetric and newborn care at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=364), Somalia 2016

	Antibiotic eye ointment	Injectable uterotonic	Injectable antibiotic	Magnesium sulphate (injectable)	Skin disinfectant	Intravenous solution with infusion set	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions									
Somaliland	80%	74%	74%	64%	79%	87%	0%	60%	107
Awdal	95%	71%	100%	81%	62%	95%	0%	63%	21
Marodi-Jeh	97%	90%	67%	60%	90%	90%	0%	63%	30
Sahil	88%	88%	63%	88%	88%	88%	0%	72%	8
Sanag	67%	56%	67%	56%	78%	78%	0%	55%	9
Sool	50%	75%	63%	69%	88%	81%	0%	62%	16
Togdher	70%	57%	74%	48%	70%	83%	0%	50%	23
Puntland	73%	41%	62%	45%	72%	69%	0%	49%	93
Bari	86%	43%	57%	36%	64%	86%	0%	50%	14
Gardafuu	14%	0%	14%	14%	14%	0%	0%	12%	7
Karkaar	100%	83%	92%	83%	100%	83%	0%	75%	12

	Antibiotic eye ointment	Injectable uterotonic	Injectable antibiotic	Magnesium sulphate (injectable)	Skin disinfectant	Intravenous solution with infusion set	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Mudug	71%	36%	64%	43%	75%	68%	0%	44%	28
Nugaal	90%	48%	81%	52%	90%	90%	0%	56%	21
Sanaag	80%	20%	40%	60%	100%	60%	0%	60%	5
Sool	0%	17%	17%	0%	0%	17%	0%	21%	6
South Central	74%	52%	57%	51%	67%	60%	0%	52%	164
Bakool	42%	33%	33%	58%	75%	67%	0%	36%	12
Bay	88%	56%	48%	56%	64%	64%	0%	47%	25
Benadir	90%	64%	77%	64%	85%	85%	0%	70%	39
Galgadud	69%	44%	63%	19%	38%	31%	0%	41%	16
Gedo	67%	58%	67%	67%	58%	50%	0%	55%	12
Hiiraan	83%	25%	17%	42%	67%	50%	0%	39%	12
Lower Juba	100%	88%	100%	75%	100%	88%	0%	75%	8
Lower Shabelle	59%	41%	47%	35%	82%	47%	0%	45%	17
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	63%	50%	63%	50%	38%	38%	0%	45%	8
Mudug	53%	53%	40%	33%	40%	47%	0%	43%	15
Facility type									
Hospital	82%	70%	75%	66%	93%	77%	0%	69%	44
Referral Health Center	75%	50%	50%	63%	75%	88%	0%	62%	8
Health Center/MCH	78%	56%	64%	54%	71%	71%	0%	53%	291
Health Post/PHU	33%	24%	29%	19%	38%	33%	0%	20%	21
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority									
Government	77%	59%	68%	56%	76%	77%	0%	55%	239
Non-government	73%	50%	54%	48%	64%	57%	0%	50%	125
Urban/Rural									
Urban	80%	56%	64%	54%	73%	71%	0%	56%	285
Rural	62%	56%	61%	51%	66%	67%	0%	45%	79
Total	76%	56%	63%	53%	72%	70%	0%	53%	364

Figure 42. Map of basic obstetric care readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

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4.1.3.2 Comprehensive emergency obstetric care

Somalia's maternal mortality ratio declined from 1,300 deaths per 100,000 live births in 1990 to 732 deaths per 100,000 live births in 2016¹². Although improvements are seen over time, the current situation is still far above the MDG target of 330 deaths per 100,000 live births and remains among one of the highest in the region.¹³ Increasing accessibility to high quality emergency obstetric care is an effective strategy for reducing maternal and infant mortality.

In order to manage obstetric complications, a facility must have the skilled personnel available or on call at all times (surgeon and anaesthetist), with the required equipment, supplies, and trained support staff to administer blood transfusions and anaesthesia (**Table 38**). Comprehensive emergency obstetric care (CEmOC) is generally offered at the district hospital level, and consists of all the functions of basic emergency obstetric care plus caesarean section and safe blood transfusion. Guidelines jointly issued by WHO, UNICEF, and UNFPA recommend four facilities offering basic obstetric care and one facility offering comprehensive obstetric care for every 500,000 people.

Table 38. Tracer items for comprehensive obstetric care readiness

Domain	Tracer items
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¹² WHO-EMRO, 2016. Framework for health information systems and core indicators for monitoring health situation and health systems performance, 2016 Report.

¹³ WHO, UNICEF, UNFPA and The World Bank, and the United Nations Population Division, 2014. Trends in maternal mortality: 1990 to 2013 Report.

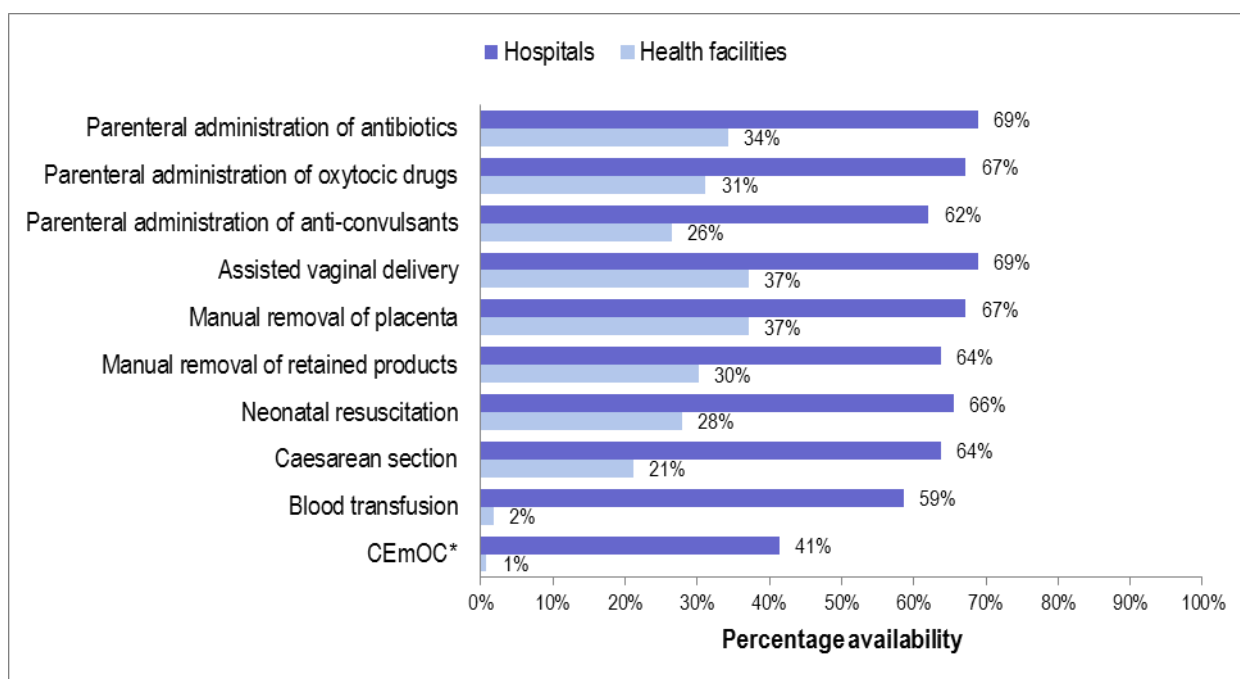
Trained staff and guidelines	<ul style="list-style-type: none"> • Guidelines for CEmOC • Staff trained in CEmOC in the past two years • Staff trained in surgery (present in facility or on-call 24 hours a day) • Staff trained in anaesthesia (present in facility or on-call 24 hours a day)
Equipment	<ul style="list-style-type: none"> • Anaesthesia equipment • Incubator
Diagnostics	<ul style="list-style-type: none"> • Capacity to conduct blood typing and • Compatibility testing on site
Medicines and commodities	<ul style="list-style-type: none"> • Blood sufficiency (no shortage of blood in the past 3 months) • Blood safety (blood obtained only from national or regional blood bank, or blood obtained from other sources but screened for HIV and other transmissible infections), • Lidocaine • Epinephrine • Halothane • Atropine • Thiopental • Suxamethonium bromide • Ketamine

Service availability

Figure 43 shows the percentage of facilities offering comprehensive obstetric care by facility type.

- As expected, hospitals were much more likely to offer comprehensive obstetric care services compared to other health facilities. For example, more than half of all hospitals (54%) offer blood transfusion, compared to 2% of other health facilities.
- More than two-thirds of hospitals (69%) offered administration of antibiotics and assisted vaginal delivery. The least available service found in hospitals was blood transfusion (54%).
- Full CEmOC services were offered in 37% of hospitals and only 1% of other health facilities.

Figure 43. Percentage of facilities offering comprehensive obstetric care services by facility type (N=799), Somalia 2016



*Comprehensive emergency obstetric care (CEmOC) consist of the seven obstetric signal functions and the availability of blood transfusion services and cesarean section

Table 39 shows the percentage of hospitals offering caesarean section, blood transfusion and CEmOC while **Figure 44** shows the variation in the availability of CeMOC services by region.

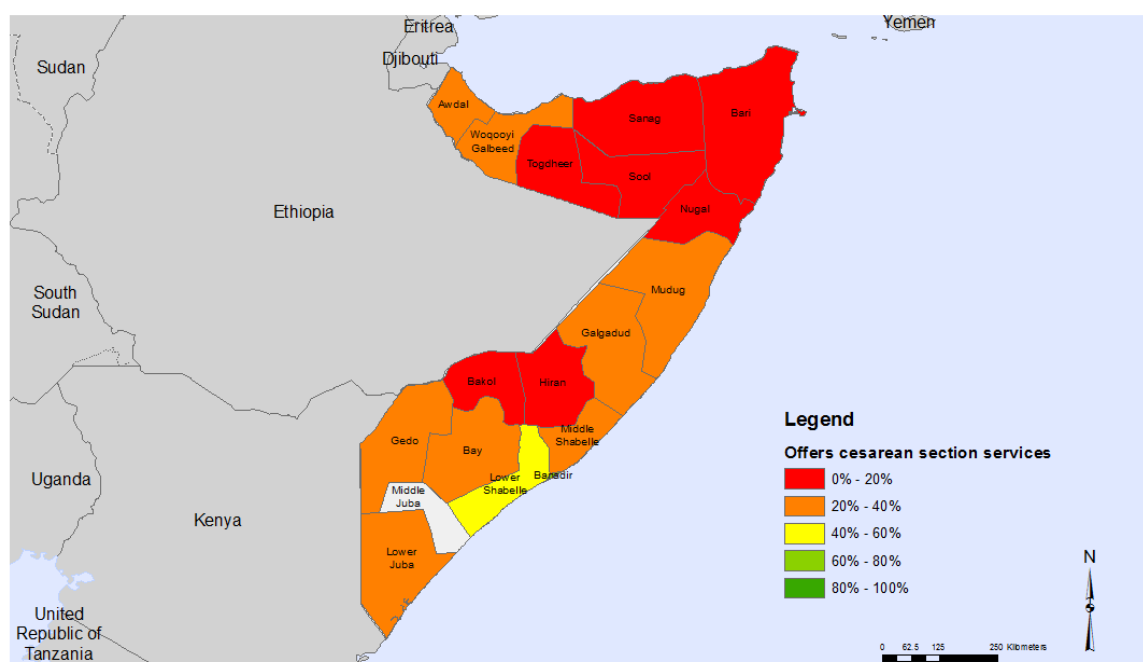
- Governmental facilities were more likely than non-governmental facilities to offer some comprehensive obstetric care services, such as parenteral administration of oxytocic drugs (34% vs. 33%) and parenteral administration of anti-convulsants (30% vs. 26%), however, the majority of CEmOC services were more available in non-governmental facilities.
- Urban and rural disparities were evident, with facilities located in urban areas much more likely to offer CEmOC services across all categories. Complete CEmOC was offered in 6% of urban facilities compared to 1% in rural facilities.
- Only 3% of facilities in Somaliland offered complete CEmOC services, with the Sanag region most likely to offer these services compared to other regions (7% compared to 2% in regions where these services were least available).
- In Puntland, 3% of facilities offered complete CEmOC services, with Sanaag most likely to offer these services (6% compared to 0% in Gardafuu and Sool).
- In South Central, 5% of facilities offered complete CEmOC services, with the Lower Juba region showing the greatest availability (12% compared to 0% in Bakool, Hiiraan and Lower Shabelle).

Table 39. Percentage of facilities offering caesarean section, blood transfusion and CEmOC services, by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Parenteral administration of antibiotics	Parenteral administration of oxytocic drugs	Parenteral administration of anti-convulsants	Assisted vaginal delivery	Manual removal of placenta	Manual removal of retained products	Neonatal resuscitation	Caesarean section	Blood transfusion	CEmOC*	Total number of facilities
Regions											
Somaliland	34%	34%	32%	36%	36%	29%	30%	19%	4%	3%	282
Awdal	36%	36%	32%	40%	40%	40%	32%	25%	2%	2%	53
Marodi-Jeh	40%	40%	36%	42%	40%	33%	28%	26%	4%	4%	72
Sahil	26%	26%	26%	26%	26%	23%	26%	23%	6%	6%	31
Sanag	29%	32%	32%	32%	25%	25%	29%	14%	7%	7%	28
Sool	30%	30%	30%	28%	30%	9%	28%	9%	2%	0%	53
Togdher	38%	36%	29%	42%	47%	40%	38%	11%	2%	2%	45
Puntland	33%	28%	24%	30%	38%	27%	28%	21%	4%	3%	228
Bari	25%	21%	15%	25%	25%	25%	19%	8%	2%	2%	48
Gardafuu	24%	24%	12%	35%	24%	35%	12%	12%	0%	0%	17
Karkaar	24%	29%	21%	29%	29%	24%	26%	26%	2%	2%	42
Mudug	38%	38%	27%	33%	52%	40%	35%	35%	10%	4%	52
Nugaal	44%	27%	39%	29%	49%	22%	46%	20%	2%	2%	41
Sanaag	28%	28%	28%	28%	28%	17%	28%	22%	6%	6%	18
Sool	60%	20%	20%	40%	60%	10%	0%	0%	0%	0%	10
South Central	42%	38%	30%	50%	44%	40%	33%	33%	10%	5%	289
Bakool	75%	42%	42%	75%	83%	83%	33%	0%	0%	0%	12
Bay	52%	45%	42%	77%	81%	81%	35%	32%	10%	10%	31
Benadir	58%	60%	46%	63%	60%	68%	56%	63%	12%	7%	57
Galgadud	32%	25%	21%	36%	32%	25%	32%	36%	18%	7%	28
Gedo	25%	28%	25%	31%	28%	31%	28%	28%	11%	8%	36
Hiiraan	17%	13%	22%	43%	48%	0%	30%	0%	0%	0%	23
Lower Juba	47%	47%	41%	47%	41%	35%	35%	35%	12%	12%	17
Lower Shabelle	61%	50%	21%	61%	36%	39%	36%	46%	21%	0%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	23%	23%	23%	23%	23%	27%	23%	23%	0%	0%	22
Mudug	34%	26%	17%	43%	14%	6%	6%	11%	3%	3%	35
Facility type											

	Parenteral administration of antibiotics	Parenteral administration of oxytocic drugs	Parenteral administration of anti-convulsants	Assisted vaginal delivery	Manual removal of placenta	Manual removal of retained products	Neonatal resuscitation	Caesarean section	Blood transfusion	CEmOC*	Total number of facilities
Hospital	69%	67%	62%	69%	67%	64%	66%	64%	59%	41%	58
Referral Health Center	67%	67%	44%	67%	89%	67%	67%	33%	22%	11%	9
Health Center/MCH	62%	56%	49%	66%	65%	54%	50%	38%	3%	1%	383
Health Post/PHU	3%	3%	2%	5%	6%	4%	3%	3%	0%	0%	294
TB Center	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55
Managing authority											
Government	36%	34%	30%	36%	39%	32%	32%	23%	5%	4%	565
Non-government	39%	33%	26%	47%	39%	35%	27%	27%	7%	3%	234
Urban/Rural											
Urban	48%	43%	37%	50%	49%	41%	40%	31%	9%	6%	492
Rural	20%	19%	17%	22%	23%	19%	16%	13%	1%	1%	307
Total	37%	34%	29%	39%	39%	33%	31%	24%	6%	4%	799

Figure 44. Map of caesarean section service availability by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

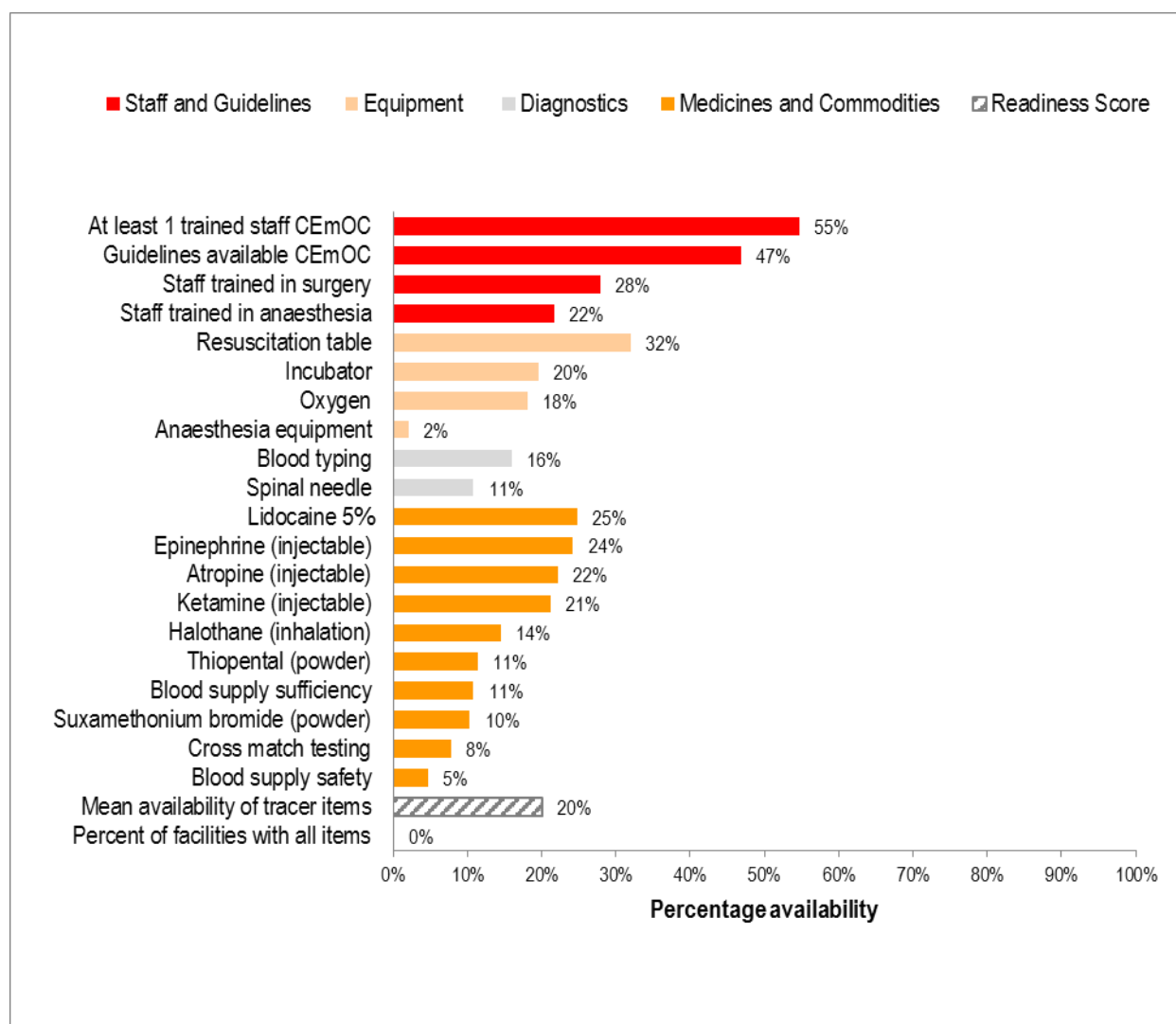
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Service readiness

Readiness to provide CEmOC was assessed based on the presence of the 17 tracer items found in **Table 38**. **Figure 45** shows the percentage of facilities that have tracer items for comprehensive obstetric care among facilities that provide caesarean section.

- No facilities had all tracer items needed to provide comprehensive obstetric care services. On average, facilities only had 20% of items needed to offer CEmOC services.
- Having at least one trained staff in CEmOC was found in just over half (55%) of all facilities offering caesarean section.
- Equipment, medicines and commodities were not readily available in facilities offering caesarean section. Very few facilities had anesthesia equipment (2%) and only 5% of facilities reported having safe blood supply.

Figure 45. Percentage of facilities that have tracer items for comprehensive obstetric care services among facilities that provide caesarean section (N=194), Somalia 2016



Service distribution

Table 40 shows the readiness to provide comprehensive emergency obstetric care items (guidelines, staff and equipment) by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location. **Table 41** shows the readiness to provide comprehensive emergency obstetric care items (diagnostics, medicine and commodities) by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location. **Figure 46** shows the variation in comprehensive emergency obstetric care readiness by region.

- The percentage of hospitals with items needed to provide CEmOC was generally higher than the percentage of other facilities with these items. Considerable differences were found in the percentage of hospitals having trained staff in surgery and anesthesia compared to referral health centers (76% compared to 33% with staff trained in surgery and 73% compared to 33% with staff trained in anesthesia). Overall mean availability of CEmOC tracer items was found to be 49% among hospitals, compared to 38% among referral health centers.
- Availability of guidelines for CEmOC were about equal between governmental and non-governmental facilities (47% and 48%, respectively). Mean availability of all tracer items for CEmOC was found to be slightly higher among non-governmental facilities (21%) compared to governmental facilities (19%).

- Urban and rural disparities exist in terms of readiness to provide CEmOC services, with the mean availability of all tracer items for this service much higher among facilities in urban areas compared to rural areas (22% vs. 11%).
- In Somaliland, the greatest mean availability of all tracer items was found in the Sanag region (36%) and the lowest mean availability was found in the Sool region (3%). Overall, the zone scored highest in the area of having trained staff in CEmOC (55% of all facilities) and lowest in the area of having anesthesia equipment (0%).
- In Puntland, mean availability of all CEmOC tracer items was highest in the Bari region (31%) and lowest in the Gardafuu region (5%). Having at least one trained staff in CEmOC was found in 21% of facilities in the zone (the highest indicator) compared to the least available item of anesthesia equipment (found in 1% of facilities).
- In South Central, the region with the greatest mean availability of CEmOC items was Lower Juba (43%), compared to Lower Shabelle, the region with the lowest mean availability (14%). As with the other two zones, the most prevalent tracer item in the zone was having at least one trained staff in CEmOC (found in 61% of facilities) and the least available item was anesthesia equipment (found in only 3% of facilities).

Table 40. Readiness to provide CEmOC: guidelines, staff and equipment capacity at hospitals by region, facility type, managing authority and urban vs. rural location (N=194), Somalia 2016

	Guidelines available CEmOC	At least 1 trained staff CEmOC	Staff trained in surgery	Staff trained in anesthesia	Anesthesia equipment	Resuscitation table	Incubator	Oxygen	Spinal needle	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions												
Somaliland	45%	55%	15%	9%	0%	23%	15%	15%	9%	0%	15%	53
Awdal	54%	46%	8%	8%	0%	8%	8%	0%	8%	0%	10%	13
Marodi-Jeh	42%	79%	11%	5%	0%	11%	5%	11%	0%	0%	11%	19
Sahil	29%	29%	14%	14%	0%	71%	29%	57%	29%	0%	26%	7
Sanag	50%	50%	50%	25%	0%	75%	75%	50%	25%	0%	36%	4
Sool	20%	20%	20%	0%	0%	0%	0%	0%	0%	0%	3%	5
Togdher	80%	60%	20%	20%	0%	20%	20%	0%	20%	0%	22%	5
Puntland	19%	21%	10%	7%	1%	13%	9%	7%	5%	0%	8%	47
Bari	50%	100%	25%	25%	25%	75%	0%	50%	25%	0%	31%	4
Gardafuu	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	5%	2
Karkaar	27%	27%	18%	18%	0%	0%	27%	27%	0%	0%	14%	11
Mudug	28%	39%	17%	11%	0%	22%	11%	0%	11%	0%	13%	18
Nugaal	63%	63%	13%	13%	0%	50%	25%	13%	13%	0%	21%	8
Sanaag	75%	0%	25%	25%	0%	25%	25%	25%	25%	0%	21%	4
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	52%	61%	39%	32%	3%	40%	23%	21%	12%	0%	25%	94
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	70%	80%	30%	30%	0%	10%	50%	20%	20%	0%	23%	10
Benadir	61%	67%	39%	33%	3%	53%	19%	33%	8%	0%	26%	36
Galgadud	30%	40%	50%	50%	0%	20%	20%	40%	10%	0%	23%	10
Gedo	70%	50%	50%	50%	0%	60%	40%	0%	30%	0%	37%	10
Hiiraan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Lower Juba	50%	50%	83%	33%	17%	67%	33%	17%	17%	0%	43%	6
Lower Shabelle	38%	77%	15%	8%	0%	31%	0%	8%	0%	0%	14%	13
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	20%	20%	40%	20%	0%	0%	0%	0%	0%	0%	6%	5

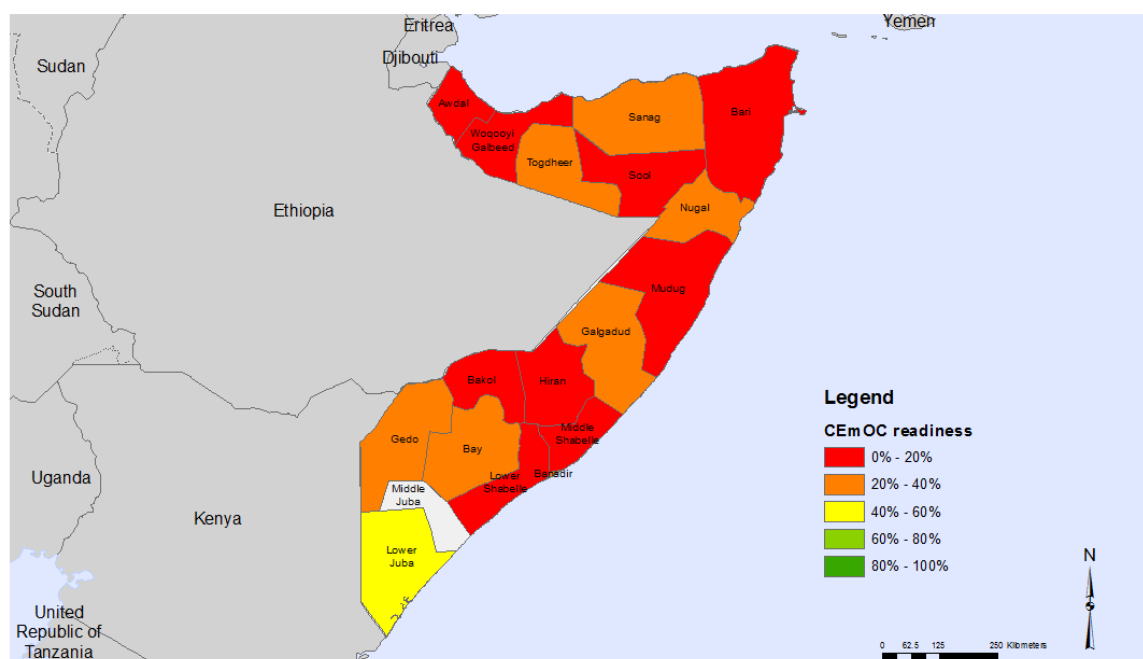
	Guidelines available CEmOC	At least 1 trained staff CEmOC	Staff trained in surgery	Staff trained in anesthesia	Anesthesia equipment	Resuscitation table	Incubator	Oxygen	Spinal needle	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Mudug	25%	50%	25%	25%	25%	50%	50%	0%	25%	0%	30%	4
Facility type												
Hospital	62%	54%	76%	73%	11%	59%	43%	43%	43%	0%	49%	37
Referral Health Center	67%	67%	33%	33%	0%	33%	0%	67%	33%	0%	38%	3
Health Center/MCH	44%	55%	16%	9%	0%	25%	15%	12%	2%	0%	13%	146
Health Post/PHU	25%	38%	13%	13%	0%	25%	0%	0%	13%	0%	13%	8
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority												
Government	47%	53%	23%	18%	2%	28%	18%	19%	13%	0%	19%	131
Non-government	48%	59%	38%	29%	2%	40%	24%	16%	6%	0%	21%	63
Urban/Rural												
Urban	51%	58%	32%	26%	3%	35%	21%	19%	12%	0%	22%	154
Rural	33%	43%	10%	5%	0%	20%	13%	13%	8%	0%	11%	40
Total	47%	55%	28%	22%	2%	32%	20%	18%	11%	0%	20%	194

Table 41. Readiness to provide CEmOC: diagnostics and medicines and commodities at hospitals by region, facility type, managing authority and urban vs. rural location (N=194), Somalia 2016

	Blood typing	Cross match testing	Blood supply sufficiency	Blood supply safety	Lidocaine 5%	Epinephrine (injectable)	Halothane (inhalation)	Atropine (injectable)	Thiopental (powder)	Suxamethonium bromide (powder)	Ketamine (injectable)	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions														
Somaliland	13%	8%	11%	0%	9%	13%	8%	9%	8%	6%	13%	0%	15%	53
Awdal	8%	8%	8%	0%	8%	8%	0%	8%	0%	0%	8%	0%	10%	13
Marodi-Jeh	11%	0%	5%	0%	0%	5%	0%	0%	0%	0%	11%	0%	11%	19
Sahil	29%	14%	29%	0%	14%	29%	29%	29%	29%	14%	29%	0%	26%	7
Sanag	25%	25%	25%	0%	50%	50%	25%	25%	25%	25%	25%	0%	36%	4
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	5
Togdher	20%	20%	20%	0%	20%	20%	20%	20%	20%	20%	20%	0%	22%	5
Puntland	6%	6%	4%	3%	14%	11%	7%	7%	3%	2%	9%	0%	8%	47
Bari	25%	25%	0%	0%	50%	25%	25%	25%	25%	25%	25%	0%	31%	4
Gardafuu	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	2
Karkaar	9%	9%	0%	9%	27%	36%	18%	0%	0%	0%	9%	0%	14%	11
Mudug	11%	11%	11%	6%	22%	17%	11%	17%	6%	6%	11%	0%	13%	18
Nugaal	13%	13%	13%	0%	50%	13%	25%	25%	13%	0%	25%	0%	21%	8
Sanaag	25%	25%	25%	25%	0%	25%	0%	25%	0%	0%	50%	0%	21%	4
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	19%	5%	12%	6%	32%	32%	18%	16%	16%	16%	28%	0%	25%	94
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	20%	10%	0%	20%	10%	10%	10%	20%	10%	0%	30%	0%	23%	10
Benadir	14%	8%	8%	6%	31%	39%	11%	33%	11%	14%	19%	0%	26%	36
Galgadud	30%	0%	10%	0%	40%	20%	10%	10%	10%	10%	50%	0%	23%	10
Gedo	20%	0%	20%	0%	60%	50%	50%	50%	40%	40%	50%	0%	37%	10
Hiiraan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Lower Juba	17%	0%	17%	0%	50%	83%	67%	67%	67%	67%	67%	0%	43%	6
Lower Shabelle	31%	0%	23%	8%	15%	15%	0%	8%	0%	0%	8%	0%	14%	13
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	6%	5
Mudug	25%	25%	25%	25%	50%	25%	50%	25%	25%	25%	25%	0%	30%	4
Facility type														

	Blood typing	Cross match testing	Blood supply sufficiency	Blood supply safety	Lidocaine 5%	Epinephrine (injectable)	Halothane (inhalation)	Atropine (injectable)	Thiopental (powder)	Suxamethonium bromide (powder)	Ketamine (injectable)	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Hospital	68%	35%	41%	22%	59%	57%	35%	62%	32%	27%	70%	0%	49%	37
Referral Health Center	33%	0%	33%	0%	67%	67%	67%	67%	33%	0%	67%	0%	38%	3
Health Center/MCH	3%	1%	3%	1%	15%	16%	8%	12%	5%	6%	8%	0%	13%	146
Health Post/PHU	13%	0%	0%	0%	25%	13%	13%	13%	13%	13%	25%	0%	13%	8
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority														
Government	17%	11%	11%	5%	24%	23%	15%	23%	11%	8%	21%	0%	19%	131
Non-government	14%	2%	11%	5%	27%	27%	13%	21%	13%	14%	22%	0%	21%	63
Urban/Rural														
Urban	19%	9%	12%	6%	27%	27%	16%	25%	12%	12%	23%	0%	22%	154
Rural	5%	3%	5%	0%	15%	13%	8%	10%	8%	5%	15%	0%	11%	40
Total	16%	8%	11%	5%	25%	24%	14%	22%	11%	10%	21%	0%	20%	194

Figure 46. Map of CEmOC readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

World Health Organization
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4.1.4 Routine child immunization

The Expanded Programme on Immunization (EPI) in Somalia is coordinated by a working group under the auspices of the Somalia Support Secretariat (SSS) and is supported by UNICEF Somalia, WHO Somalia and a number of NGOs. A complementary service delivery approach has been established, whereby immunization services are provided at health facilities, Reaching Every District (RED) approach, as well as through the integration with other child health interventions at annual Child Health Days¹⁴. Despite some improvement over time, immunization coverage indicators in Somalia remain poor, with fewer than half of children receiving routine measles, DTP and pneumococcal vaccines as of 2014¹⁵. Tracer items needed to provide routine child immunization services are outlined in **Table 42**.

Table 42. Tracer items needed to provide routine child immunization services, Somalia 2016

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for child immunization Staff trained in child immunization
Equipment	<ul style="list-style-type: none"> Cold box or vaccine carrier with ice packs Refrigerator Sharps container

¹⁴ GAVI, 2011. Somalia Expanded Programme on Immunization: A Comprehensive Multi-Year Plan 2011-2015 Report.

¹⁵ WHO and UNICEF, 2015. Countdown to 2030: Maternal, Newborn and Child Survival – Somalia Health Data Profile 2015.

	<ul style="list-style-type: none"> • Auto-disable syringes • Temperature monitoring device in refrigerator • Adequate refrigerator temperature • Immunization cards • Immunization tally sheets
Medicines and commodities	<ul style="list-style-type: none"> • Measles vaccine • DTP-Hib-HepB vaccine • Oral polio vaccine • BCG vaccine

Service availability

Figure 47 shows the percentage of facilities that offer child immunization services.

- Just under half of all facilities in Somalia (49%) offered routine childhood immunization at the time of the survey.
- Daily provision of child immunizations in facilities was found in 40% of facilities, and only 22% of facilities offered infant and birth doses.
- Child immunization as an outreach service was not commonly offered, with only 13% of facilities providing this type of service.

Figure 47. Percentage of facilities that offer child immunization services (N=799), Somalia 2016

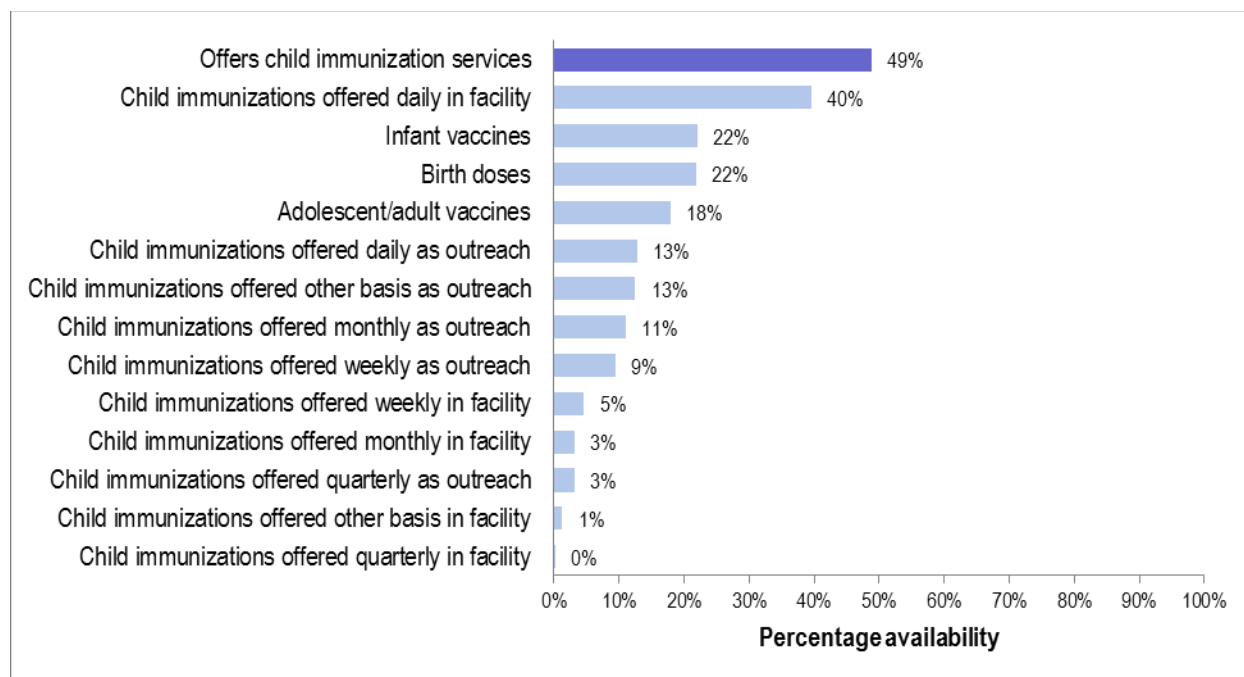


Table 43 shows the percentage of facilities offering child immunization services in facilities while **Table 44** shows the variation in child immunization service availability by region. **Table 44** shows the percentage of facilities offering child immunization services as outreach.

- The vast majority of referral health centers and health centers offered child immunization services (89% and 87%, respectively). Half of hospitals offered child immunization, while only 6% of health posts and 2% of TB centers provided this service.
- Non-governmental facilities were more likely than governmental facilities to provide child

immunization services (65% compared to 42%). Further, more than half of non-governmental facilities (53%) offered child immunization services in-facility on a daily basis compared to 34% of governmental facilities.

- Urban facilities were much more likely than rural facilities to offer child immunization services (64% compared to 25%).
- In Somaliland, the Sanag region had the greatest percentage of facilities offering child immunization services (46%), while the Sool region had the lowest percentage of facilities offering this service (30%).
- In Puntland, the Nugaal region was most likely to offer child immunization services (51%) compared to the least likely region of Sool (20%).
- In South Central, the Lower Juba region had the greatest percentage of facilities offering child immunization services, and the Gedo region had the lowest percentage of facilities offering this service (50%).
- Health centers were found to be more likely to offer frequent (daily) outreach services for child immunization compared to other facility types (23% compared to 17% of hospitals and 11% of referral health centers).
- A greater percentage of non-governmental facilities offered daily child immunization services (both inpatient and outreach) compared to governmental facilities. Daily inpatient immunization services were available in 53% of non-governmental facilities compared to 34% of governmental facilities. Daily outreach immunization services were provided by 24% of non-governmental facilities compared to only 8% of governmental facilities.
- Birth doses were most available in referral health centers (78%), followed by health centers (39%). Only 22% of hospitals provided birth doses and 2% of health posts offered this service.

Table 43. Percentage of facilities offering key in-facility child immunization services, by region, type of facility, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers child immunization services	Birth doses	Infant vaccines	Adolescent/adult vaccines	Child immunizations offered daily in facility	Child immunizations offered weekly in facility	Child immunizations offered monthly in facility	Child immunizations offered quarterly in facility	Child immunizations offered other basis in facility	Total number of facilities
Regions										
Somaliland	40%	18%	21%	21%	34%	4%	1%	0%	1%	282
Awdal	45%	11%	19%	19%	36%	9%	0%	0%	0%	53
Marodi-Jeh	44%	29%	25%	26%	38%	7%	0%	0%	0%	72
Sahil	32%	29%	29%	29%	32%	0%	0%	0%	0%	31
Sanag	46%	11%	7%	7%	32%	0%	7%	0%	7%	28
Sool	30%	4%	11%	8%	30%	0%	0%	0%	0%	53
Togdher	42%	22%	31%	31%	36%	4%	0%	0%	2%	45
Puntland	37%	21%	21%	15%	26%	4%	4%	0%	2%	228
Bari	33%	27%	23%	19%	25%	4%	2%	0%	2%	48
Gardafuu	41%	12%	35%	6%	0%	6%	35%	0%	0%	17
Karkaar	29%	17%	12%	7%	29%	0%	0%	0%	0%	42
Mudug	37%	23%	23%	15%	27%	8%	0%	0%	2%	52
Nugaal	51%	22%	24%	22%	41%	5%	2%	0%	2%	41
Sanaag	39%	17%	22%	28%	17%	6%	11%	0%	6%	18
Sool	20%	10%	0%	0%	20%	0%	0%	0%	0%	10
South Central	66%	27%	24%	17%	55%	5%	4%	1%	1%	289
Bakool	75%	58%	33%	0%	58%	17%	0%	0%	0%	12
Bay	81%	16%	6%	0%	77%	3%	0%	0%	0%	31
Benadir	75%	35%	35%	33%	72%	2%	2%	0%	0%	57
Galgadud	61%	14%	14%	14%	57%	4%	0%	0%	0%	28
Gedo	50%	31%	25%	22%	19%	8%	14%	6%	3%	36
Hiiraan	65%	0%	0%	0%	61%	0%	0%	0%	4%	23
Lower Juba	82%	47%	53%	29%	71%	12%	0%	0%	0%	17
Lower Shabelle	64%	32%	32%	14%	32%	4%	25%	0%	4%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	73%	45%	41%	36%	64%	9%	0%	0%	0%	22

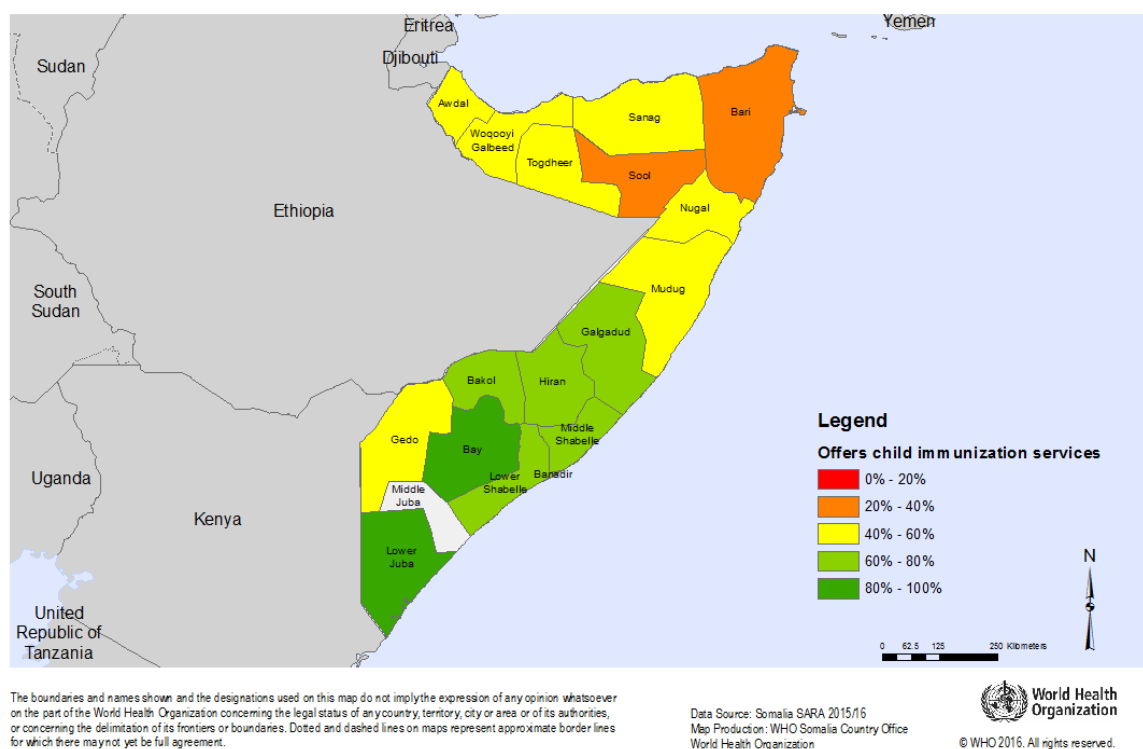
	Offers child immunization services	Birth doses	Infant vaccines	Adolescent/adult vaccines	Child immunizations offered daily in facility	Child immunizations offered weekly in facility	Child immunizations offered monthly in facility	Child immunizations offered quarterly in facility	Child immunizations offered other basis in facility	Total number of facilities
Mudug	49%	9%	9%	6%	43%	6%	0%	0%	0%	35
Facility type										
Hospital	50%	22%	22%	16%	36%	3%	2%	2%	7%	58
Referral Health Center	89%	78%	44%	44%	89%	0%	0%	0%	0%	9
Health Center/MCH	87%	39%	39%	32%	72%	8%	5%	0%	1%	383
Health Post/PHU	6%	2%	3%	2%	3%	1%	1%	0%	1%	294
TB Center	2%	0%	0%	0%	0%	2%	0%	0%	0%	55
Managing authority										
Government	42%	22%	23%	20%	34%	4%	3%	0%	1%	565
Non-government	65%	21%	20%	14%	53%	7%	4%	0%	1%	234
Urban/Rural										
Urban	64%	29%	29%	23%	53%	5%	4%	0%	2%	492
Rural	25%	10%	11%	9%	18%	5%	2%	0%	1%	307
Total	49%	22%	22%	18%	40%	5%	3%	0%	1%	799

Table 44. Percentage of facilities offering key child immunization outreach services, by region, type of facility, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Child immunizations offered daily as outreach	Child immunizations offered weekly as outreach	Child immunizations offered monthly as outreach	Child immunizations offered quarterly as outreach	Child immunizations offered other basis as outreach	Total number of facilities
Regions						
Somaliland	6%	14%	11%	2%	7%	282
Awdal	8%	26%	8%	2%	2%	53
Marodi-Jeh	13%	7%	17%	1%	7%	72
Sahil	6%	3%	19%	3%	0%	31
Sanag	4%	18%	7%	0%	18%	28
Sool	2%	11%	2%	2%	13%	53
Togdher	0%	18%	16%	2%	7%	45
Puntland	7%	6%	14%	3%	7%	228
Bari	4%	8%	10%	4%	6%	48
Gardafuu	0%	6%	35%	0%	0%	17
Karkaar	12%	0%	7%	2%	7%	42
Mudug	4%	2%	21%	0%	10%	52
Nugaal	15%	12%	7%	5%	12%	41
Sanaag	0%	17%	17%	6%	0%	18
Sool	0%	0%	10%	10%	0%	10
South Central	24%	8%	8%	4%	22%	289
Bakool	0%	42%	17%	0%	17%	12
Bay	26%	6%	0%	0%	48%	31
Benadir	40%	11%	4%	0%	21%	57
Galgadud	21%	4%	11%	14%	11%	28
Gedo	3%	17%	17%	11%	3%	36
Hiiraan	0%	0%	0%	0%	65%	23
Lower Juba	65%	6%	6%	0%	6%	17
Lower Shabelle	14%	0%	11%	7%	32%	28

	Child immunizations offered daily as outreach	Child immunizations offered weekly as outreach	Child immunizations offered monthly as outreach	Child immunizations offered quarterly as outreach	Child immunizations offered other basis as outreach	Total number of facilities
Middle Jubba						0
Middle Shebelle	59%	5%	5%	5%	0%	22
Mudug	11%	0%	17%	6%	14%	35
Facility type						
Hospital	17%	5%	9%	0%	19%	58
Referral Health Center	11%	22%	22%	22%	11%	9
Health Center/MCH	23%	17%	19%	5%	22%	383
Health Post/PHU	1%	1%	3%	0%	1%	294
TB Center	0%	0%	0%	2%	0%	55
Managing authority						
Government	8%	10%	13%	3%	8%	565
Non-government	24%	7%	7%	4%	23%	234
Urban/Rural						
Urban	18%	12%	12%	4%	17%	492
Rural	5%	5%	9%	1%	5%	307
Total	13%	9%	11%	3%	13%	799

Figure 48. Map of child immunization service availability by region, Somalia 2016

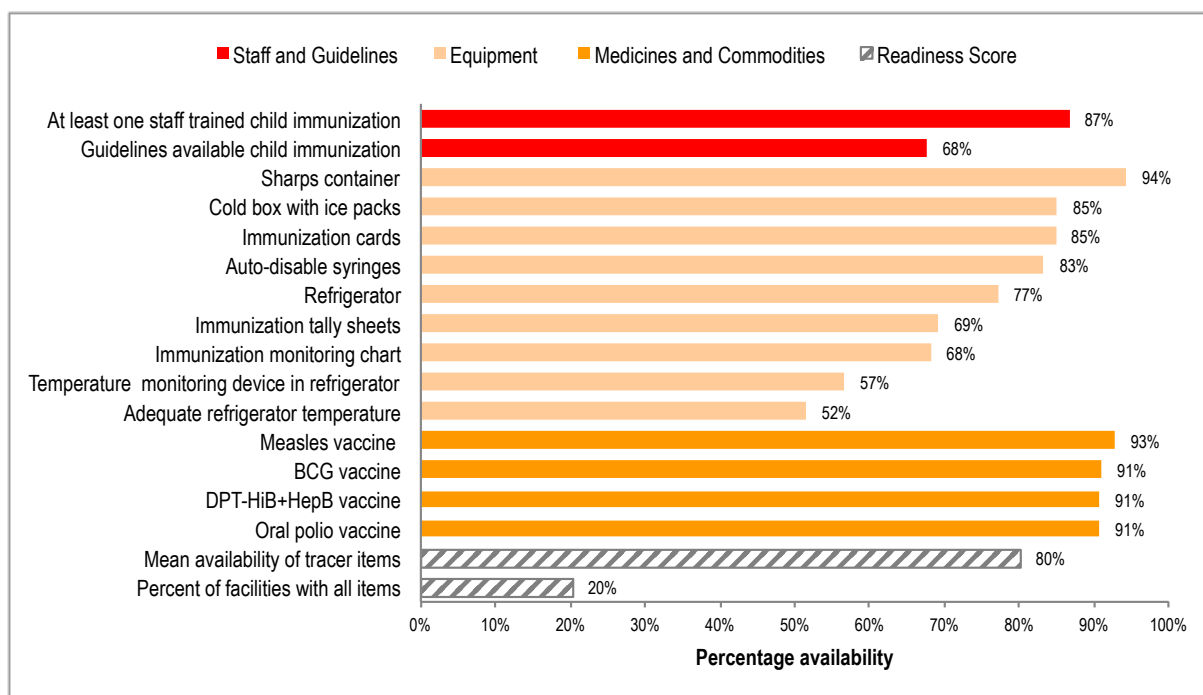


Service readiness

Readiness to provide child immunization services was assessed based on the availability of the 14 tracer items found in **Table 42**. **Figure 49** shows the percentage availability of these tracer items at facilities that offer child immunization services (N=390).

- Only 20% of all facilities reported having all items necessary to provide child immunization services.
- The vast majority of facilities (87%) had at least one trained staff in child immunization and guidelines were available in over two thirds of facilities (68%).
- The equipment needed to provide child immunization services was found in more than half of all facilities, with the highest indicators being sharps container (94%), followed by cold box with ice pack (85%) and immunization cards (85%).
- Over 90% of facilities had the medicines and commodities necessary to provide child immunization services.

Figure 49. Percentage of facilities that have tracer items for child immunization services among facilities that provide this service (N=390)



Service distribution

Table 45 shows availability of routine child immunization tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in child immunization service readiness by region.

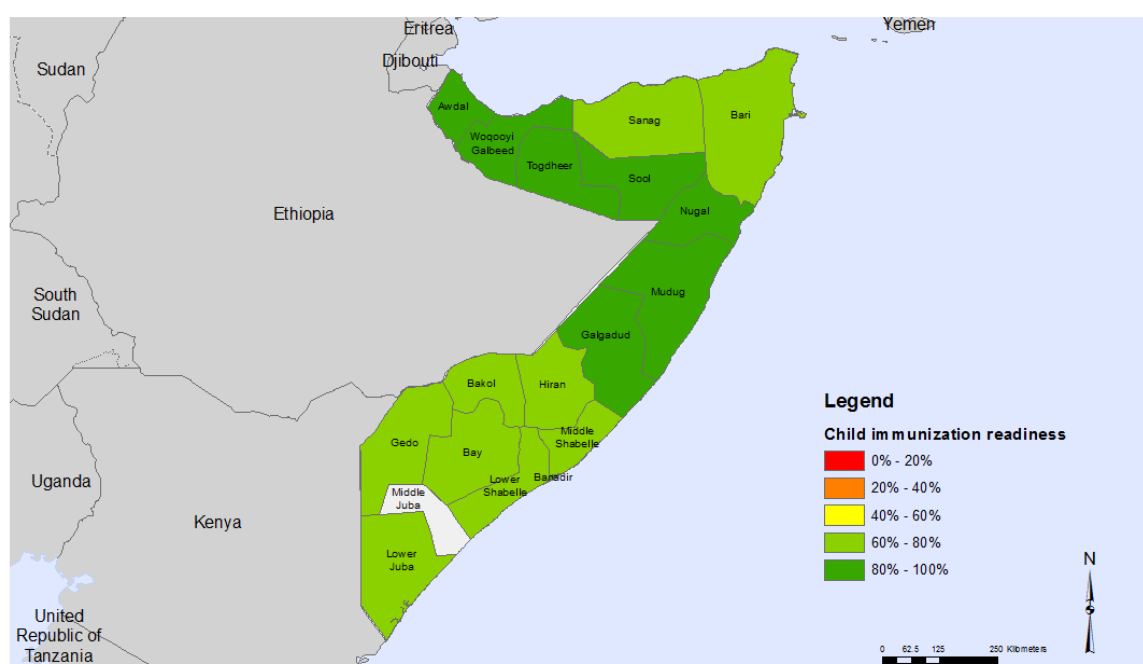
- Over 90% of facilities had the medicines and commodities necessary to provide child immunization services.
- Mean availability of tracer items needed to provide child immunization services was about equal between governmental (81%) and non-governmental facilities (79%).
- No major differences existed in the mean availability of child immunization items between urban and rural facilities (81% vs. 77%, respectively).
- Hospitals were found to have the greatest mean availability of tracer items (83%), followed by health centers (82%) and referral health centers (79%). TB centers scored lowest in terms of mean availability of tracer items needed to provide this service (21%).
- In Somaliland, the Marodi-Jeh region had the highest mean availability of tracer items for child immunization (94%), while the Sanag region had the lowest mean availability (60%).
- The Karkaar region in Puntland was found to have the greatest mean availability of tracer items (85%) and the lowest mean availability of tracer items was found in the Gardafuu region (44%).
- In South Central, the Benadir region had the greatest mean availability of tracer items (86%) and the lowest mean availability was found in the Gedo region (65%).

Table 45. Availability of tracer items for routine child immunization at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=390), Somalia 2016

	Guidelines available child immunization	At least one staff trained child immunization	Cold box with ice packs	Refrigerator	Sharps container	Auto-disable syringes	Temperature monitoring device in refrigerator	Adequate refrigerator or temperature	Immunization cards	Immunization tally sheets	Immunization monitoring chart	Measles vaccine	DPT-HiB+HepB vaccine	Oral polio vaccine	BCG vaccine	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions																		
Somaliland	82%	93%	88%	89%	98%	76%	70%	74%	80%	71%	77%	91%	91%	89%	89%	29%	84%	114
Awdal	79%	100%	83%	92%	100%	46%	42%	75%	75%	92%	83%	96%	100%	96%	96%	8%	84%	24
Marodi-Jeh	88%	97%	91%	94%	100%	97%	84%	84%	94%	88%	91%	100%	100%	100%	100%	72%	94%	32
Sahil	100%	100%	100%	100%	100%	90%	60%	70%	40%	50%	30%	100%	100%	90%	100%	0%	86%	10
Sanag	62%	69%	77%	62%	85%	38%	62%	54%	69%	23%	46%	62%	54%	62%	62%	23%	60%	13
Sool	94%	94%	81%	88%	100%	100%	88%	75%	88%	38%	100%	94%	94%	94%	88%	13%	87%	16
Togdher	74%	89%	95%	89%	100%	79%	79%	68%	84%	89%	74%	84%	84%	74%	79%	16%	83%	19
Puntland	69%	82%	81%	82%	87%	81%	56%	56%	83%	69%	64%	87%	86%	82%	88%	15%	78%	84
Bari	75%	88%	100%	69%	100%	81%	44%	63%	81%	75%	63%	94%	94%	100%	100%	6%	83%	16
Gardafuu	43%	86%	14%	71%	14%	43%	14%	29%	43%	57%	29%	57%	43%	57%	43%	0%	44%	7
Karkaar	75%	83%	92%	83%	83%	75%	83%	75%	92%	83%	75%	83%	92%	100%	92%	33%	85%	12
Mudug	53%	84%	79%	79%	100%	95%	68%	58%	89%	84%	68%	95%	89%	89%	95%	21%	83%	19
Nugaal	90%	81%	90%	95%	95%	90%	57%	57%	95%	48%	71%	86%	90%	71%	95%	19%	82%	21
Sanaag	71%	71%	57%	86%	71%	57%	43%	29%	57%	57%	57%	86%	71%	57%	71%	0%	63%	7
Sool	0%	50%	100%	100%	100%	100%	50%	50%	100%	100%	50%	100%	100%	50%	50%	0%	75%	2
South Central	58%	85%	85%	68%	95%	89%	49%	36%	89%	68%	65%	96%	93%	96%	93%	17%	79%	192
Bakool	33%	44%	89%	67%	89%	89%	44%	33%	89%	56%	22%	89%	67%	67%	67%	0%	66%	9
Bay	64%	80%	92%	76%	96%	88%	36%	16%	100%	72%	68%	100%	88%	100%	100%	0%	79%	25
Benadir	91%	98%	95%	67%	95%	93%	60%	58%	91%	81%	70%	100%	100%	100%	100%	47%	88%	43
Galgadud	24%	94%	82%	76%	100%	100%	53%	53%	100%	88%	88%	100%	100%	100%	100%	12%	84%	17
Gedo	56%	78%	56%	61%	78%	67%	39%	17%	61%	61%	67%	83%	78%	83%	89%	11%	65%	18
Hiiraan	33%	47%	100%	80%	100%	93%	47%	13%	93%	40%	13%	100%	100%	100%	73%	0%	73%	15
Lower Juba	64%	100%	93%	50%	100%	57%	43%	21%	71%	79%	71%	93%	93%	100%	93%	21%	76%	14
Lower	50%	94%	61%	61%	100%	100%	33%	22%	89%	67%	61%	100%	100%	100%	94%	6%	77%	18

	Guidelines available child immunization	At least one staff trained child immunization	Cold box with ice packs	Refrigerator	Sharps container	Auto-disable syringes	Temperature monitoring device in refrigerator	Adequate refrigerator or temperature	Immunization cards	Immunization tally sheets	Immunization monitoring chart	Measles vaccine	DPT-HiB+HepB vaccine	Oral polio vaccine	BCG vaccine	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Shabelle																		
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	94%	81%	75%	63%	94%	88%	44%	31%	81%	94%	63%	88%	81%	88%	88%	19%	78%	16
Mudug	12%	94%	100%	76%	100%	100%	76%	71%	100%	18%	88%	100%	100%	100%	100%	12%	82%	17
Facility type																		
Hospital	66%	90%	93%	90%	97%	90%	79%	55%	83%	79%	66%	79%	72%	97%	93%	31%	83%	29
Referral Health Center	63%	88%	100%	88%	88%	75%	25%	50%	63%	75%	75%	100%	100%	88%	100%	0%	79%	8
Health Center/MCH	69%	88%	86%	78%	96%	84%	57%	53%	87%	69%	70%	96%	94%	92%	93%	20%	82%	333
Health Post/PHU	53%	68%	63%	42%	68%	63%	26%	16%	58%	47%	42%	58%	58%	68%	58%	11%	53%	19
TB Center	0%	0%	0%	0%	100%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	21%	1
Managing authority																		
Government	76%	88%	84%	83%	93%	77%	63%	62%	81%	72%	71%	90%	90%	87%	90%	25%	81%	239
Non-government	55%	84%	87%	68%	96%	93%	46%	36%	91%	66%	64%	97%	93%	96%	93%	13%	79%	151
Urban/Rural																		
Urban	65%	88%	86%	76%	95%	85%	57%	50%	87%	69%	71%	95%	93%	94%	94%	20%	81%	313
Rural	78%	83%	83%	81%	91%	77%	56%	56%	78%	71%	58%	84%	83%	79%	81%	22%	77%	77
Total	68%	87%	85%	77%	94%	83%	57%	52%	85%	69%	68%	93%	91%	91%	91%	20%	80%	390

Figure 50. Map of child immunization service readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

World Health Organization
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4.1.5 Child health preventive and curative care services

Pneumonia is the leading cause of death among children under five in Somalia, accounting for 19% of deaths, followed by diarrhea (13%) and birth asphyxia and measles (11%). Access to curative care services is low, with only 13% of children under five with ARI symptoms taken to health facility¹⁶ and 20.8% of children under five receiving ORS for treatment of diarrhea. Undernutrition is a major contributing factor to childhood morbidity and mortality in the country, with recent estimates showing 42.1% of children under-five stunted and 13.2% wasted¹². **Table 46** outlines the items necessary for facilities to offer child health preventive and curative care services.

Table 46. Tracer items needed to provide child health preventive and curative care services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for Integrated management of childhood illness (IMCI) Staff trained in IMCI in the past two years Guidelines for growth monitoring Staff trained in growth monitoring
Equipment	<ul style="list-style-type: none"> Child scale and infant scale Length/height measurement equipment Thermometer Stethoscope Growth chart
Diagnostics	<ul style="list-style-type: none"> Capacity to conduct malaria testing Haemoglobin test General microscopy (to test for parasite in stool)
Medicines and commodities	<ul style="list-style-type: none"> ORS

¹⁶ WHO, 2015. Global Health Observatory Somalia Summary Statistics, January 2015 Profile.

	<ul style="list-style-type: none"> • Albendazole/mebendazole • Co-trimoxazole suspension • Vitamin A • Amoxicillin • Paracetamol suspension • Zinc
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Service availability

Figure 51 shows the percentage of facilities offering the following key child preventive and curative care services: diagnosis and treatment of child malnutrition, vitamin A supplementation, iron supplementation, provision of ORS and zinc to treat diarrhea, growth monitoring, treatment of pneumonia, administration of amoxicillin for the treatment of pneumonia, and treatment of malaria in children.

- Nearly two-thirds of facilities in the country offered preventive and curative child health care services (66%).
- Treatment for children with diarrhea (ORS and zinc supplementation) was found in 61% of all facilities.
- Child growth monitoring was the least available child health service, with 41% of facilities offering this.

Figure 51. Percentage of facilities offering key child preventive and curative care services, Somalia 2016

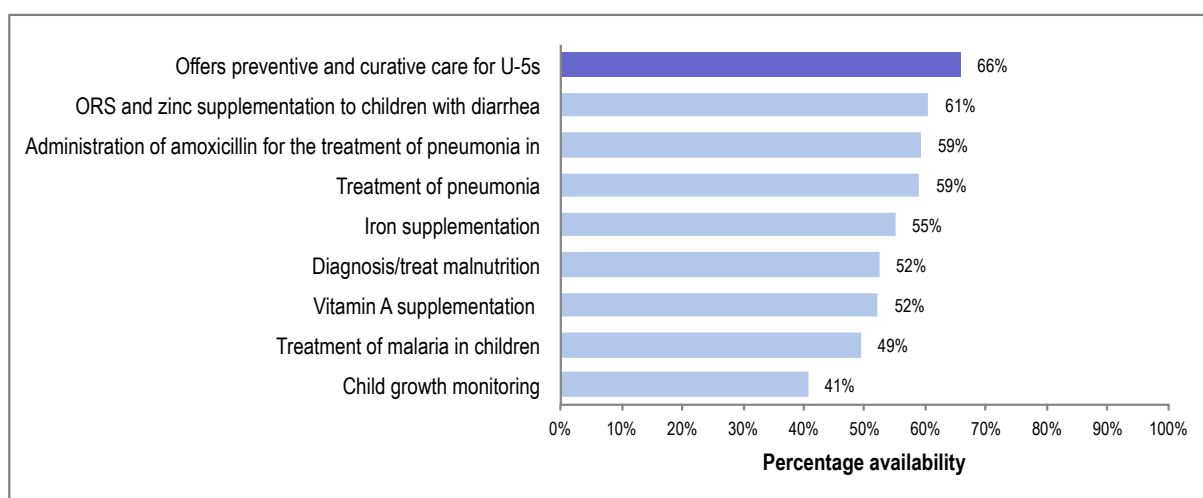


Table 47 shows the percentage of facilities offering key child preventive and curative care services, by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location while **Figure 52** shows the variation in child preventative and curative care services by region.

- All referral health centers in the country reported providing preventive and curative child health care services for under-fives. Health centers were the next category of facility most likely to provide this service (92%), followed by 72% of hospitals. Less than half of health posts (41%) and only 5% of TB centers offered preventive and curative child health services.
- Non-governmental facilities were more likely than governmental facilities to provide preventive and curative care for children under five (74% compared to 62%).
- Urban facilities were much more likely than rural facilities (74% vs. 53%) to offer preventive and curative child health care services for children under five.

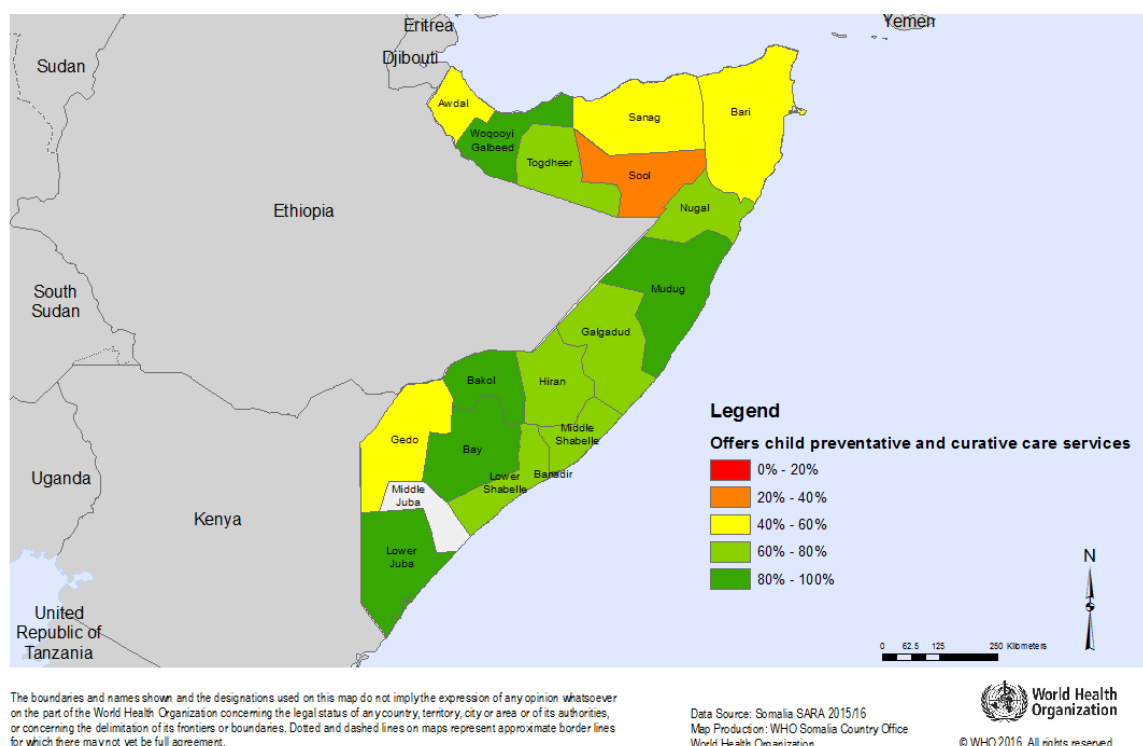
- In Somaliland, 90% of facilities in the Marodi-Jeh region offered preventive and curative child health services, while only 34% of facilities located in the Sool region offered this service.
- The Mudug region in Puntland had the greatest percentage of facilities offering preventive and curative child health care services (83%), compared to only 29% in the Karkaar region.
- In South Central, the Lower Juba region had the greatest availability of preventive and child health services (94%) compared to the Gedo region, the region that was least likely to provide this service (53%).

Table 47. Percentage of facilities offering key child preventive and curative care services, by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers preventive and curative care for U-5s	Diagnosis/treat malnutrition	Vitamin A supplementation	Iron supplementation	ORS and zinc supplementation to children with diarrhea	Child growth monitoring	Treatment of pneumonia	Administration of amoxicillin for the treatment of pneumonia in children	Treatment of malaria in children	Total number of facilities
Regions										
Somaliland	63%	51%	45%	52%	60%	42%	59%	59%	50%	282
Awdal	58%	55%	36%	51%	57%	38%	57%	53%	51%	53
Marodi-Jeh	90%	81%	71%	82%	85%	64%	88%	88%	78%	72
Sahil	68%	32%	29%	23%	68%	32%	52%	61%	55%	31
Sanag	54%	36%	36%	39%	46%	36%	43%	43%	25%	28
Sool	34%	28%	32%	32%	32%	28%	32%	32%	26%	53
Togdher	64%	51%	44%	56%	58%	40%	64%	60%	47%	45
Puntland	57%	46%	39%	43%	53%	32%	44%	47%	32%	228
Bari	52%	46%	42%	44%	52%	33%	40%	40%	33%	48
Gardafuu	35%	35%	18%	35%	35%	24%	6%	24%	29%	17
Karkaar	29%	24%	29%	29%	29%	26%	29%	26%	26%	42
Mudug	83%	54%	38%	44%	75%	29%	69%	71%	25%	52
Nugaal	76%	68%	63%	66%	71%	49%	63%	66%	46%	41
Sanaag	50%	44%	33%	33%	33%	33%	28%	33%	39%	18
Sool	40%	30%	30%	40%	30%	20%	20%	30%	30%	10
South Central	75%	58%	70%	67%	68%	46%	71%	70%	62%	289
Bakool	83%	75%	83%	75%	58%	25%	83%	75%	75%	12
Bay	84%	45%	84%	71%	71%	35%	84%	71%	84%	31
Benadir	81%	67%	77%	77%	75%	61%	75%	77%	63%	57
Galgadud	68%	68%	64%	64%	64%	57%	64%	61%	54%	28
Gedo	53%	44%	47%	44%	44%	42%	50%	50%	50%	36
Hiiraan	74%	57%	65%	70%	70%	9%	74%	74%	61%	23
Lower Juba	94%	76%	88%	82%	82%	76%	94%	94%	88%	17
Lower Shabelle	71%	43%	57%	61%	64%	39%	61%	57%	50%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	73%	59%	68%	73%	73%	59%	55%	68%	68%	22

	Offers preventive and curative care for U-5s	Diagnosis/treat malnutrition	Vitamin A supplementation	Iron supplementation	ORS and zinc supplementation to children with diarrhea	Child growth monitoring	Treatment of pneumonia	Administration of amoxicillin for the treatment of pneumonia in children	Treatment of malaria in children	Total number of facilities
Mudug	80%	63%	71%	66%	74%	37%	77%	77%	49%	35
Facility type										
Hospital	72%	60%	57%	64%	66%	53%	67%	69%	64%	58
Referral Health Center	100%	89%	89%	89%	89%	100%	78%	67%	78%	9
Health Center/MCH	92%	79%	85%	81%	86%	67%	86%	85%	74%	383
Health Post/PHU	41%	25%	18%	29%	37%	10%	32%	34%	23%	294
TB Center	5%	0%	0%	0%	0%	0%	2%	4%	2%	55
Managing authority										
Government	62%	51%	45%	50%	58%	40%	55%	56%	45%	565
Non-government	74%	56%	68%	67%	68%	42%	69%	68%	59%	234
Urban/Rural										
Urban	74%	61%	65%	64%	68%	51%	68%	67%	57%	492
Rural	53%	38%	32%	40%	48%	23%	45%	46%	37%	307
Total	66%	52%	52%	55%	61%	41%	59%	59%	49%	799

Figure 52. Map of child preventative and curative care service availability by region, Somalia 2016

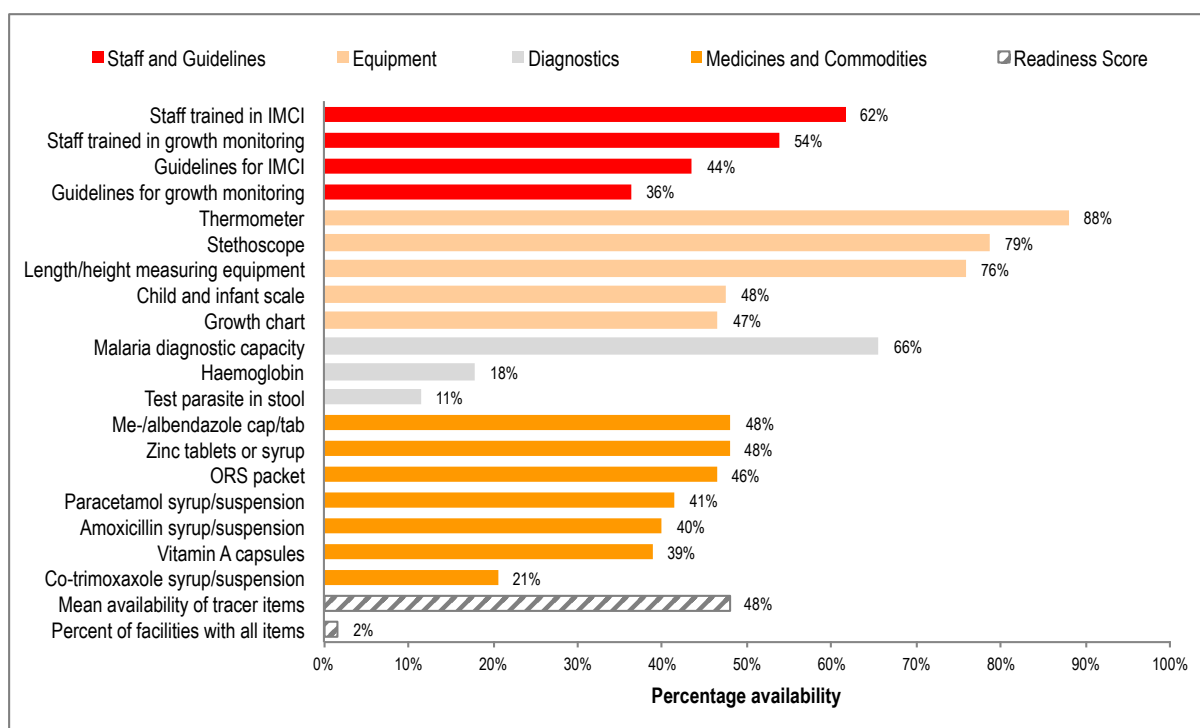


Service readiness

Readiness to offer child health preventive and curative care was assessed based on the presence of the 19 tracer items found in **Table 46**. **Figure 53** shows the percentage availability of these tracer items in facilities that offer child curative care services (N=526).

- Mean availability of tracer items needed to provider preventive and curative child health services for under-fives was found to be 49%. Only 2% of facilities reported having all items needed to provide this service.
- Overall, items for preventive and curative child health care were most available in the equipment domain, with 88% of facilities having a thermometer, 79% having a stethoscope and 76% having length/height measuring equipment.
- The last available item needed to provide preventive and curative child health care was diagnostic testing for parasites in stool, with only 11% of facilities having this item.

Figure 53. Percentage of facilities that have tracer items for child health preventive and curative care services among facilities that provide this service (N=526), Somalia 2016



Service distribution

Table 48 shows availability of child health preventive and curative care tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in child health preventative and curative care readiness by region.

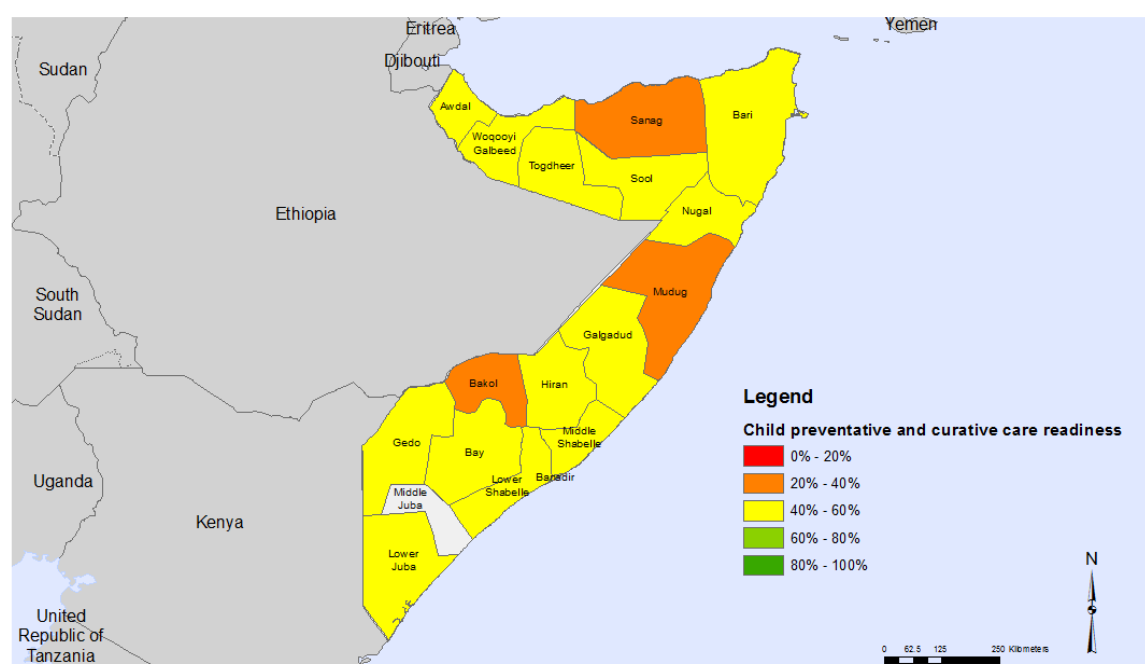
- Less than half of all facilities (44%) had guidelines for IMCI at the time of the survey, and only 36% of facilities had guidelines for growth monitoring available. Although guidelines were not readily available in the majority of facilities, staff trained in both IMCI and growth monitoring were found in more than half of all facilities (62% and 54%, respectively).
- Hospitals were most likely to have items needed to provide preventive and curative child health services (62%) compared to referral health centers (54%), health centers (54%) and health posts (25%).
- Governmental facilities were slightly more likely than non-governmental facilities to be ready to provide preventive and curative child health services (49% compared to 46%).
- Readiness to provide preventive and curative child health services was much higher among facilities located in urban areas compared to rural areas (53% compared to 37%).
- In Somaliland, the Awdal region had the highest readiness score (59%), while the Sanag region had the lowest readiness score (31%). The most available item in the zone was a thermometer (85%) and the least available item was diagnostic capacity to test for parasites in stool (10%).
- The Karkaar region was found to be the region with the highest readiness score in Puntland (63%), and the Sool region had the lowest readiness score for preventive and child health services (26%). Results indicate tracer items most and least available were the same as those in the Somaliland zone.
- In South Central, the Benadir region was most likely to have tracer items needed to provide preventive and curative child health services (59%), and the Bakool was least likely to have the items necessary to provide this service (32%). The most available item in the zone was a thermometer (93%) and the least available item was a diagnostic test for parasite in stool (13%).

Table 48. Availability of tracer items for curative and preventive child health services at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=526), Somalia 2016

	Guidelines for IMCI	Guidelines for growth monitoring	Staff trained in IMCI	Staff trained in growth monitoring	Child and infant scale	Length /height measuring equipment	Thermometer	Stethoscope	Growth chart	Hemoglobin	Test parasite in stool	Malaria diagnostic capacity	ORS packet	Amoxicillin syrup/suspension	Co-trimoxazole syrup/suspension	Paracetamol syrup/suspension	Vitamin A capsules	Me-/albendazole cap/tab	Zinc tablets or syrup	Percentage of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions																						
Somaliland	47%	43%	58%	54%	36%	72%	85%	73%	50%	14%	10%	66%	60%	53%	20%	54%	40%	61%	64%	1%	51%	179
Awdal	65%	45%	74%	65%	61%	74%	100%	74%	52%	6%	6%	77%	71%	68%	23%	61%	48%	71%	71%	0%	59%	31
Marodi-Jeh	37%	38%	66%	60%	28%	65%	78%	65%	54%	18%	12%	65%	62%	71%	29%	68%	37%	69%	69%	2%	52%	65
Sahil	38%	29%	48%	38%	33%	71%	86%	90%	14%	29%	19%	52%	38%	19%	19%	14%	24%	19%	38%	0%	38%	21
Sanag	27%	20%	7%	13%	33%	73%	67%	67%	60%	20%	13%	60%	27%	7%	7%	20%	20%	27%	27%	0%	31%	15
Sool	61%	72%	61%	61%	83%	100%	100%	94%	78%	6%	6%	44%	56%	22%	11%	33%	50%	44%	56%	0%	55%	18
Togdher	62%	55%	55%	55%	3%	69%	83%	66%	45%	3%	3%	83%	83%	66%	10%	72%	52%	90%	90%	0%	55%	29
Puntland	42%	39%	64%	49%	42%	68%	85%	70%	43%	21%	10%	64%	42%	33%	17%	37%	37%	43%	45%	2%	45%	130
Bari	36%	44%	60%	56%	12%	72%	68%	72%	48%	4%	0%	52%	36%	28%	8%	36%	36%	40%	36%	0%	39%	25
Gardafuu	33%	17%	67%	67%	50%	67%	100%	0%	50%	0%	0%	83%	17%	17%	0%	17%	17%	17%	17%	0%	33%	6
Karkaar	83%	67%	92%	75%	92%	92%	83%	100%	75%	42%	50%	100%	33%	33%	8%	25%	50%	50%	42%	0%	63%	12
Mudug	26%	26%	67%	33%	40%	51%	88%	56%	28%	23%	9%	65%	40%	35%	9%	37%	23%	35%	40%	5%	38%	43
Nugaal	58%	55%	61%	55%	35%	81%	90%	81%	48%	19%	6%	61%	58%	45%	48%	52%	58%	61%	71%	3%	55%	31
Sanaag	44%	22%	33%	44%	67%	78%	78%	89%	44%	56%	11%	67%	56%	22%	0%	33%	44%	56%	56%	0%	47%	9
Sool	25%	25%	50%	50%	75%	50%	100%	100%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	26%	4
South Central	41%	29%	63%	57%	60%	83%	93%	89%	46%	19%	13%	66%	38%	33%	23%	34%	39%	41%	36%	2%	48%	217
Bakool	40%	0%	30%	30%	30%	80%	90%	90%	10%	0%	0%	80%	20%	10%	20%	20%	20%	20%	20%	0%	32%	10
Bay	35%	23%	54%	46%	58%	73%	88%	100%	42%	12%	15%	73%	92%	50%	23%	58%	92%	88%	62%	0%	57%	26
Benadir	72%	52%	78%	65%	61%	87%	98%	96%	46%	41%	26%	72%	50%	50%	30%	48%	52%	52%	52%	9%	59%	46
Galgadud	21%	32%	58%	63%	74%	95%	95%	95%	79%	26%	11%	58%	11%	5%	5%	5%	11%	11%	11%	0%	40%	19
Gedo	58%	42%	79%	63%	68%	74%	84%	68%	63%	21%	16%	68%	32%	42%	32%	37%	37%	47%	32%	0%	51%	19
Hiiraan	18%	12%	41%	35%	59%	94%	94%	88%	12%	12%	0%	82%	59%	47%	35%	53%	59%	59%	59%	0%	48%	17
Lower Juba	38%	31%	75%	69%	44%	56%	88%	81%	38%	19%	25%	75%	31%	38%	38%	38%	38%	38%	38%	0%	47%	16
Lower Shabelle	25%	15%	75%	65%	65%	95%	100%	95%	40%	15%	15%	75%	20%	20%	10%	20%	10%	20%	20%	0%	42%	20
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle	50%	50%	38%	44%	88%	94%	81%	88%	63%	13%	0%	38%	19%	31%	25%	31%	31%	31%	31%	0%	44%	16

	Guidelines for IMCI	Guidelines for growth monitoring	Staff trained in IMCI	Staff trained in growth monitoring	Child and infant scale	Length/height measuring equipment	Thermometer	Stethoscope	Growth chart	Hemoglobin	Test parasite in stool	Malaria diagnostic capacity	ORS packet	Amoxicillin syrup/suspension	Co-trimoxazole syrup/suspension	Paracetamol syrup/suspension	Vitamin A capsules	Me-/albendazole cap/tab	Zinc tablets or syrup	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Shebelle																						
Mudug	21%	4%	64%	61%	50%	82%	96%	79%	46%	4%	4%	46%	11%	11%	11%	11%	11%	11%	11%	4%	33%	28
Facility type																						
Hospital	50%	40%	67%	60%	64%	76%	90%	95%	50%	71%	60%	86%	57%	48%	36%	57%	48%	57%	57%	14%	62%	42
Referral Health Center	67%	44%	67%	44%	22%	78%	100%	100%	44%	44%	22%	78%	56%	22%	22%	44%	56%	44%	67%	0%	54%	9
Health Center/MCH	51%	45%	67%	60%	58%	90%	95%	92%	58%	17%	9%	70%	52%	44%	23%	46%	47%	54%	52%	1%	54%	351
Health Post/PHU	18%	11%	44%	34%	12%	36%	68%	32%	14%	2%	1%	45%	26%	26%	8%	24%	11%	28%	32%	0%	25%	121
TB Center	0%	0%	33%	33%	33%	0%	33%	67%	33%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	14%	3
Managing authority																						
Government	46%	41%	63%	54%	41%	71%	86%	73%	48%	20%	12%	67%	52%	44%	20%	46%	39%	53%	55%	2%	49%	352
Non-government	39%	27%	59%	53%	61%	85%	92%	90%	44%	14%	10%	63%	36%	31%	21%	32%	38%	38%	33%	1%	46%	174
Urban/Rural																						
Urban	49%	40%	67%	60%	56%	84%	91%	90%	54%	23%	15%	69%	48%	42%	26%	43%	44%	50%	48%	2%	53%	363
Rural	31%	27%	50%	40%	28%	57%	82%	53%	30%	6%	4%	57%	44%	36%	9%	37%	28%	45%	47%	0%	37%	163
Total	44%	36%	62%	54%	48%	76%	88%	79%	47%	18%	11%	66%	46%	40%	21%	41%	39%	48%	48%	2%	48%	526

Figure 54. Map of child health preventative and curative care service readiness by region, Somalia 2016



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Map Production: WHO Somalia Country Office
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4.1.6 Adolescent health services

Items needed to provide adolescent health services are detailed in **Table 49**.

Table 49. Tracer items for adolescent health services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for service provision to adolescents Staff trained in provision of adolescent health services Staff providing family planning services trained in adolescent sexual and reproductive health Staff providing HIV testing and counseling services trained in HIV/AIDS prevention, care, and management for adolescents
Diagnostics	<ul style="list-style-type: none"> HIV diagnostic capacity
Medicines and commodities	<ul style="list-style-type: none"> Condoms

Service availability

Figure 55 shows the percentage of facilities offering adolescent health services.

- Less than half of all facilities (47%) in Somalia offered adolescent health services at the time of the survey.
- The most available service provided to adolescents was HIV testing and counseling (13%), and the least available services were provision of condoms, family planning, provision of ART, and provision of IUCD (each service found in 2% of facilities).

Figure 55. Percentage of facilities that offer adolescent health services (N=799), Somalia 2016

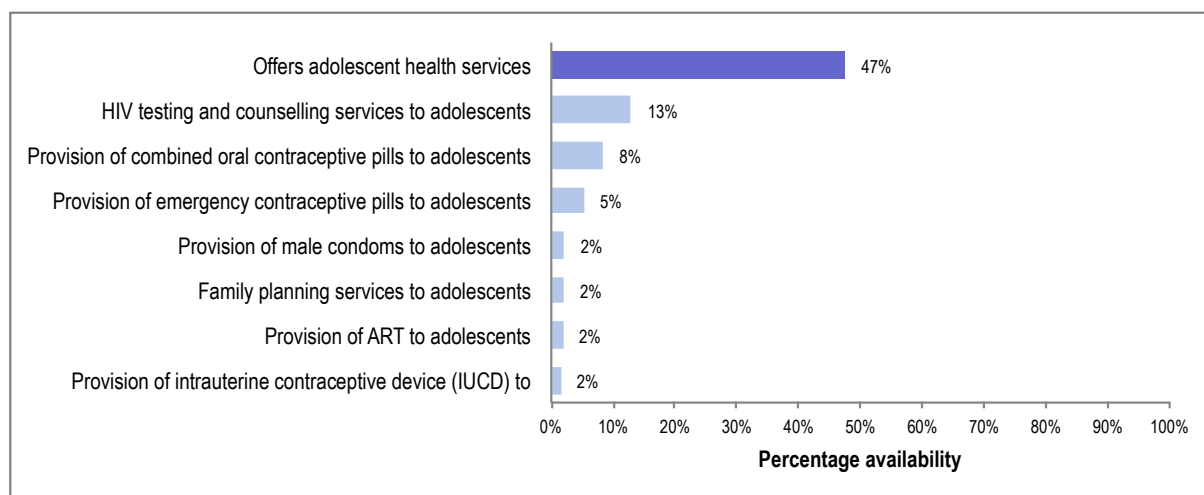


Table 50 shows the percentage of facilities offering the following key adolescent health services: HIV testing and counseling to adolescents, family planning services to adolescents, provision of combined oral contraceptive pills to adolescents, provision of male condoms to adolescents, provision of emergency contraceptive pills to adolescents, provision of intrauterine contraceptive device (IUCD) to adolescents and provision of ART to adolescents. **Figure 56** shows the variation in adolescent health service availability by region.

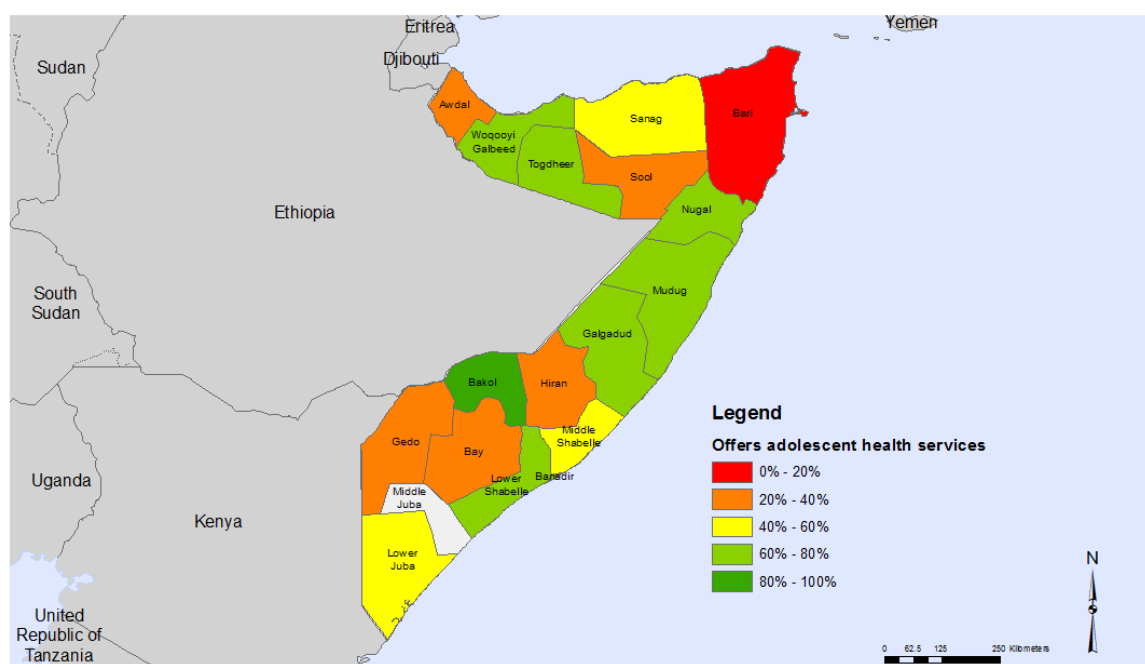
- Less than 10% of all facilities offered contraceptives (combined pills or emergency contraceptive pills) to adolescents. Governmental facilities were slightly more likely to provide contraceptives compared to non-governmental facilities (9% vs. 6% for oral contraceptives and 6% vs. 4% for emergency contraceptives).
- The majority of hospitals provided adolescent health services (74%), while only 33% of referral health centers offered the service.
- Urban facilities were much more likely than rural facilities to provide adolescent health services (55% compared to 36%).
- The Marodi-Jeh region in the Somaliland zone was most likely to provide adolescent health services (86%), while the Awdal region was least likely to provide this service (21%).
- In Puntland, the Mudug region had the greatest percentage of facilities offering adolescent health services (67%), and the Karkaar region had the lowest percentage of facilities offering this service (5%).
- In South Central, the majority of facilities offered adolescent health services (83%), while only a quarter of facilities in the Gedo region offered this service.

Table 50. Availability of tracer items for adolescent health services by region, facility type, governmental vs. non-governmental ownership and urban vs. rural location (N=799), Somalia 2016

	Offers adolescent health services	HIV testing and counselling services to adolescents	Family planning services to adolescents	Provision of combined oral contraceptive pills to adolescents	Provision of male condoms to adolescents	Provision of emergency contraceptive pills to adolescents	Provision of intrauterine contraceptive device (IUCD) to adolescents	Provision of ART to adolescents	Total number of facilities
Regions									
Somaliland	49%	14%	0%	11%	0%	4%	0%	2%	282
Awdal	21%	8%	0%	26%	0%	6%	0%	2%	53
Marodi-Jeh	86%	19%	0%	3%	0%	0%	0%	3%	72
Sahil	35%	26%	0%	16%	0%	10%	3%	3%	31
Sanag	46%	21%	0%	11%	0%	4%	0%	4%	28
Sool	28%	4%	0%	11%	0%	6%	0%	0%	53
Togdher	60%	11%	0%	2%	0%	2%	0%	2%	45
Puntland	36%	11%	1%	5%	1%	5%	2%	2%	228
Bari	13%	6%	2%	4%	2%	8%	4%	2%	48
Gardafuu	12%	0%	0%	0%	0%	0%	0%	0%	17
Karkaar	5%	7%	5%	7%	5%	7%	5%	2%	42
Mudug	67%	25%	0%	6%	0%	6%	0%	2%	52
Nugaal	66%	5%	0%	2%	0%	0%	2%	2%	41
Sanaag	50%	22%	0%	11%	0%	11%	0%	0%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	55%	13%	4%	9%	5%	7%	2%	2%	289
Bakool	83%	0%	0%	8%	0%	0%	0%	0%	12
Bay	29%	6%	0%	0%	0%	0%	0%	0%	31
Benadir	65%	37%	14%	23%	14%	21%	4%	5%	57
Galgadud	71%	7%	4%	7%	4%	7%	0%	0%	28
Gedo	25%	8%	6%	8%	6%	6%	6%	3%	36
Hiiraan	39%	9%	0%	9%	4%	4%	0%	0%	23
Lower Juba	53%	0%	0%	6%	0%	0%	6%	0%	17
Lower Shabelle	61%	18%	4%	4%	4%	4%	0%	4%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	55%	18%	5%	9%	5%	5%	5%	0%	22

	Offers adolescent health services	HIV testing and counselling services to adolescents	Family planning services to adolescents	Provision of combined oral contraceptive pills to adolescents	Provision of male condoms to adolescents	Provision of emergency contraceptive pills to adolescents	Provision of intrauterine contraceptive device (IUCD) to adolescents	Provision of ART to adolescents	Total number of facilities
Mudug	77%	0%	0%	0%	0%	0%	0%	0%	35
Facility type									
Hospital	74%	41%	5%	24%	5%	16%	5%	17%	58
Referral Health Center	33%	22%	0%	22%	0%	0%	0%	0%	9
Health Center/MCH	66%	16%	3%	13%	3%	8%	2%	1%	383
Health Post/PHU	26%	2%	0%	0%	0%	0%	0%	0%	294
TB Center	7%	20%	0%	0%	0%	0%	0%	2%	55
Managing authority									
Government	44%	13%	2%	9%	2%	6%	2%	2%	565
Non-government	56%	12%	3%	6%	3%	4%	0%	1%	234
Urban/Rural									
Urban	55%	18%	3%	11%	3%	7%	2%	3%	492
Rural	36%	4%	0%	5%	0%	3%	0%	0%	307
Total	47%	13%	2%	8%	2%	5%	2%	2%	799

Figure 56. Map of adolescent health service availability by region, Somalia 2016



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Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

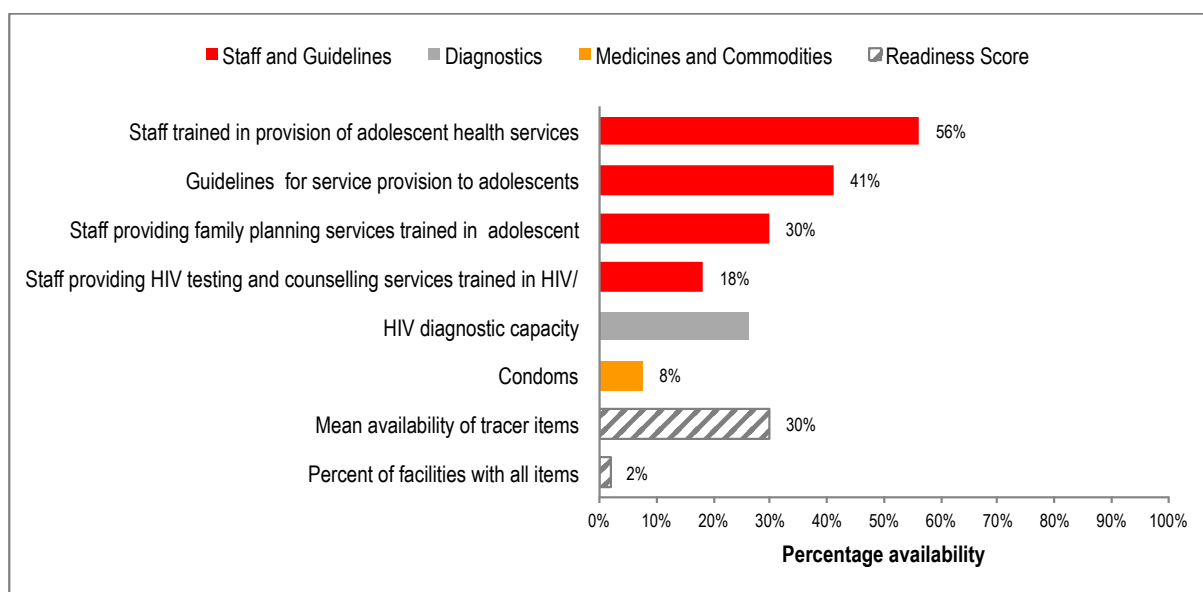
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Service readiness

Readiness to offer adolescent health care was assessed based on the presence of the 6 tracer items found in **Table 49**. **Figure 57** shows the percentage of facilities that have tracer items for adolescent health services among facilities that provide this service.

- Very few facilities had all items needed to provide adolescent health services (2%).
- On average, facilities had just under 2 out of 6 of the tracer items, for a readiness score of 30 out of 100.
- More than half of all facilities (56%) had staff trained in adolescent health services.
- Only 8% of facilities provided condoms to adolescents.

Figure 57. Percentage of facilities that have tracer items for adolescent health services among facilities that provide this service (N=379), Somalia 2016



Service distribution

Table 51 shows the readiness to provide adolescent health services in facilities that offer adolescent health care services (N=379) while shows the variation in adolescent health service readiness by region.

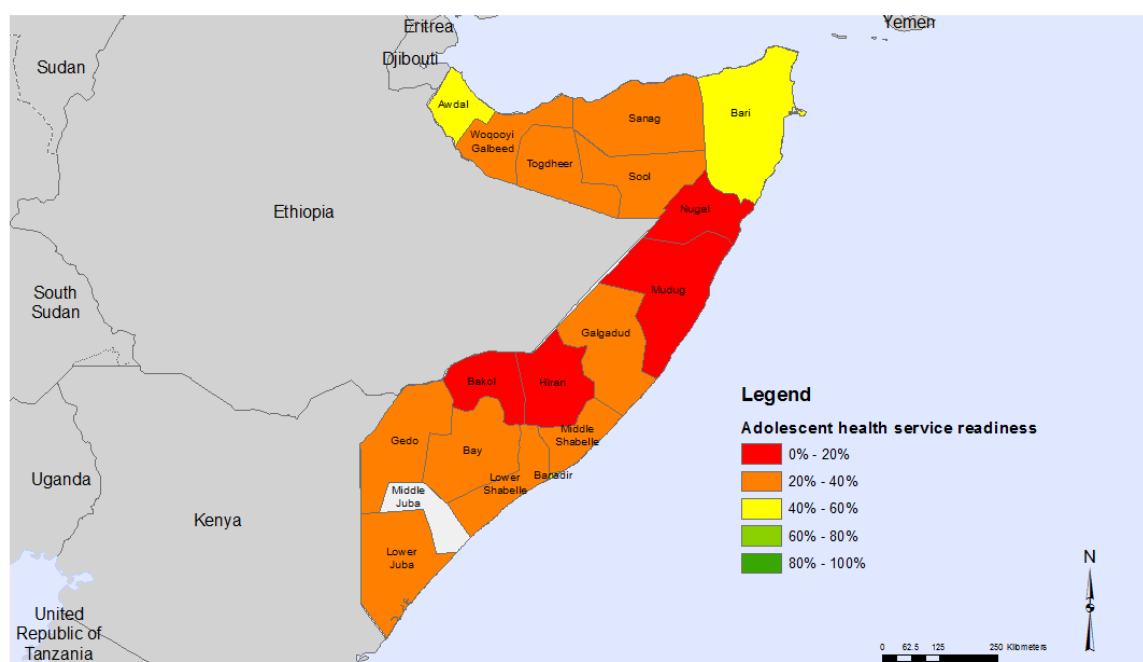
- Governmental facilities had an overall adolescent health readiness score that was slightly higher than non-governmental facilities (31% compared to 27%).
- TB centers were most likely to have the items necessary to provide adolescent health services (50%), followed by hospitals (40%) and health centers (33%). Tracer items needed for this service were least available in health posts (13%).
- Urban facilities showed higher readiness scores for adolescent health services compared to rural facilities (34% compared to 21%).
- Adolescent health services were most commonly available in the Awdal region of Somaliland (46%), compared to the least available in the Sanag region (16%).
- In Puntland, readiness to provide adolescent health services was highest in the Karkaar region (56%) and lowest in the Nugaal region.
- In South Central, the Benadir region was the region most likely to provide adolescent health services (55%) and the Bay region least likely to provide this service (12%) based on availability of tracer items needed.

Table 51. Adolescent health service readiness by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=379), Somalia 2016

	Guidelines for service provision to adolescents	Staff trained in provision of adolescent health services	Staff providing family planning services trained in adolescent sexual and reproductive health	Staff providing HIV testing and counselling services trained in HIV/AIDS prevention, care, and management for adolescents	HIV diagnostic capacity	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions									
Somaliland	45%	53%	45%	20%	29%	1%	0%	32%	139
Awdal	82%	73%	82%	18%	27%	9%	0%	48%	11
Marodi-Jeh	34%	52%	39%	11%	19%	2%	0%	26%	62
Sahil	18%	36%	64%	73%	82%	0%	0%	45%	11
Sanag	38%	23%	15%	8%	23%	0%	0%	18%	13
Sool	80%	80%	53%	13%	13%	0%	0%	40%	15
Togdher	52%	52%	44%	30%	44%	0%	0%	37%	27
Puntland	42%	51%	19%	14%	21%	4%	2%	25%	81
Bari	67%	83%	67%	50%	33%	33%	33%	56%	6
Gardafuu	50%	100%	0%	0%	50%	0%	0%	33%	2
Karkaar	100%	100%	50%	50%	50%	0%	0%	58%	2
Mudug	34%	49%	11%	9%	23%	0%	0%	21%	35
Nugaal	37%	44%	15%	11%	11%	0%	0%	20%	27
Sanaag	56%	33%	22%	11%	22%	11%	0%	26%	9
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	37%	62%	23%	19%	26%	15%	3%	30%	159
Bakool	20%	20%	20%	0%	0%	10%	0%	12%	10
Bay	22%	56%	0%	11%	33%	11%	0%	22%	9
Benadir	68%	78%	51%	43%	49%	38%	8%	55%	37
Galgadud	25%	60%	15%	5%	20%	0%	0%	21%	20
Gedo	22%	56%	44%	22%	22%	22%	11%	31%	9
Hiiraan	22%	44%	0%	0%	0%	11%	0%	13%	9
Lower Juba	67%	67%	22%	11%	33%	0%	0%	33%	9
Lower Shabelle	29%	47%	24%	35%	47%	12%	0%	32%	17
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	75%	83%	17%	17%	17%	17%	8%	37%	12
Mudug	4%	67%	0%	4%	4%	4%	0%	14%	27
Facility type									

	Guidelines for service provision to adolescents	Staff trained in provision of adolescent health services	Staff providing family planning services trained in adolescent sexual and reproductive health	Staff providing HIV testing and counselling services trained in HIV/AIDS prevention, care, and management for adolescents	HIV diagnostic capacity	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Hospital	42%	56%	35%	28%	70%	12%	5%	40%	43
Referral Health Center	0%	0%	67%	33%	67%	0%	0%	28%	3
Health Center/MCH	45%	60%	37%	21%	25%	9%	2%	33%	252
Health Post/PHU	26%	44%	5%	3%	1%	1%	1%	13%	77
TB Center	100%	75%	0%	25%	100%	0%	0%	50%	4
Managing authority									
Government	43%	53%	36%	20%	29%	6%	2%	31%	248
Non-government	38%	62%	18%	15%	20%	10%	2%	27%	131
Urban/Rural									
Urban	44%	60%	33%	22%	32%	10%	2%	34%	270
Rural	35%	46%	21%	9%	12%	1%	1%	21%	109
Total	41%	56%	30%	18%	26%	8%	2%	30%	379

Figure 58. Map of adolescent health service readiness by region, Somalia 2016



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Map Production: WHO Somalia Country Office
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4.1.7 Essential medicines for maternal and child health

Availability of essential medicines needed to provide maternal and child health services are detailed in the following section.

Figure 59 shows the percentage of facilities offering essential medicines for mothers.

- Mean availability of tracer items for medicines needed for maternal health was low. On average, facilities only had 22% of these essential medicines available.
- The most available essential medicine for maternal health was sodium chloride injectable (35%) and the least available medicines were Nifedipine and Misoprostol (9%).

Figure 60. Percentage of facilities that have essential medicines for mothers observed in stock and valid (N=799), Somalia 2016

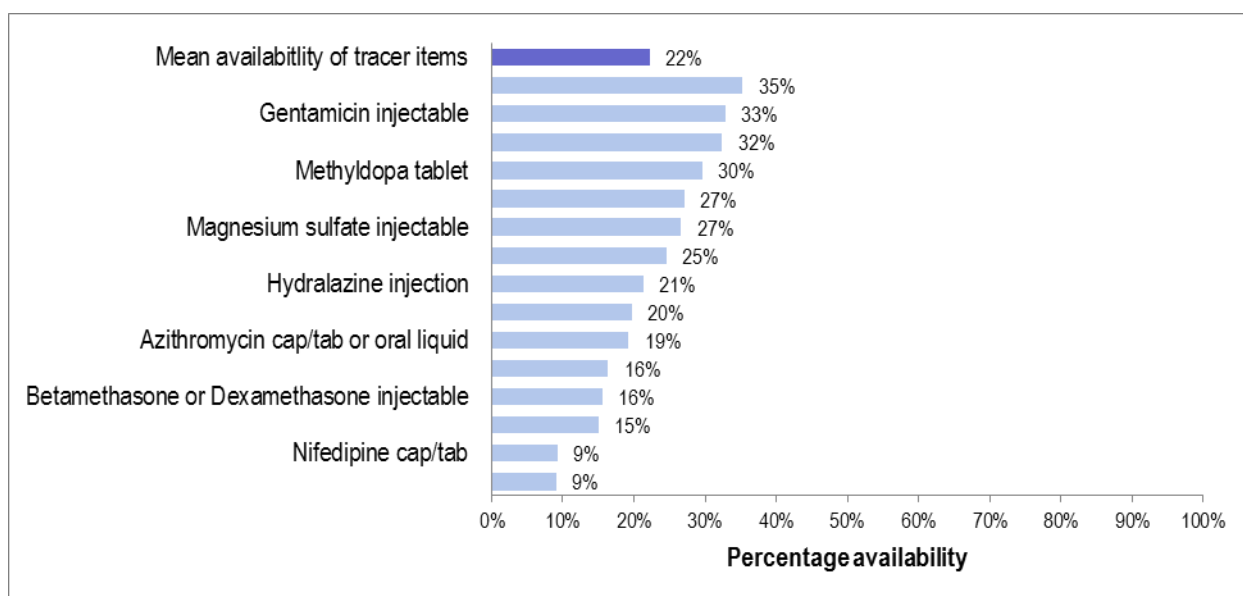


Table 52 presents the availability of essential medicines for mothers by region, facility type, managing authority and urban vs. rural location.

- Mean availability of medicines for mothers was highest among hospitals (53%) and lowest among health posts and TB centers (2%).
- Governmental facilities and non-governmental showed similar availability of essential medicines for mothers (22% vs. 23%).
- Urban facilities were more likely to have essential medicines for maternal health services compared to rural facilities (29% vs. 11%).
- In Somaliland, the Marodi-Jeh region showed the greatest availability of essential medicines for children (29%) and the Sool region displayed the poorest availability of these items (16%).
- In Puntland, mean availability of essential medicines for mothers was highest in Nugaal (24%) and lowest in Sool (3%).
- In South Central, essential medicines for mothers were most available in the Lower Juba region (42%) and least available in the Mudug region (13%).

Figure 61 displays the percentage of facilities offering essential medicines for children.

- Mean availability of tracer items for medicines needed for children was low. On average, facilities only had 23% of these essential medicines available.
- The most available essential medicine for maternal health was Getamicin injectable and zinc sulphate (33%) and the least available medicine was morphine (2%).

Figure 61. Percentage of facilities that have essential medicines for children observed in stock and valid (N=799), Somalia 2016

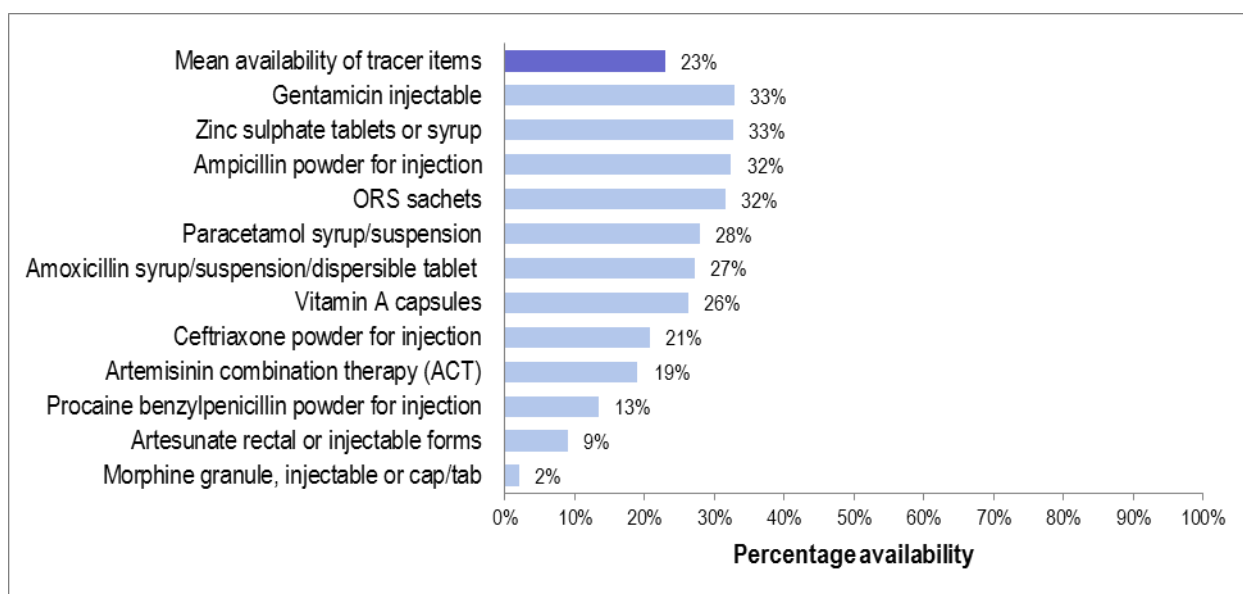


Table 53 presents the availability of essential medicines for children by region, facility type, managing authority and urban vs. rural location.

- Mean availability of medicines for children was highest among hospitals (43%) and lowest among TB centers (0%).
- Slightly more governmental facilities showed greater availability of essential medicines for children compared to non-governmental facilities (24% vs. 21%).
- Urban facilities were much more likely to have essential medicines for child health services compared to rural facilities (28% vs. 14%).
- In Somaliland, the Marodi-Jeh region showed the greatest availability of essential medicines for children (40%) and the Sanaag and Sool regions displayed the poorest availability of these items (13%).
- In Puntland, mean availability of essential medicines for children was highest in Nugaal (28%) and lowest in Sool (2%).
- In South Central, essential medicines for children were most available in the Bay region (46%) and least available in the Galgadud and Mudug regions (10%).

Figure 62 displays the percentage of facilities offering lifesaving commodities for MNACH services.

- Across service categories, child health items were most available. Family planning/birth spacing items were least available.
- The most available lifesaving commodity was skin disinfectant for newborn care (38%) and the least available lifesaving commodity was female condoms (3%).

Figure 62. Percentage of facilities that have lifesaving commodities observed in stock and valid (N=799), Somalia 2016

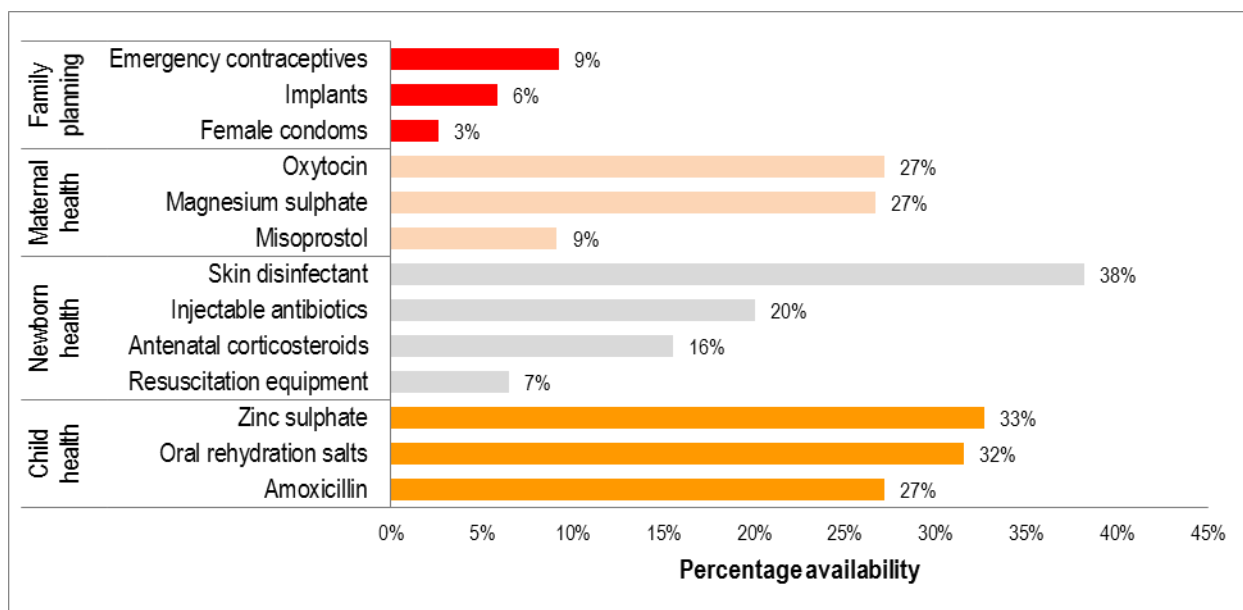


Table 54 presents the availability of lifesaving commodities by region, facility type, managing authority and urban vs. rural location.

Table 52. Availability of essential medicines for mothers, by region, facility type, managing authority and urban vs. rural location (N=799), Somalia 2016

	Oxytocin injectable	Sodium chloride injectable solution	Calcium gluconate injectable	Magnesium sulfate injectable	Ampicillin powder for injection	Gentamicin injectable	Metronidazole injectable	Misoprostol cap/tab	Azithromycin cap/tab or oral liquid	Cefixime cap/tab	Benzathine benzylpenicillin powder for injection	Betamethasone or Dexamethasone injectable	Nifedipine cap/tab	Hydralazine injection	Methyldopa tablet	Mean availability of tracer items	Total number of facilities
Regions																	
Somaliland	31%	37%	14%	28%	32%	34%	18%	10%	17%	10%	25%	13%	6%	22%	32%	22%	282
Awdal	34%	30%	4%	36%	43%	47%	21%	11%	15%	4%	34%	8%	0%	25%	43%	24%	53
Marodi-Jeh	40%	50%	24%	33%	46%	39%	22%	18%	22%	14%	24%	19%	13%	32%	35%	29%	72
Sahil	26%	29%	13%	26%	13%	19%	16%	16%	3%	3%	10%	23%	10%	23%	23%	17%	31
Sanag	21%	21%	14%	21%	14%	29%	21%	4%	21%	18%	25%	14%	7%	21%	25%	19%	28
Sool	25%	25%	11%	23%	25%	19%	17%	2%	19%	9%	25%	11%	6%	9%	21%	16%	53
Togdher	29%	56%	13%	24%	27%	42%	11%	2%	13%	11%	29%	4%	2%	20%	38%	21%	45
Puntland	17%	28%	11%	20%	28%	29%	10%	6%	18%	12%	21%	9%	6%	15%	25%	17%	228
Bari	15%	19%	8%	15%	27%	25%	10%	4%	8%	6%	23%	2%	2%	15%	25%	14%	48
Gardafuu	0%	6%	6%	6%	6%	6%	6%	0%	6%	6%	6%	6%	6%	6%	6%	5%	17
Karkaar	24%	26%	12%	24%	24%	29%	10%	10%	10%	5%	19%	5%	12%	17%	26%	17%	42
Mudug	19%	35%	17%	23%	37%	35%	10%	8%	35%	21%	29%	13%	8%	19%	37%	23%	52
Nugaal	24%	44%	10%	29%	39%	41%	15%	2%	32%	24%	27%	15%	5%	15%	34%	24%	41
Sanaag	6%	28%	17%	22%	17%	22%	11%	11%	0%	6%	17%	17%	6%	17%	6%	13%	18
Sool	10%	10%	0%	0%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	10
South Central	31%	39%	23%	30%	37%	35%	29%	11%	23%	22%	27%	23%	15%	26%	31%	27%	289
Bakool	33%	75%	25%	58%	33%	42%	17%	0%	25%	0%	25%	17%	8%	25%	33%	28%	12
Bay	48%	42%	26%	48%	52%	48%	32%	3%	29%	29%	29%	19%	13%	19%	26%	31%	31
Benadir	44%	58%	35%	44%	58%	49%	40%	19%	28%	32%	44%	33%	25%	44%	51%	40%	57
Galgadud	25%	29%	14%	11%	36%	36%	18%	4%	11%	14%	21%	14%	7%	18%	18%	18%	28
Gedo	22%	28%	28%	25%	31%	28%	33%	17%	22%	25%	25%	28%	22%	31%	28%	26%	36
Hiiraan	17%	48%	13%	26%	17%	17%	26%	13%	35%	9%	9%	13%	4%	9%	39%	20%	23
Lower Juba	41%	47%	41%	35%	47%	47%	41%	35%	47%	41%	41%	41%	41%	47%	41%	42%	17
Lower Shabelle	25%	36%	14%	21%	32%	29%	18%	4%	11%	11%	18%	21%	0%	18%	25%	19%	28
Middle Jubba	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	#DIV/0! !	0
Middle	27%	23%	23%	23%	27%	32%	32%	14%	23%	36%	27%	27%	14%	23%	27%	25%	22

	Oxytocin injectable	Sodium chloride injectable solution	Calcium gluconate injectable	Magnesium sulfate injectable	Ampicillin powder for injection	Gentamicin injectable	Metronidazole injectable	Misoprostol cap/tab	Azithromycin cap/tab or oral liquid	Cefixime cap/tab	Benzathine benzylpenicillin powder for injection	Betamethasone or Dexamethasone injectable	Nifedipine cap/tab	Hydralazine injection	Methyldopa tablet	Mean availability of tracer items	Total number of facilities
Shebelle																	
Mudug	23%	20%	6%	14%	17%	20%	17%	3%	11%	11%	14%	11%	6%	11%	11%	13%	35
Facility type																	
Hospital	57%	69%	45%	53%	64%	67%	60%	22%	45%	41%	57%	64%	38%	52%	53%	53%	58
Referral Health Center	56%	67%	22%	56%	56%	67%	11%	22%	22%	11%	33%	11%	22%	33%	67%	37%	9
Health Center/MCH	45%	56%	25%	44%	53%	54%	30%	14%	31%	23%	40%	21%	12%	34%	51%	36%	383
Health Post/PHU	2%	7%	2%	2%	4%	4%	2%	1%	2%	2%	2%	1%	1%	2%	2%	2%	294
TB Center	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	55
Managing authority																	
Government	27%	35%	16%	27%	32%	33%	18%	9%	19%	13%	25%	14%	8%	21%	31%	22%	565
Non-government	28%	35%	18%	27%	33%	32%	24%	9%	20%	19%	24%	20%	12%	21%	26%	23%	234
Urban/Rural																	
Urban	34%	45%	22%	34%	43%	42%	27%	12%	26%	21%	32%	22%	13%	28%	39%	29%	492
Rural	16%	21%	7%	15%	16%	18%	8%	4%	8%	6%	13%	6%	3%	10%	15%	11%	307
Total	27%	35%	16%	27%	32%	33%	20%	9%	19%	15%	25%	16%	9%	21%	30%	22%	799

Table 53. Availability of essential medicines for children, by region, facility type, managing authority and urban vs. rural location (N=799), Somalia 2016

	Amoxicillin syrup/suspension/ dispersible tablet	Ampicillin powder for injection	Ceftriaxone powder for injection	Gentamicin injectable	Procaine benzylpenicillin powder for injection	ORS sachets	Zinc sulphate tablets or syrup	Artemisinin combination therapy (ACT)	Artesunate rectal or injectable forms	Vitamin A capsules	Morphine granule, injectable or cap/tab	Paracetamol syrup/suspension	Mean availability of tracer items	Total number of facilities
Regions														
Somaliland	35%	32%	26%	34%	14%	39%	42%	25%	11%	26%	1%	35%	27%	282
Awdal	40%	43%	40%	47%	28%	42%	42%	25%	25%	28%	0%	36%	33%	53
Marodi-Jeh	65%	46%	32%	39%	15%	56%	63%	54%	8%	33%	1%	63%	40%	72
Sahil	16%	13%	6%	19%	3%	29%	29%	16%	0%	19%	0%	13%	14%	31
Sanag	4%	14%	14%	29%	11%	18%	18%	11%	11%	11%	4%	11%	13%	28
Sool	8%	25%	13%	19%	9%	19%	19%	4%	8%	17%	0%	11%	13%	53
Togdher	44%	27%	33%	42%	9%	53%	60%	20%	13%	33%	2%	49%	32%	45
Puntland	19%	28%	14%	29%	10%	24%	26%	12%	7%	21%	1%	21%	18%	228
Bari	17%	27%	19%	25%	8%	21%	21%	17%	13%	21%	2%	21%	18%	48
Gardafuu	6%	6%	6%	6%	6%	6%	6%	0%	0%	6%	0%	6%	4%	17
Karkaar	10%	24%	7%	29%	7%	10%	12%	7%	5%	14%	0%	7%	11%	42
Mudug	29%	37%	23%	35%	12%	33%	33%	15%	12%	19%	2%	31%	23%	52
Nugaal	34%	39%	17%	41%	15%	44%	54%	15%	0%	44%	0%	39%	28%	41
Sanaag	11%	17%	6%	22%	17%	28%	28%	11%	6%	22%	0%	17%	15%	18
Sool	0%	10%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	2%	10
South Central	26%	37%	21%	35%	16%	30%	29%	19%	9%	31%	4%	26%	23%	289
Bakool	17%	33%	17%	42%	17%	25%	25%	8%	0%	25%	0%	17%	19%	12
Bay	45%	52%	29%	48%	26%	84%	58%	68%	3%	84%	3%	48%	46%	31
Benadir	42%	58%	39%	49%	30%	42%	44%	19%	9%	44%	5%	40%	35%	57
Galgadud	4%	36%	4%	36%	0%	7%	7%	4%	4%	7%	4%	4%	10%	28
Gedo	22%	31%	19%	28%	14%	17%	17%	14%	14%	19%	8%	19%	19%	36
Hiiraan	35%	17%	13%	17%	9%	43%	43%	22%	0%	43%	0%	39%	24%	23
Lower Juba	35%	47%	35%	47%	35%	29%	35%	12%	35%	35%	12%	35%	33%	17
Lower Shabelle	14%	32%	14%	29%	7%	18%	18%	11%	7%	7%	0%	14%	14%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	23%	27%	18%	32%	5%	14%	23%	9%	9%	23%	0%	23%	17%	22
Mudug	9%	17%	9%	20%	6%	9%	9%	9%	9%	9%	3%	9%	10%	35
Facility type														
Hospital	43%	64%	47%	67%	36%	48%	50%	34%	24%	40%	17%	50%	43%	58
Referral Health	22%	56%	33%	67%	22%	56%	67%	33%	11%	56%	0%	44%	39%	9

	Amoxicillin syrup/suspension/ dispersible tablet	Ampicillin powder for injection	Ceftriaxone powder for injection	Gentamicin injectable	Procaine benzylpenicillin powder for injection	ORS sachets	Zinc sulphate tablets or syrup	Artemisinin combination therapy (ACT)	Artesunate rectal or injectable forms	Vitamin A capsules	Morphine granule, injectable or cap/tab	Paracetamol syrup/suspension	Mean availability of tracer items	Total number of facilities
Center														
Health Center/MCH	41%	53%	33%	54%	21%	49%	49%	28%	14%	44%	1%	42%	36%	383
Health Post/PHU	11%	4%	3%	4%	2%	11%	13%	7%	1%	4%	0%	10%	6%	294
TB Center	0%	2%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55
Managing authority														
Government	28%	32%	22%	33%	14%	33%	35%	19%	10%	25%	2%	30%	24%	565
Non-government	24%	33%	18%	32%	12%	28%	26%	18%	7%	29%	3%	24%	21%	234
Urban/Rural														
Urban	32%	43%	27%	42%	17%	37%	38%	22%	13%	34%	3%	33%	28%	492
Rural	19%	16%	11%	18%	7%	23%	25%	14%	3%	15%	0%	20%	14%	307
Total	27%	32%	21%	33%	13%	32%	33%	19%	9%	26%	2%	28%	23%	799

Table 54. Availability of lifesaving commodities, by region, facility type, managing authority and urban vs. rural location (N=799), Somalia 2016

	Family planning commodities			Maternal health commodities			Newborn health commodities				Child health commodities			Total number of facilities
	Female condoms	Implants	Emergency contraceptives	Oxytocin	Misoprostol	Magnesium sulphate	Injectable antibiotics	Antenatal corticosteroids	Skin disinfectant	Resuscitation equipment	Amoxicillin	Oral rehydration salts	Zinc sulphate	
Regions														
Somaliland	0%	5%	11%	31%	10%	28%	24%	13%	39%	6%	35%	39%	42%	282
Awdal	2%	11%	11%	34%	11%	36%	40%	8%	30%	8%	40%	42%	42%	53
Marodi-Jeh	0%	3%	3%	40%	18%	33%	29%	19%	64%	6%	65%	56%	63%	72
Sahil	0%	3%	23%	26%	16%	26%	3%	23%	26%	6%	16%	29%	29%	31
Sanag	0%	11%	14%	21%	4%	21%	14%	14%	29%	14%	4%	18%	18%	28
Sool	0%	4%	8%	25%	2%	23%	13%	11%	28%	2%	8%	19%	19%	53
Togdher	0%	2%	16%	29%	2%	24%	33%	4%	38%	2%	44%	53%	60%	45
Puntland	1%	7%	7%	17%	6%	20%	14%	9%	32%	4%	19%	24%	26%	228
Bari	2%	8%	10%	15%	4%	15%	19%	2%	29%	0%	17%	21%	21%	48
Gardafuu	0%	0%	0%	0%	0%	6%	6%	6%	6%	0%	6%	6%	6%	17
Karkaar	2%	10%	10%	24%	10%	24%	7%	5%	29%	5%	10%	10%	12%	42
Mudug	0%	12%	13%	19%	8%	23%	23%	13%	42%	6%	29%	33%	33%	52
Nugaal	0%	5%	0%	24%	2%	29%	17%	15%	46%	10%	34%	44%	54%	41
Sanaag	6%	6%	6%	6%	11%	22%	6%	17%	33%	0%	11%	28%	28%	18
Sool	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	6%	5%	9%	31%	11%	30%	20%	23%	42%	9%	26%	30%	29%	289
Bakool	0%	0%	17%	33%	0%	58%	17%	17%	75%	0%	17%	25%	25%	12
Bay	3%	0%	3%	48%	3%	48%	29%	19%	61%	0%	45%	84%	58%	31
Benadir	12%	12%	23%	44%	19%	44%	35%	33%	61%	21%	42%	42%	44%	57
Galgadud	0%	4%	4%	25%	4%	11%	4%	14%	21%	11%	4%	7%	7%	28
Gedo	8%	11%	8%	22%	17%	25%	19%	28%	28%	19%	22%	17%	17%	36
Hiiraan	9%	0%	4%	17%	13%	26%	9%	13%	48%	4%	35%	43%	43%	23
Lower Juba	6%	12%	18%	41%	35%	35%	35%	41%	47%	12%	35%	29%	35%	17
Lower Shabelle	4%	0%	4%	25%	4%	21%	14%	21%	50%	4%	14%	18%	18%	28
Middle Jubba	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0
Middle Shebelle	5%	0%	5%	27%	14%	23%	18%	27%	14%	0%	23%	14%	23%	22
Mudug	3%	3%	3%	23%	3%	14%	9%	11%	17%	3%	9%	9%	9%	35

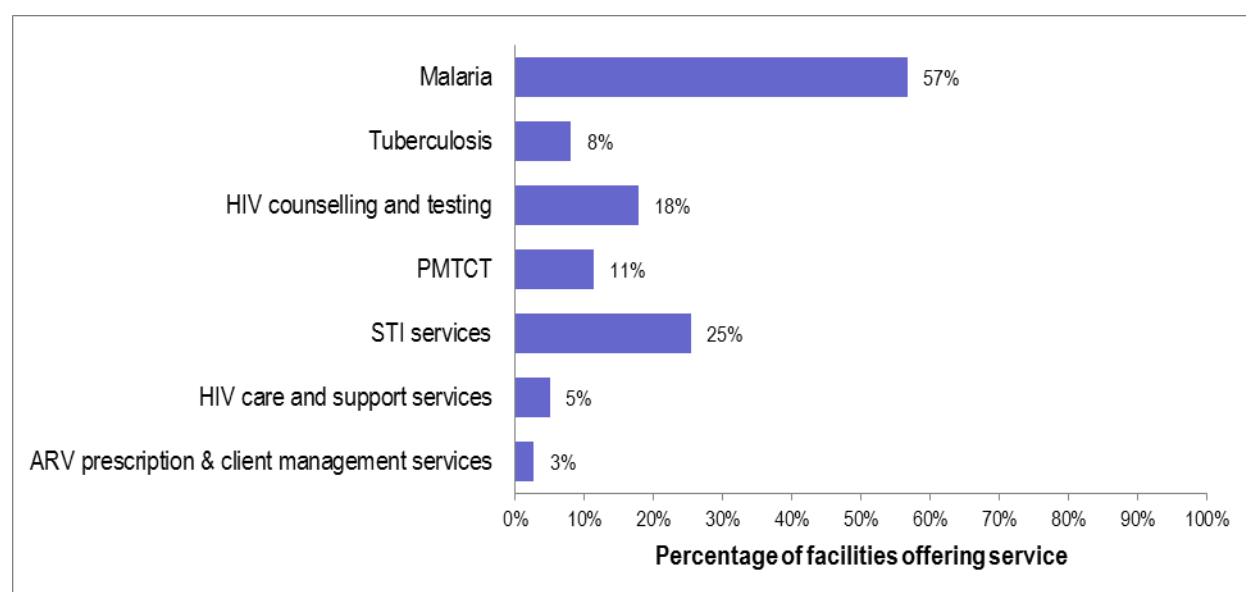
	Family planning commodities			Maternal health commodities			Newborn health commodities				Child health commodities			
	Female condoms	Implants	Emergency contraceptives	Oxytocin	Misoprostol	Magnesium sulphate	Injectable antibiotics	Antenatal corticosteroids	Skin disinfectant	Resuscitation equipment	Amoxicillin	Oral rehydration salts	Zinc sulphate	Total number of facilities
Facility type														
Hospital	9%	24%	33%	57%	22%	53%	47%	64%	78%	34%	43%	48%	50%	58
Referral Health Center	0%	11%	33%	56%	22%	56%	33%	11%	67%	22%	22%	56%	67%	9
Health Center/MCH	4%	8%	13%	45%	14%	44%	32%	21%	60%	8%	41%	49%	49%	383
Health Post/PHU	0%	0%	0%	2%	1%	2%	2%	1%	9%	0%	11%	11%	13%	294
TB Center	2%	0%	0%	0%	2%	2%	2%	2%	0%	0%	0%	0%	0%	55
Managing authority														
Government	2%	8%	10%	27%	9%	27%	21%	14%	38%	7%	28%	33%	35%	565
Non-government	4%	1%	6%	28%	9%	27%	18%	20%	39%	6%	24%	28%	26%	234
Urban/Rural														
Urban	4%	9%	12%	34%	12%	34%	26%	22%	48%	10%	32%	37%	38%	492
Rural	1%	0%	5%	16%	4%	15%	11%	6%	23%	2%	19%	23%	25%	307
Total	3%	6%	9%	27%	9%	27%	20%	16%	38%	7%	27%	32%	33%	799

4.2 Communicable diseases

The availability of communicable disease services across Somalia at the time of the survey is shown in Figure 63.

- Services for communicable diseases were most available for malaria (57%) and least available for ARV prescription and client management (3%).
- HIV-related services were limited, with only 18% of facilities offering HIV counselling and testing, 11% offering PMTCT services, 5% offering HIV care and support, and 3% offering ARV prescription and client management.

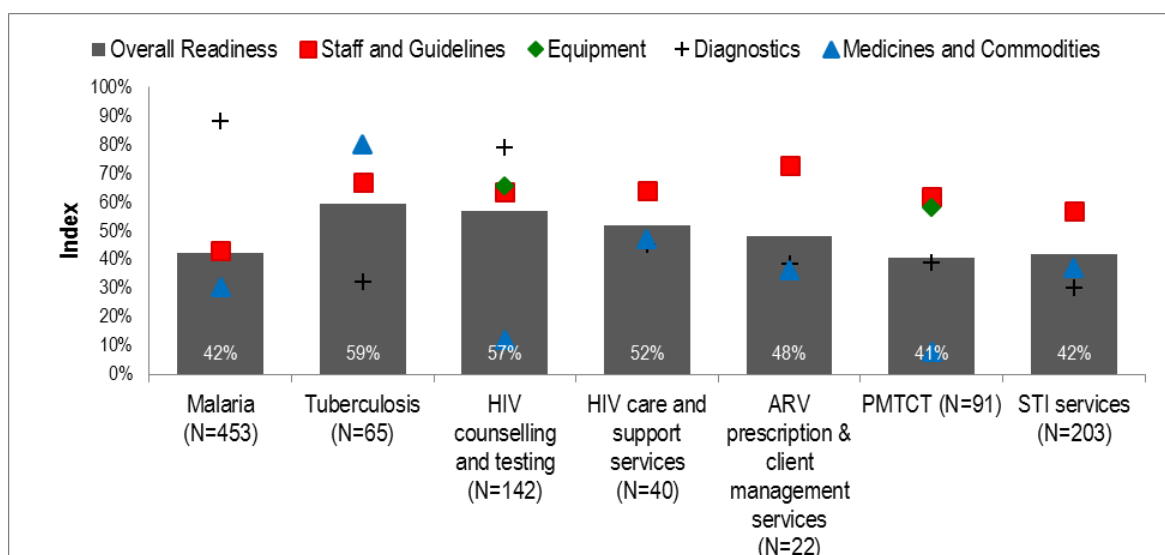
Figure 63. Availability of communicable disease services (N = 799), Somalia 2016



Readiness to provide communicable disease services is shown in Figure 64.

- Overall readiness to provide communicable disease services was highest for TB services (59%) and lowest for PMTCT services (41%).
- Within TB services, mean availability of medicines and commodities was highest and mean availability of diagnostic items was lowest.
- Availability of trained staff and guidelines was greatest in the majority communicable disease services (HIV care and support, ARV prescription and client management, PMTCT and STI services).

Figure 64. Readiness to provide communicable disease services



4.2.1 Malaria

Malaria is endemic throughout the central and southern regions in the country, with other areas in the north prone to epidemics¹⁷. Although malaria is one of the top 10 leading causes of death among children under 5 in Somalia¹⁶, recent estimates show that only a quarter of children in this age group sleep under an insecticide treated net (ITN) for prevention purposes¹⁸. As prevention is the primary strategy for controlling the spread of malaria, access to Intermittent Preventive Therapy (IPT) for pregnant women and distribution of long lasting insecticide treated nets (LLIN) is critical. In addition, ensuring health facilities are stocked with treatment using combined therapy (Artenusate plus Amodiaquine (ACT)) is necessary. Items needed to provide malaria services are outlined in **Table 55**.

Table 55. Items needed to provide malaria services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines on malaria diagnosis and treatment Guidelines for IPT Staff trained in malaria diagnosis and treatment Staff trained in IPT
Diagnostics	<ul style="list-style-type: none"> Malaria diagnostic capacity
Medicines and commodities	<ul style="list-style-type: none"> First line antimalarial in stock Paracetamol cap/tab IPT drug ITN

Service availability

Figure 65 shows the percentage of facilities that offer malaria services.

- More than half of all facilities in the country (57%) offered diagnosis or treatment of malaria.
- While treatment efforts were found in more than half of all facilities (52%), prevention efforts such as IPT were only available in 19% of facilities.
- Diagnosis of malaria by microscopy was limited, with only 14% of facilities providing this

¹⁷ WHO, 2016. Somalia National Strategic Plan for Malaria 2011-2015 Report.

¹⁸ UNICEF Somalia and Somaliland Ministry of Planning and National Development, 2014. Somaliland Multiple Indicator Cluster Survey 2011, Final Report.

service.

Figure 65. Percentage of facilities that offer malaria services (N=799), Somalia 2016

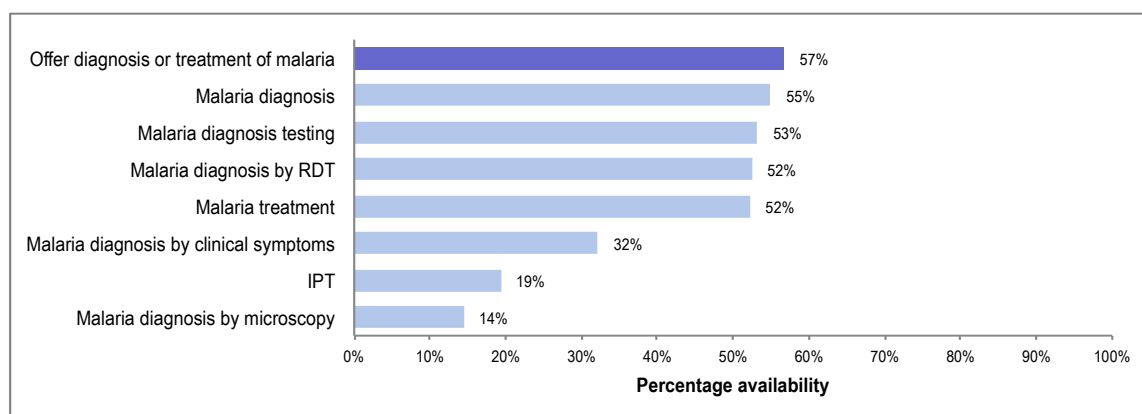


Table 56 shows the percentage of facilities offering malaria diagnosis (by testing and by clinical symptoms), malaria treatment, and IPT while shows the variation in the availability of malaria services by region.

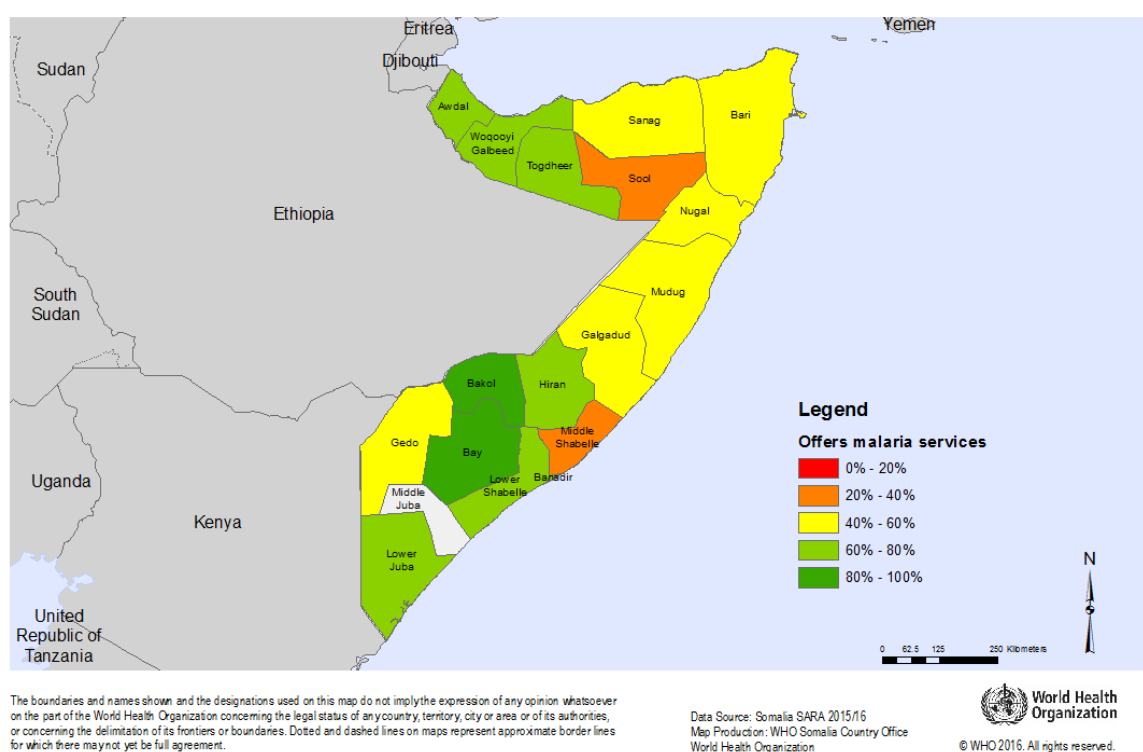
- Referral health centers were the most likely to provide malaria services (89%) compared to only 36% of health posts.
- Non-governmental facilities were slightly more likely to provide malaria service compared to governmental facilities (59% vs. 56%).
- Urban facilities were more likely than rural facilities to offer diagnosis or treatment for malaria (63% compared to 46%).
- The Togdher region in Somaliland was the region most likely to provide malaria diagnosis or treatment services (69%), compared to the Sool region, which was least likely to offer this service (25%).
- The Karkaar region in Puntland was the region most likely to provide malaria diagnosis or treatment services (88%), compared to the Sool region, which was least likely to offer this service (10%).
- The Bakool region in South Central was the region most likely to provide malaria diagnosis or treatment services (92%), compared to the Middle Shabelle region, which was least likely to offer this service (36%).

Table 56. Percentage of facilities offering key malaria services, by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offer diagnosis or treatment of malaria	Malaria diagnosis	Malaria diagnosis testing	Malaria diagnosis by clinical symptoms	Malaria diagnosis by RDT	Malaria diagnosis by microscopy	Malaria treatment	IPT	Total number of facilities
Regions									
Somaliland	55%	54%	54%	24%	54%	11%	52%	6%	282
Awdal	60%	60%	60%	58%	60%	11%	57%	8%	53
Marodi-Jeh	65%	65%	65%	13%	65%	19%	64%	6%	72
Sahil	58%	58%	55%	3%	55%	13%	58%	0%	31
Sanag	46%	46%	46%	14%	46%	7%	46%	7%	28
Sool	25%	25%	25%	11%	25%	6%	23%	11%	53
Togdher	69%	67%	64%	40%	64%	4%	62%	4%	45
Puntland	54%	50%	49%	22%	48%	10%	44%	7%	228
Bari	35%	31%	31%	13%	31%	4%	31%	2%	48
Gardafuu	35%	35%	35%	6%	35%	0%	35%	0%	17
Karkaar	88%	86%	83%	43%	83%	21%	83%	14%	42
Mudug	56%	54%	54%	19%	52%	13%	31%	6%	52
Nugaal	54%	51%	46%	20%	46%	7%	41%	12%	41
Sanaag	56%	44%	44%	39%	44%	11%	56%	11%	18
Sool	10%	0%	0%	0%	0%	0%	10%	0%	10
South Central	61%	60%	56%	48%	55%	21%	59%	41%	289
Bakool	92%	92%	92%	92%	92%	0%	92%	33%	12
Bay	90%	84%	74%	84%	74%	26%	90%	84%	31
Benadir	65%	63%	60%	53%	58%	30%	60%	44%	57
Galgadud	50%	50%	50%	46%	43%	18%	50%	18%	28
Gedo	50%	47%	42%	36%	39%	25%	50%	44%	36
Hiiraan	61%	57%	57%	57%	57%	4%	61%	39%	23
Lower Juba	76%	76%	76%	47%	71%	47%	65%	53%	17
Lower Shabelle	75%	75%	71%	18%	71%	36%	71%	36%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	36%	36%	32%	32%	32%	9%	32%	36%	22
Mudug	37%	37%	37%	34%	37%	3%	37%	20%	35
Facility type									

Hospital	81%	81%	78%	55%	72%	67%	79%	45%	58
Referral Health Center	89%	78%	78%	33%	78%	44%	78%	11%	9
Health Center/MCH	74%	72%	70%	46%	69%	16%	70%	30%	383
Health Post/PHU	38%	36%	35%	16%	35%	3%	32%	3%	294
TB Center	4%	4%	4%	2%	4%	4%	4%	4%	55
Managing authority									
Government	56%	54%	53%	27%	53%	13%	50%	11%	565
Non-government	59%	57%	53%	45%	52%	18%	56%	39%	234
Urban/Rural									
Urban	63%	62%	59%	40%	58%	21%	60%	28%	492
Rural	46%	44%	43%	20%	43%	4%	40%	5%	307
Total	57%	55%	53%	32%	52%	14%	52%	19%	799

Figure 66. Map of malaria service availability by region, Somalia 2016

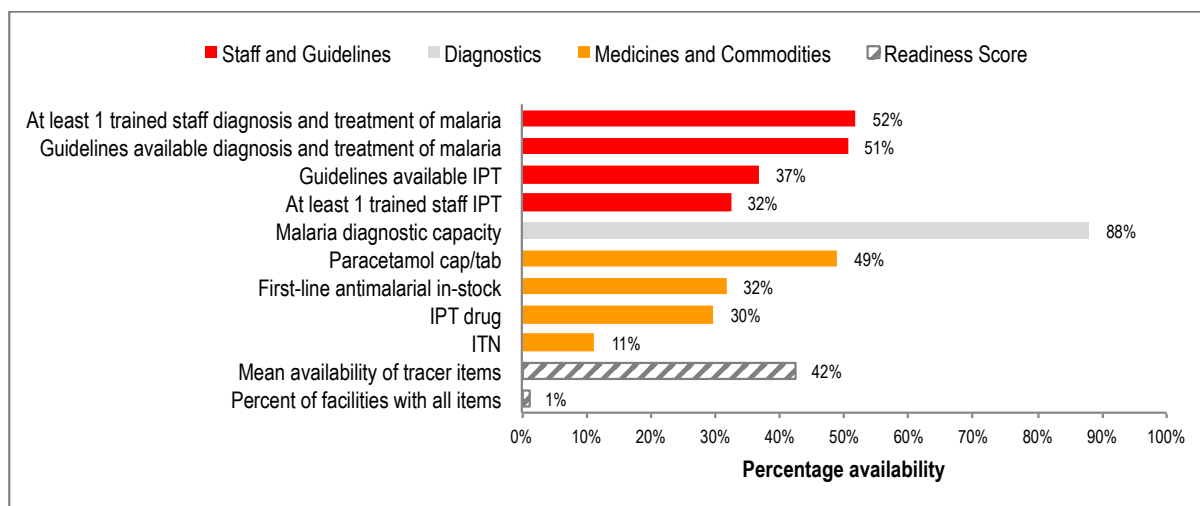


Service readiness

Readiness to provide malaria services was assessed based on the presence of the 9 tracer items found in **Table 55**. **Figure 67** shows the percentage availability of these tracer items (N=453).

- Overall readiness to provide malaria services was calculated at 42%, indicating that on average, facilities had just under 4 out of 9 of the tracer items needed for this service.
- Just over half of facilities (52%) had at least one trained staff in the diagnosis and treatment of malaria and had guidelines available for this service (51%).
- Trained staff and guidelines for preventive services such as IPT were only available in 37% and 32% of facilities, respectively.
- The least available item for malaria services was ITN, with only 11% of facilities providing this item for malaria prevention.

Figure 67. Percentage of facilities that have tracer items for malaria services among facilities that provide this service (N=453), Somalia 2016



Service distribution

Table 57 shows availability of malaria readiness tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in malaria service readiness by region.

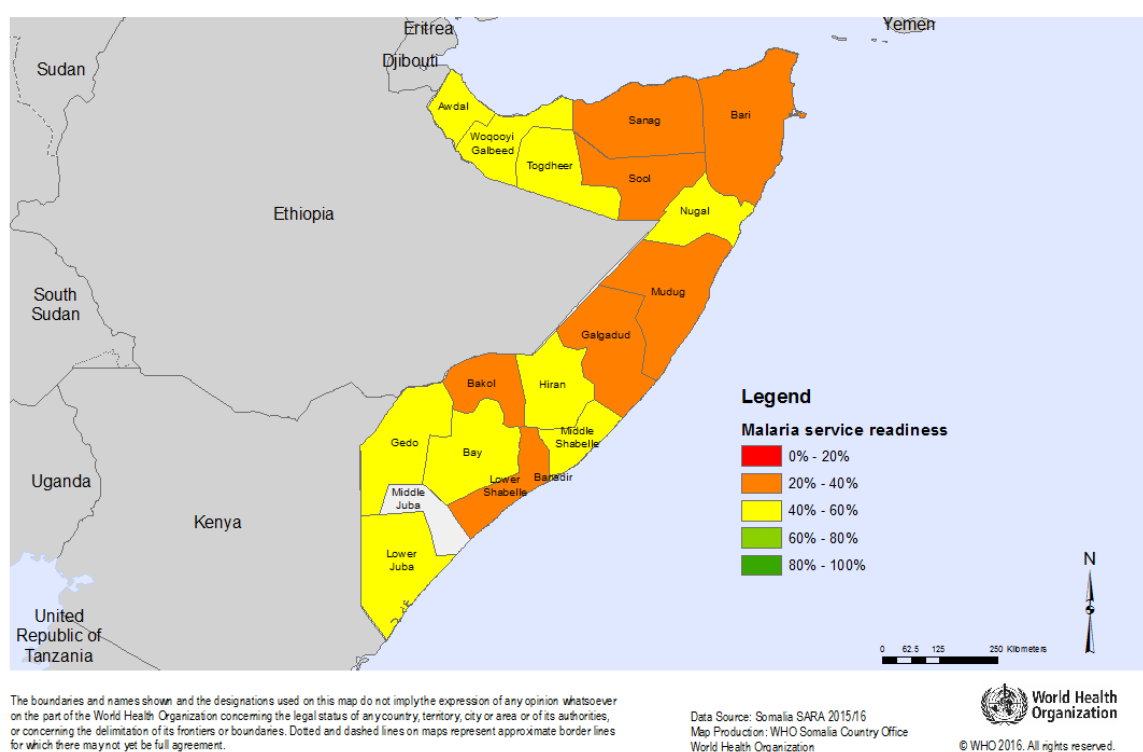
- Government and non-governmental facilities were about equal in terms of readiness to provide malaria services (42% and 43%, respectively).
- Facilities located in urban areas had higher readiness scores than those found in rural areas (47% vs. 32%).
- Hospitals and health centers scored about equal (49% and 48%, respectively) in terms of their readiness to provide malaria services. Health posts were least ready to provide this service (27%).
- The Marodi-Jeh region in Somaliland had the highest readiness score for malaria service provision (60%) and the Sahil region had the lowest readiness score (28%).
- In Puntland, the Bari region scored highest for malaria readiness (51%) and the Sool region scored lowest (0%).
- In South Central, the Benadir region showed the highest readiness to provide malaria services (55%) compared to the Bakool region, which demonstrated the lowest readiness score (22%).

Table 57. Availability of tracer items for malaria readiness at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=453), Somalia 2016

	Guidelines available diagnosis and treatment of malaria	Guidelines available IPT	At least 1 trained staff diagnosis and treatment of malaria	At least 1 trained staff IPT	Malaria diagnostic capacity	First-line antimalarial in-stock	Paracetamol cap/tab	IPT drug	ITN	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions												
Somaliland	58%	30%	44%	27%	89%	44%	64%	48%	5%	1%	45%	154
Awdal	72%	28%	38%	25%	91%	41%	63%	53%	6%	3%	46%	32
Marodi-Jeh	68%	34%	53%	47%	94%	77%	87%	77%	4%	2%	60%	47
Sahil	28%	33%	33%	17%	72%	22%	33%	6%	6%	0%	28%	18
Sanag	31%	38%	38%	8%	85%	23%	31%	15%	0%	0%	30%	13
Sool	69%	23%	62%	8%	100%	15%	46%	31%	15%	0%	41%	13
Togdher	52%	23%	39%	23%	87%	29%	71%	45%	3%	0%	41%	31
Puntland	42%	39%	52%	25%	89%	21%	38%	11%	6%	1%	36%	122
Bari	59%	59%	65%	47%	82%	41%	53%	29%	24%	6%	51%	17
Gardafuu	67%	33%	67%	0%	100%	0%	17%	0%	0%	0%	31%	6
Karkaar	32%	16%	57%	11%	95%	8%	14%	3%	0%	0%	26%	37
Mudug	17%	38%	45%	24%	93%	28%	45%	14%	3%	0%	34%	29
Nugaal	59%	68%	41%	36%	86%	27%	64%	9%	0%	0%	43%	22
Sanaag	70%	40%	60%	40%	80%	20%	40%	10%	20%	0%	42%	10
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
South Central	50%	41%	58%	42%	86%	29%	44%	27%	20%	1%	44%	177
Bakool	9%	9%	27%	0%	91%	9%	27%	27%	0%	0%	22%	11
Bay	50%	39%	50%	29%	79%	71%	71%	50%	32%	0%	52%	28
Benadir	84%	73%	54%	65%	95%	27%	59%	30%	11%	0%	55%	37
Galgadud	43%	14%	64%	29%	79%	7%	14%	7%	0%	0%	29%	14
Gedo	56%	61%	56%	56%	72%	22%	22%	22%	33%	6%	44%	18
Hiiraan	43%	0%	57%	14%	93%	36%	71%	36%	57%	0%	45%	14
Lower Juba	46%	62%	54%	62%	92%	15%	46%	46%	38%	0%	51%	13
Lower Shabelle	38%	19%	76%	43%	86%	14%	19%	5%	5%	0%	34%	21
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	63%	88%	63%	63%	75%	25%	38%	13%	0%	0%	47%	8
Mudug	15%	15%	85%	31%	100%	23%	23%	15%	23%	8%	37%	13

	Guidelines available diagnosis and treatment of malaria	Guidelines available IPT	At least 1 trained staff diagnosis and treatment of malaria	At least 1 trained staff IPT	Malaria diagnostic capacity	First-line antimalarial in-stock	Paracetamol cap/tab	IPT drug	ITN	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Facility type												
Hospital	57%	38%	60%	43%	94%	40%	57%	32%	17%	4%	49%	47
Referral Health Center	50%	38%	13%	13%	88%	25%	50%	25%	0%	0%	33%	8
Health Center/MCH	56%	48%	55%	41%	88%	37%	58%	33%	14%	1%	48%	285
Health Post/PHU	33%	7%	43%	7%	86%	16%	23%	21%	4%	0%	27%	111
TB Center	100%	0%	50%	50%	100%	0%	0%	0%	0%	0%	33%	2
Managing authority												
Government	52%	37%	48%	30%	90%	33%	51%	32%	7%	1%	42%	315
Non-government	46%	37%	60%	38%	85%	29%	45%	25%	22%	1%	43%	138
Urban/Rural												
Urban	56%	46%	58%	41%	89%	34%	52%	31%	16%	2%	47%	312
Rural	39%	17%	38%	14%	86%	28%	43%	28%	1%	0%	32%	141
Total	51%	37%	52%	32%	88%	32%	49%	30%	11%	1%	42%	453

Figure 68. Map of malaria service readiness by region, Somalia 2016



4.2.2 HIV/AIDS counselling and testing

Approximately 30,000 adults ages 15 to 49 are living with HIV in Somalia. Puntland and South Central Zones are characterized as experiencing low-level epidemics and Somaliland as generalized. The prevalence among Key Affected Populations (KAP), such as sex workers, was estimated at around 5% in 2014¹⁹. Policies and programs are being implemented across the country, including the National HIV/AIDS Strategic Plan (2015-2019) that was recently developed with support from WHO. Efforts are also underway to reduce ongoing stigma and discrimination against People Living with HIV/AIDS (PLWHA) in the country, and to improve access to HIV treatment and care. In 2015, the UNDP HIV project reached over 4,000 PLWHA in Somaliland through community conversations and a total of 1,836 radio messages were aired to promote behaviour change around HIV/AIDS²⁰. HIV counselling and testing is an entry point to receiving care and treatment. **Table 58** details the tracer items necessary for health facilities providing this service.

Table 58. Tracer items needed to provide HIV/AIDS counselling and testing services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines on HIV counseling Guidelines on HIV testing Staff trained in HIV/AIDS counselling in the past two years Staff trained in HIV testing in the past two years
Equipment	<ul style="list-style-type: none"> Room with visual and auditory privacy
Diagnostics	<ul style="list-style-type: none"> Capacity to conduct HIV diagnostic test on site
Medicines and commodities	<ul style="list-style-type: none"> Male condoms

¹⁹ UNAIDS, 2015. Progress Report for Somali HIV and AIDS Response 2014 Report.

²⁰ UNDP, 2015. Responding to HIV and AIDS in Somalia, Annual Report 2015.

Service availability

Figure 69 shows the percentage of facilities offering HIV/AIDS counseling and testing services by zone and region.

- Only 18% of facilities overall provided HIV/AIDS counseling and testing services in Somalia at the time of the survey.
- In each of the three zones, less than half of facilities offered HIV/AIDS counseling and testing services.

Figure 69. Percentage of facilities offering HIV counselling and testing services, by zone and region (N=799), Somalia 2016

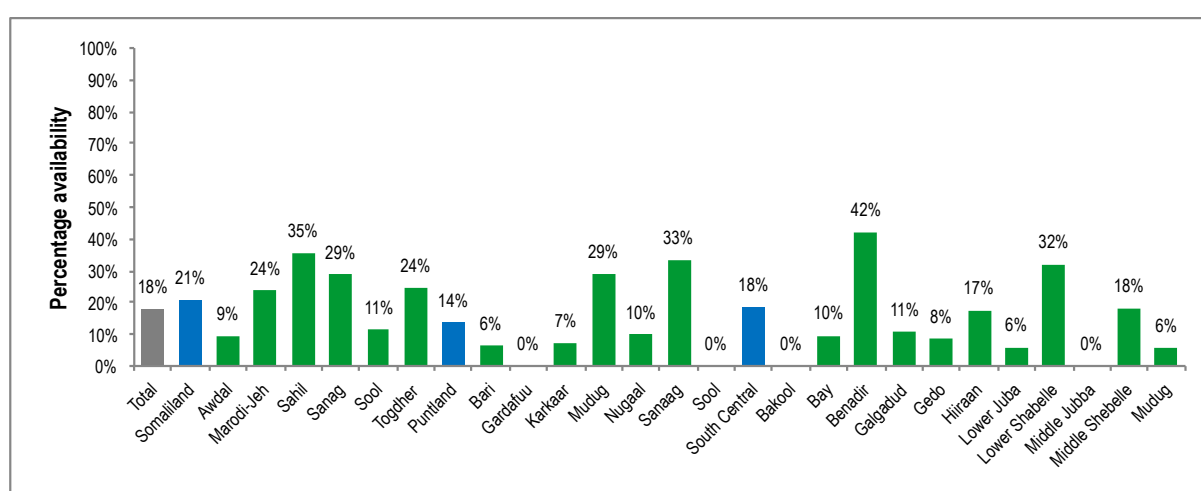


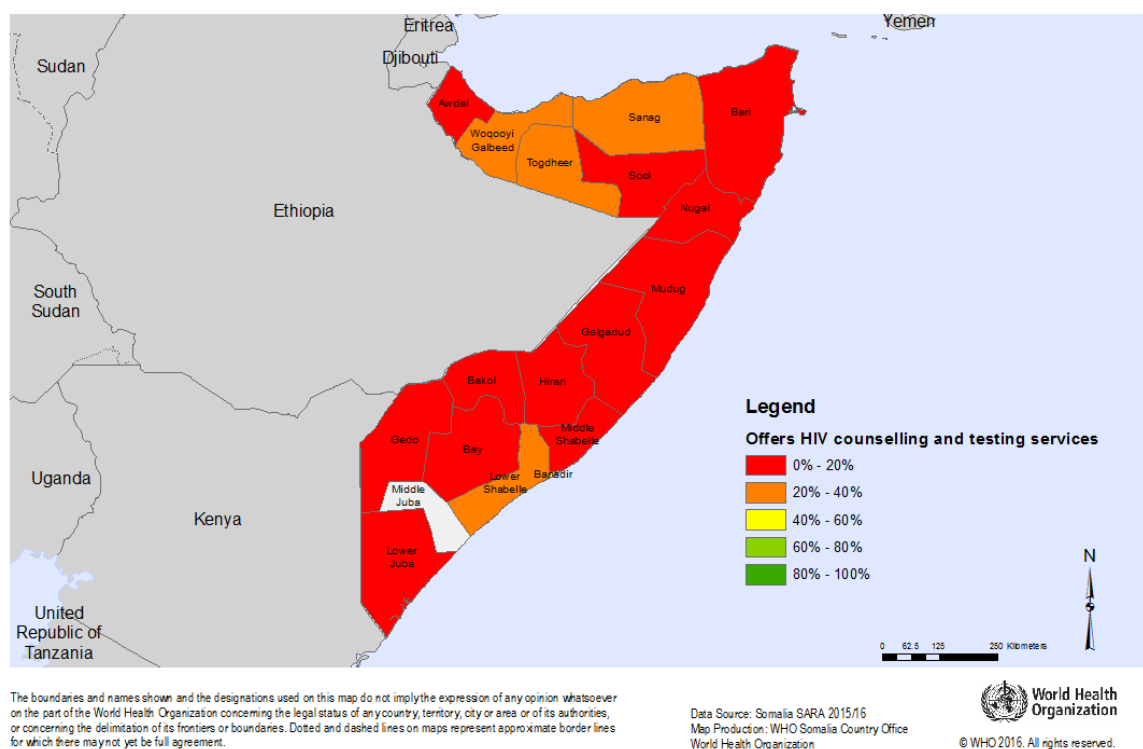
Table 59 shows the percentage of facilities offering HIV/AIDS counseling and testing services, by region, managing authority (governmental vs. non-governmental), facility type, and urban vs. rural location while shows the variation in HIV/AIDS counseling and testing services by region.

- Availability of HIV/AIDS counseling and testing services was about equal between governmental and non-governmental facilities (18% and 17%, respectively).
- Hospitals were most likely to provide HIV/AIDS counseling and testing services (55%), followed by TB centers (33%). Only 22% of health centers and referral health centers and 2% of health posts offered this service.
- Urban facilities were much more likely than rural facilities to provide HIV/AIDS counseling and testing services (25% vs. 6%).
- In Somaliland, HIV/AIDS counseling and testing services were most available in the Sahil region (35%) and least available in the Awdal region (9%).
- The Sanaag region in Puntland was found to be most likely to provide HIV/AIDS counseling and testing services and the Gardafuu and Sool regions were found to be the least likely areas to provide this service (0%).
- In South Central, Benadir was the region with the greatest availability of HIV/AIDS counseling and testing services (42%) and the Bakool region had the lowest availability (0%).

Table 59. Percentage of facilities offering HIV/ counseling and testing services, by region, managing authority (governmental vs. non-governmental), facility type, and urban vs. rural location (N=799), Somalia 2016

	Offers HIV counseling and testing services	Total number of facilities
Regions		
Somaliland	21%	282
Awdal	9%	53
Marodi-Jeh	24%	72
Sahil	35%	31
Sanag	29%	28
Sool	11%	53
Togdher	24%	45
Puntland	14%	228
Bari	6%	48
Gardafuu	0%	17
Karkaar	7%	42
Mudug	29%	52
Nugaal	10%	41
Sanaag	33%	18
Sool	0%	10
South Central	18%	289
Bakool	0%	12
Bay	10%	31
Benadir	42%	57
Galgadud	11%	28
Gedo	8%	36
Hiiraan	17%	23
Lower Juba	6%	17
Lower Shabelle	32%	28
Middle Jubba	N/A	0
Middle Shebelle	18%	22
Mudug	6%	35
Facility type		
Hospital	55%	58
Referral Health Center	22%	9
Health Center/MCH	22%	383
Health Post/PHU	2%	294
TB Center	31%	55
Managing authority		
Government	18%	565
Non-government	17%	234
Urban/Rural		
Urban	25%	492
Rural	6%	307
Total	18%	799

Figure 70. Map of HIV/AIDS counseling and testin service availability by region, Somalia 2016

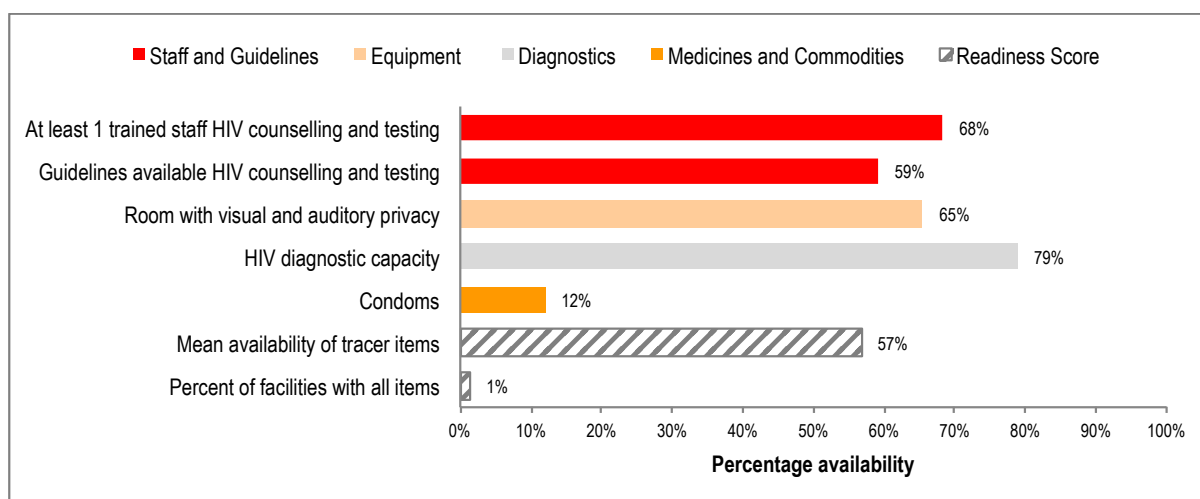


Service readiness

Readiness to provide HIV counselling and testing services was assessed based on the presence of the 7 tracer items found in **Table 58**. **Figure 71** shows the percentage availability of these tracer items at facilities offering HIV/AIDS testing and counselling services (N=142).

- Just over two-thirds of all facilities (68%) had at least one trained staff in HIV/AIDS counseling and testing and more than half of all facilities (59%) had guidelines available for this service.
- Overall, HIV diagnostic capacity was high, with 79% of facilities offering this service.
- Prevention efforts were very low, with only 12% of facilities providing condoms for HIV prevention.
- Only 1% of facilities offered all items needed to provide HIV/AIDS counseling and testing services.

Figure 71. Percentage of facilities that have tracer items for HIV counselling and testing services among facilities that provide this service (N=142), Somalia 2016



Service distribution

Table 60 shows availability of HIV/AIDS counselling and testing tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 72** shows the variation in HIV/AIDS counselling and testing service readiness by region.

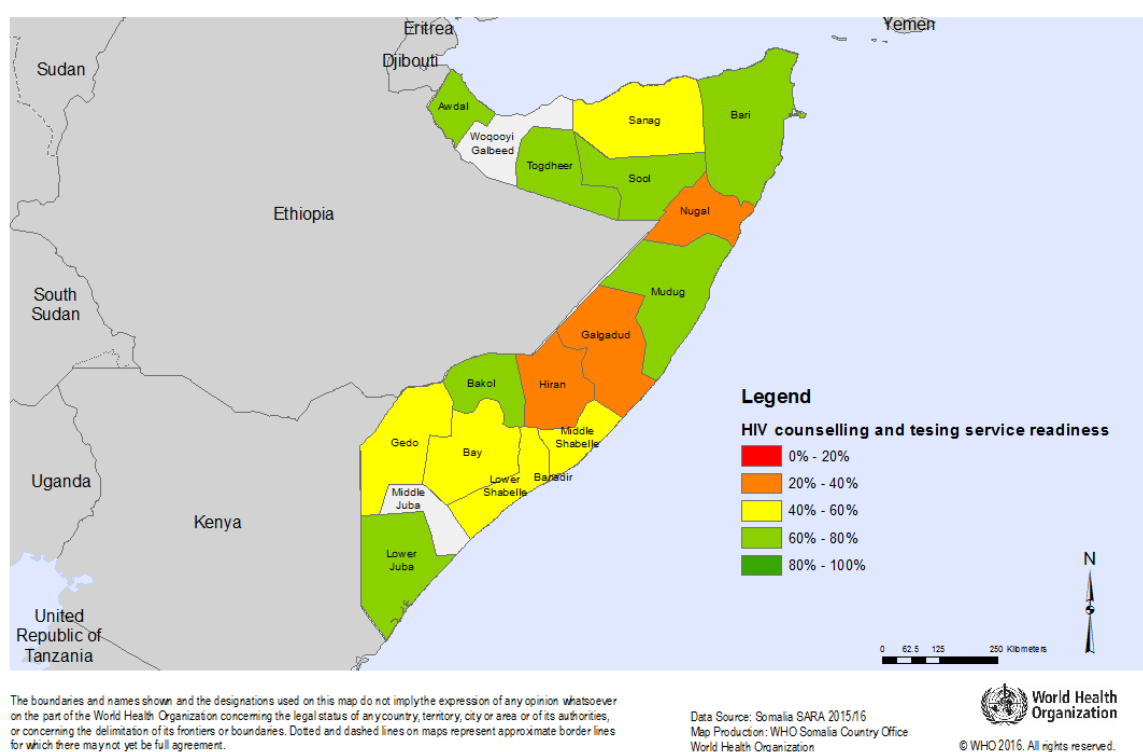
- Readiness to provide HIV/AIDS counseling and testing services was highest among TB centers (67%), followed by referral health centers (60%) and hospitals (59%). Health posts scored the lowest in terms of readiness to provide this service (30%).
- Non-governmental facilities scored slightly higher than governmental facilities in their readiness to provide HIV/AIDS counseling and testing services (58% vs. 56%).
- HIV/AIDS counseling and testing was more readily available in urban facilities compared to rural (58% vs. 48%).
- The Sahil region in Somaliland had the greatest availability of tracer items needed to provide HIV/AIDS counseling and testing services (71%) and the Sanag region had the lowest availability of items needed to provide this service (38%).
- The Bari region in Puntland had the greatest availability of tracer items needed to provide HIV/AIDS counseling and testing services (67%) and the Karkaar region had the lowest availability of items needed to provide this service (40%).
- The Bay region in South Central had the greatest availability of tracer items needed to provide HIV/AIDS counseling and testing services (67%) and the Gedo and Lower Juba regions had the lowest availability of items needed to provide this service (40%).

Table 60. Availability of tracer items for HIV/AIDS counselling and testing readiness at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=142), Somalia 2016

	Guidelines available HIV counselling and testing	At least 1 trained staff HIV counselling and testing	Room with visual and auditory privacy	HIV diagnostic capacity	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions								
Somaliland	74%	66%	69%	83%	5%	3%	59%	58
Awdal	100%	40%	80%	80%	20%	0%	64%	5
Marodi-Jeh	71%	65%	88%	88%	12%	12%	65%	17
Sahil	73%	91%	91%	100%	0%	0%	71%	11
Sanag	50%	38%	50%	50%	0%	0%	38%	8
Sool	67%	67%	33%	50%	0%	0%	43%	6
Togdher	91%	73%	45%	100%	0%	0%	62%	11
Puntland	52%	55%	68%	65%	3%	0%	48%	31
Bari	100%	100%	33%	67%	33%	0%	67%	3
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	33%	67%	67%	33%	0%	0%	40%	3
Mudug	47%	40%	73%	73%	0%	0%	47%	15
Nugaal	75%	75%	100%	75%	0%	0%	65%	4
Sanaag	33%	50%	50%	50%	0%	0%	37%	6
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	47%	79%	60%	83%	25%	0%	59%	53
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	33%	67%	100%	100%	33%	0%	67%	3
Benadir	58%	92%	46%	88%	38%	0%	64%	24
Galgadud	0%	33%	100%	100%	0%	0%	47%	3
Gedo	33%	67%	0%	67%	33%	0%	40%	3
Hiiraan	50%	75%	75%	75%	0%	0%	55%	4
Lower Juba	0%	100%	0%	100%	0%	0%	40%	1
Lower Shabelle	44%	89%	78%	78%	22%	0%	62%	9
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	25%	50%	75%	75%	0%	0%	45%	4
Mudug	100%	50%	100%	50%	0%	0%	60%	2
Facility type								

	Guidelines available HIV counselling and testing	At least 1 trained staff HIV counselling and testing	Room with visual and auditory privacy	HIV diagnostic capacity	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Hospital	44%	66%	78%	97%	9%	3%	59%	32
Referral Health Center	50%	50%	100%	100%	0%	0%	60%	2
Health Center/MCH	62%	69%	59%	72%	16%	1%	56%	85
Health Post/PHU	50%	33%	33%	33%	0%	0%	30%	6
TB Center	76%	82%	82%	94%	0%	0%	67%	17
Managing authority								
Government	66%	66%	63%	78%	10%	2%	56%	102
Non-government	43%	75%	73%	80%	18%	0%	58%	40
Urban/Rural								
Urban	59%	70%	67%	80%	14%	2%	58%	123
Rural	58%	58%	58%	68%	0%	0%	48%	19
Total	59%	68%	65%	79%	12%	1%	57%	142

Figure 72. Map of HIV/AIDS counselling and testing service readiness by region, Somalia 2016



4.2.3 HIV/AIDS care and support services

HIV/AIDS care and support services include treatment of opportunistic infections and palliative care. **Table 61** provides information on the tracer items necessary for health facilities offering this service.

Table 61. Tracer items needed to provide HIV/AIDS care and support services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for clinical management of HIV and AIDS Guidelines for palliative care Staff trained in clinical management of HIV and AIDS in the past two years
Diagnostics	<ul style="list-style-type: none"> System for diagnosis of TB among HIV positive patients
Medicines and commodities	<ul style="list-style-type: none"> Intravenous solution with infusion set Intravenous treatment of fungal infections Co-trimoxazole All four first-line TB treatment medications Palliative care pain management medication Male condoms

Service availability

Figure 73 shows the percentage of facilities offering the following HIV/AIDS care and support services: treatment of opportunistic infections, palliative care, intravenous treatment of fungal infections, treatment for Kaposi's sarcoma, nutritional rehabilitation services, fortified protein supplementation, care for pediatric HIV patients, preventative treatment for TB, micronutrient supplementation, family planning counseling, and provision of condoms.

- HIV/AIDS care and support services were very limited countywide, with only 5% of facilities offering this service.
- The most available service within HIV/AIDS care and support was provision of micronutrient supplementation (5%) and the least available service was treatment for Kaposi's sarcoma (0%).

Figure 73. Percentage of facilities that offer HIV/AIDS care and support services (N=799), Somalia 2016

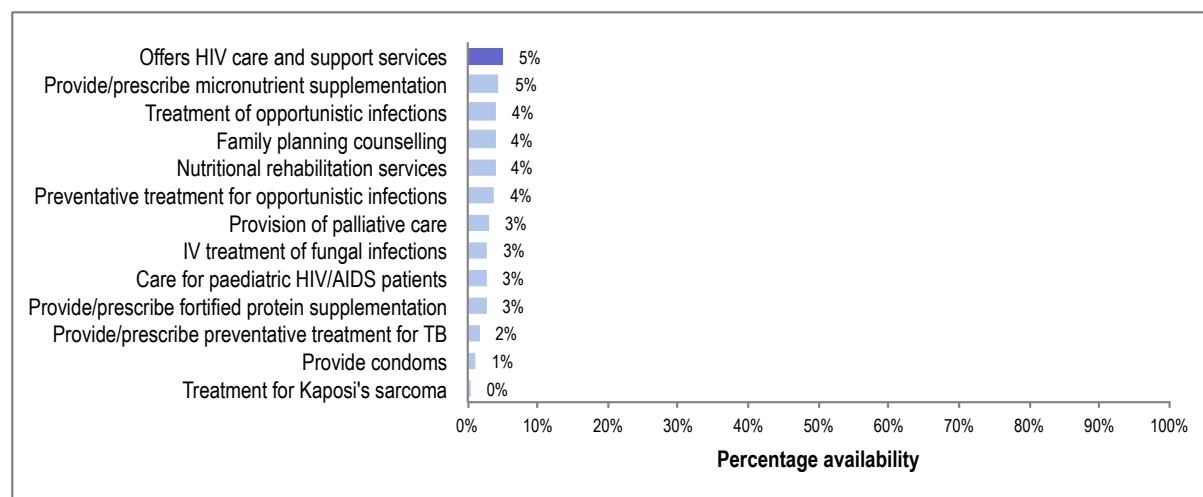


Table 62 shows the percentage of facilities offering HIV/AIDS care and support services by region, facility type, managing authority and urban vs. rural location while **Figure 74** shows the variation in HIV/AIDS care and support service availability by region.

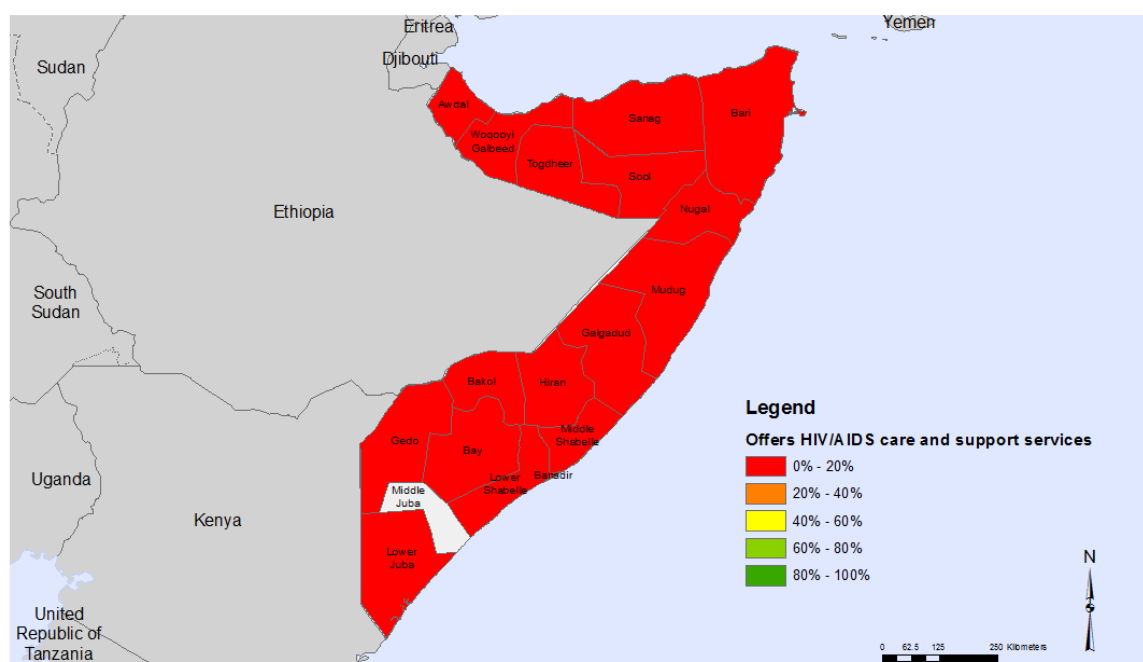
- Just over a quarter of hospitals (26%) offered HIV/AIDS care and support services and only 11% of referral health centers offered this service. No health posts reported offering care and support for HIV/AIDS patients.
- Governmental facilities were slightly more likely than non-governmental facilities to provide HIV/AIDS care and support services (5% vs. 4%).
- Facilities located in urban areas were much more likely to provide HIV/AIDS care and support services compared to those located in rural areas (7% compared to 1%).
- In Somaliland, the Marodi-Jeh region was most likely to offer HIV/AIDS care and support services (14%) and Awdal region was least likely to offer these services (2%). Treatment of opportunistic infections, nutritional rehabilitation services, preventive treatment for opportunistic infections and micronutrient supplementation were the most likely available services (6% of facilities in the region offered these).
- HIV/AIDS care and support services were most available in the Mudug region (10%) in Puntland, and least available in the Gradafuu, Sanaag and Sool regions (0%). Treatment of opportunistic infections, nutritional rehabilitation services, preventive treatment for opportunistic infections and micronutrient supplementation were the most likely available services (3% of facilities in the region offered these).
- In South Central, HIV/AIDS care and support services were most available in the Lower Shabelle region (11%) and least available in the Bakool, Bay, Galgaduud, Hiiran and Mudug regions (0%). Micronutrient supplementation was the most available type of care and support service in the South Central zone (4%).

Table 62. Availability of HIV/AIDS care and support services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers HIV care and support services	Treatment of opportunistic infections	Provision of palliative care	IV treatment of fungal infections	Treatment for Kaposi's sarcoma	Nutritional rehabilitation services	Provide/prescribe fortified protein supplementation	Care for paediatric HIV/AIDS patients	Provide/prescribe preventative treatment for TB	Preventative treatment for opportunistic infections	Provide/prescribe micronutrient supplementation	Family planning counselling	Provide condoms	Total number of facilities
Regions														
Somaliland	7%	6%	5%	4%	0%	6%	4%	3%	2%	6%	6%	5%	1%	282
Awdal	2%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%	0%	53
Marodi-Jeh	14%	14%	10%	10%	0%	10%	10%	6%	3%	11%	11%	7%	3%	72
Sahil	13%	6%	3%	3%	0%	13%	6%	6%	0%	13%	13%	10%	0%	31
Sanag	4%	4%	4%	0%	0%	4%	0%	4%	4%	4%	4%	4%	0%	28
Sool	4%	4%	4%	2%	0%	2%	2%	0%	2%	4%	4%	4%	0%	53
Togdher	4%	2%	2%	2%	2%	4%	2%	2%	2%	2%	4%	4%	0%	45
Puntland	4%	3%	2%	2%	0%	3%	2%	2%	0%	3%	3%	3%	1%	228
Bari	2%	2%	2%	2%	0%	2%	2%	2%	0%	2%	2%	2%	2%	48
Gardafuu	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17
Karkaar	2%	2%	2%	0%	0%	2%	0%	2%	0%	2%	2%	2%	2%	42
Mudug	10%	6%	4%	4%	0%	6%	6%	4%	0%	6%	8%	8%	0%	52
Nugaal	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	41
Sanaag	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	4%	3%	2%	2%	0%	3%	1%	2%	2%	2%	4%	3%	2%	289
Bakool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12
Bay	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	31
Benadir	9%	7%	4%	5%	0%	5%	4%	5%	4%	5%	9%	9%	4%	57
Galgadud	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	28
Gedo	6%	6%	3%	3%	3%	6%	6%	6%	6%	6%	6%	3%	6%	36
Hiiraan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23
Lower Juba	6%	6%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17
Lower Shabelle	11%	7%	7%	11%	0%	11%	0%	7%	7%	7%	11%	11%	4%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	5%	0%	0%	0%	0%	5%	0%	0%	0%	0%	5%	5%	0%	22
Mudug	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35

	Offers HIV care and support services	Treatment of opportunistic infections	Provision of palliative care	IV treatment of fungal infections	Treatment for Kaposi's sarcoma	Nutritional rehabilitation services	Provide/prescribe fortified protein supplementation	Care for paediatric HIV/AIDS patients	Provide/prescribe preventative treatment for TB	Preventative treatment for opportunistic infections	Provide/prescribe micronutrient supplementation	Family planning counselling	Provide condoms	Total number of facilities
Facility type														
Hospital	28%	28%	26%	22%	3%	19%	16%	19%	10%	24%	22%	21%	9%	58
Referral Health Center	11%	0%	0%	0%	0%	11%	11%	0%	0%	11%	11%	0%	0%	9
Health Center/MCH	5%	3%	1%	2%	0%	4%	2%	2%	1%	3%	5%	4%	1%	383
Health Post/PHU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	294
TB Center	7%	5%	5%	2%	0%	7%	5%	4%	5%	5%	5%	5%	0%	55
Managing authority														
Government	5%	4%	4%	3%	1%	4%	4%	3%	2%	4%	5%	4%	1%	565
Non-government	4%	3%	2%	3%	0%	3%	0%	2%	1%	2%	3%	3%	0%	234
Urban/Rural														
Urban	7%	6%	4%	4%	0%	6%	4%	4%	2%	5%	7%	6%	2%	492
Rural	1%	1%	1%	1%	0%	1%	1%	0%	0%	1%	1%	0%	0%	307
Total	5%	4%	3%	3%	0%	4%	3%	3%	2%	4%	5%	4%	1%	799

Figure 74. Map of HIV/AIDS care and support service availability by region, Somalia 2016



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Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

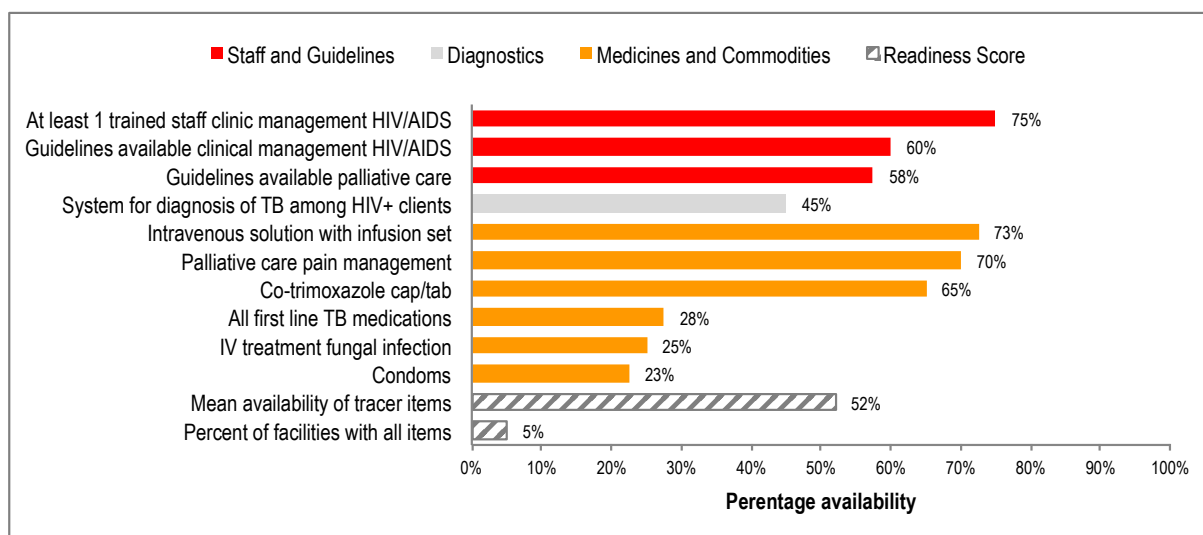
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Service readiness

Readiness to provide HIV/AIDS care and support services was assessed based on the presence of 10 tracer items found in **Table 61**. **Figure 75** shows the percentage availability of these tracer items at facilities offering HIV/AIDS care and support services (N=40).

- The majority of health facilities offering HIV/AIDS care and support services had at least one trained staff in clinical management of HIV/AIDS (75%), guidelines available for clinical management of HIV/AIDS (60%), and guidelines for palliative care (58%).
- Only 5% of facilities had all tracer items needed to provide HIV/AIDS care and support services.
- The least available item for HIV/AIDS care and support services was condoms, with only 23% of facilities offering this item.

Figure 75. Percentage of facilities that have tracer items for HIV care and support services among facilities that provide this service (N=40)



Service distribution

Table 63 shows availability of HIV/AIDS care and support tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in HIV/AIDS care and support service readiness by region.

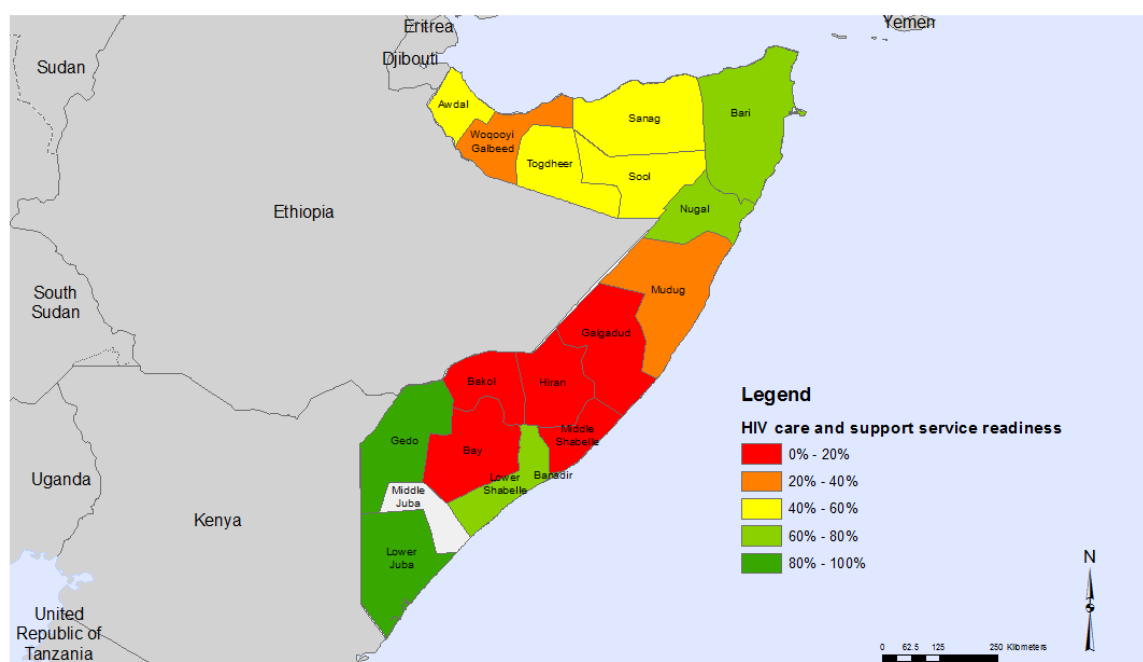
- Unlike many other services in Somalia, facilities located in rural areas had higher HIV/AIDS care and support service readiness scores than those located in urban areas (55% vs. 52%).
- Governmental facilities were slightly more ready to provide HIV/AIDS care and support services compared to non-governmental facilities (53% vs. 50%).
- Hospitals had more items needed to provide HIV/AIDS care and support services than other types of facilities (62%), followed by health centers (45%). While health posts had the highest readiness score (100%), only one facility of this type provided this service.
- The Awdal region in Somaliland had the highest readiness score for HIV/AIDS care and support services (60%), and the Marodi-Jeh region had the lowest readiness score for this service (38%).
- In Puntland, facilities in the Bari and Nugaal regions had the highest readiness scores (80%) and facilities in the Mudug region had the lowest readiness score (38%).
- In South Central, HIV/AIDS readiness was highest in the Gedo and Lower Juba regions (90%), and lowest in the Middle Shabelle region (20%).

Table 63. Availability of tracer items for HIV/AIDS care and support services readiness by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=40), Somalia 2016

	Guidelines available clinical management HIV/AIDS	Guidelines available palliative care	At least 1 trained staff clinic management HIV/AIDS	System for diagnosis of TB among HIV+ clients	Intravenous solution with infusion set	IV treatment fungal infection	Co-trimoxazole cap/tab	All first line TB medications	Palliative care pain management	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions													
Somaliland	55%	45%	70%	35%	70%	10%	60%	20%	70%	5%	0%	44%	20
Awdal	100%	100%	100%	100%	100%	0%	0%	0%	100%	0%	0%	60%	1
Marodi-Jeh	40%	30%	50%	20%	80%	10%	60%	10%	70%	10%	0%	38%	10
Sahil	50%	50%	75%	25%	50%	0%	75%	25%	75%	0%	0%	43%	4
Sanag	100%	100%	100%	100%	0%	0%	0%	100%	0%	0%	0%	50%	1
Sool	100%	50%	100%	100%	50%	0%	50%	50%	50%	0%	0%	55%	2
Togdher	50%	50%	100%	0%	100%	50%	100%	0%	100%	0%	0%	55%	2
Puntland	50%	63%	75%	50%	88%	25%	63%	13%	63%	25%	0%	51%	8
Bari	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%	0%	80%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	100%	100%	100%	100%	100%	0%	0%	0%	0%	100%	0%	60%	1
Mudug	20%	40%	60%	40%	80%	0%	60%	20%	60%	0%	0%	38%	5
Nugaal	100%	100%	100%	100%	100%	100%	100%	0%	100%	0%	0%	80%	1
Sanaag	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	75%	75%	83%	58%	67%	50%	75%	50%	75%	50%	17%	66%	12
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Benadir	100%	80%	100%	40%	60%	20%	60%	40%	60%	60%	20%	62%	5
Galgadud	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Gedo	50%	100%	100%	100%	100%	100%	100%	100%	100%	50%	50%	90%	2
Hiiraan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Lower Juba	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	90%	1
Lower Shabelle	67%	67%	67%	67%	67%	67%	67%	33%	67%	67%	0%	63%	3

	Guidelines available clinical management HIV/AIDS	Guidelines available palliative care	At least 1 trained staff clinic management HIV/AIDS	System for diagnosis of TB among HIV+ clients	Intravenous solution with infusion set	IV treatment fungal infection	Co-trimoxazole cap/tab	All first line TB medications	Palliative care pain management	Condoms	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	20%	1
Mudug	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Facility type													
Hospital	81%	75%	81%	63%	88%	38%	69%	19%	81%	25%	6%	62%	16
Referral Health Center	0%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	40%	1
Health Center/MCH	44%	50%	67%	17%	72%	17%	72%	17%	72%	22%	0%	45%	18
Health Post/PHU	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
TB Center	50%	25%	75%	100%	0%	0%	0%	100%	0%	0%	0%	35%	4
Managing authority													
Government	60%	57%	77%	47%	77%	23%	67%	27%	73%	20%	7%	53%	30
Non-government	60%	60%	70%	40%	60%	30%	60%	30%	60%	30%	0%	50%	10
Urban/Rural													
Urban	61%	61%	75%	47%	69%	25%	61%	28%	67%	22%	3%	52%	36
Rural	50%	25%	75%	25%	100%	25%	100%	25%	100%	25%	25%	55%	4
Total	60%	58%	75%	45%	73%	25%	65%	28%	70%	23%	5%	52%	40

Figure 76. Map of HIV/AIDS care and support service readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

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4.2.4 HIV/AIDS antiretroviral prescription and client management services

The most recent country estimates indicate that 7.7% of adults and children living with HIV in Somalia are currently receiving ART¹⁹. **Table 64** shows the tracer items needed for health facilities providing this service.

Table 64. Tracer items needed to provide HIV/AIDS antiretroviral and client management services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for ART, staff trained in ART in the past two years
Diagnostics	<ul style="list-style-type: none"> Capacity to conduct a complete blood count (CBC) CD4 or viral load Renal function test Liver function test
Medicines and commodities	<ul style="list-style-type: none"> Three first-line antiretrovirals

Service availability

Figure 77 shows the percentage of facilities offering antiretroviral prescription and client management services.

- Very few facilities in Somalia offered ART prescription or treatment follow-up services at the time of the survey (3%).

Figure 77. Percentage of facilities that offer ARV services (N=799), Somalia 2016

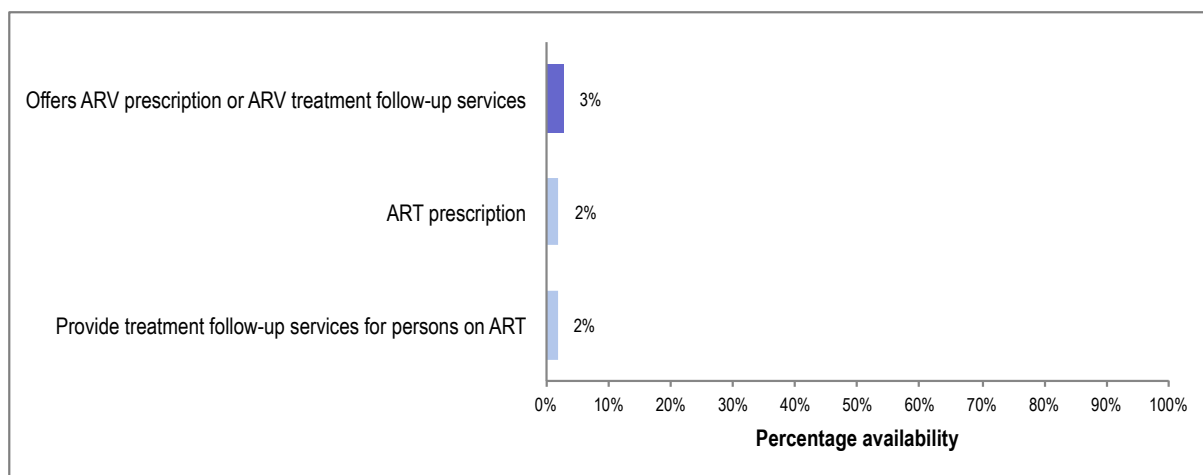


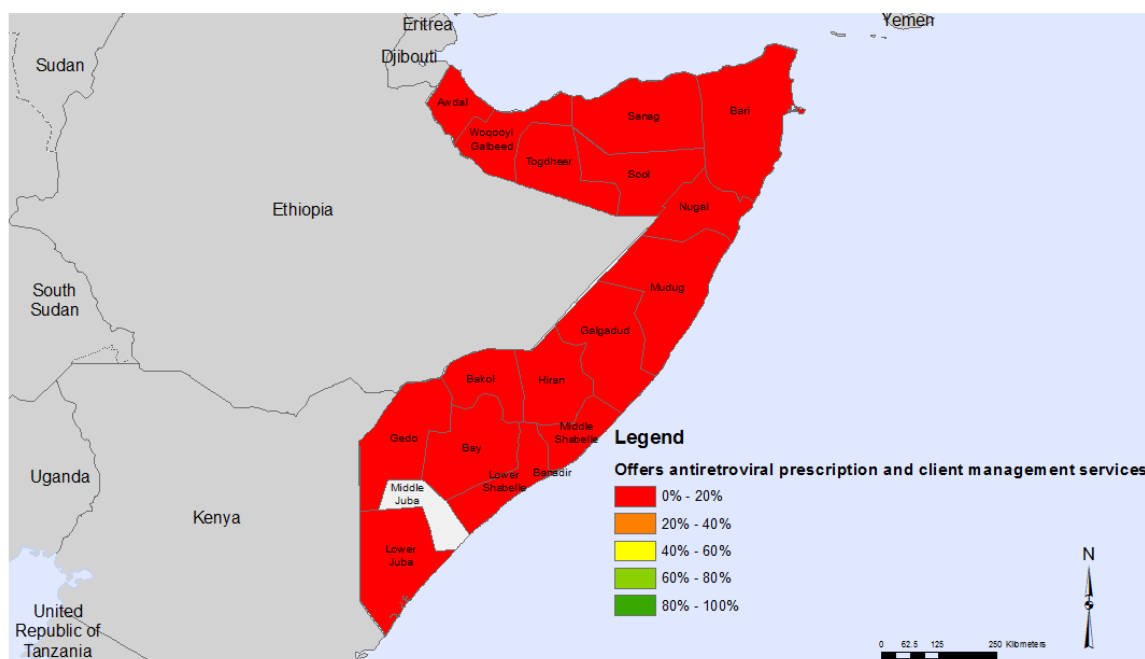
Table 65 shows the percentage of facilities offering antiretroviral prescription and client management services by region, facility type, managing authority and urban vs. rural location while **Figure 78** shows the variation in antiretroviral prescription and client management services by region.

- Hospitals were most likely to offer ART services compared to other facility types (21%) and referral health centers and health posts were least likely (0%).
- Governmental facilities had the same likelihood as non-governmental facilities to provide ART services (3%).
- ART services were most available in urban facilities (4%) and only available in 1% of rural facilities.

Table 65. Availability of ART services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers ARV prescription or ARV treatment follow-up services	ART prescription	Provide treatment follow-up services for persons on ART	Total number of facilities
Regions				
Somaliland	2%	2%	2%	282
Awdal	2%	2%	2%	53
Marodi-Jeh	3%	1%	1%	72
Sahil	3%	3%	3%	31
Sanag	4%	4%	4%	28
Sool	2%	0%	0%	53
Togdher	2%	2%	2%	45
Puntland	2%	2%	2%	228
Bari	4%	2%	2%	48
Gardafuu	0%	0%	0%	17
Karkaar	2%	2%	2%	42
Mudug	2%	2%	2%	52
Nugaal	2%	2%	2%	41
Sanaag	0%	0%	0%	18
Sool	0%	0%	0%	10
South Central	3%	2%	2%	289
Bakool	0%	0%	0%	12
Bay	0%	0%	0%	31
Benadir	9%	7%	5%	57
Galgadud	0%	0%	0%	28
Gedo	6%	6%	3%	36
Hiiraan	4%	0%	0%	23
Lower Juba	6%	0%	0%	17
Lower Shabelle	4%	4%	4%	28
Middle Jubba	N/A	N/A	N/A	0
Middle Shebelle	0%	0%	0%	22
Mudug	0%	0%	0%	35
Facility type				
Hospital	21%	17%	17%	58
Referral Health Center	0%	0%	0%	9
Health Center/MCH	2%	1%	1%	383
Health Post/PHU	0%	0%	0%	294
TB Center	4%	2%	2%	55
Managing authority				
Government	3%	2%	2%	565
Non-government	3%	2%	1%	234
Urban/Rural				
Urban	4%	3%	3%	492
Rural	1%	0%	0%	307
Total	3%	2%	2%	799

Figure 78. Map of antiretroviral prescription and client management service availability by region, Somalia 2016



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Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization



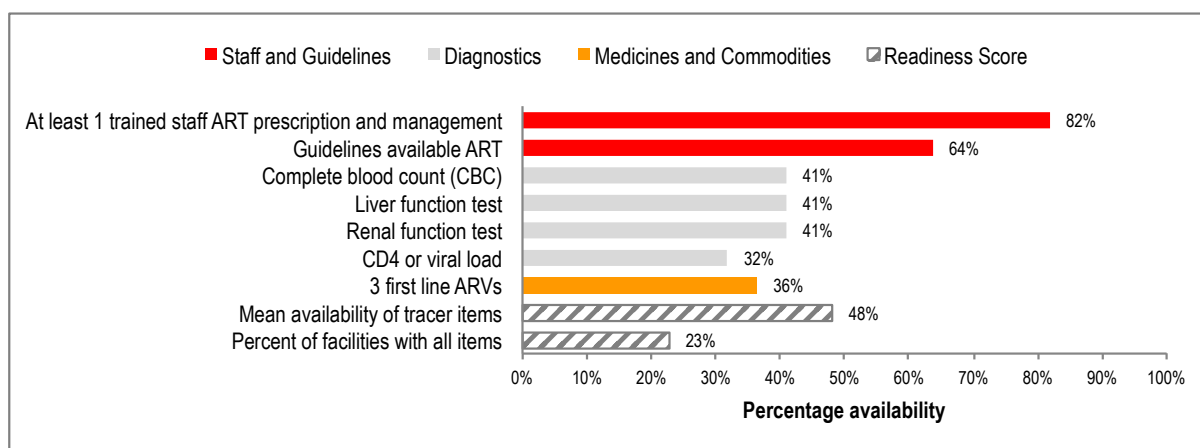
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Service readiness

Readiness to provide antiretroviral therapy was assessed based on the presence of the 7 tracer items found in **Table 64**. **Figure 79** shows the percentage availability of these tracer items at facilities offering ART services (N=22).

- Close to one quarter of facilities offering ART services (23%) had all items needed to provide this service.
- Less than half of facilities had the diagnostic capacity to perform necessary tests for ART services (complete blood count, liver function and renal function were available in 41% of facilities and CD4 or viral load only available in 32%).
- The most available item for ART services was having at least one trained staff n ART prescription and management (82%).

Figure 79. Percentage of facilities that have tracer items for ART services among facilities that provide this service (N=22), Somalia 2016



Service distribution

Table 66 shows availability of HIV/AIDS ART tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in ART service readiness by region.

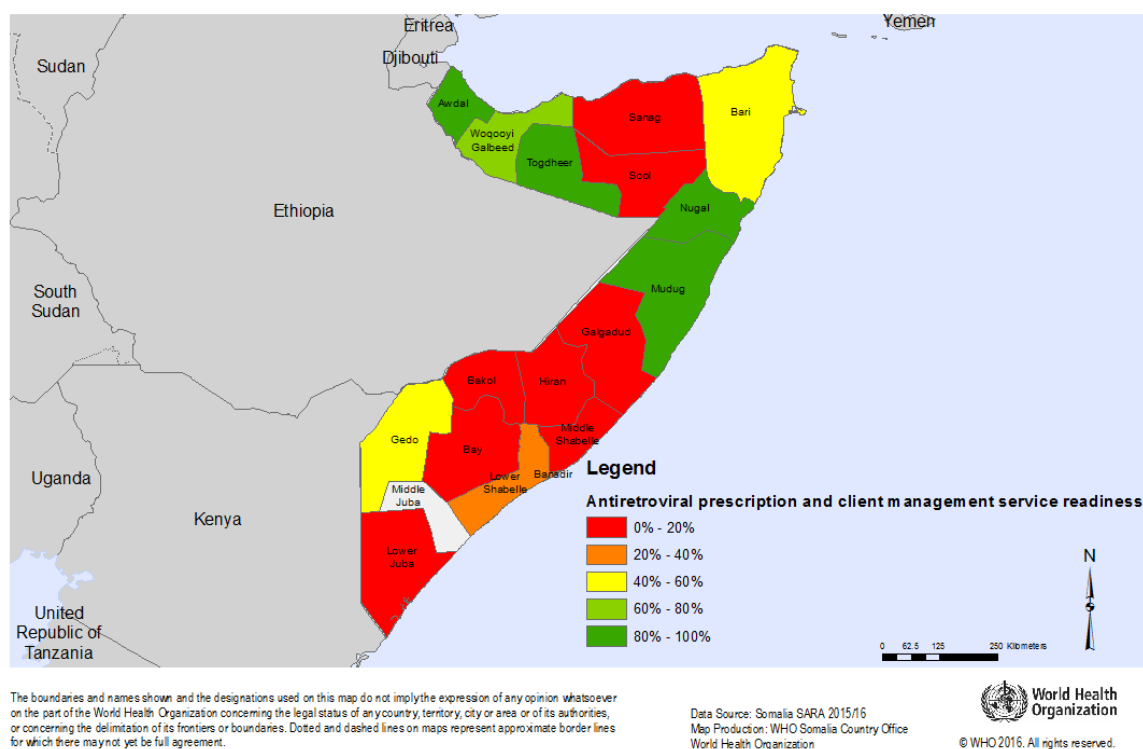
- Health posts had slightly higher readiness scores than other facility types (71%) but only one facility included in this sample. Hospitals had the next best mean availability of tracer items for ART services (69%). No referral health centers offered the service and TB centers scored lowest in terms of readiness to provide ART (7%).
- Governmental facilities were much more ready to provide ART services compared to non-governmental facilities (64% vs. 14%).
- Greater readiness to provide ART services was found in urban facilities compared to those in rural areas (49% vs. 36%).
- In Somaliland, the Togdher region had the highest readiness score (100%) for ART services compared to other regions. The region with the lowest readiness score was Sool (0%).
- Only four regions in Puntland offered ART services. Of those, the Mudug and Nugaal regions performed the highest (100%) and the Karkaar region performed the lowest (43%).
- In South Central, the Gedo region had the highest readiness score (43%) and the Hiiraan and Lower Juba regions had the lowest readiness scores (0%) for ART services.

Table 66. Availability of tracer items for ART service readiness by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=22), Somalia 2016

	Guidelines available ART	At least 1 trained staff ART prescription and management	Complete blood count (CBC)	CD4 or viral load	Renal function test	Liver function test	3 first line ARVs	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions										
Somaliland	71%	86%	57%	43%	57%	57%	43%	14%	59%	7
Awdal	100%	100%	100%	100%	100%	100%	0%	0%	86%	1
Marodi-Jeh	100%	100%	50%	50%	50%	50%	50%	0%	64%	2
Sahil	100%	100%	100%	0%	100%	100%	100%	0%	86%	1
Sanag	0%	100%	0%	0%	0%	0%	0%	0%	14%	1
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Togdher	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
Puntland	80%	100%	80%	60%	60%	60%	60%	60%	71%	5
Bari	50%	100%	50%	50%	50%	50%	50%	50%	57%	2
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	100%	100%	100%	0%	0%	0%	0%	0%	43%	1
Mudug	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
Nugaal	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
Sanaag	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	50%	70%	10%	10%	20%	20%	20%	10%	29%	10
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Benadir	60%	80%	20%	20%	20%	20%	20%	20%	34%	5
Galgadud	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Gedo	50%	100%	0%	0%	50%	50%	50%	0%	43%	2
Hiiraan	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Lower Juba	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Lower Shabelle	100%	100%	0%	0%	0%	0%	0%	0%	29%	1
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Mudug	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0

Facility type										
Hospital	83%	83%	75%	58%	67%	67%	50%	42%	69%	12
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	43%	86%	0%	0%	0%	0%	14%	0%	20%	7
Health Post/PHU	100%	100%	0%	0%	100%	100%	100%	0%	71%	1
TB Center	0%	50%	0%	0%	0%	0%	0%	0%	7%	2
Managing authority										
Government	73%	93%	60%	47%	60%	60%	53%	33%	64%	15
Non-government	43%	57%	0%	0%	0%	0%	0%	0%	14%	7
Urban/Rural										
Urban	65%	85%	45%	35%	40%	40%	35%	25%	49%	20
Rural	50%	50%	0%	0%	50%	50%	50%	0%	36%	2
Total	64%	82%	41%	32%	41%	41%	36%	23%	48%	22

Figure 80. Map of antiretroviral prescription and client management service readiness by region, Somalia 2016



4.2.5 PMTCT Services

Mother-to-child transmission of HIV can occur during pregnancy, during delivery through infected birth canal, or after birth from breastfeeding. Coverage of PMTCT in Somalia is low, with only 2.5% of mothers receiving ARV in 2013²¹. Items required for health facilities offering this service are outlined in **Table 67**.

Table 67. Tracer items needed to provide PMTCT services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for PMTCT Staff trained in PMTCT in the past two years Guidelines for infant and young child feeding counseling Staff trained in infant and young child feeding counselling in the past two years
Equipment	<ul style="list-style-type: none"> Room with visual and auditory privacy
Diagnostics	<ul style="list-style-type: none"> Capacity to conduct HIV diagnostic testing on site Dried blood spot (DBS) filter paper for diagnosing HIV in newborns
Medicines and commodities	<ul style="list-style-type: none"> Zidovudine syrup Nevirapine syrup

Service availability

Figure 81 shows the percentage of facilities offering key PMTCT services, including: counseling and testing for pregnant women and infants, ARV prophylaxis for pregnant women and infants, infant and young child feeding counseling, nutritional counseling, and family planning counseling.

²¹ UNAIDS 2015

- PMTCT services were available in only 11% percent of facilities nationwide.
- The most commonly available PMTCT service was HIV counseling and testing to infants born to HIV+ mothers (8%), while the least available service was the provision of ARV prophylaxis to HIV+ women and newborns born to HIV+ women (2%).

Figure 81. Percentage of facilities that offer PMTCT service (N=799), Somalia 2016

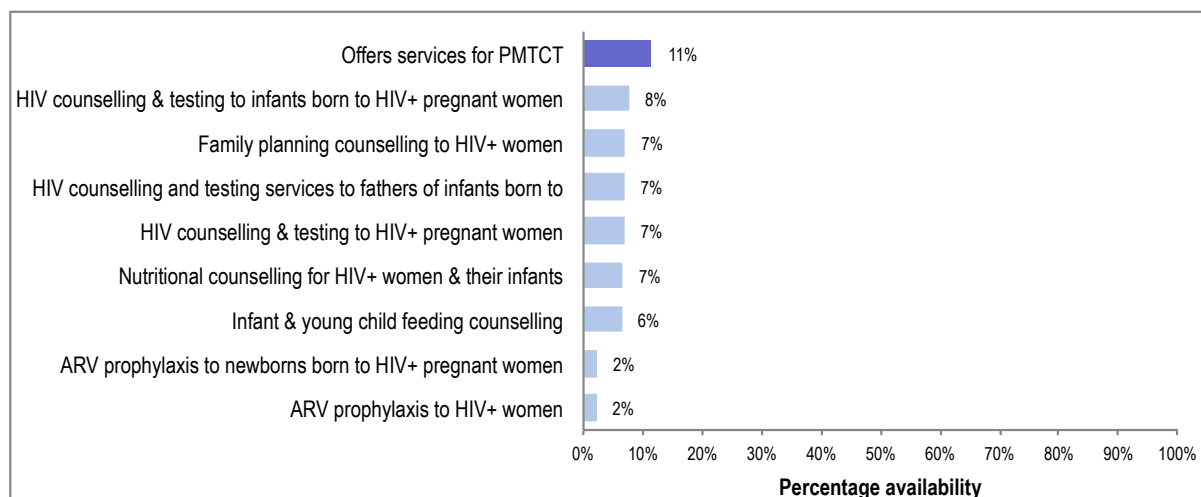


Table 68 shows the percentage of facilities offering key PMTCT services by region, facility type, managing authority, and urban vs. rural location while shows the variation in PMTCT service availability by region.

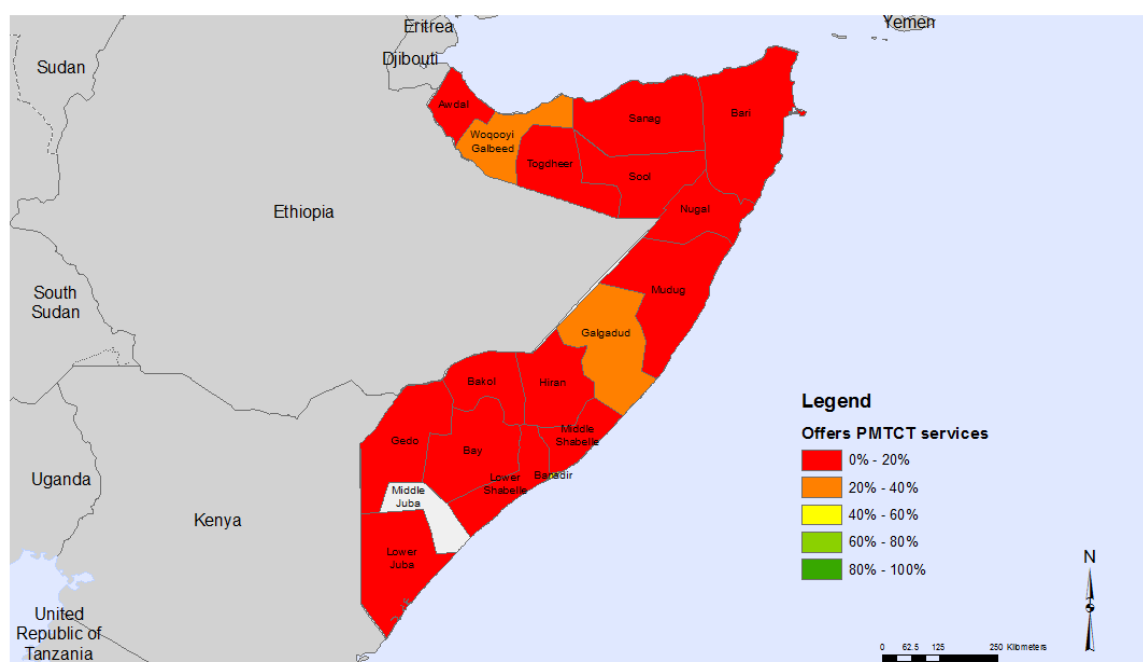
- PMTCT services were offered primarily through hospitals compared to other types of facilities. One third of hospitals provided this service, while only 22% of referral health centers and 15% of health centers offered this service. Less than 10% of TB centers and health posts offered PMTCT services (7% and 2%, respectively).
- Non-governmental facilities were slightly more likely than governmental facilities to offer PMTCT services (13% vs. 11%).
- Facilities located in urban areas were much more likely to offer PMTCT services compared to those located in rural areas (16% vs. 4%).
- The Sahil region in Somaliland was most likely to offer PMTCT services compared to other regions (23%), while the Awdal, Sanag and Sool regions were least likely to offer this service (4%). The most available service in the Somaliland zone was HIV counseling and testing to HIV+ pregnant women (8%), and the least available service was provision of ARV prophylaxis to HIV+ women (1%).
- In Puntland, the region with the greatest availability of PMTCT services was the Sanaag region (17%) and the regions with the lowest availability were Gardafuu and Sool (0%). HIV counseling and testing to infants and mothers with HIV, family planning counseling, and nutritional counseling were the most available services in the Puntland zone (4%), while ARV prophylaxis to both HIV+ women and infants were the least available services (2%).
- In South Central, the Benadir region was most likely to offer PMTCT services (42%), while the Bakool region was least likely to offer this service (0%). The most commonly available service in the South Central zone was HIV counseling and testing to fathers of infants born to HIV+ pregnant women (11%), and the least available services were ARV prophylaxis to HIV+ women and newborns born to HIV+ women (3%).

Table 68. Availability of PMTCT services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers services for PMTCT	HIV counselling & testing to HIV+ pregnant women	HIV counselling & testing to infants born to HIV+ pregnant women	ARV prophylaxis to HIV+ women	ARV prophylaxis to newborns born to HIV+ pregnant women	Infant & young child feeding counselling	Nutritional counselling for HIV+ women & their infants	Family planning counselling to HIV+ women	HIV counselling and testing services to fathers of infants born to HIV positive pregnant women	Total number of facilities
Regions										
Somaliland	11%	7%	8%	1%	2%	7%	7%	7%	6%	282
Awdal	4%	4%	4%	2%	2%	2%	0%	2%	2%	53
Marodi-Jeh	19%	10%	13%	1%	4%	11%	10%	11%	7%	72
Sahil	23%	23%	23%	3%	3%	16%	23%	23%	19%	31
Sanag	4%	0%	4%	0%	0%	4%	4%	4%	0%	28
Sool	4%	4%	4%	0%	0%	4%	4%	4%	4%	53
Togdher	11%	4%	4%	2%	0%	4%	7%	4%	4%	45
Puntland	4%	3%	4%	2%	2%	4%	4%	4%	4%	228
Bari	4%	2%	4%	2%	2%	4%	4%	4%	2%	48
Gardafuu	0%	0%	0%	0%	0%	0%	0%	0%	0%	17
Karkaar	2%	2%	2%	2%	2%	2%	2%	2%	2%	42
Mudug	4%	4%	4%	2%	2%	4%	4%	4%	4%	52
Nugaal	5%	5%	5%	2%	2%	5%	5%	5%	5%	41
Sanaag	17%	6%	11%	0%	0%	6%	6%	11%	11%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	17%	10%	10%	3%	3%	8%	9%	9%	11%	289
Bakool	0%	0%	0%	0%	0%	0%	0%	0%	0%	12
Bay	3%	3%	3%	0%	0%	3%	3%	3%	3%	31
Benadir	42%	28%	26%	7%	5%	26%	25%	28%	32%	57
Galgadud	21%	0%	4%	0%	0%	4%	0%	0%	0%	28
Gedo	14%	8%	11%	8%	8%	3%	11%	8%	8%	36
Hiiraan	9%	4%	4%	0%	0%	4%	4%	0%	4%	23
Lower Juba	18%	12%	12%	0%	0%	0%	0%	6%	18%	17
Lower Shabelle	14%	11%	11%	7%	11%	11%	11%	11%	11%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	14%	9%	9%	0%	0%	9%	9%	9%	9%	22
Mudug	6%	0%	0%	0%	0%	0%	0%	0%	0%	35

	Offers services for PMTCT	HIV counselling & testing to HIV+ pregnant women	HIV counselling & testing to infants born to HIV+ pregnant women	ARV prophylaxis to HIV+ women	ARV prophylaxis to newborns born to HIV+ pregnant women	Infant & young child feeding counselling	Nutritional counselling for HIV+ women & their infants	Family planning counselling to HIV+ women	HIV counselling and testing services to fathers of infants born to HIV positive pregnant women	Total number of facilities
Facility type										
Hospital	33%	22%	26%	19%	16%	17%	19%	24%	24%	58
Referral Health Center	22%	22%	22%	0%	0%	11%	22%	22%	11%	9
Health Center/MCH	15%	9%	10%	1%	2%	9%	9%	9%	9%	383
Health Post/PHU	2%	1%	1%	0%	0%	0%	1%	1%	1%	294
TB Center	7%	5%	5%	2%	2%	5%	5%	4%	5%	55
Managing authority										
Government	11%	7%	7%	2%	2%	7%	7%	7%	6%	565
Non-government	13%	8%	9%	2%	2%	6%	6%	6%	8%	234
Urban/Rural										
Urban	16%	9%	11%	3%	3%	9%	9%	10%	10%	492
Rural	4%	3%	3%	0%	0%	2%	3%	3%	3%	307
Total	11%	7%	8%	2%	2%	6%	7%	7%	7%	799

Figure 82. Map of PMTCT service availability by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

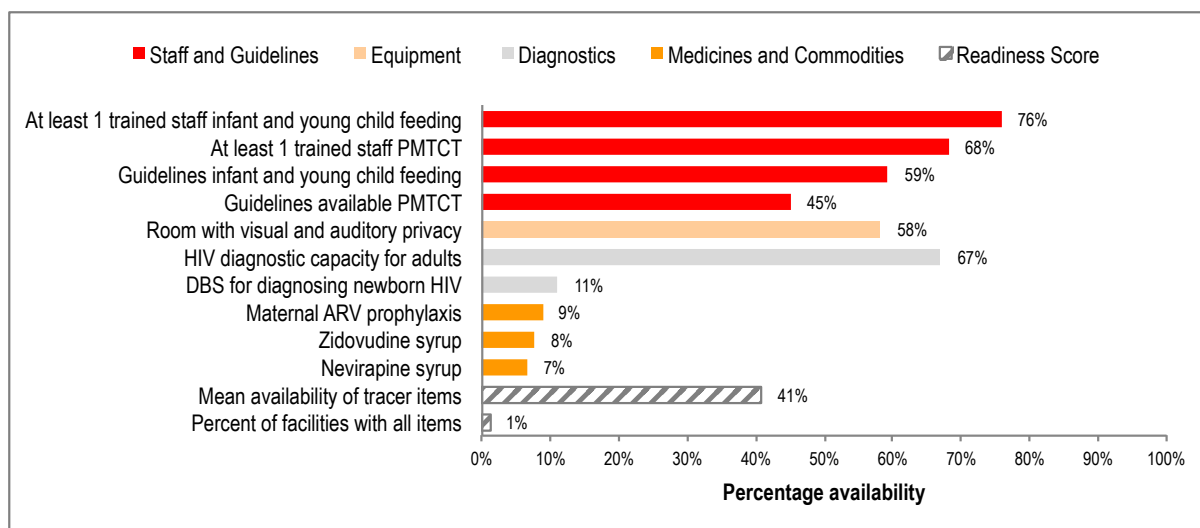
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Service readiness

Readiness to provide PMTCT services was assessed based on the presence of the 9 tracer items found in **Table 67**. **Figure 83** shows the percentage availability of these tracer items at facilities offering PMTCT services (N=91).

- Only 1% of facilities had all items needed to provide PMTCT services.
- More than half of facilities had at least one trained staff in PMTCT (68%) and infant and young child feeding (76%).
- The least available items were within the medicines and commodities domain, with availability of nevirapine syrup in 7% of facilities.

Figure 83. Percentage of facilities that have tracer items for PMTCT services among facilities that provide this service (N=91), Somalia 2016



Service distribution

Table 69 shows availability of PMTCT tracer items by region, facility type, managing authority (non-governmental vs. governmental), and by urban vs. rural location while shows the variation in PMTCT readiness by region.

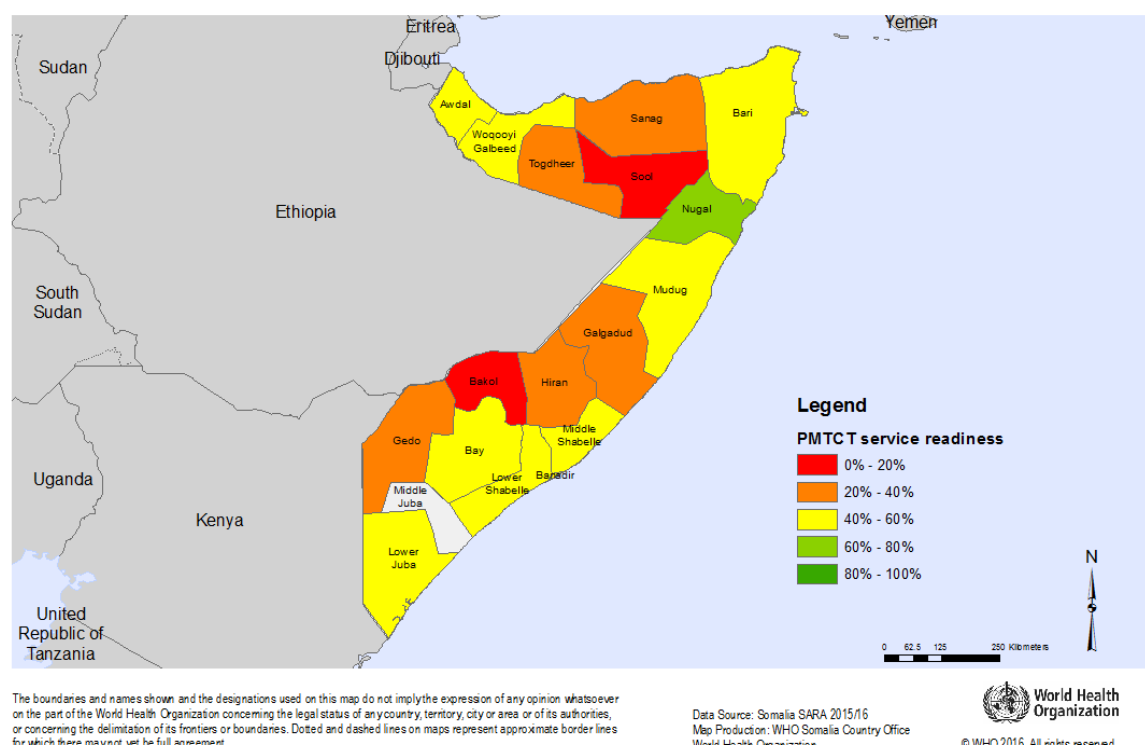
- Hospitals had the greatest mean availability of PMTCT tracer items compared to other facility types (53%), followed by referral health centers (50%). Health posts were least ready to provide this service, with a mean availability score of 38%.
- Little difference was seen in the readiness to provide PMTCT services between governmental and non-governmental facilities (40% compared to 42%, respectively).
- Urban facilities were slightly more ready to provide PMTCT services compared to rural facilities (41% vs. 38%).
- The Sahil region in Somaliland was most ready to provide PMTCT services (51%), while the readiness score in the Sanag and Sol regions was lowest (20%).
- In Puntland, the highest mean availability of tracer items was found in the Nugaal region (75%) and the lowest mean availability was found in the Karkaar region (20%).
- The Bay region in South Central scored highest in readiness to provide PMTCT (60%), while the Galgadud and Hiraan regions scored lowest (30%).

Table 69. Availability of tracer items for PMTCT service readiness by region, facility type, non-governmental vs. governmental ownership, and urban vs. rural location (N=91), Somalia 2016

	Guidelines available PMTCT	Guidelines infant and young child feeding	At least 1 trained staff PMTCT	At least 1 trained staff infant and young child feeding	Room with visual and auditory privacy	HIV diagnostic capacity for adults	DBS for diagnosing newborn HIV	Zidovudine syrup	Nevirapine syrup	Maternal ARV prophylaxis	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions													
Somaliland	48%	61%	65%	68%	68%	71%	10%	6%	3%	6%	3%	41%	31
Awdal	100%	50%	50%	0%	100%	100%	50%	0%	0%	0%	0%	45%	2
Marodi-Jeh	50%	64%	64%	57%	71%	64%	7%	7%	0%	7%	0%	39%	14
Sahil	71%	86%	86%	86%	86%	100%	0%	0%	0%	0%	0%	51%	7
Sanag	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	20%	1
Sool	0%	0%	50%	100%	0%	50%	0%	0%	0%	0%	0%	20%	2
Togdher	20%	60%	60%	80%	40%	60%	20%	20%	20%	20%	20%	40%	5
Puntland	50%	50%	70%	60%	40%	80%	20%	30%	30%	30%	0%	46%	10
Bari	50%	50%	100%	0%	50%	100%	50%	50%	50%	50%	0%	55%	2
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	20%	1
Mudug	100%	100%	50%	100%	0%	50%	0%	50%	50%	50%	0%	55%	2
Nugaal	100%	100%	100%	100%	100%	100%	0%	50%	50%	50%	0%	75%	2
Sanaag	0%	0%	67%	67%	33%	67%	0%	0%	0%	0%	0%	23%	3
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	42%	60%	70%	84%	56%	62%	10%	4%	4%	6%	0%	40%	50
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	60%	1
Benadir	54%	58%	71%	79%	54%	71%	8%	4%	4%	4%	0%	41%	24
Galgadud	0%	33%	67%	67%	83%	33%	17%	0%	0%	0%	0%	30%	6
Gedo	20%	60%	60%	80%	0%	40%	20%	20%	20%	40%	0%	36%	5
Hiiraan	0%	50%	50%	100%	50%	50%	0%	0%	0%	0%	0%	30%	2
Lower Juba	67%	100%	100%	100%	0%	100%	0%	0%	0%	0%	0%	47%	3
Lower Shabelle	50%	75%	75%	100%	100%	75%	0%	0%	0%	0%	0%	48%	4
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	67%	67%	100%	100%	67%	33%	0%	0%	0%	0%	0%	43%	3
Mudug	0%	50%	0%	100%	100%	50%	50%	0%	0%	0%	0%	35%	2

	Guidelines available PMTCT	Guidelines infant and young child feeding	At least 1 trained staff PMTCT	At least 1 trained staff infant and young child feeding	Room with visual and auditory privacy	HIV diagnostic capacity for adults	DBS for diagnosing newborn HIV	Zidovudine syrup	Nevirapine syrup	Maternal ARV prophylaxis	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Facility type													
Hospital	47%	58%	79%	68%	63%	95%	37%	26%	26%	26%	5%	53%	19
Referral Health Center	50%	100%	50%	100%	100%	100%	0%	0%	0%	0%	0%	50%	2
Health Center/MCH	44%	61%	66%	78%	58%	61%	3%	2%	0%	3%	0%	38%	59
Health Post/PHU	29%	43%	71%	71%	29%	14%	14%	14%	14%	14%	0%	31%	7
TB Center	75%	50%	50%	75%	75%	100%	0%	0%	0%	0%	0%	43%	4
Managing authority													
Government	45%	55%	65%	70%	53%	68%	10%	12%	10%	13%	2%	40%	60
Non-government	45%	68%	74%	87%	68%	65%	13%	0%	0%	0%	0%	42%	31
Urban/Rural													
Urban	47%	60%	68%	74%	59%	69%	12%	8%	6%	9%	1%	41%	78
Rural	31%	54%	69%	85%	54%	54%	8%	8%	8%	8%	0%	38%	13
Total	45%	59%	68%	76%	58%	67%	11%	8%	7%	9%	1%	41%	91

Figure 84. Map of PMTCT service readiness by region, Somalia 2016



4.2.6 Tuberculosis

Tuberculosis prevalence in Somalia was estimated at 290 per 100,000 population in 2009²². The main strategy for TB management and control is the directly observed treatment short course (DOTS), and a national TB programme providing DOTS was implemented in 1995. Approximately 66 TB centres have been established countrywide by WHO. Tracer items necessary for providing TB services are outlined in **Table 70**.

Table 70. Tracer items needed to provide TB services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for diagnosis and treatment of TB Guidelines for management of HIV/TB co-infection Guidelines for MDR-TB Guidelines for TB infection control Staff trained in TB diagnosis and treatment Staff trained in management of HIV/TB co-infection Staff trained in MDR-TB Staff trained in TB infection control
Diagnostics	<ul style="list-style-type: none"> Capacity to conduct on site TB microscopy Capacity to conduct HIV test System for diagnosis of HIV among TB clients
Medicines and commodities	<ul style="list-style-type: none"> Isoniazid Pyrazinamide Rifampicin Ethambutol

²² WHO-EMRO, 2016. Somalia TB Programme Profile 2016.

Service availability

Figure 85 shows the percentage of facilities offering tuberculosis diagnosis and treatment services.

- Very few facilities in Somalia offered TB services at the time of the survey (8%).
- The percentage of facilities offering diagnosis of TB by chest X-ray and culture were particularly low (2% and 1%, respectively).

Figure 85. Percentage of facilities that offer TB services (N=799), Somalia 2016

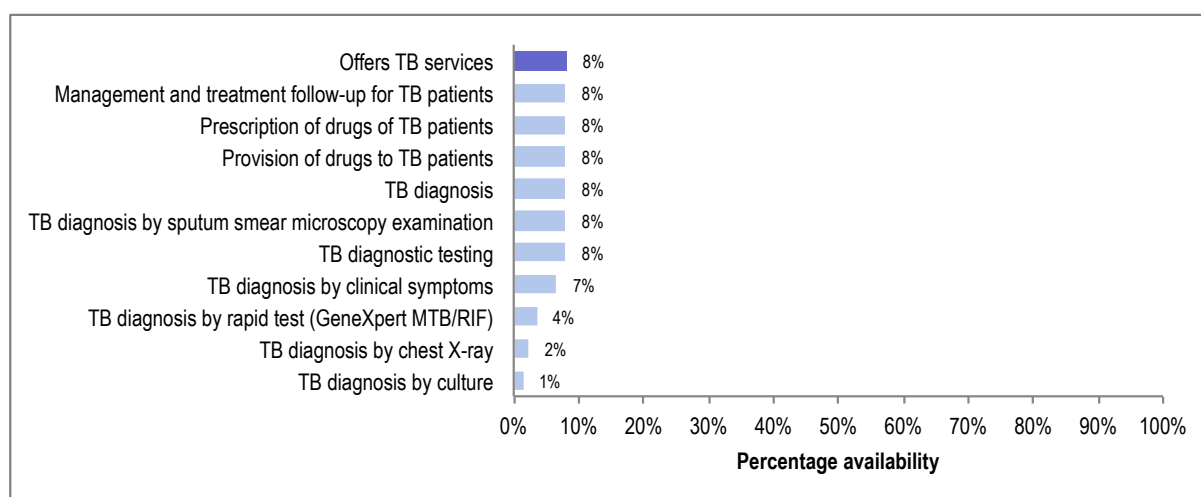


Table 71 shows the percentage of facilities offering tuberculosis diagnosis and treatment services by region, facility type, managing authority and urban vs. rural location while shows the variation in TB service availability by region.

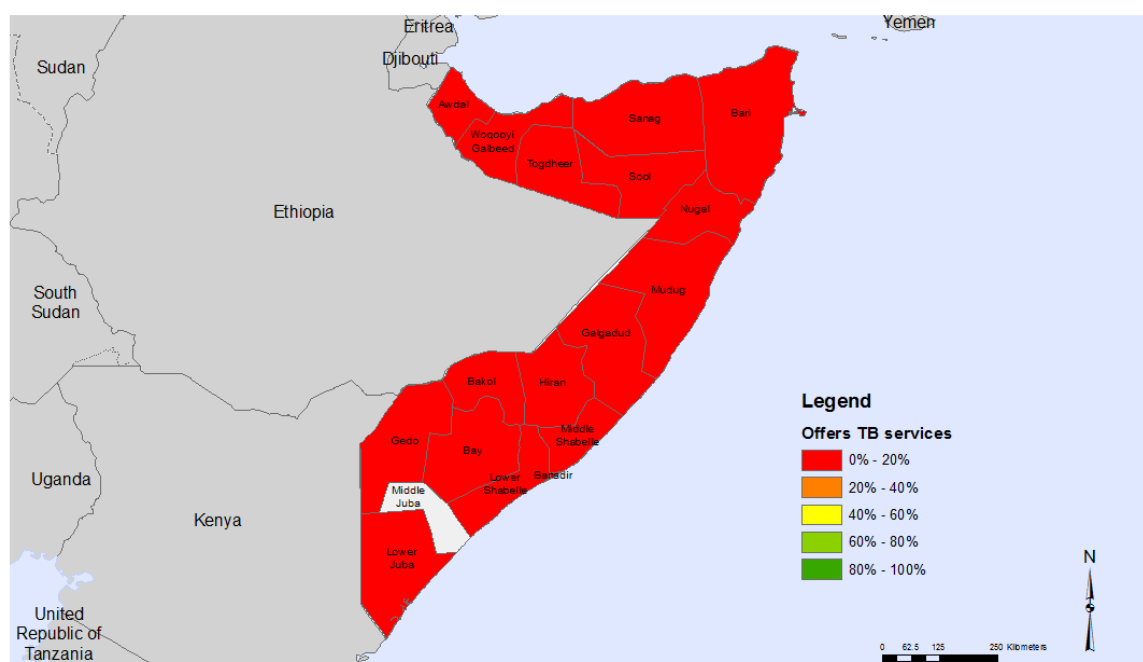
- Outside of TB centers, the percentage of facilities offering TB services was very low (9% of hospitals provided this service and only 1% of health centers).
- Non-governmental facilities were slightly more likely than governmental facilities to offer TB services (12% vs. 7%).
- Rural facilities were not likely to offer TB services (1%) compared to urban facilities (13%).
- In Somaliland, the Sool region was mostly likely to offer TB services (8%). The regions with facilities least likely to offer the service were Awdal, Marodi-Jeh, and Sahil (6%).
- The Nugaal region in Puntland had the greatest availability of TB services (7%) and the Sool region has the lowest availability (0%).
- In South Cetral, the Gedo region showed the greatest availability of TB services (19%) and the Bay and Mudug regions had the lowest availability of this service (6%).

Table 71. Availability of TB services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers TB services	TB diagnosis	TB diagnostic testing	TB diagnosis by clinical symptoms	TB diagnosis by sputum smear microscopy examination	TB diagnosis by culture	TB diagnosis by rapid test	TB diagnosis by chest X-ray	Prescription of drugs of TB patients	Provision of drugs to TB patients	Management and treatment follow-up for TB patients	Total number of facilities
Regions												
Somaliland	6%	6%	6%	5%	6%	1%	2%	2%	6%	6%	6%	282
Awdal	6%	6%	6%	6%	6%	0%	0%	0%	6%	6%	6%	53
Marodi-Jeh	6%	6%	6%	6%	6%	3%	3%	1%	6%	6%	6%	72
Sahil	6%	6%	6%	0%	6%	0%	0%	3%	6%	6%	6%	31
Sanag	7%	7%	7%	7%	7%	0%	4%	0%	7%	7%	7%	28
Sool	8%	8%	8%	6%	8%	2%	4%	4%	8%	8%	8%	53
Togdher	7%	7%	7%	4%	7%	2%	2%	2%	7%	7%	7%	45
Puntland	5%	5%	5%	4%	5%	0%	1%	1%	5%	5%	5%	228
Bari	4%	4%	4%	4%	4%	0%	0%	0%	4%	4%	4%	48
Gardafuu	6%	6%	6%	0%	6%	0%	0%	0%	6%	6%	6%	17
Karkaar	2%	2%	2%	0%	2%	0%	0%	0%	2%	2%	2%	42
Mudug	6%	6%	6%	6%	6%	0%	4%	2%	6%	6%	6%	52
Nugaal	7%	7%	7%	5%	7%	0%	0%	2%	7%	7%	7%	41
Sanaag	6%	6%	6%	6%	6%	0%	6%	0%	6%	6%	6%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	12%	12%	12%	11%	12%	2%	7%	4%	12%	12%	12%	289
Bakool	8%	8%	8%	8%	8%	0%	0%	0%	8%	8%	8%	12
Bay	6%	6%	6%	6%	6%	0%	0%	0%	6%	6%	6%	31
Benadir	14%	14%	14%	14%	14%	4%	7%	4%	14%	14%	14%	57
Galgadud	11%	11%	11%	11%	11%	0%	4%	4%	11%	11%	11%	28
Gedo	19%	19%	19%	19%	19%	8%	17%	6%	19%	19%	19%	36
Hiiraan	13%	13%	13%	13%	13%	0%	13%	13%	13%	13%	13%	23
Lower Juba	12%	6%	6%	6%	6%	0%	6%	0%	6%	6%	6%	17
Lower Shabelle	18%	18%	18%	4%	18%	0%	0%	4%	18%	18%	18%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	14%	14%	14%	14%	14%	5%	9%	5%	14%	14%	14%	22
Mudug	6%	6%	6%	6%	6%	3%	6%	3%	6%	6%	6%	35
Facility type												
Hospital	9%	7%	7%	7%	7%	3%	3%	0%	7%	7%	7%	58

	Offers TB services	TB diagnosis	TB diagnostic testing	TB diagnosis by clinical symptoms	TB diagnosis by sputum smear microscopy examination	TB diagnosis by culture	TB diagnosis by rapid test	TB diagnosis by chest X-ray	Prescription of drugs of TB patients	Provision of drugs to TB patients	Management and treatment follow-up for TB patients	Total number of facilities
Referral Health Center	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9
Health Center/MCH	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	383
Health Post/PHU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	294
TB Center	100%	100%	100%	80%	100%	13%	42%	27%	100%	100%	100%	55
Managing authority												
Government	7%	7%	7%	5%	7%	1%	3%	2%	7%	7%	7%	565
Non-government	12%	12%	12%	10%	12%	2%	6%	4%	12%	12%	12%	234
Urban/Rural												
Urban	13%	13%	13%	10%	13%	2%	5%	3%	13%	13%	13%	492
Rural	1%	1%	1%	1%	1%	0%	1%	0%	1%	1%	1%	307
Total	8%	8%	8%	7%	8%	1%	4%	2%	8%	8%	8%	799

Figure 86. Map of tuberculosis service availability by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

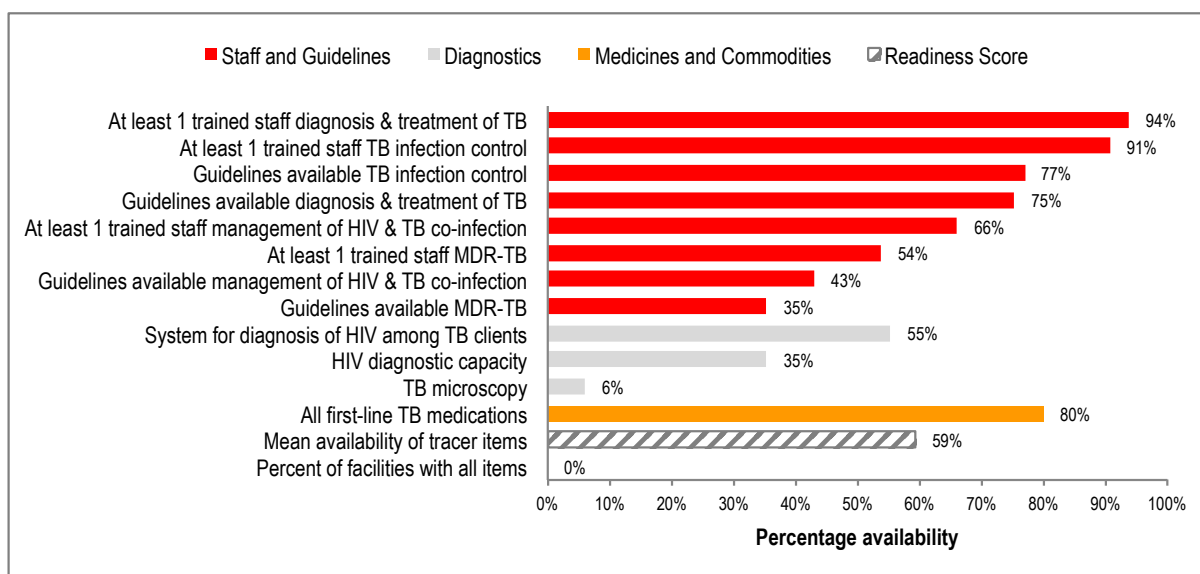
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Service readiness

Readiness to provide TB services was assessed based on the presence of the 12 tracer items found in **Table 70**. **Figure 87** shows the percentage availability of these tracer items at facilities offering TB services (N=65).

- The vast majority of facilities had at least one trained staff in the diagnosis and treatment of TB (94%) and TB infection control (91%).
- Availability of all first line medications for TB was quite high at 80%.
- TB microscopy was the least available item with TB services (6%).
- No facilities had all items needed to provide TB services.

Figure 87. Percentage of facilities that have tracer items for TB services among facilities that provide this service (N=65), Somalia 2016



Service distribution

Table 72 shows availability of tuberculosis tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 88** shows the variation in TB service readiness by region.

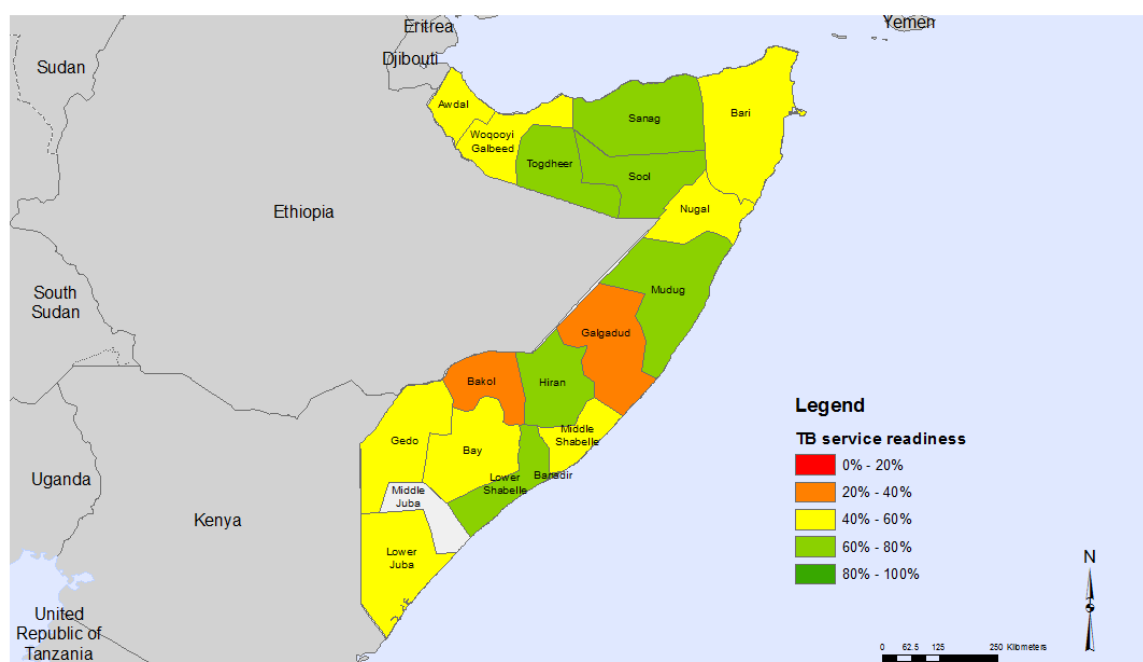
- Health posts had the highest readiness score for TB services (83%) compared to other facility types. This was followed by TB centers (61%) and the lowest readiness score was found in hospitals (42%).
- Readiness to provide TB services was the same between governmental and non-governmental facilities (59%).
- Rural facilities showed greater readiness to provide TB services compared to urban facilities (79% vs. 59%).
- In Somaliland, the Sanag region was most ready to provide TB services (79%) and the Sahil region was least ready (50%).
- In Puntland, the Mudug region had the highest mean availability of tracer items for TB (78%) while the Gardafuu region had the lowest availability of these items (42%).
- In South Central, readiness to provide TB services was highest in Benadir (78%) and lowest in Bakool (38%).

Table 72. Availability of tracer items for TB service readiness by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=65), Somalia 2016

	Guidelines available diagnosis & treatment of TB	Guidelines available management of HIV & TB co-infection	Guidelines available MDR-TB	Guidelines available TB infection control	At least 1 trained staff diagnosis & treatment of TB	At least 1 trained staff management of HIV & TB co-infection	At least 1 trained staff MDR-TB	At least 1 trained staff TB infection control	TB microscopy	HIV diagnostic capacity	System for diagnosis of HIV among TB clients	All first-line TB medications	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions															
Somaliland	72%	61%	28%	78%	94%	78%	61%	94%	11%	39%	67%	67%	0%	62%	18
Awdal	33%	67%	0%	67%	100%	100%	33%	67%	0%	0%	100%	67%	0%	53%	3
Marodi-Jeh	75%	25%	25%	75%	100%	75%	75%	100%	0%	75%	25%	50%	0%	58%	4
Sahil	50%	50%	0%	100%	100%	50%	0%	100%	0%	0%	100%	50%	0%	50%	2
Sanag	100%	100%	0%	50%	100%	100%	100%	100%	50%	100%	50%	100%	0%	79%	2
Sool	100%	75%	50%	75%	100%	50%	50%	100%	0%	25%	75%	75%	0%	65%	4
Togdher	67%	67%	67%	100%	67%	100%	100%	100%	33%	33%	67%	67%	0%	72%	3
Puntland	73%	45%	36%	82%	100%	64%	45%	100%	0%	9%	64%	91%	0%	59%	11
Bari	50%	50%	50%	100%	100%	50%	50%	100%	0%	0%	100%	100%	0%	63%	2
Gardafuu	100%	0%	0%	100%	100%	0%	0%	100%	0%	0%	0%	100%	0%	42%	1
Karkaar	100%	0%	0%	0%	100%	100%	100%	100%	0%	0%	100%	100%	0%	58%	1
Mudug	67%	67%	100%	100%	100%	100%	100%	100%	0%	33%	100%	67%	0%	78%	3
Nugaal	67%	33%	0%	67%	100%	33%	0%	100%	0%	0%	33%	100%	0%	44%	3
Sanaag	100%	100%	0%	100%	100%	100%	0%	100%	0%	0%	0%	100%	0%	58%	1
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	78%	33%	39%	75%	92%	61%	53%	86%	6%	42%	47%	83%	0%	58%	36
Bakool	0%	0%	0%	0%	100%	100%	0%	100%	0%	0%	0%	100%	0%	33%	1
Bay	100%	0%	50%	100%	100%	50%	100%	100%	0%	50%	0%	50%	0%	58%	2
Benadir	100%	63%	75%	100%	100%	88%	63%	100%	13%	63%	75%	100%	0%	78%	8
Galgadud	33%	0%	0%	33%	100%	33%	67%	100%	0%	0%	67%	33%	0%	39%	3
Gedo	71%	14%	29%	71%	71%	43%	43%	71%	0%	29%	14%	71%	0%	44%	7
Hiiraan	100%	100%	0%	100%	100%	100%	0%	100%	0%	100%	100%	100%	0%	75%	3
Lower Juba	50%	50%	50%	50%	50%	50%	50%	50%	0%	50%	50%	100%	0%	50%	2
Lower Shabelle	60%	40%	60%	80%	100%	80%	80%	80%	0%	40%	60%	80%	0%	63%	5
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	100%	0%	0%	67%	100%	33%	33%	100%	0%	0%	0%	100%	0%	44%	3
Mudug	100%	0%	50%	50%	100%	0%	50%	50%	50%	50%	50%	100%	0%	54%	2

	Guidelines available diagnosis & treatment of TB	Guidelines available management of HIV & TB co-infection	Guidelines available MDR-TB	Guidelines available TB infection control	At least 1 trained staff diagnosis & treatment of TB	At least 1 trained staff management of HIV & TB co-infection	At least 1 trained staff MDR-TB	At least 1 trained staff TB infection control	TB microscopy	HIV diagnostic capacity	System for diagnosis of HIV among TB clients	All first-line TB medications	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Facility type															
Hospital	40%	0%	20%	60%	60%	40%	60%	60%	40%	60%	0%	60%	0%	42%	5
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	50%	25%	50%	50%	100%	75%	50%	100%	25%	50%	25%	100%	0%	58%	4
Health Post/PHU	100%	100%	100%	100%	100%	100%	0%	100%	0%	100%	100%	100%	0%	83%	1
TB Center	80%	47%	35%	80%	96%	67%	55%	93%	2%	31%	62%	80%	0%	61%	55
Managing authority															
Government	76%	49%	35%	81%	92%	70%	51%	89%	5%	30%	59%	76%	0%	59%	37
Non-government	75%	36%	36%	71%	96%	61%	57%	93%	7%	43%	50%	86%	0%	59%	28
Urban/Rural															
Urban	75%	41%	33%	76%	94%	67%	54%	90%	6%	35%	54%	79%	0%	59%	63
Rural	100%	100%	100%	100%	100%	50%	50%	100%	0%	50%	100%	100%	0%	79%	2
Total	75%	43%	35%	77%	94%	66%	54%	91%	6%	35%	55%	80%	0%	59%	65

Figure 88. Map of TB service readiness by region, Somalia 2016



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Map Production: WHO Somalia Country Office
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4.2.7 Sexually transmitted infection services

Syphilis testing is the only sexually transmitted infection (STI) diagnosis that is part of the HIV sentinel surveillance in Somalia. Syphilis prevalence in Somalia was estimated at approximately 1.5% in 2014¹⁹. **Table 73** outlines the tracer items needed to provide STI services in health facilities.

Table 73. Tracer items needed to provide STI services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for diagnosis and treatment of STIs Staff trained in diagnosis and treatment of STIs
Diagnostics	<ul style="list-style-type: none"> Capacity to conduct on site syphilis rapid test
Medicines and commodities	<ul style="list-style-type: none"> Male condoms Metronidazole Ciprofloxacin Ceftriaxone injection

Service availability

Figure 89 shows the percentage of facilities offering STI diagnosis and treatment services.

- Only one quarter of health facilities in Somalia offer STI services.
- Diagnosis of STIs was only found in 17% of facilities, while treatment was slightly more available (24%).

Figure 89. Percentage of facilities that offer STI services (N=799), Somalia 2016

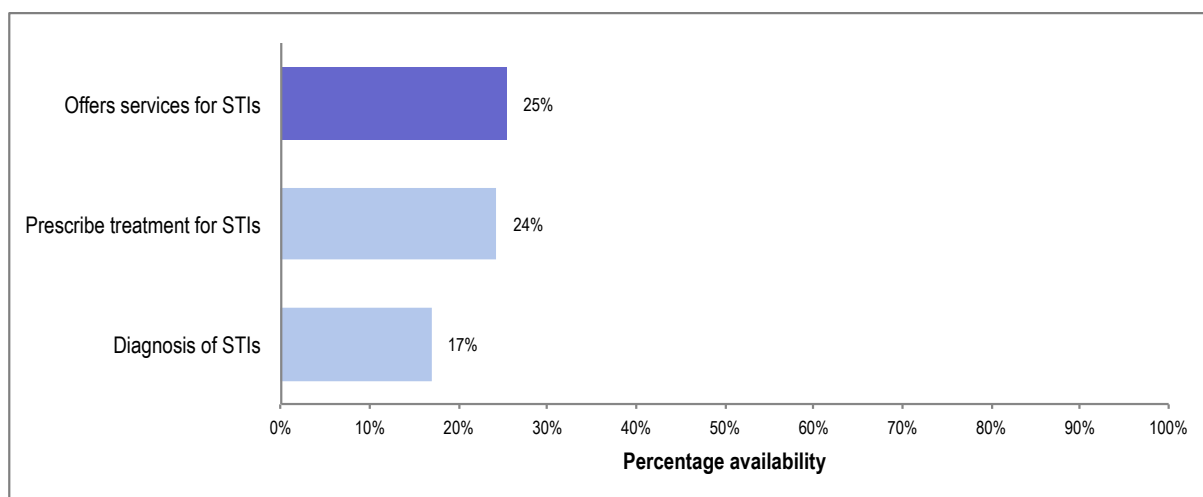


Table 74 shows the percentage of facilities offering STI diagnosis and treatment services by region, facility type, managing authority and urban vs. rural location while **Figure 90** shows the variation in STI service availability by region.

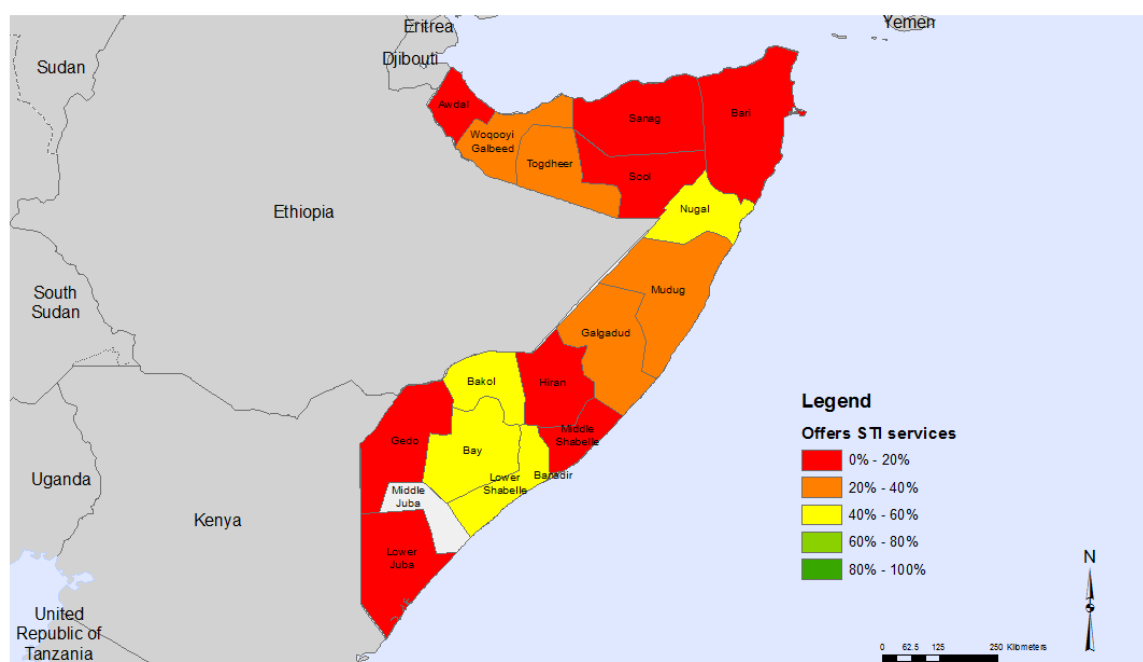
- STI services were most available in hospitals compared to other facility types (60%) and least available in TB centers (2%).
- Non-governmental facilities were slightly more likely to offer STI services compared to governmental facilities (27% vs. 23%).
- STI services were much more available in urban facilities compared to rural (33% vs. 11%).

Table 74. Availability of STI services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers services for STIs	Diagnosis of STIs	Prescribe treatment for STIs	Total number of facilities
Regions				
Somaliland	21%	16%	20%	282
Awdal	19%	19%	17%	53
Marodi-Jeh	21%	15%	21%	72
Sahil	29%	29%	29%	31
Sanag	7%	4%	7%	28
Sool	15%	13%	15%	53
Togdher	31%	13%	27%	45
Puntland	26%	13%	25%	228
Bari	6%	4%	6%	48
Gardafuu	6%	6%	6%	17
Karkaar	19%	19%	19%	42
Mudug	44%	15%	44%	52
Nugaal	46%	15%	46%	41
Sanaag	28%	22%	22%	18
Sool	0%	0%	0%	10
South Central	30%	21%	28%	289
Bakool	50%	25%	50%	12
Bay	48%	48%	48%	31
Benadir	53%	39%	49%	57
Galgadud	21%	18%	21%	28
Gedo	14%	11%	11%	36
Hiiraan	4%	0%	0%	23
Lower Juba	6%	6%	6%	17
Lower Shabelle	50%	36%	50%	28
Middle Jubba	N/A	N/A	N/A	0
Middle Shebelle	14%	9%	9%	22
Mudug	14%	0%	14%	35
Facility type				
Hospital	62%	57%	60%	58
Referral Health Center	67%	67%	56%	9
Health Center/MCH	36%	23%	35%	383

Health Post/PHU	7%	2%	7%	294
TB Center	4%	2%	2%	55
Managing authority				
Government	24%	16%	23%	565
Non-government	29%	18%	27%	234
Urban/Rural				
Urban	34%	24%	33%	492
Rural	11%	6%	11%	307
Total	25%	17%	24%	799

Figure 90. Map of STI service availability by region, Somalia 2016



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Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
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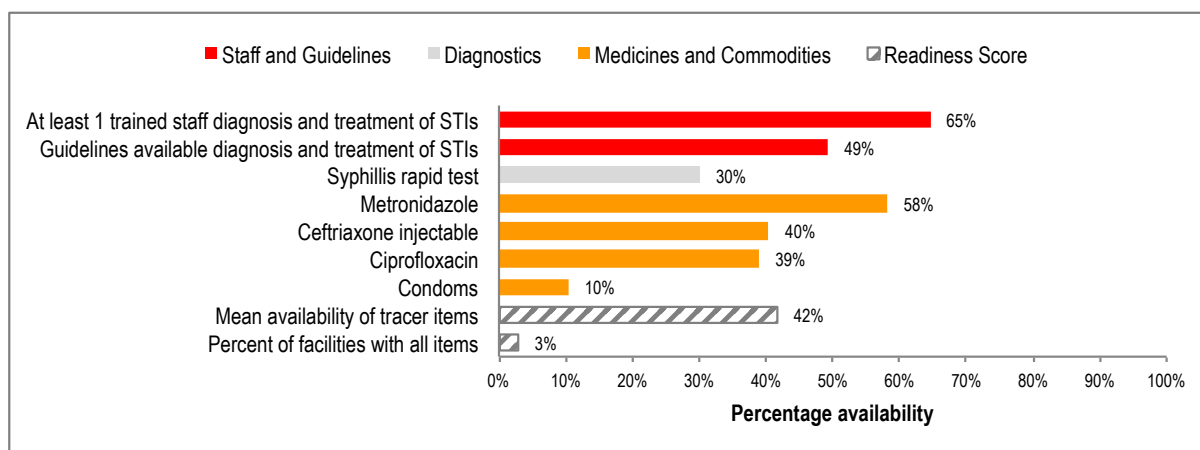
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Service readiness

Readiness to provide STI services was assessed based on the presence of the 7 tracer items found in **Table 73**. **Figure 91** shows the percentage availability of these tracer items at facilities offering STI services (N=203).

- The majority of facilities offering STI services had at least one trained staff in diagnosis and treatment of STIs (65%) and nearly half of facilities had guidelines for the diagnosis and treatment of STIs (49%).
- Less than one third of facilities offered the syphilis rapid test (30%).
- Only 10% of facilities provided condoms for prevention of STIs.

Figure 91. Percentage of facilities that have tracer items for STI services among facilities that provide this service (N=203), Somalia 2016



Service distribution

Table 75 shows availability of STI tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in STI service readiness by region.

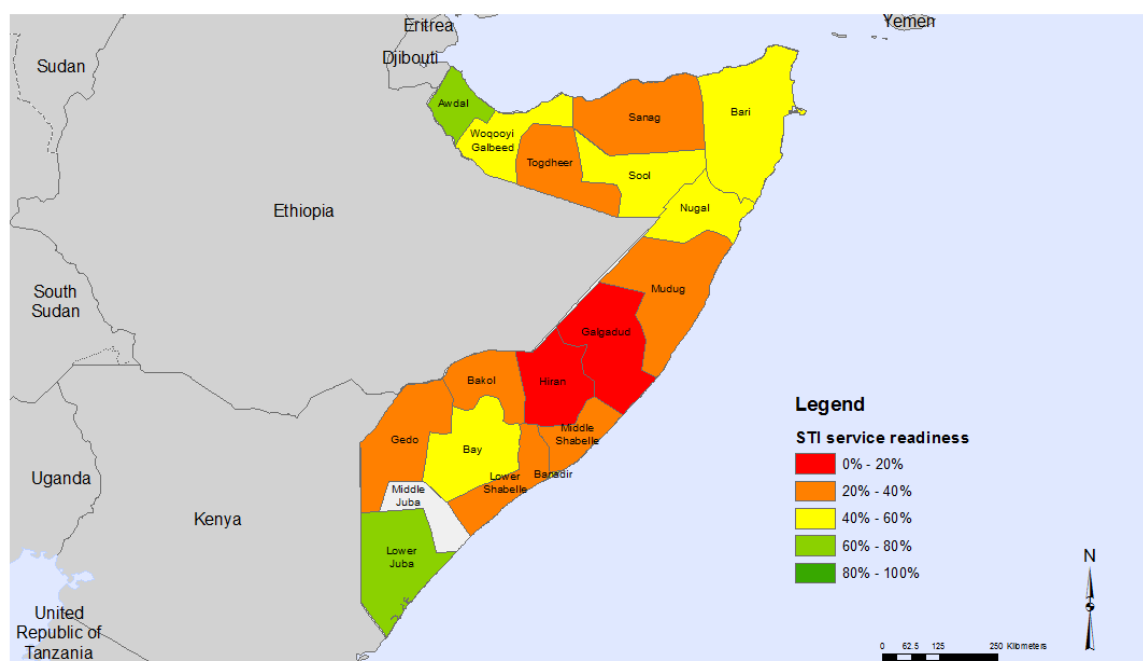
- Readiness to provide STI services was highest among hospitals compared to other facility types (51%), followed by referral health centers (43%) and health centers (43%). TB centers were least ready to provide this service (14%).
- Governmental facilities were found to be more ready to provide STI services compared to non-governmental facilities (45% vs. 36%).
- Facilities located in urban areas had higher STI services readiness scores compared to those found in rural areas (43% vs. 34%).

Table 75. Availability of tracer items for STI services at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=203), Somalia 2016

	Guidelines available diagnosis and treatment of STIs	At least 1 trained staff diagnosis and treatment of STIs	Syphilis rapid test	Condoms	Metronidazole	Ciprofloxacin	Ceftriaxone injectable	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions										
Somaliland	55%	62%	31%	2%	76%	40%	52%	0%	45%	58
Awdal	90%	70%	30%	10%	90%	80%	90%	0%	66%	10
Marodi-Jeh	20%	47%	33%	0%	73%	47%	47%	0%	38%	15
Sahil	89%	100%	89%	0%	67%	33%	22%	0%	57%	9
Sanag	0%	50%	0%	0%	50%	0%	50%	0%	21%	2
Sool	88%	100%	13%	0%	75%	25%	63%	0%	52%	8
Togdher	36%	29%	7%	0%	79%	21%	43%	0%	31%	14
Puntland	53%	59%	24%	7%	56%	44%	34%	2%	39%	59
Bari	100%	67%	33%	67%	100%	100%	100%	33%	81%	3
Gardafuu	0%	100%	100%	0%	0%	0%	0%	0%	29%	1
Karkaar	88%	75%	38%	25%	63%	50%	38%	0%	54%	8
Mudug	39%	48%	13%	0%	43%	35%	35%	0%	30%	23
Nugaal	58%	63%	21%	0%	68%	47%	26%	0%	41%	19
Sanaag	20%	60%	40%	0%	40%	40%	20%	0%	31%	5
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	43%	70%	34%	19%	48%	35%	37%	6%	41%	86
Bakool	0%	33%	0%	17%	50%	33%	33%	0%	24%	6
Bay	73%	53%	27%	7%	80%	67%	47%	0%	50%	15
Benadir	70%	80%	43%	33%	57%	40%	50%	10%	53%	30
Galgadud	0%	50%	50%	0%	17%	0%	0%	0%	17%	6
Gedo	20%	60%	20%	20%	60%	40%	60%	20%	40%	5
Hiiraan	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Lower Juba	0%	100%	100%	0%	100%	100%	100%	0%	71%	1
Lower Shabelle	29%	86%	43%	14%	21%	14%	21%	7%	33%	14
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	100%	33%	33%	33%	33%	33%	0%	38%	3
Mudug	0%	80%	0%	0%	0%	0%	0%	0%	11%	5
Facility type										
Hospital	44%	69%	78%	11%	56%	50%	50%	6%	51%	36

	Guidelines available diagnosis and treatment of STIs	At least 1 trained staff diagnosis and treatment of STIs	Syphilis rapid test	Condoms	Metronidazole	Ciprofloxacin	Ceftriaxone injectable	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Referral Health Center	100%	50%	50%	0%	50%	17%	33%	0%	43%	6
Health Center/MCH	54%	70%	20%	12%	62%	41%	43%	2%	43%	138
Health Post/PHU	14%	29%	5%	5%	48%	19%	10%	5%	18%	21
TB Center	0%	50%	50%	0%	0%	0%	0%	0%	14%	2
Managing authority										
Government	56%	63%	30%	9%	67%	43%	45%	4%	45%	135
Non-government	37%	68%	29%	13%	41%	31%	31%	1%	36%	68
Urban/Rural										
Urban	51%	67%	32%	11%	58%	41%	42%	3%	43%	169
Rural	38%	50%	21%	6%	59%	29%	32%	3%	34%	34
Total	49%	65%	30%	10%	58%	39%	40%	3%	42%	203

Figure 92. Map of STI service readiness by region, Somalia 2016



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Map Production: WHO Somalia Country Office
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4.3 Non-communicable diseases

In Somalia, availability of non-communicable disease services was low overall and did not exceed 9% for any service. **Figure 93** shows the availability for each non-communicable disease service.

- The most available non-communicable disease services were for chronic respiratory disease diagnosis/management and diabetes diagnosis/management (9%).
- Cervical cancer diagnosis was the least available service for non-communicable diseases (2%).

Readiness to provide non-communicable disease services is shown in Figure 94.

- Although least available, facilities were most ready to provide cervical cancer services (67%).
- Chronic respiratory disease diagnosis/management was the area in which facilities were least ready (46%).

Figure 93. Availability of non-communicable disease services (N = 799), Somalia 2016

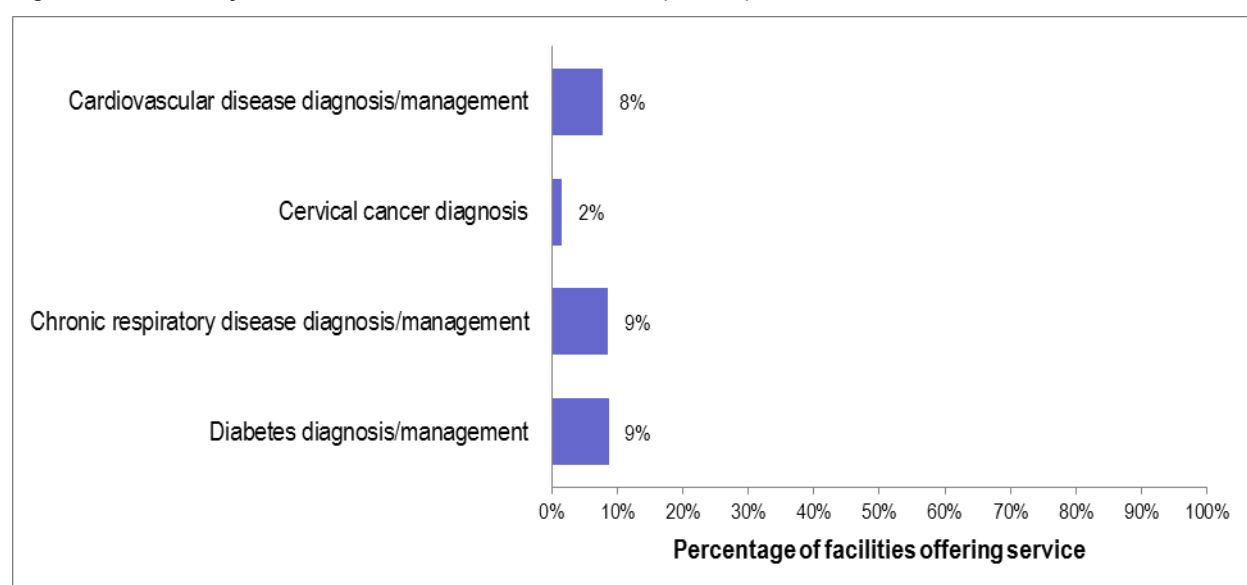
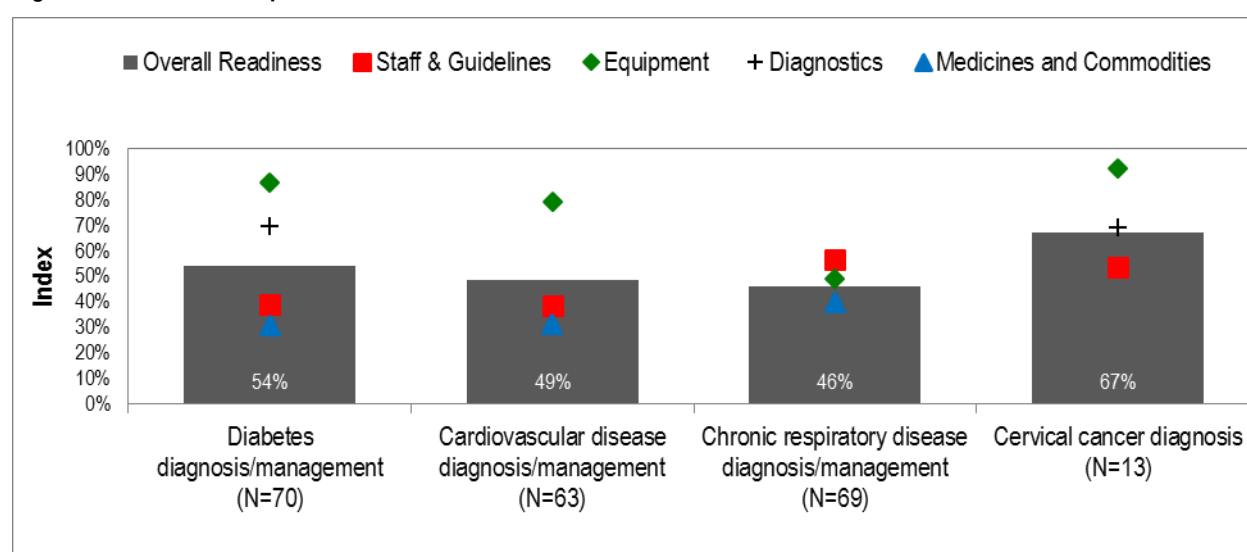


Figure 94. Readiness to provide non-communicable disease services



4.3.1 Diabetes care

In 2014, WHO estimated mortality from non-communicable diseases (NCDs) at 19% and diabetes estimated to account for 1%²³. Diabetes prevalence among people ages 20-79 is estimated at 5.1%²⁴. Somalia currently lacks operational policies, strategies or action plans surrounding NCDs, such as the promotion of physical activity and promotion of healthy diets. **Table 76** outlines the tracer items necessary for health facilities providing diabetes care services.

Table 76. Tracer items needed to provide diabetes care

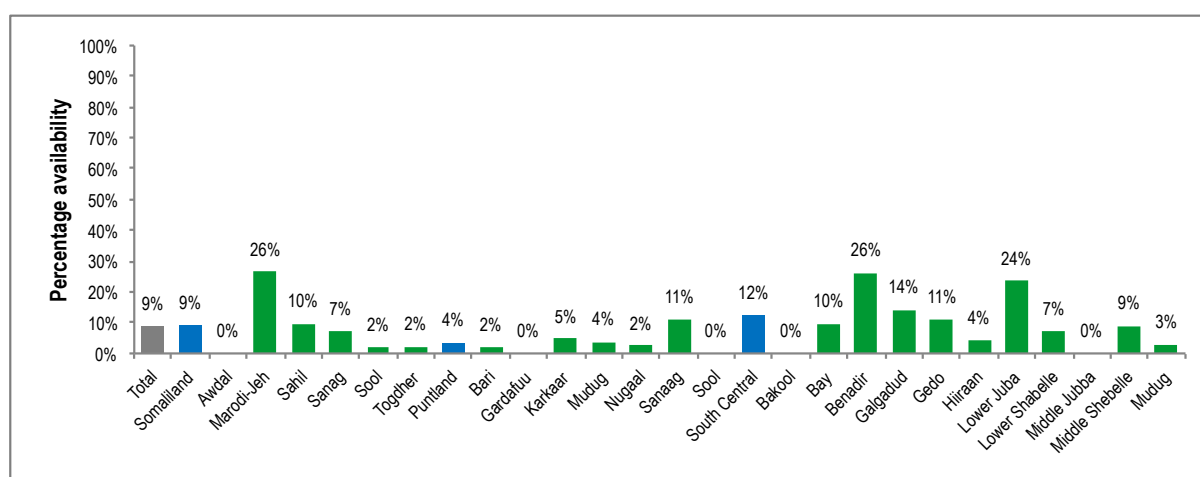
Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for diabetes diagnosis and treatment Staff trained in diabetes diagnosis and treatment
Equipment	<ul style="list-style-type: none"> Blood pressure apparatus Adult scale Measuring tape
Diagnostics	<ul style="list-style-type: none"> Blood glucose Urine dipstick – protein Urine dipstick – ketones
Medicines and commodities	<ul style="list-style-type: none"> Metformin Glibenclamide Insulin regular injectable Glucose 50% injectable Gliclazide or glipizide tablet

Service availability

Figure 95 shows the percentage of facilities offering diabetes diagnosis and treatment services by zone and region.

- Only 9% of facilities countrywide offered diabetes diagnosis and treatment services.
- In any region, the highest availability of this service was 26%.

Figure 95. Percentage of facilities that offer diabetes services, by zone and region (N=799), Somalia 2016



²³ WHO, 2014. Noncommunicable Diseases (NCD) Country Profile – Somalia 2014 Report.

²⁴ International Diabetes Federation, 2015. Diabetes Atlas 2015 Report.

Table 77 shows the percentage of facilities offering diabetes diagnosis and treatment services by region, facility type, managing authority and urban vs. rural location while

Figure 96 shows the variation in diabetes service availability by region.

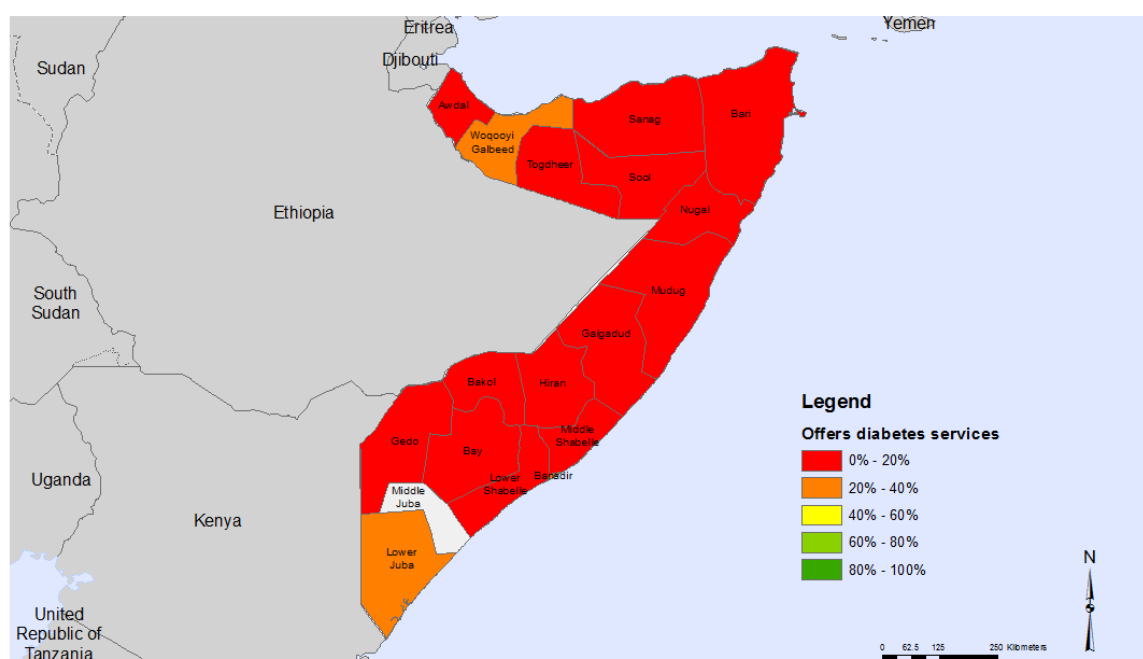
- Diabetes services were most available in hospitals compared to any other facility type (59%). Only 1% of health posts offered this service. As expected, TB centers did not offer any diabetes diagnosis or treatment.
- Non-governmental facilities were more likely than governmental facilities to provide diabetes services (11% vs. 8%).
- Urban facilities were much more likely to offer diabetes services compared to rural facilities (13% vs. 2%).
- The greatest availability of diabetes services in Somaliland was found in the Marodi-Jeh region (26%), while the Awdal region showed the least availability of this service (0%).
- The Sanaag region in Puntland had the greatest availability of diabetes services (11%) and the Gardafuu and Sool regions had the lowest availability (0%).
- In South Central, the Benadir region was the area most likely to offer diabetes services (26%) and the Bakool region was least likely to offer these services (0%)

Table 77. Availability of diabetes services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Diabetes diagnosis and/or management	Total number of facilities
Regions		
Somaliland	9%	282
Awdal	0%	53
Marodi-Jeh	26%	72
Sahil	10%	31
Sanag	7%	28
Sool	2%	53
Togdher	2%	45
Puntland	4%	228
Bari	2%	48
Gardafuu	0%	17
Karkaar	5%	42
Mudug	4%	52
Nugaal	2%	41
Sanaag	11%	18
Sool	0%	10
South Central	12%	289
Bakool	0%	12
Bay	10%	31
Benadir	26%	57
Galgadud	14%	28
Gedo	11%	36
Hiiraan	4%	23
Lower Juba	24%	17
Lower Shabelle	7%	28
Middle Jubba	N/A	0
Middle Shebelle	9%	22
Mudug	3%	35
Facility type		

	Diabetes diagnosis and/or management	Total number of facilities
Hospital	59%	58
Referral Health Center	22%	9
Health Center/MCH	8%	383
Health Post/PHU	1%	294
TB Center	0%	55
Managing authority		
Government	8%	565
Non-government	11%	234
Urban/Rural		
Urban	13%	492
Rural	2%	307
Total	9%	799

Figure 96. Map of diabetes service availability by region, Somalia 2016



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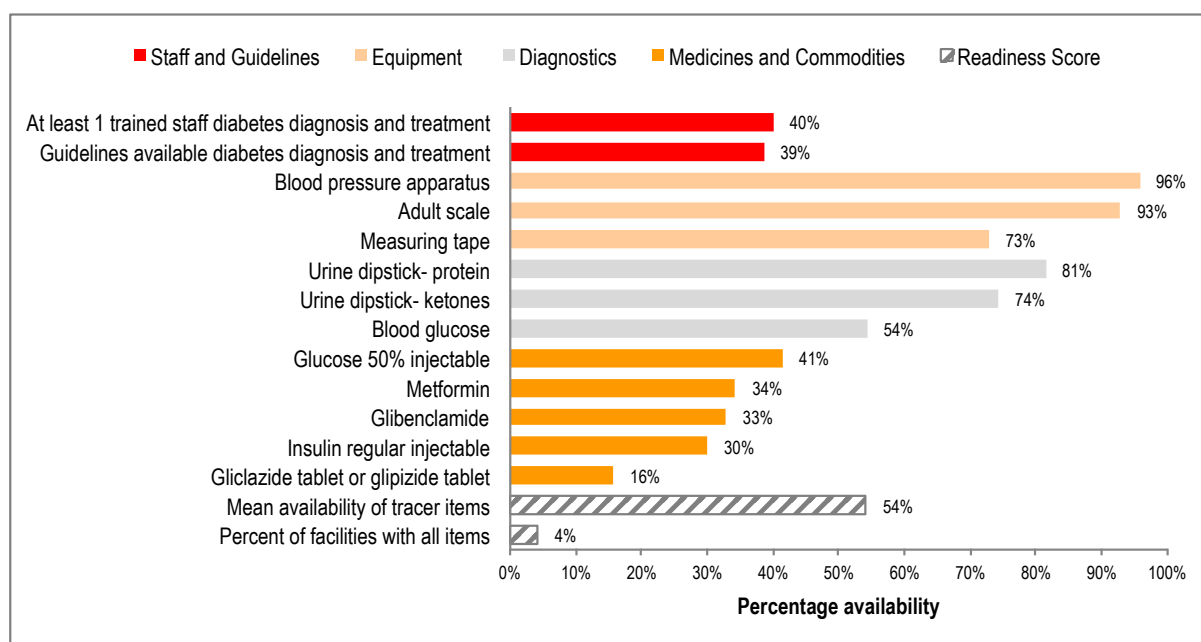
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Service readiness

Readiness to provide diabetes services was assessed based on the presence of the 13 tracer items found in **Table 76**. **Figure 97** shows the percentage availability of these tracer items at facilities offering diabetes services (N=70).

- Less than 50% of facilities had the medicines and commodities needed for diabetes services.
- Readiness in the equipment domain was highest, with 96% of facilities having a blood pressure apparatus, 93% having an adult scale and 73% having measuring tape.
- Only 4% of facilities had all items needed to provide diabetes services.

Figure 97. Percentage of facilities that have tracer items for diabetes services among facilities that provide this service (N=70), Somalia 2016



Service distribution

Table 78 shows availability of diabetes care tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 98** shows the variation in diabetes service readiness by region.

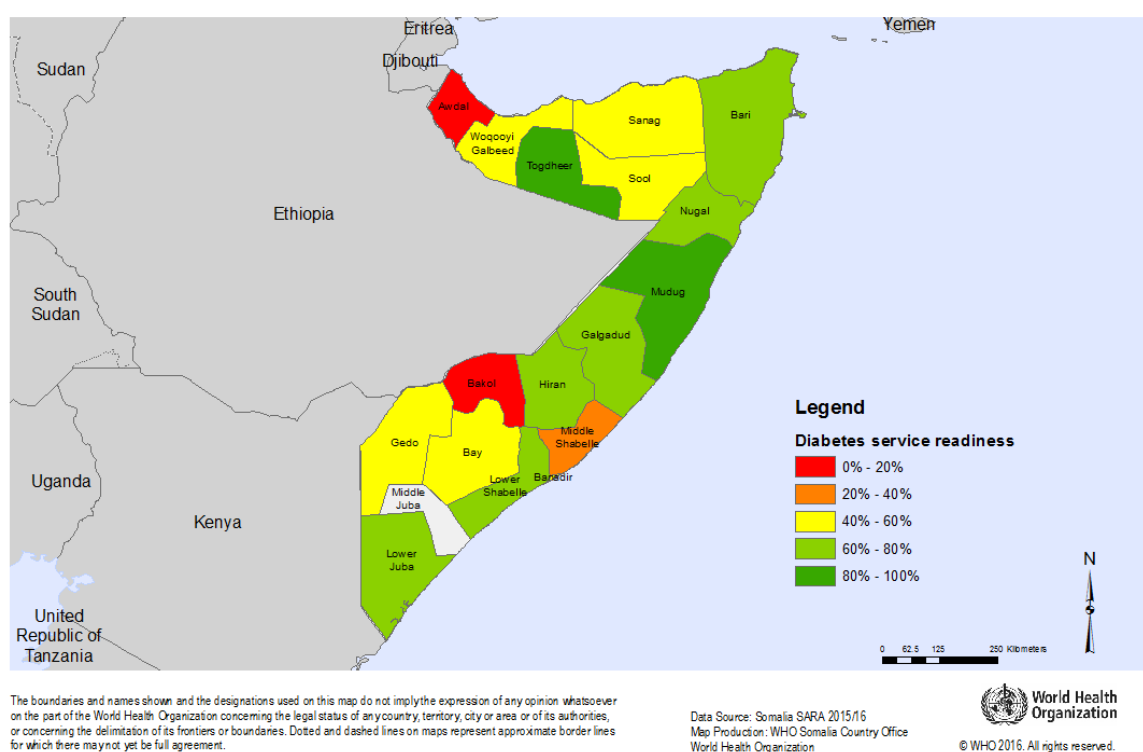
- Hospitals showed the greatest readiness to provide diabetes care services (62%), followed by health centers (49%). Referral health centers were least ready to provide this service (35%).
- Non-governmental facilities had greater mean availability of tracer items for diabetes care compared to governmental facilities (57% vs. 52%).
- Facilities providing diabetes care in urban locations had higher readiness scores compared to those located in rural areas (56% vs. 40%).
- In Somaliland, the Tigdher region performed highest in terms of readiness to provide diabetes care services (100%) and the Marodi-Jeh region score lowest (46%).
- Facilities in the Bari and Nugaal regions of Puntland had the greatest readiness to provide diabetes care services (77%) and the Sanaag region had the lowest readiness to provide this service (38%).
- In South Central, Lower Shabelle and Hiiraan regions had the best availability of tracer items for diabetes services (69%), while Benadir scored lowest (46%).

Table 78. Availability of tracer items for diabetes services at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=70), Somalia 2016

	Guidelines available diabetes diagnosis and treatment	At least 1 trained staff diabetes diagnosis and treatment	Blood pressure apparatus	Adult scale	Measuring tape	Blood glucose	Urine dipstick-protein	Urine dipstick-ketones	Metformin	Glibenclamide	Insulin regular injectable	Glucose 50% injectable	Gliclazide tablet or glipizide tablet	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions																
Somaliland	19%	19%	100%	100%	73%	65%	85%	85%	23%	27%	23%	31%	12%	4%	51%	44
Awdal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Marodi-Jeh	16%	16%	100%	100%	68%	53%	84%	84%	16%	21%	21%	21%	5%	0%	47%	19
Sahil	33%	33%	100%	100%	100%	100%	100%	100%	33%	33%	33%	33%	0%	0%	62%	3
Sanag	0%	0%	100%	100%	50%	100%	50%	50%	50%	50%	0%	50%	50%	0%	50%	2
Sool	0%	0%	100%	100%	100%	100%	100%	100%	0%	0%	0%	100%	0%	0%	54%	1
Togdher	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
Puntland	38%	38%	88%	100%	88%	50%	88%	75%	50%	50%	38%	63%	25%	0%	61%	8
Bari	100%	0%	0%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	0%	77%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	50%	50%	100%	100%	100%	50%	50%	50%	0%	50%	50%	50%	0%	0%	54%	2
Mudug	0%	50%	100%	100%	100%	50%	100%	50%	100%	100%	50%	100%	50%	0%	73%	2
Nugaal	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	100%	0%	0%	77%	1
Sanaag	0%	0%	100%	100%	50%	50%	100%	100%	0%	0%	0%	0%	0%	0%	38%	2
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	53%	56%	94%	86%	69%	47%	78%	67%	39%	33%	33%	44%	17%	6%	55%	36
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	33%	0%	100%	100%	67%	100%	100%	100%	33%	33%	33%	33%	0%	0%	56%	3
Benadir	53%	47%	93%	93%	80%	33%	60%	53%	20%	13%	13%	33%	7%	0%	46%	15
Galgadud	75%	75%	100%	100%	75%	100%	100%	100%	25%	25%	25%	25%	0%	0%	63%	4
Gedo	50%	75%	75%	50%	50%	0%	75%	25%	75%	75%	75%	75%	50%	0%	58%	4
Hiiraan	0%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	0%	0%	69%	1
Lower Juba	50%	75%	100%	75%	50%	50%	100%	75%	75%	50%	75%	75%	25%	0%	67%	4
Lower Shabelle	50%	50%	100%	100%	100%	50%	100%	100%	50%	50%	50%	50%	50%	50%	69%	2
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	50%	50%	100%	50%	50%	0%	50%	50%	0%	0%	0%	0%	0%	0%	31%	2
Mudug	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1

	Guidelines available diabetes diagnosis and treatment	At least 1 trained staff diabetes diagnosis and treatment	Blood pressure apparatus	Adult scale	Measuring tape	Blood glucose	Urine dipstick-protein	Urine dipstick-ketones	Metformin	Glibenclamide	Insulin regular injectable	Glucose 50% injectable	Gliclazide tablet or glipizide tablet	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Facility type																
Hospital	44%	44%	97%	94%	71%	74%	91%	85%	47%	44%	38%	56%	21%	6%	62%	34
Referral Health Center	0%	0%	100%	100%	100%	50%	50%	50%	0%	0%	0%	0%	0%	0%	35%	2
Health Center/MCH	37%	40%	93%	93%	77%	40%	77%	67%	23%	23%	23%	30%	10%	3%	49%	30
Health Post/PHU	25%	25%	100%	75%	50%	0%	50%	50%	25%	25%	25%	25%	25%	0%	38%	4
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority																
Government	30%	27%	95%	91%	73%	57%	84%	80%	30%	32%	30%	43%	16%	2%	53%	44
Non-government	54%	62%	96%	96%	73%	50%	77%	65%	42%	35%	31%	38%	15%	8%	57%	26
Urban/Rural																
Urban	41%	42%	95%	94%	75%	56%	83%	75%	36%	34%	31%	44%	16%	5%	56%	64
Rural	17%	17%	100%	83%	50%	33%	67%	67%	17%	17%	17%	17%	17%	0%	40%	6
Total	39%	40%	96%	93%	73%	54%	81%	74%	34%	33%	30%	41%	16%	4%	54%	70

Figure 98. Map of diabetes service readiness by region, Somalia 2016



4.3.2 Cardiovascular disease services

Cardiovascular disease (CVD) accounts for an estimated 6% of the deaths in Somalia²³. Tracer items needed to provide CVD services are outlined in **Table 79**.

Table 79. Tracer items needed to provide CVD services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for diagnosis and treatment of chronic cardiovascular conditions Staff trained in diagnosis and management of chronic cardiovascular conditions
Equipment	<ul style="list-style-type: none"> Blood pressure apparatus Adult scale Oxygen
Medicines and commodities	<ul style="list-style-type: none"> ACE inhibitors Hydrochlorothiazide tablet or other thiazide diuretic tablet Beta blockers Calcium channel blockers Aspirin Metformin

Service availability

Figure 99 shows the percentage of facilities offering cardiovascular disease diagnosis and/or management services by zone and region.

- Only 8% of all facilities in Somalia offered cardiovascular disease diagnosis and/or management services at the time of the survey.

- In all three zones, no region exceeded 25% availability of CVD services.

Figure 99. Percentage of facilities that offer CVD services, by zone and region (N=799), Somalia 2016

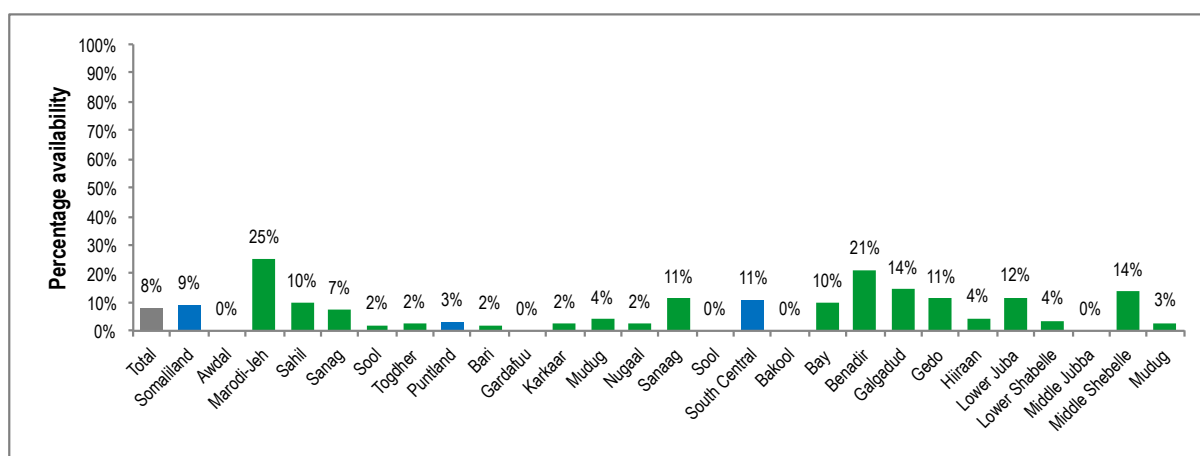


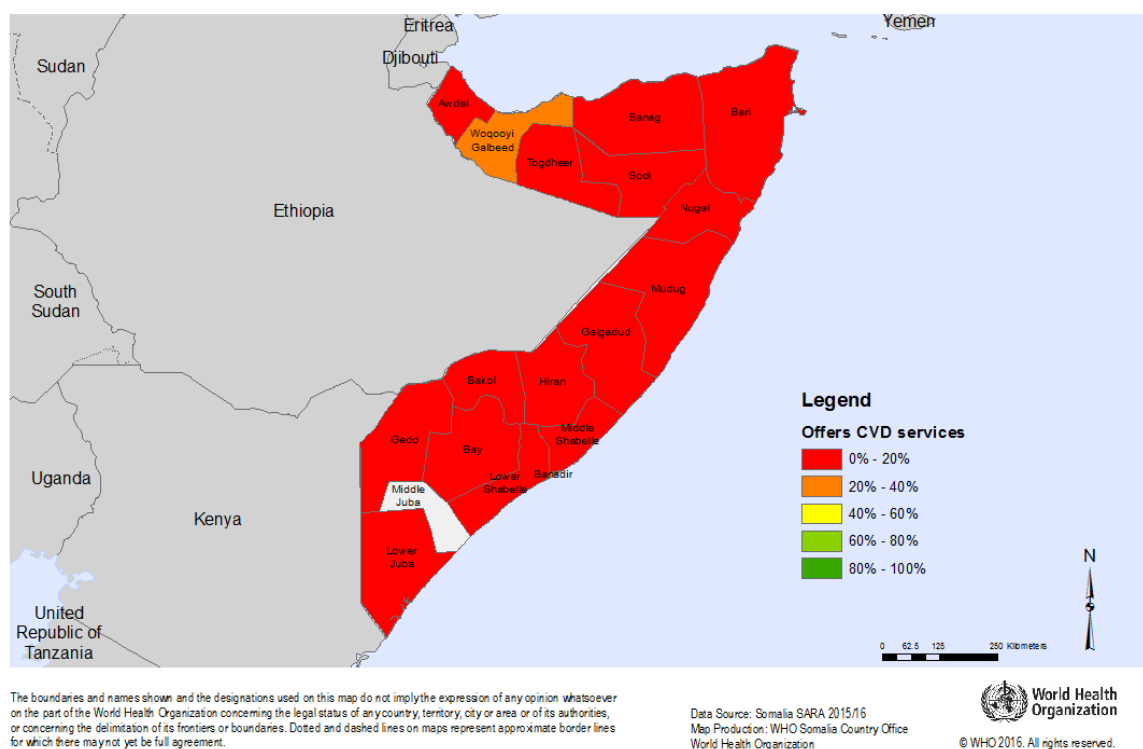
Table 80 shows the percentage of facilities offering cardiovascular disease diagnosis and/or management services by region, facility type, managing authority and urban vs. rural location while shows the variation in CVD service availability by region.

- Hospitals were more likely than any other type of facility to offer cardiovascular disease diagnosis and/or management services (53%). CVD services were not available in referral health centers and only 7% of health centers and 1% of health posts provided this service.
- Non-governmental facilities were slightly more likely to provide CVD services than governmental facilities (9% vs. 7%).
- Facilities in urban areas were much more likely to provide CVD services than those in rural areas (12% vs. 2%).
- In Somaliland, the greatest availability of CVD services was found in Marodi-Jeh (25%) and the lowest availability in the Awdal region (0%).
- In Puntland, the Sanaag region showed the greatest availability of CVD services and the Gardafuu and Sool regions had the lowest availability of this service (0%).
- The Benadir region of South Central had the greatest percentage of facilities offering CVD services (21%), and the Bakool region had the lowest percentage of facilities offering this service (0%).

Table 80. Availability of CVD services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers cardiovascular disease diagnosis and/or management	Total number of facilities
Regions		
Somaliland	9%	282
Awdal	0%	53
Marodi-Jeh	25%	72
Sahil	10%	31
Sanag	7%	28
Sool	2%	53
Togdher	2%	45
Puntland	3%	228
Bari	2%	48
Gardafuu	0%	17
Karkaar	2%	42
Mudug	4%	52
Nugaal	2%	41
Sanaag	11%	18
Sool	0%	10
South Central	11%	289
Bakool	0%	12
Bay	10%	31
Benadir	21%	57
Galgadud	14%	28
Gedo	11%	36
Hiiraan	4%	23
Lower Juba	12%	17
Lower Shabelle	4%	28
Middle Jubba	N/A	0
Middle Shebelle	14%	22
Mudug	3%	35
Facility type		
Hospital	53%	58
Referral Health Center	0%	9
Health Center/MCH	7%	383
Health Post/PHU	1%	294
TB Center	0%	55
Managing authority		
Government	7%	565
Non-government	9%	234
Urban/Rural		
Urban	12%	492
Rural	2%	307
Total	8%	799

Figure 100. Map of CVD service availability by region, Somalia 2016



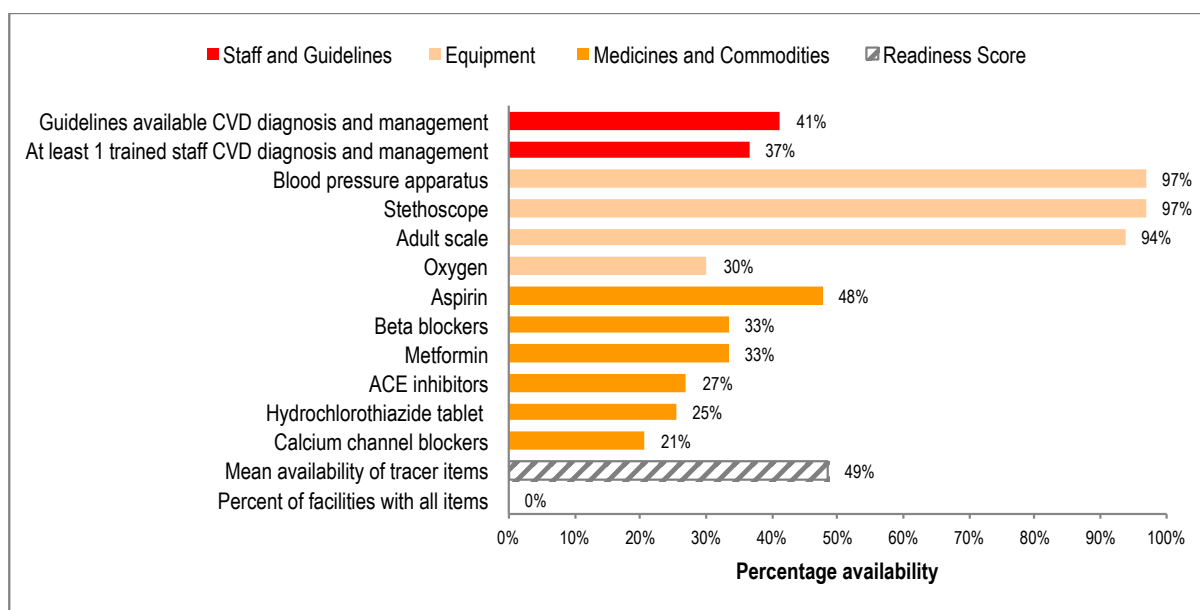
Service readiness

Readiness to provide cardiovascular disease diagnosis and/or management services was assessed based on the presence of the 12 tracer items found in **Table 79**.

Figure 101 shows the percentage availability of these tracer items at facilities offering cardiovascular disease services (N=63).

- Equipment items were the most readily available in facilities offering CVD services, with 97% having a blood pressure apparatus and stethoscope, and 94% having an adult scale. However, only 30% of facilities had oxygen.
- Guidelines and trained staff were low, with only 41% of facilities having guidelines for CVD and only 37% having at least one trained staff in CVD diagnosis and management.
- No facilities had all items needed to provide CVD services.

Figure 101. Percentage of facilities that have tracer items for CVD services among facilities that provide this service (N=63), Somalia 2016



Service distribution

Table 81 shows availability of cardiovascular disease services tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in CVD service readiness by region.

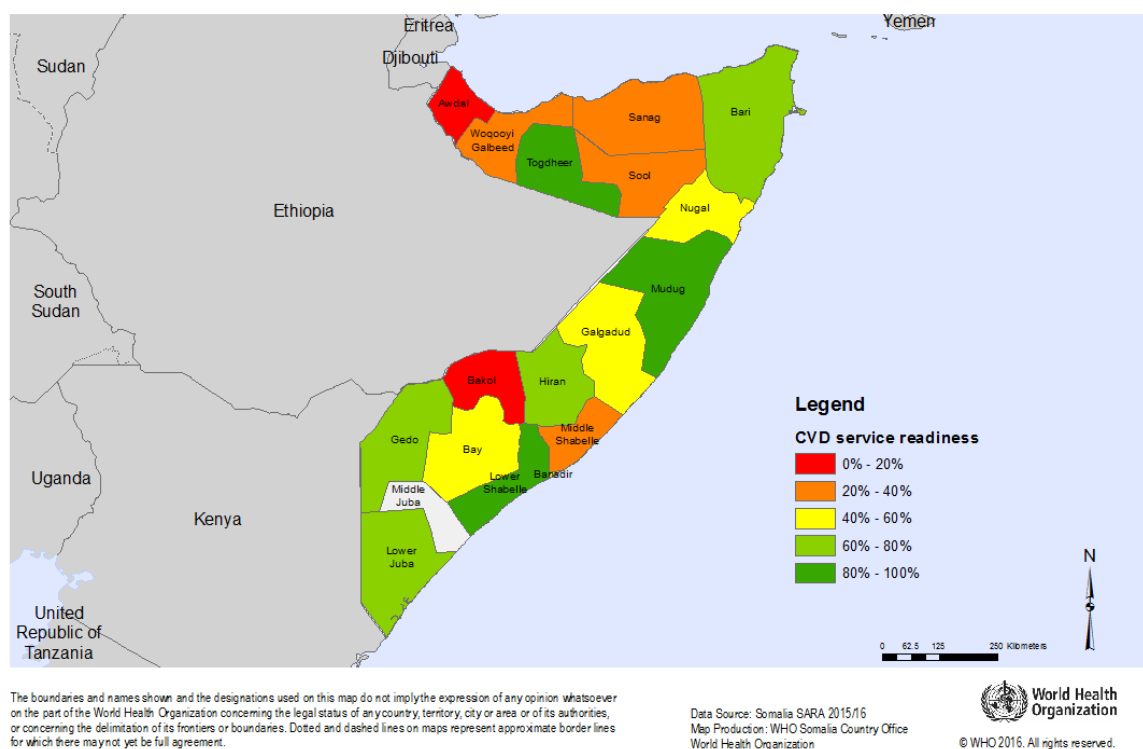
- Readiness to provide CVD services was greatest among hospitals (55%), followed by health centers (43%). Health posts were least ready out of all facility types offering this service (40%).
- Non-governmental facilities showed greater readiness to provide CVD services compared to governmental facilities (53% vs. 46%).
- Urban facilities were more like than rural facilities to be ready to provide CVD services (50% vs. 38%).
- In Somaliland, the region that showed the greatest readiness to provide CVD services was Togdher (83%), and the region with the poorest readiness was Sool (25%).
- In Puntland, the Mudug and Bari regions both showed high readiness scores for CVD services (75%), while the Sanaag region demonstrated the lowest readiness at 29%.
- The Lower Shabelle and Mudug regions of South Central zone had the highest readiness scores for CVD services (92%), while the Middle Shabelle region had the lowest readiness score (33%).

Table 81. Availability of tracer items for CVD services at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=63), Somalia 2016

	Guidelines available CVD diagnosis and management	At least 1 trained staff CVD diagnosis and management	Stethoscope	Blood pressure apparatus	Adult scale	Oxygen	ACE inhibitors	Hydrochlorothiazide tablet	Beta blockers	Calcium channel blockers	Aspirin	Metformin	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions															
Somaliland	24%	4%	100%	100%	96%	20%	24%	20%	24%	12%	40%	24%	0%	41%	25
Awdal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Marodi-Jeh	17%	6%	100%	100%	100%	11%	22%	17%	22%	11%	44%	17%	0%	39%	18
Sahil	33%	0%	100%	100%	67%	33%	33%	0%	33%	0%	33%	33%	0%	39%	3
Sanag	50%	0%	100%	100%	100%	100%	0%	50%	0%	0%	0%	50%	0%	46%	2
Sool	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	25%	1
Togdher	100%	0%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%	83%	1
Puntland	43%	57%	100%	86%	100%	14%	43%	29%	57%	29%	71%	57%	0%	57%	7
Bari	100%	0%	100%	0%	100%	0%	100%	100%	100%	100%	100%	100%	0%	75%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	100%	100%	100%	100%	100%	0%	0%	0%	100%	0%	100%	0%	0%	58%	1
Mudug	0%	100%	100%	100%	100%	0%	100%	50%	100%	50%	100%	100%	0%	75%	2
Nugaal	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	100%	100%	0%	58%	1
Sanaag	0%	0%	100%	100%	100%	50%	0%	0%	0%	0%	0%	0%	0%	29%	2
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	55%	58%	94%	97%	90%	42%	26%	29%	35%	26%	48%	35%	0%	53%	31
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	33%	0%	100%	100%	100%	67%	0%	0%	67%	0%	100%	33%	0%	50%	3
Benadir	58%	42%	100%	100%	100%	42%	17%	25%	17%	17%	42%	17%	0%	48%	12
Galgadud	50%	75%	100%	100%	100%	100%	25%	0%	0%	0%	0%	25%	0%	48%	4
Gedo	50%	75%	50%	75%	50%	0%	75%	75%	75%	75%	75%	75%	0%	63%	4
Hiiraan	0%	100%	100%	100%	100%	100%	0%	0%	100%	0%	100%	100%	0%	67%	1
Lower Juba	50%	100%	100%	100%	100%	0%	50%	50%	50%	50%	50%	50%	0%	63%	2
Lower Shabelle	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	92%	1
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	67%	67%	100%	100%	67%	0%	0%	0%	0%	0%	0%	0%	0%	33%	3
Mudug	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%	92%	1
Facility type															
Hospital	45%	42%	100%	97%	94%	48%	35%	32%	42%	26%	52%	48%	0%	55%	31

	Guidelines available CVD diagnosis and management	At least 1 trained staff CVD diagnosis and management	Stethoscope	Blood pressure apparatus	Adult scale	Oxygen	ACE inhibitors	Hydrochlorothiazide tablet	Beta blockers	Calcium channel blockers	Aspirin	Metformin	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	39%	32%	96%	96%	96%	14%	18%	18%	21%	14%	46%	18%	0%	43%	28
Health Post/PHU	25%	25%	75%	100%	75%	0%	25%	25%	50%	25%	25%	25%	0%	40%	4
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority															
Government	34%	22%	95%	95%	93%	22%	29%	29%	32%	20%	51%	29%	0%	46%	41
Non-government	55%	64%	100%	100%	95%	45%	23%	18%	36%	23%	41%	41%	0%	53%	22
Urban/Rural															
Urban	44%	39%	98%	96%	95%	33%	26%	25%	33%	21%	51%	35%	0%	50%	57
Rural	17%	17%	83%	100%	83%	0%	33%	33%	33%	17%	17%	17%	0%	38%	6
Total	41%	37%	97%	97%	94%	30%	27%	25%	33%	21%	48%	33%	0%	49%	63

Figure 102. Map of CVD service readiness by region, Somalia 2016



4.3.3 Chronic respiratory disease services

Mortality from chronic respiratory diseases (CRD) in Somalia is estimated at 17 per 100,000²⁵. Tracer items necessary for health facilities providing CRD services are outlined in **Table 82**.

Table 82. Tracer items needed to provide CRD services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for diagnosis and management of CRD Staff trained in CRD diagnosis and management
Equipment	<ul style="list-style-type: none"> Stethoscope Peak flow meter Spacers for inhalers and oxygen
Medicines and commodities	<ul style="list-style-type: none"> Salbutamol inhaler Beclomethasone inhaler Prednisolone Hydrocortisone Epinephrine

Service availability

Figure 103 shows the percentage of facilities offering chronic respiratory disease diagnosis and/or management services.

- Only 9% of all facilities in Somalia offered chronic respiratory disease diagnosis and/or management services at the time of the survey.
- The greatest availability of CRD services in any region was 26%.

²⁵ University of Washington, Institute for Health Metrics and Evaluation, 2016. Global Health Data Exchange 2015 Report.

Figure 103. Percentage of facilities that offer CRD services, by zone and region (N=799), Somalia 2016

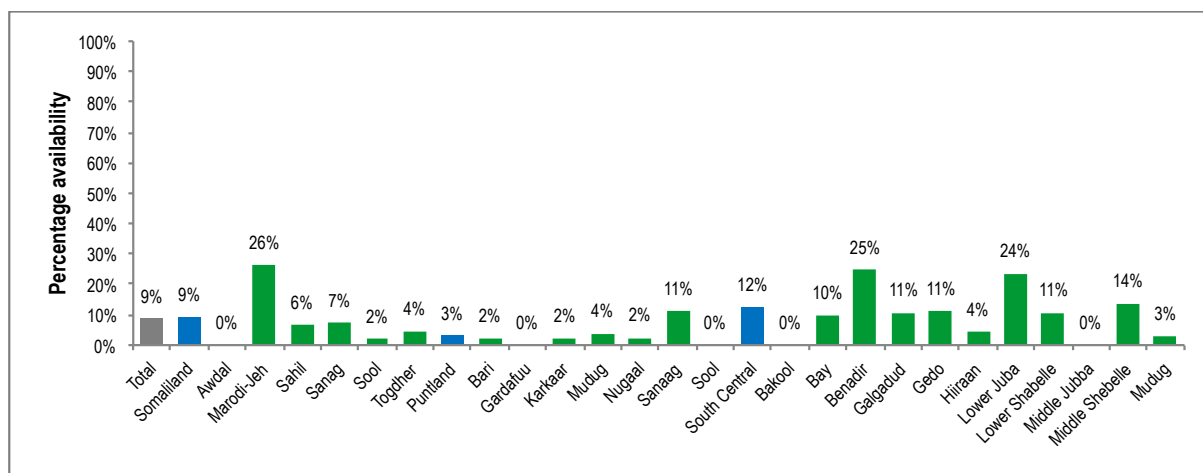


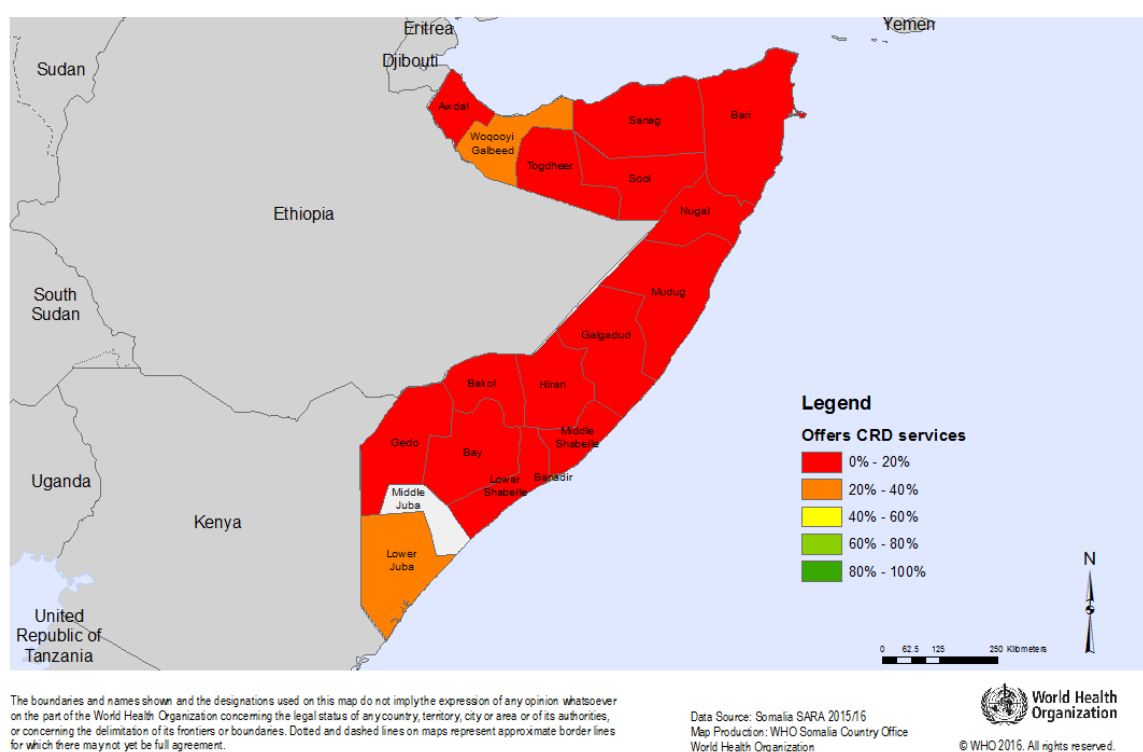
Table 83 shows the percentage of facilities offering CRD services by region, facility type, managing authority and urban vs. rural location while shows the variation in CRD service availability by region.

- CRD services were most available in hospitals compared to other facility types (53%) and least available in referral health centers (0%).
- Non-governmental facilities were more likely to provide CRD services compared to governmental facilities (12% vs. 7%).
- Facilities in urban areas were much more likely than those in rural areas to offer CRD services (13% vs. 2%).
- The Marodi-Jeh region in Somaliland had the greatest availability of CRD services (26%) and the Awdal region had the lowest availability (0%).
- The Sanaag region was most likely to offer CRD services in Puntland (11%), compared to Gardafuu and Sool, the regions least likely to offer this service (0%).
- In the Benadir region of the South Central zone, 25% of facilities offered CRD services, while no facilities in Bakool provided this service.

Table 83. Availability of CRD services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers chronic respiratory disease diagnosis and/or management	Total number of facilities
Regions		
Somaliland	9%	282
Awdal	0%	53
Marodi-Jeh	26%	72
Sahil	6%	31
Sanag	7%	28
Sool	2%	53
Togdher	4%	45
Puntland	3%	228
Bari	2%	48
Gardafuu	0%	17
Karkaar	2%	42
Mudug	4%	52
Nugaal	2%	41
Sanaag	11%	18
Sool	0%	10
South Central	12%	289
Bakool	0%	12
Bay	10%	31
Benadir	25%	57
Galgadud	11%	28
Gedo	11%	36
Hiiraan	4%	23
Lower Juba	24%	17
Lower Shabelle	11%	28
Middle Jubba	N/A	0
Middle Shebelle	14%	22
Mudug	3%	35
Facility type		
Hospital	53%	58
Referral Health Center	0%	9
Health Center/MCH	9%	383
Health Post/PHU	1%	294
TB Center	2%	55
Managing authority		
Government	7%	565
Non-government	12%	234
Urban/Rural		
Urban	13%	492
Rural	2%	307
Total	9%	799

Figure 104. Map of CRD service availability by region, Somalia 2016

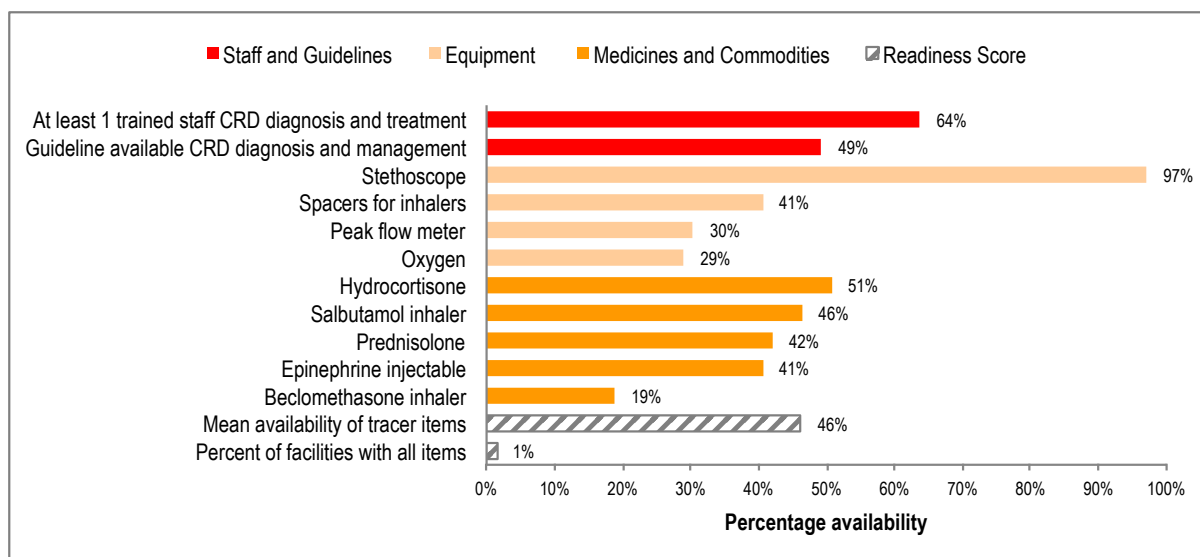


Service readiness

Readiness to provide CRD services was assessed based on the presence of the 11 tracer items found in Table 82. Figure 105 shows the percentage availability of these tracer items at facilities offering CRD services (N=69).

- More than half of facilities had at least one trained staff in CRD (64%), but less than half had guidelines available (49%).
- Less than half of facilities had the medicines and commodities needed for CRD, with just over half having hydrocortisone (51%).
- Only 1% of facilities had all items needed to provide CRD services.

Figure 105. Percentage of facilities that have tracer items for CRD services among facilities that provide this service (N=69), Somalia 2016



Service distribution

Table 84 shows availability of CRD services tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 106** shows the variation in CRD service readiness by region.

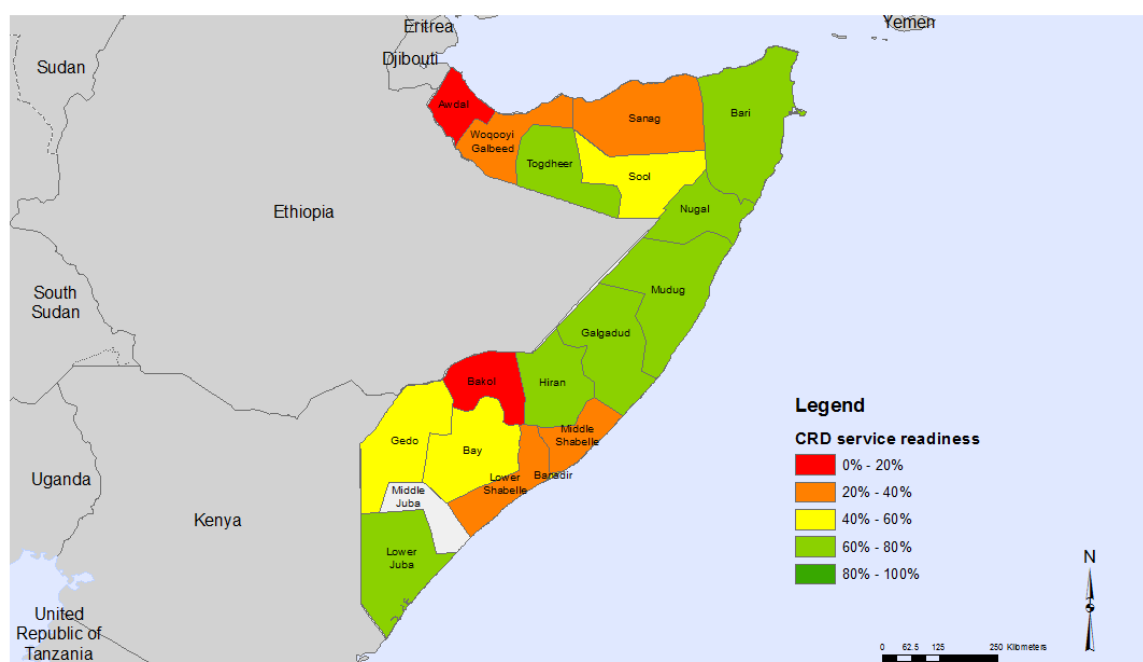
- Hospitals demonstrated the greatest readiness to provide CRD services (55%), followed by health centers (44%). TB centers were least ready to provide this service (16%).
- Non-governmental facilities were slightly more ready than governmental facilities to provide CRD services (50% vs. 44%).
- Readiness to provide CRD services was much higher among urban facilities compared to rural ones (47% vs. 36%).
- In Somaliland, mean availability of tracer items needed for CRD was highest in the Togdher region (64%) and lowest in the Sanag region (23%).
- The Bari and Nugaal regions of Puntland showed the greatest readiness to provide CRD services (73%) and the Sanaag region was least ready to provide this service.
- In South Central, the Mudug region had the greatest availability of tracer items for CRD (91%), and the Middle Shabelle region had the lowest availability of these items (30%).

Table 84. Availability of tracer items for CRD services readiness at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=69), Somalia 2016

	Guideline available CRD diagnosis and management	At least 1 trained staff CRD diagnosis and treatment	Stethoscope	Peak flow meter	Spacers for inhalers	Oxygen	Salbutamol inhaler	Beclomethasone inhaler	Prednisolone	Hydrocortisone	Epinephrine injectable	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions														
Somaliland	35%	54%	100%	15%	42%	19%	35%	8%	27%	50%	19%	0%	37%	26
Awdal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Marodi-Jeh	26%	53%	100%	16%	37%	16%	37%	5%	26%	53%	11%	0%	34%	19
Sahil	50%	50%	100%	0%	50%	50%	0%	0%	50%	50%	50%	0%	41%	2
Sanag	0%	0%	100%	0%	50%	50%	0%	0%	0%	0%	50%	0%	23%	2
Sool	100%	100%	100%	0%	100%	0%	0%	0%	0%	100%	0%	0%	45%	1
Togdher	100%	100%	100%	50%	50%	0%	100%	50%	50%	50%	50%	0%	64%	2
Puntland	43%	43%	100%	43%	29%	14%	57%	43%	43%	71%	57%	0%	49%	7
Bari	100%	0%	100%	100%	0%	0%	100%	100%	100%	100%	100%	0%	73%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	100%	100%	100%	0%	0%	0%	100%	100%	100%	100%	0%	0%	64%	1
Mudug	0%	50%	100%	0%	0%	0%	50%	50%	50%	100%	100%	0%	45%	2
Nugaal	100%	100%	100%	100%	100%	0%	100%	0%	0%	100%	100%	0%	73%	1
Sanaag	0%	0%	100%	50%	50%	50%	0%	0%	0%	0%	0%	0%	23%	2
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	61%	75%	94%	39%	42%	39%	53%	22%	53%	47%	53%	3%	53%	36
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	0%	0%	100%	0%	33%	67%	67%	0%	100%	67%	33%	0%	42%	3
Benadir	71%	86%	100%	43%	43%	43%	43%	7%	43%	36%	50%	7%	51%	14
Galgadud	67%	67%	100%	67%	67%	100%	67%	0%	33%	33%	67%	0%	61%	3
Gedo	75%	75%	50%	25%	25%	0%	75%	75%	75%	75%	100%	0%	59%	4
Hiiraan	100%	100%	100%	0%	0%	100%	100%	0%	100%	100%	0%	0%	64%	1
Lower Juba	50%	75%	100%	75%	50%	25%	75%	75%	75%	75%	75%	0%	68%	4

	Guideline available CRD diagnosis and management	At least 1 trained staff CRD diagnosis and treatment	Stethoscope	Peak flow meter	Spacers for inhalers	Oxygen	Salbutamol inhaler	Beclomethasone inhaler	Prednisolone	Hydrocortisone	Epinephrine injectable	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Lower Shabelle	33%	100%	100%	0%	0%	33%	33%	0%	33%	33%	33%	0%	36%	3
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	67%	67%	100%	33%	67%	0%	0%	0%	0%	0%	0%	0%	30%	3
Mudug	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	91%	1
Facility type														
Hospital	48%	52%	100%	32%	58%	48%	58%	26%	45%	71%	65%	0%	55%	31
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	50%	76%	97%	29%	29%	15%	38%	12%	41%	32%	21%	3%	40%	34
Health Post/PHU	67%	33%	67%	33%	0%	0%	33%	33%	33%	67%	33%	0%	36%	3
TB Center	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	1
Managing authority														
Government	40%	60%	95%	24%	36%	24%	48%	17%	40%	60%	38%	0%	44%	42
Non-government	63%	70%	100%	41%	48%	37%	44%	22%	44%	37%	44%	4%	50%	27
Urban/Rural														
Urban	49%	65%	98%	32%	44%	32%	46%	19%	41%	49%	43%	2%	47%	63
Rural	50%	50%	83%	17%	0%	0%	50%	17%	50%	67%	17%	0%	36%	6
Total	49%	64%	97%	30%	41%	29%	46%	19%	42%	51%	41%	1%	46%	69

Figure 106. Map of CRD service readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
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4.3.4 Cervical cancer care

While Human Papillomavirus (HPV) prevalence data are not available, it is estimated that every year, approximately 967 women are diagnosed with cervical cancer in Somalia and 546 die from the disease²⁶. Items necessary for health facilities to provide cervical cancer care are outlined in **Table 85**.

Table 85. Tracer items needed to provide cervical cancer services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for cervical cancer prevention and control Staff trained in cervical cancer prevention and control
Equipment	<ul style="list-style-type: none"> Speculum
Diagnostics	<ul style="list-style-type: none"> Diagnostic capacity for acetic acid

Service availability

Figure 107 shows the percentage of facilities offering cervical cancer prevention and control services by zone and region.

- Cervical cancer services were very limited in Somalia at the time of the survey, with only 2% offering this service nationally.
- The greatest availability of cervical cancer services in any one region was only 7%.

Figure 107. Percentage of facilities that offer cervical cancer services, by zone and region (N=799), Somalia 2016

²⁶ ICO Information Centre on HPV and Cancer, 2016. Somalia Fact Sheet 2016.

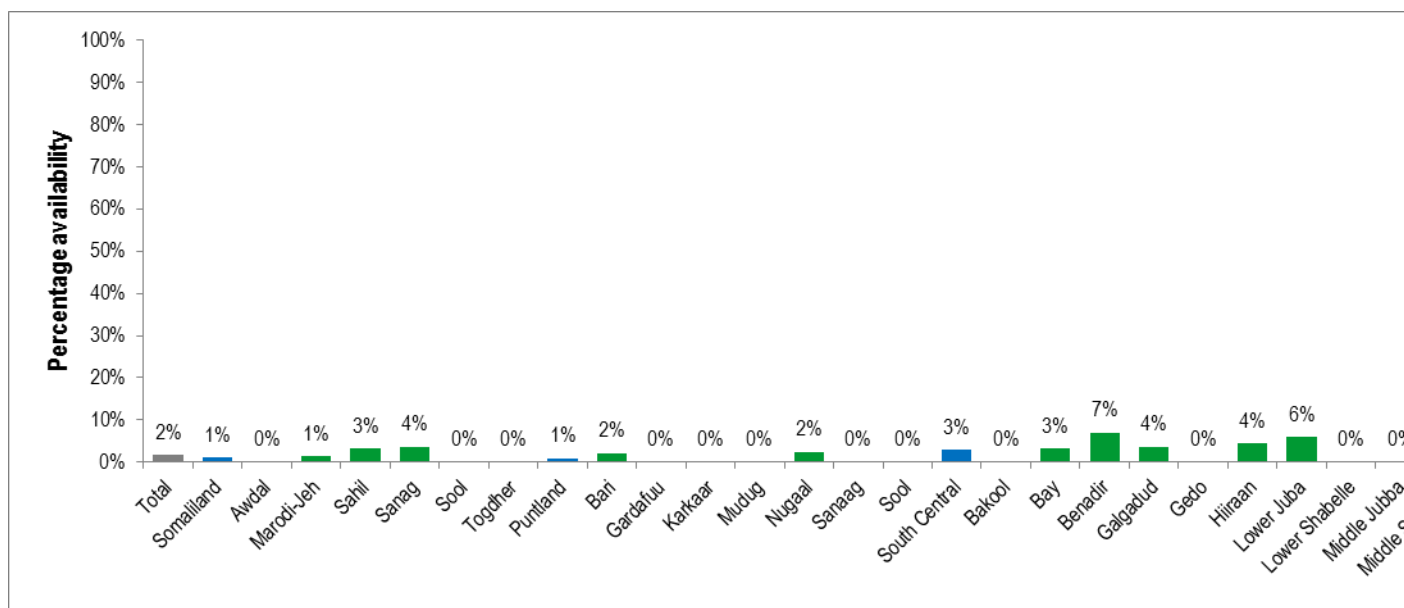


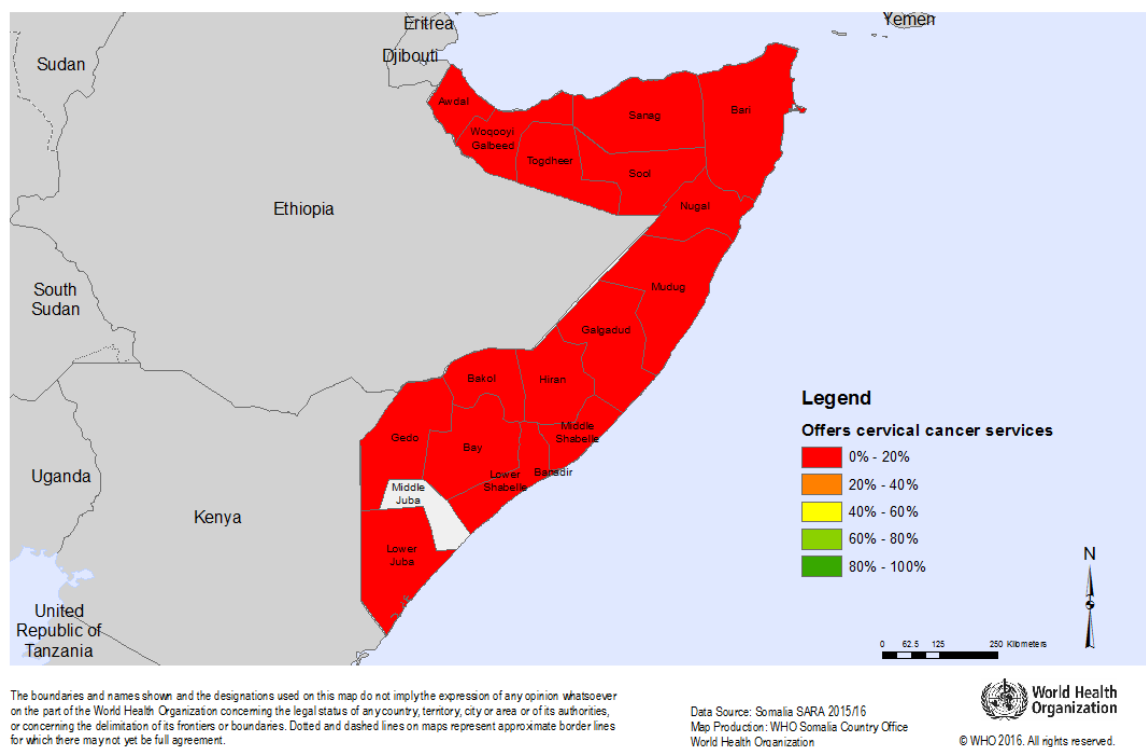
Table 86 shows the percentage of facilities offering cervical cancer prevention and control services by region, facility type, managing authority and urban vs. rural location while shows the variation in cervical cancer prevention and control service availability by region.

- Hospitals and health centers were the only facility types offering cervical cancer services (19% and 1%, respectively).
- Non-governmental facilities had greater availability of cervical cancer services compared to governmental facilities (2% vs. 1%).
- Cervical cancer services were only available in urban facilities (3%) and not in rural ones.
- In Somaliland, facilities in the Sanag region were most likely to offer cervical cancer diagnosis (4%), while the Awdal, Sool and Togdher regions were least likely to offer this service (0%).
- The Nugaal and Bari regions in Puntland were the only two areas offering cervical cancer services (2%).
- The Benadir region was most likely to offer cervical cancer services in South Central (7%), while the Bakool, Gedo, Lower Shabelle, Middle Shabelle and Mudug regions did not offer this service at all.

Table 86. Availability of cervical cancer services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers cervical cancer diagnosis	Total number of facilities
Regions		
Somaliland	1%	282
Awdal	0%	53
Marodi-Jeh	1%	72
Sahil	3%	31
Sanag	4%	28
Sool	0%	53
Togdher	0%	45
Puntland	1%	228
Bari	2%	48
Gardafuu	0%	17
Karkaar	0%	42
Mudug	0%	52
Nugaal	2%	41
Sanaag	0%	18
Sool	0%	10
South Central	3%	289
Bakool	0%	12
Bay	3%	31
Benadir	7%	57
Galgadud	4%	28
Gedo	0%	36
Hiiraan	4%	23
Lower Juba	6%	17
Lower Shabelle	0%	28
Middle Jubba	N/A	0
Middle Shebelle	0%	22
Mudug	0%	35
Facility type		
Hospital	19%	58
Referral Health Center	0%	9
Health Center/MCH	1%	383
Health Post/PHU	0%	294
TB Center	0%	55
Managing authority		
Government	1%	565
Non-government	2%	234
Urban/Rural		
Urban	3%	492
Rural	0%	307
Total	2%	799

Figure 108. Map of cervical cancer service availability by region, Somalia 2016



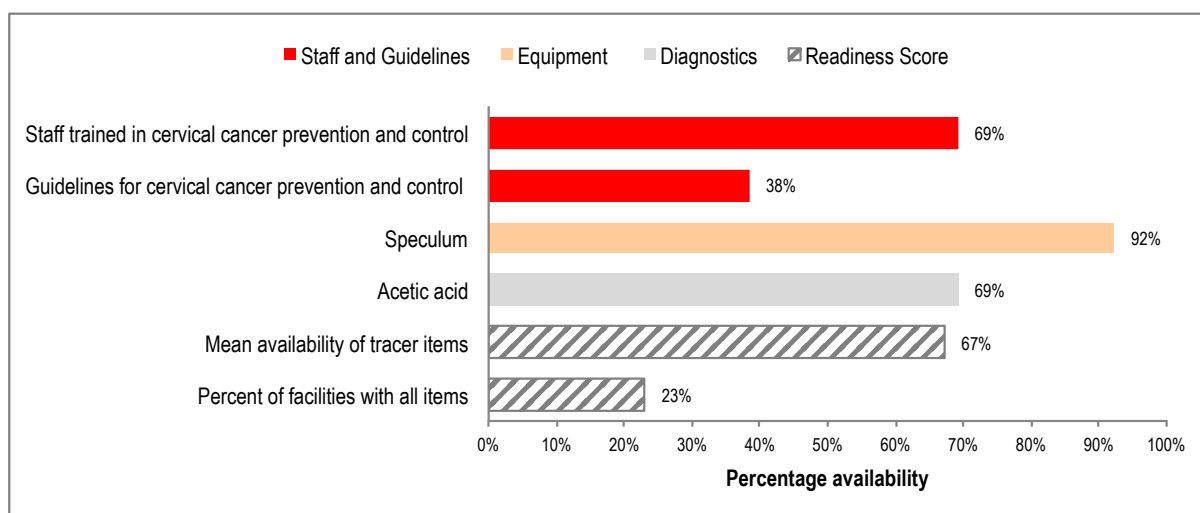
Service readiness

Readiness to provide cervical cancer prevention and control services was assessed based on the presence of the 4 tracer items found in **Table 85**.

Figure 109 shows the percentage availability of these tracer items at facilities offering cervical cancer services (N=13).

- Although few facilities offered cervical cancer services, mean availability of tracer items needed within those facilities was fairly high (67%).
- The equipment needed to provide cervical cancer services was found in the majority of facilities offering this service (92%).

Figure 109. Percentage of facilities that have tracer items for cervical cancer services among facilities that provide this service (N=13), Somalia 2016



Service distribution

Table 87 shows availability of cervical cancer services tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in cervical cancer service readiness by region.

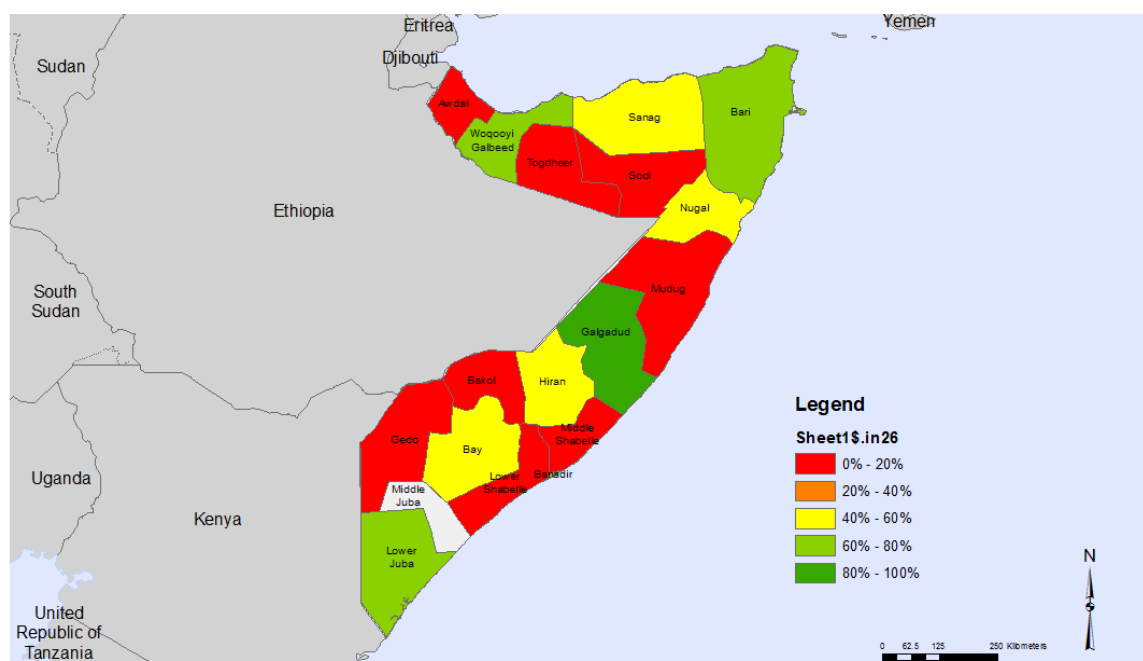
- Health centers had the greatest availability of tracer items needed for cervical cancer services (88%).
- Non-governmental facilities were much more likely than governmental facilities to be ready to provide cervical cancer services (80% vs. 59%).
- Cervical cancer services were only found in urban facilities.
- In Somaliland, readiness to provide cervical cancer services was greatest in the Marodi-Jeh region (75%) and lowest in the Sahil and Sanag regions (50%).
- The Bari region of Puntland showed the greatest readiness to provide cervical cancer services (75%) and the Nugaal region showed the lowest readiness (50%).
- In South Central, readiness to provide cervical cancer services was highest in the Galgadud region and lowest in the Bay and Hiiraan regions (50%).

Table 87. Availability of tracer items for cervical cancer services readiness at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=13), Somalia 2016

	Guidelines for cervical cancer prevention and control	Staff trained in cervical cancer prevention and control	Speculum	Acetic acid	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions							
Somaliland	0%	67%	100%	67%	0%	58%	3
Awdal	N/A	N/A	N/A	N/A	N/A	N/A	0
Marodi-Jeh	0%	100%	100%	100%	0%	75%	1
Sahil	0%	0%	100%	100%	0%	50%	1
Sanag	0%	100%	100%	0%	0%	50%	1
Sool	N/A	N/A	N/A	N/A	N/A	N/A	0
Togdher	N/A	N/A	N/A	N/A	N/A	N/A	0
Puntland	50%	50%	100%	50%	0%	63%	2
Bari	100%	0%	100%	100%	0%	75%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	N/A	N/A	N/A	N/A	N/A	N/A	0
Mudug	N/A	N/A	N/A	N/A	N/A	N/A	0
Nugaal	0%	100%	100%	0%	0%	50%	1
Sanaag	N/A	N/A	N/A	N/A	N/A	N/A	0
Sool	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	50%	75%	88%	75%	38%	72%	8
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	0%	0%	100%	100%	0%	50%	1
Benadir	75%	75%	75%	75%	50%	75%	4
Galgadud	100%	100%	100%	100%	100%	100%	1
Gedo	N/A	N/A	N/A	N/A	N/A	N/A	0
Hiiraan	0%	100%	100%	0%	0%	50%	1
Lower Juba	0%	100%	100%	100%	0%	75%	1
Lower Shabelle	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	N/A	N/A	N/A	N/A	N/A	N/A	0
Mudug	N/A	N/A	N/A	N/A	N/A	N/A	0
Facility type							

	Guidelines for cervical cancer prevention and control	Staff trained in cervical cancer prevention and control	Speculum	Acetic acid	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Hospital	27%	64%	100%	64%	18%	64%	11
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	100%	100%	50%	100%	50%	88%	2
Health Post/PHU	N/A	N/A	N/A	N/A	N/A	N/A	0
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority							
Government	25%	50%	100%	63%	13%	59%	8
Non-government	60%	100%	80%	80%	40%	80%	5
Urban/Rural							
Urban	38%	69%	92%	69%	23%	67%	13
Rural	N/A	N/A	N/A	N/A	N/A	N/A	0
Total	38%	69%	92%	69%	23%	67%	13

Figure 110. Map of cervical cancer service readiness by region, Somalia 2016



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4.4 Surgical care

Improving efficacy, safety, and equity in the provision of surgical care is an increasingly recognized priority in low and middle income countries. Basic surgical care for minor procedures can be performed at the primary care level, whereas more comprehensive surgical care requiring a well-equipped major operating theatre is generally performed only at the district hospital level or above. In this survey, assessments were done for basic and comprehensive surgical care.

4.4.1 Basic surgical services

Basic surgical care includes the following key services: incision and drainage, wound debridement, suturing, acute burn management, closed treatment of fracture, cricothyroidotomy, male circumcision, and chest tube insertion. Tracer items needed to provide basic surgical care services are outlined in **Table 88**.

Table 88. Tracer items needed to provide basic surgical care services

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none">• Guidelines for Integrated management of emergency and essential surgical care (IMEESC)• Staff trained in IMEESC in the past two years
Equipment	<ul style="list-style-type: none">• Needle holder• Scalpel handle with blade• Retractor, surgical scissors• Nasogastric tubes• Tourniquet• Adult and pediatric resuscitators• Suction apparatus• Oxygen• Skin disinfectant• Sutures• Ketamine

Service availability

Figure 111 shows the percentage of facilities offering basic surgical care as well as the key services.

- Only 12% of facilities in Somalia offered basic surgical care services at the time of the survey.
- The most available surgical services were incision and drainage of abscesses, suturing, acute burn management and wound debridement (11%) and the least available services were Cricothyroidotomy and biopsy of lymph node/mass/other (2%).

Figure 111. Percentage of facilities that offer basic surgical services (N=799), Somalia 2016

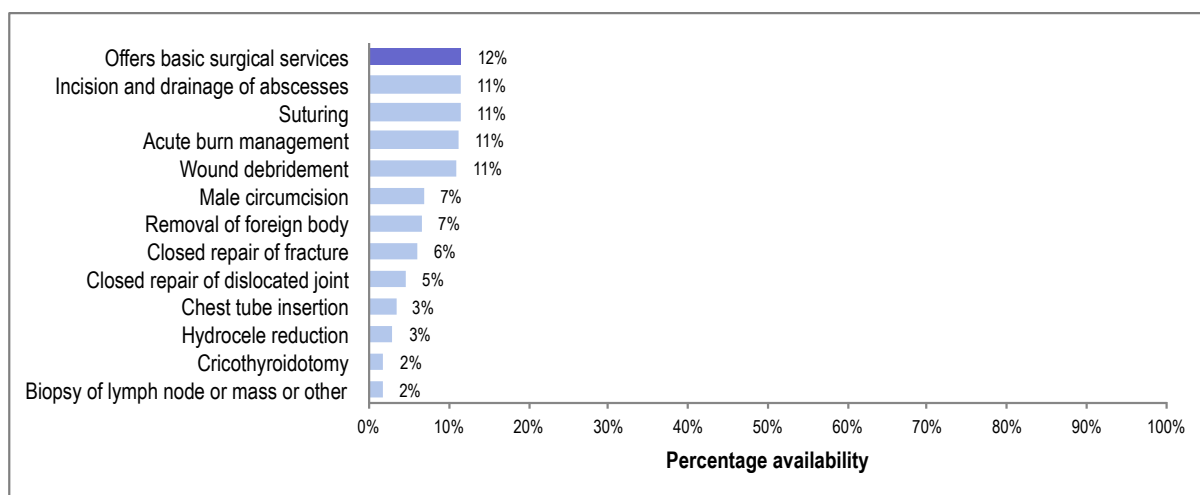


Table 89 shows the percentage of facilities offering basic surgical services by region, facility type, managing authority and urban vs. rural location while shows the variation in basic surgical service availability by region.

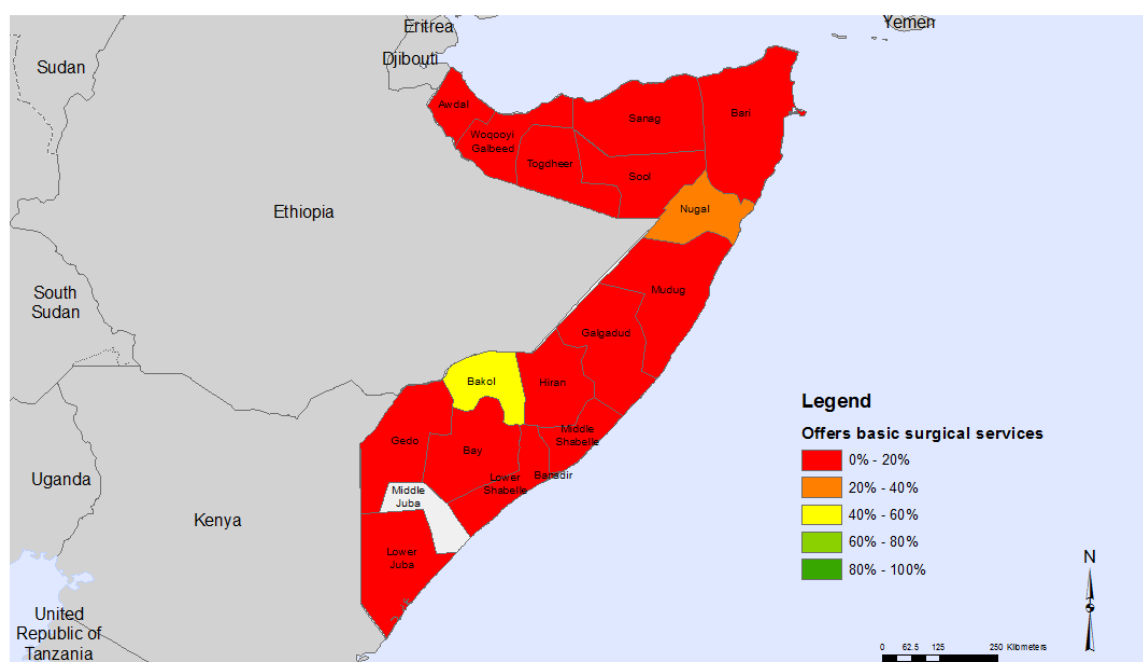
- Basic surgical services were most available in hospitals compared to other types of facilities (60%), and least available in TB centers (0%).
- Little difference was found with respect to availability of basic surgical services between governmental and non-governmental facilities (12% compared to 11%, respectively).
- Facilities in urban areas were more likely to offer basic surgical services compared to those in rural areas (16% vs. 5%).
- In Somaliland, the greatest availability of basic surgical services was found in the Marodi-Jeh region (14%), and lowest availability of these services was found in the Sool and Togdher regions (2%).
- The Nugaal region of Puntland showed the greatest availability of basic surgical services (39%), and the Gardafuu and Sool regions had the lowest availability (0%).
- In South Central, facilities in the Bakool region were most likely to offer basic surgical services (50%), and facilities in the Hiiraan and Middle Shabelle regions were least likely to offer these services (0%).

Table 89. Availability of basic surgical services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers basic surgical services	Incision and drainage of abscesses	Wound debridement	Acute burn management	Suturing	Closed repair of fracture	Cricothyroidotomy	Male circumcision	Hydrocele reduction	Chest tube insertion	Closed repair of dislocated joint	Biopsy of lymph node or mass or other	Removal of foreign body	Total number of facilities
Regions														
Somaliland	8%	8%	7%	7%	8%	4%	1%	5%	2%	2%	2%	0%	5%	282
Awdal	8%	8%	8%	6%	8%	2%	0%	4%	2%	2%	0%	0%	0%	53
Marodi-Jeh	14%	14%	13%	13%	13%	6%	0%	7%	4%	1%	1%	0%	11%	72
Sahil	13%	13%	10%	13%	13%	10%	0%	13%	6%	3%	6%	0%	6%	31
Sanag	11%	11%	7%	11%	11%	4%	4%	7%	0%	4%	4%	0%	7%	28
Sool	2%	2%	2%	2%	2%	2%	0%	2%	0%	0%	2%	0%	0%	53
Togdher	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	45
Puntland	15%	15%	15%	15%	15%	7%	1%	8%	2%	2%	4%	2%	8%	228
Bari	4%	4%	4%	2%	4%	4%	2%	2%	2%	2%	4%	4%	4%	48
Gardafuu	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17
Karkaar	17%	17%	17%	17%	17%	5%	0%	12%	0%	0%	0%	0%	12%	42
Mudug	12%	12%	12%	12%	12%	6%	0%	10%	6%	4%	6%	0%	8%	52
Nugaal	39%	37%	37%	39%	39%	12%	2%	10%	0%	2%	5%	2%	15%	41
Sanaag	22%	22%	22%	22%	22%	17%	0%	22%	0%	6%	17%	6%	11%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	12%	12%	11%	12%	12%	8%	4%	7%	4%	6%	7%	3%	7%	289
Bakool	50%	50%	50%	50%	50%	42%	0%	25%	8%	0%	25%	0%	33%	12
Bay	10%	10%	10%	10%	10%	10%	0%	10%	3%	6%	6%	0%	6%	31
Benadir	14%	14%	14%	14%	14%	7%	5%	7%	7%	9%	7%	7%	9%	57
Galgadud	18%	18%	18%	18%	18%	11%	11%	14%	4%	14%	14%	4%	7%	28
Gedo	19%	19%	17%	19%	19%	8%	6%	14%	6%	6%	8%	6%	11%	36
Hiiraan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23
Lower Juba	12%	12%	12%	12%	12%	12%	12%	6%	12%	12%	12%	6%	12%	17
Lower Shabelle	4%	4%	4%	4%	4%	4%	0%	0%	4%	4%	4%	0%	0%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22
Mudug	6%	6%	6%	6%	6%	6%	3%	3%	3%	3%	6%	3%	6%	35

	Offers basic surgical services	Incision and drainage of abscesses	Wound debridement	Acute burn management	Suturing	Closed repair of fracture	Cricothyroidotomy	Male circumcision	Hydrocele reduction	Chest tube insertion	Closed repair of dislocated joint	Biopsy of lymph node or mass or other	Removal of foreign body	Total number of facilities
Facility type														
Hospital	60%	60%	59%	60%	60%	47%	21%	48%	33%	40%	47%	19%	43%	58
Referral Health Center	44%	44%	33%	44%	44%	11%	0%	33%	0%	0%	0%	0%	11%	9
Health Center/MCH	12%	12%	11%	11%	12%	5%	1%	5%	1%	1%	2%	0%	7%	383
Health Post/PHU	2%	2%	2%	2%	2%	1%	0%	1%	0%	0%	1%	1%	1%	294
TB Center	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55
Managing authority														
Government	12%	12%	11%	11%	12%	6%	2%	7%	3%	3%	4%	2%	7%	565
Non-government	11%	11%	10%	11%	11%	7%	3%	6%	3%	4%	6%	2%	5%	234
Urban/Rural														
Urban	16%	16%	15%	15%	16%	9%	3%	10%	4%	5%	7%	3%	10%	492
Rural	5%	5%	4%	4%	5%	2%	0%	2%	1%	0%	1%	0%	1%	307
Total	12%	11%	11%	11%	11%	6%	2%	7%	3%	3%	5%	2%	7%	799

Figure 112. Map of basic surgical service availability by region, Somalia 2016



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Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

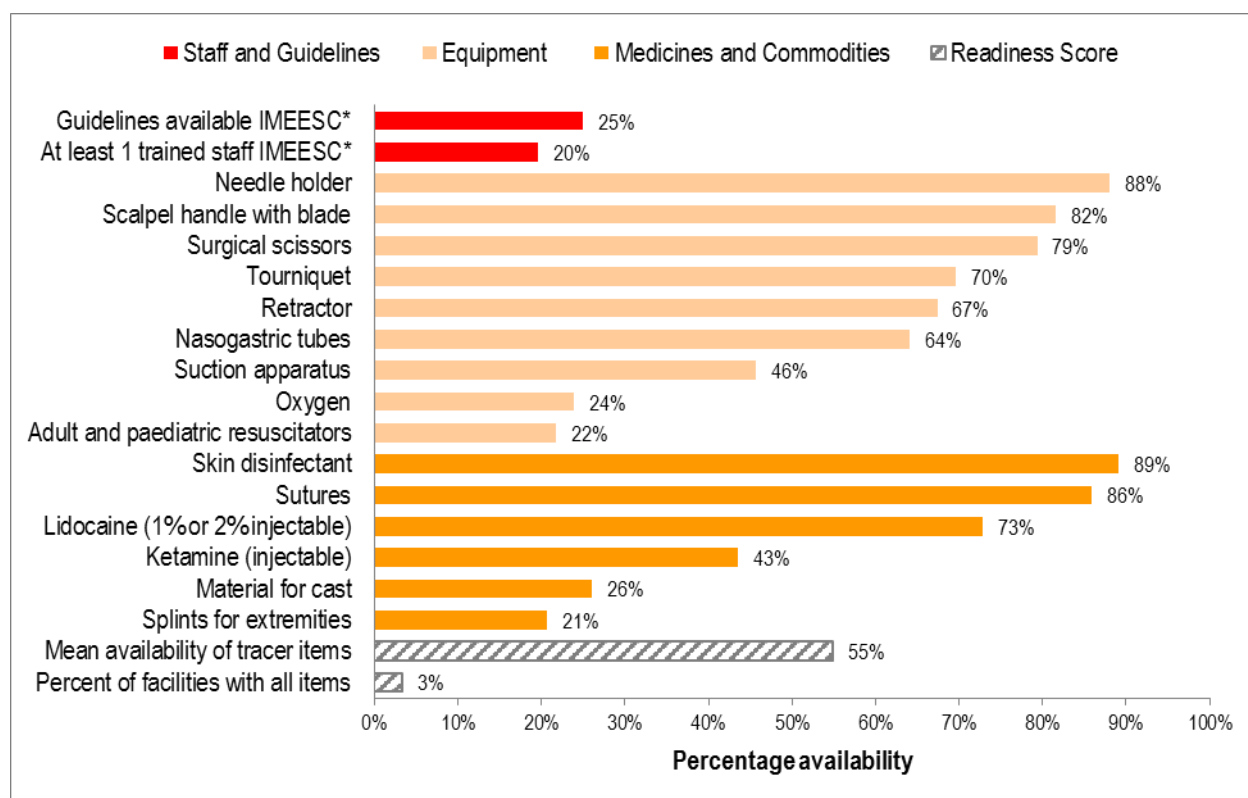
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Service readiness

Readiness to provide basic surgical care services was assessed based on the availability of the 13 tracer items found in **Table 88**. **Figure 113** shows the percentage availability of these tracer items in facilities that offer basic surgical care (N=92).

- Guidelines and having at least one trained staff in Integrated Management for Emergency and Essential Surgical Care (IMEESC) were low in the majority of facilities offering basic surgical care (25% had guidelines and 20% had at least one trained staff).
- The most available tracer item for basic surgical care was skin disinfectant (89%) and the least available item was splints for extremities (21%).
- Only 3% of facilities offering basic surgical services had all items needed to provide this service.

Figure 113. Percentage of facilities that have tracer items for basic surgical services among facilities that provide this service (N=92), Somalia 2016



Service distribution

Table 90 shows availability of basic surgical care tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while shows the variation in basic surgical service readiness by region.

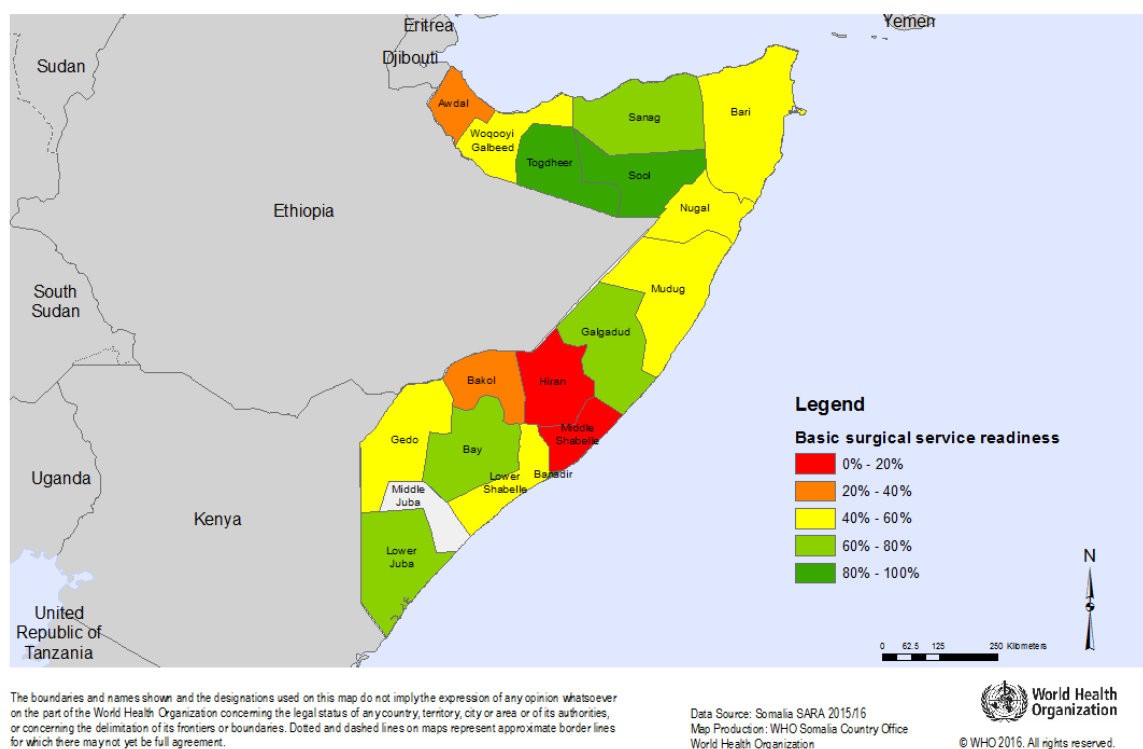
- Mean availability of tracer items for basic surgical care was highest among hospitals compared to other facility types (76%), followed by health centers (44%). Health posts had the lowest availability of tracer items needed for basic surgical services (34%) and TB centers did not offer this service.
- Non-governmental facilities had slightly higher readiness scores for basic surgical care compared to governmental facilities (58% vs. 54%).
- Facilities in urban areas were much more likely to be ready to provide basic surgical care compared to those located in rural areas (59% vs. 35%).
- Readiness to provide basic surgical care was highest in the Togdher region of Somaliland (88%) and lowest in the Marodi-Jeh region (36%).
- In Puntland, the Bari region had the highest readiness score for basic surgical care (68%) and the Karkaar and Nugaal regions scored the lowest in terms of readiness to provide this service (45%).
- In South Central, both the Benadir and Galgaduud regions showed the highest mean availability of tracer items for basic surgical care (80%), and the Bakool region demonstrated the lowest availability of these items (39%).

Table 90. Availability of tracer items for basic surgical care services readiness at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=92), Somalia 2016

	Guidelines available IMEES C*	At least 1 trained staff IMEES C*	Needle holder	Scalpel handle with blade	Retractor	Surgical scissors	Nasogastric tubes	Tourniquet	Adult and pediatric resuscitators	Suction apparatus	Oxygen	Skin disinfectant	Sutures	Ketamine (injectable)	Lidocaine (1% or 2% injectable)	Splints for extremities	Material for cast	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions																				
Somaliland	30%	9%	83%	65%	61%	52%	52%	65%	17%	52%	30%	83%	83%	39%	78%	17%	22%	0%	49%	23
Awdal	25%	25%	75%	75%	50%	25%	25%	75%	0%	25%	0%	25%	50%	25%	75%	25%	25%	0%	37%	4
Marodi-Jeh	20%	0%	70%	40%	40%	40%	30%	40%	10%	30%	20%	90%	80%	20%	70%	0%	10%	0%	36%	10
Sahil	0%	0%	100%	75%	75%	50%	75%	75%	50%	100%	75%	100%	100%	75%	75%	25%	25%	0%	63%	4
Sanag	67%	33%	100%	100%	100%	100%	100%	100%	0%	67%	67%	100%	100%	33%	100%	0%	0%	0%	69%	3
Sool	100%	0%	100%	100%	100%	100%	100%	100%	0%	100%	0%	100%	100%	100%	100%	100%	100%	0%	82%	1
Togdher	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%	88%	1
Puntland	17%	11%	89%	80%	66%	89%	57%	63%	9%	40%	6%	91%	86%	26%	77%	20%	14%	0%	49%	35
Bari	50%	100%	100%	100%	100%	100%	50%	50%	50%	50%	0%	100%	100%	50%	50%	50%	50%	0%	68%	2
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	29%	14%	86%	86%	71%	86%	57%	43%	0%	29%	0%	86%	71%	14%	71%	14%	14%	0%	45%	7
Mudug	17%	0%	100%	50%	83%	100%	67%	83%	0%	33%	0%	100%	83%	33%	67%	17%	0%	0%	49%	6
Nugaal	6%	6%	81%	81%	44%	94%	44%	63%	6%	31%	6%	88%	88%	19%	88%	13%	13%	0%	45%	16
Sanaag	25%	0%	100%	100%	100%	50%	100%	75%	25%	100%	25%	100%	100%	50%	75%	50%	25%	0%	65%	4
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	29%	35%	91%	94%	74%	88%	79%	79%	38%	47%	38%	91%	88%	65%	65%	50%	41%	9%	64%	34
Bakool	0%	0%	83%	83%	0%	50%	50%	67%	0%	17%	17%	100%	100%	33%	50%	0%	17%	0%	39%	6
Bay	33%	33%	100%	100%	67%	67%	67%	67%	67%	33%	67%	100%	100%	100%	100%	0%	67%	33%	73%	3
Benadir	63%	50%	88%	88%	100%	100%	100%	100%	63%	75%	63%	100%	100%	63%	63%	38%	75%	13%	80%	8
Galgadud	60%	80%	100%	100%	100%	100%	100%	100%	60%	60%	80%	60%	80%	100%	80%	20%	40%	20%	80%	5
Gedo	14%	14%	100%	100%	71%	100%	86%	57%	14%	43%	0%	86%	57%	57%	57%	29%	29%	0%	55%	7
Hiiraan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0

	Guidelines available IMEES C*	At least 1 trained staff IMEES C*	Needle holder	Scalpel handle with blade	Retractor	Surgical scissors	Nasogastric tubes	Tourniquet	Adult and pediatric resuscitators	Suction apparatus	Oxygen	Skin disinfectant	Sutures	Ketamine (injectable)	Lidocaine (1% or 2% injectable)	Splints for extremities	Material for cast	Percentage of facilities with all items	Mean availability of tracer items	Total number of facilities
Lower Juba	0%	0%	100%	100%	100%	100%	50%	100%	50%	50%	50%	100%	100%	100%	100%	50%	0%	0%	68%	2
Lower Shabelle	0%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	53%	1
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Mudug	0%	50%	50%	100%	100%	100%	50%	50%	50%	50%	0%	100%	100%	50%	50%	50%	50%	0%	62%	2
Facility type																				
Hospital	46%	40%	100%	100%	91%	94%	91%	89%	49%	77%	49%	91%	94%	83%	89%	43%	49%	9%	76%	35
Referral Health Center	0%	0%	100%	75%	50%	25%	50%	75%	0%	50%	25%	75%	50%	25%	50%	25%	0%	0%	38%	4
Health Center/MCH	15%	7%	80%	72%	50%	76%	46%	61%	7%	28%	9%	91%	87%	17%	70%	7%	13%	0%	44%	46
Health Post/PHU	0%	14%	71%	57%	71%	57%	57%	29%	0%	0%	0%	71%	57%	29%	29%	0%	14%	0%	34%	7
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority																				
Government	24%	13%	88%	78%	67%	78%	61%	69%	19%	48%	21%	90%	87%	40%	78%	19%	24%	3%	54%	67
Non-government	28%	36%	88%	92%	68%	84%	72%	72%	28%	40%	32%	88%	84%	52%	60%	24%	32%	4%	58%	25
Urban/Rural																				
Urban	29%	23%	91%	87%	71%	87%	68%	73%	24%	49%	26%	92%	90%	45%	77%	22%	28%	4%	59%	78
Rural	0%	0%	71%	50%	50%	36%	43%	50%	7%	29%	14%	71%	64%	36%	50%	14%	14%	0%	35%	14
Total	25%	20%	88%	82%	67%	79%	64%	70%	22%	46%	24%	89%	86%	43%	73%	21%	26%	3%	55%	92

Figure 114. Map of basic surgical service availability by region, Somalia 2016



4.4.2 Comprehensive surgical services

Hospitals are able to provide a wider and more comprehensive range of surgical care services compared to smaller facilities. Tracer items needed to provide comprehensive surgical care are outlined in **Table 91**.

Table 91. Tracer items needed to provide comprehensive surgical care

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines for Integrated management of emergency and essential surgical care (IMEESC) Staff trained in IMEESC in the past two years Surgeon on staff Anesthetist on staff
Equipment	<ul style="list-style-type: none"> Oxygen Anesthesia equipment Spinal needle Suction apparatus Capacity to perform general anesthesia Capacity to perform spinal anesthesia

Service availability

Figure 115 shows the percentage of hospitals offering the key surgical procedures.

- Countrywide, 60% of facilities offered comprehensive surgical services at the time of the survey.
- The most common surgical procedure offered by health facilities was episiotomy (38%), and the least common was cleft palate and skin grafting (14%).

Figure 115. Percentage of hospitals that offer comprehensive surgical services (N=59), Somalia 2016

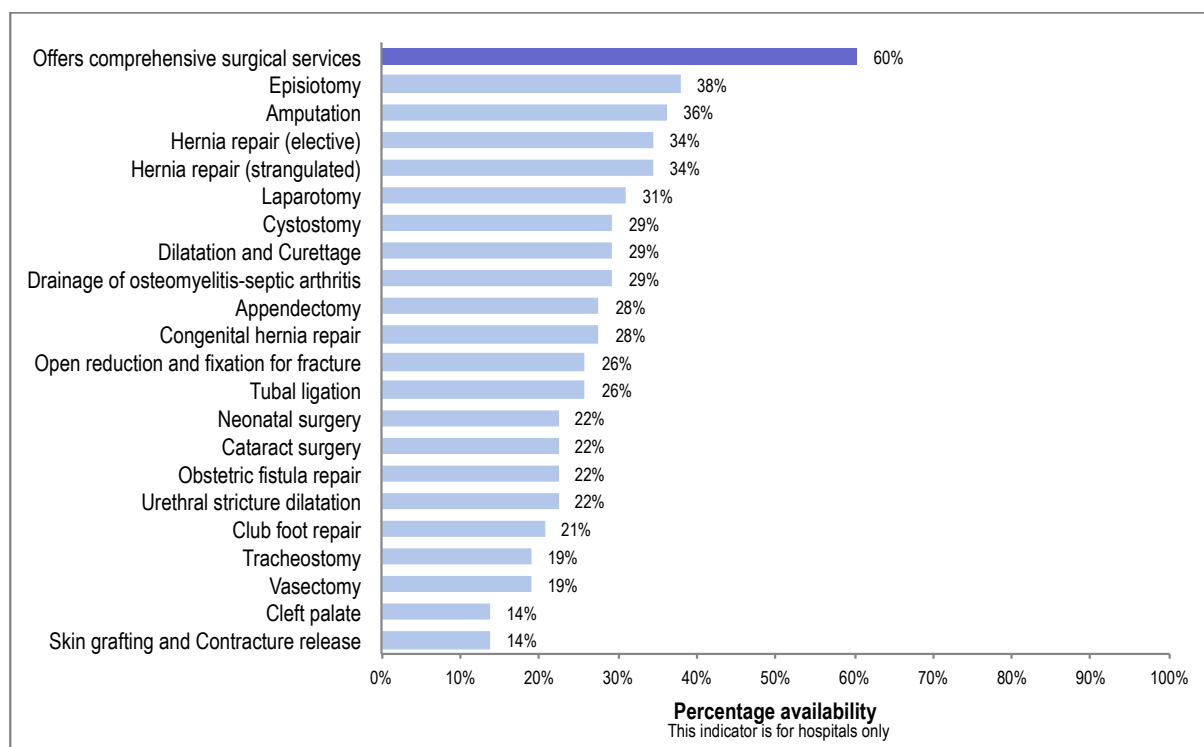


Table 92 shows the percentage of hospitals offering comprehensive surgical services by region, facility type, managing authority and urban vs. rural location while **Figure 116** shows the variation in comprehensive surgical service availability by region.

- Non-governmental hospitals were more likely than governmental hospitals to offer comprehensive surgical services (64% vs. 58%).
- Comprehensive surgical services were only available in urban facilities and not in rural facilities.
- In Somaliland, the Awdal and Sool regions were most likely to offer comprehensive surgical care compared to other regions (100%), while the Marodi-Jeh and Sahil regions were least likely to offer this service (33%).
- In Puntland, the Bari, Nugaal and Sanaag regions had the greatest availability of facilities offering comprehensive surgical care (100%), and the Karkaar region had the lowest availability (0%).
- In South Central, availability of comprehensive surgical care was highest in the Bay, Lower Juba and Mudug regions (100%), and lowest in the Hiiraan and Middle Shabelle regions (0%).

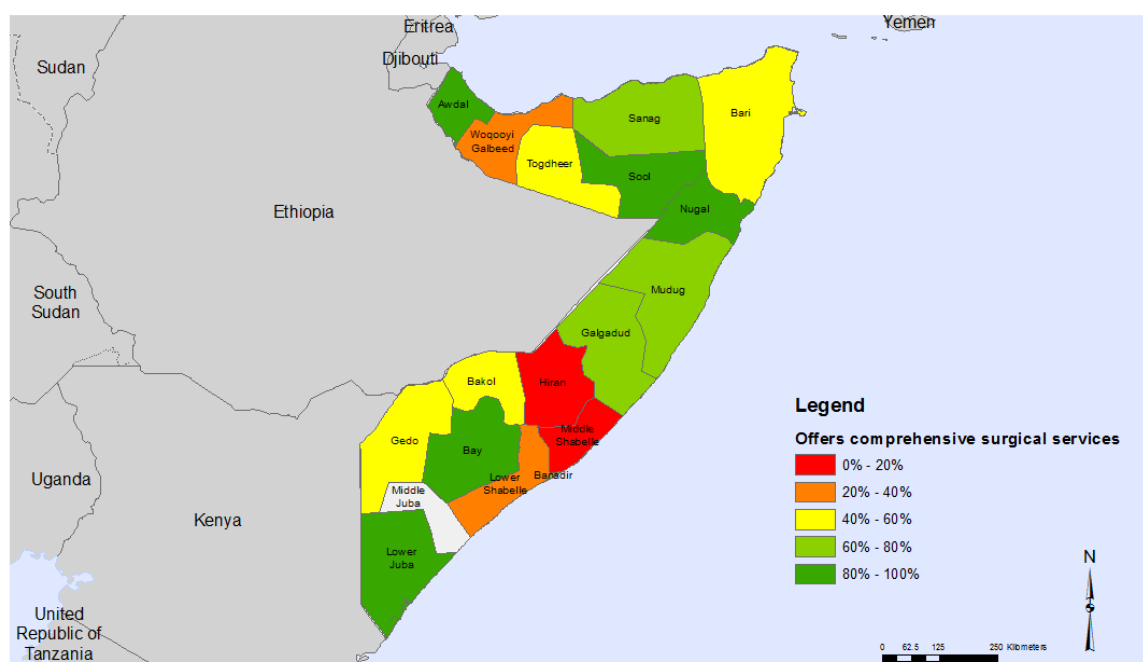
Table 92. Availability of comprehensive surgical care services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers comprehensive surgical services	Tracheostomy	Tubal ligation	Vasectomy	Dilatation and Curettage	Obstetric fistula repair	Episiotomy	Appendectomy	Hernia repair (strangulated)	Hernia repair (elective)	Cystostomy	Urethral stricture dilatation	Laparotomy	Congenital hernia repair	Neonatal surgery	Cleft palate	Skin grafting and Contracture release	Open reduction and fixation for fracture	Amputation	Cataract surgery	Club foot repair	Drainage of osteomyelitis-septic arthritis	Total number of facilities
Regions																							
Somaliland	50%	13%	19%	6%	19%	13%	38%	31%	31%	31%	31%	31%	19%	31%	19%	6%	13%	19%	31%	19%	19%	19%	16
Awdal	100%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
Marodijeh	33%	0%	0%	0%	0%	0%	17%	17%	17%	17%	17%	17%	0%	17%	17%	0%	17%	17%	17%	17%	17%	17%	6
Sahil	33%	0%	33%	33%	33%	0%	33%	33%	33%	33%	33%	33%	33%	33%	0%	0%	0%	33%	33%	33%	0%	33%	3
Sanag	67%	33%	33%	0%	33%	0%	67%	33%	33%	33%	33%	33%	0%	33%	0%	0%	0%	0%	33%	0%	33%	0%	3
Sool	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Togdher	50%	50%	50%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	0%	0%	0%	50%	0%	0%	0%	2
Puntland	78%	22%	22%	33%	44%	33%	44%	44%	56%	56%	33%	11%	56%	33%	22%	0%	11%	22%	44%	44%	22%	56%	9
Bari	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	100%	0%	100%	100%	100%	100%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Mudug	67%	0%	33%	33%	67%	0%	33%	33%	67%	67%	0%	0%	67%	33%	0%	0%	0%	67%	67%	33%	0%	33%	3
Nugaal	100%	50%	0%	50%	0%	50%	50%	50%	50%	50%	50%	0%	50%	50%	0%	0%	0%	0%	50%	50%	0%	50%	2
Sanaag	100%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	0%	50%	0%	50%	0%	0%	0%	0%	50%	50%	100%	2
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	61%	21%	30%	21%	30%	24%	36%	21%	30%	30%	27%	21%	30%	24%	24%	21%	15%	30%	36%	18%	21%	27%	33
Bakool	50%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	50	0%	50%	50%	0%	0%	0%	2

	Offers comprehensive surgical services	Tracheostomy	Tubal ligation	Vasectomy	Dilatation and Curettage	Obstetric fistula repair	Episiotomy	Appendectomy	Hernia repair (strangulated)	Hernia repair (elective)	Cystostomy	Urethral stricture dilatation	Laparotomy	Congenital hernia repair	Neonatal surgery	Cleft palate %	Skin grafting and Contracture release	Open reduction and fixation for fracture	Amputation	Cataract surgery	Club foot repair	Drainage of osteomyelitis-septic arthritis	Total number of facilities
Bay	100%	0%	0%	0%	33%	33%	33%	0%	0%	33%	0%	0%	33%	0%	0%	0%	0%	33%	0%	0%	0%	0%	3
Benadir	80%	60%	80%	80%	80%	60%	60%	60%	80%	80%	80%	40%	60%	60%	80%	80%	60%	80%	80%	40%	60%	80%	5
Galgadud	71%	14%	29%	14%	29%	14%	43%	14%	43%	43%	29%	29%	43%	29%	29%	0%	0%	14%	57%	43%	29%	43%	7
Gedo	60%	0%	20%	0%	20%	20%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5
Hiiraan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Lower Juba	100%	100%	100%	50%	50%	50%	100%	100%	100%	50%	100%	100%	100%	100%	50%	50%	100%	100%	0%	50%	0%	0%	2
Lower Shabelle	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	4
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3
Mudug	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
Facility type																							
Hospital	60%	19%	26%	19%	29%	22%	38%	28%	34%	34%	29%	22%	31%	28%	22%	14%	14%	26%	36%	22%	21%	29%	58
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Post/PHU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority																							
Government	58%	19%	25%	19%	28%	22%	42%	33%	36%	33%	31%	19%	33%	28%	19%	14%	11%	25%	36%	19%	17%	28%	36

	Offers comprehensive surgical services	Tracheostomy	Tubal ligation	Vasectomy	Dilatation and Curettage	Obstetric fistula repair	Episiotomy	Appendectomy	Hernia repair (strangulated)	Hernia repair (elective)	Cystostomy	Urethral stricture dilatation	Laparotomy	Congenital hernia repair	Neonatal surgery	Cleft palate	Skin grafting and Contracture release	Open reduction and fixation for fracture	Amputation	Cataract surgery	Clubfoot repair	Drainage of osteomyelitis-septic arthritis	Total number of facilities
Non-government	64%	18%	27%	18%	32%	23%	32%	18%	32%	36%	27%	27%	27%	27%	27%	14%	18%	27%	36%	27%	27%	32%	22
Urban/Rural																							
Urban	61%	19%	26%	19%	30%	23%	39%	28%	35%	35%	30%	23%	32%	28%	23%	14%	14%	26%	37%	23%	21%	30%	57
Rural	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Total	60%	19%	26%	19%	29%	22%	38%	28%	34%	34%	29%	22%	31%	28%	22%	14%	14%	26%	36%	22%	21%	29%	58

Figure 116. Map of comprehensive surgical service availability by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

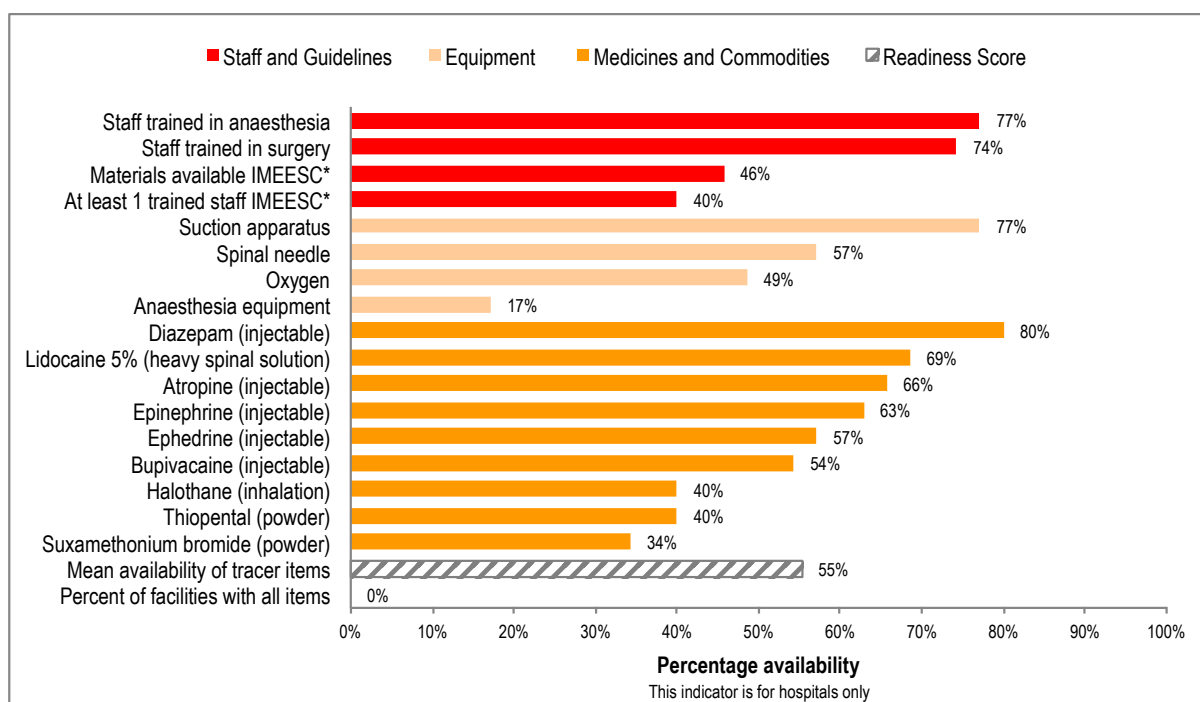
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Service readiness

Readiness to provide comprehensive surgical care was assessed based on the presence of the 10 tracer items found in **Table 91**. **Figure 117** shows the percentage availability of these tracer items in facilities that offer comprehensive surgical care (N=32).

- Staff trained in anesthesia and staff trained in surgery was high (77% and 74%, respectively), however, less than half of facilities had materials available for IMEESC (46%) and at least one trained staff in IMEESC (40%).
- The most available item for comprehensive surgical care was diazepam (80%), and the least available item was anesthesia equipment (17%).
- No facilities had all items needed to provide comprehensive surgical care.

Figure 117. Percentage of hospitals that have tracer items for comprehensive surgical care among facilities that provide this service (N=32), Somalia 2016



Service distribution

Table 93 shows availability of comprehensive surgical care tracer items by region, facility type, managing authority (governmental vs. non-governmental), and by urban vs. rural location while **Figure 118** show the variation in comprehensive surgical care readiness by region.

- Governmental hospitals were more ready to provide comprehensive surgical care than non-governmental hospitals (58% vs. 52%)
- Only hospitals located in urban areas offered comprehensive surgical care.
- In Somaliland, mean availability of tracer items for comprehensive surgical care was highest among facilities in the Togdher region (82%) and lowest in the Sool region (29%).
- Facilities in the Bari region of Puntland had the highest mean availability of tracer items for comprehensive surgical care (94%) and facilities in the Sanaag region had the lowest mean availability of these items (32%).
- In South Central, the greatest availability of tracer items for comprehensive surgical care was found un in the Mudug region (88%), and the poorest availability of these items was found un in the Bakool and Lower Shabelle regions (24%).

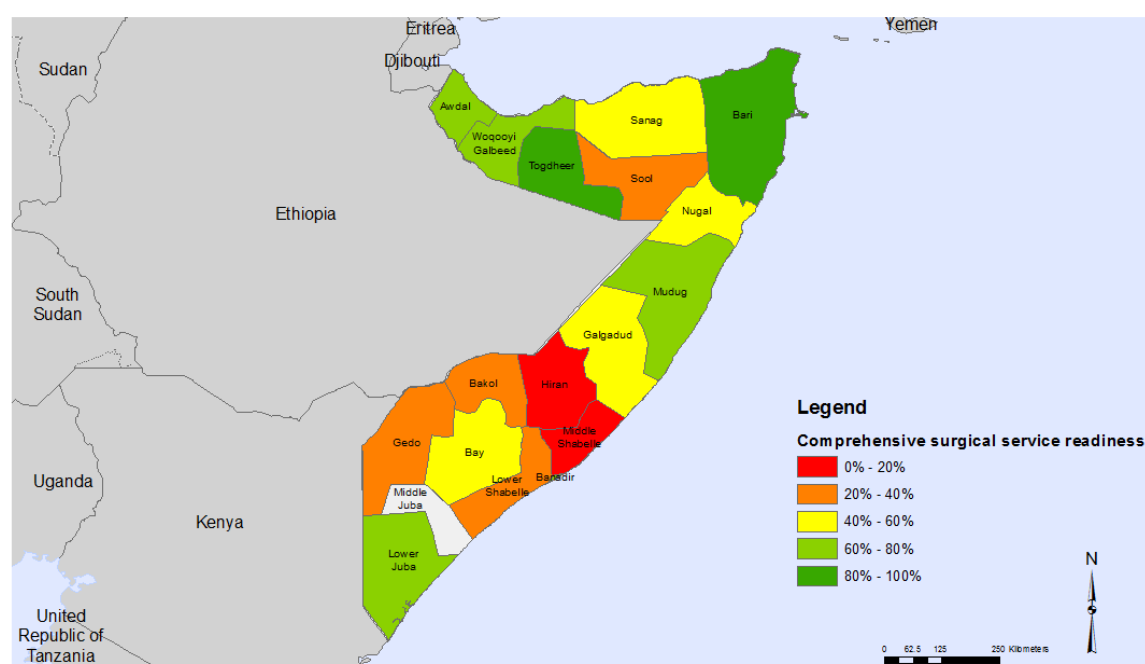
Table 93. Availability of tracer items for comprehensive surgical care services readiness at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=32), Somalia 2016

	Materials available IMEES C*	At least 1 trained staff IMEES C*	Staff trained in surgery	Staff trained in anaesthesia	Oxygen	Anaesthesia equipment	Spinal needle	Suction apparatus	Thiopental (powder)	Suxamethonium bromide (powder)	Atropine (injectable)	Diazepam (injectable)	Halothane (inhalation)	Bupivacaine (injectable)	Lidocaine 5% (heavy spinal solution)	Epinephrine (injectable)	Ephedrine (injectable)	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions																				
Somali	75%	25%	75%	75%	63%	25%	75%	100%	38%	38%	75%	88%	38%	63%	75%	75%	75%	0%	63%	8
Awdal	100%	100%	100%	100%	0%	0%	100%	100%	0%	0%	0%	100%	0%	100%	100%	100%	100%	0%	65%	1
Marodi-Jeh	50%	0%	50%	50%	100%	50%	50%	100%	50%	50%	100%	100%	50%	50%	50%	50%	50%	0%	59%	2
Sahil	0%	0%	100%	100%	100%	100%	100%	100%	0%	0%	100%	100%	0%	100%	100%	100%	100%	0%	71%	1
Sanag	100%	50%	50%	50%	100%	0%	50%	100%	50%	50%	100%	100%	50%	50%	100%	100%	100%	0%	71%	2
Sool	100%	0%	100%	100%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	29%	1
Togdher	100%	0%	100%	100%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	82%	1
Puntland	43%	29%	57%	71%	14%	14%	71%	86%	43%	29%	71%	86%	43%	71%	57%	57%	57%	0%	53%	7
Bari	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	94%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Mudug	50%	0%	50%	100%	0%	0%	100%	50%	50%	50%	100%	100%	50%	100%	100%	100%	50%	0%	62%	2
Nugaal	50%	50%	50%	50%	0%	0%	50%	100%	50%	0%	50%	50%	50%	50%	50%	50%	50%	0%	44%	2
Sanaag	0%	0%	50%	50%	50%	0%	50%	100%	0%	0%	50%	100%	0%	50%	0%	0%	50%	0%	32%	2
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	35%	50%	80%	80%	55%	15%	45%	65%	40%	35%	60%	75%	40%	45%	70%	60%	50%	0%	53%	20
Bakool	0%	0%	100%	100%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	1
Bay	33%	33%	67%	100%	67%	0%	67%	33%	33%	0%	67%	100%	33%	33%	33%	33%	33%	0%	45%	3

	Materials available IMEES C*	At least 1 trained staff IMEES C*	Staff trained in surgery	Staff trained in anaesthesia	Oxygen	Anaesthesia equipment	Spinal needle	Suction apparatus	Thiopental (powder)	Suxamethonium bromide (powder)	Atropine (injectable)	Diazepam (injectable)	Halothane (inhalation)	Bupivacaine (injectable)	Lidocaine 5% (heavy spinal solution)	Epinephrine (injectable)	Ephedrine (injectable)	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Benadir	50%	50%	100%	100%	75%	25%	75%	100%	50%	50%	100%	100%	50%	100%	75%	100%	100%	0%	76%	4
Galgaduud	60%	80%	100%	80%	80%	0%	20%	60%	20%	20%	20%	60%	20%	0%	80%	40%	20%	0%	45%	5
Gedo	33%	33%	33%	33%	0%	0%	33%	67%	33%	33%	67%	67%	33%	33%	67%	67%	33%	0%	39%	3
Hiiraan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Lower Juba	0%	0%	50%	50%	50%	50%	50%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	71%	2
Lower Shabelle	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	24%	1
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Mudug	0%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	88%	1
Facility type																				
Hospital	46%	40%	74%	77%	49%	17%	57%	77%	40%	34%	66%	80%	40%	54%	69%	63%	57%	0%	55%	35
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Post/PHU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority																				
Government	52%	33%	76%	76%	48%	19%	67%	86%	38%	29%	71%	81%	43%	67%	62%	67%	67%	0%	58%	21

	Materials available IMEES C*	At least 1 trained staff IMEES C*	Staff trained in surgery	Staff trained in anaesthesia	Oxygen	Anaesthesia equipment	Spinal needle	Suction apparatus	Thiopental (powder)	Suxamethonium bromide (powder)	Atropine (injectable)	Diazepam (injectable)	Halothane (inhalation)	Bupivacaine (injectable)	Lidocaine 5% (heavy spinal solution)	Epinephrine (injectable)	Ephedrine (injectable)	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Non-government	36%	50%	71%	79%	50%	14%	43%	64%	43%	43%	57%	79%	36%	36%	79%	57%	43%	0%	52%	14
Urban/Rural																				
Urban	46%	40%	74%	77%	49%	17%	57%	77%	40%	34%	66%	80%	40%	54%	69%	63%	57%	0%	55%	35
Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Total	46%	40%	74%	77%	49%	17%	57%	77%	40%	34%	66%	80%	40%	54%	69%	63%	57%	0%	55%	35

Figure 118. Map of comprehensive surgical service readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

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4.4.3 Blood transfusion

The tracer items necessary for hospitals to provide blood transfusion are outlined in **Table 94**.

Table 94. Tracer items needed to provide blood transfusion

Domain	Tracer items
Trained staff and guidelines	<ul style="list-style-type: none"> Guidelines on appropriate use of blood and safe transfusion practices Staff trained in the appropriate use of blood and safe transfusion practices
Equipment	<ul style="list-style-type: none"> Refrigerator for blood storage
Diagnostics	<ul style="list-style-type: none"> Capacity to conduct blood typing and compatibility testing on site (ABO blood group testing, Rhesus blood group testing, and cross-matching, with centrifuge, 37 degree incubator, and grouping sera)
Medicine and commodities	<ul style="list-style-type: none"> Sufficiency (no shortage of blood in the past three months) Safety (blood obtained only from national or regional blood bank, or blood obtained from other sources but screened for HIV and other transmissible infections).

Service availability

Figure 119 show the percentage of facilities offering blood transfusion services by zone and region.

- Overall, only 6% of facilities in Somalia offered blood transfusion at the time of the survey.
- The greatest percentage of facilities offering this service in any region was 18%.

Figure 119. Percentage of facilities that offer blood transfusion services, by zone and region (N=799), Somalia 2016

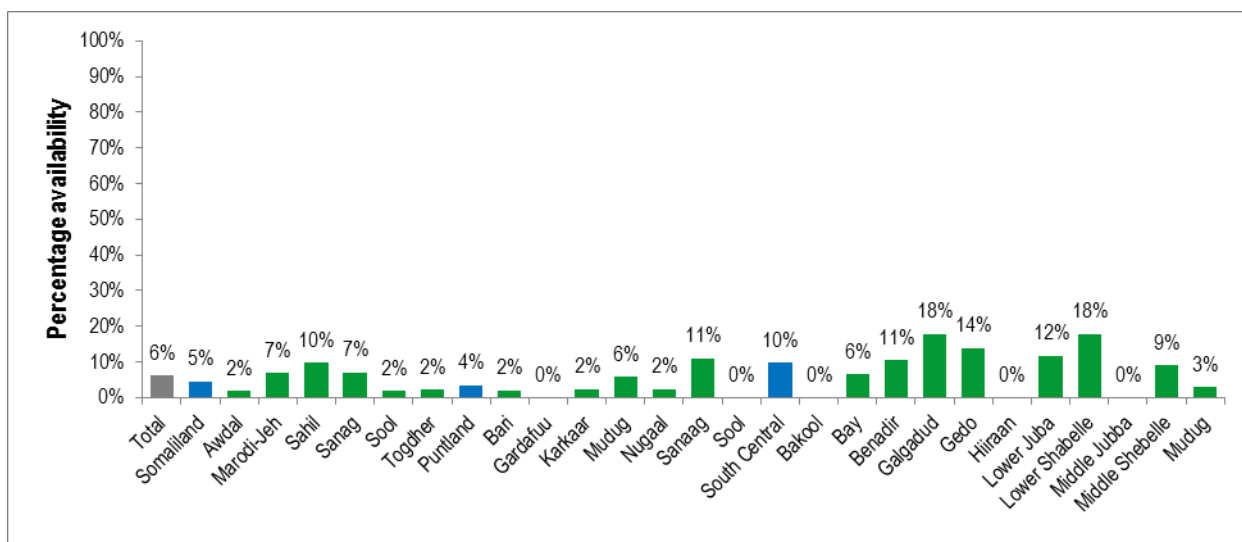


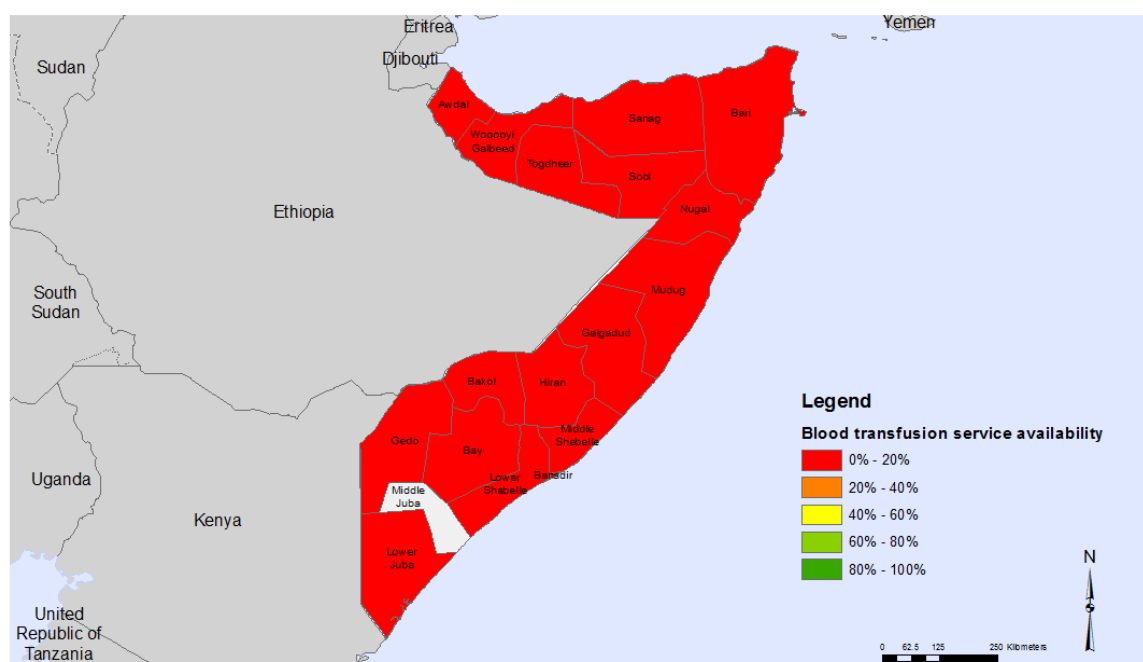
Table 95 shows the percentage of facilities offering blood transfusion services by region, facility type, managing authority and urban vs. rural location while **Figure 120** shows the variation in blood transfusion availability by region.

- As expected, blood transfusion services were most available among hospital facilities (67%) and TB centers had the lowest availability of this service (0%).
- Non-governmental facilities were slightly more likely than governmental facilities to offer blood transfusion services (8% vs. 5%).
- Blood transfusion services were much more available in urban health facilities compared to rural facilities.
- In Somaliland, the greatest availability of blood transfusion services was found in the Sahil region (10%), and the lowest availability in the Awdal, Sool, and Togdher regions (2%).
- In Puntland, blood transfusion services were most available in the Sanaag region (11%) and least available in the Sool and Gardafuu regions (0%).
- In South Central, the Galgaduud and Lower Shabelle regions had the greatest availability of blood transfusion services, while the Bakool and Hiiraan regions had the lowest availability (0%).

Table 95. Availability of blood transfusion services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=799), Somalia 2016

	Offers blood transfusion	Total number of facilities
Regions		
Somaliland	5%	282
Awdal	2%	53
Marodi-Jeh	7%	72
Sahil	10%	31
Sanag	7%	28
Sool	2%	53
Togdher	2%	45
Puntland	4%	228
Bari	2%	48
Gardafuu	0%	17
Karkaar	2%	42
Mudug	6%	52
Nugaal	2%	41
Sanaag	11%	18
Sool	0%	10
South Central	10%	289
Bakool	0%	12
Bay	6%	31
Benadir	11%	57
Galgadud	18%	28
Gedo	14%	36
Hiiraan	0%	23
Lower Juba	12%	17
Lower Shabelle	18%	28
Middle Jubba	N/A	0
Middle Shebelle	9%	22
Mudug	3%	35
Facility type		
Hospital	67%	58
Referral Health Center	11%	9
Health Center/MCH	2%	383
Health Post/PHU	1%	294
TB Center	0%	55
Managing authority		
Government	5%	565
Non-government	8%	234
Urban/Rural		
Urban	9%	492
Rural	1%	307
Total	6%	799

Figure 120. Map of blood transfusion service availability by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

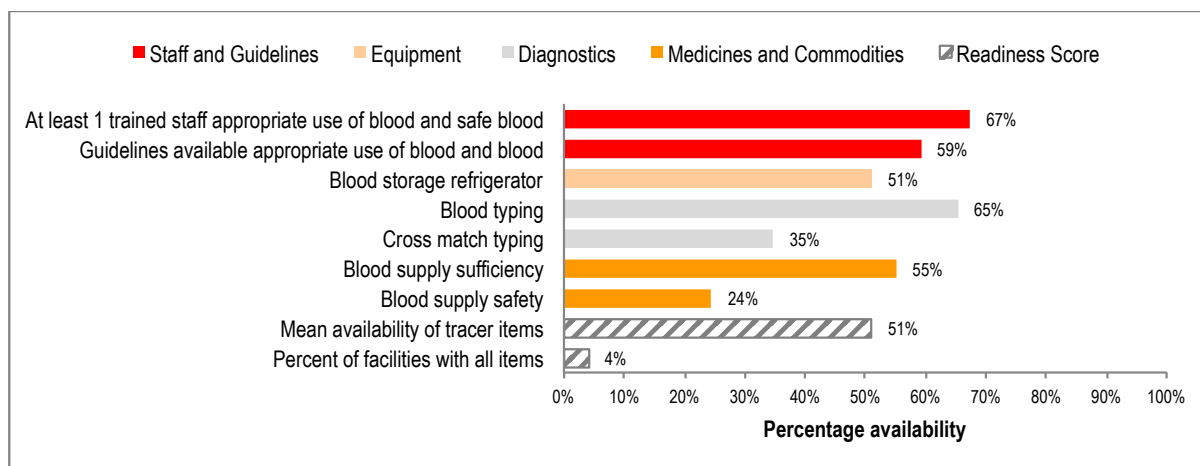
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Service readiness

Readiness to provide blood transfusion services at hospitals was assessed based on the presence of the six tracer items found in **Table 94**. **Figure 121** shows the percentage availability of these tracer items in hospitals (N=49).

- More than half of facilities offering blood transfusion services had at least one trained staff in appropriate use of blood and safe blood (67%) and guidelines available for the appropriate use of blood and safe blood (59%).
- The most available item for blood transfusion services was trained staff, followed by blood typing (65%). The least available item needed to provide this service was blood supply safety (24%).
- Only 4% of facilities had all items needed to provide blood transfusion services.

Figure 121. Percentage of facilities that have tracer items for blood transfusion services among facilities that provide this service (N=49), Somalia 2016



Service distribution

Table 96 shows the availability of blood transfusion tracer items by region, facility type, managing authority, and urban vs. rural location while **Figure 122** shows the variation in blood transfusion service readiness by region.

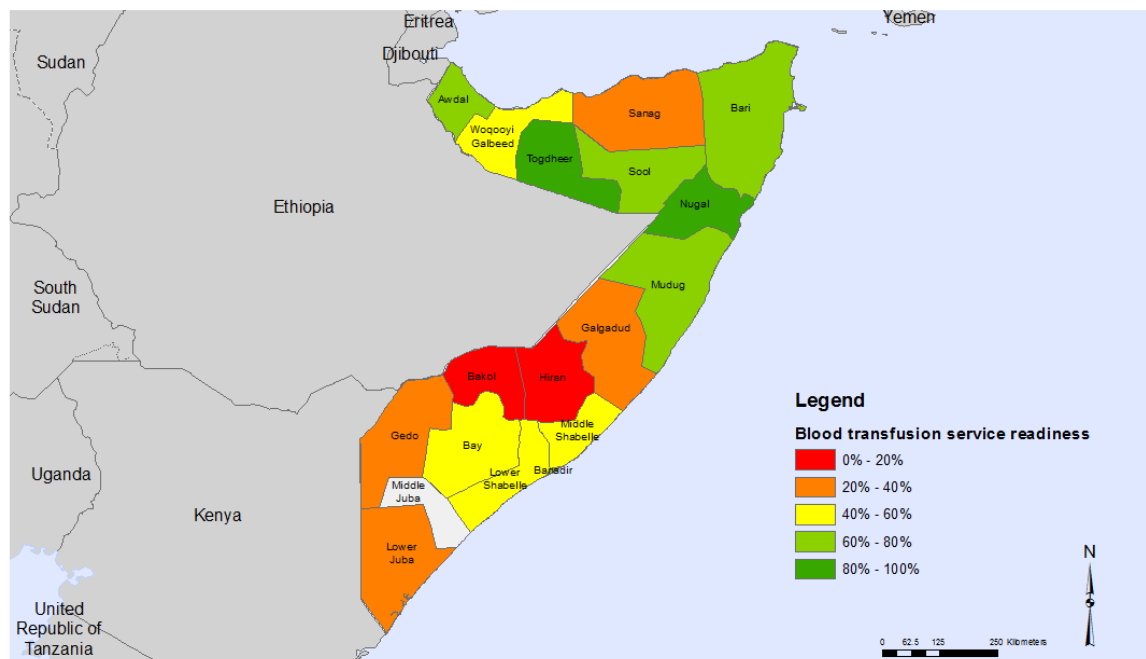
- Mean availability of tracer items was highest among hospitals compared to other facility types (55%). Health posts showed the poorest readiness, with mean availability of items needed for blood transfusion at 24%.
- Little difference was found with respect to blood transfusion service readiness between governmental and non-governmental facilities (50% compared to 52%, respectively).
- Urban facilities were more likely than rural facilities to be ready to provide blood transfusion services (51% vs. 46%).
- In Somaliland, blood transfusion service readiness was highest in the Togdher region (86%) and lowest in the Sanag region (24%).
- Mean availability of tracer items for blood transfusion services was best in the Karkaar and Nugaal regions of Puntland. The poorest readiness indicators in this zone were found in the Sanaag region (36%).
- In the South Central zone, mean availability of tracer items for blood transfusion services was highest in the Mudug region (100%) and lowest in the Gedo region (31%).

Table 96. Availability of tracer items for blood transfusion services readiness at facilities offering the service by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=49), Somalia 2016

	Guidelines available appropriate use of blood and blood transfusion	At least 1 trained staff appropriate use of blood and safe blood transfusion	Blood storage refrigerator	Blood typing	Cross match typing	Blood supply sufficiency	Blood supply safety	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Regions										
Somaliland	62%	69%	46%	85%	54%	62%	15%	0%	56%	13
Awdal	100%	100%	0%	100%	100%	100%	0%	0%	71%	1
Marodi-Jeh	40%	60%	60%	80%	40%	40%	20%	0%	49%	5
Sahil	67%	67%	33%	100%	33%	100%	0%	0%	57%	3
Sanag	50%	50%	50%	50%	50%	50%	0%	0%	43%	2
Sool	100%	100%	0%	100%	100%	0%	100%	0%	71%	1
Togdher	100%	100%	100%	100%	100%	100%	0%	0%	86%	1
Puntland	50%	63%	25%	75%	75%	63%	38%	0%	55%	8
Bari	100%	100%	0%	100%	100%	0%	0%	0%	57%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	100%	100%	100%	100%	100%	0%	100%	0%	86%	1
Mudug	33%	67%	0%	67%	67%	67%	33%	0%	48%	3
Nugaal	100%	100%	100%	100%	100%	100%	0%	0%	86%	1
Sanaag	0%	0%	0%	50%	50%	100%	50%	0%	36%	2
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	61%	68%	61%	54%	14%	50%	25%	7%	47%	28
Bakool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Bay	0%	0%	50%	100%	50%	0%	100%	0%	43%	2
Benadir	83%	83%	100%	67%	33%	67%	50%	17%	69%	6
Galgadud	60%	80%	40%	60%	0%	20%	0%	0%	37%	5
Gedo	40%	40%	60%	20%	0%	60%	0%	0%	31%	5
Hiiraan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Lower Juba	50%	50%	50%	50%	0%	50%	0%	0%	36%	2
Lower Shabelle	60%	80%	20%	60%	0%	60%	20%	0%	43%	5
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	100%	100%	100%	0%	0%	50%	0%	0%	50%	2
Mudug	100%	100%	100%	100%	100%	100%	100%	100%	100%	1

	Guidelines available appropriate use of blood and blood transfusion	At least 1 trained staff appropriate use of blood and safe blood transfusion	Blood storage refrigerator	Blood typing	Cross match typing	Blood supply sufficiency	Blood supply safety	Percent of facilities with all items	Mean availability of tracer items	Total number of facilities
Facility type										
Hospital	62%	74%	56%	74%	41%	49%	26%	5%	55%	39
Referral Health Center	0%	0%	0%	100%	0%	100%	0%	0%	29%	1
Health Center/MCH	67%	50%	33%	33%	17%	83%	33%	0%	45%	6
Health Post/PHU	33%	33%	33%	0%	0%	67%	0%	0%	24%	3
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority										
Government	50%	57%	43%	70%	50%	57%	27%	3%	50%	30
Non-government	74%	84%	63%	58%	11%	53%	21%	5%	52%	19
Urban/Rural										
Urban	59%	67%	52%	65%	35%	54%	26%	4%	51%	46
Rural	67%	67%	33%	67%	33%	67%	0%	0%	48%	3
Total	59%	67%	51%	65%	35%	55%	24%	4%	51%	49

Figure 122. Map of blood transfusion readiness by region, Somalia 2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Somalia SARA 2015/16
Map Production: WHO Somalia Country Office
World Health Organization

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4.5 Tracer medicines

In addition to essential medicines, the SARA also captured tracer medicines availability (infectious disease medicines, non-communicable disease medicines, mental health and neurological medicines, and palliative care medicines). **Table 97, Table 98, Table 99, and Table 100** show the percentage of facilities with infectious disease medicines, non-communicable disease medicines, mental health and neurological medicines, and palliative care medicines availability by region, facility type, managing authority and urban vs. rural location.

Infectious disease medicines

- Metronidazole cap/tab was most available (30% of facilities had this item), and Ciprofloxacin cap/tab was least available (only 19% of facilities had this item).
- In hospitals and referral health centers, Metronidazole cap/tab was the most available medicine (50% and 56%, respectively).
- Availability of infectious disease medicines did not exceed 12% among health posts, and TB centers had the lowest available of all medicines in this category.
- Health facilities in urban areas had much greater availability of all of the infectious disease medicines compared to rural facilities.

Non-communicable disease medicines

- With the exception of Paracetamol cap/tab, hospitals had the greatest availability of non-communicable disease medicines compared to all other facility types.
- The most available medicine for NCDs was Paracetamol cap/tab (32%) and the least available medicines were Gliclazide tablet or glipizide tablet and Glyceryl trinitrate sublingual table (2%).
- Non-governmental facilities showed greater availability of the majority of NCD medicines, with the exception of: Furosemide cap/tab, Hydrochlorothiazide tablet or other thiazide diuretic tablet, Hydrocortisone injection, Ibuprofen tablet, Paracetamol, and Salbutamol inhaler.
- Health facilities in urban areas had much greater availability of all of the NCD medicines compared to rural facilities.

Mental health and neurological medicines

- Overall, the availability of mental health and neurological medicines was very low. The most available medicine was Diazepam (both tablet and injection), with 5% of facilities offering this item. The least available medicines were Levodopa + carbidopa tablet and Lithium (1% of facilities had these items).
- Nearly all mental health medicines were only available in urban areas, with the exception of Diazepam and Phenobarbital.

Palliative care medicines

- For most medicines, non-governmental facilities showed greater availability compared to governmental facilities (with the exception of Ibuprofen, Metoclopramide injection, and Paracetamol).
- The most available palliative care medicine was Paracetamol (32%) and least available were Senna preparation (laxative), Morphine, and Lorazepam tablet (2%).

Table 97. Infectious disease medicines availability by region, facility type, managing authority, and urban vs. rural location (N=799), Somalia 2016

	Me-/albendazole cap/tab	Amoxicillin cap/tab	Ceftriaxone injection	Co-trimoxazole cap/tab	Ciprofloxacin cap/tab	Fluconazole cap/tab	Metronidazole cap/tab	Total number of facilities
Regions								
Somaliland	40%	34%	26%	34%	20%	33%	37%	282
Awdal	42%	40%	40%	36%	30%	34%	42%	53
Marodi-Jeh	64%	58%	32%	56%	26%	54%	51%	72
Sahil	13%	6%	6%	29%	13%	29%	26%	31
Sanag	18%	7%	14%	14%	7%	11%	14%	28
Sool	15%	13%	13%	13%	8%	13%	15%	53
Togdher	60%	47%	33%	38%	24%	38%	53%	45
Puntland	25%	22%	14%	25%	16%	24%	23%	228
Bari	23%	23%	19%	21%	17%	21%	23%	48
Gardafuu	6%	6%	6%	6%	0%	6%	6%	17
Karkaar	14%	12%	7%	14%	10%	14%	14%	42
Mudug	29%	29%	23%	29%	23%	29%	31%	52
Nugaal	46%	41%	17%	49%	27%	46%	37%	41
Sanaag	28%	11%	6%	28%	11%	22%	17%	18
Sool	0%	0%	0%	0%	0%	0%	0%	10
South Central	32%	29%	21%	26%	21%	26%	29%	289
Bakool	25%	25%	17%	25%	17%	25%	25%	12
Bay	81%	61%	29%	42%	35%	35%	61%	31
Benadir	44%	42%	39%	40%	32%	40%	42%	57
Galgadud	7%	7%	4%	7%	4%	7%	7%	28
Gedo	25%	19%	19%	22%	14%	22%	22%	36
Hiiraan	43%	39%	13%	39%	26%	39%	43%	23
Lower Juba	35%	35%	35%	35%	29%	35%	29%	17
Lower Shabelle	14%	14%	14%	11%	11%	11%	14%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	27%	27%	18%	27%	27%	27%	27%	22
Mudug	9%	9%	9%	9%	9%	9%	9%	35
Facility type								
Hospital	48%	48%	47%	47%	43%	47%	50%	58
Referral Health Center	44%	44%	33%	67%	22%	67%	56%	9
Health Center/MCH	51%	43%	33%	44%	31%	42%	48%	383

Health Post/PHU	12%	11%	3%	9%	2%	9%	7%	294
TB Center	2%	2%	2%	2%	2%	2%	2%	55
Managing authority								
Government	34%	29%	22%	31%	19%	30%	31%	565
Non-government	30%	27%	18%	24%	19%	23%	27%	234
Urban/Rural								
Urban	38%	34%	27%	34%	26%	33%	37%	492
Rural	24%	20%	11%	20%	9%	19%	19%	307
Total	33%	29%	21%	29%	19%	28%	30%	799

Table 98. Non-communicable disease medicines availability by region, facility type, managing authority, and urban vs. rural location (N=799), Somalia 2016

	Amlo dipin e table t or alter nativ e calci um chan nel block er	As piri n cap /ta b	Beclom etason e inhaler	Beta blocker (e.g.bi soprol ol, metopr olol, carvedi lol, atenol ol)	Enal april table t or other ACE inhib itor e.g. lisino pril, rami pril, perin dopri l	Epine phrin e inject able	Furos emid e cap/t ab	Gliben clamid e cap/ta b	Glicl azid e tabl et or glipi zide tabl et	Glu cos e 50 % inje ctio n	Glyc eryl trinit rate subli ngu al table t	Hydrochl orothiazid e tablet or other thiazide diuretic tablet	Hydroc ortison e injectio n	Ibup rofe n tabl et	Ins ulin reg ular inje ctio n	Isos orbid e dinitr ate table t	Metf ormi n table t	Omeprazole tablet or altern ative such as panto prazole, rabeprazole	Paracetamol cap/ta b	Prednisolone cap/ta b	Salbutamol inhaler	Simvastatin tablet or other statin e.g. atorvastatin, pravastatin, fluvastatin	Spironolactone tablet	Total numb er of facilities
Regions																								
Somaliland	2%	11%	4%	5%	2%	5%	20%	3%	1%	8%	1%	6%	23%	36%	2%	3%	5%	13%	40%	17%	20%	4%	2%	282
Awdal	2%	6%	4%	2%	0%	2%	42%	0%	0%	4%	0%	15%	38%	40%	0%	0%	4%	15%	42%	34%	28%	0%	2%	53
Marodijeh	4%	22%	7%	11%	6%	8%	15%	6%	1%	19%	3%	6%	25%	56%	7%	10%	13%	28%	65%	24%	25%	4%	4%	72
Sahil	0%	13%	0%	6%	3%	10%	6%	6%	0%	6%	0%	0%	16%	19%	3%	0%	3%	23%	23%	6%	0%	0%	0%	31
Sanag	0%	0%	7%	0%	0%	7%	7%	4%	4%	7%	0%	11%	11%	14%	0%	0%	4%	0%	14%	7%	14%	4%	4%	28
Sool	0%	8%	0%	0%	0%	2%	13%	0%	0%	2%	0%	0%	9%	11%	0%	0%	0%	0%	19%	4%	11%	0%	0%	53
Togdher	2%	7%	2%	4%	2%	2%	29%	2%	2%	4%	2%	4%	31%	53%	2%	2%	4%	2%	53%	13%	29%	16%	2%	45
Puntland	1%	17%	4%	2%	1%	4%	16%	4%	1%	11%	1%	3%	13%	24%	3%	2%	4%	7%	24%	15%	15%	2%	1%	228
Bari	2%	17%	6%	2%	2%	2%	10%	2%	2%	10%	2%	2%	13%	23%	4%	2%	2%	6%	21%	19%	21%	2%	2%	48
Gardafuu	0%	6%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	6%	0%	6%	0%	0%	17
Karkaar	0%	14%	2%	2%	0%	10%	12%	5%	0%	12%	0%	7%	12%	10%	5%	0%	5%	2%	12%	5%	14%	0%	0%	42
Mudug	2%	15%	10%	6%	4%	6%	23%	6%	2%	13%	2%	6%	17%	31%	4%	4%	4%	12%	33%	21%	17%	8%	2%	52
Nugaal	0%	37%	2%	0%	0%	2%	24%	2%	0%	17%	0%	0%	20%	46%	0%	2%	7%	12%	41%	27%	17%	0%	0%	41
Sanaag	0%	6%	0%	0%	0%	6%	17%	11%	6%	0%	6%	0%	6%	22%	0%	6%	6%	6%	22%	11%	11%	0%	0%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10

South Central	6%	21%	8%	8%	4%	12%	17%	8%	4%	15%	3%	7%	16%	29%	7%	4%	10%	12%	29%	19%	20%	5%	4%	289
Bakool	0%	17%	8%	25%	0%	8%	17%	0%	0%	17%	0%	0%	8%	25%	8%	0%	8%	0%	25%	25%	17%	0%	0%	12
Bay	0%	42%	0%	10%	0%	3%	23%	6%	0%	19%	0%	0%	23%	68%	3%	0%	10%	16%	68%	23%	26%	0%	0%	31
Benadir	7%	33%	19%	7%	7%	26%	26%	7%	4%	30%	0%	16%	32%	44%	4%	4%	12%	18%	42%	35%	40%	5%	4%	57
Galgadud	0%	0%	0%	0%	4%	7%	7%	4%	0%	4%	0%	0%	4%	7%	4%	0%	4%	4%	7%	4%	7%	0%	0%	28
Gedo	8%	17%	8%	8%	8%	14%	11%	11%	6%	11%	6%	8%	8%	14%	11%	8%	8%	8%	14%	8%	8%	6%	3%	36
Hiraan	9%	17%	0%	13%	0%	9%	26%	9%	4%	4%	4%	4%	9%	43%	0%	4%	13%	4%	43%	26%	22%	9%	0%	23
Lower Juba	29%	35%	35%	29%	18%	29%	29%	24%	18%	35%	18%	29%	29%	35%	29%	18%	35%	35%	35%	35%	35%	29%	29%	17
Lower Shabelle	4%	4%	0%	4%	0%	7%	11%	4%	4%	4%	4%	4%	11%	14%	4%	4%	4%	7%	14%	7%	11%	4%	4%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	5%	27%	5%	5%	5%	5%	5%	14%	5%	5%	5%	5%	9%	18%	9%	9%	14%	23%	27%	23%	14%	5%	9%	22
Mudug	3%	9%	3%	3%	3%	3%	9%	3%	3%	9%	3%	3%	9%	9%	6%	3%	6%	9%	9%	6%	6%	3%	3%	35
Facility type																								
Hospital	16%	33%	19%	28%	21%	41%	45%	31%	14%	41%	10%	22%	47%	48%	22%	9%	31%	31%	52%	29%	40%	21%	16%	58
Referral Health Center	0%	11%	0%	0%	0%	22%	22%	0%	0%	11%	0%	11%	44%	44%	0%	0%	11%	11%	56%	22%	22%	0%	0%	9
Health Center/MCH	3%	26%	8%	6%	2%	8%	29%	5%	2%	15%	2%	8%	27%	46%	4%	4%	8%	17%	48%	29%	31%	4%	2%	383
Health Post/PHU	0%	3%	0%	1%	0%	1%	1%	0%	0%	2%	0%	0%	2%	10%	1%	1%	1%	1%	11%	2%	1%	1%	0%	294
TB Center	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	55
Managing authority																								
Government	2%	15%	5%	4%	2%	6%	19%	4%	2%	10%	1%	6%	19%	31%	3%	3%	5%	11%	33%	17%	19%	3%	2%	565
Non-government	6%	18%	7%	8%	4%	10%	15%	8%	3%	13%	3%	5%	13%	28%	6%	4%	11%	11%	29%	18%	17%	5%	5%	234
Urban/Rural																								

Urban	5%	23%	8%	8%	4%	10%	24%	8%	3%	16%	3%	8%	22%	35%	6%	4%	10%	15%	37%	23%	24%	5%	4%	492
Rural	0%	6%	2%	1%	1%	3%	7%	1%	0%	4%	0%	2%	10%	21%	1%	2%	2%	5%	23%	7%	9%	2%	0%	307
Total	3%	16%	5%	5%	3%	7%	18%	5%	2%	11%	2%	6%	18%	30%	4%	3%	7%	11%	32%	17%	19%	4%	3%	799

Table 99. Mental health and neurological medicines availability by region, facility type, managing authority, and urban vs. rural location (N=799), Somalia 2016

	Amitriptyline tablet	Carbamazepine tablet	Chlorpromazine injection	Diazepam tablet	Diazepam injection or diazepam rectal tubes	Fluoxetine tablet	Fluphenazine injection	Haloperidol tablet	Levodopa + carbidoopa tablet	Lorazepam injection	Lithium tablet	Phenobarbital tablet	Phenytoin tablet	Valproate sodium tablet	Total number of facilities
Regions															
Somaliland	2%	2%	2%	3%	4%	1%	1%	1%	1%	1%	1%	4%	1%	1%	282
Awdal	0%	0%	0%	4%	6%	0%	0%	0%	0%	0%	0%	8%	0%	0%	53
Marodi-Jeh	4%	3%	3%	4%	7%	1%	0%	0%	0%	0%	0%	1%	0%	0%	72
Sahil	3%	3%	3%	3%	6%	3%	3%	3%	0%	0%	0%	3%	3%	3%	31
Sanag	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	28
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	53
Togdher	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	45
Puntland	3%	1%	2%	1%	2%	2%	2%	1%	1%	1%	1%	2%	2%	1%	228
Bari	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	48
Gardafuu	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17
Karkaar	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	42
Mudug	6%	2%	2%	2%	4%	2%	2%	2%	2%	2%	0%	2%	2%	2%	52
Nugaal	2%	0%	0%	2%	2%	2%	2%	0%	0%	0%	0%	2%	2%	0%	41
Sanaag	6%	6%	6%	0%	0%	6%	6%	6%	0%	6%	6%	6%	6%	6%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	7%	4%	4%	9%	8%	4%	3%	4%	2%	3%	2%	6%	4%	2%	289
Bakool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12
Bay	3%	0%	3%	6%	6%	3%	0%	0%	0%	0%	3%	0%	0%	0%	31
Benadir	16%	11%	11%	28%	19%	11%	5%	14%	4%	7%	4%	14%	7%	4%	57
Galgadud	0%	0%	0%	4%	7%	4%	4%	4%	0%	0%	0%	0%	0%	0%	28
Gedo	6%	6%	6%	6%	6%	6%	8%	6%	6%	6%	3%	6%	8%	6%	36
Hiiraan	4%	4%	0%	4%	0%	0%	0%	0%	0%	0%	0%	4%	4%	0%	23
Lower Juba	24%	18%	12%	6%	6%	6%	12%	0%	6%	6%	6%	6%	18%	12%	17
Lower Shabelle	4%	0%	4%	4%	4%	0%	0%	4%	0%	4%	0%	4%	0%	0%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle	0%	0%	0%	5%	5%	0%	0%	0%	0%	0%	0%	9%	5%	0%	22

Shebelle															
Mudug	3%	3%	3%	6%	6%	3%	3%	3%	3%	3%	3%	6%	3%	3%	35
Facility type															
Hospital	26%	21%	21%	33%	34%	21%	16%	14%	9%	10%	9%	26%	21%	12%	58
Referral Health Center	0%	0%	0%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9
Health Center/MCH	4%	2%	2%	5%	4%	2%	2%	3%	1%	2%	1%	4%	2%	1%	383
Health Post/PHU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	294
TB Center	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55
Managing authority															
Government	3%	2%	2%	4%	4%	2%	2%	2%	1%	2%	1%	4%	2%	2%	565
Non-government	5%	4%	4%	7%	6%	4%	3%	2%	1%	2%	2%	4%	3%	2%	234
Urban/Rural															
Urban	6%	4%	4%	7%	7%	4%	3%	4%	2%	3%	2%	6%	4%	2%	492
Rural	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	307
Total	4%	3%	3%	5%	5%	3%	2%	2%	1%	2%	1%	4%	3%	2%	799

Table 100. Palliative care medicines availability by region, facility type, managing authority, and urban vs. rural location (N=799), Somalia 2016

	Dexamethasone injection	Haloperidol injection	Hyoscine butylbromide injection	Ibuprofen	Loperamide tab/cap	Lorazepam tablet	Metoclopramide injection	Morphine granule, injectable or cap/tab	Paracetamol	Senna preparation (laxative)	Total number of facilities
Regions											
Somaliland	12%	1%	3%	36%	1%	2%	5%	1%	40%	1%	0
Awdal	8%	0%	2%	40%	0%	0%	9%	0%	42%	0%	53
Marodi-Jeh	17%	0%	3%	56%	1%	3%	8%	1%	65%	1%	72
Sahil	23%	3%	13%	19%	0%	3%	3%	0%	23%	0%	31
Sanag	11%	4%	0%	14%	4%	4%	4%	4%	14%	4%	28
Sool	11%	0%	0%	11%	0%	0%	0%	0%	19%	0%	53
Togdher	2%	2%	2%	53%	2%	2%	4%	2%	53%	0%	45
Puntland	8%	2%	3%	24%	1%	1%	3%	1%	24%	0%	0
Bari	2%	2%	2%	23%	2%	2%	4%	2%	21%	2%	48
Gardafuu	6%	0%	0%	0%	0%	0%	0%	0%	6%	0%	17
Karkaar	5%	0%	2%	10%	0%	0%	2%	0%	12%	0%	42
Mudug	12%	4%	6%	31%	4%	2%	4%	2%	33%	0%	52
Nugaal	12%	0%	2%	46%	0%	0%	0%	0%	41%	0%	41
Sanaag	17%	6%	6%	22%	0%	6%	6%	0%	22%	0%	18
Sool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10
South Central	22%	5%	10%	29%	5%	4%	7%	4%	29%	3%	0
Bakool	17%	0%	0%	25%	0%	0%	0%	0%	25%	0%	12
Bay	19%	3%	13%	68%	10%	3%	6%	3%	68%	0%	31
Benadir	35%	9%	25%	44%	5%	9%	18%	5%	42%	4%	57
Galgadud	14%	0%	0%	7%	4%	0%	0%	4%	7%	4%	28
Gedo	25%	6%	8%	14%	8%	3%	8%	8%	14%	6%	36
Hiiraan	13%	0%	4%	43%	4%	0%	0%	0%	43%	0%	23
Lower Juba	41%	24%	18%	35%	6%	12%	18%	12%	35%	12%	17
Lower Shabelle	21%	7%	7%	14%	4%	4%	7%	0%	14%	4%	28
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	18%	0%	0%	18%	0%	0%	0%	0%	27%	0%	22
Mudug	9%	3%	3%	9%	3%	3%	3%	3%	9%	3%	35
Facility type											
Hospital	62%	19%	36%	48%	21%	16%	36%	17%	52%	10%	58

Referral Health Center	11%	0%	0%	44%	0%	0%	0%	0%	56%	0%	9
Health Center/MCH	19%	3%	5%	46%	2%	2%	5%	1%	48%	1%	383
Health Post/PHU	1%	0%	0%	10%	0%	0%	0%	0%	11%	0%	294
TB Center	2%	0%	0%	2%	0%	0%	0%	0%	2%	0%	55
Managing authority											
Government	13%	2%	5%	31%	2%	2%	6%	2%	33%	1%	565
Non-government	19%	3%	6%	28%	4%	3%	4%	3%	29%	3%	234
Urban/Rural											
Urban	20%	4%	8%	35%	4%	4%	8%	3%	37%	2%	492
Rural	5%	0%	1%	21%	0%	0%	1%	0%	23%	0%	307
Total	14%	3%	5%	30%	3%	2%	5%	2%	32%	2%	799

4.6 Advanced diagnostics

4.6.1 Advanced diagnostic services

Advanced diagnostic services include laboratory tests that are generally performed at hospitals. The following type of advanced diagnostic tests are assessed through the SARA:

- Serum electrolytes
- Full blood count with differential
- Blood typing (ABO and Rhesus) and cross match (by anti-globulin or equivalent)
- Liver function test (ALT or other)
- Renal function test (serum creatinine testing or other)
- CD4 count and percentage
- HIV antibody testing (ELISA)
- Syphilis serology
- Cryptococcal antigen
- Gram stain
- Urine microscopy testing
- CSF/body fluid counts

Figure 123 shows the percentage of hospitals offering advanced diagnostic services.

- On average, hospitals had capacity to perform 3-4 out of the 12 advanced diagnostic tests (29%)
- The most available advanced diagnostic service was urine dipstick with microscopy (45%) and the least available advanced diagnostic service was the HIV antibody test (ELISA) (10%).

Figure 123. Percentage of hospitals that offer advanced diagnostic services (N=58), Somalia 2016

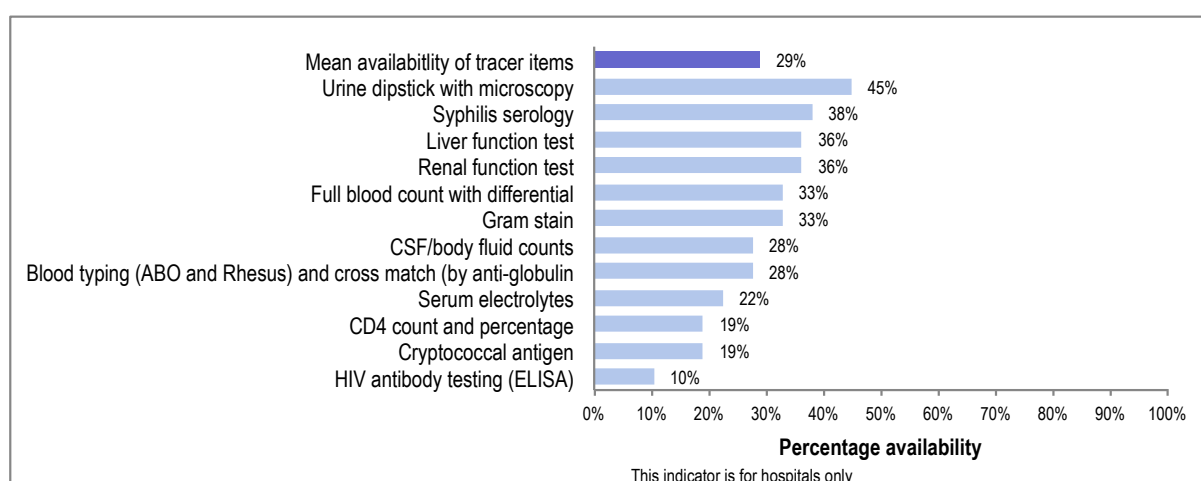


Table 101 shows the percentage of hospitals offering advanced diagnostic services by region, facility type, managing authority and urban vs. rural location.

- Governmental facilities had greater availability of advanced diagnostic services across all categories compared to non-governmental facilities.

- Only facilities located in urban areas reported having advanced diagnostic services available at the time of the survey.

Table 101. Availability of advanced diagnostic services by region, facility type, governmental vs. non-governmental ownership, and urban vs. rural location (N=58), Somalia 2016

	Serum electrolytes	Full blood count with differential	Blood typing (ABO and Rhesus) and cross match (by anti-globulin or equivalent)	Renal function test	Liver function test	CD4 count and percentage	HIV antibody testing (ELISA)	Syphilis serology	Cryptococcal antigen	Gram stain	Urine dipstick with microscopy	CSF/body fluid counts	Mean availability of tracer items	Total number of facilities
Regions														
Somaliland	31%	56%	38%	56%	56%	25%	13%	56%	19%	44%	50%	50%	41%	16
Awdal	100%	100%	100%	100%	100%	100%	0%	100%	0%	100%	100%	100%	83%	1
Marodi-Jeh	33%	67%	33%	67%	67%	17%	17%	67%	17%	50%	67%	67%	47%	6
Sahil	0%	33%	0%	33%	33%	0%	0%	33%	0%	0%	0%	0%	11%	3
Sanag	33%	33%	33%	33%	33%	0%	0%	33%	33%	33%	33%	33%	28%	3
Sool	100%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	92%	1
Togdher	0%	50%	50%	50%	50%	50%	0%	50%	50%	50%	50%	50%	42%	2
Puntland	44%	56%	67%	44%	44%	44%	22%	56%	33%	56%	67%	33%	47%	9
Bari	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Karkaar	100%	100%	100%	0%	0%	0%	0%	100%	0%	100%	100%	0%	50%	1
Mudug	33%	67%	67%	33%	33%	67%	0%	67%	33%	33%	67%	0%	42%	3
Nugaal	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	2
Sanaag	0%	0%	50%	50%	50%	0%	0%	0%	0%	50%	50%	50%	25%	2
Sool	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
South Central	12%	15%	12%	24%	24%	9%	6%	24%	15%	21%	36%	15%	18%	33
Bakool	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2
Bay	0%	0%	33%	67%	67%	0%	0%	0%	0%	0%	33%	0%	17%	3
Benadir	60%	60%	40%	60%	60%	20%	20%	80%	40%	80%	100%	60%	57%	5
Galgadud	0%	14%	0%	14%	14%	0%	0%	0%	0%	0%	14%	14%	6%	7
Gedo	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%	40%	0%	7%	5
Hiiraan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Lower Juba	0%	0%	0%	0%	0%	0%	50%	50%	50%	50%	50%	0%	21%	2
Lower Shabelle	0%	25%	0%	0%	0%	0%	0%	50%	0%	0%	25%	0%	8%	4
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	0%	0%	33%	33%	33%	0%	0%	0%	0%	0%	0%	8%	3
Mudug	100%	0%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	83%	1

	Serum electrolytes	Full blood count with differential	Blood typing (ABO and Rhesus) and cross match (by anti-globulin or equivalent)	Renal function test	Liver function test	CD4 count and percentage	HIV antibody testing (ELISA)	Syphilis serology	Cryptococcal antigen	Gram stain	Urine dipstick with microscopy	CSF/body fluid counts	Mean availability of tracer items	Total number of facilities
Facility type														
Hospital	22%	33%	28%	36%	36%	19%	10%	38%	19%	33%	45%	28%	29%	58
Referral Health Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Health Post/PHU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
TB Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Managing authority														
Government	31%	47%	39%	44%	44%	25%	14%	50%	25%	42%	56%	36%	38%	36
Non-government	9%	9%	9%	23%	23%	9%	5%	18%	9%	18%	27%	14%	14%	22
Urban/Rural														
Urban	23%	33%	28%	37%	37%	19%	11%	39%	19%	33%	46%	28%	29%	57
Rural	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1
Total	22%	33%	28%	36%	36%	19%	10%	38%	19%	33%	45%	28%	29%	58

4.6.2 High level diagnostic equipment

High level diagnostic equipment service availability at hospitals was assessed based on the presence of the four types of diagnostic equipment (X-ray, ECG, Ultrasound, and CT scan).

Figure 124 shows the percentage availability of these equipment items in hospitals (N=58).

- On average, hospitals had 1 out of 4 high level diagnostic equipment items (23%).
- The most available high level diagnostic equipment was an X-ray (38%), and the least available was a CT scan (5%).

Figure 124. Percentage of hospitals that have high level diagnostic equipment available (N=58), Somalia 2016

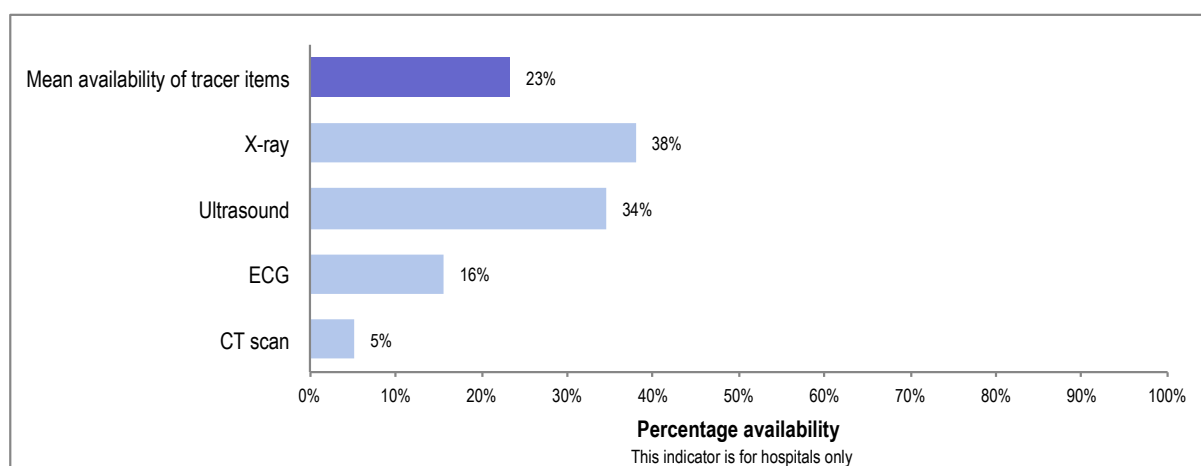


Table 102 shows the availability of high level diagnostic equipment by region, facility type, managing authority and urban vs. rural location.

- Across all items, governmental hospitals had more high level diagnostic equipment compared to non-governmental hospitals.
- Only urban hospitals reported having high level diagnostic equipment available at the time of the survey.
- In Somaliland, high level diagnostic equipment was most available in the Awdal and Sool regions (100%) and least available in the Marodi-Jeh, Sahil and Sanag regions (33%).
- In Puntland, availability of high level diagnostic equipment was greatest in the Bari and Karkaar regions (100%) and poorest in the Nugaal and Sanaag regions (50%).
- In South Central, the Hiiraan region showed the greatest availability of high level diagnostic equipment (100%), while the Bakool, Bay, Middle Shabelle and Mudug regions showed the lowest availability (0%).

Table 102. High level diagnostic equipment availability by region, facility type, managing authority and urban vs. rural location (N=58), Somalia 2016

	X-ray	ECG	Ultrasound	CT scan	Mean availability of tracer items	Total number of facilities
Regions						
Somaliland	44%	19%	38%	0%	25%	16
Awdal	100%	100%	100%	0%	75%	1
Marodi-Jeh	33%	17%	17%	0%	17%	6
Sahil	33%	0%	33%	0%	17%	3
Sanag	33%	0%	33%	0%	17%	3
Sool	100%	100%	100%	0%	75%	1
Togdher	50%	0%	50%	0%	25%	2
Puntland	67%	56%	67%	33%	56%	9
Bari	100%	100%	100%	100%	100%	1
Gardafuu	N/A	N/A	N/A	N/A	N/A	0
Karkaar	100%	0%	100%	100%	75%	1
Mudug	67%	67%	67%	0%	50%	3
Nugaal	50%	50%	50%	50%	50%	2
Sanaag	50%	50%	50%	0%	38%	2
Sool	N/A	N/A	N/A	N/A	N/A	0
South Central	27%	3%	24%	0%	14%	33
Bakool	0%	0%	0%	0%	0%	2
Bay	0%	0%	33%	0%	8%	3
Benadir	60%	0%	40%	0%	25%	5
Galgadud	43%	14%	43%	0%	25%	7
Gedo	0%	0%	0%	0%	0%	5
Hiiraan	100%	0%	100%	0%	50%	1
Lower Juba	50%	0%	50%	0%	25%	2
Lower Shabelle	25%	0%	0%	0%	6%	4
Middle Jubba	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	0%	0%	0%	0%	0%	3
Mudug	0%	0%	0%	0%	0%	1
Facility type						
Hospital	38%	16%	34%	5%	23%	58
Referral Health Center	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	N/A	N/A	N/A	N/A	N/A	0
Health Post/PHU	N/A	N/A	N/A	N/A	N/A	0
TB Center	N/A	N/A	N/A	N/A	N/A	0
Managing authority						
Government	42%	19%	42%	8%	28%	36
Non-government	32%	9%	23%	0%	16%	22
Urban/Rural						
Urban	39%	16%	35%	5%	24%	57
Rural	0%	0%	0%	0%	0%	1
Total	38%	16%	34%	5%	23%	58

5. Client satisfaction

Client satisfaction is increasingly linked with improvement in the quality of health care and improved health outcomes. Client satisfaction is not routinely assessed as part of the SARA, but for the Somali SARA, this was requested by stakeholders, discussed and agreed to be included to avoid a missed opportunity to capture clients' perception of quality of care. The client satisfaction module was completed in hospitals, referral health centers, and health centers only. Health posts and TB centers were excluded due to challenges in getting the required clients on the day of the survey. Client satisfaction data is unavailable for 7 facilities that were eligible for client satisfaction data collection. This is largely due to errors by the data collection team in correctly assessing the facility type.

In each facility, two clients who visited the facility for outpatient services on the day of data collection were randomly selected and were interviewed subsequent to their visit with a health care provider. The client satisfaction assessment assessed the following areas: general satisfaction with overall care, health workers attitude, waiting time, privacy and costs/charges.

Table 103 details the background characteristics of the client satisfaction sample included in the Somali SARA.

- A total of 444 facilities were visited for the client satisfaction survey of the SARA. Within those, a total of 931 client exit interviews were conducted. The majority of clients interviewed were female (64%).
- More than half of individuals interviewed were attending the health facility for themselves (53%).
- For children, 36% of clients were attending the health facility for children under five years, while 11% were attending for children over the age of five.

Table 104 shows the percentage of client satisfaction as was observed during exit interviews with patients and other clients (under five and above five) during the survey.

- Overall, the majority of clients reported they were highly satisfied with the services they received (61%) and 30% were satisfied with the service.
- Only 1% of clients reported being somewhat dissatisfied and the vast majority said they would recommend that health facility (91%).

Reasons for dissatisfaction among clients who reported being unsatisfied are detailed in **Table 105**.

- Among the very small sample of those who reported not being satisfied with the services at the health facility, the majority mentioned non-availability of medicines as one of the reasons.
- Limited or no privacy was also cited as a main reason for customer dissatisfaction (45%).
- Costs or charges were least likely to contribute to customer dissatisfaction.

Table 103. Background characteristics of the SARA customer satisfaction survey (N=931), Somalia 2016

	No. facilities visited	No. client interviews	% visiting for self	% visiting for U5 child	% visiting for over 5 child	% clients female	% receiving service they came for
Zones/Regions							
Somaliland	128	249	51%	36%	12%	70%	96%
Awdal	25	53	57%	42%	2%	74%	98%
Marodi-Jeh	38	65	37%	37%	26%	68%	94%
Sahil	13	23	61%	39%	0%	61%	100%
Sanag	12	27	59%	22%	15%	78%	96%
Sool	21	41	61%	32%	7%	76%	88%
Togdher	20	40	57%	42%	2%	74%	98%
Puntland	92	192	58%	35%	7%	65%	96%
Bari	18	41	49%	41%	10%	73%	90%
Gardafuu	4	8	50%	38%	13%	63%	100%
Karkaar	12	26	58%	38%	4%	77%	100%
Mudug	24	49	71%	29%	0%	63%	100%
Nugaal	20	38	66%	26%	8%	58%	100%
Sanaag	9	20	45%	45%	10%	50%	100%
Sool	5	10	40%	40%	20%	70%	70%
South Central	224	490	51%	37%	12%	60%	96%
Bakool	12	23	57%	35%	9%	43%	100%
Bay	29	69	33%	61%	6%	55%	97%
Benadir	50	122	55%	39%	7%	64%	97%
Galgadud	19	42	48%	21%	29%	64%	93%
Gedo	14	31	35%	32%	32%	61%	100%
Hiiraan	20	24	63%	38%	0%	54%	100%
Lower Juba	15	27	41%	48%	11%	56%	100%
Lower Shabelle	22	66	64%	27%	9%	67%	98%
Middle Jubba	0	0	N/A	N/A	N/A	N/A	N/A
Middle Shebelle	18	36	56%	31%	11%	64%	78%
Mudug	25	50	54%	26%	20%	54%	98%
Total	444	931	53%	36%	11%	64%	96%

Table 104. Level of customer satisfaction among those who received the service they came for (N=894), Somalia 2016

	% highly satisfied	% satisfied	% neutral	% somewhat dissatisfied	% highly dissatisfied	% charged for services	% who would recommend health facility	Total No. respondents
Zones/Regions								
Somaliland	67%	26%	6%	0%	0%	18%	92%	238
Awdal	56%	37%	8%	0%	0%	10%	96%	52
Marodi-Jeh	64%	30%	7%	0%	0%	23%	82%	61
Sahil	96%	0%	4%	0%	0%	22%	96%	23
Sanag	92%	4%	4%	0%	0%	27%	100%	26
Sool	61%	39%	0%	0%	0%	17%	97%	36
Togdher	60%	28%	10%	3%	0%	15%	93%	40
Puntland	71%	25%	3%	1%	1%	31%	96%	185
Bari	76%	19%	5%	0%	0%	22%	97%	37
Gardafuu	75%	25%	0%	0%	0%	63%	88%	8
Karkaar	88%	12%	0%	0%	0%	38%	92%	26
Mudug	78%	20%	2%	0%	0%	16%	98%	49
Nugaal	58%	37%	3%	3%	0%	37%	100%	38
Sanaag	65%	25%	5%	0%	5%	55%	100%	20
Sool	29%	71%	0%	0%	0%	14%	57%	7
South Central	53%	34%	11%	1%	0%	9%	88%	471
Bakool	48%	52%	0%	0%	0%	0%	96%	23
Bay	52%	40%	7%	0%	0%	13%	93%	67
Benadir	69%	19%	10%	0%	1%	10%	74%	118
Galgadud	46%	36%	18%	0%	0%	10%	92%	39
Gedo	39%	45%	16%	0%	0%	13%	100%	31
Hiiraan	63%	38%	0%	0%	0%	4%	100%	24
Lower Juba	48%	41%	7%	4%	0%	4%	100%	27
Lower Shabelle	52%	29%	17%	2%	0%	12%	85%	65
Middle Jubba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Middle Shebelle	32%	50%	18%	0%	0%	11%	79%	28
Mudug	43%	33%	14%	8%	2%	0%	100%	49
Total	61%	30%	8%	1%	0%	16%	91%	894

Table 105. Reasons for dissatisfaction among those clients who were not fully satisfied (N=11), Somalia 2016

	% health worker attitude	% long wait time	% limited/no privacy	% non-availability of medicines	% costs/charges	Total no. dissatisfied clients
Zones/Regions						
Somaliland	100%	100%	0%	100%	0%	1
Puntland	0%	0%	50%	100%	0%	2
South Central	25%	25%	50%	100%	13%	8
Total	27%	27%	45%	100%	9%	11

6. Data verification

6.1 Introduction to data quality assessment

Quality data on health sector performance should be available on a regular, preferably annual basis. Population-based surveys are conducted only periodically, usually once every 3-5 years, and collect retrospective information. Thus surveys are generally not a reliable reflection of the current health situation. By contrast, health facility data are collected and aggregated on a continuing basis and have the potential to present a more up-to-date picture.

All health data are imperfect in some way. Data quality assessment should always be undertaken to understand how much confidence can be placed in the health data reported. Population-based surveys use standard methods to assess data quality and make adjustments as needed to address problems of bias or missing values. All such adjustments are carefully documented. Such rigorous quality control mechanisms are rarely applied to routinely-collected administrative and health facility data. Yet these data are often the basis for annual monitoring; decision makers using them need assurance of their reliability and soundness.

In practice, HMIS data have a number of limitations and quality problems, such as missing values, bias, and computation errors. Furthermore, when HMIS data are used to estimate population coverage rates, assumptions have to be made about the relevant denominators or target populations. These assumptions are often prone to errors.

6.2 Dimensions of data quality

The Data Verification (DV) questionnaire of the SARA survey assesses two dimensions of routine data quality: 1) completeness of data and 2) internal consistency of reported data.

Completeness of data

The completeness of the data is assessed by measuring whether all the entities which are supposed to report actually do so. The measures of completeness included in the facility survey portion of the DQR include:

- Completeness of facility reporting – This metric measures if the sample of health facilities in the facility survey have submitted their monthly reporting form and submitted it on time.
- Completeness of indicator data – This metric measures if the health facilities included in the survey have included the information on each of the selected indicators in their monthly reporting form, if they are offering the service.
- Completeness of TB data elements in the source documents – As part of TB standards and benchmarks, data for a minimum set of variables should be available for $\geq 95\%$ of the total number of reported TB cases in the basic management unit (BMU). As erroneous conclusions can be drawn if the BMU data is inaccurate or incomplete, the proportion of TB cases with at least one of the following six variables missing are ascertained in the TB register: year of registration, sex, age, disease classification, type of patient, and bacteriological results.

Internal consistency of reported data

Internal consistency of the data is the coherence of the data being evaluated. The comparison of data in source documents to data in the national database is the measure of internal consistency evaluated during the health facility survey using the verification of reporting consistency metric.

Verification of reporting consistency involves an assessment of the reporting accuracy for selected indicators through the review of source documents and monthly reports in health facilities. Data verification examines the agreement between the total number of service outputs recorded in source documents at the health facility and the total number of service outputs reported through the routine reporting system for selected indicators. The ratio of the recounted value from the source documents to the reported value is called the “verification factor” and constitutes a measure of accuracy for the indicator.

Even if the reported and recounted numbers do not match exactly, it is useful to take into account the degree of disparity between the two. For a given indicator, the verification factor at a facility is computed as the recounted number of events from source documents divided by the reported number of events from the HMIS.

A verification factor (VF) higher than 1 implies that there is underreporting of events in the HMIS for the verification period. If the verification ratio is less than 1, this implies that there is over-reporting of events in the HMIS for the period chosen for the analyses. When calculating the verification factor for a given tracer indicator, data are excluded from facilities which do not provide the specific service. It should also be noted that recounted values may exceed reported values if some reports are missing or reported values may exceed recounted values if some source documents are missing. For this reason the verification factor is only calculated for health facilities that have both the source documents and the monthly reports; it is not calculated for facilities that have either the source data or one or more monthly reports missing.

6.3 Facilities included in the data verification assessment

The data verification module of the survey was administered in all hospitals, referral health centers, health centers/MCH, and TB centers in Somalia (health posts were excluded because they don’t have a functional HMIS system yet). Data verification data is unavailable for 17 facilities that were eligible for data verification data collection. This is largely due to errors by the data collection team in correctly assessing the facility type. The number of facilities for which the data verification assessment was conducted can be found in **Table 106**.

Table 106. Facilities included in the DV survey by zone and region, Somalia 2016

	Total number of facilities
Regions	
Somaliland	162
Puntland	106
South Central	239
Facility type	
Hospital	59
Referral Health Center	15
Health Center/MCH	381
TB Center	52

Managing authority	
Government	302
Non-government	205
Urban/Rural	
Urban	418
Rural	89
Total	507

6.4 Data quality assessment results

The data verification questionnaire assessed the quality of routine data for the following five indicators:

- Antenatal care
- DTP3 / PENTA3
- Malaria cases
- Notified cases of TB
- Currently on ART

The results of the data quality assessment are presented in the following sections.

6.4.1 Availability of services and reporting data status

The following tables, **Table 107** and **Table 108**, provide information on the number and percentage of facilities in the sample providing the specific health services and those that report data to a HMIS. The data verification results are based on this subset of facilities that offer the service and report to the HMIS.

- 81% of health facilities provide ANC and of the facilities that provide ANC 94% report data to the MoH reporting system.
- 73% of health facilities provide DTP3/PENTA3 and of the facilities that provide DTP3/PENTA 97% report data to the MoH reporting system.
- 68% of health facilities provide malaria services and of the facilities that provide malaria services 92% report data to the MoH reporting system.
- 13% of health facilities provide TB services and of the facilities that provide TB services 94% report data to the MoH reporting system.
- 4% of health facilities provide ART services and of those that provide ART services 70% report data to the MoH reporting system.

Table 107. Percentage of facilities providing each health service, by region, facility type, managing authority, and urban/rural

	ANC	DTP3/PENTA3	Malaria	TB	ART	Total number of facilities
Regions						
Somaliland	80%	74%	67%	12%	5%	147
Puntland	88%	75%	71%	11%	5%	104
South Central	78%	72%	67%	14%	3%	237

Facility type						
Hospital	74%	50%	81%	9%	21%	58
Referral Health Center	89%	89%	89%	0%	0%	9
Health Center/MCH	93%	87%	75%	1%	2%	366
TB Center	2%	2%	4%	100%	4%	55
Managing authority						
Government	84%	75%	70%	12%	5%	283
Non-government	77%	71%	64%	14%	3%	205
Urban/Rural						
Urban	79%	71%	67%	15%	5%	412
Rural	89%	87%	70%	1%	1%	76
Total	81%	73%	68%	13%	4%	488

Table 108. Percentage of facilities providing service that report to a MOH reporting system, by region, facility type, managing authority, and urban/rural

	ANC (N=394)	DTP3/PENTA (N=357)	Malaria (N=330)	TB (N=62)	ART (N=20)
Regions					
Somaliland	94%	90%	78%	0%	2%
Puntland	93%	81%	71%	0%	3%
South Central	95%	86%	74%	2%	2%
Facility type					
Hospital	88%	90%	91%	60%	83%
Referral Health Center	100%	100%	88%	N/A	N/A
Health Center/MCH	95%	97%	92%	100%	67%
TB Center	100%	100%	100%	96%	0%
Managing authority					
Government	94%	97%	93%	94%	77%
Non-government	94%	97%	90%	93%	57%
Urban/Rural					
Urban	94%	97%	92%	95%	74%
Rural	93%	95%	91%	0%	0%
Total	94%	97%	92%	94%	70%

6.4.2 Availability of source documents and monthly reports

If a facility offers a particular service, it should also have the source documents (registers, tally sheets, etc.) and the monthly reports of the three-month verification period available for review on the day of the data verification survey. The following table, **Table 109**, show the percentage availability of these documents for all the three months.

- Across all services, the percentage of facility-months with all source documents and monthly reports is similar, ranging from 76% for malaria to 86% for TB and ART.

Table 109. Amongst facilities providing a specific service and reporting on that service, percentage of facility-months for which the source documents and monthly reports could be re-located by the survey team, by region, facility type, managing authority, and urban/rural

	ANC (N=371)	DTP3/PENTA (N=345)	Malaria (N=304)	TB (N=58)	ART (N=14)
Regions					
Somaliland	92%	86%	67%	0%	2%
Puntland	82%	73%	59%	0%	4%
South Central	77%	73%	55%	2%	1%
Facility type					
Hospital	60%	62%	72%	100%	100%
Referral Health Center	75%	63%	57%	N/A	N/A
Health Center/MCH	85%	86%	77%	100%	50%
TB Center	100%	100%	100%	85%	N/A
Managing authority					
Government	85%	86%	77%	84%	100%
Non-government	79%	81%	73%	88%	50%
Urban/Rural					
Urban	81%	84%	75%	86%	86%
Rural	89%	83%	81%	N/A	N/A
Total	82%	84%	76%	86%	86%

6.4.3 Completeness of indicator data

In addition to having the monthly report available, there must also be complete data recorded for each service of interest. The following table, **Table 110**, shows the percentage of facilities that have complete indicator data by service.

- Across all services, the percentage of facility-months with all indicator data complete is similar, ranging from 76% for malaria to 88% for TB.

Table 110. Amongst facilities providing a specific service and reporting data, percentage of facility-months that have data for the following indicators in their monthly reports, by region, facility type, managing authority, and urban/rural

	ANC (N=371)	DTP3/PENTA (N=345)	Malaria cases (N=304)	Notified cases of TB (N=58)	Currently on ART (N=14)
Regions					
Somaliland	93%	88%	67%	0%	2%
Puntland	83%	74%	59%	0%	4%
South Central	79%	74%	55%	2%	1%
Facility type					
Hospital	62%	62%	73%	100%	100%
Referral Health Center	75%	63%	57%	N/A	N/A
Health Center/MCH	86%	88%	77%	100%	50%
TB Center	100%	100%	100%	87%	N/A
Managing authority					
Government	86%	87%	78%	84%	100%
Non-government	81%	82%	73%	92%	50%
Urban/Rural					
Urban	82%	85%	75%	88%	86%
Rural	92%	86%	81%	N/A	N/A

Total	84%	85%	76%	88%	86%
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TB surveillance systems require data on a minimum set of variables to adequately assess TB incidence and trends. This includes data for all cases on age, sex, year, bacteriological results (i.e. laboratory versus clinically confirmed), history of previous treatment (i.e. new versus previously treated), and anatomical site of disease (e.g. pulmonary versus extra-pulmonary). The following table, **Table 111**, shows the percentage of cases reviewed with missing data in the TB registers.

- Overall, 18 facilities out of 58 has cases with missing data.
- The variable most frequently omitted from the register was the bacteriological result while the least frequently omitted variable was patient sex.

Table 111. Amongst facilities providing TB services and reporting data, number of cases with missing data for select variables in TB registers, by region, facility type, managing authority, and urban/rural (N = 58)

	Sex	Age	Disease classification	Type of patient	Bacteriological results	Number of facilities with cases having missing data	Total number of facilities
Regions							
Somaliland	4	68	3	2	129	2	17
Puntland	0	0	1	1	0	1	10
South Central	156	454	197	302	438	15	31
Facility type							
Hospital	27	93	13	47	46	2	3
Referral Health Center	0	0	0	0	0	0	0
Health Center/MCH	0	0	0	0	0	0	2
TB Center	133	429	188	258	521	16	53
Managing authority							
Government	100	282	70	101	438	8	32
Non-government	60	240	131	204	129	10	26
Urban/Rural							
Urban	160	522	201	305	567	18	58
Rural	0	0	0	0	0	0	0
Total	160	522	201	305	567	18	58

6.4.4 Internal consistency of reported data: ANC

Detailed results on the facility level data verification factor for ANC are in **Table 112** below.

- The national data verification factor for ANC is 1.06 and 65% of facilities had source data exactly matching reported data.
- Hospitals had the highest proportion of facilities with source data exactly matching reported data (85%)
- Significant over-reporting (by more than 10%) of ANC services delivered was found in 4% of facilities.

- Significant under-reporting (by more than 10%) of ANC services delivered was found in 4% of facilities.

Table 112. ANC Facility level data verification factor indicators, by region, facility type, managing authority, and urban/rural (N = 281)

	National verification factor	% of facilities for which source data exactly match reported data	% of facilities that over-report by more than 10% (V.F. < 0.9)	% of facilities that under-report by more than 10% (V.F. > 1.10)	Total number of facilities providing the service and reporting data that have all required source records and reports
Regions					
Somaliland	1.03	54%	1%	6%	97
Puntland	0.98	67%	8%	2%	61
South Central	1.12	73%	4%	2%	123
Facility type					
Hospital	1.02	85%	0%	5%	20
Referral Health Center	1.00	40%	0%	0%	5
Health Center/MCH	1.06	64%	4%	4%	256
TB Center	N/A	N/A	N/A	N/A	0
Managing authority					
Government	1.04	60%	5%	5%	171
Non-government	1.09	74%	3%	2%	110
Urban/Rural					
Urban	1.06	64%	4%	3%	228
Rural	1.03	68%	4%	8%	53
Total	1.06	65%	4%	4%	281

Detailed results on the reasons for discrepancy between source documents and monthly reports for ANC are in **Table 113** below.

- No discrepancy between source documents and monthly reports was reported for 65% of facilities.
- The leading cause of discrepancy was transcription errors (17%) while the least common cause of discrepancy was missing documents during report preparation (5%).

Table 113. ANC reasons for discrepancy between source data and reported data, by region, facility type, managing authority, and urban/rural (N = 371)

	No discrepancy	Arithmetic errors	Transcription errors	Missing documents during report preparation	Missing documents during survey implementation	Total number of facilities providing the service and reporting data
Regions						
Somaliland	81%	15%	29%	2%	2%	110

Puntland	80%	25%	13%	5%	13%	85
South Central	78%	11%	12%	7%	14%	176
Facility type						
Hospital	71%	8%	3%	5%	21%	38
Referral Health Center	75%	38%	13%	0%	13%	8
Health Center/MCH	81%	16%	19%	5%	9%	324
TB Center	0%	0%	0%	0%	100%	1
Managing authority						
Government	78%	17%	20%	4%	9%	223
Non-government	82%	12%	14%	5%	12%	148
Urban/Rural						
Urban	80%	17%	16%	5%	11%	308
Rural	75%	8%	25%	5%	6%	63
Total	79%	15%	17%	5%	10%	371

6.4.5 Internal consistency of reported data: DTP3/PENTA

Detailed results on the facility level data verification factor for DTP3/PENTA3 are in **Table 114** below.

- The national data verification factor for DTP3/PENTA3 is 0.99 and 64% of facilities had source data exactly matching reported data.
- Hospitals had the highest proportion of facilities with source data exactly matching reported data (73%)
- Significant over-reporting (by more than 10%) of DTP3/PENTA3 services delivered was found in 9% of facilities.
- Significant under-reporting (by more than 10%) of DTP3/PENTA3 services delivered was found in 6% of facilities.

Table 114. DTP3/PENTA3 Facility level data verification factor indicators, by region, facility type, managing authority, and urban/rural (N = 275)

	National verification factor	% of facilities for which source data exactly match reported data	% of facilities that over-report by more than 10% (V.F. < 0.9)	% of facilities that under-report by more than 10% (V.F. > 1.10)	Total number of facilities providing the service and reporting data that have all required source records and reports
Regions					
Somaliland	1.00	43%	10%	10%	92
Puntland	0.99	58%	14%	5%	57
South Central	0.99	81%	6%	4%	126
Facility type					
Hospital	0.97	73%	7%	0%	15
Referral Health Center	0.96	20%	20%	0%	5
Health Center/MCH	0.99	64%	9%	7%	255
TB Center	N/A	N/A	N/A	N/A	0
Managing authority					

Government	1.00	51%	11%	9%	166
Non-government	0.98	83%	6%	2%	109
Urban/Rural					
Urban	0.99	65%	9%	5%	224
Rural	1.01	57%	8%	12%	51
Total	0.99	64%	9%	6%	275

Detailed results on the reasons for discrepancy between source documents and monthly reports for ANC are in **Table 115** below.

- No discrepancy between source documents and monthly reports was reported for 74% of facilities.
- The leading cause of discrepancy was transcription errors (17%) while the least common cause of discrepancy was missing documents during report preparation (5%).

Table 115. DTP3/PENTA3 reasons for discrepancy between source data and reported data, by region, facility type, managing authority, and urban/rural (N = 345)

	No discrepancy	Arithmetic errors	Transcription errors	Missing documents during report preparation	Missing documents during survey implementation	Total number of facilities providing the service and reporting data
Regions						
Somaliland	64%	21%	33%	2%	1%	106
Puntland	74%	20%	19%	7%	8%	74
South Central	80%	8%	6%	7%	13%	165
Facility type						
Hospital	77%	12%	8%	4%	15%	26
Referral Health Center	50%	25%	25%	0%	25%	8
Health Center/MCH	75%	15%	18%	5%	7%	310
TB Center	0%	0%	0%	0%	100%	1
Managing authority						
Government	67%	18%	24%	4%	8%	205
Non-government	84%	10%	7%	6%	8%	140
Urban/Rural						
Urban	75%	14%	17%	6%	9%	282
Rural	70%	17%	17%	2%	5%	63
Total	74%	14%	17%	5%	8%	345

6.4.6 Internal consistency of reported data: Malaria cases

Detailed results on the facility level data verification factor for malaria cases are in **Table 116** below.

- The national data verification factor for malaria cases is 1.00 and 92% of facilities had source data exactly matching reported data.
- RHCs and TB centers had the highest proportion of facilities with source data exactly matching reported data (100%)

- Significant over-reporting (by more than 10%) of malaria cases was found in 3% of facilities.
- Significant under-reporting (by more than 10%) of malaria cases was found in 3% of facilities.

Table 116. Malaria Facility level data verification factor indicators, by region, facility type, managing authority, and urban/rural (N = 212)

	National verification factor	% of facilities for which source data exactly match reported data	% of facilities that over-report by more than 10% (V.F. < 0.9)	% of facilities that under-report by more than 10% (V.F. > 1.10)	Total number of facilities providing the service and reporting data that have all required source records and reports
Regions					
Somaliland	1.00	99%	0%	1%	75
Puntland	1.02	94%	0%	4%	48
South Central	0.99	84%	7%	3%	89
Facility type					
Hospital	1.02	82%	4%	7%	28
Referral Health Center	1.00	100%	0%	0%	3
Health Center/MCH	1.00	93%	3%	2%	180
TB Center	1.00	100%	0%	0%	1
Managing authority					
Government	1.01	93%	2%	3%	131
Non-government	0.99	89%	5%	2%	81
Urban/Rural					
Urban	1.00	90%	3%	3%	176
Rural	1.00	100%	0%	0%	36
Total	1.00	92%	3%	3%	212

Detailed results on the reasons for discrepancy between source documents and monthly reports for malaria cases are in **Table 117** below.

- No discrepancy between source documents and monthly reports was reported for 87% of facilities.
- The leading cause of discrepancy was missing documents during survey implementation (11%) while the least common cause of discrepancy was missing documents during report preparation.

Table 117. Malaria reasons for discrepancy between source data and reported data, by region, facility type, managing authority, and urban/rural (N = 304)

	No discrepancy	Arithmetic errors	Transcription errors	Missing documents during report preparation	Missing documents during survey implementation	Total number of facilities providing the service and reporting

						data
Regions						
Somaliland	97%	0%	4%	2%	1%	95
Puntland	89%	5%	3%	0%	11%	66
South Central	78%	6%	7%	6%	17%	143
Facility type						
Hospital	79%	9%	7%	5%	16%	43
Referral Health Center	86%	0%	0%	0%	14%	7
Health Center/MCH	88%	3%	5%	3%	9%	252
TB Center	100%	0%	0%	0%	50%	2
Managing authority						
Government	87%	3%	3%	3%	10%	185
Non-government	86%	5%	8%	4%	11%	119
Urban/Rural						
Urban	84%	5%	6%	4%	13%	256
Rural	98%	0%	2%	2%	0%	48
Total	87%	4%	5%	3%	11%	304

6.4.7 Internal consistency of reported data: Notified cases of TB

Detailed results on the facility level data verification factor for notified cases of TB are in **Table 118** below.

- The national data verification factor for notified cases of TB is 1.33 and 64% of facilities had source data exactly matching reported data.
- TB centers had the highest proportion of facilities with source data exactly matching reported data (70%)
- Significant over-reporting (by more than 10%) of notified cases of TB was found in 31% of facilities.
- Significant under-reporting (by more than 10%) of notified cases of TB was found in 2% of facilities.

Table 118. TB Facility level data verification factor indicators, by region, facility type, managing authority, and urban/rural (N = 45)

	National verification factor	% of facilities for which source data exactly match reported data	% of facilities that over-report by more than 10% (V.F. < 0.9)	% of facilities that under-report by more than 10% (V.F. > 1.10)	Total number of facilities providing the service and reporting data that have all required source records and reports
Regions					
Somaliland	0.82	64%	27%	0%	11
Puntland	0.78	78%	22%	0%	9
South Central	1.75	60%	36%	4%	25

Facility type					
Hospital	0.56	0%	67%	0%	3
Referral Health Center	N/A	N/A	N/A	N/A	0
Health Center/MCH	0.52	50%	50%	0%	2
TB Center	1.43	70%	28%	3%	40
Managing authority					
Government	0.76	67%	29%	0%	24
Non-government	1.98	62%	33%	5%	21
Urban/Rural					
Urban	1.33	64%	31%	2%	45
Rural	N/A	N/A	N/A	N/A	0
Total	1.33	64%	31%	2%	45

Detailed results on the reasons for discrepancy between source documents and monthly reports for notified cases of TB are in **Table 119** below.

- No discrepancy between source documents and monthly reports was reported for 53% of facilities.
- The leading cause of discrepancy was transcription errors (16%) while the least common cause of discrepancy was arithmetic errors (5%).

Table 119. TB reasons for discrepancy between source data and reported data, by region, facility type, managing authority, and urban/rural (N = 58)

	No discrepancy	Arithmetic errors	Transcription errors	Missing documents during report preparation	Missing documents during survey implementation	Total number of facilities providing the service and reporting data
Regions						
Somaliland	53%	6%	18%	12%	12%	17
Puntland	70%	0%	10%	0%	20%	10
South Central	48%	6%	16%	10%	13%	31
Facility type						
Hospital	0%	67%	0%	0%	33%	3
Referral Health Center	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	50%	0%	0%	0%	0%	2
TB Center	57%	2%	17%	9%	13%	53
Managing authority						
Government	56%	3%	13%	13%	16%	32
Non-government	50%	8%	19%	4%	12%	26
Urban/Rural						
Urban	53%	5%	16%	9%	14%	58
Rural	N/A	N/A	N/A	N/A	N/A	0
Total	53%	5%	16%	9%	14%	58

6.4.8 Internal consistency of reported data: Currently on ART

Detailed results on the facility level data verification factor for ART are in **Table 120** below.

- The national data verification factor for ART is 1.00 and 100% of facilities had source data exactly matching reported data.
- There was no significant under or over reporting of ART across all facilities.

Table 120. ART Facility level data verification factor indicators, by region, facility type, managing authority, and urban/rural (N = 10)

	National verification factor	% of facilities for which source data exactly match reported data	% of facilities that over-report by more than 10% (V.F. < 0.9)	% of facilities that under-report by more than 10% (V.F. > 1.10)	Total number of facilities providing the service and reporting data that have all required source records and reports
Regions					
Somaliland	1.00	100%	0%	0%	4
Puntland	1.00	100%	0%	0%	3
South Central	1.00	100%	0%	0%	3
Facility type					
Hospital	1.00	100%	0%	0%	8
Referral Health Center	N/A	N/A	N/A	N/A	0
Health Center/MCH	1.00	100%	0%	0%	2
TB Center	N/A	N/A	N/A	N/A	0
Managing authority					
Government	1.00	100%	0%	0%	8
Non-government	1.00	100%	0%	0%	2
Urban/Rural					
Urban	1.00	100%	0%	0%	10
Rural	N/A	N/A	N/A	N/A	0
Total	1.00	100%	0%	0%	10

Detailed results on the reasons for discrepancy between source documents and monthly reports for ART are in **Table 121** below.

- No discrepancy between source documents and monthly reports was reported for 100% of facilities.

Table 121. ART reasons for discrepancy between source data and reported data, by region, facility type, managing authority, and urban/rural (N = 14)

	No discrepancy	Arithmetic errors	Transcription errors	Missing documents during report preparation	Missing documents during survey implementation	Total number of facilities providing the service and

						reporting data
Regions						
Somaliland	100%	0%	0%	0%	0%	5
Puntland	100%	0%	0%	0%	0%	4
South Central	100%	0%	0%	0%	0%	5
Facility type						
Hospital	100%	0%	0%	0%	0%	10
Referral Health Center	N/A	N/A	N/A	N/A	N/A	0
Health Center/MCH	100%	0%	0%	0%	0%	4
TB Center	N/A	N/A	N/A	N/A	N/A	0
Managing authority						
Government	100%	0%	0%	0%	0%	10
Non-government	100%	0%	0%	0%	0%	4
Urban/Rural						
Urban	100%	0%	0%	0%	0%	14
Rural	N/A	N/A	N/A	N/A	N/A	0
Total	100%	0%	0%	0%	0%	14

7. Conclusion

TBD

Annex 1: Master Facility List (MFL)

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	1	Awdal	101	Baki	1110101	Adad HP	PHU/HP	No	10.101815	43.225202
1	Somaliland	1	Awdal	101	Baki	1110102	Ali Haydh HC	MCH/HC	Yes	10.042857	43.784505
1	Somaliland	1	Awdal	101	Baki	1110103	Arawayne HP	PHU/HP	Yes	10.278056	43.414166
1	Somaliland	1	Awdal	101	Baki	1110104	Baki HC	MCH/HC	Yes	10.012582	43.368237
1	Somaliland	1	Awdal	101	Baki	1110105	Dilla HC	MCH/HC	Yes	9.777023	43.35049
1	Somaliland	1	Awdal	101	Baki	1110106	Fadhihun HC	MCH/HC	Yes	10.286949	43.294714
1	Somaliland	1	Awdal	101	Baki	1110107	Gediqsi HP	PHU/HP	Yes	9.82842	43.418111
1	Somaliland	1	Awdal	101	Baki	1110108	Hamarta Durdur Ad HP	PHU/HP	Yes	10.108934	43.356797
1	Somaliland	1	Awdal	101	Baki	1110109	Hego HP	PHU/HP	Yes	10.078006	43.265549
1	Somaliland	1	Awdal	101	Baki	1110110	Horay HP	PHU/HP	Yes	10.180959	43.36696
1	Somaliland	1	Awdal	101	Baki	1110111	Jarahoroto HP	PHU/HP	Yes	9.843584	43.330282
1	Somaliland	1	Awdal	101	Baki	1110112	Old Baki HP	PHU/HP	Yes	9.94519	43.348392
1	Somaliland	1	Awdal	101	Baki	1110113	Ruqi HP	PHU/HP	Yes	9.970068	43.427418
1	Somaliland	1	Awdal	102	Borama	1110201	Abuqays HP	PHU/HP	No	9.928789	43.116307
1	Somaliland	1	Awdal	102	Borama	1110202	Boon HC	MCH/HC	Yes	10.194752	43.08778
1	Somaliland	1	Awdal	102	Borama	1110203	Borama Central HC	MCH/HC	Yes	9.936282	43.182004
1	Somaliland	1	Awdal	102	Borama	1110204	Borama Hospital	Hospital	Yes	9.936737	43.180342
1	Somaliland	1	Awdal	102	Borama	1110205	Garayawl HP	PHU/HP	Yes	9.867381	43.226114

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	1	Awdal	102	Borama	1110206	Halimale HP	PHU/HP	Yes	10.235726	43.172519
1	Somaliland	1	Awdal	102	Borama	1110207	Idhanka HP	MCH/HC	Yes	9.694832	43.303189
1	Somaliland	1	Awdal	102	Borama	1110208	Qaloc HP	PHU/HP	Yes	9.734795	43.289019
1	Somaliland	1	Awdal	102	Borama	1110209	Qorgab HC	MCH/HC	Yes	9.933788	43.195191
1	Somaliland	1	Awdal	102	Borama	1110210	Qulijed HC	MCH/HC	Yes	10.089518	43.010949
1	Somaliland	1	Awdal	102	Borama	1110211	Sh. Ali Jawhar HC	MCH/HC	Yes	9.94725	43.192496
1	Somaliland	1	Awdal	102	Borama	1110212	Sh. Osman HC	MCH/HC	Yes	9.948518	43.170664
1	Somaliland	1	Awdal	102	Borama	1110213	Shed-Dher HC	MCH/HC	Yes	9.929034	43.179296
1	Somaliland	1	Awdal	102	Borama	1110214	Shifo HC	MCH/HC	Yes	9.931119	43.18463
1	Somaliland	1	Awdal	102	Borama	1110215	Tuli HP	PHU/HP	Yes	9.816753	43.311201
1	Somaliland	1	Awdal	102	Borama	1110216	Walalgo HP	PHU/HP	Yes	9.868663	43.278783
1	Somaliland	1	Awdal	102	Borama	1110217	Wara HP	PHU/HP	No	10.261586	43.246217
1	Somaliland	1	Awdal	102	Borama	1110218	Borama TB center	TB center	Yes	9.937523	43.179809
1	Somaliland	1	Awdal	103	Lughaya	1110302	Fardo-Laguhidh HP	PHU/HP	Yes	10.411367	43.449841
1	Somaliland	1	Awdal	103	Lughaya	1110303	Garbadadar HC	MCH/HC	Yes	10.24134	43.621491
1	Somaliland	1	Awdal	103	Lughaya	1110304	Gargara HC	MCH/HC	Yes	10.313433	43.80475
1	Somaliland	1	Awdal	103	Lughaya	1110305	Gerisa HC	MCH/HC	Yes	10.604171	43.433435
1	Somaliland	1	Awdal	103	Lughaya	1110306	Ido-adays HP	PHU/HP	Yes	10.626279	44.036542
1	Somaliland	1	Awdal	103	Lughaya	1110307	Karure HP	PHU/HP	Yes	10.754645	43.589466
1	Somaliland	1	Awdal	103	Lughaya	1110308	Lughaya HC	MCH/HC	Yes	10.682601	43.941346

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	1	Awdal	103	Lughaya	1110309	Lughaya RHC	RHC	No	10.682738	43.940975
1	Somaliland	1	Awdal	103	Lughaya	1110310	Osoli HP	PHU/HP	Yes	10.437555	43.705127
1	Somaliland	1	Awdal	103	Lughaya	1110311	Riiga Kalawle HP	PHU/HP	Yes	10.550875	43.852929
1	Somaliland	1	Awdal	103	Lughaya	1110313	Shed-Dher HP	PHU/HP	Yes	10.301	43.522937
1	Somaliland	1	Awdal	103	Lughaya	1110314	Turka HP	PHU/HP	Yes	10.28408	43.735446
1	Somaliland	1	Awdal	104	Zeila	1110401	Abdulqadir HC	MCH/HC	Yes	10.509646	42.891681
1	Somaliland	1	Awdal	104	Zeila	1110402	Asho Ado HP	PHU/HP	Yes	11.176344	43.440771
1	Somaliland	1	Awdal	104	Zeila	1110403	Borama TB Hospital	TB center	Yes	9.937523	43.179809
1	Somaliland	1	Awdal	104	Zeila	1110404	El Bahay HP	PHU/HP	Yes	10.297015	42.965203
1	Somaliland	1	Awdal	104	Zeila	1110405	El Gal HP	PHU/HP	Yes	10.976317	43.440689
1	Somaliland	1	Awdal	104	Zeila	1110406	Fiqi Aden HC	MCH/HC	Yes	10.374422	43.193885
1	Somaliland	1	Awdal	104	Zeila	1110407	Habaas HP	PHU/HP	Yes	10.432833	42.810581
1	Somaliland	1	Awdal	104	Zeila	1110408	Hariirad RHC	RHC	Yes	10.327219	42.843232
1	Somaliland	1	Awdal	104	Zeila	1110409	Hariirad TB Centre	TB center	Yes	10.332621	42.837117
1	Somaliland	1	Awdal	104	Zeila	1110410	Harirad HC	MCH/HC	Yes	10.329614	42.838097
1	Somaliland	1	Awdal	104	Zeila	1110411	Jidhi HC	MCH/HC	Yes	10.620894	43.068139
1	Somaliland	1	Awdal	104	Zeila	1110412	Lawya-ado HC	MCH/HC	Yes	11.459249	43.257916
1	Somaliland	1	Awdal	104	Zeila	1110414	Tokhoshi HP	PHU/HP	Yes	11.349638	43.415131
1	Somaliland	1	Awdal	104	Zeila	1110415	Zeila HC	MCH/HC	Yes	11.35479	43.476168

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
										5	
1	Somaliland	1	Awdal	104	Zeila	1110416	Zeilac District Hospital	Hospital	No	11.352779	43.47077
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220101	Ada HP	PHU/HP	Yes	9.959302	43.80758
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220102	Agabar HC	MCH/HC	Yes	9.926227	43.91602
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220103	Allaybaday HC	MCH/HC	Yes	9.38611	43.517815
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220104	Arabsiyo HC	MCH/HC	Yes	9.679783	43.760856
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220105	Bodhley HP	PHU/HP	Yes	9.600468	43.542263
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220106	Boqor HP	PHU/HP	Yes	9.636017	43.57325
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220107	Bus HP	PHU/HP	Yes	9.857055	43.674557
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220108	El Bardale HP	PHU/HP	Yes	9.825125	43.476468
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220109	Gabiley HC	MCH/HC	Yes	9.704856	43.625217
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220110	Gabiley Hospital	Hospital	Yes	9.706002	43.630198
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220111	Gabiley TB Hospital	TB center	Yes	9.708296	43.636295
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220112	Ged-Baladh HP	PHU/HP	Yes	9.484659	43.431678
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220113	Hidhinta HP	PHU/HP	Yes	9.551203	43.737422
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220114	Ijara HP	PHU/HP	Yes	9.583791	43.628804
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220115	Ilma-Dada HP	PHU/HP	Yes	9.754993	43.459525
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220116	Kalabaydh HC	MCH/HC	Yes	9.6714	43.476116
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220117	Taysa HP	PHU/HP	Yes	9.566886	43.671326
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220118	Wajale HC	MCH/HC	Yes	9.60228	43.336445
1	Somaliland	2	Marodi-Jeh	201	Gabiley	1220119	Wajaale hospital	Hospital	Yes	9.616455	43.342022
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220201	Abarso HC	MCH/HC	Yes	9.5987	43.883198
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220202	Abdi Idan HC	MCH/HC	Yes	9.534384	44.038662

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220203	Adadley HC	MCH/HC	Yes	9.766254	44.690463
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220204	Ahmed Bur HP	PHU/HP	Yes	9.607424	44.520662
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220205	Ali Adan HP	PHU/HP	Yes	9.074013	44.661973
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220206	Awr-Barkhadle HP	PHU/HP	Yes	9.691067	44.30942
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220207	Ayaha 4 HC	MCH/HC	Yes	9.516283	44.030912
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220208	Badarwanag HP	PHU/HP	Yes	9.573612	44.409673
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220209	Bali Abane HC	MCH/HC	Yes	9.149613	43.856335
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220210	Bali Gubadle HC	MCH/HC	Yes	9.003574	44.003938
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220211	Bali Gubadle TB Centre	TB center	Yes	9.003574	44.00447
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220212	Bali Kalil HP	PHU/HP	Yes	9.08204	44.498929
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220213	Da'arbudhuq HC	MCH/HC	Yes	9.858298	44.528089
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220214	Dami A HC	MCH/HC	Yes	9.567547	44.080656
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220215	Dami B HC	MCH/HC	Yes	9.570659	44.072196
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220216	Dararwayne HC	MCH/HC	Yes	9.718396	44.223142
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220217	Darasalam HC	MCH/HC	Yes	9.838035	44.013896
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220218	Dhabolaq HP	PHU/HP	Yes	9.510814	43.875064
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220219	Dheenta HP	PHU/HP	Yes	9.725627	44.410184
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220220	Dhimbiriyale HC	MCH/HC	Yes	9.268864	44.116627
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220221	Digale HC	MCH/HC	Yes	9.512666	44.120997
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220222	Dr. Khalid HC	MCH/HC	Yes	9.561329	44.068643

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1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220223	El-Lahelay HC	MCH/HC	Yes	10.266132	44.083345
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220224	Farawayne HC	MCH/HC	Yes	9.333055	43.670406
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220226	Ged-Deble HP	PHU/HP	Yes	9.765976	43.982202
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220227	Guburaha Banka HP	PHU/HP	Yes	9.171435	44.019822
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220228	Gumar HP	PHU/HP	Yes	9.105857	43.898048
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220229	Guryo-Samo HC	MCH/HC	Yes	9.554969	44.071992
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220230	Haraf HP	PHU/HP	Yes	9.543292	43.99394
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220231	Hargeisa G. Hospital	Hospital	Yes	9.56114	44.055377
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220232	Hargeisa TB Hospital	TB center	Yes	9.558005	44.055231
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220233	Hawadle HC	MCH/HC	Yes	9.577432	44.055454
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220234	Hunbawayne HP	PHU/HP	Yes	9.808016	44.277941
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220235	Iftin HC	MCH/HC	Yes	9.547857	44.060472
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220236	Ilinta-Dhehe HP	PHU/HP	Yes	9.982759	44.123564
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220237	Ina Igire HP	PHU/HP	Yes	8.974034	44.414122
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220238	Lafta-Farawayne HP	PHU/HP	Yes	9.432894	43.755881
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220239	M.Monge TB center	TB center	Yes	9.542978	44.098896
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220240	Menhal Hospital - Hargeisa	Hospital	Yes	9.544314	44.077008
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220241	Mohamed-Moge HC	MCH/HC	Yes	9.54202	44.089174
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220242	New-Hargeisa HC	MCH/HC	Yes	9.561457	44.073488

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1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220243	Qol-Aday HP	PHU/HP	Yes	9.210332	44.16485
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220244	Qoolbuulale HC	MCH/HC	Yes	8.868966	44.400365
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220245	Qoton Dabo HP	PHU/HP	Yes	9.176393	44.64425
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220246	Sabawanag HC	MCH/HC	Yes	9.046127	44.583316
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220247	Sahardid HC	MCH/HC	Yes	9.563729	44.037926
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220248	Salahley HC	MCH/HC	Yes	9.025305	44.207015
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220249	Sayla HP	PHU/HP	Yes	9.273796	43.893806
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220250	Sh. Omer HC	MCH/HC	Yes	9.530197	44.021224
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220251	Sheikh Nor HC	MCH/HC	Yes	9.577685	44.079769
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220252	SOS-Hargeisa HC	MCH/HC	Yes	9.573745	44.044233
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220253	Toon HP	PHU/HP	Yes	9.391318	44.118582
1	Somaliland	2	Marodi-Jeh	202	Hargeisa	1220254	Salaxy Hospital	Hospital	Yes	9.021795	44.214594
1	Somaliland	3	Sahil	301	Berbera	1330101	Abdaal RHC	RHC	Yes	9.954173	44.697179
1	Somaliland	3	Sahil	301	Berbera	1330102	Berbera Central HC	MCH/HC	Yes	10.442073	45.01087
1	Somaliland	3	Sahil	301	Berbera	1330103	Berbera Hospital	Hospital	Yes	10.43984	45.012705
1	Somaliland	3	Sahil	301	Berbera	1330104	Berbera Mental Hospital	Hospital	Yes	10.44095	45.012479
1	Somaliland	3	Sahil	301	Berbera	1330105	Berbera TB Hospital/Centre	TB center	Yes	10.439346	45.013415
1	Somaliland	3	Sahil	301	Berbera	1330106	Bihin HP	PHU/HP	Yes	10.161252	45.107271
1	Somaliland	3	Sahil	301	Berbera	1330107	Biyolay HP	PHU/HP	Yes	10.116071	45.27148
1	Somaliland	3	Sahil	301	Berbera	1330108	Bulahar HC	MCH/HC	Yes	10.38345	44.404263

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										7	
1	Somaliland	3	Sahil	301	Berbera	1330109	Dalow HP	PHU/HP	No	9.960167	44.889171
1	Somaliland	3	Sahil	301	Berbera	1330110	Dibijo HP	PHU/HP	Yes	10.066238	45.300435
1	Somaliland	3	Sahil	301	Berbera	1330111	Doha Guban HP	PHU/HP	Yes	9.951847	44.600828
1	Somaliland	3	Sahil	301	Berbera	1330112	El Bodale HP	PHU/HP	Yes	10.084225	44.173065
1	Somaliland	3	Sahil	301	Berbera	1330113	El Sheikh HP	PHU/HP	Yes	10.439503	44.264121
1	Somaliland	3	Sahil	301	Berbera	1330114	Hagal HP	PHU/HP	Yes	10.252862	45.740562
1	Somaliland	3	Sahil	301	Berbera	1330115	Hamas HP	PHU/HP	Yes	10.083432	44.813918
1	Somaliland	3	Sahil	301	Berbera	1330116	Hayeyti HP	PHU/HP	Yes	10.164098	45.468594
1	Somaliland	3	Sahil	301	Berbera	1330118	Jamalaye HC	MCH/HC	Yes	10.441324	45.023526
1	Somaliland	3	Sahil	301	Berbera	1330119	Lafarug HP	PHU/HP	Yes	10.008025	44.774454
1	Somaliland	3	Sahil	301	Berbera	1330120	Las-idle RHC	RHC	Yes	10.175644	45.987133
1	Somaliland	3	Sahil	301	Berbera	1330121	Laso-da'awo HC	MCH/HC	Yes	10.052257	44.98222
1	Somaliland	3	Sahil	301	Berbera	1330122	SOS HC	MCH/HC	Yes	10.43573	45.00687
1	Somaliland	3	Sahil	302	Sheikh	1330201	Dariqo HP	PHU/HP	Yes	9.933206	45.177088
1	Somaliland	3	Sahil	302	Sheikh	1330202	Gidheys HP	PHU/HP	Yes	9.949499	45.457591
1	Somaliland	3	Sahil	302	Sheikh	1330203	Go'da Wayn HC	MCH/HC	Yes	9.787829	44.906866
1	Somaliland	3	Sahil	302	Sheikh	1330204	Go'da Yar HP	PHU/HP	Yes	9.759266	45.007696
1	Somaliland	3	Sahil	302	Sheikh	1330205	Guguh HP	PHU/HP	Yes	9.967389	45.405857
1	Somaliland	3	Sahil	302	Sheikh	1330206	Huduso HP	PHU/HP	Yes	10.005123	45.164287
1	Somaliland	3	Sahil	302	Sheikh	1330207	Hulqabobe	PHU/HP	Yes	10.01332	45.08395

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							HP / Sheik			8	
1	Somaliland	3	Sahil	302	Sheikh	1330208	Sheikh HC	MCH/HC	Yes	9.933736	45.190251
1	Somaliland	3	Sahil	302	Sheikh	1330209	Sheikh Hospital	Hospital	Yes	9.929241	45.160417
1	Somaliland	3	Sahil	302	Sheikh	1330210	Sheikh TB Hospital/Centre	TB center	Yes	9.933798	45.190573
1	Somaliland	3	Sahil	302	Sheikh	1330211	Suuqsada HC	MCH/HC	Yes	9.942576	45.331548
1	Somaliland	4	Sanag	401	Badhan	1440110	Habasha HP	PHU/HP	No	11.008325	48.321966
1	Somaliland	4	Sanag	401	Badhan	1440111	Hadaftimo HC	MCH/HC	Yes	10.764809	48.110456
1	Somaliland	4	Sanag	401	Badhan	1440112	Hingalol District Hospital	Hospital	Yes	9.760565	48.30815
1	Somaliland	4	Sanag	401	Badhan	1440116	Sibaye HP	PHU/HP	Yes	9.961682	48.138211
1	Somaliland	4	Sanag	401	Badhan	1440118	Geeldoora MCH	MCH/HC	Yes	10.711714	48.339835
1	Somaliland	4	Sanag	402	El-Afweyn	1440201	Bohol HP	PHU/HP	No	9.362323	47.301049
1	Somaliland	4	Sanag	402	El-Afweyn	1440202	Dararwayne HP	PHU/HP	Yes	9.756881	47.526757
1	Somaliland	4	Sanag	402	El-Afweyn	1440203	Dhur-ilaan HP	PHU/HP	No	10.126192	46.351669
1	Somaliland	4	Sanag	402	El-Afweyn	1440204	El-Afwayn District Hospital	Hospital	Yes	9.932538	47.216758
1	Somaliland	4	Sanag	402	El-Afweyn	1440205	El-Afwayn HC	MCH/HC	Yes	9.925084	47.217207
1	Somaliland	4	Sanag	402	El-Afweyn	1440206	Fadhigab HP	PHU/HP	Yes	9.666429	47.014205
1	Somaliland	4	Sanag	402	El-Afweyn	1440208	Gar-Adag HC	MCH/HC	Yes	9.484935	46.87099
1	Somaliland	4	Sanag	402	El-Afweyn	1440209	Hamilka HP	PHU/HP	No	9.876853	47.405612
1	Somaliland	4	Sanag	402	El-Afweyn	1440210	Hulul HC	MCH/HC	Yes	9.973754	46.69852
1	Somaliland	4	Sanag	402	El-Afweyn	1440211	Lasdomare HP	PHU/HP	No	9.85408	46.888861

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	4	Sanag	403	Erigavo	1440301	Ardaa HP	PHU/HP	Yes	10.243378	47.697701
1	Somaliland	4	Sanag	403	Erigavo	1440303	Barwaqo/ERI GAVO HC	MCH/HC	Yes	10.622503	47.367761
1	Somaliland	4	Sanag	403	Erigavo	1440304	Elafwein TB center	TB center	Yes	9.932375	47.217155
1	Somaliland	4	Sanag	403	Erigavo	1440305	Erigabo Hospital	Hospital	Yes	10.626195	47.365972
1	Somaliland	4	Sanag	403	Erigavo	1440306	Erigabo TB Hospital	TB center	Yes	10.626931	47.364962
1	Somaliland	4	Sanag	403	Erigavo	1440307	Figi-Fuliye HP	PHU/HP	Yes	10.026904	47.78218
1	Somaliland	4	Sanag	403	Erigavo	1440308	God-Anod HP	PHU/HP	Yes	10.1112	47.30775
1	Somaliland	4	Sanag	403	Erigavo	1440309	Goob HP	PHU/HP	Yes	10.575814	47.13377
1	Somaliland	4	Sanag	403	Erigavo	1440310	Gudmo HC	MCH/HC	Yes	10.588079	46.955351
1	Somaliland	4	Sanag	403	Erigavo	1440311	Hamaas HP	PHU/HP	Yes	10.775169	47.507373
1	Somaliland	4	Sanag	403	Erigavo	1440312	Hared HP	PHU/HP	Yes	10.768125	47.267835
1	Somaliland	4	Sanag	403	Erigavo	1440313	Hiis HP	PHU/HP	No	10.896984	46.919282
1	Somaliland	4	Sanag	403	Erigavo	1440314	Jidali HP	PHU/HP	Yes	10.700844	47.668198
1	Somaliland	4	Sanag	403	Erigavo	1440315	Kulmiye HC	MCH/HC	Yes	10.617873	47.372142
1	Somaliland	4	Sanag	403	Erigavo	1440316	Kulmiye HP	PHU/HP	Yes	10.756605	47.584985
1	Somaliland	4	Sanag	403	Erigavo	1440317	Maidh HC	MCH/HC	Yes	11.002874	47.1095
1	Somaliland	4	Sanag	403	Erigavo	1440318	Rugey HP	PHU/HP	Yes	10.844966	47.307515
1	Somaliland	4	Sanag	403	Erigavo	1440319	Shinbirale HP	PHU/HP	Yes	10.143646	47.905727

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1	Somaliland	4	Sanag	403	Erigavo	1440320	Yufle HC	MCH/HC	Yes	10.373191	47.194858
1	Somaliland	5	Sool	501	Ainabo	1550101	Ainabo District Hospital	Hospital	No	8.957493	46.407331
1	Somaliland	5	Sool	501	Ainabo	1550102	Ainabo HC	MCH/HC	Yes	8.957724	46.407528
1	Somaliland	5	Sool	501	Ainabo	1550104	Dhanano HP	PHU/HP	Yes	9.472024	46.628173
1	Somaliland	5	Sool	501	Ainabo	1550106	Gawsa Weyne HP	PHU/HP	Yes	9.087806	46.774456
1	Somaliland	5	Sool	501	Ainabo	1550109	Oog HC	MCH/HC	Yes	8.938528	46.621056
1	Somaliland	5	Sool	501	Ainabo	1550111	Wadamo-Goo HP	PHU/HP	Yes	8.929229	46.268609
1	Somaliland	5	Sool	501	Ainabo	1550112	War-Idad HP	PHU/HP	Yes	9.28226	46.25278
1	Somaliland	5	Sool	501	Ainabo	1550113	Wirir HP	PHU/HP	Yes	9.464981	46.186699
1	Somaliland	5	Sool	501	Ainabo	1550116	Ainabo TB center	TB center	Yes	8.956482	46.409112
1	Somaliland	5	Sool	502	Hudun	1550201	Awrbogays HC	MCH/HC	Yes	9.569575	47.753808
1	Somaliland	5	Sool	502	Hudun	1550202	Gorofley HP	PHU/HP	Yes	9.13558	47.753021
1	Somaliland	5	Sool	502	Hudun	1550203	Haange HP	PHU/HP	Yes	9.129969	47.576095
1	Somaliland	5	Sool	502	Hudun	1550204	Holhol HP	PHU/HP	Yes	8.930082	47.734673
1	Somaliland	5	Sool	502	Hudun	1550205	Hudun HC	MCH/HC	Yes	9.157727	47.4728
1	Somaliland	5	Sool	502	Hudun	1550206	Kulaalhudun HP	PHU/HP	Yes	9.73952	47.653384
1	Somaliland	5	Sool	502	Hudun	1550207	Lafweyne HP	PHU/HP	Yes	9.153887	47.228503
1	Somaliland	5	Sool	502	Hudun	1550208	Hudun TB center	TB center	Yes	9.168938	47.474834
1	Somaliland	5	Sool	503	Laasaanod	1550301	Adhi-Adeye HP	PHU/HP	Yes	8.681014	47.15812
1	Somaliland	5	Sool	503	Laasaanod	1550303	Alibarre HC	MCH/HC	Yes	8.479217	47.364177
1	Somaliland	5	Sool	503	Laasaanod	1550304	Boaame HC	MCH/HC	Yes	8.401318	47.936366
1	Somaliland	5	Sool	503	Laasaanod	1550305	Daami HC	MCH/HC	Yes	8.474054	47.366784

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	5	Sool	503	Laasaanod	1550306	Dabatag HP	PHU/HP	Yes	8.112921	47.160975
1	Somaliland	5	Sool	503	Laasaanod	1550307	Dabayl-Wayne HP	PHU/HP	Yes	8.116058	47.536735
1	Somaliland	5	Sool	503	Laasaanod	1550308	Dalyare HP	PHU/HP	Yes	8.54359	47.59692
1	Somaliland	5	Sool	503	Laasaanod	1550309	Dan-Gudban HP	PHU/HP	Yes	8.156483	47.688715
1	Somaliland	5	Sool	503	Laasaanod	1550310	Dharkeyn HP	PHU/HP	Yes	8.003344	46.994398
1	Somaliland	5	Sool	503	Laasaanod	1550311	Dhumey HP	PHU/HP	Yes	8.332078	47.061673
1	Somaliland	5	Sool	503	Laasaanod	1550312	Fardhidin HP	PHU/HP	No	8.091968	47.99072
1	Somaliland	5	Sool	503	Laasaanod	1550313	Farhaskule HC	MCH/HC	Yes	8.467695	47.352828
1	Somaliland	5	Sool	503	Laasaanod	1550314	Ganbadhe HP	PHU/HP	Yes	8.526195	47.563616
1	Somaliland	5	Sool	503	Laasaanod	1550315	Gumeys HP	PHU/HP	Yes	8.851794	46.796262
1	Somaliland	5	Sool	503	Laasaanod	1550316	Hidh-Hidh HP	PHU/HP	Yes	8.375815	46.989466
1	Somaliland	5	Sool	503	Laasaanod	1550318	Kalabaydh HC - L. Anod	MCH/HC	Yes	8.241148	47.225553
1	Somaliland	5	Sool	503	Laasaanod	1550319	Las-Anod Central HC	MCH/HC	Yes	8.479082	47.356735
1	Somaliland	5	Sool	503	Laasaanod	1550320	Las-Anod Hospital	Hospital	Yes	8.483255	47.357553
1	Somaliland	5	Sool	503	Laasaanod	1550321	Las-Anod TB Hospital	TB center	Yes	8.484234	47.357638
1	Somaliland	5	Sool	503	Laasaanod	1550323	Sahdher HC	MCH/HC	Yes	8.003431	47.106471
1	Somaliland	5	Sool	503	Laasaanod	1550324	Sha'abka HC	MCH/HC	Yes	8.48154	47.35616
1	Somaliland	5	Sool	503	Laasaanod	1550325	Shululuh HP	PHU/HP	Yes	8.612568	46.694836
1	Somaliland	5	Sool	503	Laasaanod	1550326	Tukaraq HP	PHU/HP	Yes	8.541511	47.788233
1	Somaliland	5	Sool	503	Laasaanod	1550327	Yagori HC	MCH/HC	Yes	8.752714	46.964644
1	Somaliland	5	Sool	503	Laasaanod	1550328	Yeyle HP	PHU/HP	Yes	8.698725	46.616293
1	Somaliland	5	Sool	503	Laasaanod	1550329	Godqaboobe	PHU/HP	Yes	8.537207	47.94133
1	Somaliland	5	Sool	503	Laasaanod	1550330	Qoriley HC	MCH/HC	Yes	8.00574	47.562219

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	5	Sool	503	Laasaanod	1550331	Faliidhyaale	PHU/HP	Yes	8.536398	48.42698
1	Somaliland	5	Sool	503	Laasaanod	1550332	Buuro Wadal	PHU/HP	Yes	8.498217	48.263824
1	Somaliland	5	Sool	504	Taleeh	1550401	Aroley HP	PHU/HP	No	8.85607	48.14833
1	Somaliland	5	Sool	504	Taleeh	1550402	Godaalo HP	PHU/HP	Yes	9.089327	47.9268
1	Somaliland	5	Sool	504	Taleeh	1550403	Halin HP	PHU/HP	Yes	9.085632	48.619955
1	Somaliland	5	Sool	504	Taleeh	1550404	Kalaad HP	PHU/HP	Yes	8.807914	48.88602
1	Somaliland	5	Sool	504	Taleeh	1550405	Karingarfod HP	PHU/HP	Yes	8.119986	47.75677
1	Somaliland	5	Sool	504	Taleeh	1550406	Laasourdan HP	PHU/HP	Yes	9.213796	47.860248
1	Somaliland	5	Sool	504	Taleeh	1550407	Sarmanyo HC	MCH/HC	Yes	9.489745	47.994934
1	Somaliland	5	Sool	504	Taleeh	1550408	Shahda/TAL EEH HP	PHU/HP	Yes	9.085632	48.907012
1	Somaliland	5	Sool	504	Taleeh	1550409	Taleh District Hospital	Hospital	Yes	9.144431	48.421558
1	Somaliland	5	Sool	504	Taleeh	1550410	Taleh HC	MCH/HC	Yes	9.145731	48.420944
1	Somaliland	6	Togdher	601	Buhodle	1660102	Bali-Alanle HP	PHU/HP	Yes	8.59416	46.082426
1	Somaliland	6	Togdher	601	Buhodle	1660104	Buhodle HC	MCH/HC	No	8.233432	46.325612
1	Somaliland	6	Togdher	601	Buhodle	1660108	Hanad HC	MCH/HC	Yes	8.237375	46.327189
1	Somaliland	6	Togdher	601	Buhodle	1660111	Nado HC	MCH/HC	Yes	8.234261	46.323783
1	Somaliland	6	Togdher	601	Buhodle	1660112	Odanle HP	PHU/HP	Yes	8.32455	46.040415
1	Somaliland	6	Togdher	601	Buhodle	1660113	Qorulugod HC	MCH/HC	Yes	8.557432	46.222571
1	Somaliland	6	Togdher	602	Buroa	1660201	Aden Saleban HC	MCH/HC	Yes	9.522213	45.577565
1	Somaliland	6	Togdher	602	Buroa	1660202	Bali-Dhig HC	MCH/HC	Yes	8.368136	45.920334
1	Somaliland	6	Togdher	602	Buroa	1660203	Bali-Hile HP	PHU/HP	No	9.181857	45.583207
1	Somaliland	6	Togdher	602	Buroa	1660204	Bali-Roble HP	PHU/HP	No	9.615528	45.968923
1	Somaliland	6	Togdher	602	Buroa	1660205	Beer HP	PHU/HP	Yes	9.365154	45.761284
1	Somaliland	6	Togdher	602	Buroa	1660206	Burao Central	MCH/HC	Yes	9.523721	45.537539

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							HC				
1	Somaliland	6	Togdher	602	Buroa	1660207	Burao General Hospital	Hospital	Yes	9.535116	45.537402
1	Somaliland	6	Togdher	602	Buroa	1660208	Burao TB center	TB center	Yes	9.533446	45.537271
1	Somaliland	6	Togdher	602	Buroa	1660209	Dhagah-Dher HC	MCH/HC	Yes	8.416406	45.76836
1	Somaliland	6	Togdher	602	Buroa	1660210	Dhoqoshay HC	MCH/HC	Yes	8.508862	45.71567
1	Somaliland	6	Togdher	602	Buroa	1660211	Dr. Alag HC	MCH/HC	Yes	9.526005	45.524311
1	Somaliland	6	Togdher	602	Buroa	1660212	Dr. Yusuf HC	MCH/HC	Yes	9.513065	45.544308
1	Somaliland	6	Togdher	602	Buroa	1660213	Druqsi HC	MCH/HC	Yes	8.519299	45.464321
1	Somaliland	6	Togdher	602	Buroa	1660214	Faqayub HP	PHU/HP	Yes	9.936776	46.027687
1	Somaliland	6	Togdher	602	Buroa	1660215	Farah Omar HC	MCH/HC	Yes	9.514585	45.536603
1	Somaliland	6	Togdher	602	Buroa	1660217	Harada Gubatahil HP	PHU/HP	Yes	8.784494	45.466448
1	Somaliland	6	Togdher	602	Buroa	1660218	Kalbare HP	PHU/HP	Yes	9.908338	45.572965
1	Somaliland	6	Togdher	602	Buroa	1660219	Kiniya HC	MCH/HC	Yes	9.518187	45.530708
1	Somaliland	6	Togdher	602	Buroa	1660220	Kosar HC	MCH/HC	Yes	9.581078	45.520907
1	Somaliland	6	Togdher	602	Buroa	1660221	Malaga Yar HP	PHU/HP	Yes	9.145967	45.951118
1	Somaliland	6	Togdher	602	Buroa	1660222	Nasiye HP	PHU/HP	Yes	8.74876	45.636121
1	Somaliland	6	Togdher	602	Buroa	1660224	Qoryale HC	MCH/HC	Yes	9.073977	45.971064
1	Somaliland	6	Togdher	602	Buroa	1660226	Riyo-Hidho HP	PHU/HP	No	8.47404	45.599116
1	Somaliland	6	Togdher	602	Buroa	1660227	Shansha-Ade HP	PHU/HP	Yes	8.659391	45.931237
1	Somaliland	6	Togdher	602	Buroa	1660228	Sibidhley HP	PHU/HP	Yes	8.439491	45.692464
1	Somaliland	6	Togdher	602	Buroa	1660229	Tala-Bur HP	PHU/HP	Yes	8.550776	45.975957

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
1	Somaliland	6	Togdher	602	Buroa	1660230	Warabeye HP	PHU/HP	Yes	8.87701	45.574609
1	Somaliland	6	Togdher	602	Buroa	1660231	War-Ibran HP	PHU/HP	Yes	8.806026	45.886799
1	Somaliland	6	Togdher	602	Buroa	1660232	Yirowe HC	MCH/HC	Yes	9.433207	45.672238
1	Somaliland	6	Togdher	602	Buroa	1660233	Yucub-Yaboh HP	PHU/HP	Yes	8.496658	45.527701
1	Somaliland	6	Togdher	603	Odweine	1660301	Abdi Farah HC	MCH/HC	Yes	9.189583	44.989144
1	Somaliland	6	Togdher	603	Odweine	1660302	Ali Farah HP	PHU/HP	Yes	8.791798	45.309396
1	Somaliland	6	Togdher	603	Odweine	1660303	Bar-Ad HP	PHU/HP	No	8.876515	45.097483
1	Somaliland	6	Togdher	603	Odweine	1660304	Dabagoriyale HP	PHU/HP	Yes	8.730433	44.824321
1	Somaliland	6	Togdher	603	Odweine	1660305	Eeg HP	PHU/HP	Yes	8.999191	45.35882
1	Somaliland	6	Togdher	603	Odweine	1660306	El-Hume HP	PHU/HP	Yes	9.385897	45.164281
1	Somaliland	6	Togdher	603	Odweine	1660307	Gatitaley HP	PHU/HP	No	9.517914	44.863173
1	Somaliland	6	Togdher	603	Odweine	1660308	Gudibi HP	PHU/HP	Yes	8.817241	44.994255
1	Somaliland	6	Togdher	603	Odweine	1660309	Hahi HP	PHU/HP	Yes	9.35076	44.96592
1	Somaliland	6	Togdher	603	Odweine	1660310	Haji Salah HC	MCH/HC	Yes	8.59396	45.241485
1	Somaliland	6	Togdher	603	Odweine	1660311	Harro-Sheik HP	PHU/HP	Yes	9.315563	44.756561
1	Somaliland	6	Togdher	603	Odweine	1660312	Ina Adami HP	PHU/HP	No	9.687166	44.777472
1	Somaliland	6	Togdher	603	Odweine	1660313	Khatumo HP	PHU/HP	No	8.66745	45.01585
1	Somaliland	6	Togdher	603	Odweine	1660314	Lan-Mulaho HP	PHU/HP	Yes	8.621003	45.148041
1	Somaliland	6	Togdher	603	Odweine	1660315	Odwayne HC	MCH/HC	Yes	9.405658	45.063645
1	Somaliland	6	Togdher	603	Odweine	1660316	Odwayne Hospital	Hospital	Yes	9.408083	45.064514
1	Somaliland	6	Togdher	603	Odweine	1660317	Oodweyne TB center	TB center	Yes	9.409828	45.062599

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
2	Puntland	1	Bari	101	Bossaso	2110101	Afurur HP	PHU/HP	No	10.838364	48.935896
2	Puntland	1	Bari	101	Bossaso	2110102	Armo HC	MCH/HC	Yes	10.567193	49.060472
2	Puntland	1	Bari	101	Bossaso	2110103	B/eley HC	MCH/HC	Yes	11.278729	49.19721
2	Puntland	1	Bari	101	Bossaso	2110104	Barookhle HP	PHU/HP	Yes	10.522257	49.23214
2	Puntland	1	Bari	101	Bossaso	2110105	Beldaaje HC	MCH/HC	Yes	11.165375	49.11432
2	Puntland	1	Bari	101	Bossaso	2110106	Boqolka Bush HC	MCH/HC	Yes	11.282558	49.1651
2	Puntland	1	Bari	101	Bossaso	2110107	Bosaso General Hospital	Hospital	Yes	11.284329	49.180553
2	Puntland	1	Bari	101	Bossaso	2110108	Bosaso TB center	TB center	Yes	11.257405	49.180279
2	Puntland	1	Bari	101	Bossaso	2110109	Carta HP	PHU/HP	Yes	10.496328	49.074932
2	Puntland	1	Bari	101	Bossaso	2110110	Ceeldaahir HP	PHU/HP	Yes	10.624816	49.045491
2	Puntland	1	Bari	101	Bossaso	2110111	Central/Ugas yasin HC	MCH/HC	Yes	11.283461	49.179574
2	Puntland	1	Bari	101	Bossaso	2110113	Dhud hoose/Dhud Sare HP	PHU/HP	No	10.688982	49.241933
2	Puntland	1	Bari	101	Bossaso	2110116	Horseed HC	MCH/HC	Yes	11.2599	49.181979
2	Puntland	1	Bari	101	Bossaso	2110118	Isnino HC	MCH/HC	Yes	11.269771	49.203151
2	Puntland	1	Bari	101	Bossaso	2110119	Jiingada HP	PHU/HP	Yes	10.72517	49.149988
2	Puntland	1	Bari	101	Bossaso	2110120	Kalabayr HP	PHU/HP	Yes	10.829949	49.25381
2	Puntland	1	Bari	101	Bossaso	2110121	Lasadawaco HP	PHU/HP	Yes	10.471521	49.082832
2	Puntland	1	Bari	101	Bossaso	2110123	Shabeelle HC	MCH/HC	Yes	11.275384	49.194982

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
2	Puntland	1	Bari	101	Bossaso	2110124	T/Jaalle HC	MCH/HC	Yes	11.272638	49.185862
2	Puntland	1	Bari	101	Bossaso	2110126	Yalho HP	PHU/HP	Yes	10.924473	49.256889
2	Puntland	1	Bari	101	Bossaso	2110127	Jurile HP	PHU/HP	Yes	10.385377	49.071735
2	Puntland	1	Bari	101	Bossaso	2110128	Karin HP	PHU/HP	Yes	10.982399	49.218579
2	Puntland	1	Bari	101	Bossaso	2110129	Laag HP	PHU/HP	Yes	11.038283	49.18814
2	Puntland	1	Bari	101	Bossaso	2110130	Banderziada Qaw HP	PHU/HP	Yes	11.233128	48.97415
2	Puntland	1	Bari	102	Qandala	2110201	Balli dhidin HP	PHU/HP	Yes	10.883986	50.395088
2	Puntland	1	Bari	102	Qandala	2110205	Ceelgaal HP	PHU/HP	Yes	11.375204	50.397188
2	Puntland	1	Bari	102	Qandala	2110212	Qaanlaaye HP	PHU/HP	Yes	11.289972	50.328479
2	Puntland	1	Bari	102	Qandala	2110213	Qandala HC	MCH/HC	Yes	11.47246	49.874007
2	Puntland	1	Bari	102	Qandala	2110215	Unuun HP	PHU/HP	Yes	11.178507	50.434055
2	Puntland	1	Bari	102	Qandala	2110217	Xijijle HP	PHU/HP	Yes	10.932451	50.244303
2	Puntland	1	Bari	102	Qandala	2110218	Dhaadaar HP	PHU/HP	Yes	11.122105	49.869436
2	Puntland	1	Bari	102	Qandala	2110219	Sheebaab	PHU/HP	Yes	11.082409	49.90705
2	Puntland	1	Bari	102	Qandala	2110220	Buruc HP	PHU/HP	Yes	11.473892	49.680736
2	Puntland	1	Bari	102	Qandala	2110221	Beliwacatay HP	PHU/HP	Yes	11.027225	50.440436
2	Puntland	1	Bari	103	Ufain	2110301	Geesa qabad HP	PHU/HP	Yes	10.813266	49.597017
2	Puntland	1	Bari	103	Ufain	2110302	Jeedaal HP	PHU/HP	Yes	10.20992	49.507984

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
										7	
2	Puntland	1	Bari	103	Ufain	2110305	Kobdhexaad HP	PHU/HP	Yes	10.656162	49.49925
2	Puntland	1	Bari	103	Ufain	2110306	Moqor HP	PHU/HP	No	10.662179	49.939414
2	Puntland	1	Bari	103	Ufain	2110308	Tasjic HP HP	PHU/HP	Yes	10.862348	49.457768
2	Puntland	1	Bari	103	Ufain	2110309	Ufain HC	MCH/HC	Yes	10.652623	49.756343
2	Puntland	1	Bari	104	Iskushuban	2110401	Biyo Gaduud HP	PHU/HP	Yes	9.814737	50.590562
2	Puntland	1	Bari	104	Iskushuban	2110403	Dhar jaale HP	PHU/HP	Yes	10.473235	50.021899
2	Puntland	1	Bari	104	Iskushuban	2110404	Dharoor HC	MCH/HC	Yes	10.4339	49.811525
2	Puntland	1	Bari	104	Iskushuban	2110405	Gorgore HP	PHU/HP	Yes	10.493696	50.695093
2	Puntland	1	Bari	104	Iskushuban	2110406	Isku Shuban MCH	MCH/HC	Yes	10.281698	50.229959
2	Puntland	1	Bari	104	Iskushuban	2110407	Isku Shuban RHC	RHC	Yes	10.281594	50.229233
2	Puntland	1	Bari	104	Iskushuban	2110408	Mareer HP	PHU/HP	Yes	9.963064	50.44988
2	Puntland	1	Bari	104	Iskushuban	2110409	Timirshe HP	PHU/HP	Yes	10.564006	50.421913
2	Puntland	1	Bari	104	Iskushuban	2110410	Xiriio HC	MCH/HC	Yes	9.979189	50.248444

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
2	Puntland	1	Bari	104	Iskushuban	2110411	Xubabays HP	PHU/HP	Yes	10.02459	50.487049
2	Puntland	1	Bari	104	Iskushuban	2110412	IskuShuban TB center	TB center	Yes	10.281597	50.229335
2	Puntland	2	Gardafuu	201	Alula	2220102	Alula HC	MCH/HC	Yes	11.963237	50.753369
2	Puntland	2	Gardafuu	201	Alula	2220103	Bareeda HP	PHU/HP	Yes	11.868187	51.05659
2	Puntland	2	Gardafuu	201	Alula	2220107	Ceelquud HP	PHU/HP	Yes	11.761244	51.044561
2	Puntland	2	Gardafuu	201	Alula	2220113	Geesaley HP	PHU/HP	Yes	11.744967	50.50374
2	Puntland	2	Gardafuu	201	Alula	2220114	Habbo HC	MCH/HC	Yes	11.790278	50.524069
2	Puntland	2	Gardafuu	201	Alula	2220116	Hursale 1 HP	PHU/HP	Yes	11.565474	50.869486
2	Puntland	2	Gardafuu	201	Alula	2220120	Murcanyo HP	PHU/HP	Yes	11.691681	50.457833
2	Puntland	2	Gardafuu	201	Alula	2220123	Saynyar HP	PHU/HP	Yes	11.760526	51.196112
2	Puntland	2	Gardafuu	201	Alula	2220125	Tooxin HP	PHU/HP	Yes	11.750585	51.256346
2	Puntland	2	Gardafuu	201	Alula	2220127	Xoogaad HP	PHU/HP	Yes	11.582404	51.115333
2	Puntland	2	Gardafuu	201	Alula	2220128	Seyn Weyn Gardafu	PHU/HP	Yes	11.734879	51.194032
2	Puntland	2	Gardafuu	202	Baargaal	2220206	Gumbax HC	MCH/HC	Yes	10.88278	51.112162
2	Puntland	2	Gardafuu	202	Baargaal	2220208	Mudiye HP	PHU/HP	Yes	11.355951	50.68307
2	Puntland	2	Gardafuu	202	Baargaal	2220212	Taageer HP	PHU/HP	Yes	10.946342	50.919322
2	Puntland	2	Gardafuu	202	Baargaal	2220213	Wadi kheeyr HP	PHU/HP	Yes	11.12964	51.055999
2	Puntland	2	Gardafuu	202	Baargaal	2220216	Bargaal HC	MCH/HC	Yes	11.28914	51.075088

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
										3	
2	Puntland	2	Gardafuu	202	Baargaal	2220217	Bargal TB center	TB center	Yes	11.289135	51.075048
2	Puntland	3	Karkaar	301	Benderbayla	2330101	Bandarbayla HC	MCH/HC	Yes	9.493291	50.813298
2	Puntland	3	Karkaar	301	Benderbayla	2330104	Dhuudo HC	MCH/HC	Yes	9.324601	50.207289
2	Puntland	3	Karkaar	301	Benderbayla	2330109	Qalwo HP	PHU/HP	Yes	9.635081	49.516707
2	Puntland	3	Karkaar	301	Benderbayla	2330110	Qarasor HP	PHU/HP	Yes	9.644646	49.570776
2	Puntland	3	Karkaar	302	Qardho	2330201	Adisoone HP	PHU/HP	Yes	9.525166	49.234013
2	Puntland	3	Karkaar	302	Qardho	2330202	Cambaar Sare HP	PHU/HP	Yes	9.735423	49.446103
2	Puntland	3	Karkaar	302	Qardho	2330204	Guudcad HP	PHU/HP	Yes	9.750261	49.197179
2	Puntland	3	Karkaar	302	Qardho	2330206	Jadad HP	PHU/HP	Yes	9.404286	49.588087
2	Puntland	3	Karkaar	302	Qardho	2330208	Libaxar HP	PHU/HP	Yes	9.486324	49.399284
2	Puntland	3	Karkaar	302	Qardho	2330209	Qardho HC	MCH/HC	Yes	9.509661	49.085683
2	Puntland	3	Karkaar	302	Qardho	2330210	Qardho Gen Hospital	Hospital	Yes	9.510201	49.085775
2	Puntland	3	Karkaar	302	Qardho	2330211	Qardho TB center	TB center	Yes	9.510367	49.084975
2	Puntland	3	Karkaar	302	Qardho	2330213	Shaxda HC	MCH/HC	Yes	9.175989	48.907055
2	Puntland	3	Karkaar	302	Qardho	2330214	Sheerbi HC	MCH/HC	Yes	9.862875	49.08924
2	Puntland	3	Karkaar	302	Qardho	2330215	Shimbiraale HP	PHU/HP	Yes	9.507329	49.093896
2	Puntland	3	Karkaar	302	Qardho	2330216	Shire HP	PHU/HP	Yes	9.088625	49.212996
2	Puntland	3	Karkaar	302	Qardho	2330217	Xabaal reer HP	PHU/HP	Yes	9.830113	49.372339
2	Puntland	3	Karkaar	302	Qardho	2330218	Xingood HC	MCH/HC	Yes	9.496359	49.078022
2	Puntland	3	Karkaar	302	Qardho	2330219	Yako HP	PHU/HP	Yes	9.220501	49.121127
2	Puntland	3	Karkaar	303	Rako	2330301	Caris HP	PHU/HP	Yes	9.59525	50.798117

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
2	Puntland	3	Karkaar	303	Rako	2330303	Dharinbaar HP	PHU/HP	Yes	8.935331	50.476494
2	Puntland	3	Karkaar	303	Rako	2330304	Dhudhub HP	PHU/HP	Yes	9.228863	49.918871
2	Puntland	3	Karkaar	303	Rako	2330305	Durdura HP	PHU/HP	Yes	9.032346	50.584936
2	Puntland	3	Karkaar	303	Rako	2330306	Kullule HP	PHU/HP	Yes	9.148961	50.643838
2	Puntland	3	Karkaar	303	Rako	2330307	Qoton HP	PHU/HP	Yes	9.594911	50.468883
2	Puntland	3	Karkaar	303	Rako	2330308	Rako HC	MCH/HC	Yes	9.782249	49.72836
2	Puntland	3	Karkaar	303	Rako	2330309	Rako RHC	RHC	Yes	9.78013	49.733223
2	Puntland	3	Karkaar	304	Waaciya	2330401	Alxamduliah HP	PHU/HP	Yes	10.084725	49.030034
2	Puntland	3	Karkaar	304	Waaciya	2330402	Dalwayn HP	PHU/HP	Yes	10.269911	49.062553
2	Puntland	3	Karkaar	304	Waaciya	2330404	Waaciye HC	MCH/HC	Yes	10.010504	49.043944
2	Puntland	3	Karkaar	304	Waaciya	2330405	Waciye HC	MCH/HC	Yes	10.003978	49.045412
2	Puntland	3	Karkaar	304	Waaciya	2330406	Xida HP	PHU/HP	Yes	9.955673	49.053832
2	Puntland	3	Karkaar	305	Xaafun	2330501	Dhuur HP	PHU/HP	Yes	9.236277	50.590968
2	Puntland	3	Karkaar	305	Xaafun	2330502	Duud hoyo HP	PHU/HP	Yes	9.883241	49.949038
2	Puntland	3	Karkaar	305	Xaafun	2330503	Meygaag HP	PHU/HP	Yes	9.519362	49.92237
2	Puntland	3	Karkaar	305	Xaafun	2330504	Xaafun HC	MCH/HC	Yes	10.418127	51.27293
2	Puntland	3	Karkaar	305	Xaafun	2330506	Garan HP	PHU/HP	Yes	10.172118	50.897755
2	Puntland	3	Karkaar	305	Xaafun	2330507	Hurdiya HP	PHU/HP	Yes	10.564567	51.133278
2	Puntland	3	Karkaar	305	Xaafun	2330508	Dardaare HP	PHU/HP	Yes	10.417894	50.91156
2	Puntland	3	Karkaar	305	Xaafun	2330509	Handhaa	PHU/HP	Yes	10.648444	51.138422
2	Puntland	3	Karkaar	305	Xaafun	2330510	Baarmadoobe HP	PHU/HP	Yes	10.053322	50.887433

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2	Puntland	3	Karkaar	305	Xaafun	2330511	Foar HP	PHU/HP	Yes	10.316615	50.897858
2	Puntland	4	Mudug	401	Galkaio	2440101	Mudug Regional Hospital	Hospital	Yes	6.770233	47.427489
2	Puntland	4	Mudug	401	Galkaio	2440102	Golkaio TB center	TB center	Yes	6.770223	47.426339
2	Puntland	4	Mudug	401	Galkaio	2440103	Central Health center	MCH/HC	Yes	6.771562	47.428196
2	Puntland	4	Mudug	401	Galkaio	2440104	Garsoor Haelth center	MCH/HC	Yes	6.762176	47.424771
2	Puntland	4	Mudug	401	Galkaio	2440105	Barwaaqo HC	MCH/HC	Yes	6.792347	47.411191
2	Puntland	4	Mudug	401	Galkaio	2440106	Doonyaale HC	MCH/HC	Yes	6.771799	47.414932
2	Puntland	4	Mudug	401	Galkaio	2440107	Horumar HC	MCH/HC	Yes	6.768043	47.438225
2	Puntland	4	Mudug	401	Galkaio	2440108	Israac HC	MCH/HC	Yes	6.78134	47.437676
2	Puntland	4	Mudug	401	Galkaio	2440109	Agaaran HC	MCH/HC	Yes	7.05724	47.490396
2	Puntland	4	Mudug	401	Galkaio	2440110	Bacadweyn HC	MCH/HC	Yes	7.19468	47.520454
2	Puntland	4	Mudug	401	Galkaio	2440111	Bacadweyn HC	MCH/HC	Yes	7.192543	47.521902
2	Puntland	4	Mudug	401	Galkaio	2440112	Beyra HC	MCH/HC	Yes	6.951191	47.31781
2	Puntland	4	Mudug	401	Galkaio	2440113	Harfo HC	MCH/HC	Yes	7.352611	47.615527
2	Puntland	4	Mudug	401	Galkaio	2440114	Hayat Maternity Home	MCH/HC	Yes	6.762115	47.415994
2	Puntland	4	Mudug	401	Galkaio	2440115	Tawakal HP	PHU/HP	Yes	6.816849	47.45645
2	Puntland	4	Mudug	401	Galkaio	2440116	Margaaga HP	MCH/HC	Yes	7.220796	47.535482
2	Puntland	4	Mudug	401	Galkaio	2440117	Heema HP	PHU/HP	Yes	7.15011	47.528376
2	Puntland	4	Mudug	401	Galkaio	2440118	Roos HP	PHU/HP	Yes	7.203802	47.435923
2	Puntland	4	Mudug	401	Galkaio	2440119	Godod HP	MCH/HC	Yes	6.951904	47.624491
2	Puntland	4	Mudug	401	Galkaio	2440120	Dhagxanyacad e HP	MCH/HC	Yes	6.88587	47.355678

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2	Puntland	4	Mudug	401	Galkaio	2440121	Teerage HP	PHU/HP	Yes	6.859283	47.306732
2	Puntland	4	Mudug	401	Galkaio	2440122	Gobsh HP	PHU/HP	Yes	6.939201	47.479686
2	Puntland	4	Mudug	401	Galkaio	2440123	Beer dhagaxtuur HP	MCH/HC	No	7.451892	47.411897
2	Puntland	4	Mudug	401	Galkaio	2440124	Bilcil HP	PHU/HP	Yes	7.455594	47.72423
2	Puntland	4	Mudug	402	Goldogob	2440201	Galdagob Hospital	Hospital	Yes	7.021919	47.02256
2	Puntland	4	Mudug	402	Goldogob	2440202	Galdagob TB center	TB center	Yes	7.026459	47.022892
2	Puntland	4	Mudug	402	Goldogob	2440203	Qudus HC	MCH/HC	Yes	7.02655	47.023448
2	Puntland	4	Mudug	402	Goldogob	2440204	Shaafici HC	MCH/HC	Yes	7.037265	47.028628
2	Puntland	4	Mudug	402	Goldogob	2440205	Bursaalex HC	MCH/HC	Yes	7.176419	47.244156
2	Puntland	4	Mudug	402	Goldogob	2440206	Bursaalex RHC	RHC	Yes	7.180277	47.233519
2	Puntland	4	Mudug	402	Goldogob	2440207	Daarasalaam HC	PHU/HP	Yes	7.25818	47.112073
2	Puntland	4	Mudug	402	Goldogob	2440208	Riig oomane HP	PHU/HP	Yes	7.204587	47.192512
2	Puntland	4	Mudug	402	Goldogob	2440209	Qansaxle HP	PHU/HP	Yes	7.115247	47.094991
2	Puntland	4	Mudug	402	Goldogob	2440210	Xero jaale HP	PHU/HP	Yes	6.987531	47.184584
2	Puntland	4	Mudug	402	Goldogob	2440211	Laanmadow HP	PHU/HP	Yes	7.330837	47.291832
2	Puntland	4	Mudug	402	Goldogob	2440212	Kalabayr HP	PHU/HP	Yes	7.19027	47.288635
2	Puntland	4	Mudug	402	Goldogob	2440213	Jeexada HP	PHU/HP	Yes	7.152881	47.131399
2	Puntland	4	Mudug	403	Jariiban	2440301	Jariiban Hospital	Hospital	Yes	7.213912	48.852641
2	Puntland	4	Mudug	403	Jariiban	2440302	Jariiban TB center	TB center	Yes	7.213057	48.852777
2	Puntland	4	Mudug	403	Jariiban	2440303	Jariiban HC	MCH/HC	Yes	7.21664	48.852359
2	Puntland	4	Mudug	403	Jariiban	2440304	Balibusle HC	MCH/HC	Yes	7.094033	48.159329
2	Puntland	4	Mudug	403	Jariiban	2440305	Garacad HC	MCH/HC	Yes	6.945928	49.321196

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2	Puntland	4	Mudug	403	Jariiban	2440306	Salax HC	MCH/HC	Yes	7.294333	48.324807
2	Puntland	4	Mudug	403	Jariiban	2440307	Tawfiq HC	MCH/HC	Yes	6.6223	48.877927
2	Puntland	4	Mudug	403	Jariiban	2440308	Buubi HP	PHU/HP	Yes	7.142587	48.377156
2	Puntland	4	Mudug	403	Jariiban	2440309	Seemade HP	PHU/HP	Yes	7.156336	48.609739
2	Puntland	4	Mudug	403	Jariiban	2440310	Balanbal HP	PHU/HP	Yes	7.447778	48.145639
2	Puntland	4	Mudug	403	Jariiban	2440311	Kulub HP	PHU/HP	Yes	7.035518	49.371336
2	Puntland	4	Mudug	403	Jariiban	2440312	Ceelxagar HP	PHU/HP	Yes	7.41773	49.277935
2	Puntland	4	Mudug	403	Jariiban	2440313	Dhooba cantuug HC	PHU/HP	Yes	7.619465	49.077075
2	Puntland	4	Mudug	403	Jariiban	2440314	Labilamaane HP	PHU/HP	Yes	7.518751	49.019754
2	Puntland	4	Mudug	403	Jariiban	2440315	Malaasle HP	PHU/HP	Yes	7.521892	47.984223
2	Puntland	4	Mudug	403	Jariiban	2440316	Dhinawda HP	PHU/HP	Yes	6.731452	49.200849
2	Puntland	5	Nugaal	501	Burtinle	2550101	Baley HP	PHU/HP	No	8.505539	48.602126
2	Puntland	5	Nugaal	501	Burtinle	2550102	Burtinle TB center	TB center	Yes	7.653786	47.838906
2	Puntland	5	Nugaal	501	Burtinle	2550103	Jalam HC	MCH/HC	Yes	7.865735	48.038189
2	Puntland	5	Nugaal	501	Burtinle	2550104	Kalkaal HC	MCH/HC	Yes	7.645522	47.831477
2	Puntland	5	Nugaal	501	Burtinle	2550105	Magacle HP	PHU/HP	Yes	7.868569	47.694774
2	Puntland	5	Nugaal	501	Burtinle	2550106	Maraya HP	PHU/HP	Yes	8.313323	50.158434
2	Puntland	5	Nugaal	501	Burtinle	2550107	Shaafici HC	MCH/HC	Yes	7.637205	47.830109
2	Puntland	5	Nugaal	501	Burtinle	2550108	Burtinle Hospital	Hospital	Yes	7.654172	47.830012
2	Puntland	5	Nugaal	502	Dangoroyo	2550201	Baqbaq HP	PHU/HP	Yes	8.69627	50.069263
2	Puntland	5	Nugaal	502	Dangoroyo	2550202	Celbuw HP	PHU/HP	Yes	9.087824	49.586656
2	Puntland	5	Nugaal	502	Dangoroyo	2550203	Dangoroyo HC	MCH/HC	Yes	8.724384	49.341937
2	Puntland	5	Nugaal	502	Dangoroyo	2550204	Qarxis HC	MCH/HC	Yes	8.494772	49.58258

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
2	Puntland	5	Nugaal	503	Eyl	2550301	Badey HC	MCH/HC	Yes	7.964062	49.842659
2	Puntland	5	Nugaal	503	Eyl	2550302	Daawad HC	MCH/HC	Yes	7.982291	49.819258
2	Puntland	5	Nugaal	503	Eyl	2550303	Eyl TB center	TB center	Yes	7.981743	49.818849
2	Puntland	5	Nugaal	503	Eyl	2550304	Godob HC	MCH/HC	Yes	7.513168	49.412611
2	Puntland	5	Nugaal	503	Eyl	2550305	Xasbahale HC	MCH/HC	Yes	7.954159	49.173887
2	Puntland	5	Nugaal	504	Garowe	2550401	Awr Culus HC	MCH/HC	Yes	8.057335	48.607516
2	Puntland	5	Nugaal	504	Garowe	2550403	Baarweyn HP	PHU/HP	No	8.518808	49.353177
2	Puntland	5	Nugaal	504	Garowe	2550404	Birta dheer HP	PHU/HP	Yes	8.139568	48.19487
2	Puntland	5	Nugaal	504	Garowe	2550405	Budunbuto HP	PHU/HP	Yes	8.517373	49.421126
2	Puntland	5	Nugaal	504	Garowe	2550406	Caano Yaskax HP	PHU/HP	Yes	8.837323	48.749021
2	Puntland	5	Nugaal	504	Garowe	2550407	Ceeelmadoobe HP	PHU/HP	Yes	8.404232	50.045669
2	Puntland	5	Nugaal	504	Garowe	2550408	Cuun HP	PHU/HP	Yes	8.821115	48.892283
2	Puntland	5	Nugaal	504	Garowe	2550409	Dhanaane HP	PHU/HP	No	7.757635	49.814529
2	Puntland	5	Nugaal	504	Garowe	2550410	Dhariin HP	PHU/HP	No	8.448682	50.244874
2	Puntland	5	Nugaal	504	Garowe	2550411	Dhiganle HP	PHU/HP	Yes	7.827028	49.488231
2	Puntland	5	Nugaal	504	Garowe	2550412	Gambool HC	MCH/HC	Yes	8.405586	48.481944
2	Puntland	5	Nugaal	504	Garowe	2550413	Gargaar HC	MCH/HC	Yes	8.415815	48.495301
2	Puntland	5	Nugaal	504	Garowe	2550414	Garmaal HP	PHU/HP	No	8.579391	50.327464
2	Puntland	5	Nugaal	504	Garowe	2550415	Garowe Gen Hospital	Hospital	Yes	8.407342	48.477086
2	Puntland	5	Nugaal	504	Garowe	2550416	Garowe TB center	TB center	Yes	8.407943	48.477872
2	Puntland	5	Nugaal	504	Garowe	2550417	Godobyar HP	PHU/HP	Yes	7.579456	47.652685
2	Puntland	5	Nugaal	504	Garowe	2550418	Jilab HC	MCH/HC	Yes	8.397483	48.520279

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2	Puntland	5	Nugaal	504	Garowe	2550419	Jowle HC	MCH/HC	Yes	8.410574	48.499942
2	Puntland	5	Nugaal	504	Garowe	2550420	Jowle Mobile HC	MCH/HC	Yes	8.414377	48.51073
2	Puntland	5	Nugaal	504	Garowe	2550421	Kalabaydh HC	MCH/HC	Yes	7.983131	48.104716
2	Puntland	5	Nugaal	504	Garowe	2550422	La daga HP	PHU/HP	No	8.191872	50.120873
2	Puntland	5	Nugaal	504	Garowe	2550423	Mayle HP	PHU/HP	Yes	7.758429	48.674763
2	Puntland	5	Nugaal	504	Garowe	2550424	Reemate HP	PHU/HP	Yes	7.799385	48.520381
2	Puntland	5	Nugaal	504	Garowe	2550425	Sinujiif HC	MCH/HC	Yes	8.532902	48.98478
2	Puntland	5	Nugaal	504	Garowe	2550426	Uusgure HP	PHU/HP	Yes	8.804691	49.720162
2	Puntland	5	Nugaal	504	Garowe	2550427	Waabari HC	MCH/HC	Yes	8.405971	48.488564
2	Puntland	5	Nugaal	504	Garowe	2550428	Wargaduud HP	PHU/HP	Yes	7.728481	49.070123
2	Puntland	5	Nugaal	504	Garowe	2550429	Xaarxaar HP	PHU/HP	Yes	7.793701	47.976976
2	Puntland	5	Nugaal	504	Garowe	2550430	Xamur HP	PHU/HP	Yes	8.721803	48.741749
2	Puntland	5	Nugaal	504	Garowe	2550431	Yoonbays HP	PHU/HP	Yes	8.021443	49.008052
2	Puntland	6	Sanaag	601	Badhan	2660102	Badhan Hospital	Hospital	Yes	10.714438	48.330123
2	Puntland	6	Sanaag	601	Badhan	2660103	Badhan HC	MCH/HC	Yes	10.713154	48.331296
2	Puntland	6	Sanaag	601	Badhan	2660104	Badhan TB center	TB center	Yes	10.714167	48.328324
2	Puntland	6	Sanaag	601	Badhan	2660105	Carmale HP	PHU/HP	Yes	10.479329	47.960914
2	Puntland	6	Sanaag	601	Badhan	2660106	Ceelaayo HP	PHU/HP	No	11.244142	48.892481
2	Puntland	6	Sanaag	601	Badhan	2660107	Ceelbuh HC	MCH/HC	Yes	10.223659	48.30747
2	Puntland	6	Sanaag	601	Badhan	2660108	Daarasalam HP	PHU/HP	Yes	10.292083	47.877319
2	Puntland	6	Sanaag	601	Badhan	2660109	Durduri HP	PHU/HP	No	11.298339	48.586048
2	Puntland	6	Sanaag	601	Badhan	2660110	Mindigale HP	PHU/HP	Yes	10.68201	48.672193

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2	Puntland	6	Sanaag	601	Badhan	2660112	Yube HP	PHU/HP	No	10.745042	47.927658
2	Puntland	6	Sanaag	601	Badhan	2660113	Cawsane HP	PHU/HP	Yes	10.582949	48.80709
2	Puntland	6	Sanaag	601	Badhan	2660118	Hadaftimo II MCH	MCH/HC	No	10.767246	48.107267
2	Puntland	6	Sanaag	601	Badhan	2660119	Lako HP	PHU/HP	Yes	10.725599	48.586913
2	Puntland	6	Sanaag	601	Badhan	2660123	Rad HP	PHU/HP	Yes	10.711838	48.562524
2	Puntland	6	Sanaag	602	Dhahar	2660201	Balibusle HP	PHU/HP	Yes	10.024456	48.597803
2	Puntland	6	Sanaag	602	Dhahar	2660203	Baraagahaqol HC	MCH/HC	Yes	9.559429	48.487226
2	Puntland	6	Sanaag	602	Dhahar	2660204	Buraan HC	MCH/HC	Yes	10.221837	48.770042
2	Puntland	6	Sanaag	602	Dhahar	2660205	Damalo Xagare HP	PHU/HP	Yes	9.811862	47.950337
2	Puntland	6	Sanaag	602	Dhahar	2660206	Dhahar HC	MCH/HC	Yes	9.755113	48.821212
2	Puntland	6	Sanaag	602	Dhahar	2660207	Dhahar Hospital	Hospital	Yes	9.760567	48.817558
2	Puntland	6	Sanaag	604	Laasqoray	2660401	Laasqoray HC	MCH/HC	Yes	11.160375	48.195936
2	Puntland	6	Sanaag	605	Xingalool	2660501	Xingalool HC	MCH/HC	Yes	9.752479	48.305411
2	Puntland	7	Sool	701	Buhodle	2770101	Al Raxma HC	MCH/HC	Yes	8.232265	46.334123
2	Puntland	7	Sool	701	Buhodle	2770103	Buhodle PL Hospital	Hospital	No	8.233432	46.325612
2	Puntland	7	Sool	701	Buhodle	2770105	Dandan HP	PHU/HP	No	8.242421	46.539856
2	Puntland	7	Sool	701	Buhodle	2770106	Qararo HP	PHU/HP	No	8.168911	46.503463
2	Puntland	7	Sool	701	Buhodle	2770107	Sahan HC	MCH/HC	Yes	8.236352	46.322254
2	Puntland	7	Sool	701	Buhodle	2770108	Sool Joogto HP	PHU/HP	Yes	8.440108	46.323113
2	Puntland	7	Sool	701	Buhodle	2770109	Xararan HP	PHU/HP	Yes	8.290179	46.144598

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2	Puntland	7	Sool	701	Buhodle	2770110	Maygaale HP	PHU/HP	No	8.472576	46.291444
2	Puntland	7	Sool	701	Buhodle	2770111	General MCH	MCH/HC	Yes	8.233806	46.325353
2	Puntland	7	Sool	702	Horufadhi	2770201	Ceegag HP	PHU/HP	Yes	8.624448	46.484401
2	Puntland	7	Sool	702	Horufadhi	2770202	Didaalo HP	PHU/HP	No	8.440507	46.466696
2	Puntland	7	Sool	702	Horufadhi	2770203	Horufadhi HC	MCH/HC	Yes	8.578998	46.399333
2	Puntland	7	Sool	706	Widhwidh	2770601	Balacad HP	PHU/HP	Yes	8.085886	46.748233
2	Puntland	7	Sool	706	Widhwidh	2770604	Widhwidh HC	MCH/HC	Yes	8.455708	46.705874
2	Puntland	7	Sool	706	Widhwidh	2770605	Xamar lagu xir HP	PHU/HP	Yes	8.134877	46.604873
3	South Central	1	Middle Shebelle	101	Adale	3110101	Adale District Hospital	Hospital	NO ACCESS		
3	South Central	1	Middle Shebelle	101	Adale	3110102	Adale PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	101	Adale	3110103	Geelgube PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	101	Adale	3110104	Masajid ali gadud PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	101	Adale	3110105	Saacid Adale TB center	TB center	Yes	2.759594	46.324559
3	South Central	1	Middle Shebelle	101	Adale	3110106	SHARDO Adale HC	MCH/HC	Yes	2.761568	46.321477
3	South Central	1	Middle Shebelle	101	Adale	3110107	Xaji ali PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	102	Aden Yabal	3110201	Aden Yabal AID VISION HC	MCH/HC	NO ACCESS		
3	South Central	1	Middle Shebelle	102	Aden Yabal	3110202	Aden yabal PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	102	Aden Yabal	3110203	Ceel burale PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	103	Balad	3110301	Balad TB center	TB center	Yes	2.359863	45.388721
3	South Central	1	Middle	103	Balad	3110302	Balad District	Hospital	Yes	2.346148	45.391653

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
			Shebelle				hospital				
3	South Central	1	Middle Shebelle	103	Balad	3110303	Balad PHU	PHU/HP	Yes	2.44879	45.355512
3	South Central	1	Middle Shebelle	103	Balad	3110304	Balad PHU INTESOS	PHU/HP	Yes	2.356597	45.387932
3	South Central	1	Middle Shebelle	103	Balad	3110305	Balad SHARDO HC	MCH/HC	Yes	2.354841	45.38756
3	South Central	1	Middle Shebelle	103	Balad	3110306	SRC HC	MCH/HC	Yes	2.360174	45.389064
3	South Central	1	Middle Shebelle	103	Balad	3110307	Xawadley PHU	PHU/HP	Yes	2.582918	45.48661
3	South Central	1	Middle Shebelle	103	Balad	3110308	Ceel-Macaan HC	MCH/HC	Yes	2.177825	45.593038
3	South Central	1	Middle Shebelle	104	Jowhar	3110401	Airport PHU	PHU/HP	No	2.881358	45.479122
3	South Central	1	Middle Shebelle	104	Jowhar	3110402	Barrey HC	MCH/HC	Yes	2.820225	45.534577
3	South Central	1	Middle Shebelle	104	Jowhar	3110403	Biya cadde PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	104	Jowhar	3110404	Bulo Shiek HC	MCH/HC	Yes	2.774903	45.518039
3	South Central	1	Middle Shebelle	104	Jowhar	3110405	Mandhere HC	MCH/HC	Yes	2.691475	45.504911
3	South Central	1	Middle Shebelle	104	Jowhar	3110406	Horsed HC	MCH/HC	No	2.773926	45.503579
3	South Central	1	Middle Shebelle	104	Jowhar	3110407	Jameco town PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	104	Jowhar	3110408	Jowhar HC	MCH/HC	Yes	2.773618	45.496377
3	South Central	1	Middle Shebelle	104	Jowhar	3110409	Jowhar maternity	Hospital	Yes	2.781699	45.502846
3	South Central	1	Middle Shebelle	104	Jowhar	3110410	Jowhar Regional Hospital	Hospital	Yes	2.774137	45.496678
3	South Central	1	Middle	104	Jowhar	3110411	Jowhar TB	TB center	Yes	2.773697	45.496508

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
			Shebelle				center				
3	South Central	1	Middle Shebelle	104	Jowhar	3110412	Kongo PHU (Intersos)	PHU/HP	Yes	2.730668	45.465217
3	South Central	1	Middle Shebelle	104	Jowhar	3110413	Kongo PHU (ORDO)	PHU/HP	No	2.73234	45.462592
3	South Central	1	Middle Shebelle	104	Jowhar	3110414	Kulmis HC	MCH/HC	Yes	2.781497	45.506625
3	South Central	1	Middle Shebelle	104	Jowhar	3110415	Sabune PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	105	Mahaday	3110501	Burane PHU	PHU/HP	No	2.960313	45.515241
3	South Central	1	Middle Shebelle	105	Mahaday	3110502	Ceel baraf PHU	PHU/HP	NO ACCESS		
3	South Central	1	Middle Shebelle	105	Mahaday	3110503	Mahaday HC (ZAMZAM)	MCH/HC	Yes	2.972591	45.533861
3	South Central	1	Middle Shebelle	105	Mahaday	3110504	Mahaday HC (Intersos)	PHU/HP	Yes	2.96965	45.533321
3	South Central	1	Middle Shebelle	106	Raaga celle	3110601	Rage ceelle District Hospital	Hospital	NO ACCESS		
3	South Central	1	Middle Shebelle	107	Run-Nirgod	3110701	Run Nirgod District Hospital	Hospital	NO ACCESS		
3	South Central	1	Middle Shebelle	108	Warsheikh	3110801	Warsheikh PHU	PHU/HP	Yes	2.29819	45.79834
3	South Central	2	Benadir	201	Abdul Aziz	3220101	AZZ ARC HC	MCH/HC	Yes	2.040393	45.35602
3	South Central	2	Benadir	201	Abdul Aziz	3220102	Saacid TB center	TB center	Yes	2.048984	45.360456
3	South Central	2	Benadir	202	Bondheere	3220201	BND CISP HC	MCH/HC	Yes	2.047217	45.342085
3	South Central	2	Benadir	202	Bondheere	3220202	BND Islamic Relief HC	MCH/HC	Yes	2.04002	45.341815
3	South Central	2	Benadir	203	Deynile	3220301	CWW HC	MCH/HC	Yes	2.063858	45.262199
3	South Central	2	Benadir	203	Deynile	3220302	Deynile	Hospital	Yes	2.129143	45.288233

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							Hospital				
3	South Central	2	Benadir	203	Deynile	3220303	DYL Islamic Relief HC	MCH/HC	Yes	2.053199	45.298153
3	South Central	2	Benadir	203	Deynile	3220304	DYL Mercy USA HC	MCH/HC	Yes	2.047147	45.285578
3	South Central	2	Benadir	203	Deynile	3220305	PAC HC	MCH/HC	Yes	2.071979	45.321069
3	South Central	2	Benadir	203	Deynile	3220306	Concern world wide Hc	MCH/HC	Yes	2.033637	45.303933
3	South Central	2	Benadir	204	Dharkeynley	3220401	Dharkeynley TB center	TB center	Yes	2.027443	45.280201
3	South Central	2	Benadir	204	Dharkeynley	3220402	DHK IRC HC	MCH/HC	Yes	2.056064	45.266391
3	South Central	2	Benadir	204	Dharkeynley	3220403	DHK SORRDO HC	MCH/HC	Yes	2.021783	45.270951
3	South Central	2	Benadir	204	Dharkeynley	3220404	SOS HC	MCH/HC	Yes	2.035149	45.212622
3	South Central	2	Benadir	204	Dharkeynley	3220405	WARDI 1 HC	MCH/HC	Yes	2.029787	45.282692
3	South Central	2	Benadir	204	Dharkeynley	3220406	WARDI 2 HC	MCH/HC	Yes	2.031198	45.272317
3	South Central	2	Benadir	205	Hamar JabJab	3220501	HJB SCI HC	MCH/HC	Yes	2.029733	45.33011
3	South Central	2	Benadir	205	Hamar JabJab	3220502	WARDI HC	MCH/HC	Yes	2.027618	45.323275
3	South Central	2	Benadir	206	Hawal Wadag	3220603	HWN IRC HC	MCH/HC	Yes	2.037689	45.323473
3	South Central	2	Benadir	206	Hawal Wadag	3220604	HWN SCI HC	MCH/HC	No	1.710571	45.322336
3	South Central	2	Benadir	206	Hawal Wadag	3220605	ZAMZAM Foundation HC	MCH/HC	Yes	2.047267	45.32525
3	South Central	2	Benadir	207	Hiliwa	3220701	SOS Hospital	Hospital	Yes	2.090397	45.367991
3	South Central	2	Benadir	208	Hodan	3220801	ACF HC	MCH/HC	Yes	2.032656	45.315639

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	2	Benadir	208	Hodan	3220802	Ayaan TB center (Muslim Aid)	TB center	Yes	2.037797	45.314253
3	South Central	2	Benadir	208	Hodan	3220803	HOD ARC HC	MCH/HC	Yes	2.049029	45.315022
3	South Central	2	Benadir	208	Hodan	3220804	HOD Cesvi HC	MCH/HC	Yes	2.062559	45.266353
3	South Central	2	Benadir	208	Hodan	3220805	Hodan WARDI HC	MCH/HC	Yes	2.040535	45.314143
3	South Central	2	Benadir	209	Karan	3220901	Keysaney Hospital	Hospital	Yes	2.053538	45.38658
3	South Central	2	Benadir	209	Karan	3220902	KRN ALDAWA HC	MCH/HC	Yes	2.058345	45.379477
3	South Central	2	Benadir	209	Karan	3220903	KRN CISP HC	MCH/HC	Yes	2.050979	45.365976
3	South Central	2	Benadir	209	Karan	3220904	KRN IRC HC	MCH/HC	Yes	2.050953	45.362415
3	South Central	2	Benadir	209	Karan	3220905	KRN Mercy USA HC	MCH/HC	Yes	2.049653	45.366532
3	South Central	2	Benadir	210	Kahda	3221001	KHD Mercy USA HC	MCH/HC	Yes	2.031762	45.247581
3	South Central	2	Benadir	210	Kahda	3221002	Muslim Hand HC	MCH/HC	Yes	2.032887	45.256032
3	South Central	2	Benadir	210	Kahda	3221003	Wardi HC	MCH/HC	Yes	2.039958	45.232985
3	South Central	2	Benadir	211	Shibis	3221101	SBS ALDACWA HC	MCH/HC	Yes	2.050239	45.345992
3	South Central	2	Benadir	211	Shibis	3221102	SBS Mercy USA HC	MCH/HC	Yes	2.050511	45.345512
3	South Central	2	Benadir	212	Waberi	3221201	Manhal TB center	TB center	Yes	2.029936	45.31504
3	South Central	2	Benadir	212	Waberi	3221202	Saacid TB center	TB center	No	2.028262	45.319808
3	South Central	2	Benadir	212	Waberi	3221203	Save children HC	MCH/HC	Yes	2.031565	45.325028
3	South Central	2	Benadir	212	Waberi	3221204	WAB	MCH/HC	Yes	2.033923	45.334407

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							SORRDO HC				
3	South Central	2	Benadir	213	Wadajir	3221305	Banadir Hospital	Hospital	Yes	2.034277	45.299873
3	South Central	2	Benadir	213	Wadajir	3221306	Buul-xuubey TB center (Muslim Aid)	TB center	Yes	2.045529	45.281723
3	South Central	2	Benadir	213	Wadajir	3221307	IMC HC	MCH/HC	Yes	2.036033	45.295547
3	South Central	2	Benadir	213	Wadajir	3221308	Madina Hospital	Hospital	Yes	2.030794	45.297647
3	South Central	2	Benadir	213	Wadajir	3221309	WDJ CESVI 1 HC	MCH/HC	Yes	2.022858	45.292101
3	South Central	2	Benadir	213	Wadajir	3221310	WDJ CESVI 2 HC	MCH/HC	Yes	2.021675	45.294871
3	South Central	2	Benadir	213	Wadajir	3221311	WJD SORRDO HC	MCH/HC	Yes	2.029383	45.3031
3	South Central	2	Benadir	214	Warta nabada	3221401	WND ARC HC	MCH/HC	Yes	2.043638	45.338557
3	South Central	2	Benadir	214	Warta nabada	3221402	WND CESVI 1 HC	MCH/HC	Yes	2.058494	45.328792
3	South Central	2	Benadir	214	Warta nabada	3221403	WND CESVI 2 HC	MCH/HC	Yes	2.046836	45.336384
3	South Central	2	Benadir	214	Warta nabada	3221404	Muslim Hanads HC	MCH/HC	Yes	2.061451	45.325584
3	South Central	2	Benadir	215	Yaqshid	3221501	Finsoma TB center	TB center	Yes	2.082172	45.356224
3	South Central	2	Benadir	215	Yaqshid	3221502	Mercy TB center	TB center	No	2.053565	45.342526
3	South Central	2	Benadir	215	Yaqshid	3221503	YAQ CISP HC	MCH/HC	Yes	2.079126	45.359609
3	South Central	2	Benadir	215	Yaqshid	3221504	YAQ Mercy USA 1 HC	MCH/HC	Yes	2.06233	45.34833
3	South Central	2	Benadir	215	Yaqshid	3221505	YAQ Mercy USA 2 HC	MCH/HC	Yes	2.057445	45.342426
3	South Central	2	Benadir	215	Yaqshid	3221506	YAQ Mercy	MCH/HC	Yes	2.06782	45.341838

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							USA 3 HC				
3	South Central	2	Benadir	216	Heliwaa	3221601	HLW Relief international HC 1	MCH/HC	No	2.077149	45.363675
3	South Central	2	Benadir	217	Hamar Wayne	3221701	Save the children HC	MCH/HC	Yes	2.033576	45.342669
3	South Central	2	Benadir	218	Shangani	3221801	Aid vision HC	MCH/HC	Yes	2.038495	45.348232
3	South Central	3	Bay	301	Baidoba	3330101	AYDO holwadag section HC	MCH/HC	Yes	3.130758	43.64213
3	South Central	3	Bay	301	Baidoba	3330102	Baidoa TB center	TB center	Yes	3.10845	43.644144
3	South Central	3	Bay	301	Baidoba	3330103	BASDO Isha section HC	MCH/HC	Yes	3.108344	43.65481
3	South Central	3	Bay	301	Baidoba	3330104	Bay Regional Hospital	Hospital	Yes	3.110784	43.643358
3	South Central	3	Bay	301	Baidoba	3330106	Bayhaw Hospital	Hospital	Yes	3.136596	43.653792
3	South Central	3	Bay	301	Baidoba	3330107	CMHCC isha section	MCH/HC	Yes	3.111422	43.647362
3	South Central	3	Bay	301	Baidoba	3330108	DMO horseed section HC	MCH/HC	Yes	3.116335	43.649752
3	South Central	3	Bay	301	Baidoba	3330109	GREDO berdalle section HC	MCH/HC	Yes	3.122579	43.65722
3	South Central	3	Bay	301	Baidoba	3330110	PRF habarre village HC	MCH/HC	Yes	3.220277	43.834999
3	South Central	3	Bay	301	Baidoba	3330111	SAMA Labatunjerow HC	MCH/HC	Yes	3.31449	43.445649
3	South Central	3	Bay	301	Baidoba	3330112	SAMA sydhelow area HC	MCH/HC	Yes	3.31449	43.445649
3	South Central	3	Bay	301	Baidoba	3330113	SOS adada area HC	MCH/HC	Yes	3.126267	43.66653

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	3	Bay	301	Baidoba	3330114	SRCS holwadag section HC	MCH/HC	Yes	3.120472	43.644845
3	South Central	3	Bay	301	Baidoba	3330115	SRCS isha section HC	MCH/HC	Yes	3.113421	43.647094
3	South Central	3	Bay	301	Baidoba	3330116	Swiss calmo awdinle section HC	MCH/HC	Yes	3.17055	43.40989
3	South Central	3	Bay	301	Baidoba	3330117	Swiss calmo berdale section HC	MCH/HC	Yes	3.121203	43.661375
3	South Central	3	Bay	301	Baidoba	3330118	Swiss calmo Gof gadud shabelo section HC	MCH/HC	Yes	2.99599	43.4752
3	South Central	3	Bay	301	Baidoba	3330119	Tirow TB center	TB center	NO ACCESS		
3	South Central	3	Bay	301	Baidoba	3330120	WHCO wadajir section HC	MCH/HC	Yes	3.17061	43.63753
3	South Central	3	Bay	301	Baidoba	3330121	WVS/MOH darasalam HC	MCH/HC	Yes	3.112583	43.667101
3	South Central	3	Bay	301	Baidoba	3330122	WVS/MOH Towfiq HC	MCH/HC	Yes	3.121714	43.676195
3	South Central	3	Bay	301	Baidoba	3330123	ALDA gof gaudud MCH	MCH/HC	Yes	3.313221	43.47007
3	South Central	3	Bay	301	Baidoba	3330124	ALDA MCH	MCH/HC	Yes	3.118536	43.657249
3	South Central	3	Bay	301	Baidoba	3330125	Hunein health centre	MCH/HC	Yes	3.118152	43.644768
3	South Central	3	Bay	301	Baidoba	3330126	ISHA MOH ISWA MCH	MCH/HC	Yes	3.107929	43.652295
3	South Central	3	Bay	301	Baidoba	3330127	Moragaabey MCH	MCH/HC	Yes	3.125038	43.64686
3	South Central	3	Bay	302	Berdalle	3330201	Berdelle health post	PHU/HP	Yes	3.213657	43.198854
3	South Central	3	Bay	302	Berdalle	3330202	CCC	MCH/HC	Yes	3.09211	43.204468

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							towsweine settlement HC				
3	South Central	3	Bay	302	Berdalle	3330203	DAYAH berdelle town HC	MCH/HC	No	3.213158	43.198854
3	South Central	3	Bay	302	Berdalle	3330204	SRCS berdelle town HC	MCH/HC	Yes	3.2176	43.199783
3	South Central	3	Bay	303	Burhakaba	3330301	Burhakab MCH HC	MCH/HC	Yes	2.79361	44.0825
3	South Central	3	Bay	303	Burhakaba	3330302	Burhakaba District Hospital	Hospital	Yes	2.793888	44.08554
3	South Central	3	Bay	303	Burhakaba	3330303	Swiss calmo TB center	TB center	Yes	2.793888	44.080554
3	South Central	3	Bay	304	Diinsor	3330401	DHO dinsor town HC	MCH/HC	NO ACCESS		
3	South Central	3	Bay	304	Diinsor	3330402	Diinsor District Hospital	Hospital	NO ACCESS		
3	South Central	3	Bay	304	Diinsor	3330403	Diinsor TB center	TB center	NO ACCESS		
3	South Central	3	Bay	305	Qansaxdh ere	3330501	BMO qasaxdhere town HC	MCH/HC	NO ACCESS		
3	South Central	3	Bay	305	Qansaxdh ere	3330502	Qansaxdhere health post	PHU/HP	NO ACCESS		
3	South Central	3	Bay	305	Qansaxdh ere	3330503	SRCS qasaxdhere town HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	401	Abudwak	3440101	1July HC	MCH/HC	Yes	6.250431	46.215117
3	South Central	4	Galgadud	401	Abudwak	3440102	Abudwak District hospital	Hospital	No	6.239441	46.22575
3	South Central	4	Galgadud	401	Abudwak	3440103	Abudwak SRC HC	MCH/HC	Yes	6.23892	46.225978
3	South Central	4	Galgadud	401	Abudwak	3440104	Abudwak TB	TB center	Yes	6.239441	46.226157

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							center				
3	South Central	4	Galgadud	401	Abudwak	3440105	Al hayat hospital	Hospital	Yes	6.242435	46.231138
3	South Central	4	Galgadud	401	Abudwak	3440106	Bali ad HP	PHU/HP	Yes	6.274207	46.051394
3	South Central	4	Galgadud	401	Abudwak	3440107	Bangele HC	MCH/HC	Yes	6.083964	46.31284
3	South Central	4	Galgadud	401	Abudwak	3440108	Dhabad HC	MCH/HC	Yes	6.430633	46.455912
3	South Central	4	Galgadud	401	Abudwak	3440109	Hadio community hospital	Hospital	No	6.235603	46.232548
3	South Central	4	Galgadud	401	Abudwak	3440110	Herales HC	MCH/HC	No	6.01973	45.96033
3	South Central	4	Galgadud	401	Abudwak	3440111	Hurshe HC	PHU/HP	No	6.118796	46.311173
3	South Central	4	Galgadud	401	Abudwak	3440112	Ibado hospital	Hospital	Yes	6.240254	46.234375
3	South Central	4	Galgadud	401	Abudwak	3440113	Midnimo hospital	Hospital	Yes	6.244858	46.211698
3	South Central	4	Galgadud	401	Abudwak	3440114	Mirjicley HP	PHU/HP	No	5.979361	46.364746
3	South Central	4	Galgadud	401	Abudwak	3440115	Shilamadaw HP	PHU/HP	No	6.179964	46.105088
3	South Central	4	Galgadud	401	Abudwak	3440116	Ubah - Abudwak HC	MCH/HC	No	6.242735	46.234757
3	South Central	4	Galgadud	402	Adado	3440201	Ada Kibir HC	MCH/HC	Yes	5.720816	46.954011
3	South Central	4	Galgadud	402	Adado	3440202	Adado Hospital	Hospital	Yes	6.137032	46.625217
3	South Central	4	Galgadud	402	Adado	3440203	Adado SRC HC	MCH/HC	Yes	6.132348	46.624934
3	South Central	4	Galgadud	402	Adado	3440204	Adado TB center	TB center	Yes	6.127769	46.625045
3	South Central	4	Galgadud	402	Adado	3440205	Albiri maternal hospital	Hospital	No	6.122028	46.623582
3	South Central	4	Galgadud	402	Adado	3440206	Bahdo HC	MCH/HC	Yes	5.789669	47.228042
3	South Central	4	Galgadud	402	Adado	3440207	Bodadhogore HP	PHU/HP	Yes	5.961627	46.460259
3	South Central	4	Galgadud	402	Adado	3440208	Dhagahdher	PHU/HP	Yes	5.854636	46.812588

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							HP				
3	South Central	4	Galgadud	402	Adado	3440209	Docolley HC	MCH/HC	No	6.131748	46.971531
3	South Central	4	Galgadud	402	Adado	3440210	Gidheys HP	PHU/HP	Yes	6.01932	46.680448
3	South Central	4	Galgadud	402	Adado	3440211	Godinlabe HC	MCH/HC	Yes	5.874349	46.623677
3	South Central	4	Galgadud	402	Adado	3440212	Kahandho HP	PHU/HP	Yes	5.970196	47.126067
3	South Central	4	Galgadud	402	Adado	3440213	Marsamage HC	MCH/HC	No	5.632475	47.398915
3	South Central	4	Galgadud	403	Balanbale	3440301	Balanbale HC	MCH/HC	Yes	5.762957	45.756219
3	South Central	4	Galgadud	404	Ceel Buur	3440401	El Bur Town HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	405	Dhuusama rreb	3440501	Dhuso-mareb TB center	TB center	Yes	5.532877	46.383882
3	South Central	4	Galgadud	405	Dhuusama rreb	3440502	Dhuusamarreb Hospital	Hospital	Yes	5.532584	46.383482
3	South Central	4	Galgadud	405	Dhuusama rreb	3440503	Dusamareb Town HC	MCH/HC	Yes	5.532607	46.383562
3	South Central	4	Galgadud	405	Dhuusama rreb	3440504	EIL-Dhere HP	PHU/HP	Yes	5.36765	46.187548
3	South Central	4	Galgadud	405	Dhuusama rreb	3440505	Gadone HC	MCH/HC	Yes	5.695078	46.67628
3	South Central	4	Galgadud	405	Dhuusama rreb	3440506	Guriel HC	MCH/HC	No	5.303622	45.870228
3	South Central	4	Galgadud	405	Dhuusama rreb	3440507	Hananbure HC	MCH/HC	Yes	5.918789	46.373168
3	South Central	4	Galgadud	405	Dhuusama rreb	3440508	Isterlin hospital in Gurieil	Hospital	Yes	5.313117	45.885904
3	South Central	4	Galgadud	405	Dhuusama rreb	3440509	Marergur HC	MCH/HC	Yes	5.745774	46.506408
3	South Central	4	Galgadud	406	Eil- bur	3440601	Community hospital	Hospital	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440602	Eil bur HC	MCH/HC	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	4	Galgadud	406	Eil- bur	3440603	Eil garas HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440604	Eil Garas hospital	Hospital	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440605	Eil -lahelay HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440606	Eil-qohle HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440607	Eli-bur District hospital	Hospital	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440608	Gaharei HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440609	Galhareeri hospital	Hospital	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440610	Galharei communtiy HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440611	Garbala HC	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	406	Eil- bur	3440612	Hindheer HC	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440701	Ali afrah HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440702	Barag-shador HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440703	Burdiid HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440704	Durdur HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440705	Eil-gorof HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440706	Eil-haji HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440707	Eldere town HC	MCH/HC	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	4	Galgadud	407	Eldhere	3440708	El-Dher TB center	TB center	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440709	Eldhere TB center	TB center	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440710	Elqabobe HP	PHU/HP	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440711	Galcad Town HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440712	Huladuur HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440713	Mesagwein HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440714	Osweyne HC	MCH/HC	NO ACCESS		
3	South Central	4	Galgadud	407	Eldhere	3440715	Waxweyne HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	501	Bardera	3550101	Bardera TB center	TB center	Yes	2.346224	42.290405
3	South Central	5	Gedo	501	Bardera	3550102	Bardere HC	MCH/HC	Yes	2.346224	42.290405
3	South Central	5	Gedo	501	Bardera	3550103	Faafahdhuun HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	501	Bardera	3550104	Geriley HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	501	Bardera	3550105	Horsed HC	MCH/HC	No	2.341104	42.289141
3	South Central	5	Gedo	501	Bardera	3550106	ICRC Bardera HC	MCH/HC	Yes	2.336303	42.281611
3	South Central	5	Gedo	501	Bardera	3550107	Masawa HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	501	Bardera	3550108	Shanqolow HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	501	Bardera	3550109	Wadajir HC	MCH/HC	No	2.344701	42.276515
3	South Central	5	Gedo	501	Bardera	3550110	Bardere HP	PHU/HP	Yes	2.343127	42.279184
3	South Central	5	Gedo	502	Beled Hawo	3550201	Beled aamin HP	PHU/HP	Yes	3.956268	41.893978
3	South Central	5	Gedo	502	Beled	3550202	Beled Hawo	Hospital	Yes	3.923813	41.876282

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
					Hawo		Hospital				
3	South Central	5	Gedo	502	Beled Hawo	3550203	Beled Hawo TB center	TB center	Yes	3.29981	41.875315
3	South Central	5	Gedo	502	Beled Hawo	3550204	Buur ijaabo HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	502	Beled Hawo	3550205	Caracase HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	502	Beled Hawo	3550206	Gadoon dhawe HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	502	Beled Hawo	3550209	Khadijo xaji HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	502	Beled Hawo	3550210	Malakacey HP	PHU/HP	Yes	3.892237	41.934002
3	South Central	5	Gedo	502	Beled Hawo	3550211	Malkarey HP	PHU/HP	No	3.892243	41.85553
3	South Central	5	Gedo	502	Beled Hawo	3550212	Wargaduud HP	PHU/HP	Yes	3.54664	41.531198
3	South Central	5	Gedo	502	Beled Hawo	3550213	Beled Hawo MCH	MCH/HC	Yes	3.29981	41.875513
3	South Central	5	Gedo	503	Buurdhubo	3550301	Buurdhubo HC	MCH/HC	Yes	3.17356	42.483862
3	South Central	5	Gedo	503	Buurdhubo	3550302	Dhubaa HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	503	Buurdhubo	3550303	Faanweyn HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	503	Buurdhubo	3550304	Kamarey HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	503	Buurdhubo	3550305	Malkaahida HP	PHU/HP	Yes	3.343633	42.481602
3	South Central	5	Gedo	503	Buurdhubo	3550306	Surriyo HP	PHU/HP	No	3.26061	42.49176
3	South Central	5	Gedo	503	Buurdhubo	3550307	Hilmareer MCH	MCH/HC	No	3.222613	42.495558
3	South Central	5	Gedo	504	Ceel Waaq	3550401	Buro badheysa HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	504	Ceel Waaq	3550402	Busaar HC	MCH/HC	No	2.675867	41.324769

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	5	Gedo	504	Ceel Waaq	3550403	Cellwaq Hospital	Hospital	Yes	2.787951	41.019709
3	South Central	5	Gedo	504	Ceel Waaq	3550404	Coos quran HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	504	Ceel Waaq	3550405	Dhamase HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	504	Ceel Waaq	3550406	Garsale HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	504	Ceel Waaq	3550407	ICRC Ceel Waaq HC	MCH/HC	Yes	2.781355	41.018405
3	South Central	5	Gedo	504	Ceel Waaq	3550408	Libaanyo HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	504	Ceel Waaq	3550409	Likoley HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	504	Ceel Waaq	3550410	Meeri HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	504	Ceel Waaq	3550411	Samaroole HP	PHU/HP	No	2.792126	41.226675
3	South Central	5	Gedo	504	Ceel Waaq	3550412	Mercy USA	PHU/HP	Yes	2.788576	41.015877
3	South Central	5	Gedo	505	Dolow	3550501	Dagreebo HP	PHU/HP	Yes	4.033098	42.383145
3	South Central	5	Gedo	505	Dolow	3550502	Dhuseye HP	PHU/HP	No	4.094997	42.019494
3	South Central	5	Gedo	505	Dolow	3550503	Dollow HC	MCH/HC	Yes	4.16292	42.075653
3	South Central	5	Gedo	505	Dolow	3550504	Dollow Hospital	Hospital	Yes	4.163256	42.076945
3	South Central	5	Gedo	505	Dolow	3550505	Dolow Health & TB center	MCH/HC	Yes	4.163177	42.083282
3	South Central	5	Gedo	505	Dolow	3550506	Gedweine town HC	MCH/HC	Yes	4.02795	42.297438
3	South Central	5	Gedo	505	Dolow	3550507	Gubata HP	PHU/HP	No	4.13346	42.210976
3	South Central	5	Gedo	505	Dolow	3550508	Kureey HP	PHU/HP	No	4.131675	42.209692
3	South Central	5	Gedo	505	Dolow	3550509	Qansaxley IDP	PHU/HP	Yes	4.152172	42.06923
3	South Central	5	Gedo	505	Dolow	3550510	Sargaduud HP	PHU/HP	Yes	4.094713	42.027969
3	South Central	5	Gedo	505	Dolow	3550511	Unsi HP	PHU/HP	Yes	4.022298	41.95223

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	5	Gedo	506	Garbahare y	3550601	Buraa HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	506	Garbahare y	3550602	Ceel cade HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	506	Garbahare y	3550603	Ceelgaduud HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	506	Garbahare y	3550604	Daabley HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	506	Garbahare y	3550605	Garbaharey Hospital	Hospital	Yes	3.332396	42.215872
3	South Central	5	Gedo	506	Garbahare y	3550606	Garbaharey TB center	TB center	Yes	3.332758	42.215853
3	South Central	5	Gedo	506	Garbahare y	3550607	Godey HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	506	Garbahare y	3550608	Maracade HC	MCH/HC	Yes	3.414241	42.143252
3	South Central	5	Gedo	506	Garbahare y	3550609	Maykaareebay HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	506	Garbahare y	3550610	Reesqode HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	506	Garbahare y	3550611	Tulabarwaqo HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	507	Luuq	3550701	Abdi qeyre HP	PHU/HP	No	3.880573	42.530287
3	South Central	5	Gedo	507	Luuq	3550703	Balatul raxma HP	PHU/HP	Yes	3.766686	42.498408
3	South Central	5	Gedo	507	Luuq	3550704	Banmudule HP	PHU/HP	No	3.758014	42.556927
3	South Central	5	Gedo	507	Luuq	3550705	Booaaanleyi HP	PHU/HP	No	3.783325	42.558562
3	South Central	5	Gedo	507	Luuq	3550706	Bulagaras HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	507	Luuq	3550707	Ceelboon HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	507	Luuq	3550708	Doney HP	PHU/HP	No	3.747227	42.526414
3	South Central	5	Gedo	507	Luuq	3550709	Dugabe HP	PHU/HP	Yes	3.884227	42.482291

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	5	Gedo	507	Luuq	3550710	Garbalow HP	PHU/HP	Yes	3.90185	42.510385
3	South Central	5	Gedo	507	Luuq	3550711	Garban HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	507	Luuq	3550712	Garcase HP	PHU/HP	No	3.730132	42.542088
3	South Central	5	Gedo	507	Luuq	3550713	Gubad HC	MCH/HC	No	3.826214	42.486669
3	South Central	5	Gedo	507	Luuq	3550714	Halbo HP	PHU/HP	No	3.856241	42.533931
3	South Central	5	Gedo	507	Luuq	3550715	Hanooy HP	PHU/HP	Yes	3.754955	42.536728
3	South Central	5	Gedo	507	Luuq	3550716	Horseed HP	PHU/HP	Yes	3.794515	42.530063
3	South Central	5	Gedo	507	Luuq	3550717	luuq godey HP	PHU/HP	No	3.797481	42.554189
3	South Central	5	Gedo	507	Luuq	3550718	Luuq HC	MCH/HC	Yes	3.78591	42.548254
3	South Central	5	Gedo	507	Luuq	3550719	Luuq Hospital	Hospital	Yes	3.80034	42.544504
3	South Central	5	Gedo	507	Luuq	3550720	Luuq TB center	TB center	Yes	3.786018	42.548367
3	South Central	5	Gedo	507	Luuq	3550721	Maganey HP	PHU/HP	No	3.706774	42.520688
3	South Central	5	Gedo	507	Luuq	3550722	Marayle HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	507	Luuq	3550723	Mirodhomow HP	PHU/HP	No	3.917468	42.537701
3	South Central	5	Gedo	507	Luuq	3550724	Mudhawey HC	MCH/HC	No	3.95101	42.480373
3	South Central	5	Gedo	507	Luuq	3550725	Mudulow HP	PHU/HP	NO ACCESS		
3	South Central	5	Gedo	507	Luuq	3550726	Qoney HC	MCH/HC	NO ACCESS		
3	South Central	5	Gedo	507	Luuq	3550727	Shatilow HP	PHU/HP	Yes	3.9055	42.424304
3	South Central	5	Gedo	507	Luuq	3550728	Shidle HP	PHU/HP	Yes	3.829595	42.563857
3	South Central	5	Gedo	507	Luuq	3550729	Taaganey HP	PHU/HP	No	3.835908	42.578937
3	South Central	5	Gedo	507	Luuq	3550730	Wariiryaale HC	MCH/HC	No	3.960255	42.459319
3	South Central	5	Gedo	507	Luuq	3550731	Yukut HP	PHU/HP	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	6	Hiiraan	602	Belet Weyne	3660201	B. Weyne-1 TB center	TB center	Yes	4.732966	45.198311
3	South Central	6	Hiiraan	602	Belet Weyne	3660202	B. Weyne-2 TB center	TB center	Yes	4.744186	45.218241
3	South Central	6	Hiiraan	602	Belet Weyne	3660203	Belet Weyne hospital	Hospital	Yes	4.737619	45.204417
3	South Central	6	Hiiraan	602	Belet Weyne	3660204	Buundo weyn Clinic	MCH/HC	Yes	4.723483	45.2106
3	South Central	6	Hiiraan	602	Belet Weyne	3660205	Donsubagle HC	MCH/HC	Yes	4.733721	45.210902
3	South Central	6	Hiiraan	602	Belet Weyne	3660206	El Ali HC	MCH/HC	NO ACCESS		
3	South Central	6	Hiiraan	602	Belet Weyne	3660207	Farlibax HC	MCH/HC	NO ACCESS		
3	South Central	6	Hiiraan	602	Belet Weyne	3660208	Hawa tako HC	MCH/HC	Yes	4.743221	45.216972
3	South Central	6	Hiiraan	602	Belet Weyne	3660209	Hawl-wadag Heegan HC	MCH/HC	Yes	4.733851	45.194258
3	South Central	6	Hiiraan	602	Belet Weyne	3660210	Hilac HC	MCH/HC	Yes	4.745059	45.192781
3	South Central	6	Hiiraan	602	Belet Weyne	3660211	Jawil HC	MCH/HC	Yes	4.920129	45.220984
3	South Central	6	Hiiraan	602	Belet Weyne	3660212	Kooshin HC	MCH/HC	Yes	4.747144	45.205096
3	South Central	6	Hiiraan	602	Belet Weyne	3660213	Sigalow makane HC	MCH/HC	Yes	4.755862	45.189734
3	South Central	6	Hiiraan	602	Belet Weyne	3660214	Sigalow takfir HC	MCH/HC	Yes	4.755071	45.18452
3	South Central	6	Hiiraan	602	Belet Weyne	3660215	Tuula Hiiran HC	MCH/HC	Yes	4.837003	45.211308
3	South Central	6	Hiiraan	602	Belet Weyne	3660216	Hidig MCH Center-Koshin	MCH/HC	NO ACCESS		
3	South Central	6	Hiiraan	602	Belet Weyne	3660217	Hiwado MCH Center-Koshin	MCH/HC	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	6	Hiiraan	602	Belet Weyne	3660218	Save the Children HP Center- Haawa-taako	PHU/HP	NO ACCESS		
3	South Central	6	Hiiraan	602	Belet Weyne	3660219	Save the Children HP Center- Howl-wadaag	PHU/HP	NO ACCESS		
3	South Central	6	Hiiraan	603	Buloburti	3660301	Bogabeso	MCH/HC	Yes	3.850307	45.569684
3	South Central	6	Hiiraan	603	Buloburti	3660302	Bulo Burde TB center	TB center	Yes	3.863202	45.57127
3	South Central	6	Hiiraan	603	Buloburti	3660303	Buurweyn HC	MCH/HC	No	3.852774	45.56341
3	South Central	6	Hiiraan	603	Buloburti	3660304	Haji Bube HC	MCH/HC	Yes	3.861729	45.569807
3	South Central	6	Hiiraan	603	Buloburti	3660305	Hantiwadag HC	MCH/HC	Yes	3.852827	45.56347
3	South Central	6	Hiiraan	603	Buloburti	3660306	October HC	MCH/HC	Yes	3.852132	45.565731
3	South Central	6	Hiiraan	603	Buloburti	3660307	Buloburti General Hospital	Hospital	NO ACCESS		
3	South Central	6	Hiiraan	604	Buq-aqable	3660407	Buq-aqable TB center	TB center	NO ACCESS		
3	South Central	6	Hiiraan	605	El-ali	3660501	El Ali TB center	TB center	NO ACCESS		
3	South Central	6	Hiiraan	606	Jalalaqsi	3660601	Galbeed HC	MCH/HC	NO ACCESS		
3	South Central	6	Hiiraan	606	Jalalaqsi	3660602	Jalalaqsi TB center	TB center	NO ACCESS		
3	South Central	6	Hiiraan	607	Mahas	3660701	MAHAS 1 HC	MCH/HC	Yes	4.392273	46.090251
3	South Central	6	Hiiraan	607	Mahas	3660702	MAHAS 2 HC	MCH/HC	NO ACCESS		
3	South Central	6	Hiiraan	607	Mahas	3660703	MAHAS 3 HC	MCH/HC	Yes	4.392403	46.090266
3	South Central	6	Hiiraan	607	Mahas	3660704	SCI MCH Center -	MCH/HC	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
							Mahasa				
3	South Central	6	Hiiraan	607	Mahas	3660705	SCI MCH Center -Gobo	MCH/HC	NO ACCESS		
3	South Central	6	Hiiraan	607	Mahas	3660706	SCI MCH Center - Ganuribad	MCH/HC	NO ACCESS		
3	South Central	6	Hiiraan	607	Mahas	3660707	HICDO MCH	MCH/HC	No	4.390952	46.087993
3	South Central	6	Hiiraan	608	Mataban	3660801	Gerijir HC	MCH/HC	Yes	5.438447	45.513678
3	South Central	6	Hiiraan	608	Mataban	3660802	Mataban HC	MCH/HC	Yes	5.198423	45.526099
3	South Central	6	Hiiraan	608	Mataban	3660803	MATABAN TB CENTER	TB center	No	5.194076	45.52203
3	South Central	6	Hiiraan	608	Mataban	3660804	Mataban wardi HC	MCH/HC	Yes	5.198789	45.529584
3	South Central	7	Lower Juba	701	Afmadow	3770101	Afmadow Hospital	Hospital	NO ACCESS		
3	South Central	7	Lower Juba	701	Afmadow	3770102	Afmadow MCH	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	701	Afmadow	3770103	Diif health centre	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	701	Afmadow	3770104	Hosungow MCH	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	702	Badhadhe	3770201	Badhadhe health centre	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	702	Badhadhe	3770202	Bula Haji MCH	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	702	Badhadhe	3770203	Gudhaa Health Post	PHU/HP	Yes	-1.033527	41.974576
3	South Central	7	Lower Juba	702	Badhadhe	3770204	Gudhaa MCH	MCH/HC	No	-1.033687	41.9742
3	South Central	7	Lower Juba	702	Badhadhe	3770205	Muganbow MCH/OPD SRCS	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	702	Badhadhe	3770206	Raskanboni Health centre	MCH/HC	Yes	-1.635996	41.587262
3	South Central	7	Lower Juba	702	Badhadhe	3770207	Madhawo	PHU/HP	No	-1.009846	42.034321

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	7	Lower Juba	703	Dhobely	3770301	Dhobleey hospital	Hospital	NO ACCESS		
3	South Central	7	Lower Juba	703	Dhobely	3770302	Dhobleey MCH	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	704	Hagar	3770401	Hagar MCH	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	705	Jamame	3770501	Jamama Hospital	Hospital	NO ACCESS		
3	South Central	7	Lower Juba	705	Jamame	3770502	Jamama MCH	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	705	Jamame	3770503	Shaqaalaha MCH	MCH/HC	NO ACCESS		
3	South Central	7	Lower Juba	706	Kismayo	3770601	Allenley MCH	MCH/HC	Yes	-0.359647	42.53584
3	South Central	7	Lower Juba	706	Kismayo	3770602	APD MCH	MCH/HC	Yes	-0.363115	42.537753
3	South Central	7	Lower Juba	706	Kismayo	3770603	Buula-Ablika MCH	MCH/HC	Yes	-0.34696	42.559796
3	South Central	7	Lower Juba	706	Kismayo	3770604	Dalxiska MCH	MCH/HC	Yes	-0.343043	42.560636
3	South Central	7	Lower Juba	706	Kismayo	3770605	Ex- Midwifery MCH	MCH/HC	Yes	-0.343965	42.545916
3	South Central	7	Lower Juba	706	Kismayo	3770606	Fanolle MCH	MCH/HC	Yes	-0.362863	42.551814
3	South Central	7	Lower Juba	706	Kismayo	3770607	Farjano MCH	MCH/HC	Yes	-0.352532	42.551808
3	South Central	7	Lower Juba	706	Kismayo	3770608	Gulwade MCH	MCH/HC	Yes	-0.352125	42.544162
3	South Central	7	Lower Juba	706	Kismayo	3770609	Kismayo General Hospital	Hospital	Yes	-0.364045	42.546479
3	South Central	7	Lower Juba	706	Kismayo	3770610	Kismayo General Hospital MCH/OPD	MCH/HC	Yes	-0.36393	42.546262
3	South Central	7	Lower Juba	706	Kismayo	3770611	Muslim Hand MCH	MCH/HC	Yes	-0.360702	42.548977
3	South Central	7	Lower Juba	706	Kismayo	3770612	Muslim TB Centre	TB center	Yes	-0.365836	42.541871

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	7	Lower Juba	706	Kismayo	3770613	Siinay MCH (Mahfalka) yagleel	MCH/HC	No	-0.350599	42.551349
3	South Central	7	Lower Juba	706	Kismayo	3770614	Siinay MCH ARC	MCH/HC	Yes	-0.34598	42.551299
3	South Central	7	Lower Juba	706	Kismayo	3770615	SwACEDA Hospital	Hospital	Yes	-0.352976	42.538117
3	South Central	7	Lower Juba	706	Kismayo	3770616	Waaberi MCH	MCH/HC	Yes	-0.361781	42.554491
3	South Central	8	Lower Shabelle	801	Afgooye	3880101	21 October HC	MCH/HC	Yes	2.15395	45.122206
3	South Central	8	Lower Shabelle	801	Afgooye	3880102	Afgoie MCH	MCH/HC	Yes	2.144839	45.120314
3	South Central	8	Lower Shabelle	801	Afgooye	3880103	Afgoye hospital	Hospital	Yes	2.145073	45.117928
3	South Central	8	Lower Shabelle	801	Afgooye	3880104	Afgoye maternity	Hospital	Yes	2.145305	45.117834
3	South Central	8	Lower Shabelle	801	Afgooye	3880105	Balguriv MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	801	Afgooye	3880106	Ceelasha-MCH	MCH/HC	Yes	2.085844	45.202537
3	South Central	8	Lower Shabelle	801	Afgooye	3880107	Cumarbeere-MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	801	Afgooye	3880108	Garwaree-MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	801	Afgooye	3880109	Hawa Abdi HC	MCH/HC	Yes	2.095216	45.187165
3	South Central	8	Lower Shabelle	801	Afgooye	3880110	Lafole MCH	MCH/HC	Yes	2.102159	45.167173
3	South Central	8	Lower Shabelle	801	Afgooye	3880111	Maguurto-MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	801	Afgooye	3880112	Marerey MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	801	Afgooye	3880113	Walamoy-MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	802	Afmadowe	3880201	Afmadowe TB center	TB center	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	8	Lower Shabelle	803	Awdheghe	3880301	Awdheghe MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	803	Awdheghe	3880302	Darasalam MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	803	Awdheghe	3880303	Darasalam TB center	TB center	NO ACCESS		
3	South Central	8	Lower Shabelle	804	Barawe	3880401	Barawe hospital	Hospital	Yes	1.110708	44.02917
3	South Central	8	Lower Shabelle	804	Barawe	3880402	Barawe MCH	MCH/HC	Yes	1.110678	44.02902
3	South Central	8	Lower Shabelle	804	Barawe	3880403	Barawe TB center	TB center	Yes	1.110702	44.029315
3	South Central	8	Lower Shabelle	806	Kurtunwar ey	3880601	BUULA MAREER MCH1	MCH/HC	Yes	1.634637	44.523022
3	South Central	8	Lower Shabelle	806	Kurtunwar ey	3880602	BUULA MAREER MCH2	MCH/HC	Yes	1.634583	44.52332
3	South Central	8	Lower Shabelle	806	Kurtunwar ey	3880603	Kurtunwaarey MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880701	Ayub Orphange	MCH/HC	Yes	1.708073	44.755537
3	South Central	8	Lower Shabelle	807	Marka	3880702	Barirre MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880703	Gaywerrow MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880704	Golwein MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880705	Golweyn MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880706	Horseed HC	MCH/HC	Yes	1.710571	44.760914
3	South Central	8	Lower Shabelle	807	Marka	3880707	Howl wadag HC	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880708	Janaalle HC	MCH/HC	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	8	Lower Shabelle	807	Marka	3880709	Jilib Marka MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880710	KM 50 HC	MCH/HC	Yes	1.980696	44.986573
3	South Central	8	Lower Shabelle	807	Marka	3880711	Marka hospital	Hospital	Yes	1.713935	44.756343
3	South Central	8	Lower Shabelle	807	Marka	3880712	Marka Swisso TB center	TB center	Yes	1.71102	44.760914
3	South Central	8	Lower Shabelle	807	Marka	3880713	Marka-2 TB center	TB center	Yes	1.713935	44.765218
3	South Central	8	Lower Shabelle	807	Marka	3880714	Mubaarak HP	PHU/HP	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880715	Mushani MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	807	Marka	3880716	Rusia HC	MCH/HC	Yes	1.720127	44.775282
3	South Central	8	Lower Shabelle	807	Marka	3880717	Shalambood HC	MCH/HC	Yes	1.706299	44.69531
3	South Central	8	Lower Shabelle	807	Marka	3880718	Wadajir HC	MCH/HC	Yes	1.71678	44.769913
3	South Central	8	Lower Shabelle	808	Qoryoolay	3880801	Madina majabto HP	PHU/HP	NO ACCESS		
3	South Central	8	Lower Shabelle	808	Qoryoolay	3880802	Qorioley MCH	MCH/HC	Yes	1.790788	44.531183
3	South Central	8	Lower Shabelle	808	Qoryoolay	3880803	Qoryoley hospital	Hospital	Yes	1.790782	44.531059
3	South Central	8	Lower Shabelle	808	Qoryoolay	3880804	Qoryoley TB center	TB center	Yes	1.790782	44.531049
3	South Central	8	Lower Shabelle	809	Sablaale	3880901	Sablale MCH	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	809	Sablaale	3880902	Waab Arye HC	MCH/HC	NO ACCESS		
3	South Central	8	Lower Shabelle	810	Wanla Weyn	3881001	Gobanle MCH	MCH/HC	Yes	2.617267	44.891307
3	South Central	8	Lower Shabelle	810	Wanla Weyn	3881002	LEGO HC	MCH/HC	NO ACCESS		

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3	South Central	8	Lower Shabelle	810	Wanla Weyn	3881003	Wanla Weyn I MCH	MCH/HC	Yes	2.619863	44.894872
3	South Central	8	Lower Shabelle	810	Wanla Weyn	3881004	Wanla Weyn II MCH	MCH/HC	Yes	2.618468	44.892919
3	South Central	8	Lower Shabelle	810	Wanla Weyn	3881005	Wanle Wayne TB center	TB center	Yes	2.620228	44.895402
3	South Central	8	Lower Shabelle	810	Wanla Weyn	3881006	Yaqbariwayne HC	MCH/HC	No	2.713216	44.995402
3	South Central	9	Mudug	901	Galkacyo	3990101	Bandarqaali HC	MCH/HC	Yes	6.626533	47.844774
3	South Central	9	Mudug	901	Galkacyo	3990102	Bandiradley CESVI HC	MCH/HC	Yes	6.476326	46.963405
3	South Central	9	Mudug	901	Galkacyo	3990103	Bandiradley SDRO HC	MCH/HC	Yes	6.479667	46.945927
3	South Central	9	Mudug	901	Galkacyo	3990104	Bitale HC	MCH/HC	Yes	6.70153	47.830278
3	South Central	9	Mudug	901	Galkacyo	3990105	Carafaad CESVI HP	PHU/HP	Yes	6.738007	47.43105
3	South Central	9	Mudug	901	Galkacyo	3990106	Dagaari HC	MCH/HC	Yes	6.552519	47.27672
3	South Central	9	Mudug	901	Galkacyo	3990107	Docol HC	MCH/HC	Yes	6.434458	47.488462
3	South Central	9	Mudug	901	Galkacyo	3990108	Galinsoor bisha cas HC	MCH/HC	Yes	6.431856	46.717927
3	South Central	9	Mudug	901	Galkacyo	3990109	Galinsoor CESVI HC	MCH/HC	Yes	6.429038	46.715721
3	South Central	9	Mudug	901	Galkacyo	3990110	Galkacyo-South TB center	TB center	Yes	6.746414	47.427265
3	South Central	9	Mudug	901	Galkacyo	3990111	Hiiraan CESVI HP	PHU/HP	Yes	6.745539	47.449572
3	South Central	9	Mudug	901	Galkacyo	3990112	Howl Wadag MCH	MCH/HC	No	6.753762	47.439126
3	South Central	9	Mudug	901	Galkacyo	3990113	Sadex xiglo HC	MCH/HC	Yes	6.501854	47.101902
3	South Central	9	Mudug	901	Galkacyo	3990114	South galkacyo IMC Hospital	Hospital	Yes	6.741566	47.427797

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	9	Mudug	901	Galkacyo	3990115	South Galkacyo MCH	MCH/HC	Yes	6.761179	47.442998
3	South Central	9	Mudug	901	Galkacyo	3990116	Wadajir MCH	MCH/HC	No	6.75906	47.439837
3	South Central	9	Mudug	901	Galkacyo	3990117	WarGalo CESVI HC	MCH/HC	Yes	6.270084	47.520984
3	South Central	9	Mudug	901	Galkacyo	3990118	WHO Health center	MCH/HC	No	6.743667	47.425561
3	South Central	9	Mudug	902	Harardhere	3990201	Dabagalo HC	MCH/HC	NO ACCESS		
3	South Central	9	Mudug	902	Harardhere	3990202	Harardere Town MCH	MCH/HC	NO ACCESS		
3	South Central	9	Mudug	902	Harardhere	3990203	Harardhere TB center	TB center	NO ACCESS		
3	South Central	9	Mudug	902	Harardhere	3990204	Jowle HC	MCH/HC	NO ACCESS		
3	South Central	9	Mudug	903	Hobyo	3990301	Af-Barwaaqo mercy usa HC	MCH/HC	No	6.498528	48.778746
3	South Central	9	Mudug	903	Hobyo	3990302	Bacaadwayn mercy usa HC	MCH/HC	Yes	5.324615	47.909882
3	South Central	9	Mudug	903	Hobyo	3990303	Bajeela mercy usa HC	MCH/HC	Yes	5.789488	47.705672
3	South Central	9	Mudug	903	Hobyo	3990304	Birqodoy mercy usa HP	PHU/HP	No	6.050349	47.768916
3	South Central	9	Mudug	903	Hobyo	3990305	Bud-Bud mercy usa HC	MCH/HC	Yes	6.174048	48.680115
3	South Central	9	Mudug	903	Hobyo	3990306	Camaara mercy usa HC	MCH/HC	NO ACCESS		
3	South Central	9	Mudug	903	Hobyo	3990307	Ceeldibir mercy usa HC	MCH/HC	Yes	5.887021	48.349731
3	South Central	9	Mudug	903	Hobyo	3990308	Ceelducaale mercy usa HP	PHU/HP	No	5.43802	48.426757
3	South Central	9	Mudug	903	Hobyo	3990309	Ceelguula mercy usa HC	MCH/HC	Yes	6.013535	47.851466
3	South Central	9	Mudug	903	Hobyo	3990310	Daba qalooc mercy usa HP	PHU/HP	Yes	5.712125	47.855134

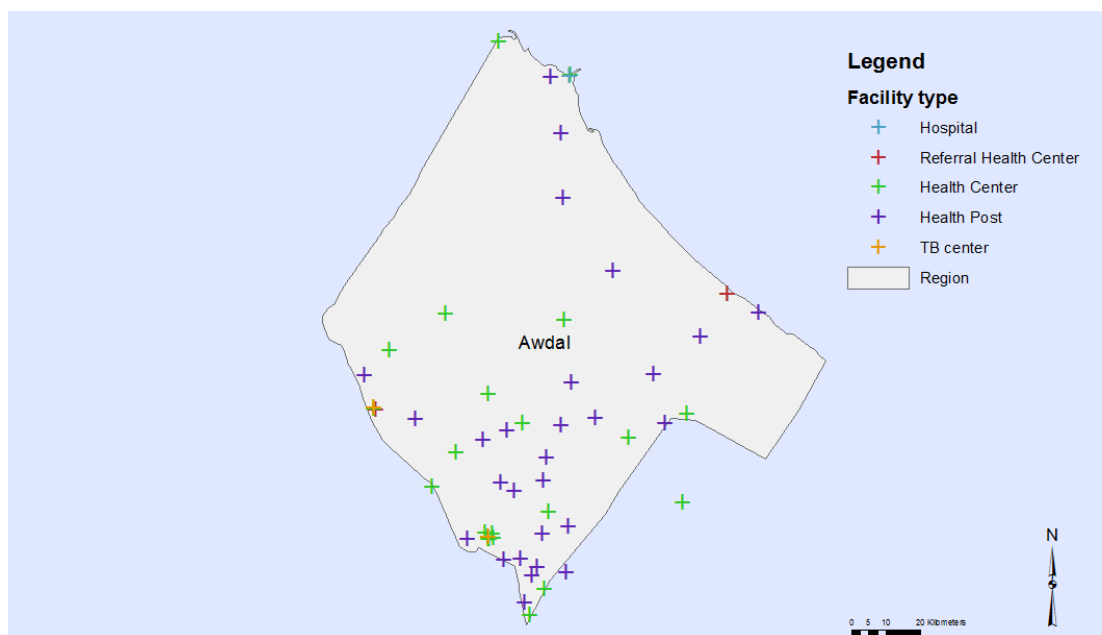
Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	9	Mudug	903	Hobyo	3990311	Dajimaale mercy usa HP	PHU/HP	No	6.30296	48.217544
3	South Central	9	Mudug	903	Hobyo	3990312	Dowgaab mercy usa HP	PHU/HP	Yes	6.122538	47.416449
3	South Central	9	Mudug	903	Hobyo	3990313	GalBarwaaqo mercy usa HC	MCH/HC	Yes	6.13077	47.675018
3	South Central	9	Mudug	903	Hobyo	3990314	Garawaale mercy usa HP	PHU/HP	No	5.818365	48.167158
3	South Central	9	Mudug	903	Hobyo	3990315	Gawaan mercy usa HC	MCH/HC	Yes	5.31131	48.297446
3	South Central	9	Mudug	903	Hobyo	3990316	Hobyo mercy usa HC	MCH/HC	Yes	5.354948	48.524712
3	South Central	9	Mudug	903	Hobyo	3990317	Jiic dheere mercy usa HP	PHU/HP	No	5.430296	47.779958
3	South Central	9	Mudug	903	Hobyo	3990318	Kalabayr mercy usa HC	MCH/HC	Yes	5.555739	47.649166
3	South Central	9	Mudug	903	Hobyo	3990319	Laamxaram mercy usa HP	PHU/HP	Yes	5.401696	48.320653
3	South Central	9	Mudug	903	Hobyo	3990320	Laasgacameey mercy usa HP	PHU/HP	Yes	5.45161	47.89417
3	South Central	9	Mudug	903	Hobyo	3990321	Labad mercy usa HP	PHU/HP	Yes	5.545679	48.673041
3	South Central	9	Mudug	903	Hobyo	3990322	Labo Ceel mercy usa HP	PHU/HP	No	5.689645	47.554526
3	South Central	9	Mudug	903	Hobyo	3990323	Lulubshe mercy usa HP	PHU/HP	No	5.821731	48.14555
3	South Central	9	Mudug	903	Hobyo	3990324	Qaranroow mercy usa HC	MCH/HC	Yes	5.228429	48.251629
3	South Central	9	Mudug	903	Hobyo	3990325	Qaycad mercy usa HP	PHU/HP	No	5.366239	47.941676
3	South Central	9	Mudug	903	Hobyo	3990326	Qaydaro mercy usa HP	PHU/HP	Yes	5.791383	47.489485
3	South Central	9	Mudug	903	Hobyo	3990327	Shabeelow mercy usa HP	PHU/HP	No	5.491743	48.041372
3	South Central	9	Mudug	903	Hobyo	3990328	Sugule mercy usa HP	PHU/HP	Yes	5.483996	48.544025

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	9	Mudug	903	Hobyo	3990329	Wasil Bisha cas HC	MCH/HC	Yes	5.425058	48.116884
3	South Central	9	Mudug	903	Hobyo	3990330	Wasil mercy usa HC	MCH/HC	Yes	5.425673	48.128594
3	South Central	9	Mudug	903	Hobyo	3990331	Xeero dhegaxleey mercy usa HC	MCH/HC	Yes	5.576484	48.239611
3	South Central	9	Mudug	904	Xarardheere	3990401	Waaxwayn HC	MCH/HC	NO ACCESS		
3	South Central	9	Mudug	904	Xarardheere	3990402	Xarardheere Hospital	Hospital	NO ACCESS		
3	South Central	10	Bakool	1001	El-Barde	31010011	Abesale HC	MCH/HC	Yes	4.903719	44.520734
3	South Central	10	Bakool	1001	El-Barde	31010012	Ato HC	MCH/HC	Yes	4.620637	43.356664
3	South Central	10	Bakool	1001	El-Barde	31010013	Elberde town HC	MCH/HC	Yes	4.825325	43.661266
3	South Central	10	Bakool	1001	El-Barde	31010014	Quracjome HC	MCH/HC	Yes	4.944549	44.299189
3	South Central	10	Bakool	1002	Hudur	31010021	Garasweyne HC	MCH/HC	Yes	4.263535	43.484995
3	South Central	10	Bakool	1002	Hudur	31010022	Hudur Hospital	Hospital	Yes	4.116237	43.891056
3	South Central	10	Bakool	1002	Hudur	31010023	Hudur MCH 1	MCH/HC	Yes	4.117965	43.893521
3	South Central	10	Bakool	1002	Hudur	31010024	Hudur MCH 2	MCH/HC	Yes	4.123749	43.891982
3	South Central	10	Bakool	1002	Hudur	31010025	Hudur TB center	TB center	NO ACCESS		
3	South Central	10	Bakool	1002	Hudur	31010026	Moragabey MCH	MCH/HC	No	4.190523	43.641237
3	South Central	10	Bakool	1002	Hudur	31010027	Hudur Southwest State Hospital	Hospital	Yes	4.11799	43.883098
3	South Central	10	Bakool	1003	Tiyeglow	31010031	Biyooley	MCH/HC	NO ACCESS		
3	South Central	10	Bakool	1003	Tiyeglow	31010032	Tieglow Town HC	MCH/HC	Yes	4.01234	44.5107

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	10	Bakool	1003	Tiyeglow	31010033	Tiyeglow TB center	TB center	NO ACCESS		
3	South Central	10	Bakool	1004	Wajid	31010041	Burdhuhunle-MCH	MCH/HC	NO ACCESS		
3	South Central	10	Bakool	1004	Wajid	31010042	Kurta HC	MCH/HC	NO ACCESS		
3	South Central	10	Bakool	1004	Wajid	31010043	WJID Town HC	MCH/HC	Yes	3.80875	43.24712
3	South Central	10	Bakool	1005	Yeed	31010051	Yed HC	MCH/HC	Yes	4.538099	43.022091
3	South Central	11	Middle Jubba	1101	Banada	31111011	Banada MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1102	Buale	31111021	Ex WVS MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1102	Buale	31111022	Halgan MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1102	Buale	31111023	Heegan TB centre	TB center	NO ACCESS		
3	South Central	11	Middle Jubba	1102	Buale	31111024	SORDES MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1102	Buale	31111025	Waraha Dhobley MCH/OPD	Hospital	NO ACCESS		
3	South Central	11	Middle Jubba	1103	Dhakaje	31111031	Dhakaje MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1104	Duyac Garoon	31111041	Duyac garoon MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1105	Fargurow	31111051	Faragurow MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1106	Jilib	31111061	Bandar Jadid MCH/OPD	Hospital	NO ACCESS		
3	South Central	11	Middle Jubba	1106	Jilib	31111062	Fanole MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1106	Jilib	31111063	Homboy MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1106	Jilib	31111064	Jilib Town MCH/OPD	MCH/HC	NO ACCESS		

Zone code	Zone name	Region code	Region Name	District code	District Name	Facility code	Facility Name	Facility Type	Functioning	Latitude	Longitude
3	South Central	11	Middle Jubba	1106	Jilib	31111065	Jilib Town TB center	TB center	NO ACCESS		
3	South Central	11	Middle Jubba	1107	Kaytoy	31111071	Kaytoy MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1108	Marerey	31111081	Gadudey MCH/OPD	Hospital	NO ACCESS		
3	South Central	11	Middle Jubba	1108	Marerey	31111082	Marerey Oji MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1109	Sakow	31111091	October MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1109	Sakow	31111092	Sakow MCH/OPD	Hospital	NO ACCESS		
3	South Central	11	Middle Jubba	1109	Sakow	31111093	SRCS MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1109	Sakow	31111094	WVS MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1110	Salagle	31111101	Ilal MCH/OPD	MCH/HC	NO ACCESS		
3	South Central	11	Middle Jubba	1111	Xaramka	31111111	Xaramka MCH/OPD	MCH/HC	NO ACCESS		

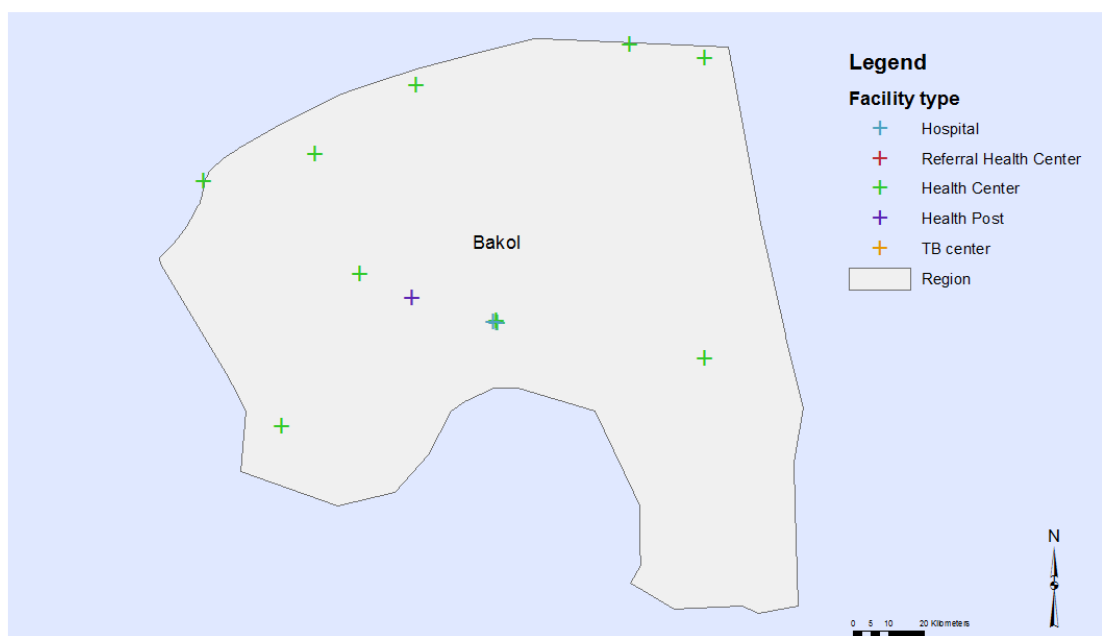
Annex 2: Regional maps of facilities by type



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Map Production: WHO Somalia Country Office
World Health Organization

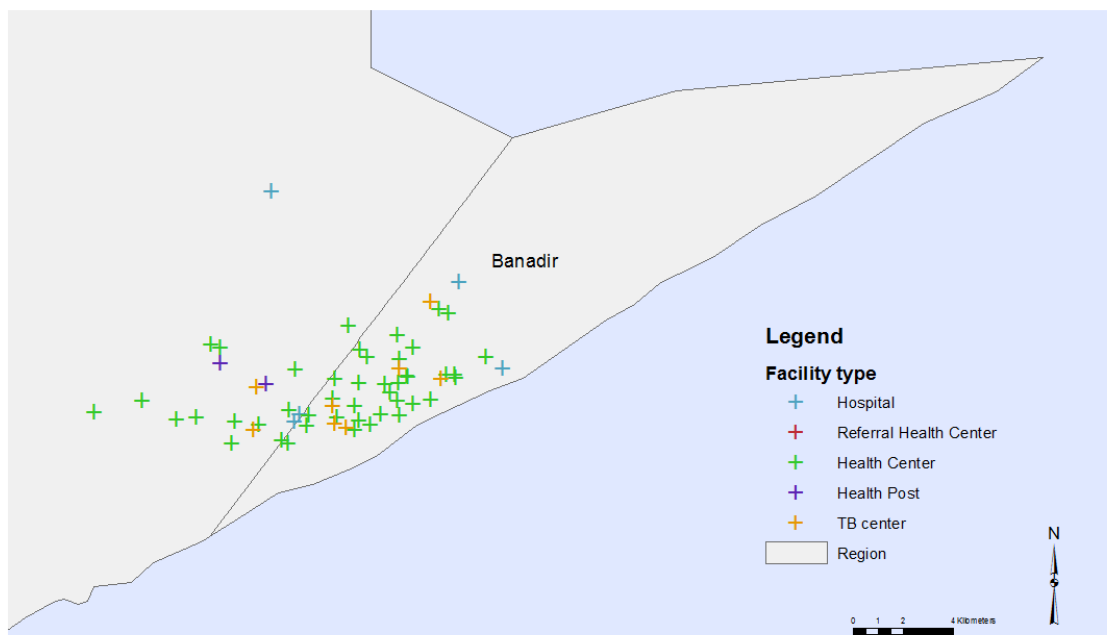
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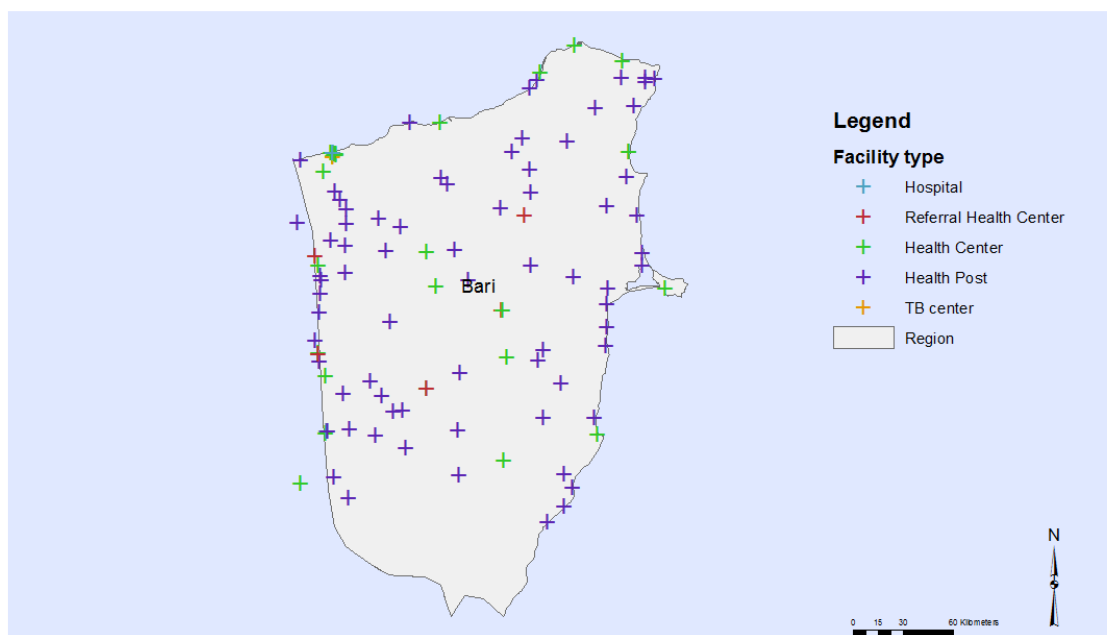
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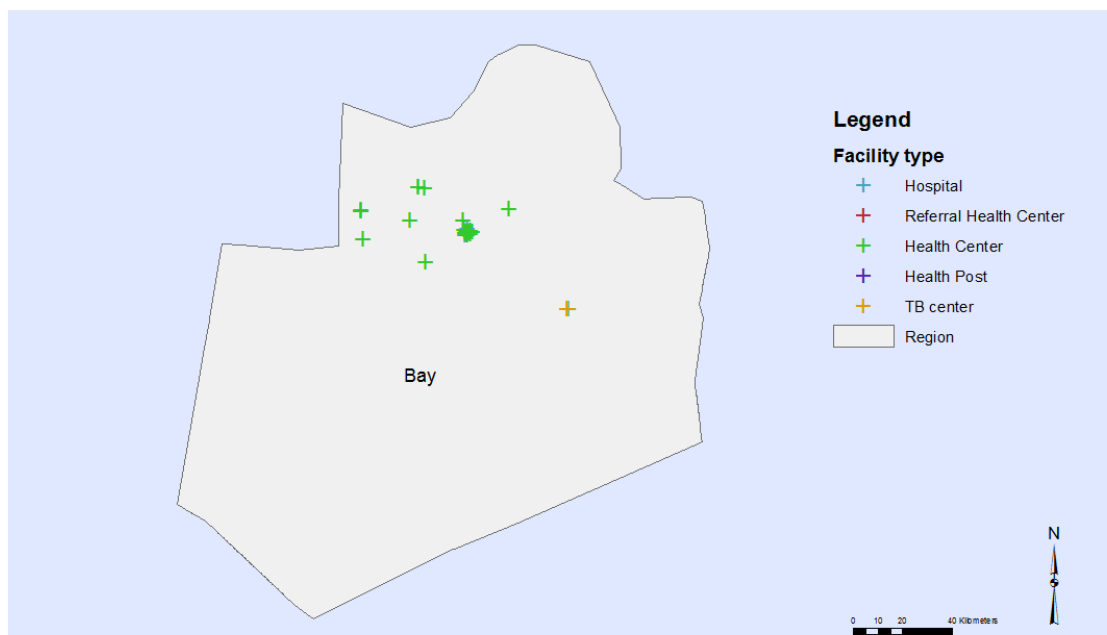
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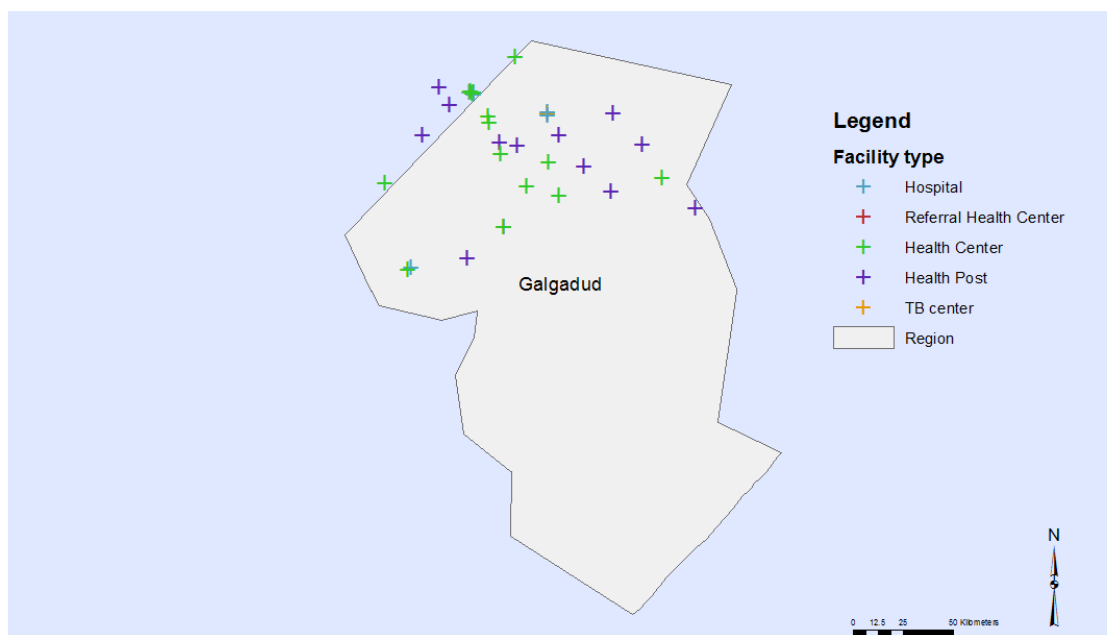
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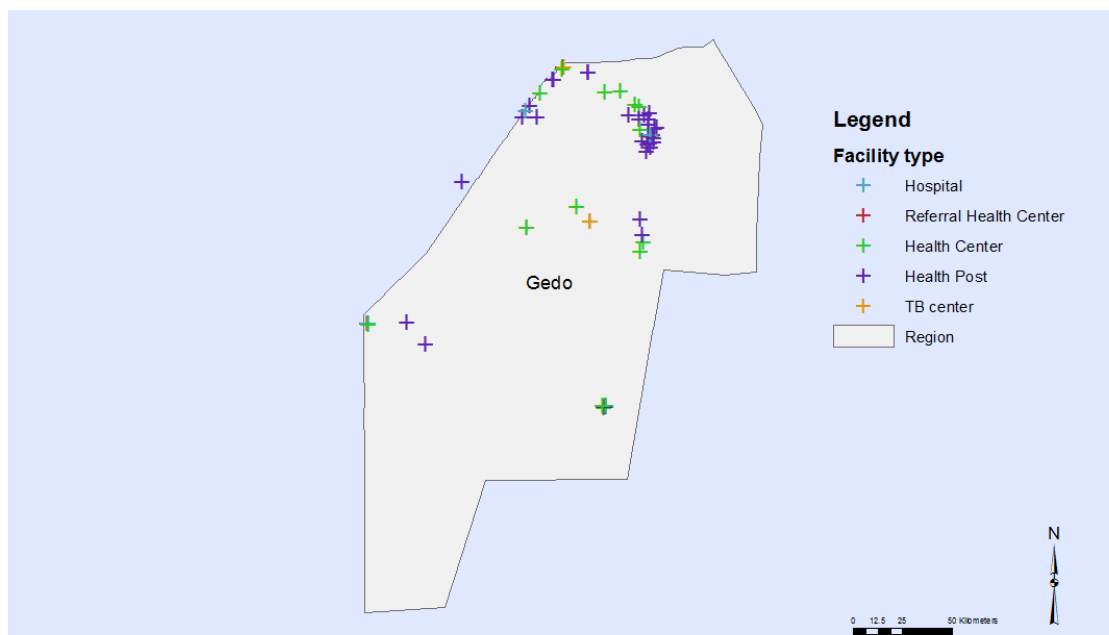
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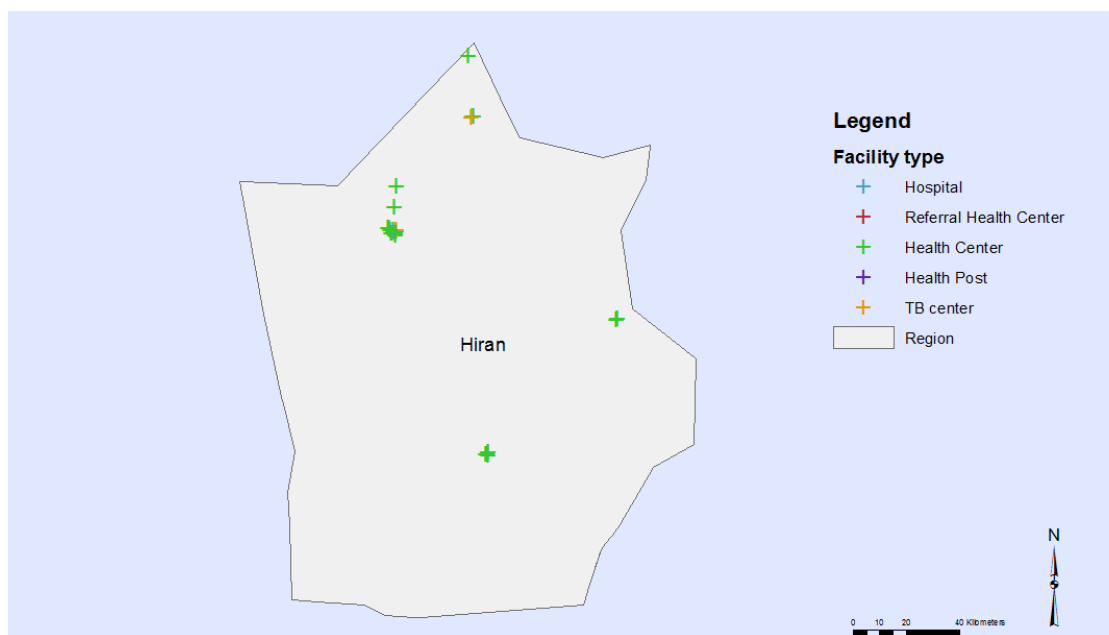
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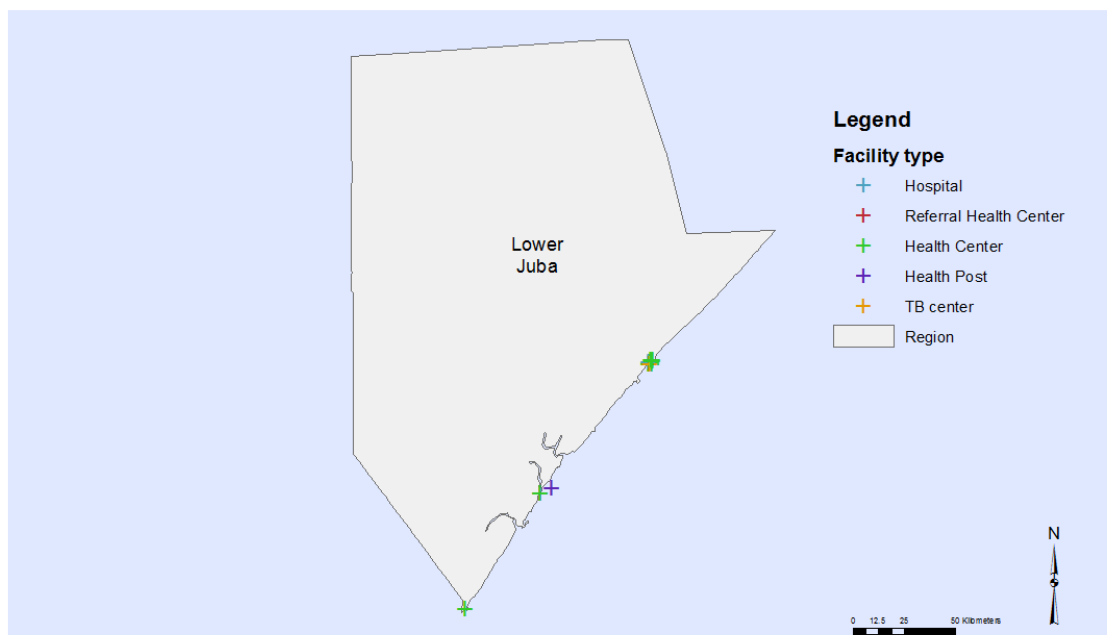
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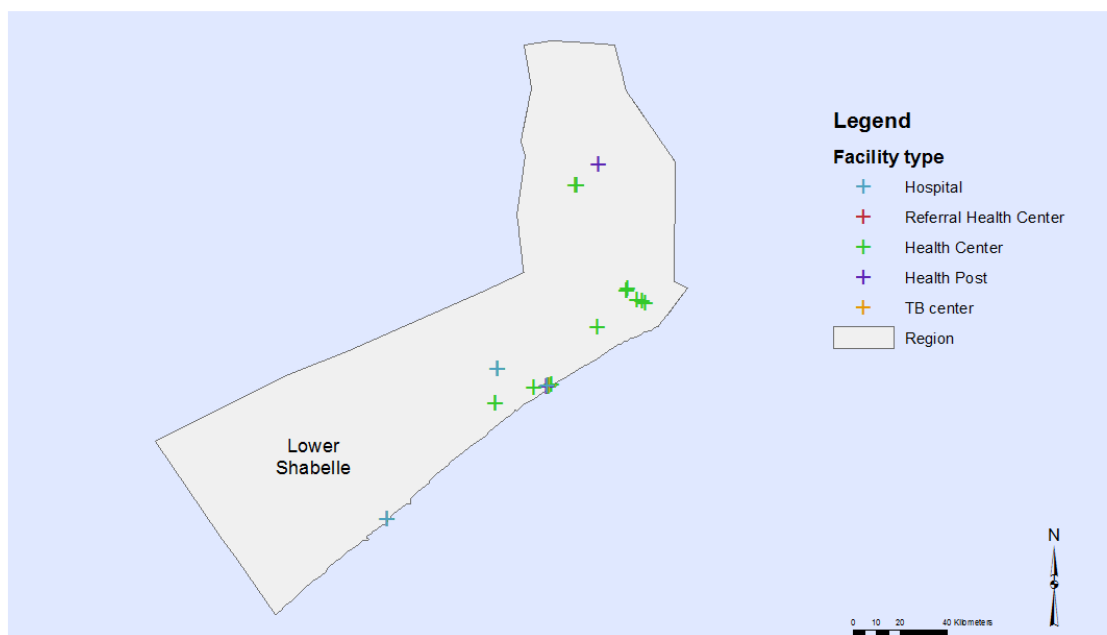
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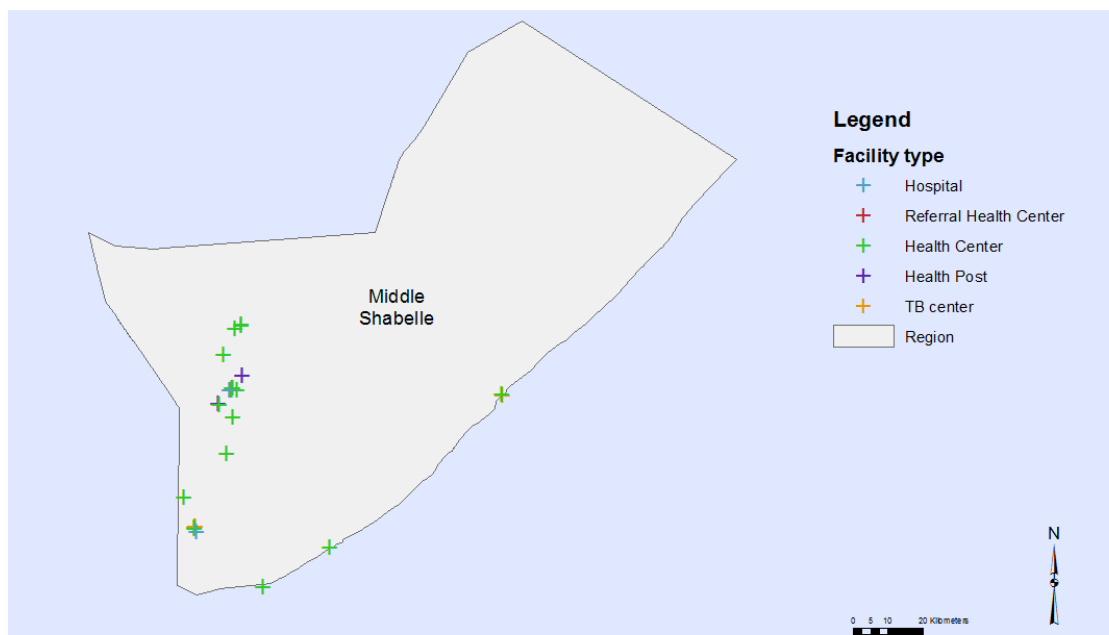
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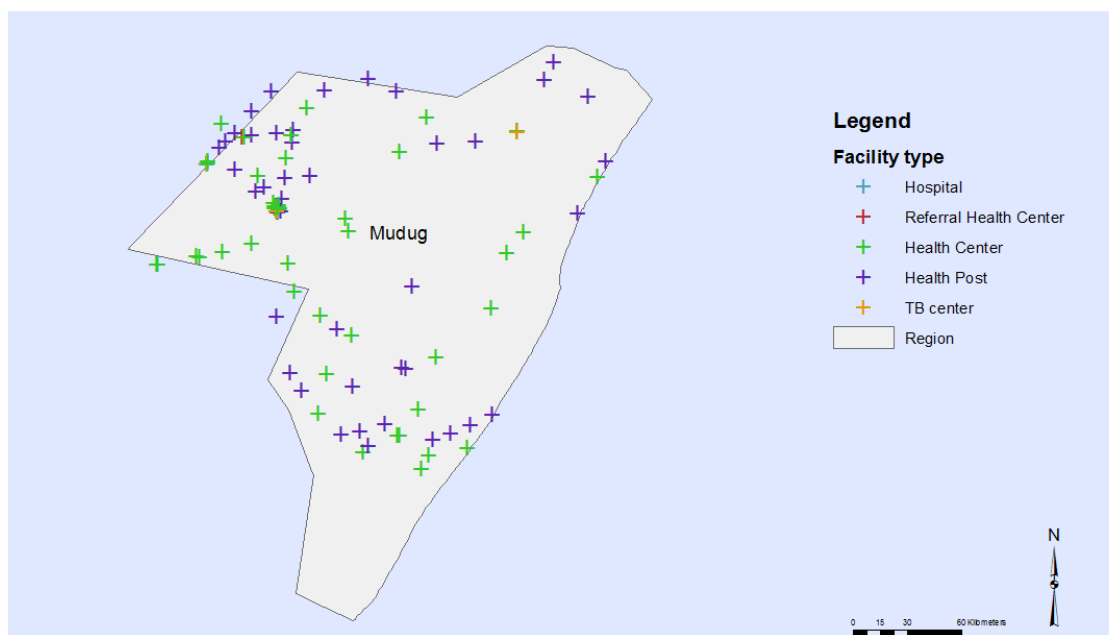
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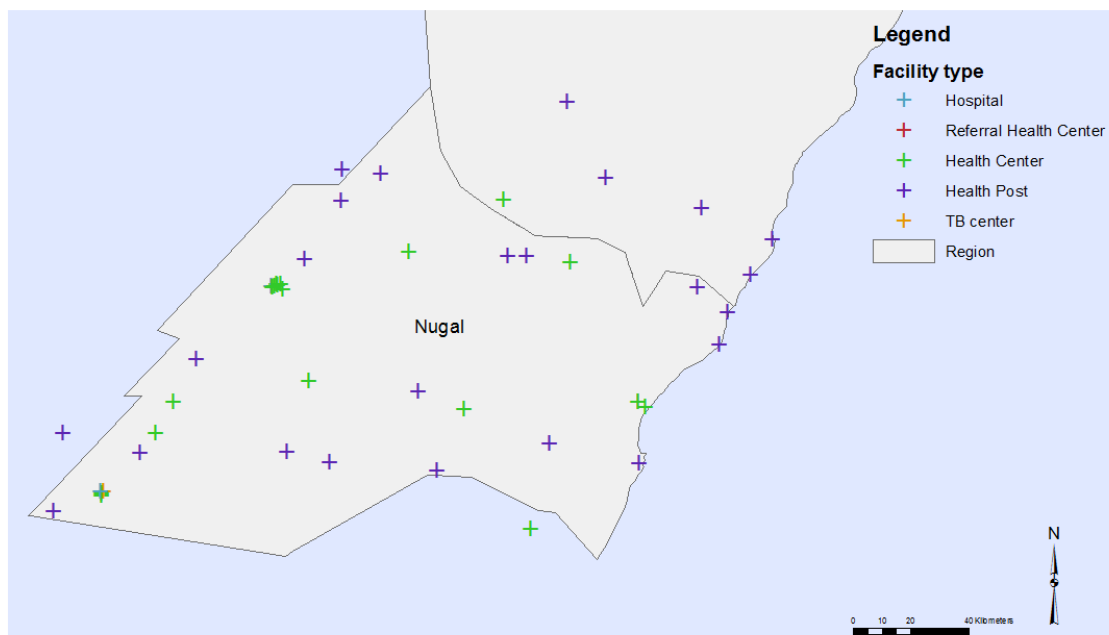
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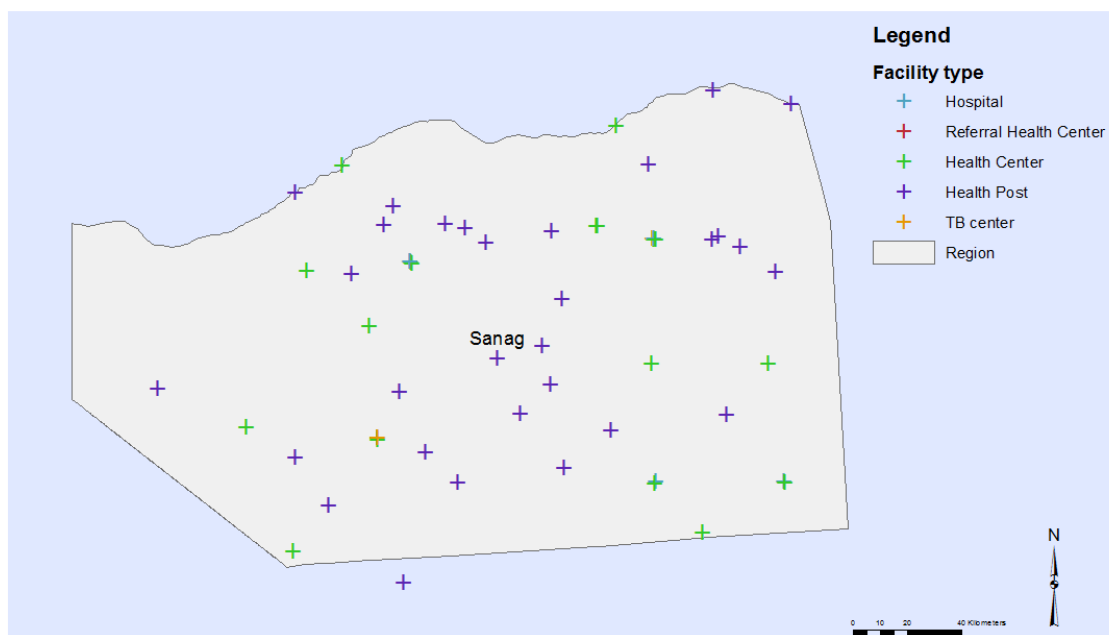
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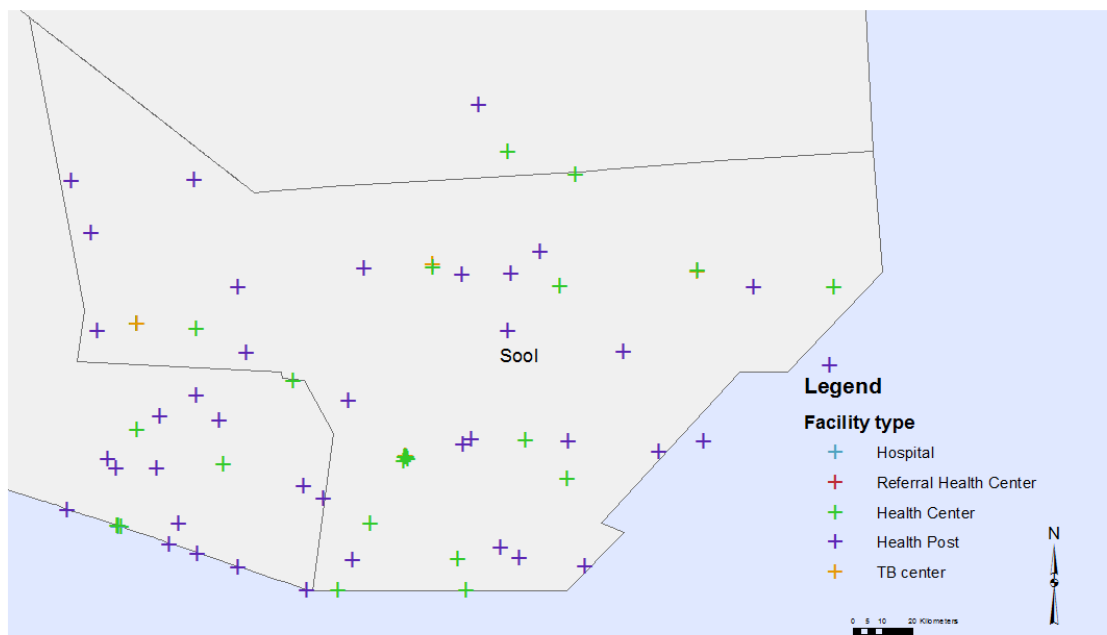
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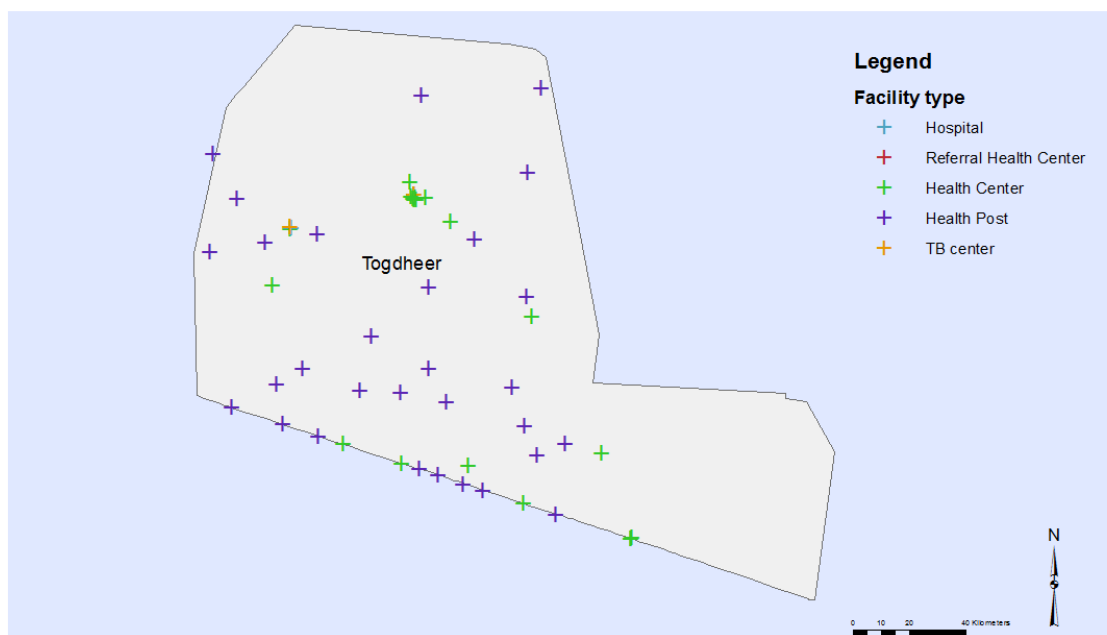
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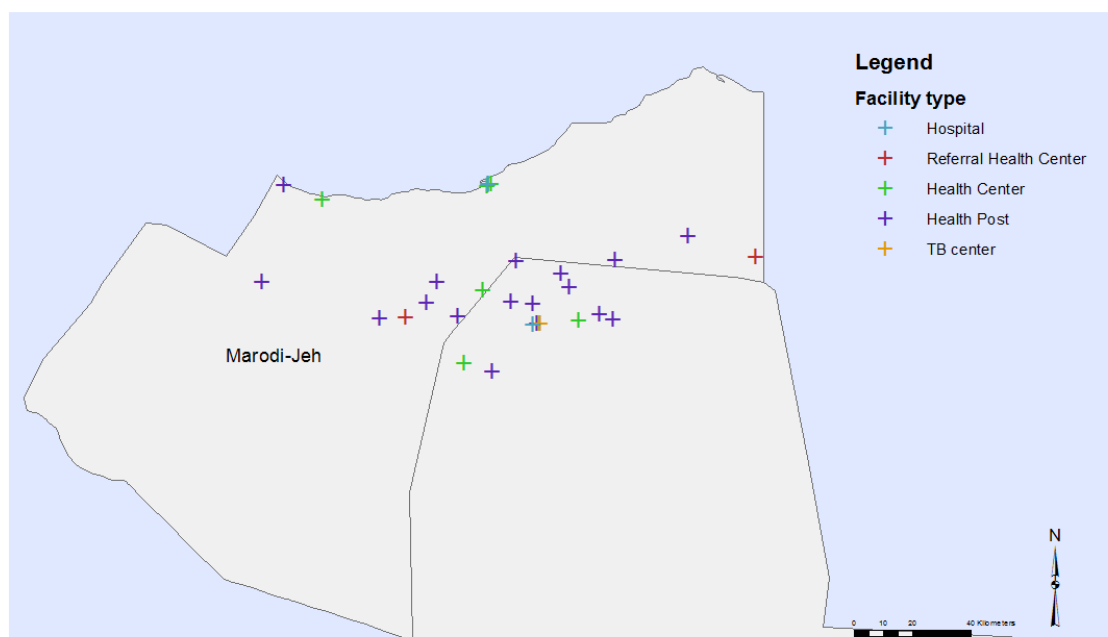
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Annex 3: Questionnaires

Service Availability and Readiness Assessment

Somali 2015 Questionnaire

Facility number	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Name of facility	<input type="text"/>
Region	<input type="text"/>
District	<input type="text"/>

SARA core instrument

Version 2.2 July, 2015

The SARA core instrument is a questionnaire broken down into the following sections:

Section 1: Cover page

- Interviewer visits
- Facility identification
- Geographic coordinates
- General information

Section 2: Staffing

Section 3: Inpatient and observation beds

Section 4: Infrastructure

- Communications
- Ambulance/transport for emergencies
- Power supply
- Basic client amenities
- Infection control
- Processing of equipment for reuse
- Health care waste management
- Supervision
- Basic equipment
- Infection control precautions

Section 5: Available services

- Family planning
- Antenatal care
- Prevention of mother-to-child transmission of HIV
- Obstetric and newborn care
- Caesarean section
- Immunization
- Child preventative and curative care
- Adolescent health
- HIV counselling and testing
- HIV treatment
- HIV care and support
- Sexually transmitted infections
- Tuberculosis
- Malaria
- Non-communicable diseases
- Surgery
- Blood transfusion

Section 6: Diagnostics

Section 7: Medicines and commodities

Section 8: Interviewer's observations

Number	Question	Result
SECTION 1: COVER PAGE		
INTERVIEWER VISITS		
001	Facility number	<div style="border: 1px solid black; width: 100px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 20px; height: 20px; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; border: 1px solid black;"></div> </div>
002	Is this a supervisor validation check of a facility?	<div style="display: flex; justify-content: space-between;"> <div> DATA COLLECTION FOR FACILITY ASSESSMENT..... SUPERVISOR VALIDATION </div> <div> 1 2 </div> </div>
Date	1	2
	3	FINAL VISIT
Interviewer Name	DAY	MONTH
	YEAR	INT. NUMBER
FACILITY IDENTIFICATION		
003	Name of facility	<div style="border: 1px solid black; width: 100%; height: 20px;"></div>
004	Location of facility (village/address)	<div style="border: 1px solid black; width: 100%; height: 20px;"></div>
005	Zone	<div style="border: 1px solid black; width: 100%; height: 20px;"></div>
006	Region	<div style="border: 1px solid black; width: 100%; height: 20px;"></div>
006_1	District	<div style="border: 1px solid black; width: 100%; height: 20px;"></div>
007	Type of facility	<div style="display: flex; justify-content: space-between;"> <div> HOSPITAL..... REFERRAL HEALTH CENTER HEALTH CENTRE/MCH..... HEALTH POST/PRIMARY HEALTH UNIT TB CENTER OTHER _____ (SPECIFY) </div> <div> 1 2 3 4 5 96 </div> </div>
008	Managing Authority (who is running the facility)	<div style="display: flex; justify-content: space-between;"> <div> GOVERNMENT/PUBLIC NGO/NOT-FOR-PROFIT FAITH-BASED OTHER _____ (SPECIFY) </div> <div> 1 2 3 96 </div> </div>

009	Urban/Rural	URBAN..... RURAL.....	1 2
010	Outpatient only	YES..... NO	
SO_13	Is this facility operational?	YES..... NO	→013
SO_14	For how long has this facility been non-operational?	LESS THAN 1 MONTH 1 MONTH TO 3 MONTHS 3 MONTHS TO 6 MONTHS..... MORE THAN SIX MONTHS..... DON'T KNOW9	

GEOGRAPHIC COORDINATES

COLLECT GEOGRAPHIC COORDINATES INFORMATION FOLLOWING THE INSTRUCTIONS*.

SET DEFAULT SETTINGS FOR GPS:

1. SET COORDINATE FORMAT TO DECIMAL DEGREES (HDDD.DDDDD)
2. SET "DATUM" TO WGS84
3. SET "UNITS" TO METRIC, "NORTH REF" TO MAGNETIC AND "ANGLE" TO DEGREE

MOVE TO MAIN ENTRANCE OF THE BUILDING. STAND WITHIN 30 METERS OF DOOR WHERE ENTRANCE IS IN PLAIN VIEW TO THE SKY.

1. TURN GPS RECEIVER ON AND WAIT UNTIL SATELLITE PAGE INDICATES "READY TO NAVIGATE" AND ACCURACY IS AT A RECOMMENDED LEVEL
2. GO TO THE "MENU" PAGE AND SELECT "MARK"
3. HIGHLIGHT THE WAYPOINT NUMBER AND PRESS "ENTER"
4. ENTER FACILITY CODE AND PRESS "ENTER" TO GO BACK TO THE "MARK" PAGE
5. HIGHLIGHT "OK" AND PRESS "ENTER" TO REGISTER THE WAYPOINT
6. GO TO THE MENU PAGE, HIGHLIGHT "WAYPOINT" AND PRESS "ENTER"
7. HIGHLIGHT THE WAYPOINT AND PRESS "ENTER" TO OPEN ITS DETAILED INFORMATION
8. COPY INFORMATION FROM WAYPOINT LIST PAGE IN THE FORM BELOW

BE SURE TO COPY THE WAYPOINT NAME (FACILITY NUMBER) FROM THE WAYPOINT LIST PAGE TO VERIFY THAT YOU ARE ENTERING THE CORRECT WAYPOINT INFORMATION ON THE DATA FORM



013	Latitude	DEGREES/DEC b <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
014	Longitude	DEGREES/DEC b <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>



Number	Question	Result	Skip
GENERAL INFORMATION			
FACILITY NUMBER	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	INTERVIEWER CODE	<input type="text"/> <input type="text"/>
<p>FIND THE MANAGER, THE PERSON IN-CHARGE OF THE FACILITY, OR MOST SENIOR HEALTH WORKER RESPONSIBLE FOR OUTPATIENT SERVICES WHO IS PRESENT AT THE FACILITY. READ THE FOLLOWING GREETING:</p> <p>Good day! My name is _____. We are here on behalf of the Ministry of Health conducting a survey of health facilities to assist the government in knowing more about health services in our country.</p> <p>Now I will read a statement explaining the study.</p> <p>Your facility was selected to participate in this study. We will be asking you questions about various health services. Information about your facility may be used by the [MOH], organizations supporting services in your facility, and researchers, for planning service improvement or for conducting further studies of health services.</p> <p>Neither your name nor that of any other health worker respondents participating in this study will be included in the dataset or in any report; however, there is a small chance that any of these respondents may be identified later. Still, we are asking for your help to ensure that the information we collect is accurate.</p> <p>You may refuse to answer any question or choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation.</p> <p>If there are questions for which someone else is the most appropriate person to provide the information, we would appreciate if you introduce us to that person to help us collect that information.</p> <p>At this point, do you have any questions about the study? Do I have your agreement to proceed?</p>			
_____		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DAY MONTH YEAR	
015	May I begin the interview?	YES..... NO.....	→5001
016	INTERVIEW START TIME (use the 24 hour-clock system)	<input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	

Number	Question	Result		Skip
MODULE 1: SERVICE AVAILABILITY				
SECTION 2: STAFFING				
200	I have a few questions on staffing for this facility. Please tell me how many staff with each of the following qualifications are currently assigned to, employed by, or seconded to this facility. Please count each staff member only once, on the basis of the highest technical or professional qualification. For doctors, I would also like to know, of the total number, how many are part-time in this facility.	A) ASSIGNED/ EMPLOYED/ SECONDED (INCLUDING PART TIME)	B) PART TIME	
01	Generalist (non-specialist) medical doctors	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	
02	Specialist medical doctors	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	
SO_02	Among those specialists medical doctors how many are:			
SO_02A	Anaesthetist	<input type="text"/> <input type="text"/> <input type="text"/>		
SO_02B	Obstetrician	<input type="text"/> <input type="text"/> <input type="text"/>		
SO_02C	Paediatrician	<input type="text"/> <input type="text"/> <input type="text"/>		
03	Non-physician clinicians/paramedical professionals	<input type="text"/> <input type="text"/> <input type="text"/>		
04	Nursing professionals	<input type="text"/> <input type="text"/> <input type="text"/>		
05	Midwifery professionals	<input type="text"/> <input type="text"/> <input type="text"/>		
08	Pharmacists	<input type="text"/> <input type="text"/> <input type="text"/>		
11	Laboratory technicians (medical and pathology)	<input type="text"/> <input type="text"/> <input type="text"/>		
12	Community health workers	<input type="text"/> <input type="text"/> <input type="text"/>		
SO_12	Community based health workers	<input type="text"/> <input type="text"/> <input type="text"/>		
SECTION 3: INPATIENT AND OBSERVATION BEDS				

301	Excluding any delivery beds, how many overnight/inpatient beds in total does this facility have, both for adults and children?	# OF OVERNIGHT/ INPATIENT BEDS. . . .	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
302	Of the overnight/inpatient beds in this facility, how many are dedicated maternity beds? THIS DOES NOT INCLUDE DELIVERY BEDS	# OF DEDICATED MATERNITY BEDS. . . .	<input type="text"/> <input type="text"/> <input type="text"/>	



Number	Question	Result	Skip
MODULE 2: SERVICE READINESS			
SECTION 4: INFRASTRUCTURE			
This section will focus on questions related to infrastructure.			
COMMUNICATIONS			
400	Does this facility have a <i>functioning land line telephone</i> that is available to call outside at all times client services are offered? CLARIFY THAT IF FACILITY OFFERS 24-HOUR EMERGENCY SERVICES, THEN THIS REFERS TO 24-HOUR AVAILABILITY.	YES.....1 NO2	
401	Does this facility have a <i>functioning cellular telephone or a private cellular phone</i> that is supported by the facility?	YES.....1 NO2	
402	Does this facility have a <i>functioning short-wave radio</i> for radio calls?	YES.....1 NO2	
403	Does this facility have <i>a functioning computer?</i>	YES.....1 NO2	
404	Is there access to email or internet within the facility today?	YES.....1 NO2	
AMBULANCE/TRANSPORT FOR EMERGENCIES			
405	Does this facility have a <i>functional ambulance</i> or other vehicle for emergency transportation for clients that is stationed at this facility or operates from this facility?	YES.....1 NO2	→407
406	Does this facility have access to an ambulance or other vehicle for emergency transport for clients that is stationed at another facility or that operates from another facility in near proximity?	YES.....1 NO2	→408 →408
407	Is fuel for the ambulance or other emergency vehicle available today?	YES.....1 NO2 DON'T KNOW98	
POWER SUPPLY			
408	Does your facility have electricity from any source (e.g. electricity grid, generator, solar, or other) including for stand-alone devices (EPI cold chain)?	YES.....1 NO2	→417

Number	Question	Result	Skip
409	What is the electricity used for in the facility?	ONLY STAND-ALONE ELECTRIC MEDICAL DEVICES/APPLIANCES (e.g. EPI cold room, refrigerator, suction apparatus, etc.) 1 ELECTRIC LIGHTING (EXCLUDING FLASHLIGHTS) AND COMMUNICATIONS... 2 ELECTRIC LIGHTING, COMMUNICATIONS, AND 1 TO 2 ELECTRIC MEDICAL DEVICES/APPLIANCES..... 3 ALL ELECTRICAL NEEDS OF FACILITY 4	
410	What is the facility's main source of electricity?	CENTRAL SUPPLY OF ELECTRICITY (e.g. national or community grid) 1 GENERATOR (FUEL OR BATTERY OPERATED GENERATOR) 2 SOLAR SYSTEM 3 OTHER 96 (SPECIFY)	
411	Other than the main or primary source, does the facility have a secondary or backup source of electricity? IF YES: What is the secondary source of electricity?	NO SECONDARY SOURCE 0 CENTRAL SUPPLY OF ELECTRICITY (e.g. national or community grid) 1 GENERATOR (FUEL OR BATTERY OPERATED GENERATOR) 2 SOLAR SYSTEM 3 OTHER 96 (SPECIFY)	
412	During the past 7 days, was electricity available at all times from the main or any backup source when the facility was open for services?	ALWAYS AVAILABLE (NO INTERRUPTIONS) 1 OFTEN AVAILABLE (INTERRUPTIONS OF LESS THAN 2 HOURS PER DAY) 2 SOMETIMES AVAILABLE (FREQUENT OR PROLONGED INTERRUPTIONS OF MORE THAN 2 HOURS PER DAY) 3	
	CHECK Q410 AND Q411: FACILITY HAS A GENERATOR ("2" CIRCLED FOR EITHER QUESTION) 	FACILITY DOES NOT HAVE A GENERATOR ("2" NOT CIRCLED FOR BOTH QUESTIONS) 	Q415
413	Is the generator functional?	YES..... 1 NO 2 DON'T KNOW 98	➔ 415 ➔ 415
414	Is there fuel or a charged battery available today?	YES..... 1 NO 2 DON'T KNOW 98	

Number	Question	Result	Skip
415	CHECK Q410 AND Q411: FACILITY HAS A SOLAR SYSTEM ("3" CIRCLED FOR EITHER QUESTION) 	FACILITY DOES NOT HAVE A SOLAR SYSTEM ("3" NOT CIRCLED FOR BOTH QUESTIONS) 	Q417
416	Is the solar system functional?	YES, FUNCTIONING.....1 PARTIALLY, BATTERY NEEDS SERVICING/REPLACEMENT.....2 NO, NOT FUNCTIONAL3 DON'T KNOW98	
BASIC CLIENT AMENITIES			
417	On average, how many hours per day is this facility open?	4 HOURS OR LESS1 5 TO 8 HOURS2 9 TO 16 HOURS3 17 TO 23 HOURS4 24 HOURS5	
418	What is the most commonly used source of water for the facility at this time ? OBSERVE THAT WATER IS AVAILABLE FROM THE SOURCE OR IN THE FACILITY ON THE DAY OF THE VISIT. E.G. CHECK THAT THE PIPE IS FUNCTIONING.	PIPED INTO FACILITY1 PIPED ONTO FACILITY GROUNDS2 PUBLIC TAP/STANDPIPE3 TUBEWELL/BOREHOLE4 PROTECTED DUG WELL5 UNPROTECTED DUG WELL6 PROTECTED SPRING7 UNPROTECTED SPRING8 RAINWATER COLLECTION9 BOTTLED WATER10 CART W/SMALL TANK/DRUM11 TANKER TRUCK.....12 SURFACE WATER13 OTHER96 (SPECIFY) DON'T KNOW98 NO WATER SOURCE00	→420 →420 →420 →420 →420 →420 →420
419	Is water available from this source on facility premises?	YES, INSIDE THE FACILITY1 YES, WITHIN THE GROUND OF THE FACILITY.....2 NO, OUTSIDE THE FACILITY GROUNDS.....3	
420	Is there a room with auditory and visual privacy available for patient consultations?	AUDITORY PRIVACY ONLY1 VISUAL PRIVACY ONLY2 BOTH AUDITORY AND VISUAL PRIVACY3 NO PRIVACY4	

Number	Question	Result	Skip																																																
421	Is there a toilet (latrine) on premises in functioning condition that is accessible for general outpatient client use? IF YES: What type of toilet? IF MULTIPLE TOILETS ARE AVAILABLE, CONSIDER THE MOST MODERN TYPE OBSERVE THAT THE TOILET (LATRINE) IS ACCESSIBLE (UNLOCKED OR KEY AVAILABLE) AND FUNCTIONING	FLUSH TOILET1 VENTILATED IMPROVED PIT LATRINE (VIP).....2 PIT LATRINE WITH SLAB3 PIT LATRINE WITHOUT SLAB/OPEN PIT.....4 COMPOSTING TOILET5 BUCKET.....6 HANGING TOILET/ HANGING LATRINE.....7 NO FACILITIES/BUSH/FIELD.....8																																																	
INFECTION CONTROL																																																			
422	Does this facility have any guidelines on standard precautions for infection prevention? IF YES, ASK TO SEE THE DOCUMENT	YES, OBSERVED1 YES, REPORTED NOT SEEN2 NO3																																																	
PROCESSING OF EQUIPMENTS FOR REUSE																																																			
423	Please tell me if the following items used for processing of equipment for reuse are available and functional in the facility today. IF AVAILABLE, ASK TO SEE IT AND INDICATE IF IT IS FUNCTIONING OR NOT	<table border="1"> <thead> <tr> <th colspan="3">A) AVAILABLE</th><th colspan="3">B) FUNCTIONING</th></tr> <tr> <th>OBSERVED</th><th>REPORTED NOT SEEN</th><th>NOT AVAILABLE</th><th>YES</th><th>NO</th><th>DON'T KNOW</th></tr> </thead> <tbody> <tr> <td>01</td><td>02</td><td>03</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>04</td><td>05</td><td>06</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>07</td><td>08</td><td>09</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>10</td><td>11</td><td>12</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>13</td><td>14</td><td>15</td><td></td><td></td><td></td></tr> <tr> <td>16</td><td>17</td><td>18</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>	A) AVAILABLE			B) FUNCTIONING			OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	01	02	03	1	2	8	04	05	06	1	2	8	07	08	09	1	2	8	10	11	12	1	2	8	13	14	15				16	17	18	1	2	8	
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10	11	12	1	2	8																																														
13	14	15																																																	
16	17	18	1	2	8																																														
01	Electric autoclave (pressure & wet heat)																																																		
02	Non-electric autoclave																																																		
03	Electric dry heat sterilizer																																																		
04	Electric boiler or steamer (no pressure)																																																		
05	Non-electric pot with cover for boiling/steam																																																		
06	Heat source for non-electric equipment																																																		
HEALTH CARE WASTE MANAGEMENT																																																			

Number	Question	Result	Skip
424	<p>Now I would like to ask you a few questions about waste management practices for sharps waste, such as needles or blades.</p> <p>How does this facility finally dispose of sharps waste (e.g., filled sharps boxes)?</p> <p>PROBE TO ARRIVE AT CORRECT RESPONSE</p> <p>NOTE: IF ANY OF THE RESPONSES 2-9 TAKE PLACE OUTSIDE THE FACILITY, THEN THE CORRECT RESPONSE TO CIRCLE WILL BE IN THE CATEGORY OF "REMOVE OFFSITE"</p>	<p>BURN INCINERATOR</p> <p>2-CHAMBER INDUSTRIAL (800-1000+° C) . 2</p> <p>1-CHAMBER DRUM/BRICK 3</p> <p>OPEN BURNING</p> <p>FLAT GROUND - NO PROTECTION 4</p> <p>PIT OR PROTECTED GROUND 5</p> <p>DUMP WITHOUT BURNING</p> <p>FLAT GROUND - NO PROTECTION 6</p> <p>COVERED PIT OR PIT LATRINE 7</p> <p>OPEN-PIT - NO PROTECTION 8</p> <p>PROTECTED GROUND OR PIT 9</p> <p>REMOVE OFFSITE</p> <p>STORED IN COVERED CONTAINER..... 10</p> <p>STORED IN OTHER PROTECTED ENVIRONMENT 11</p> <p>STORED UNPROTECTED 12</p> <p>OTHER 96</p> <p>(SPECIFY)</p> <p>NEVER HAS SHARP WASTE 95</p>	
425	<p>Now I would like to ask you a few questions about waste management practices for medical waste other than sharps, such as used bandages.</p> <p>How does this facility finally dispose of medical waste other than sharps boxes?</p> <p>PROBE TO ARRIVE AT CORRECT RESPONSE</p> <p>NOTE: IF ANY OF THE RESPONSES 2-9 TAKE PLACE OUTSIDE THE FACILITY, THEN THE CORRECT RESPONSE TO CIRCLE WILL BE IN THE CATEGORY OF "REMOVE OFFSITE"</p>	<p>SAME AS FOR SHARPS ITEMS 1</p> <p>BURN INCINERATOR</p> <p>2-CHAMBER INDUSTRIAL (800-1000+° C) . 2</p> <p>1-CHAMBER DRUM/BRICK 3</p> <p>OPEN BURNING</p> <p>FLAT GROUND - NO PROTECTION 4</p> <p>PIT OR PROTECTED GROUND 5</p> <p>DUMP WITHOUT BURNING</p> <p>FLAT GROUND - NO PROTECTION 6</p> <p>COVERED PIT OR PIT LATRINE 7</p> <p>OPEN-PIT - NO PROTECTION 8</p> <p>PROTECTED GROUND OR PIT 9</p> <p>REMOVE OFFSITE</p> <p>STORED IN COVERED CONTAINER..... 10</p> <p>STORED IN OTHER PROTECTED ENVIRONMENT 11</p> <p>STORED UNPROTECTED 12</p> <p>OTHER 96</p> <p>(SPECIFY)</p> <p>NEVER HAS SHARP WASTE 95</p>	

Number	Question	Result	Skip
426	CHECK Q424 AND Q425: INCINERATOR USED (EITHER "2" OR "3" CIRCLED) 	INCINERATOR NOT USED (NEITHER "2" NOR "3" CIRCLED) 	Q430
427	Is the incinerator functional today?	YES.....1 NO2 DON'T KNOW98	→430 →430
428	Is fuel for the incinerator available today?	YES.....1 NO2 DON'T KNOW98	
SUPERVISION			
430	When was the last time this facility received a supervision visit from the higher level (DHMT/RHMT or other)?	THIS MONTH1 IN THE LAST 3 MONTHS2 MORE THAN 3 MONTHS AGO3 DON'T KNOW98	→500 →500
431	During the supervision visit, did the supervisor assess the following?	YES	NO
01	Pharmacy (e.g. drug stock out, expiry, records, etc.)	1	2
02	Staffing (e.g. staff available and training)	1	2
03	Data (e.g. completeness, quality, and timely reporting)	1	2
SO_03	Immunization	1	2
GENERAL OUTPATIENT SECTION			
BASIC EQUIPMENT			
500	Please tell me if the following basic equipment and supplies used in the provision of client services are available and functional in this facility today. ASK TO SEE THE ITEMS	A) AVAILABLE	B) FUNCTIONING
		OBSERVED REPORTED NOT NOT SEEN AVAILABLE	YES NO DON'T KNOW
01	Adult weighing scale	1 → B 2 → B 3 02 ←	1 2 8
02	Child weighing scale- 250 gram gradation	1 → B 2 → B 3 03 ←	1 2 8
03	Infant weighing scale – 100 gram gradation	1 → B 2 → B 3 04 ←	1 2 8
04	Measuring tape-height board/stadiometre	1 → B 2 → B 3 SO_04 ←	1 2 8

Number	Question	Result					Skip
SO_04	MUAC (mid upper arm circumference tape)	1 → B	2 → B	3 05 ←	1	2	8
05	Thermometer	1 → B	2 → B	3 06 ←	1	2	8
06	Stethoscope	1 → B	2 → B	3 07 ←	1	2	8
07	Blood pressure apparatus (may be digital or manual sphygmomanometer with stethoscope)	1 → B	2 → B	3 08 ←	1	2	8
08	Light source (flashlight acceptable)	1 → B	2 → B	3 09 ←	1	2	8
09	Intravenous infusion kits	1 10	2 10	3 10 ←			
10	Oxygen concentrators	1 → B	2 → B	3 11 ←	1	2	8
11	Oxygen cylinders	1 → B	2 → B	3 12 ←	1	2	8
12	Central oxygen supply	1 → B	2 → B	3 13 ←	1	2	8
13	Flowmeter for oxygen therapy (with humidification)	1 → B	2 → B	3 14 ←	1	2	8
14	Oxygen delivery apparatus (key connecting tubes and mask/nasal prongs)	1 → B	2 → B	3 501 ←	1	2	8
501	At any time during the past 3 months has oxygen been unavailable for any reason?	YES.....1 NO2					
INFECTION CONTROL PRECAUTIONS							
600	Please tell me if the following resources/supplies used for infection control are available in the general outpatient area of this facility today. ASK TO SEE THE ITEMS	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE			
01	Clean running water (piped, bucket with tap, or pour pitcher)	1	2	3			
02	Hand-washing soap/liquid soap	1	2	3			
03	Alcohol based hand rub	1	2	3			
04	Disposable latex gloves	1	2	3			
05	Waste receptacle (pedal bin) with lid and plastic bin liner	1	2	3			
06	Sharps container ("safety box")	1	2	3			
07	Environmental disinfectant (e.g., chlorine, alcohol)	1	2	3			

Number	Question	Result			Skip
08	Disposable syringes with disposable needles	1	2	3	
09	Auto-disable syringes	1	2	3	

Number	Question	Result	Skip
SECTION 5: AVAILABLE SERVICES			
This section will focus on questions related to available services.			
A. REPRODUCTIVE, MATERNAL AND NEWBORN HEALTH			
FAMILY PLANNING SERVICES			
700	Does this facility offer family planning services?	YES 1 NO.....2	→ 800
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE FAMILY PLANNING SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT FAMILY PLANNING SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.			
701	Does this facility provide or prescribe any of the following modern methods of family planning:	YES	NO
01	Combined estrogen progesterone oral contraceptive pills	1	2
02	Progestin-only contraceptive pills	1	2
03	Combined estrogen progesterone injectable contraceptives	1	2
04	Progestin-only injectable contraceptives	1	2
05	Male condoms	1	2
06	Female condoms	1	2
07	Intrauterine contraceptive device (IUCD)	1	2
08	Implants	1	2
09	Cycle beads for standard days method	1	2
10	Emergency contraceptive pills	1	2
11	Male sterilization	1	2
12	Female sterilization	1	2
702	Does this facility provide or prescribe any of the following modern methods of family planning for unmarried adolescents :	YES	NO
01	Combined estrogen progesterone oral contraceptive pills	1	2
02	Male condoms	1	2
03	Emergency contraceptive pills	1	2
04	Intrauterine contraceptive device (IUCD)	1	2
703	Please tell me if the following documents are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED	YES, REPORTED NOT SEEN NO
01	National family planning guidelines	1	2 3

Number	Question	Result					Skip
02	Any family planning check-lists and/or job-aids	1	2	3			
704	Have you or any provider(s) of family planning services:	YES		NO			
01	Received any family planning training in the last two years?	1	2				
02	Received any training in adolescent sexual and reproductive health in the last two years?	1	2				
705	Does this facility stock contraceptive commodities at this service site?	YES 1 NO 2				→ 800	
706	Are any of the following reproductive health medicines and commodities available in this service site today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE/COMMODITY IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	Combined estrogen progesterone oral contraceptive pills	1	2	3	4	5	
02	Progestin-only contraceptive pills	1	2	3	4	5	
03	Combined estrogen progesterone injectable contraceptives	1	2	3	4	5	
04	Progestin-only injectable contraceptives	1	2	3	4	5	
05	Male condoms	1	2	3	4	5	
06	Female condoms	1	2	3	4	5	
07	Implant (e.g. levonorgestrel, etonogestrel)	1	2	3	4	5	
08	Emergency contraceptive pills (e.g. levonorgestrel tablet, ulipristal acetate tablet, mifepristone tablet 10-25 mg)	1	2	3	4	5	
09	Intrauterine contraceptive device (IUCD)	1	2	3	4	5	
707	For each of the following items, please check in the facility records if there has been a stock-out in the past 3 months:	STOCK-OUT IN THE PAST 3 MONTHS	NO STOCK-OUT IN PAST 3 MONTHS	NOT INDICATED	PRODUCT NOT OFFERED	FACILITY RECORD NOT AVAILABLE	
01	Female condoms	1	2	3	4	5	
02	Implant (e.g.levonorgestrel, etonogestrel)	1	2	3	4	5	
03	Emergency contraceptive pills (e.g. levonorgestrel tablet, ulipristal acetate tablet, mifepristone tablet 10-25 mg)	1	2	3	4	5	
ANTENATAL CARE SERVICES							
800	Does this facility offer antenatal care (ANC) services?	YES 1 NO 2				→ 900	
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE ANTENATAL CARE SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT ANTENATAL CARE SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.							





Number	Question	Result			Skip
801	Do ANC providers provide any of the following services to pregnant women as part of routine ANC services?	YES		NO	
01	Iron supplementation	1	2		
02	Folic acid supplementation	1	2		
SO_05	Multi-micronutrients supplementation	1	2		
03	Intermittent preventive treatment in pregnancy (IPTp) for malaria	1	2		
04	Tetanus toxoid immunization	1	2		
05	Monitoring for hypertensive disorder of pregnancy	1	2		
SO_06	HIV test offered to pregnant woman	1	2		
SO_07	LLINs (long lasting insecticide treated net) to pregnant women	1	2		
802	Please tell me if the following documents are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED	YES, REPORTED NOT SEEN	NO	
01	National ANC guidelines	1	2	3	
02	Any ANC check-lists and/or job-aids	1	2	3	
03	IPTp guidelines, check-lists and/or job-aids (including wall charts) ACCEPTABLE IF PART OF ANC GUIDELINES.	1	2	3	
803	Have you or any provider(s) of ANC services:	YES		NO	
01	Received any ANC training in the last two years?	1		2	
02	Received any training in IPTp in the last two years?	1		2	
PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV					
900	Does this facility offer services for the prevention of mother-to-child transmission of HIV (PMTCT)?	YES 1 NO.....2			→1000
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE PMTCT SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT PMTCT SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.					
901	As part of PMTCT services, please tell me if this facility provides the following services to clients:	YES		NO	
01	Provide HIV counselling and testing services to pregnant women for PMTCT	1		2	
02	Provide HIV counselling and testing services to infants born to HIV positive pregnant women for PMTCT	1		2	

Number	Question	Result			Skip
SO_10	Provide HIV counselling and testing services to fathers of infants born to HIV positive pregnant women, for PMTCT	1	2		
03	Provide ARV medicines to HIV positive pregnant women for PMTCT	1	2		
04	Provide ARV prophylaxis to newborns of HIV positive pregnant women for PMTCT	1	2		
05	Provide infant and young child feeding counselling for PMTCT	1	2		
06	Provide nutritional counselling for HIV positive pregnant women and their infants for PMTCT	1	2		
07	Provide family planning counselling to HIV positive pregnant women for PMTCT	1	2		
902	Please tell me if the following guidelines are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED	YES, REPORTED NOT SEEN	NO	
01	National guidelines for PMTCT	1	2	3	
02	Guidelines for infant and young child feeding counselling	1	2	3	
903	Have you or any provider(s) of PMTCT services:	YES	NO		
01	Received any training in PMTCT in the last two years?	1	2		
02	Received any training in infant and young child feeding in the last two years?	1	2		
904	Is the PMTCT service room or area a private room/area with auditory and visual privacy?	AUDITORY PRIVACY ONLY..... 1 VISUAL PRIVACY ONLY 2 BOTH AUDITORY AND VISUAL PRIVACY ... 3 NO PRIVACY 4			
OBSTETRIC AND NEWBORN CARE SERVICES					
1000	Does this facility offer delivery (including normal delivery, basic emergency obstetric care, and/or comprehensive emergency obstetric care) and/or newborn care services?	YES 1 NO.....2			→ 1100
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE OBSTETRIC AND NEWBORN CARE SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT OBSTETRIC AND NEWBORN CARE SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.					
1001	Please tell me if the following interventions are <u>routinely</u> carried out by providers of delivery services in this facility:	YES	NO		

Number	Question	Result			Skip
01	Administration of oxytocin injection immediately after birth to all women for the prevention of post-partum haemorrhage	1	2		
02	Monitoring and management of labour using partograph	1	2		
03	Immediate and exclusive breastfeeding	1	2		
04	Hygienic cord care (cut with sterile item and apply disinfectant to tip and stump, and no application of other substances)	1	2		
05	Thermal protection (drying baby immediately after birth and wrapping)	1	2		
1002	Please tell me if any of the following interventions for the management of complications during and after pregnancy and childbirth have been carried out in the last 12 months by providers of delivery services as part of their work in this facility.	YES	NO		
01	Parenteral administration of antibiotics (IV or IM) for mothers	1	2		
02	Parenteral administration of oxytocic for treatment of post-partum haemorrhage (IV or IM)	1	2		
03	Parenteral administration of magnesium sulphate for management of preeclampsia and eclampsia (IV or IM)	1	2		
04	Assisted vaginal delivery	1	2		
05	Manual removal of placenta	1	2		
06	Removal of retained products of conception	1	2		
07	Neonatal resuscitation with bag and mask	1	2		
08	Caesarean section	1	2		
09	Blood transfusion	1	2		
10	Antibiotics for preterm or prolonged PROM (premature rupture of membranes) to prevent infection	1	2		
11	Corticosteroids in preterm labour	1	2		
12	KMC (Kangaroo mother care) for premature/very small babies	1	2		
13	Injectable antibiotics for neonatal sepsis	1	2		
1003	Are the following documents available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED	YES, REPORTED NOT SEEN	NO	
01	Any national guidelines for essential childbirth care	1	2	3	



Number	Question	Result			Skip		
02	Any check-lists and/or job-aids for essential childbirth care	1	2	3			
03	Any national guidelines for essential newborn care	1	2	3			
1004	Have you or any provider(s) of delivery services:	YES		NO			
01	Received training in newborn resuscitation using the newborn bag and mask in the last two years	1		2			
02	Apart from newborn resuscitation, received training in essential childbirth care in the last two years	1		2			
1005	I would like to know if the following basic equipment items are available in this service area today. For each equipment or item, please tell me if it is available today and functioning. ASK TO SEE THE ITEMS	A) AVAILABLE			B) FUNCTIONING		
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	Examination light (flashlight ok)	1 → B	2 → B	3 02 ←	1	2	8
02	Delivery pack	1 → B	2 → B	3 03 ←	1	2	8
03	Cord clamp	1 → B	2 → B	3 04 ←	1	2	8
04	Episiotomy scissors	1 → B	2 → B	3 05 ←	1	2	8
05	Scissors or blade to cut cord	1 → B	2 → B	3 06 ←	1	2	8
06	Suture material with needle	1 07	2 07	3 07 ←			
07	Needle holder	1 → B	2 → B	3 08 ←	1	2	8
08	Manual vacuum extractor	1 → B	2 → B	3 09 ←	1	2	8
09	Vacuum aspirator or D&C kit	1 → B	2 → B	3 10 ←	1	2	8
10	Incubator	1 → B	2 → B	3 11 ←	1	2	8
11	Disposable latex gloves	1 12	2 12	3 12 ←			
12	Blank partograph	1 13	2 13	3 13 ←			

Number	Question	Result					Skip
13	Delivery bed	1 → B	2 → B	3 14	1	2	8
14	Resuscitation table (with heat source) (for newborn resuscitation)	1 → B	2 → B	3 15	1	2	8
15	Newborn bag and mask size 1 for term babies (for newborn resuscitation)	1 → B	2 → B	3 16	1	2	8
16	Newborn bag and mask size 0 for pre-term babies (for newborn resuscitation)	1 → B	2 → B	3 17	1	2	8
17	Electric suction pump (for suction apparatus)	1 → B	2 → B	3 18	1	2	8
18	Suction catheter (for suction apparatus) for suctioning newborn	1 → B	2 → B	3 19	1	2	8
19	Suction bulb, single use	1 → B	2 → B	3 20	1	2	8
20	Suction bulb, sterilizable multi-use	1 → B	2 → B	3 21	1	2	8
21	Vaginal Speculum	1 → B	2 → B	3 22	1	2	8
22	Infant weighting scale	1 → B	2 → B	3 23	1	2	8
23	Blood pressure apparatus (may be digital or manual sphygmomanometer with stethoscope)	1 → B	2 → B	3 24	1	2	8
24	Clean running water (piped, bucket with tap, or pour pitcher)	1 25	2 25	3 25			
25	Hand-washing soap/liquid soap	1 26	2 26	3 26			
26	Alcohol based hand rub	1 1006	2 1006	3 1006			
1006	Does this facility stock any medicines for obstetric care in this service site?	YES 1 NO 2					→ 1009
1007	Are any of the following medicines and commodities available in this service site today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE/COMMODITY IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	Antibiotic eye ointment for newborn	1	2	3	4	5	
02	Gentamicin injection	1	2	3	4	5	
03	Ampicillin powder for injection	1	2	3	4	5	
04	Hydralazine injection	1	2	3	4	5	

Number	Question	Result				Skip
05	Metronidazole injection	1	2	3	4	5
06	Azithromycin cap/tab or oral liquid	1	2	3	4	5
07	Cefixime cap/tab	1	2	3	4	5
08	Benzathine benzylpenicillin powder for injection	1	2	3	4	5
09	Nifedipine cap/tab (10mg)	1	2	3	4	5
10	Methyldopa tablet	1	2	3	4	5
11	Calcium gluconate injection	1	2	3	4	5
12	Magnesium sulphate injectable	1	2	3	4	5
13	Skin disinfectant	1	2	3	4	5
14	Intravenous solution with infusion set	1	2	3	4	5
15	Sodium chloride injectable solution	1	2	3	4	5
16	Betamethasone injection	1	2	3	4	5
17	Dexamethasone injection	1	2	3	4	5
18	Oxytocin injection	1	2	3	4	5
	IF OXYTOCIN IS OBSERVED AVAILABLE (Q1007_18 is "1" OR "2") 	IF OXYTOCIN IS NOT OBSERVED AVAILABLE (Q1007_18 is "3","4",OR" 5") 				Q1009
1008	Is the oxytocin stored in cold storage?	YES 1 NO..... 2				
CESAREAN SECTION						
1009	CHECK Q1002_08: CESAREAN SECTION OFFERED 	CESAREAN SECTION NOT OFFERED 				Q1100
1010	Do you have the national guidelines for Comprehensive Emergency Obstetric Care (CEmOC) available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO..... 3				
1011	Have you or any provider(s) of delivery service received any training in Comprehensive Emergency Obstetric Care (CEmOC) in the last two years?	YES 1 NO..... 2				
1012	Does this facility have a health professional who can perform caesarean section present in the facility or on call 24 hours a day (including weekends and on public holidays)?	YES 1 NO..... 2				

Number	Question	Result	Skip																
1013	Does this facility have an anaesthetist (or doctor with anaesthetics training) present in the facility or on call 24 hours a day (including weekends and on public holidays)?	YES 1 NO..... 2																	
IMMUNIZATION																			
1100	Does this facility offer immunization services?	YES 1 NO..... 2	→1200																
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE IMMUNIZATION SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT IMMUNIZATION SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.																			
1101	Is this facility providing immunization services today?	YES 1 NO..... 2																	
1102	Does this facility provide any of the following immunization services in the facility only, as outreach at fixed post only, or both?	<table border="1"> <thead> <tr> <th>BOTH IN THE FACILITY AND AS OUTREACH</th><th>IN THE FACILITY ONLY</th><th>OUTREACH ONLY</th><th>SERVICE NOT OFFERED</th></tr> </thead> <tbody> <tr> <td>01</td><td>02</td><td>03</td><td>04</td></tr> <tr> <td>02</td><td>02</td><td>03</td><td>04</td></tr> <tr> <td>03</td><td>02</td><td>03</td><td>04</td></tr> </tbody> </table>	BOTH IN THE FACILITY AND AS OUTREACH	IN THE FACILITY ONLY	OUTREACH ONLY	SERVICE NOT OFFERED	01	02	03	04	02	02	03	04	03	02	03	04	
BOTH IN THE FACILITY AND AS OUTREACH	IN THE FACILITY ONLY	OUTREACH ONLY	SERVICE NOT OFFERED																
01	02	03	04																
02	02	03	04																
03	02	03	04																
01	Birth doses (e.g. BCG, OPV0, ...)	1	2	3	4														
02	Infant vaccines (under 1 year)	1	2	3	4														
03	Adolescent/adult vaccines (e.g. HPV, tetanus, flu)	1	2	3	4														
1103	How often does this facility offer routine full child immunization services at the facility?	DAILY..... 1 WEEKLY..... 2 MONTHLY 3 QUARTERLY..... 4 OTHER 96 (SPECIFY)																	
1104	How often does this facility offer routine full child immunization services as outreach?	DAILY..... 1 WEEKLY..... 2 MONTHLY 3 QUARTERLY..... 4 OTHER 96 (SPECIFY)																	
1105	Do you have the national guidelines for routine child immunization available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO..... 3																	
1106	Have you or any provider(s) of immunization service delivery received any training in any of the following child immunization services in the last two years? IF YES: Please specify if it was through formal training or supportive supervision	YES, FORMAL TRAINING	YES, SUPPORTIVE SUPERVISION	NO TRAINING															

Number	Question	Result			Skip
01	Immunization service delivery (Immunization in practice (IIP) or any similar)	1	2	3	
02	Vaccine management/handling and cold chain	1	2	3	
03	Data reporting and monitoring of service delivery (e.g. Data Quality Self-Assessment (DQS))	1	2	3	
04	Disease surveillance and reporting	1	2	3	
05	Injection safety and waste management	1	2	3	
06	RED (Reaching Every District)	1	2	3	
1107	I would like to know if the following items for immunization are available in this service area today. For each item, please tell me if it is available today. ASK TO SEE THE ITEMS	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	
01	Auto-disable syringes	1	2	3	
02	Sharps container/safety box	1	2	3	
03	Vaccine carrier(s)/cold box	1	2	3	
04	Set of ice packs for vaccine carriers (Note: 4-5 ice packs make one set)	1	2	3	
05	Immunization cards (or child health booklet)	1	2	3	
06	Official immunization tally sheets or integrated tally sheet	1	2	3	
07	Official immunization registers or equivalent	1	2	3	
SO_11	Immunization monitoring chart	1	2	3	
1108	Does this facility have a refrigerator available and functioning for the storage of vaccines? NOTE: FOR A REFRIGERATOR TO BE FUNCTIONAL IT MUST HAVE SUFFICIENT CAPACITY TO ACCOMMODATE ALL NEEDED VACCINES.	AVAILABLE AND FUNCTIONAL 1 AVAILABLE NOT FUNCTIONAL 2 AVAILABLE DON'T KNOW IF FUNCTIONING..... 3 NOT AVAILABLE 4			→ 1115
1109	What type of energy source is used for the vaccine refrigerator?	ELECTRICITY (GRID OR GENERATOR) 1 SOLAR (WITH OR WITHOUT BATTERIES) .. 2 GAS 3 KEROSENE 4 MIXED (ELECTRIC WITH GAS KEROSENE).. 5 OTHER..... 96			
1110	Does this energy source supply power to the refrigerator for 24 hours a day and for 7 days in the week?	YES 1 NO..... 2			
1111	Which of the following devices for monitoring	A) AVAILABLE		B) FUNCTIONING	

Number	Question	Result					Skip
	refrigerator temperature are available and functioning in the refrigerator today: ASK TO SEE THE ITEMS	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	Thermometer	1 → B	2 → B	3 02	1	2	8
02	Continuous temperature recorder/logger	1 → B	2 → B	3 1112	1	2	8
1112	Is the temperature of the refrigerator monitored twice daily? IF YES: PLEASE ASK TO SEE THE LOG USED TO RECORD THE TEMPERATURE	YES, LOG OBSERVED 1 YES, LOG REPORTED NOT SEEN 2 NO.....3					→1115
1113	Has the temperature log been completed for the last 30 days? PLEASE REVIEW LOG AND CHECK FOR COMPLETENESS (TEMPERATURE RECORDED 2 TIMES / DAY DURING THE LAST 30 DAYS)	YES 1 YES, PARTIALLY 2 NO..... 3					→1115
1114	Has the temperature been out of the range 2 to 8 °C inclusive in the last 30 days? PLEASE CHECK THE TEMPERATURE RECORD AND VERIFY THE TEMPERATURE FOR THE LAST 30 WORKING DAYS IN ORDER TO ANSWER THE QUESTION	OBSERVED IN RANGE..... 1 REPORTED IN RANGE BUT NOT SEEN2 OUT OF RANGE3 RECORD NOT AVAILABLE4					
1115	CHECK Q1101 AND Q1108: FACILITY IS OFFERING IMMUNIZATION SERVICES TODAY (Q1101 = "1") OR HAS A FUNCTIONING REFRIGERATOR FOR THE STORAGE OF VACCINES (Q1108 = "1") 	FACILITY DOES NOT OFFER IMMUNIZATION SERVICES TODAY (Q1101 = "2") AND DOES NOT HAVE A FUNCTIONAL REFRIGERATOR FOR THE STORAGE OF VACCINES (Q1108 = "2", "3" OR "4") 					Q1117
1116	Are any of the following vaccines available in this service site today? SELECT ONE OF EACH VACCINE AT RANDOM AND CHECK IF THE VACCINE IS VALID: 1. VIAL MONITOR (VVM) ON THE VACCINE VIAL HAS NOT TURNED AND 2. THE EXPIRY DATE HAS NOT PASSED	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	Measles vaccine and diluent	1	2	3	4	5	
02	DPT-Hib+HepB (pentavalent)	1	2	3	4	5	
03	Oral polio vaccine	1	2	3	4	5	
04	BCG vaccine and diluent	1	2	3	4	5	
1117	In the past three months were you unable to give any of the vaccines listed below because of unavailable stock? FOR EACH OF THE FOLLOWING ITEMS, PLEASE CHECK IN THE FACILITY RECORDS IF THERE HAS BEEN A STOCK-OUT IN THE PAST 3 MONTHS	YES, STOCK OUT	NO STOCK OUT	NOT INDICATED	PRODUCT NOT OFFERED	FACILITY RECORD NOT AVAILABLE	
01	Measles vaccine and diluent	1	2	3	4	5	
02	DPT-Hib-HepB (pentavalent) vaccine	1	2	3	4	5	
03	Oral polio vaccine	1	2	3	4	5	

Number	Question	Result					Skip
04	BCG vaccine and diluent	1	2	3	4	5	
B. CHILD AND ADOLESCENT HEALTH							
CHILD PREVENTATIVE AND CURATIVE CARE SERVICES							
1200	Does this facility offer preventative and curative care services for children under 5?	YES 1 NO 2					→1300
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE CHILD PREVENTATIVE AND CURATIVE CARE SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT CHILD PREVENTATIVE AND CURATIVE CARE SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.							
1201	Please tell me if this facility provides the following services:	YES		NO			
01	Diagnose and/or treat child malnutrition	1		2			
02	Provide vitamin A supplementation	1		2			
03	Provide iron supplementation	1		2			
04	Provide ORS to children with diarrhoea	1		2			
05	Provide zinc supplementation to children with diarrhoea	1		2			
06	Child growth monitoring	1		2			
07	Treatment of pneumonia	1		2			
08	Administration of amoxicillin for the treatment of pneumonia in children	1		2			
09	Treatment of malaria in children	1		2			
1202	Please tell me if the following documents are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED	YES, REPORTED NOT SEEN		NO		
01	IMCI guidelines for the diagnosis and management of childhood illnesses	1	2		3		
02	National guidelines for growth monitoring	1	2		3		
03	Any check-lists and/or job-aids for IMCI	1	2		3		
1203	Have you or any provider(s):	YES		NO			
01	Of curative care services for sick children received any training in the Integrated Management of Childhood Illnesses (IMCI) in the last two years?	1		2			
02	Of growth monitoring services for children received any training in growth monitoring in the last two years?	1		2			
1204	Please tell me if the following basic equipment items are available and functional	A) AVAILABLE			B) FUNCTIONNING		



Number	Question	Result					Skip
	in this service area today. ASK TO SEE THE ITEMS	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	Length/height measuring equipment	1 → B	2 → B	3 02 ↗	1	2	8
02	Growth charts	1 1300 ↗	2 1300 ↗	3 1300 ↗			
ADOLESCENT HEALTH SERVICES							
1300	Does this facility offer adolescent health services?	YES 1 NO 2					→ 1400
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE ADOLESCENT HEALTH SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT ADOLESCENT HEALTH SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.							
1301	Do you have the national guidelines for service provision to adolescents available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3					
1302	Have you or any providers of adolescent health services received any training on the provision of adolescent health services in the last two years?	YES 1 NO 2					
C. COMMUNICABLE DISEASES							
HIV COUNSELLING & TESTING							
1400	Does this facility offer HIV counselling and testing services?	YES 1 NO 2					→ 1500
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE HIV COUNSELLING AND TESTING SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT HIV COUNSELLING AND TESTING SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.							
1401	Do you have the national HIV counselling and testing guidelines available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3					
1402	Have you or any provider(s) of HIV/AIDS counselling and testing services:	YES		NO			
01	Received any training in HIV counselling and testing (HCT) in the last two years?	1		2			
02	Received any training in HIV/AIDS prevention, care, and management for adolescents in the last two years?	1		2			
1403	Does this facility provide HIV counselling and testing services to minor adolescents?	YES 1 NO 2					

Number	Question	Result			Skip
1404	Is the HIV testing and counselling service room or area a private room/area with auditory and visual privacy?	AUDITORY PRIVACY ONLY..... 1 VISUAL PRIVACY ONLY 2 BOTH AUDITORY AND VISUAL PRIVACY ... 3 NO PRIVACY 4			
1405	Does this facility have HIV rapid test kits (with valid expiration date) in stock in this service site today? CHECK TO SEE IF VALID (NOT EXPIRED)	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3			
1406	Does this facility have condoms available in this service site today to give to clients receiving services? IF YES, ASK TO SEE CONDOMS	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3			
1407	Please tell me if the following resources/supplies used for infection control are available in this service area today. ASK TO SEE THE ITEMS				
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	
01	Clean running water (piped, bucket with tap, or pour pitcher)	1	2	3	
02	Hand-washing soap/liquid soap	1	2	3	
03	Alcohol based hand rub	1	2	3	
04	Disposable latex gloves	1	2	3	
05	Waste receptacle (pedal bin) with lid and plastic bin liner	1	2	3	
06	Sharps container ("safety box")	1	2	3	
07	Environmental disinfectant (e.g., chlorine, alcohol)	1	2	3	
08	Disposable syringes with disposable needles	1	2	3	
09	Auto-disable syringes	1	2	3	
HIV TREATMENT					
1500	Does this facility offer HIV & AIDS antiretroviral prescription or antiretroviral treatment follow-up services?	YES 1 NO 2			→1600
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE HIV TREATMENT SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT HIV TREATMENT SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.					
1501	Do providers in this facility:	YES	NO		
01	Prescribe ART	1	2		
02	Prescribe ART to adolescents	1	2		
1502	Does this facility provide treatment follow-up services for persons on ART, including providing community-based services?	YES 1 NO 2			

Number	Question	Result	Skip
1503	Do you have the national ART guidelines available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3	
1504	Have you or any provider(s) of ART received any training in ART prescription and management in the last two years?	YES 1 NO 2	
HIV CARE AND SUPPORT			
1600	Does this facility offer HIV & AIDS care and support services, such as treatment of opportunistic infections and provisions of palliative care?	YES 1 NO 2	→ 1700
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE HIV CARE AND SUPPORT SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT HIV CARE AND SUPPORT SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.			
1601	Please tell me if this facility provides the following services for HIV/AIDS clients:	YES	NO
01	Prescribe treatment for any opportunistic infections or symptoms related to HIV/AIDS? This includes treating topical fungal infections.	1	2
02	Provide or prescribe palliative care for patients, such as symptom or pain management, or nursing care for the terminally ill, or severely debilitated clients?	1	2
03	Provide systemic intravenous treatment of specific fungal infections such as cryptococcal meningitis?	1	2
04	Provide anti-cancer drugs for Kaposi's sarcoma?	1	2
05	Provide nutritional rehabilitation services? e.g., client education and provision of nutritional supplements?	1	2
06	Prescribe or provide fortified protein supplementation (FPS)?	1	2
07	Care for paediatric HIV/AIDS patients?	1	2
08	Prescribe or provide preventive treatment for TB (INH + Pyridoxine)?	1	2
09	Primary preventive treatment for opportunistic infections, such as co-trimoxazole preventive treatment (CPT)?	1	2
10	Provide or prescribe micronutrient supplementation, such as vitamins or iron?	1	2
11	Family planning counselling for HIV/AIDS clients?	1	2



Number	Question	Result			Skip
12	Provide condoms for preventing further transmission of HIV?	1	2		
1602	Do providers in this facility screen or test HIV clients for TB or have a system for diagnosis of TB among HIV positive clients? IF YES, ASK TO SEE A REGISTER OR RECORD OF HIV-POSITIVE CLIENTS TESTED FOR TB	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 YES, REGISTER NOT MAINTAINED 3 NO..... 4			
1603	Please tell me if the following guidelines are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED	YES, REPORTED NOT SEEN	NO	
01	National guidelines for the clinical management of HIV/AIDS	1	2	3	
02	Guidelines for palliative care	1	2	3	
1604	Have you or any provider(s) of HIV care and support services received any training in the clinical management of HIV/AIDS in the last two years?	YES 1 NO..... 2			
SEXUALLY TRANSMITTED INFECTIONS					
1700	Does this facility offer diagnosis or treatment of STIs other than HIV?	YES 1 NO..... 2			→1800
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE STI SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT STI SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.					
1701	Do providers in this facility diagnose STIs?	YES 1 NO..... 2			
1702	Do providers in this facility prescribe treatment for STIs?	YES 1 NO..... 2			
1703	Do you have the national guidelines for the diagnosis and treatment of STIs available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO..... 3			
1704	Have you or any provider(s) of STI services received any training in STI diagnosis and treatment in the last two years?	YES 1 NO..... 2			
TUBERCULOSIS					
1800	Does this facility offer diagnosis, treatment prescription, or treatment follow-up of tuberculosis?	YES 1 NO..... 2			→1900
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE TUBERCULOSIS SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT TUBERCULOSIS SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.					

Number	Question	Result			Skip		
1801	Do providers in this facility diagnose TB?	YES 1 NO..... 2			→ 1803		
1802	Which of the following methods are used at this facility for diagnosing TB:	YES	NO				
01	Clinical symptoms	1	2				
02	Sputum smear microscopy examination	1	2				
03	Culture	1	2				
04	Rapid test (GeneXpert MTB/RIF)	1	2				
05	Chest X-ray	1	2				
1803	Does this facility prescribe drugs for TB patients?	YES 1 NO..... 2					
1804	Does this facility provide drugs to TB patients?	YES 1 NO..... 2					
1805	Does this facility manage and provide treatment follow-up for TB patients (e.g. DOTS)?	YES 1 NO..... 2					
1806	Do providers in this facility screen or test TB patients for HIV or have a system for diagnosis of HIV among TB patients? IF YES, ASK TO SEE A REGISTER OR RECORD OF TB CLIENTS TESTED FOR HIV	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 YES, REGISTER NOT MAINTAINED 3 NO..... 4					
1807	Please tell me if the following guidelines are available in the facility today: IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED	YES, REPORTED NOT SEEN	NO			
01	Somali TB treatment guidelines	1	2	3			
02	Management of HIV and TB co-infection	1	2	3			
03	National Guidelines for treatment of drug resistant TB (MDR-TB)	1	2	3			
04	TB infection control guidelines	1	2	3			
1808	Have any providers of TB services at this facility received training in the following topics in the last two years?	YES	NO				
01	Diagnosis and treatment of TB	1	2				
02	Management of HIV and TB co-infection	1	2				
03	MDR-TB	1	2				
04	TB infection control	1	2				



Number	Question	Result	Skip										
1809	Does this facility stock any medicines for TB treatment?	YES, IN SERVICE SITE 1 YES, ELSEWHERE (E.G BULK STORE/PHARMACY) 2 YES, IN BOTH LOCATIONS 3 NO, TB MEDS NOT STOCKED 4	→ 1900 → 1900										
1810	Are any of the following medicines available in this service site today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	<table border="1"> <thead> <tr> <th colspan="3">OBSERVED AVAILABLE</th><th colspan="2">NOT OBSERVED</th></tr> <tr> <th>AT LEAST ONE VALID</th><th>AVAILABLE NON VALID</th><th>REPORTED AVAILABLE BUT NOT SEEN</th><th>NOT AVAILABLE TODAY</th><th>NEVER AVAILABLE</th></tr> </thead> </table>	OBSERVED AVAILABLE			NOT OBSERVED		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
OBSERVED AVAILABLE			NOT OBSERVED										
AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE									
02	Isoniazid	1 2 3 4 5											
05	Isoniazid + Rifampicin (2FDC)	1 2 3 4 5											
07	Isoniazid + Rifampicin + Pyrazinamide (RHZ) (3FDC)	1 2 3 4 5											
08	Isoniazid + Rifampicin + Ethambutol (RHE) (3FDC)	1 2 3 4 5											
09	Isoniazid + Rifampicin + Pyrazinamide + Ethambutol (4FDC)	1 2 3 4 5											
10	Streptomycin Injectable	1 2 3 4 5											
MALARIA													
1900	Does this facility offer diagnosis or treatment of malaria?	YES 1 NO 2	→ 2000										
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE MALARIA SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT MALARIA SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.													
1901	Do providers in this facility diagnose malaria?	YES 1 NO 2	→ 1906										
1902	Which of the following methods are used at this facility for diagnosing malaria:	<table border="1"> <thead> <tr> <th>YES</th><th>NO</th></tr> </thead> </table>	YES	NO									
YES	NO												
01	Clinical symptoms	1 2											
02	Rapid diagnostic testing (RDT)	1 2											
03	Microscopy	1 2											
	CHECK Q1902_02: IF FACILITY CONDUCTS MALARIA RDTS: 	IF FACILITY DOES NOT CONDUCT MALARIA RDTS: 	Q1906										
1903	Does this facility have malaria rapid diagnostic test kits (with valid expiration date) in stock in this service site today? CHECK TO SEE IF VALID (NOT EXPIRED)	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3											



Number	Question	Result	Skip
1904	Has there been a stock-out of malaria RDT kits in the past 4 weeks?	YES 1 NO..... 2	→ 1906
1905	How many days of stock-out?	LESS THAN 7 DAYS 1 7 TO 14 DAYS 2 MORE THAN 14 DAYS 3	
1906	Do providers in this facility prescribe treatment for malaria?	YES 1 NO..... 2	
1907	Do you have the national guidelines for the diagnosis and treatment of malaria available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO..... 3	
1908	Have you or any provider(s) of malaria services received any training in malaria diagnosis with RDTs in the last two years?	YES 1 NO..... 2	
1909	Have you or any provider(s) of malaria services received any training in malaria treatment in the last two years?	YES 1 NO..... 2	
1910	Does this facility provide Intermittent preventive treatment for malaria?	YES 1 NO..... 2	
D. NON-COMMUNICABLE DISEASES			
2000	Does this facility offer diagnosis or management of non-communicable diseases, such as diabetes, cardiovascular disease, chronic respiratory disease, or cervical cancer?	YES 1 NO..... 2	→ 2100
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE NON-COMMUNICABLE DISEASE SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT NCD SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.			
2001	Do providers in this facility diagnose and/or manage diabetes in patients?	YES 1 NO..... 2	→ 2004
2002	Do you have the national guidelines for the diagnosis and management of diabetes available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO..... 3	
2003	Have you or any provider(s) of diabetes services received any training in the diagnosis and management of diabetes in the last two years?	YES 1 NO..... 2	
2004	Do providers in this facility diagnose and/or manage cardiovascular diseases such as hypertension in patients?	YES 1 NO..... 2	→ 2007

Number	Question	Result						Skip
2005	Do you have the national guidelines for the diagnosis and management of cardiovascular diseases available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3						
2006	Have you or any provider(s) of services for cardiovascular diseases received any training in the diagnosis and management of cardiovascular diseases such as hypertension in the last two years?	YES 1 NO 2						
2007	Do providers in this facility diagnose and/or manage chronic respiratory diseases in patients?	YES 1 NO 2						→2011
2008	Do you have the national guidelines for the diagnosis and management of chronic respiratory disease available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3						
2009	Have you or any provider(s) of chronic respiratory disease services received any training in the diagnosis and management of chronic respiratory diseases in the last two years?	YES 1 NO 2						
2010	Please tell me if the following basic equipment items are available and functional in this service area today. ASK TO SEE THE ITEMS	A) AVAILABLE			B) FUNCTIONING			
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
01	Peak flow meters	1 → B	2 → B	3 02 ↙	1	2	8	
02	Spacers for inhalers	1 → B	2 → B	3 2011 ↙	1	2	8	
2011	Do providers in this facility diagnose cervical cancer in patients?	YES 1 NO 2						→2100
2012	Do you have the national guidelines for cervical cancer prevention and control? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3						
2013	Have you or any provider(s) received any training in cervical cancer prevention and control?	YES 1 NO 2						
2014	Please tell me if the following basic equipment/items are available in this service area today. ASK TO SEE THE ITEMS	A) AVAILABLE			B) FUNCTIONING			
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
01	Acetic acid	1 02 ↙	2 02 ↙	3 02 ↙				

Number	Question	Result					Skip
02	Vaginal speculum	1 → B	2 → B	3 2100 ↖	1	2	8
E. SURGERY							
SURGICAL SERVICES							
2100	Does this facility offer any surgical services (including minor surgery such as suturing, circumcision, wound debridement, etc.), or caesarean section?	YES 1 NO..... 2					→ 2200
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE SURGICAL SERVICES ARE PROVIDED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT SURGICAL SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.							
2101	Please tell me if this facility provides the following services:	YES	NO				
01	Incision and drainage of abscesses	1	2				
02	Wound debridement	1	2				
03	Acute burn management	1	2				
04	Suturing	1	2				
05	Closed repair of fracture	1	2				
06	Cricothyroidotomy	1	2				
07	Male circumcision	1	2				
08	Hydrocele reduction	1	2				
09	Chest tube insertion	1	2				
10	Closed repair of dislocated joint	1	2				
11	Biopsy of lymph node or mass or other	1	2				
12	Removal of foreign body (throat, eye, ear, or nose)	1	2				
	CHECK Q007: IF HOSPITAL: 	IF NOT HOSPITAL: 					Q2102
13	Tracheostomy	1	2				
14	Tubal ligation	1	2				
15	Vasectomy	1	2				
16	Dilatation & Curettage	1	2				
17	Obstetric fistula repair	1	2				
18	Episiotomy, cervical and vaginal laceration	1	2				
19	Appendectomy	1	2				
20	Hernia repair (strangulated)	1	2				

Number	Question	Result			Skip		
21	Hernia repair (elective)	1		2			
22	Cystostomy	1		2			
23	Urethral stricture dilatation	1		2			
24	Laparotomy (uterine rupture, ectopic pregnancy, acute abdomen, intestinal obstruction, perforation, injuries)	1		2			
25	Congenital hernia repair	1		2			
26	Neonatal surgery (abdominal wall defect, colostomy imperforate anus, intussusceptions)	1		2			
27	Cleft palate repair	1		2			
28	Contracture release	1		2			
29	Skin grafting	1		2			
30	Open reduction and fixation for fracture	1		2			
31	Amputation	1		2			
32	Cataract surgery	1		2			
33	Club foot repair (casting or open club foot release)	1		2			
34	Drainage of osteomyelitis-septic arthritis	1		2			
2102	Please tell me if the following surgical equipment and supplies are available and functional in this facility today. ASK TO SEE THE ITEMS	A) AVAILABLE			B) FUNCTIONING		
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW
01	Resuscitator bag and mask- adult	1 → B	2 → B	3 02 ↙	1	2	8
02	Resuscitator bag and mask- paediatric	1 → B	2 → B	3 03 ↙	1	2	8
03	Needle holder	1 → B	2 → B	3 04 ↙	1	2	8
04	Scalpel handle with blades	1 → B	2 → B	3 05 ↙	1	2	8
05	Retractor	1 → B	2 → B	3 06 ↙	1	2	8
06	Surgical scissors	1 → B	2 → B	3 07 ↙	1	2	8
07	Nasogastric tubes	1 → B	2 → B	3 08 ↙	1	2	8
08	Tourniquet	1 → B	2 → B	3 09 ↙	1	2	8



Number	Question	Result					Skip
09	Suction pump (manual or electric) with catheter	1 → B	2 → B	3 10 ↙	1	2	8
10	CHECK Q007 AND Q1002_08: IF HOSPITAL OR HEALTH FACILITY OFFERS CESAREAN SECTION: 	IF NOT HOSPITAL AND CESAREAN SECTION NOT OFFERED: 					Q2104
11	Oropharyngeal airway- adult	1 → B	2 → B	3 12 ↙	1	2	8
12	Oropharyngeal airway- paediatric	1 → B	2 → B	3 13 ↙	1	2	8
13	Magills forceps- adult	1 → B	2 → B	3 14 ↙	1	2	8
14	Magills forceps- paediatric	1 → B	2 → B	3 15 ↙	1	2	8
15	Endotracheal tube neonatal – uncuffed size below 3	1 → B	2 → B	3 16 ↙	1	2	8
16	Endotracheal tube paediatric- uncuffed sizes 3.0 to 5.0	1 → B	2 → B	3 17 ↙	1	2	8
17	Endotracheal tube adult- cuffed sizes 5.5 to 9.0	1 → B	2 → B	3 18 ↙	1	2	8
18	Laryngoscope handle and blade- adult	1 → B	2 → B	3 19 ↙	1	2	8
19	Laryngoscope handle and blade- paediatric	1 → B	2 → B	3 20 ↙	1	2	8
20	Laryngoscope handle and blade- neonatal	1 → B	2 → B	3 21 ↙	1	2	8
21	Anaesthesia machine	1 → B	2 → B	3 22 ↙	1	2	8
22	Tubings and connectors (to connect endotracheal tube)	1 → B	2 → B	3 23 ↙	1	2	8
23	Stylet	1 → B	2 → B	3 24 ↙	1	2	8
24	Spinal needle	1 → B	2 → B	3 25 ↙	1	2	8
25	Newborn bag and mask size 1 for term babies (for newborn resuscitation)	1 → B	2 → B	3 26 ↙	1	2	8
26	Oxygen concentrators	1 → B	2 → B	3 27 ↙	1	2	8
27	Oxygen cylinders	1 → B	2 → B	3 28 ↙	1	2	8

Number	Question	Result					Skip
28	Central oxygen supply	1 → B	2 → B	3 29 ↙	1	2	8
29	Flowmeter for oxygen therapy (with humidification)	1 → B	2 → B	3 30 ↙	1	2	8
30	Oxygen delivery apparatus (key connecting tubes and mask/nasal prongs)	1 → B	2 → B	3 2103 ↙	1	2	8
2103	At any time during the past 3 months has oxygen been unavailable for any reason?	YES 1 NO 2					
2104	Please tell me if any of the following materials or medicines are available in this service site today. I would like to see those that are available. CHECK TO SEE IF AT LEAST ONE OF EACH MATERIAL/MEDICINE IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE			NOT OBSERVED		
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	Suture material (any type)	1	2	3	4	5	
02	Skin disinfectant	1	2	3	4	5	
03	Ketamine (injection)	1	2	3	4	5	
04	Lidocaine 1% or 2% (anaesthesia)	1	2	3	4	5	
05	Splints for extremities	1	2	3	4	5	
06	Material for cast	1	2	3	4	5	
	CHECK Q007 AND Q1002_08: IF HOSPITAL OR HEALTH FACILITY OFFERS CESAREAN SECTION: 	IF NOT HOSPITAL AND CESAREAN SECTION NOT OFFERED: 					Q2105
07	Thiopental (powder)	1	2	3	4	5	
08	Suxamethonium bromide (powder)	1	2	3	4	5	
09	Atropine (injection)	1	2	3	4	5	
10	Diazepam (injection)	1	2	3	4	5	
11	Halothane (inhalation)	1	2	3	4	5	
12	Bupivacaine (injection)	1	2	3	4	5	
13	Lidocaine 5% (heavy spinal solution)	1	2	3	4	5	
14	Epinephrine (injection)	1	2	3	4	5	
15	Ephedrine (injection)	1	2	3	4	5	
2105	Do you have materials on Integrated Management of Emergency and Essential Surgical care (IMEESC) (e.g. best practices, protocols, etc.) available in this facility today? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3					
2106	Have you or any provider(s) of basic surgical services received any training in IMEESC in the last two years?	YES 1 NO 2					

Number	Question	Result			Skip
2107	Does this facility have a staff member trained in surgery, including caesarean section, (clinical officer, general physician, or surgeon) present in the facility or on call 24 hours a day (including weekends and on public holidays)?	YES 1 NO..... 2			
2108	Does this facility have a staff member trained in anaesthesia (nurse, clinical officer, general physician, surgeon, or anaesthesiologist) present in the facility or on call 24 hours a day (including weekends and on public holidays)?	YES 1 NO..... 2			
2109	I am interested in knowing if the following resources/supplies used for infection control are available in this service area today. ASK TO SEE THE ITEMS	OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	
01	Clean running water (piped, bucket with tap, or pour pitcher)	1	2	3	
02	Hand-washing soap/liquid soap	1	2	3	
03	Alcohol based hand rub	1	2	3	
04	Disposable latex gloves	1	2	3	
05	Waste receptacle (pedal bin) with lid and plastic bin liner	1	2	3	
06	Sharps container ("safety box")	1	2	3	
07	Environmental disinfectant (e.g., chlorine, alcohol)	1	2	3	
08	Disposable syringes with disposable needles	1	2	3	
09	Auto-disable syringes	1	2	3	
BLOOD TRANSFUSION					
2200	Does this facility offer blood transfusion services?	YES 1 NO..... 2			→ 3000
ASK TO BE SHOWN THE LOCATION IN THE FACILITY WHERE BLOOD IS COLLECTED, PROCESSED, TESTED, STORED, OR HANDLED PRIOR TO TRANSFUSION. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT BLOOD TRANSFUSION SERVICES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.					
2201	Have there been any interruptions in blood availability during the past 3 months?	YES 1 NO..... 2			
2202	Does this facility obtain blood from a national or regional blood centre?	YES 1 NO..... 2			
2203	Does this facility obtain ANY blood from sources other than the national or regional blood centre?	YES 1 NO..... 2			

Number	Question	Result				Skip
2204	Does any place in this facility do blood screening for infectious diseases prior to transfusion?	YES 1 NO..... 2				→ 2206
2205	Please tell me if the blood that is transfused in the facility is "always", "sometimes", "rarely", or "never" screened for any of the following infectious diseases.	ALWAYS	SOMETIMES	RARELY	NEVER	
01	HIV	1	2	3	4	
02	Syphilis	1	2	3	4	
03	Hepatitis B	1	2	3	4	
04	Hepatitis C	1	2	3	4	
2206	Does this facility have a refrigerator available and functioning in this service area for the storage of blood?	AVAILABLE AND FUNCTIONAL 1 AVAILABLE NOT FUNCTIONAL 2 AVAILABLE DON'T KNOW IF FUNCTIONING..... 3 NOT AVAILABLE 4				→ 2210
2207	Is the temperature of the refrigerator monitored at least once every 24 hours? IF YES: PLEASE ASK TO SEE THE LOG USED TO RECORD THE TEMPERATURE	YES, LOG OBSERVED 1 YES, LOG REPORTED NOT SEEN 2 NO..... 3				→ 2210
2208	Has the temperature log been completed for the last 30 days? PLEASE REVIEW LOG AND CHECK FOR COMPLETENESS (TEMPERATURE RECORDED AT LEAST ONCE EVERY 24 HOURS DURING THE LAST 30 DAYS)	YES 1 YES, PARTIALLY 2 NO..... 3				→ 2210
2209	Has the temperature been out of the range 2 to 6°C inclusive in the last 30 days? PLEASE CHECK THE TEMPERATURE RECORD AND VERIFY THE TEMPERATURE FOR THE LAST 30 WORKING DAYS IN ORDER TO ANSWER THE QUESTION	OBSERVED IN RANGE 1 REPORTED IN RANGE BUT NOT SEEN 2 OUT OF RANGE 3 RECORD NOT AVAILABLE 4				
2210	Do you have any guidelines on the appropriate use of blood and safe transfusion practices? IF AVAILABLE, ASK TO SEE THE DOCUMENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO..... 3				
2211	Have any provider(s) of blood transfusion services received any training in the appropriate use of blood and safe transfusion practices in the last two years?	YES 1 NO..... 2				

Number	Question	Result	Skip			
SECTION 6: DIAGNOSTICS						
3000	Does this facility conduct any diagnostic testing including any rapid diagnostic testing?	YES1 NO.....2	→4000			
ASK TO BE SHOWN THE MAIN LABORATORY OR LOCATION IN THE FACILITY WHERE MOST TESTING IS DONE TO START DATA COLLECTION. INTRODUCE YOURSELF AND EXPLAIN THE PURPOSE OF THE SURVEY, THEN ASK THE FOLLOWING QUESTIONS.						
I would like to know if the following diagnostic tests and associated equipment are available today in this facility.						
3100	Does this facility offer any of the following tests on-site?	YES (ONSITE)	NO			
02	Rapid syphilis testing	1	2			
03	HIV rapid testing	1	2			
04	Urine rapid tests for pregnancy	1	2			
05	Urine protein dipstick testing	1	2			
06	Urine glucose dipstick testing	1	2			
07	Urine ketone dipstick testing	1	2			
08	Dry Blood Spot (DBS) collection for HIV viral load or EID	1	2			
3101	I would like to know if the following items for rapid diagnostic testing are available or not available today. CHECK TO SEE IF AT LEAST ONE OF EACH RDT IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE	NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
01	Malaria rapid diagnostic kit	1	2	3	4	5
02	Syphilis rapid test kit	1	2	3	4	5
03	HIV rapid test kit	1	2	3	4	5
04	Urine pregnancy test kit	1	2	3	4	5
05	Dipsticks for urine protein	1	2	3	4	5
06	Dipsticks for urine glucose	1	2	3	4	5
07	Dipsticks for urine ketone bodies	1	2	3	4	5
08	Filter paper for collecting DBS	1	2	3	4	5
	CHECK Q3101_01: IF FACILITY CONDUCTS MALARIA RDTs (Q3101_01 = 1, 2, 3, OR 4):	IF FACILITY DOES NOT CONDUCT MALARIA RDTs (Q3101_01 = 5):				Q3200
3102	Has there been a stock-out of malaria RDT kits in the past 4 weeks?	YES1 NO.....2	→3200			
3103	How many days of stock-out?	LESS THAN 7 DAYS1 7 TO 14 DAYS2 MORE THAN 14 DAYS3				

Number	Question	Result			Skip		
3200	Does this facility conduct the following tests onsite or offsite?	YES, ONSITE	YES, OFFSITE	DON'T CONDUCT THE TEST			
01	Blood glucose tests using a glucometer	1	2	3			
02	Haemoglobin testing	1	2	3			
03	General microscopy/wet-mounts	1	2	3			
04	Malaria smear tests	1	2	3			
05	HIV antibody testing by ELISA	1	2	3			
3201	I would like to know if the following general equipment items are available and functional today. ASK TO SEE THE ITEMS	<div> <div>A) AVAILABLE</div> <div> <div>OBSERVED</div> <div>REPORTED NOT SEEN</div> <div>NOT AVAILABLE</div> </div> </div> <div> <div>B) FUNCTIONING</div> <div> <div>YES</div> <div>NO</div> <div>DON'T KNOW</div> </div> </div>					
01	Light microscope	1 → B	2 → B	3 02 ↙	1	2	8
02	Glass slides and cover slips	1 → B	2 → B	3 03 ↙	1	2	8
03	Refrigerator	1 → B	2 → B	3 04 ↙	1	2	8
04	Glucometer	1 → B	2 → B	3 05 ↙	1	2	8
05	Glucometer test strips (with valid expiration date)	1 → B	2 → B	3 06 ↙	1	2	8
06	Colorimeter or haemoglobinometer	1 → B	2 → B	3 07 ↙	1	2	8
07	HemoCue	1 → B	2 → B	3 08 ↙	1	2	8
08	Wright-Giemsa stain or other acceptable malaria parasite stain (eg. Field Stain A and B)	1 → B	2 → B	3 09 ↙	1	2	8
09	ELISA washer	1 → B	2 → B	3 10 ↙	1	2	8
10	ELISA reader	1 → B	2 → B	3 11 ↙	1	2	8
11	Incubator	1 → B	2 → B	3 12 ↙	1	2	8
12	Specific assay kit- HIV antibody testing by ELISA	1 → B	2 → B	3 3202 ↙	1	2	8
3202	Does this facility have an accredited/certified microscopist?	YES1 NO.....2					
3300	CHECK Q1800: TB SERVICES OFFERED 	TB SERVICES NOT OFFERED 			Q3400		

Number	Question	Result	Skip												
3301	Does this facility do Ziehl-Neelsen testing for TB (AFB) onsite or offsite?	YES, ONSITE1 YES, OFFSITE2 NO.....3	→ 3303 → 3303												
3302	I would like to know if the following equipment items for TB testing are available and functional today. ASK TO SEE THE ITEMS	<table border="1"> <thead> <tr> <th colspan="3">A) AVAILABLE</th><th colspan="3">B) FUNCTIONING</th></tr> <tr> <th>OBSERVED</th><th>REPORTED NOT SEEN</th><th>NOT AVAILABLE</th><th>YES</th><th>NO</th><th>DON'T KNOW</th></tr> </thead> </table>	A) AVAILABLE			B) FUNCTIONING			OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
A) AVAILABLE			B) FUNCTIONING												
OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW										
01	Fluorescence microscope (FM)	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 02 ↙</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 02 ↙	1	2	8							
1 → B	2 → B	3 02 ↙	1	2	8										
02	Ziehl-Neelsen stain	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 03 ↙</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 03 ↙	1	2	8							
1 → B	2 → B	3 03 ↙	1	2	8										
03	Auramine Rhodamine stain for fluorescent microscopy	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 3303 ↙</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 3303 ↙	1	2	8							
1 → B	2 → B	3 3303 ↙	1	2	8										
3303	Does this facility conduct Xpert MTB/RIF diagnostic testing for TB onsite or offsite?	YES, ONSITE1 YES, OFFSITE2 NO.....3	→ 3400 → 3400												
3304	Please tell me if the following equipment items for Xpert MTB/RIF diagnostic testing for TB are available and functional today. ASK TO SEE THE ITEMS	<table border="1"> <thead> <tr> <th colspan="3">A) AVAILABLE</th><th colspan="3">B) FUNCTIONING</th></tr> <tr> <th>OBSERVED</th><th>REPORTED NOT SEEN</th><th>NOT AVAILABLE</th><th>YES</th><th>NO</th><th>DON'T KNOW</th></tr> </thead> </table>	A) AVAILABLE			B) FUNCTIONING			OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
A) AVAILABLE			B) FUNCTIONING												
OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW										
01	GeneXpert 4 module unit with laptop	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 02 ↙</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 02 ↙	1	2	8							
1 → B	2 → B	3 02 ↙	1	2	8										
02	TB rapid test cartridge	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 3400 ↙</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 3400 ↙	1	2	8							
1 → B	2 → B	3 3400 ↙	1	2	8										
3400	Does this facility conduct liver function /renal function tests and/or white blood counts onsite or offsite?	YES, ONSITE1 YES, OFFSITE2 NO.....3	→ 3500												
3401	Does this facility conduct the following liver and renal function tests onsite or offsite?	<table border="1"> <thead> <tr> <th>YES, ONSITE</th><th>YES, OFFSITE</th><th>DON'T CONDUCT THE TEST</th></tr> </thead> </table>	YES, ONSITE	YES, OFFSITE	DON'T CONDUCT THE TEST										
YES, ONSITE	YES, OFFSITE	DON'T CONDUCT THE TEST													
01	ALT testing	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
02	Other liver function testing (such as bilirubin)	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
03	Serum creatinine testing	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
04	Other renal function testing (such as urea nitrogen)	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
	CHECK Q3401 liver function/renal function: IF "YES, ONSITE" CIRCLED FOR ANY TEST	IF ONLY "YES, OFFSITE" OR "NO" ARE CIRCLED	Q3403												
3402	Please tell me if the following equipment items and reagents for liver and kidney function testing are available and functional today. ASK TO SEE THE ITEMS	<table border="1"> <thead> <tr> <th colspan="3">A) AVAILABLE</th><th colspan="3">B) FUNCTIONING</th></tr> <tr> <th>OBSERVED</th><th>REPORTED NOT SEEN</th><th>NOT AVAILABLE</th><th>YES</th><th>NO</th><th>DON'T KNOW</th></tr> </thead> </table>	A) AVAILABLE			B) FUNCTIONING			OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
A) AVAILABLE			B) FUNCTIONING												
OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW										



Number	Question	Result						Skip
01	Biochemistry analyser	1 → B	2 → B	3 02 ↙	1	2	8	
02	Centrifuge	1 → B	2 → B	3 03 ↙	1	2	8	
03	Specific assay kit(s)- liver function test	1 → B	2 → B	3 04 ↙	1	2	8	
04	Specific assay kit(s)- renal function test	1 → B	2 → B	3 3403 ↙	1	2	8	
3403	Does this facility do full blood count and differential testing onsite or offsite?	YES, ONSITE1 YES, OFFSITE2 NO.....3						→ 3405 → 3405
3404	Please tell me if the following equipment items and reagents for full blood count testing are available and functional today. ASK TO SEE THE ITEMS	A) AVAILABLE			B) FUNCTIONING			
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
01	Haematology analyzer (for full blood count)	1 → B	2 → B	3 02 ↙	1	2	8	
02	Stains for full blood count and differential	1 → B	2 → B	3 3405 ↙	1	2	8	
3405	Does this facility do CD4 count (absolute and percentage) testing onsite or offsite?	YES, ONSITE1 YES, OFFSITE2 NO.....3						→ 3500 → 3500
3406	Please tell me if the following equipment items for CD4 testing are available and functional today. ASK TO SEE THE ITEMS	A) AVAILABLE			B) FUNCTIONING			
		OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
01	CD4 counter	1 → B	2 → B	3 02 ↙	1	2	8	
02	Specific assay kit- CD4 test	1 → B	2 → B	3 3500 ↙	1	2	8	
3500	Does this facility conduct blood group serology onsite or offsite?	YES, ONSITE1 YES, OFFSITE2 NO.....3						→ 3600
3501	Does this facility conduct the following blood group serology tests onsite or offsite?	YES, ONSITE		YES, OFFSITE		DON'T CONDUCT THE TEST		
01	ABO blood grouping testing	1		2		3		
02	Rhesus blood grouping testing	1		2		3		
03	Cross-match testing by direct agglutination	1		2		3		
04	Cross-match testing by indirect anti-globulin testing or other test with equivalent sensitivity	1		2		3		



Number	Question	Result	Skip												
	CHECK Q3501 Blood typing and cross match: IF "YES, ONSITE" CIRCLED FOR ANY TEST	IF ONLY "YES, OFFSITE" OR "NO" ARE CIRCLED	Q3600												
3502	Please tell me if the following equipment items and reagents for blood typing and cross match are available and functional today. ASK TO SEE THE ITEMS	<table border="1"> <thead> <tr> <th colspan="3">A) AVAILABLE</th><th colspan="3">B) FUNCTIONING</th></tr> <tr> <th>OBSERVED</th><th>REPORTED NOT SEEN</th><th>NOT AVAILABLE</th><th>YES</th><th>NO</th><th>DON'T KNOW</th></tr> </thead> </table>	A) AVAILABLE			B) FUNCTIONING			OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
A) AVAILABLE			B) FUNCTIONING												
OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW										
01	Centrifuge	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 02</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 02	1	2	8							
1 → B	2 → B	3 02	1	2	8										
02	37° C incubator	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 03</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 03	1	2	8							
1 → B	2 → B	3 03	1	2	8										
03	Grouping sera	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 3600</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 3600	1	2	8							
1 → B	2 → B	3 3600	1	2	8										
3600	CHECK Q007: IF HOSPITAL:	IF NOT HOSPITAL:	Q4000												
3601	Does this facility conduct the following tests onsite or offsite?	<table border="1"> <thead> <tr> <th>YES, ONSITE</th><th>YES, OFFSITE</th><th>DON'T CONDUCT THE TEST</th></tr> </thead> </table>	YES, ONSITE	YES, OFFSITE	DON'T CONDUCT THE TEST										
YES, ONSITE	YES, OFFSITE	DON'T CONDUCT THE TEST													
01	Serum electrolyte testing	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
02	Urine microscopy testing	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
03	Syphilis serology testing	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
04	Gram stain testing	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
05	CSF/ body fluid counts	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
06	Cryptococcal antigen testing	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
07	Molecular biological technique for HIV viral load or HIV early-infant diagnosis (PCR)	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> </table>	1	2	3										
1	2	3													
3602	Please tell me if the following equipment items and reagents are available and functional today: ASK TO SEE THE ITEMS	<table border="1"> <thead> <tr> <th colspan="3">A) AVAILABLE</th><th colspan="3">B) FUNCTIONING</th></tr> <tr> <th>OBSERVED</th><th>REPORTED NOT SEEN</th><th>NOT AVAILABLE</th><th>YES</th><th>NO</th><th>DON'T KNOW</th></tr> </thead> </table>	A) AVAILABLE			B) FUNCTIONING			OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW	
A) AVAILABLE			B) FUNCTIONING												
OBSERVED	REPORTED NOT SEEN	NOT AVAILABLE	YES	NO	DON'T KNOW										
01	Specific assay kit- serum electrolyte test	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 02</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 02	1	2	8							
1 → B	2 → B	3 02	1	2	8										
02	Specific assay kit- syphilis serology	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 03</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 03	1	2	8							
1 → B	2 → B	3 03	1	2	8										
03	Gram stains	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 04</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 04	1	2	8							
1 → B	2 → B	3 04	1	2	8										
04	White blood counting chamber	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 05</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 05	1	2	8							
1 → B	2 → B	3 05	1	2	8										
05	Specific assay kit- cryptococcal antigen test	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 06</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 06	1	2	8							
1 → B	2 → B	3 06	1	2	8										
06	Assay specific automated system for estimating HIV viral load	<table border="1"> <tr> <td>1 → B</td><td>2 → B</td><td>3 07</td><td>1</td><td>2</td><td>8</td></tr> </table>	1 → B	2 → B	3 07	1	2	8							
1 → B	2 → B	3 07	1	2	8										



Number	Question	Result						Skip
07	Centrifuge	1 → B	2 → B	3 08 ↙	1	2	8	
08	Vortex mixer	1 → B	2 → B	3 09 ↙	1	2	8	
09	Pipettes	1 → B	2 → B	3 10 ↙	1	2	8	
10	Biochemistry analyser	1 → B	2 → B	3 3603 ↙	1	2	8	
3603	Does this facility perform diagnostic x-rays, ultrasound, or computerized tomography?	YES 1 NO 2						→4000
3604	Please tell me if the following imaging equipment items are available and functional today. ASK TO SEE THE ITEMS	A) AVAILABLE OBSERVED REPORTED NOT SEEN NOT AVAILABLE			B) FUNCTIONING YES NO DON'T KNOW			
01	X-ray machine	1 → B	2 → B	3 02 ↙	1	2	8	
02	Ultrasound equipment	1 → B	2 → B	3 03 ↙	1	2	8	
03	CT scan	1 → B	2 → B	3 04 ↙	1	2	8	
04	ECG	1 → B	2 → B	3 4000 ↙	1	2	8	

Number	Question	Result	Skip
SECTION 7: MEDICINES AND COMMODITIES			
4000	Does this facility stock medicines, vaccines, or contraceptive commodities?	YES 1 NO..... 2	→5000
ASK TO BE SHOWN THE MAIN LOCATION IN THE FACILITY WHERE MEDICINES AND OTHER SUPPLIES ARE STORED. FIND THE PERSON MOST KNOWLEDGEABLE ABOUT STORAGE AND MANAGEMENT OF MEDICINES AND SUPPLIES IN THE FACILITY. INTRODUCE YOURSELF, EXPLAIN THE PURPOSE OF THE SURVEY AND ASK THE FOLLOWING QUESTIONS.			
I would like to know if the following medicines are available today in this facility. I would also like to observe the medicines that are available. If any of the medicines I mention is stored in another location in the facility, please tell me where in the facility it is stored so I can go there to verify.			
4001	Are any of the following medicines for the treatment of infectious diseases available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE AT LEAST ONE VALID AVAILABLE NON VALID	NOT OBSERVED REPORTED AVAILABLE BUT NOT SEEN NOT AVAILABLE TODAY NEVER AVAILABLE
01	Co-trimoxazole cap/tab (Oral antibiotic)	1 2	3 4 5
02	Fluconazole cap/tab	1 2	3 4 5
03	Albendazole or Mebendazole cap/tab	1 2	3 4 5
04	Metronidazole cap/tab	1 2	3 4 5
05	Amoxicillin cap/tab	1 2	3 4 5
06	Ceftriaxone injection	1 2	3 4 5
07	Ciprofloxacin cap/tab	1 2	3 4 5
4002	Are any of the following medicines for the management of non-communicable diseases available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE AT LEAST ONE VALID AVAILABLE NON VALID	NOT OBSERVED REPORTED AVAILABLE BUT NOT SEEN NOT AVAILABLE TODAY NEVER AVAILABLE
01	Metformin cap/tab	1 2	3 4 5
02	Insulin regular injection	1 2	3 4 5
03	Glucose 50% injection	1 2	3 4 5
04	ACE inhibitor (e.g. enalapril, lisinopril, ramipril, perindopril)	1 2	3 4 5
05	Thiazide (e.g. hydrochlorothiazide)	1 2	3 4 5
06	Beta blocker (e.g. bisoprolol, metoprolol, carvedilol, atenolol)	1 2	3 4 5
07	Calcium channel blocker (e.g. amlodipine)	1 2	3 4 5
08	Aspirin cap/tab	1 2	3 4 5
09	Beclomethasone inhaler	1 2	3 4 5
10	Prednisolone cap/tab	1 2	3 4 5
11	Hydrocortisone injection	1 2	3 4 5
12	Epinephrine injection	1 2	3 4 5

Number	Question	Result				Skip
13	Furosemide cap/tab	1	2	3	4	5
14	Glibenclamide cap/tab	1	2	3	4	5
15	Gliclazide tablet or glipizide tablet	1	2	3	4	5
16	Glyceryl trinitrate sublingual tablet	1	2	3	4	5
17	Ibuprofen tablet	1	2	3	4	5
18	Isosorbide dinitrate tablet	1	2	3	4	5
19	Omeprazole tablet or alternative such as pantoprazole, rabeprazole	1	2	3	4	5
20	Paracetamol cap/tab (adult oral formulation)	1	2	3	4	5
21	Salbutamol inhaler	1	2	3	4	5
22	Simvastatin tablet or other statin e.g. atorvastatin, pravastatin, fluvastatin	1	2	3	4	5
23	Spironolactone tablets	1	2	3	4	5
4003	Are any of the following reproductive health medicines and commodities available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE/COMMODITY IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED		
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
01	Combined estrogen progesterone oral contraceptive pills	1	2	3	4	5
02	Progestin-only contraceptive pills	1	2	3	4	5
03	Combined estrogen progesterone injectable contraceptives	1	2	3	4	5
04	Progestin-only injectable contraceptives	1	2	3	4	5
05	Male condoms	1	2	3	4	5
06	Female condoms	1	2	3	4	5
07	Implant (e.g. levonorgestrel, etonogestrel)	1	2	3	4	5
08	Emergency contraceptive pill (e.g. levonorgestrel tablet, ulipristal acetate tablet, mifepristone tablet 10-25 mg)	1	2	3	4	5
09	Intrauterine contraceptive device (IUCD)	1	2	3	4	5
4004	For each of the following items, please check in the facility records if there has been a stock-out in the past 3 months:	STOCK-OUT IN THE PAST 3 MONTHS	NO STOCK-OUT IN PAST 3 MONTHS	NOT INDICATED	PRODUCT NOT OFFERED	FACILITY RECORD NOT AVAILABLE
01	Female condoms	1	2	3	4	5
02	Implant (e.g. levonorgestrel, etonogestrel)	1	2	3	4	5
03	Emergency contraceptive pill (e.g. levonorgestrel tablet, ulipristal acetate tablet, mifepristone tablet 10-25 mg)	1	2	3	4	5
4005	Are any of the following maternal health	OBSERVED AVAILABLE		NOT OBSERVED		



Number	Question	Result				Skip
	medicines available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
01	Iron tablets	1	2	3	4	5
02	Folic acid tablets	1	2	3	4	5
03	Iron and folic acid combined tablets	1	2	3	4	5
04	Tetanus toxoid vaccine	1	2	3	4	5
05	Sodium chloride injectable solution	1	2	3	4	5
06	Calcium gluconate injection	1	2	3	4	5
07	Magnesium sulphate injectable	1	2	3	4	5
08	Ampicillin powder for injection	1	2	3	4	5
09	Gentamicin injection	1	2	3	4	5
10	Hydralazine injection	1	2	3	4	5
11	Metronidazole injection	1	2	3	4	5
12	Misoprostol 200µg tablets	1	2	3	4	5
13	Azithromycin cap/tab or oral liquid	1	2	3	4	5
14	Cefixime cap/tab	1	2	3	4	5
15	Benzathine benzylpenicillin powder for injection	1	2	3	4	5
16	Betamethasone injection	1	2	3	4	5
17	Dexamethasone injection	1	2	3	4	5
18	Nifedipine cap/tab (10mg)	1	2	3	4	5
19	Methyldopa tablet	1	2	3	4	5
20	Oxytocin injection	1	2	3	4	5
	IF OXYTOCIN IS OBSERVED AVAILABLE (Q4005_20 is "1" OR "2") 	IF OXYTOCIN IS NOT OBSERVED AVAILABLE (Q4005_20 is "3","4",OR "5") 				→4007
4006	Is the oxytocin stored in cold storage?	YES 1 NO 2				
4007	For each of the following items, please check in the facility records if there has been a stock-out in the past 3 months:	STOCK- OUT IN THE PAST 3 MONTHS	NO STOCK- OUT IN PAST 3 MONTHS	NOT INDICATED	PRODUCT NOT OFFERED	FACILITY RECORD NOT AVAILABLE
01	Oxytocin injection	1	2	3	4	5
02	Misoprostol 200µg tablets	1	2	3	4	5
03	Magnesium sulphate injection	1	2	3	4	5
04	Gentamicin injection	1	2	3	4	5
05	Procaine benzylpenicillin injection	1	2	3	4	5

Number	Question	Result					Skip
06	Ceftriaxone injection	1	2	3	4	5	
07	Betamethasone injection	1	2	3	4	5	
08	Dexamethasone injection	1	2	3	4	5	
4008	Are any of the following child health medicines available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	Procaine benzylpenicillin injection	1	2	3	4	5	
02	Oral Rehydration Salts (ORS) sachets	1	2	3	4	5	
03	Zinc sulphate tablets	1	2	3	4	5	
04	Zinc sulphate syrup or dispersible tablets	1	2	3	4	5	
05	Vitamin A (retinol) capsules	1	2	3	4	5	
06	Antibiotic eye ointment for newborn	1	2	3	4	5	
07	Co-trimoxazole syrup/suspension	1	2	3	4	5	
08	Paracetamol syrup/suspension	1	2	3	4	5	
09	Amoxicillin 250 mg or 500 mg dispersible tablet or syrup/suspension	1	2	3	4	5	
	IF AMOXICILLIN DISPERSIBLE TABLETS ARE OBSERVED AVAILABLE (Q4008_09 is "1") 	AMOXICILLIN DISPERSIBLE TABLETS NOT OBSERVED 				→4011	
4009	Is the product stored so that identification labels and expiry dates and manufacturing dates are visible?	YES 1 NO..... 2					
4010	Check the expiry dates of the stored product. Are they stored in first-to-expire, first-out (FEFO) order (i.e. the stock that will expire first is the closest to the front)? CHECK THE EXPIRY DATES OF THE STORED PRODUCT AT THE FRONT AND AT THE BACK OF THE SHELF. IF THE PRODUCT AT THE FRONT EXPIRES FIRST, ANSWER "YES". IF THE PRODUCT AT THE BACK EXPIRES FIRST, ANSWER "NO".	YES 1 NO..... 2					
4011	For each of the following items, please check in the facility records if there has been a stock-out in the past 3 months:	STOCK-OUT IN THE PAST 3 MONTHS	NO STOCK-OUT IN PAST 3 MONTHS	NOT INDICATED	PRODUCT NOT OFFERED	FACILITY RECORD NOT AVAILABLE	
01	Amoxicillin 250mg or 500mg dispersible tablet or syrup/suspension	1	2	3	4	5	
02	Oral rehydration salts (ORS)	1	2	3	4	5	
03	Zinc sulphate tablets	1	2	3	4	5	
04	Zinc sulphate syrup or dispersible tablets	1	2	3	4	5	

Number	Question	Result					Skip
4012	Does this facility stock any medicines for malaria treatment?	YES 1 NO..... 2					→4016
4013	Are any of the following malaria medicines and commodities available today in this facility? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE/COMMODITY IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	ACT	1	2	3	4	5	
02	Artemisinin monotherapy (oral)	1	2	3	4	5	
03	Artesunate rectal or injection dosage forms	1	2	3	4	5	
04	SP (Sulfadoxine + Pyrimethamine)	1	2	3	4	5	
05	Insecticide treated bed nets for patients and their families and households	1	2	3	4	5	
06	Insecticide treated bed net vouchers for patients and their families and households	1	2	3	4	5	
07	Chloroquine (oral)	1	2	3	4	5	
08	Quinine (oral)	1	2	3	4	5	
09	Primaquine (oral)	1	2	3	4	5	
	CHECK Q4013_01: IF FACILITY STOCKS ACT (Q4013_01 = 1, 2, 3, OR 4): 	IF FACILITY DOES NOT STOCK ACT (Q4013_01 = 5): 					→4016
4014	Has there been a stock-out of ACT in the past 4 weeks?	YES 1 NO..... 2					→4016
4015	How many days of stock-out?	LESS THAN 7 DAYS 1 7 TO 14 DAYS 2 MORE THAN 14 DAYS 3					
4016	Does this facility stock any medicines for tuberculosis treatment?	YES 1 NO..... 2					→4018
4017	Are any of the following TB medicines available today in this facility? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
02	Isoniazid	1	2	3	4	5	
05	Isoniazid + Rifampicin (2FDC)	1	2	3	4	5	
07	Isoniazid + Rifampicin + Pyrazinamide (RHZ) (3FDC)	1	2	3	4	5	
08	Isoniazid + Rifampicin + Ethambutol (RHE) (3FDC)	1	2	3	4	5	

Number	Question	Result				Skip
09	Isoniazid + Rifampicin + Pyrazinamide + Ethambutol (4FDC)	1	2	3	4	5
10	Streptomycin injectable	1	2	3	4	5
4018	Does this facility stock any antiretroviral medicines?	YES 1 NO..... 2				→4020
4019	Are any of the following ARVs available today in this facility? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED		
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
01	Zidovudine (ZDV, AZT)	1	2	3	4	5
02	Zidovudine (ZDV, AZT) syrup	1	2	3	4	5
03	Abacavir (ABC)	1	2	3	4	5
04	Lamivudine (3TC)	1	2	3	4	5
05	Tenofovir Disoproxil Fumarate (TDF)	1	2	3	4	5
06	Nevirapine (NVP)	1	2	3	4	5
07	Nevirapine (NVP) syrup	1	2	3	4	5
08	Efavirenz (EFV)	1	2	3	4	5
09	Emtricitabine (FTC)	1	2	3	4	5
10	Lamivudine + Abacavir (3TC + ABC)	1	2	3	4	5
11	Zidovudine + Lamivudine (AZT + 3TC)	1	2	3	4	5
12	Zidovudine + Lamivudine + Abacavir (AZT + 3TC + ABC)	1	2	3	4	5
13	Zidovudine + Lamivudine + Nevirapine (AZT + 3TC + NVP)	1	2	3	4	5
14	Tenofovir + Emtricitabine (TDF + FTC)	1	2	3	4	5
15	Tenofovir + Lamivudine (TDF + 3TC)	1	2	3	4	5
16	Tenofovir + Lamivudine + Efavirenz (TDF + 3TC + EFV)	1	2	3	4	5
17	Tenofovir + Emtricitabine + Efavirenz (TDF + FTC + EFV)	1	2	3	4	5
18	Didanosine (DDI)	1	2	3	4	5
19	Lamivudine (3TC) syrup	1	2	3	4	5
20	Stavudine 30 or 40 (D4T)	1	2	3	4	5
21	Stavudine syrup	1	2	3	4	5
22	Efavirenz (EFV) syrup	1	2	3	4	5
23	Delavirdine (DLV)	1	2	3	4	5
24	Enfuvirtide (T-20)	1	2	3	4	5
25	Stavudine + Lamivudine (D4T + 3TC)	1	2	3	4	5

Number	Question	Result				Skip
26	Stavudine + Lamivudine + Nevirapine (D4T + 3TC + NVP)	1	2	3	4	5
4020	Does this facility stock any protease inhibitors for the treatment of HIV/AIDS?	YES 1 NO..... 2				→4022
4021	Are any of the following protease inhibitors available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED		
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
01	Lopinavir (LPV)	1	2	3	4	5
02	Indinavir (IDV)	1	2	3	4	5
03	Nelfinavir (NFV)	1	2	3	4	5
04	Saquinavir (SQV)	1	2	3	4	5
05	Ritonavir (RTV)	1	2	3	4	5
06	Atazanavir (ATV)	1	2	3	4	5
07	Fosamprenavir (FPV)	1	2	3	4	5
08	Tipranavir (TPV)	1	2	3	4	5
09	Darunavir (DRV)	1	2	3	4	5
4022	Are any of the following other medicines and commodities available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE/COMMODITY IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED		
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
01	Normal saline IV solution	1	2	3	4	5
02	Ringers lactate IV solution	1	2	3	4	5
03	5% dextrose IV solution	1	2	3	4	5
04	IV treatment for fungal infections	1	2	3	4	5
05	Skin disinfectant	1	2	3	4	5
06	Gowns	1	2	3	4	5
07	Eye protection (goggles, face shields)	1	2	3	4	5
08	Medical (surgical or procedural) masks	1	2	3	4	5
09	Absorbable suture material	1	2	3	4	5
10	Non-absorbable suture material	1	2	3	4	5
11	Ketamine (injection)	1	2	3	4	5
12	Lidocaine 1% or 2% (anaesthesia)	1	2	3	4	5
13	Diazepam (injection)	1	2	3	4	5

Number	Question	Result					Skip
	CHECK Q007 AND Q1002_08: IF HOSPITAL OR HEALTH FACILITY OFFERS CESAREAN SECTION: 	IF NOT HOSPITAL AND CESAREAN SECTION NOT OFFERED: 					Q4100
14	Thiopental (powder)	1	2	3	4	5	
15	Suxamethonium bromide (powder)	1	2	3	4	5	
16	Atropine (injection)	1	2	3	4	5	
17	Halothane (inhalation)	1	2	3	4	5	
18	Bupivacaine (injection)	1	2	3	4	5	
19	Lidocaine 5% (heavy spinal solution)	1	2	3	4	5	
20	Epinephrine (injection)	1	2	3	4	5	
21	Ephedrine (injection)	1	2	3	4	5	
4023	Are any of the following mental health and neurological medicines available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE/COMMODITY IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	Amitriptyline tablet	1	2	3	4	5	
02	Carbamazepine tablet	1	2	3	4	5	
03	Chlorpromazine injection	1	2	3	4	5	
04	Diazepam tablet	1	2	3	4	5	
05	Diazepam injection or diazepam rectal tubes	1	2	3	4	5	
06	Fluoxetine tablet	1	2	3	4	5	
07	Fluphenazine injection	1	2	3	4	5	
08	Haloperidol tablet	1	2	3	4	5	
09	Lithium tablet	1	2	3	4	5	
10	Phenobarbital tablet	1	2	3	4	5	
11	Phenytoin tablet	1	2	3	4	5	
12	Valproate sodium tablet	1	2	3	4	5	
13	Lorazepam injection	1	2	3	4	5	
14	Levodopa + carbidopa tablet	1	2	3	4	5	
4024	Are any of the following palliative care medicines available in the facility today? CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE/COMMODITY IS VALID (NOT EXPIRED)	OBSERVED AVAILABLE		NOT OBSERVED			
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	
01	Dexamethasone injection	1	2	3	4	5	
02	Haloperidol injection	1	2	3	4	5	
03	Hyoscine butylbromide injection	1	2	3	4	5	

Number	Question	Result				Skip
04	Lorazepam tablet	1	2	3	4	5
05	Metoclopramide injection	1	2	3	4	5
06	Morphine granules, tablet	1	2	3	4	5
07	Morphine injection	1	2	3	4	5
08	Senna preparation (laxative)	1	2	3	4	5
09	Loperamide tab/cap	1	2	3	4	5
SUPPLY CHAIN						
4100	Who is the principal person responsible for managing the ordering of medical supplies at this facility?	NURSE 1 CLINICAL OFFICER 2 PHARMACY TECHNICIAN 3 PHARMACY ASSISTANT 4 PHARMACIST 5 MEDICAL ASSISTANT 6 OTHER 96 (SPECIFY)				
4101	Which of the following mechanisms is used to determine this facility's resupply quantities? ASK FOR EACH OF THE BELOW	YES	NO	DON'T KNOW		
01	The facility itself (pull distribution system)	1	2	3		
02	A higher level facility (push distribution system)	1	2	3		
03	Other (SPECIFY)	1	2	3		
4102	How are the facility's resupply quantities determined?	FORMULA (ANY CALCULATION) 1 DON'T KNOW 2 OTHER MEANS 3				
SO_08	Does this facility report monthly on available stock and consumption? IF YES: ASK TO SEE THE LATEST REPORT SENT	YES, OBSERVED 1 YES, REPORTED NOT SEEN 2 NO 3				
4103	What is the <u>main source</u> of your routine pharmaceutical commodity supplies? By this I mean who is the direct supplier to your facility?	NATIONAL MEDICAL STORES 1 JOINT MEDICAL STORES 2 NGO/DONORS 3 PRIVATE SOURCES 4 OTHER 96 (SPECIFY)				

Number	Question	Result		Skip
4104	How are your pharmaceutical commodity supplies from the <u>main supplier</u> of your routine pharmaceuticals delivered to this facility?	SUPPLIER DELIVERS TO FACILITY 1 FACILITY MUST ARRANGE DELIVERY TO FACILITY 2 OTHER _____ 96 (SPECIFY)		
4105	Who is responsible for transporting products from central medical stores to your facility?	YES	NO	
01	Local supplier delivers	1	2	
02	Higher level delivers	1	2	
03	This facility collects	1	2	
04	Other _____ (SPECIFY)	1	2	
4106	For the most recent order, how long did it take between ordering and receiving products?	LESS THAN 2 WEEKS 1 2 WEEKS TO 1 MONTH 2 BETWEEN 1 AND 2 MONTHS 3 MORE THAN 2 MONTHS 4 DO NOT MAKE ORDERS 5		
SO_09	Is there a storage room?	YES 1 NO.....2		
We have now completed all of the questions in this module of the survey. Thank you for your participation.				

Number	Question	Result	Skip
SECTION 8: INTERVIEWER'S OBSERVATIONS			
5000	INTERVIEW END TIME (use the 24 hour-clock system)	<div> <div></div> <div></div> </div> : <div> <div></div> <div></div> </div>	
5001	RESULT CODES (LAST VISIT):	COMPLETED 1 RESPONDENT NOT AVAILABLE 2 REFUSED 3 PARTIALLY COMPLETED 4 OTHER _____ 96 (SPECIFY)	
COMMENTS ABOUT THE RESPONDENT:			
<div></div> <div></div> <div></div> <div></div>			
COMMENTS ON SPECIFIC QUESTIONS:			
<div></div> <div></div> <div></div> <div></div> <div></div>			
ANY OTHER COMMENTS:			
<div></div> <div></div> <div></div> <div></div> <div></div>			
SUPERVISOR'S OBSERVATIONS:			
<div></div> <div></div> <div></div> <div></div> <div></div>			
NAME OF SUPERVISOR: _____		DATE: _____	

Facility Reporting Data Verification

Facility number	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>
Name of facility	<div></div>
Region	<div></div>
District	<div></div>

Number	Question	Result	Skip
<u>FACILITY REPORTING DATA VERIFICATION TOOL (RECORD REVIEW)</u>			
<u>FACILITY IDENTIFICATION</u>			
DV_001	Facility number	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
DV_002	Name of facility	<input type="text"/>	
DV_003	Location of facility (Locality name)	<input type="text"/>	
DV_004	Zone	<input type="text"/> <input type="text"/>	
DV_005	Region	<input type="text"/> <input type="text"/>	
DV_005_1	District	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
DV_006	Type of facility	HOSPITAL1 REFERRAL HEALTH CENTER.....2 HEALTH CENTRE/MCH3 HEALTH POST4 TB CENTER5 OTHER..... 96 (SPECIFY)	
DV_007	Managing authority	GOVERNMENT/PUBLIC1 NGO/NOT-FOR-PROFIT2 FAITH-BASED.....3 OTHER..... 96 (SPECIFY)	
MATERNAL HEALTH INDICATOR			
ANTENATAL CARE FIRST VISIT (ANC1)			
DV_008	Does this facility provide antenatal care services?	YES 1 NO 2	→DV_022
DV_009	Does this facility report ANC data to a reporting system?	YES 1 NO 2	→DV_022
DV_010	Which of the following reporting system(s) does the facility report ANC data to:	YES NO	
01	Health Management Information System	1	2
02	Programme specific reporting system for MCH	1	2

Number	Question	Result		Skip		
03	Non-governmental organizations or institutions	1	2			
04	Other reporting system	1	2			
		SPECIFY				
SOURCE DOCUMENTS AND REPORTS						
DV_011A	Which of the following documents are used at this facility to record the number of pregnant women receiving antenatal care:	YES	NO			
01	ANC register or Integrated ANC register	1	2			
02	ANC tally sheets	1	2			
03	Patient cards	1	2			
04	Other	1	2			
		SPECIFY				
DV_011B	What is the source document used by this facility for monthly reporting of antenatal care services? We are primarily interested in the main document that is used for compiling the total number of ANC1 visits seen at this facility. Please report if any improvised documents are used.	ANC REGISTER OR INTEGRATED ANC REGISTER 1 TALLY SHEETS 2 PATIENT CARDS 3 OTHER (SPECIFY) _____ 96				
BASED ON RESPONSE TO QUESTION DV_011B, PLEASE ASK THE PERSON IN THE FACILITY WHO REGULARLY PREPARES THE FACILITY MONTHLY REPORTS TO PROVIDE YOU WITH THE SOURCE DOCUMENT USED TO COMPILE AND SUMMARIZE INFORMATION FOR MONTHLY REPORTING (i.e. REGISTERS, TALLY SHEETS, ETC.) AS WELL AS THE MONTHLY REPORTS FOR APRIL, MAY, AND JUNE 2015 FOR ANC.						
REVIEW SOURCE DOCUMENT FOR ANC1 AND ANSWER THE FOLLOWING QUESTIONS						
DV_012	Please confirm the availability of the source document for antenatal care visits for April to June. If available, please recount the number of ANC1 visits recorded in the main source document for April to June 2015.	(A) SOURCE DOCUMENT AVAILABLE			(B) RECOUNT NUMBER OF ANC1 IN SOURCE DOCUMENT	
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 ↶	4 02 ↶	

Number	Question	Result				Skip
02	May	1 → B	2 → B	3 03 ↙	4 03 ↙	
03	June	1 → B	2 → B	3 DV_013 ↙	4 DV_013 ↙	
*PARTLY: the source document is available but some information is missing						
REVIEW MONTHLY REPORT FOR ANC1 AND ANSWER THE FOLLOWING QUESTIONS						
DV_013	Please confirm the availability of the monthly report for antenatal care visits for April to June. If available, please record the number of ANC1 visits recorded in the monthly report (HIA2) for April to June 2015.	(A) MONTHLY REPORT AVAILABLE				(B) RECORD NUMBER OF ANC1 IN MONTHLY REPORT
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 ↙	4 02 ↙	
02	May	1 → B	2 → B	3 03 ↙	4 03 ↙	
03	June	1 → B	2 → B	3 DV_014 ↙	4 DV_014 ↙	
*PARTLY: the source document is available but some information is missing						
DISCREPANCIES						
DV_014	What are the reasons for the discrepancy (if any) observed between the main source document and the monthly report for each month?	A) APRIL		B) MAY	C) JUNE	
		NO DISCREPANCY 1 DATA ENTRY ERRORS..... 2 ARITHMETIC ERRORS..... 3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY 4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE 5 OTHER 96 _____ (SPECIFY)		NO DISCREPANCY 1 DATA ENTRY ERRORS 2 ARITHMETIC ERRORS 3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY 4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE..... 5 OTHER 96 _____ (SPECIFY)	NO DISCREPANCY 1 DATA ENTRY ERRORS..... 2 ARITHMETIC ERRORS..... 3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY 4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE 5 OTHER 96 _____ (SPECIFY)	
IMMUNIZATION INDICATOR						
PENTAVALENT/DTP THIRD DOSE (PENTA) IN CHILDREN UNDER 1 YEAR						
DV_022	Does this facility provide immunization services?	YES 1 NO 2				→DV_066



Number	Question	Result		Skip
DV_023	Does this facility report immunization data to a reporting system?	YES 1 NO 2		→DV_066
DV_024	Which of the following reporting system(s) does the facility report immunization data to:	YES	NO	
01	Health Management Information System	1	2	
02	Immunization/EPI programme	1	2	
03	Non-governmental organizations or institutions	1	2	
04	Other reporting system	1 _____ SPECIFY	2	
SOURCE DOCUMENTS AND REPORTS				
DV_025	Which of the following documents are used at this facility to record the number of children getting immunized:	YES	NO	
01	Child register or child immunization register	1	2	
02	Immunization tally sheets	1	2	
03	Child health cards or child immunization cards	1	2	
04	Other	1 _____ SPECIFY	2	
DV_026	What is the source document used by this facility for monthly reporting of DPT (Penta)? We are primarily interested in the main document that is used for compiling monthly summary statistics for DPT (Penta). Please report if any improvised documents are used.	CHILD REGISTER OR CHILD IMMUNIZATION REGISTER..... 1 IMMUNIZATION TALLY SHEETS..... 2 CHILD HEALTH/IMMUNIZATION CARDS .. 3 OTHER (SPECIFY) _____ 96		
BASED ON RESPONSE TO QUESTION DV_026, PLEASE ASK THE PERSON IN THE FACILITY WHO REGULARLY PREPARES THE FACILITY MONTHLY REPORTS TO PROVIDE YOU WITH THE SOURCE DOCUMENT USED TO COMPILE AND SUMMARIZE INFORMATION FOR MONTHLY REPORTING (i.e. REGISTERS, TALLY SHEETS, ETC.) AS WELL AS THE MONTHLY REPORTS FOR APRIL, MAY, AND JUNE 2015 FOR DPT (PENTA).				
REVIEW SOURCE DOCUMENTS FOR DPT3 (PENTA3) AND ANSWER THE FOLLOWING QUESTIONS				
DV_033	Please confirm the availability of source documents for DPT3 (Penta3) for April to June. If available, please Recount the number of DPT3 (penta3) immunizations recorded in the main source document for April to June 2015.	(A) Source documents available		(B) Recount number of immunizations in source documents



Number	Question	Result				Skip
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY*	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 ↙	4 02 ↙	
02	May	1 → B	2 → B	3 03 ↙	4 03 ↙	
03	June	1 → B	2 → B	3 DV_034 ↙	4 DV_034 ↙	
*PARTLY: the register is available but some information is missing						
REVIEW MONTHLY REPORTS FOR DPT3 (PENTA3) AND ANSWER THE FOLLOWING QUESTIONS						
DV_034	Please confirm the availability of monthly reports for April to June. If available, please report the number of DPT3 (penta3) immunizations recorded in the EPI monthly reports for April to June 2015.	(A) Monthly reports available				(B) Report number of immunizations in monthly reports
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY*	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 ↙	4 02 ↙	
02	May	1 → B	2 → B	3 03 ↙	4 03 ↙	
03	June	1 → B	2 → B	3 DV_035 ↙	4 DV_035 ↙	
DISCREPANCIES						
DV_035	What are the reasons for the discrepancy (if any) observed between the main source document and the monthly report for each month?	A) APRIL		B) MAY		C) JUNE
		NO DISCREPANCY1 DATA ENTRY ERRORS.....2 ARITHMETIC ERRORS.....3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE5 OTHER96 (SPECIFY)		NO DISCREPANCY 1 DATA ENTRY ERRORS 2 ARITHMETIC ERRORS 3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY 4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE 5 OTHER 96 (SPECIFY)		NO DISCREPANCY1 DATA ENTRY ERRORS.....2 ARITHMETIC ERRORS.....3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE5 OTHER96 (SPECIFY)

Number	Question	Result		Skip
HIV INDICATORS				
ART COVERAGE				
DV_066	Does this facility provide ART?	YES 1 NO 2		→DV_080
DV_067	Does this facility report the number of patients on ART to a reporting system?	YES 1 NO 2		→DV_080
DV_068	Which of the following reporting system(s) does the facility report delivery of ART:	YES	NO	
01	Health Management Information System	1	2	
02	National HIV/AIDS program	1	2	
03	Non-governmental organizations or institutions	1	2	
04	Other reporting system	1 _____ SPECIFY	2	
SOURCE DOCUMENTS AND REPORTS				
DV_069A	Which of the following documents are used at this facility to record the number of patients on ART:	YES	NO	
01	Pre-ART register	1	2	
02	ART tally sheets	1	2	
03	Patient cards (HIV care/ART cards)	1	2	
04	ART register	1	2	
DV_ZMB_01	ANC register	1	2	
05	Other	1 _____ SPECIFY	2	
DV_069B	What is the source document used by this facility for monthly reporting of number of patients on ART? We are primarily interested in the main document that is used for compiling the total number of patients on ART seen at this facility. Please report if any improvised documents are used.	PRE-ART REGISTER 1 ART TALLY SHEET 2 PATIENT CARDS..... 3 ART REGISTER 4 OTHER (SPECIFY) _____ 96		

Number	Question	Result				Skip
<p>BASED ON RESPONSE TO QUESTION DV_069B, PLEASE ASK THE PERSON IN THE FACILITY WHO REGULARLY PREPARES THE FACILITY MONTHLY REPORTS TO PROVIDE YOU WITH THE SOURCE DOCUMENT USED TO COMPILE AND SUMMARIZE INFORMATION FOR MONTHLY REPORTING (i.e. REGISTERS, TALLY SHEETS, ETC.) AS WELL AS THE MONTHLY REPORTS FOR APRIL, MAY, AND JUNE 2015 FOR ART RECORDED IN THE FACILITY.</p> <p>NOTE: YOU MAY NEED TO USE SEVERAL SOURCE DOCUMENTS FOR THE RECOUNTING IF SEVERAL SOURCE DOCUMENTS ARE USED TO COMPILE THE MONTHLY REPORT.</p>						
REVIEW SOURCE DOCUMENT FOR ART AND ANSWER THE FOLLOWING QUESTIONS						
DV_070	Please confirm the availability of the source document for use at the facility to compile the number of PATIENTS ON ART for April to June. If available, please recount the number of PATIENTS ON ART recorded in the main source document for April to June 2015.	(A) Source document available				(B) Recount number of PATIENTS ON ART in source document
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 ↙	4 02 ↙	
02	May	1 → B	2 → B	3 03 ↙	4 03 ↙	
03	June	1 → B	2 → B	3 DV_071 ↙	4 DV_071 ↙	
*PARTLY: the source document is available but some information is missing						
REVIEW MONTHLY REPORT FOR ART AND ANSWER THE FOLLOWING QUESTIONS						
DV_071	Please confirm the availability of the monthly report for number of PATIENTS ON ART for April to June. If available, please record the number of PATIENTS ON ART as recorded in the monthly report for April to June 2015.	(A) Monthly report available				(B) Record number of PATIENTS ON ART in monthly report
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 ↙	4 02 ↙	
02	May	1 → B	2 → B	3 03 ↙	4 03 ↙	
03	June	1 → B	2 → B	3 DV_072 ↙	4 DV_072 ↙	

Number	Question	Result	Skip	
*PARTLY: the source document is available but some information is missing				
DISCREPANCIES				
DV_072	What are the reasons for the discrepancy (if any) observed between the main source document and the monthly report for each month ?	A) APRIL	B) MAY	C) JUNE
		NO DISCREPANCY1 DATA ENTRY ERRORS2 ARITHMETIC ERRORS3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE5 OTHER96	NO DISCREPANCY 1 DATA ENTRY ERRORS 2 ARITHMETIC ERRORS 3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY 4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE 5 OTHER 96	NO DISCREPANCY1 DATA ENTRY ERRORS2 ARITHMETIC ERRORS3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE5 OTHER96
		(SPECIFY)	(SPECIFY)	(SPECIFY)
TB INDICATOR				
TB CASES				
DV_080	Does this facility provide TB diagnosis and/or treatment?	YES 1 NO 2	→DV_087	
DV_081	Does this facility report the total number of TB cases (all types) to a reporting system?	YES 1 NO 2	→DV_087	
DV_082	Which of the following reporting system(s) does the facility report total number of TB cases (all types) to:	YES	NO	
01	Health Management Information System	1	2	
02	National TB programme	1	2	
03	Non-governmental organizations or institutions	1	2	
04	Other reporting system	1 _____ SPECIFY	2	
SOURCE DOCUMENTS AND REPORTS (NOTIFIED TB CASES)				
DV_083A	Which of the following documents are used at this facility to record the total number of TB cases (all types):	YES	NO	
01	TB register	1	2	
02	Presumptive TB register (TB suspects)	1	2	
03	Patient cards (TB treatment cards)	1	2	
04	TB laboratory register	1	2	

Number	Question	Result				Skip					
05	Outpatient register	1	2								
06	Electronic patient record system	1	2								
07	Other	1	2								
		SPECIFY									
DV_083B	What is the source document used by this facility for quarterly reporting of notified TB cases? We are primarily interested in the main document that is used for compiling quarterly summary statistics for total number of TB cases (all types) . Please report if any improvised documents are used.	TB REGISTER..... 1 PRESUMPTIVE TB REGISTER..... 2 PATIENT CARDS..... 3 TB LABORATORY REGISTER..... 4 OUTPATIENT REGISTER..... 5 ELECTRONIC PATIENT RECORD SYSTEM .. 6 OTHER (SPECIFY) _____ 96									
BASED ON RESPONSE TO QUESTION DV_083B, PLEASE ASK THE PERSON IN THE FACILITY WHO REGULARLY PREPARES THE FACILITY MONTHLY REPORTS TO PROVIDE YOU WITH THE SOURCE DOCUMENT USED TO COMPILE AND SUMMARIZE INFORMATION FOR MONTHLY/QUARTERLY REPORTING (i.e. REGISTERS, TALLY SHEETS, ETC.) AS WELL AS THE MONTHLY OR QUARTERLY REPORTS FOR TOTAL NUMBER OF TB CASES (ALL TYPES).											
REVIEW SOURCE DOCUMENT FOR TB CASES AND ANSWER THE FOLLOWING QUESTIONS											
DV_084	Please confirm the availability of the source document used at the facility to compile the number of notified cases of TB for the quarter (April - June). If available, please recount and record the number of notified cases of TB as recorded in the main source document for the quarter (April – June 2015).	(A) Source document available				(B) Recount number of notified cases of TB in source document					
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO						
01	Quarter (April - June)	1 → B	2 → B	3  DV_085	4  DV_085	A= <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>					
DV_084C	From the TB register, count the total number of TB cases that were transferred in for the verification period (April – June 2015). Please record the total number for the quarter. IF THE TB REGISTER IS NOT AVAILABLE, RECORD "0".	B = <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>									
DV_084D	CALCULATE C: TOTAL NUMBER OF TB CASES FROM THE TB REGISTER MINUS THE TRANSFERRED-IN CASES (TRANSFERRED-IN CASES ARE NOT INCLUDED IN THE RECEIVING UNIT'S CASE REGISTRATIONS)	TB CASES THAT SHOULD BE REPORTED C = A – B = <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>									

Number	Question	Result				Skip
*PARTLY: the source document is available but some information is missing						
REVIEW MONTHLY REPORT FOR TB CASES AND ANSWER THE FOLLOWING QUESTIONS						
DV_085	Please confirm the availability of the quarterly report for number of notified cases of TB for April to June. If available, please record the number of notified cases of TB as recorded in the quarterly report for April to June.	(A) Quarterly report available				(B) Record number of notified cases of TB in quarterly report
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	Quarterly report (April to June)	1 → B	2 → B	3  DV_086	4  DV_086	D = <table border="1" style="display: inline-table; width: 100px; height: 20px; vertical-align: middle;"></table>
*PARTLY: the source document is available but some information is missing						
DISCREPANCIES						
DV_086	What are the reasons for the discrepancy (if any) observed between the main source document and the quarterly report (values C and D)?	NO DISCREPANCY 1 DATA ENTRY ERRORS..... 2 ARITHMETIC ERRORS..... 3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY 4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE 5 OTHER (SPECIFY) 96				
DV_086A	MISSING DATA: Count the number of cases in the quarter (April to June) with missing information for each of the following columns in the unit TB register.	NUMBER OF CASES (ROWS) WITH MISSING DATA				
01	Year of registration	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>				
02	Sex	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>				
03	Age	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>				
04	Disease classification/Anatomical site of disease	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>				
05	Type of patient /History of previous TB treatment/Patient registration group	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>				
06	Bacteriological results	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>				

Number	Question	Result	Skip
07	Number of cases missing data in at least 1 of the 6 columns listed above	<div></div>	
MALARIA			
MALARIA CASES			
DV_087	Does this facility provide malaria diagnosis?	YES 1 NO 2	→END
DV_088A	Does this facility report malaria cases to a reporting system?	YES 1 NO 2	→END
DV_088B	What indicator definition is used when reporting malaria cases?	TOTAL MALARIA CASES TREATED (PRESUMED AND CONFIRMED) 1 CONFIRMED MALARIA CASES (BY EITHER MICROSCOPY OR RDT) 2 SUSPECTED MALARIA CASES TESTED 3 OTHER (SPECIFY) _____ 96	
DV_089	Which of the following reporting system(s) does the facility report malaria cases to:	YES	NO
01	Health Management Information System	1	2
02	National malaria programme	1	2
03	Non-governmental organizations or institutions	1	2
04	Other reporting system	1 _____ SPECIFY	2
SOURCE DOCUMENTS AND REPORTS			
DV_090A	Which of the following documents are used at this facility to record the number of malaria cases?	YES	NO
01	OPD register	1	2
02	Tally sheets	1	2
03	Patient cards	1	2
04	Lab register	1	2
05	Other	1 _____ SPECIFY	2
DV_090B	What is the source document used by this facility for monthly reporting of malaria cases? We are primarily interested in the main document that is used for compiling monthly summary statistics for malaria cases. Please report if any improvised documents are used.	OPD REGISTER 1 TALLY SHEETS 2 PATIENT CARDS 3 OTHER (SPECIFY) _____ 96	

Number	Question	Result				Skip
<p>BASED ON RESPONSE TO QUESTION DV_090B, PLEASE ASK THE PERSON IN THE FACILITY WHO REGULARLY PREPARES THE FACILITY MONTHLY REPORTS TO PROVIDE YOU WITH THE SOURCE DOCUMENT USED TO COMPILE AND SUMMARIZE INFORMATION FOR MONTHLY REPORTING (i.e. REGISTERS, TALLY SHEETS, ETC.) AS WELL AS THE MONTHLY REPORTS FOR APRIL, MAY, AND JUNE 2015 FOR MALARIA CASES RECORDED IN THE FACILITY.</p>						
<p>REVIEW SOURCE DOCUMENT FOR MALARIA CASE RATE AND ANSWER THE FOLLOWING QUESTIONS</p>						
DV_091	Please confirm the availability of the source document for malaria cases for April to June. If available, please recount the number of malaria cases as recorded in the main source document for April to June 2015.	(A) Source document available				(B) Recount number of malaria cases in source document
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 <input type="checkbox"/>	4 02 <input type="checkbox"/>	
02	May	1 → B	2 → B	3 03 <input type="checkbox"/>	4 03 <input type="checkbox"/>	
03	June	1 → B	2 → B	3 DV_092 <input type="checkbox"/>	4 DV_092 <input type="checkbox"/>	
*PARTLY: the source document is available but some information is missing						
<p>REVIEW MONTHLY REPORT FOR MALARIA CASE RATE AND ANSWER THE FOLLOWING QUESTIONS</p>						
DV_092	Please confirm the availability of the monthly report for malaria cases for April to June. If available, please record the number of malaria cases recorded in the monthly report for April to June 2015.	(A) Monthly report available				(B) Record number of malaria cases in monthly report
		YES, AVAILABLE AND COMPLETE	YES, AVAILABLE BUT PARTLY* COMPLETE	YES, AVAILABLE BUT NO DATA RECORDED	NO	
01	April	1 → B	2 → B	3 02 <input type="checkbox"/>	4 02 <input type="checkbox"/>	
02	May	1 → B	2 → B	3 03 <input type="checkbox"/>	4 03 <input type="checkbox"/>	
03	June	1 → B	2 → B	3 DV_093 <input type="checkbox"/>	4 DV_093 <input type="checkbox"/>	
*PARTLY: the source document is available but some information is missing						
<p><u>DISCREPANCIES</u></p>						
DV_093	What are the reasons for the discrepancy (if	A) APRIL		B) MAY		C) JUNE

Number	Question	Result			Skip
	any) observed between the main source document and the monthly report for each month ?	NO DISCREPANCY..... 1 DATA ENTRY ERRORS 2 ARITHMETIC ERRORS 3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY 4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE 5 OTHER 96 (SPECIFY)	NO DISCREPANCY.....1 DATA ENTRY ERRORS2 ARITHMETIC ERRORS3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE5 OTHER96 (SPECIFY)	NO DISCREPANCY1 DATA ENTRY ERRORS2 ARITHMETIC ERRORS3 INFORMATION FROM ALL SOURCE DOCUMENTS NOT COMPILED CORRECTLY4 SOURCE DOCUMENT AND/OR MONTHLY REPORT NOT AVAILABLE5 OTHER96 (SPECIFY)	

CUSTOMER SATISFACTION ASSESSMENT

Facility number	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Customer interview number	<input type="text"/> <input type="text"/>
Name of facility	<input type="text"/>
Region	<input type="text"/>
District	<input type="text"/>

Number	Question	Result	Skip								
INFORMATION ABOUT THE INTERVIEW											
Date	Date of interview	DAY MONTH YEAR <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
Interviewer Name	Interviewer name and code	_____	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> </table>								
FACILITY IDENTIFICATION											
001	Facility number	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>									
002	Customer interview number (e.g. 01 for first customer interviewed)		<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> </table>								
003	Name of facility	_____									
004	Location of facility (Town/City/Village)	_____									
SO_01	Urban/rural	URBAN1 RURAL2									
005	Zone	_____	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> </table>								
006	Region	_____	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> </table>								
006_1	District	_____	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td></td><td></td><td></td><td></td> </tr> </table>								
INSTRUCTION FOR EXIT INTERVIEW: Select any two clients/patients who have been seen in the OPD of the facility. Greet the client and introduce yourself. My name is..... The Ministry of Health is seeking to improve the health care services to the community. We ask that you take a few minutes to complete this survey. Your comments are confidential. We welcome any suggestions or comments that you have concerning the quality of care you received.											
007	May I begin the interview?	YES1 NO2	→END								
008	INTERVIEW START TIME (use the 24 hour-clock system)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> </table> : <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> </table>									
009	Are you visiting the facility for yourself or for your child?	SELF1 CHILD UNDER 5 YEARS OF AGE2 CHILD OVER 5 YEARS OF AGE3									
010	Sex of client	FEMALE.....1 MALE2									
011	Did you get the service(s) which you came for today?	YES1 NO2	→END								

Number	Question	Result	Skip														
012	During your visit, were you satisfied with the overall care that you received?	HIGHLY SATISFIED.....1 SATISFIED.....2 NEUTRAL.....3 SOMEWHAT DISSATISFIED4 HIGHLY DISSATISFIED5	→014 →014 →014														
013	Which of the following were the reasons for your dissatisfaction?	<table border="1"> <thead> <tr> <th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>01 Health workers attitude</td><td>1</td></tr> <tr> <td>02 Long waiting time</td><td>2</td></tr> <tr> <td>03 Limited/no privacy</td><td>2</td></tr> <tr> <td>04 Non-availability of medicines and commodities</td><td>2</td></tr> <tr> <td>05 Costs/charges</td><td>2</td></tr> <tr> <td>06 Other _____ (SPECIFY)</td><td>2</td></tr> </tbody> </table>	YES	NO	01 Health workers attitude	1	02 Long waiting time	2	03 Limited/no privacy	2	04 Non-availability of medicines and commodities	2	05 Costs/charges	2	06 Other _____ (SPECIFY)	2	
YES	NO																
01 Health workers attitude	1																
02 Long waiting time	2																
03 Limited/no privacy	2																
04 Non-availability of medicines and commodities	2																
05 Costs/charges	2																
06 Other _____ (SPECIFY)	2																
014	Were you charged, or did you pay fees for any services you received?	YES1 NO2															
015	Would you recommend this health facility to a friend or family member?	YES1 NO2 DON'T KNOW8															
016	Do you have any suggestions for improvement?	_____ _____ _____ _____ _____															

Thank you very much and we appreciate and value your time and cooperation in filling out this questionnaire.

