Expanded Program on Immunization Policy
Ministry Of Health Development
Republic of Somaliland
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Acronyms

AD	Auto-disable syringes
AEFI	Adverse Events Following Immunizations
AFP	Acute Flaccid Paralysis
BCG	Bacillus Calmette–Guérin
cMYP	comprehensive Multi-Year-Plan
CBOs	Community Based Organization
CHW	Community Health Worker
CSOs	Civil Society Organizations
DHMT	District Health Management Team
DPT	Diphtheria Pertussis Tetanus
DPT-HepB-Hib	Diphtheria, Pertussis, Tetanus, Hepatitis B and Haemophilus Influenza type b vaccine
EPHS	Essential Package of Health Services
EPI	Expanded Program on Immunization
EVM	Effective Vaccine Management
FHW	Female Health Workers
Gavi	Global Alliance for Vaccines and Immunization
GVAP	Global Vaccine Action Plan
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
HMIS	Health Management Information
ICC	Inter-agency Coordination Committee
IEC	Information Education and Communication
ILRs	Ice lined Refrigerators
IPV	Inactivated Polio Vaccine (Check the statement in the policy)
JRF	Joint Reporting Format (UNICEF/WHO)
HC	Health Center
MCH	Maternal and Child Health
MCH/OPDs	Maternal and Child Health/ Out Patient Department
MDG	Millennium Development Goal
MNT	Maternal and Neonatal Tetanus
MoHD	Ministry of Health Development
NGOs	Non-Governmental Organizations
NID	National Immunization Days
NITAG	National Immunization Technical Advisory Group
NRA	National Regulatory Authority
OPV	Oral Polio Vaccine
PHC	Primary Health Care
REC	Reaching Every Child
RHMT	Regional Health Management Team
RMNCH	Reproductive, Maternal, Neonatal and Child health
SDGs	Sustainable Development Goals
SIA	Supplemental Immunization Activity
SWOC	Strengths, weaknesses, opportunities and challenges
SMA	Somaliland Medical association
Td	Tetanus-diphtheria
UHC	Universal Health Coverage
UNDP	United Nations Development Program

UNICEF	United Nations Children's Fund
VPD	Vaccine Preventable Diseases
VVM	Vaccine Vial Monitor
WCBA	Women of Child bearing Age
UNFPA	United Nations Population Fund
UNDP	United Nations Development Programme
FAO	Food and Agriculture Organization
WFP	World Food Programme
WHO	World Health Organization

Forward

The Ministry of Health Development (MoHD) of Somaliland has renewed its efforts to accelerate in responding to the overall health needs of the people with focus on priority programs such as maternal, neonatal and child health. As clearly articulated in the health policy, the Somaliland Government is committed to support health priorities through focusing on innovative approaches and interventions that will make a difference in the shortest possible period of time. The government recognizes the importance of immunization which is the most cost-effective tool against major communicable childhood diseases. It also recognizes the importance of delivering equitable services to its population with focus on those with the greatest need. The development of expended program on immunization (EPI) policy to strengthen and improve the immunization program reflects the commitment of the Ministry of Health Development to address a priority program in close collaboration with its partners. Somaliland is very keen to work with its partners, especially on the global health initiatives such as Global Alliances for Vaccines and Immunization, The global Fund for the three epidemics, and the Global Financing Facility for the Reproductive, Maternal, Newborn, Child and Adolescent Health.

Somaliland fully understands the low performance of EPI program, the previous failure of meeting MDGs and the ongoing efforts towards SDGs. To this end, it has decided to revisit the overall country strategy on maternal and child health in order to scale up priority interventions such as the vaccination program. Thus, the Ministry of Health Development is delighted to embark on a new EPI policy and redefine the strategic directions that will lead the implementation of the policy towards achieving its objectives. Our commitment is based on the principles of UHC2030, the ongoing health sector reform (HSR) of Somaliland, and pursue the value-based goal of "leaving no one behind". In relation to this vision, our mission is clear, we are committed to strengthen partnership, locally and externally, we are very keen to explore every opportunity to exploit our domestic resources and we are indeed devoted to improve our health systems to ensure integrated, sustainable, and comprehensive health services. The Ministry of Health Development reiterates its role to support the Regional and Districts of health management team who own this policy and will ensure that the policy recommendations and guidelines are effectively implemented in their respective areas. We also reaffirm that ownership, efficiency, equity and result-focused remain our guiding principles.

On behalf of the Ministry of Health Development of Somaliland, I fully express my sincere thanks to our partners who have been with us throughout to enable us mark a major milestone in health services development particularly in the field of maternal and child health. My special thanks goes to WHO, especially Dr. A. Momin Ahmed the consultant for leading the process of organizing, developing and producing this remarkable document.

Yours sincerely;

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1. Background and Introduction

In Somaliland the health sector continued to improve access to service delivery, improve health governance, health workforce, health information, and access to quality medicines. Significant progress has been made in expanding primary health care services through an improved public health infrastructure such as the introduction of newly established primary health units, basic health centres and hospitals in many districts. The health workforce has significantly increased in urban areas as a result of pre-service training, albeit the shortages continued in the rural areas. Efforts were made to strengthen decentralized management of health services at regional level as part of improving governance functions, and the health management information system has evidently achieved a lot in terms of coordinating regional data and information. Progress in health financing and resource mobilization was sluggish and has not made major strides. A significant portion of the primary health services delivery is supported by external agencies. The service delivery mechanisms, commonly known as the essential package of health services (EPHS) has been introduced in certain districts[1].

The MoHD reports show that the management component of the EPHS districts have improved however major concerns about sustainability were indeed documented. On the sector profile, the health system- thinking, the evolving service delivery, and availability of medium-term strategic plans are the key strengths of the health system[2]. On the other hand, significant weakness exist which inter alia include: Fragmentation of health system functions; under-funding with rudimentary infrastructure in many districts; shortage of qualified health workers in remote districts; weak MoHD institutional capacities in some regions, and largely unregulated private sector.

The challenges include: meagre resources for the public health sector; unpredictable external aid to the health sector; poor access to health care delivery by the IDP communities, nomads and scattered population; unhealthy lifestyle and harmful practices; and major determinants of health such as unplanned urbanization and deteriorating environmental factors. However, many opportunities are out there that requires to be thoroughly examined. The increasing commitment by the Government to UHC2030, the willingness of the Somaliland health professionals from the Diaspora to contribute, the increasing role of NGOs in EPHS, and the growing capacity of intersect oral collaboration for improving health are all positive signs in addressing some of the key challenges.

The EPI is priority program and special attention was given to the formulation of a policy with viable strategic directions, and well-articulated action points that enjoys the full support of all stakeholders. The policy is based on lessons from past experiences, on the overall context, on profound SWOC analysis, and on innovative approaches intended to effectively address the immunization program gaps and challenges. It highlights the guiding principles and values of the development process, it outlines the health care delivery model--the EPHS-- through which EPI is being delivered, and more importantly, it outlines the core strategic directions for translating the policy objectives into activities and outcomes.

[1] Essential package of Health Services, 2009, being implemented in Buroa, Berbera and Awdal

[2] Somali Health Sector Profile, WHO-EMRO Health Systems Division 2017

2. EPI Policy Development Methodology

Using the lessons learned, the process of developing an updated EPI policy was much more than formulating a document. It was designed to be a learning exercise where partners focus on innovative ways not only for EPI service delivery but for envisaging the long-term business in establishing an effective and sustainable immunization program which is an integral component of the overall Somaliland health system. The policy ingredients were collected through:

- **Extensive document reviews for collecting as much information as possible:**
  Huge efforts were made to search for appropriate and reliable information and intelligence that could help formulate a robust national EPI policy. Notably, the recent Somaliland health sector reviews, the health sector strategic plans, the Gavistrategy[3], cMYP, the global vaccine action plan[4], and the UHC 2030 partnership have been very helpful to provide not only directions but a vision for embarking on a new platform for immunization.

- **Engaging with senior health official s and leadership health authorities to ensure support and a common position:**
  Two-pronged strategy were at the center of this task. Ensuring the leadership support to EPI program in general and the new directions in particular followed by sensitizing them to strive for mobilizing domestic resources and for reinforcing the health system thinking approach. Such interactions were found to be very useful for the new leaders to update them on the current global initiatives such as the UHC 2030 partnership; on collaborative programs related to immunization; and on global efforts towards SDGs health-related goals.
- Consultative meetings with WHO, UNICEF and key NGOs:

Three objectives were pursued under these activities:

(i) to obtain as much technical and managerial information as possible
(ii) to ensure inclusiveness and a common position;
(iii) and to bolster existing collaboration and ensure a shared responsibility. Understanding their perspectives were very useful to ensure synergy and harmonization.

- **Devising instruments for facilitating the policy development process:**
  For quality purpose, an assessment framework was proposed to ensure the development of well-structured policy document. As part of the methodology this exercise has divided the content of the policy into several key domains. The initial process, the context, the connectivity with higher frameworks, the service delivery model; and the main technical components of EPI program.

[3] Gavi Strategy on Immunization, 2016-2020

[4] WHO global vaccine action plan 2011-2020 endorsed by 194 countries in 2012

- **Policy formulation process workshops:**

The workshops were designed to brainstorm on innovative approaches and interventions for the development of an effective program policy and minimum acceptable standards and benchmarks for implementing EPI at all levels of service delivery. Multiple stakeholders in EPI participated in and played a major role in hands-on working sessions, looking at the various components of an original draft.

2.1 The process guiding principles:

To ensure quality, openness, and balanced views of the process the following principles were effectively and consistently pursued throughout the process. For example, ownership by the government was considered as the fundamental principle for undertaking such an important initiative for strengthening the EPI program in Somaliland with the purpose of reaching the missing children and pursuing the policy of leaving "no one behind". Moreover, bringing all stakeholders on board to stand behind the initiative was a key instrument for ensuring inclusiveness and a collective vision. The major principles and values for undertaking the policy process included:

- Ownership by the government
- Government shall ensure quality health care at all levels.
- Inclusiveness
- Collective vision
- Profound intelligence gathering
- Clear purpose and objectives
- Proper guidance
- Technical soundness
- Teamwork
- Solidarity
- Shared responsibility and mutual accountability

2.2 The Scope:

The policy operates within the framework of the national health policy, and is delineated by the overall objectives of the health sector. The EPI Policy is a handy instrument that provides the overall strategic directions and key policy recommendations to the MoHD and its partners on EPI program objectives and priorities. The immunization policy covers the Regions, and Districts of Somaliland. The policy document conveys a clear message on the commitment to a priority program that is led and owned by the government. It represents a key component of the essential public health package that should be delivered under the universal health coverage principles. The document furnishes policy statements on the overall government decisions vis-à-vis immunization requirements, it underlines eligibility with clear technical guidelines on various antigens, on immunization schedule, on target diseases, on cold chain and vaccine management systems, on injection safety, and on reporting and monitoring procedures of Adverse Events Following Immunization (AEFI).

3. Context

Somaliland health sector has continued to improve over the last two decades with an increasing access to quality primary health care services, enhanced organizational structures, an increasing workforce and expanding primary health care facilities throughout the country. The population of Somaliland was estimated at 4.0 million in 2019[5] with majority living in urban areas. It has an estimated population growth rate of 3 per cent and an estimated average life expectancy of 55.5 years at birth[6]. There has been an increase of the facility utilization rate throughout the regions Somaliland. The immunization program was identified as a core activity under the public health department. The overall performance of EPI however was quite low with an estimated just over 50 percent of fully vaccinated children under one year of age. The private sector in health services delivery has been growing fast but it has remained largely unregulated. The districts in Somaliland implementing the EPHS strategy have shown a better organized health care delivery system; an increasing access to quality services by the target population; an enhanced performance; and a stronger community engagement. Nonetheless, the process has its own technical deficiencies in terms of addressing certain components such as the immunization services. The total number of functioning health facilities is 378 including hospitals, health centers clinics and primary health care units[7].

Table 1: health facilities distribution Number of Health Facilities in 2019

HFs	Awdal	M/jeh	Sahil	Togdher	Sanag	Sool	Total
Hospital	2	5	2	2	3	2	16
RHC	3	4	3	4	2	4	20
HC	37	46	10	42	28	33	196
PHUs	29	24	25	30	16	22	146
Total	71	79	40	78	49	61	378

The human capital for health has significantly increased albeit with varied concentrations in different regions. The overall number and density of doctors, nurses and midwives remain very low especially in the rural area. The total number of officially registered doctors is 129 against 914 qualified nurses with a ratio of 1:7[8].

[5] PESS, UNFPA

[6] UNFPA, 2014

[7] HMIS, Ministry of health development, 2019.

[8] HMIS, Ministry of health development, Somaliland

Table 2: Human Resources for Health

SN	Type	Awdal	M/jeex	Sahil	Togdh	Sanaag	Sool	Total
1	Physicians	25	51	11	22	15	5	129
2	Nurses	120	445	60	110	79	90	914
3	Midwives	35	187	43	82	56	45	448
4	Pharmacists	4	3	6	2	8	3	26
5	Anesthesia	4	5	-	8	3	3	23
6	Data mgmt.	2	4	3	2	2	2	15
7	Lab-technician	10	43	18	10	8	5	94
8	X-ray tech	2	4	18	1	2	1	28
9	Total	202	752	159	237	173	154	1677

The Nurses and assistants are the principal vaccinators in health centers however, there is no specific data on how many qualified vaccinators are available, including the quality of training on proper vaccination procedures.

3.1 Immunization System

The Somaliland EPI was launched in 1991 with the support of bilateral and multilateral organizations. UNICEF and WHO were the lead agencies in technical and material support. The program expanded through PHC nationwide networks with the purpose of reaching the rural and the nomadic population as these segments of the Somaliland population forms the majority and remained underserved. The performance of the routine immunization was not very successful however, the policy of mass campaigns uplifted the coverage throughout the country. Whatever the program has achieved, the civil unrest and the national warfare that started in 1988 and ended in 1991 has devastated the infrastructure. The EPI was one of first public health preventive program that was re-launched again soon after stability returned gradually to Somaliland.

The HC/OPD are networks of close-to-client outlets of primary health care unit. The Ministry of Health Development (MoHD) is fully responsible and provides leadership in policy formulation and in program implementation. UNICEF is the major financier and partner of EPI in Somaliland.

The UNICEF support to EPI includes: procurement and distribution of vaccines and injection equipment of assured quality, maintenance of cold chain, production and dissemination of IEC materials, provision of financial assistance to partners for implementing outreach immunization sessions.

WHO provides technical assistance to the Ministry of Health Development (MoHD) and all partners; and is the second major financier of immunization activities in the country. It provides technical guidelines and training programs to health workers and management structures. WHO supports an extensive network of the polio eradication initiative which helps the mass immunization campaigns; and the surveillance of vaccine preventable diseases (VPD).There are a number of international and national NGOs supporting immunization activities in the country which are accountable to the Ministry of Health Development (MoHD). These NGOs run most of HCs, and are involved in immunization service delivery, disease surveillance, social mobilization, training of health workers, supporting logistics and provision of technical and financial support.

Child health is one of the six core programs in EPHS and therefore immunization is the key intervention that should be delivered at all EPHS levels in a much more effective and efficient manner. It is expected that EPHS strategy will identify the most deprived communities, boost the vaccination services and will reach the missing children. Managerially, the EPHS is focusing on health system support components, community participation and coordination which are all critical to the program performance.

3.2 Higher Level Frameworks and Immunization Program:

3.2.1 Government Policy on High Level Commitment:

The immunization program is clearly reflected in the health policy and in the medium-term strategic plan. The high-level commitment to vaccination services is also reflected in service delivery policies, in partnership engagements, and in communication field. The EPI services are delivered in all health centers services, in EPHS health centers and in referral health centers. The Ministry of Health Development (MoHD) engages with many partners on EPI as part of its commitment to promote collaborative programs with local and external health partners. On communication for EPI the Ministry of Health Development (MoHD) has established several channels to promote immunization. The local media is strongly engaged in EPI communication, reaching the urban and the rural population through various mechanisms.

The EPI program is connected the global vaccine action plan (GVAP); to the sustainable development goals (SDGs); and to the universal health coverage initiative (UHC). Immunization is documented as a priority program in the NHP, and remain one of the core programs in the national service delivery package. The NHP urges the MoHD and Development Partners join hands in effectively pursuing the policy of sustainability. It recommends the holistic approach for building the country's health system and raises loud enough the role of EPI in moving towards UHC goal. It is worth mention that the Somaliland government senior leaders are profoundly engaged through advocacy and support at all levels of the community.

3.2.2 Policy on Advocacy for Immunization Program:

The high-level advocacy is based on a legally-binding resolutions of the World Health Organization[9]. The resolution urges Member States to strengthen the governance and leadership of national immunization programs, and improve monitoring and surveillance systems to ensure up-to-date data guides policy and programmatic decisions to optimize performance and impact. It also calls on countries to expand immunization services beyond infancy, mobilize domestic financing, and strengthen international cooperation to achieve GVAP goals, a commitment to ensure that no one misses out on vital immunization by 2020.

The immunization policy of Somaliland strongly advocates for what the country has endorsed in the GVAP, it observes its guiding principles, and pursue the GVAP six strategic objectives which calls: **(i)** All countries commit to immunization as a priority; **(ii)**Individuals and communities understand the value of vaccines and demand immunization as both their right and responsibility; **(iii)**The benefits of immunization are equitably extended to all people; **(iv)**Strong immunization systems are an integral part of a well-functioning health system; **(v)** Immunization programs have sustainable access to predictable funding, quality supply and innovative technologies; and **(vi)**Country, regional and global research and development innovations maximize the benefits of immunization.

3.3 Service Delivery Model: Essential Package of Health Services

UHC means that all individuals and communities receive the health services they need without suffering financial hardship. It includes the full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care[9]. Full child immunization is among the WHO defined 16 essential health services. In 2018, Somaliland joined the UHC Partnership (UHC-P), which supports the development of a roadmap towards health systems in emergencies and the launch of a humanitarian nexus to support health system strengthening in 2019[10]. The UHC-Partnership supports the planned revision of the essential package of health services to ensure a comprehensive package that includes hospitals, health facilities and community level health services to strengthen PHC. Immunization is well-placed in UHC framework with focus on those with greatest need.

The essential package of health services (EPHS) is designed for the four levels of health service provision and divided into 10 programs, of which six core programs are provided at all levels and four additional programs are provided only at the referral level. Full implementation of EPHS in all regions is not possible due to shortage of funds and trained staff, scarcity of medical supplies and indeed security concerns in certain districts11. Nevertheless, rolling out of EPHS in a relatively short time has helped turn around deteriorated facilities, improve standards of staff performance, implement essential drug lists and ensure better treatment.

[9] WHO UHC factsheet

[10] UHC 2030 partnership, 2018

[11] Somali high-level health sector review, 2015

The EPHS is the vehicle for the EPI delivery at all levels. The primary health unit (PHU) level which is the grass-root level has so many roles to play in immunization activities. The policy strongly advocates the use of the protocols provided in the Standard Operating procedures (SOPs) or Minimum Service Delivery standards (MSDS) for EPI under EPHS framework. In short, this level which is run by a CHW will help the immunization during the outreach services, during the campaigns, during micro planning and for routine activities related to advocacy, mobilization, organization and coordination. These are the requirements for EPI, they are considered as the input indicators at PHU level that will be measured against the work of the community health workers.

The health center level (HC) is the main delivery arm for immunization services. The policy recommends all HCs should be able to deliver the minimum acceptable level of services that achieves at least 90% of infants receive all vaccines in the EPI schedule before age 1 year and at least 80% of pregnant women receive minimum 2 doses of Td before delivery. The policy supports the provisions in the SOPs to be closely observed to ensure that EPI requirements are explicitly defined at the level of health center. The required minimum standard for human capital such as the number of workforce, skills and competencies, the equipment, the reporting mechanisms, and the system of program coordination are unambiguously provided in SOPs. Similarly, the requirements for EPI program delivery for the remaining two centers such as the referral health center and the hospital level should be defined and applied on the ground. Thus, the policy anticipates that the existing gap between immunization services and the EPHS delivery levels will be bridged once the minimum acceptable standards for the vaccination program are fulfilled.

The policy foresees the possibility of engaging selected private sector facilities in EPI service delivery where vaccination activities are regularly carried out, where the national EPI policy guidelines and recommendations are strictly followed and where vaccine safety norms and reporting systems are in line with the public system. The policy fully supports all workable strategies and approaches but indeed of acceptable quality for expanding the immunization services to reach the missing children. Every service delivery model, through public and/or private will remain central to national efforts in improving EPI program. The policy underlines equity as a value-based principle with focus on the vulnerable segments of the populations throughout the country to ensure the benefits of immunization are equitably extended to all people.

The public-private mix in health care is another delivery model that could be explored further. The advantage is linked to the fact the Ministry of Health Development (MoHD) is reaching out to private providers be them for-profit or not-for-profit in order to tap into their resources and experiences. The policy supports all efforts for seeking innovative approaches for the purpose of expanding the immunization services.

3.4 Routine Immunization Performance:

Significant improvements of routine immunization have been documented in Somaliland in recent years however, the coverage is far below the required target. In a nutshell, the combination of the demand and supply side of the vaccination program is fundamentally responsible for the poor performance.

The national EPI policy calls for partners in EPI to periodically review the program performance not only in terms of outcomes such as the coverage but rather focus on higher level commitments, policy and strategic planning, program governance, partnerships, role of all stakeholders and service delivery models. The EPI program reviews should use relevant performance assessment frameworks and instruments that have multiple purpose and not looking immunization services in isolation. Previous reviews were sketchy and have not produced any meaningful results as far as program performance is concerned. Proper templates for collecting data and information should be designed, field-tested and deployed.

Immunization equity assessment was conducted in 2017 in Somaliland to identify gaps in vaccination services and bottlenecks. The study was designed to focus on equity and SWOT analysis, using disaggregated data from Surveys, HIS, surveillance and other sources by geographic, demographic and socioeconomic factors. The study found disparities between Somaliland, Northwestern region and South-central Somalia, disparities between the urban and the rural areas and disparities between the wealthiest quintile and the poorest quintile[12]. Based on data from 2006 MICS, the equity analysis found that the greatest disparity was noted for children born in the wealthiest quintile compared with those born to women in the poorest quintile showing an absolute difference of 22 and 23 percentage points for DPT3 and Measles coverage respectively[13].

4. Immunization Vision, Goal and Objectives

4.1Vision

A healthy start early in life for all the Somaliland children, guaranteed through efficient and high-quality immunization services that are accessible, equitable and affordable lead by the UHC principle of leaving no one behind.

[12] UNICEF, immunization equity assessment report, 2017

[13] MICS 2006 Somaliland

4.2 Goal and Objectives

4.2.1 Overall Objective

- Decrease mortality and morbidity levels from vaccine preventable diseases through providing of save vaccines and of assured quality to all eligible target populations.

4.2.2 Specific Objectives

- Increase and sustain quality high immunization coverage rates
- Reach the missing children through increased access
- Ensure proper reporting and effective data management
- Ensure proper surveillance and outbreak response of vaccine preventable diseases

5. Strategic Directions

The EPI policy envisages nine strategic directions that will help attain the aforementioned goals and objectives of the program:

(1) Ensure and maintain policy commitment and ownership
(2) Reach every child and women of childbearing age through the realization of EPI initiative
(3) Increase and develop skilled human resources for EPI program (4) Introduce new vaccines and additional doses for existing vaccines.
(5) Scale up vaccine safety efforts
(6) Explore sustainable EPI financing mechanisms
(7) Enhance EPI partnership and coordination efforts
(8) Strengthen advocacy and communication for EPI
(9) Improve and maintain quality data management to form the basis of the program planning

Ownership and commitment by the government will remain the key message of the policy. Every effort should be made to ensure that no one of EPI target population should be left out. The human capital for the program is at the forefront and should be underscored. The policy advocates for introduction of new and underused vaccines and additional doses for existing vaccines provided that the necessary conditions are satisfactorily met. A detailed action plan on vaccine and injection safety should be formulated and made available for all delivery outlets. Both domestic and external financing opportunities should be explored. Partnership is critical to ensure broader support. The existing coordination at all levels must be beefed up. Communication through all feasible and appropriate channels should be reinforced with focus on those who need most.

The policy strongly recommends that a detailed action plan is required for each strategic direction, highlighting the key interventions, outlining specific benchmarks, targets and

indicators for each and every strategic direction. This will be an integral part of the EPI comprehensive multiyear plan and should be reviewed periodically. An inclusive process is highly recommended when action plans for each strategic direction is being formulated. The policy also recommends the following guidelines for the implementation of the strategic directions:

- Revisiting the EPHS framework;
- Orientation of all stakeholders in the new EPI policy;
- Using Minimum Service Delivery Standards in the field;
- Ensuring the integration of EPI into relevant RMNACH initiative;
- Exploring workable strategies to involve the private sector in service delivery.

6. The EPI Policy: Technical Component

The scope of the national EPI Policy is to provide policy and strategic framework for National, Region, District and Facility level immunization practices.

6.1 Routine EPI target diseases, vaccines and target population

Immunization is free and is delivered through the national EPI Program against the following childhood diseases:

- Tuberculosis
- Poliomyelitis
- Diphtheria
- Pertussis
- Tetanus
- Hepatitis B
- Meningitis diseases caused by Haemophilus influenza type B Measles
- Pneumonia

6.2 Policy on vaccine quality

1. All vaccines used in Somaliland by EPI program are safe, procured exclusively through UNICEF from manufactures pre-qualified and accredited by WHO, under the guidance of the MoHD

2. The national EPI Program provides the following vaccines:

   a) BCG: It contains live attenuated Mycobacterium bovis (M. bovis) and comes in powder form. It must be reconstituted with a diluent before use. It is essential that only the diluent supplied with the same batch number of the vaccine be used. The BCG (20 dose vial) vaccine should be kept at +2°C – +8°C always. The diluent must pre-cooled 24 hour before the reconstitution. Any remaining reconstituted vaccine must be discarded after six hours or at the end of the immunization session, whichever comes first or according to the manufactures' instructions.

   b) Oral Polio Vaccine (bOPV): kept at -15 to -25 (National, Regional and District level) and +2 to +8 (at service delivery level), is prepared from attenuated live polio virus and is presented as a liquid vaccine that is provided in glass/plastic vials with droppers in a separate plastic bag. In consultation with global partners, the country will make an informed decision on the introduction of IPV and phasing-out of OPV. According to international guidelines, IPV (5 dose vial), inactivated polio virus vaccine, is provided in liquid form in glass vials. The vaccine should be kept in +2°C – +8°C at all times.

   c) Pentavalent (DTP-HepB-Hib) vaccine: It contains diphtheria, tetanus, pertussis, Hepatitis B and Haemophilusinfluenza type b vaccine; and is provided as liquid form in vials of ten doses and the vaccine should be kept at +2°C – +8°C

   d) Measles vaccines provided as a powder, with a diluent in a separate vial. Before it can be used, it must be reconstituted. It is essential that only the diluent supplied with the vaccine be used of the same batch number. The diluent must pre-cooled 24 hour before the reconstitution. Always, measles vaccine should be kept at +2°C – +8°C. Any remaining reconstituted vaccine must be discarded after six hours or at the end of the immunization session, whichever comes first or according to the manufactures' instructions.

3. Td is provided as a liquid in vials and also in prefilled auto-disable injection devices. Storing temperature of +2°C – +8°C.
4. New vaccines shall be introduced by the Government of Somaliland depending on burden of disease as well as technical, managerial and financial feasibility.
5. Other vaccines, though not part of routine immunization schedule, against *Yellow Fever*, *Meningitis*, *Influenza, Pneumococcal*, or any other VPD diseases will be provided to exposed health workers, travellers or special/risk groups, by storing +2°C – +8°C.

The policy strongly advocates that non-routine vaccinations including: cholera, yellow fever, typhoid, meningitis should be made available for risk groups. Among others, health workers, such as lab-technicians, veterinarians, food handlers and travellers should have access to those vaccines.

6. Additional doses of existing vaccines if meeting all the standard set by WHO like MCV2 and IPV2 etc.

7. National Immunization Technical Advisory Group or Immunization Coordination Committee (ICC) will advise the national EPI program on issues related with vaccines to be used in the country.

6.3 EPI Target Population

The following table illustrates who is eligible for the routine vaccination services. Eligibility reflects the fundamental principles of rights to health. The Somaliland government is committed to ensure that all eligible population should equitably benefit from the immunization services. The policy strongly advises periodic equity analysis to inspect gaps in accessibility.

No	Policy statement	Remarks
1	Immunization shall be delivered to all eligible children and all eligible women and special risk groups without any discrimination with respect to gender, race, religion or any other demographic attributes.	-Value and equity based statement
2	Target populations for the routine EPI program are the following: - Children less than one year of age. All children should complete the primary immunization series by their first birthday and give MCV2 at 15 months - Children under two years of age: Children who have not completed the primary series by their first birthday will be eligible to finalize the series. Children above 1 year previously unvaccinated should receive OPV + MCV	- Eligible population
3	Women of Child Bearing Age - All women of child-bearing age (15 to 49 years of age): - All pregnant women will be given special emphasis to ensure protection of all neonates against Neonatal Tetanus and diphtheria.	- To control MNT
4	Target population for supplemental immunization activities - Children under five years of age, or any age as may be determined by the government with partners based on epidemiology of disease. - All women of child bearing age	- As dictated by epidemiological picture

6.4 Immunization Schedule and Vaccine administration

6.4.1 Vaccination Schedule

According to the recommended schedule all children will receive one dose of BCG vaccine, 3 doses of DPT-HepB-Hib (Penta), 4 doses of OPV, one dose of IPV and one dose of measles vaccine at 9 months and second dose of measles and IPV2 in the second year of life. The routine program schedule is illustrated in table 1.

Table 4: Routine Immunization Schedule for infants, 0-11 months

Age	Vaccines	
At Birth[15] (up to 2week)	BCG	OPV0
6 weeks (42 days)	DPT-HepB-Hib1	OPV1
10 weeks	DPT-HepB-Hib2	OPV2
14 weeks	DPT-HepB-Hib3	OPV3
14 weeks	IPV1	
9 month	IPV2	
9 months	Measles	
15-18 months	Measles	

6.4.2 Immunization for the 2nd year of life

The policy highlights that the 2nd year of life is an opportunity to further integrate immunizations with other health interventions such as Vitamin A supplementation, nutrition, growth monitoring, and deworming. Booster doses of routine immunization such as DTP4; Second Measles Containing Vaccine dose (MCV2) and some new vaccines are strongly recommended beyond infancy.

Table 5: Immunization Schedule for Pregnant women and WCBA (15-49 YEARS)

Dose	Time for administration	Duration of Protection
Td1	at first contact OR as early as possible during pregnancy	None
Td 2	at least 4 weeks after Td1	1-3 years
Td 3	at least 6 months after Td2	5 years
Td 4	at least 1 year after Td3	10 years
Td 5	at least 1 year after Td4	For all child bearing years

Give OPV-0 within 2 weeks of birth. If given later, it delays the first dose of OPV1 to be given at 6 weeks of age along with DTP-HepB-Hib1. BCG should be given at birth or as early in life as possible normally up to the 1st birthday. The current policy emphasizes that due to the significant prevalence of MNT in Somaliland, pregnant women for whom reliable information on previous tetanus vaccinations is not available should receive at least 2 doses of Td with an interval of at least 4 weeks between the doses. To ensure protection for a minimum of 5 years, a third dose should be given at least 6 months later. A fourth and fifth dose should be given at intervals of at least 1 year, or during subsequent pregnancies, in order to ensure long-term protection. The policy calls that special attention should be given to the nomadic population.

6.5 Interval between multiple doses of the same antigen

An up-to-date technical information should be regularly provided to the concerned staff in EPI program. Locally translated guidelines, clearly indicating the recommended technical advices should be encouraged. The policy recommends that NITAG technical guidelines should be strongly followed.

<table>
<tr><th>Vaccines</th><th>Recommended Action</th></tr>
<tr><td>For vaccines that require administration of more than one dose (DTP-HepB-Hib, OPV, Td, measles)</td><td>An interval of at least 4 weeks will be ensured between two doses of these vaccines, for development of an adequate antibody response</td></tr>
<tr><td colspan="2">✓ A dose of one of these vaccines must not be given at an interval of less than 4 weeks and if given must not be counted as part of the primary series.
✓ Longer-than-recommended intervals between doses do not reduce final antibody concentrations.</td></tr>
<tr><td>Supplementary immunization [SIAs,NIDS/SNIDS/mop-ups]</td><td>OPV doses and /or measles doses will be given irrespective of the child's history of vaccination and will not be counted as part of the child's primary immunization series.</td></tr>
<tr><td colspan="2">✓ At all EPI centers (Health center, Referral Health Center and hospitals), BCG and measles vials should be opened daily as required. No specific day's need be assigned for BCG or measles vaccination to avoid missed opportunities. All eligible children are vaccinated whenever they are presented to health facility.</td></tr>
</table>

6.6 Simultaneous administration of vaccines

1. To reduce the number of contacts required to complete the immunization series, as many antigens as possible are given at a single visit, at the recommended sites. This policy recommendation is vital especially in areas where the populations are not easily accessible such as the nomadic and hard to reach population.
2. All the EPI antigens are safe and effective when administered simultaneously, i.e. during the same immunization session but at different sites. For example, a 1-year old child who has never previously been immunized should receive BCG, measles, and the first dose of DPT-HepB-Hib and polio vaccines.

6.7 Routes of Administration

Policy guidelines:

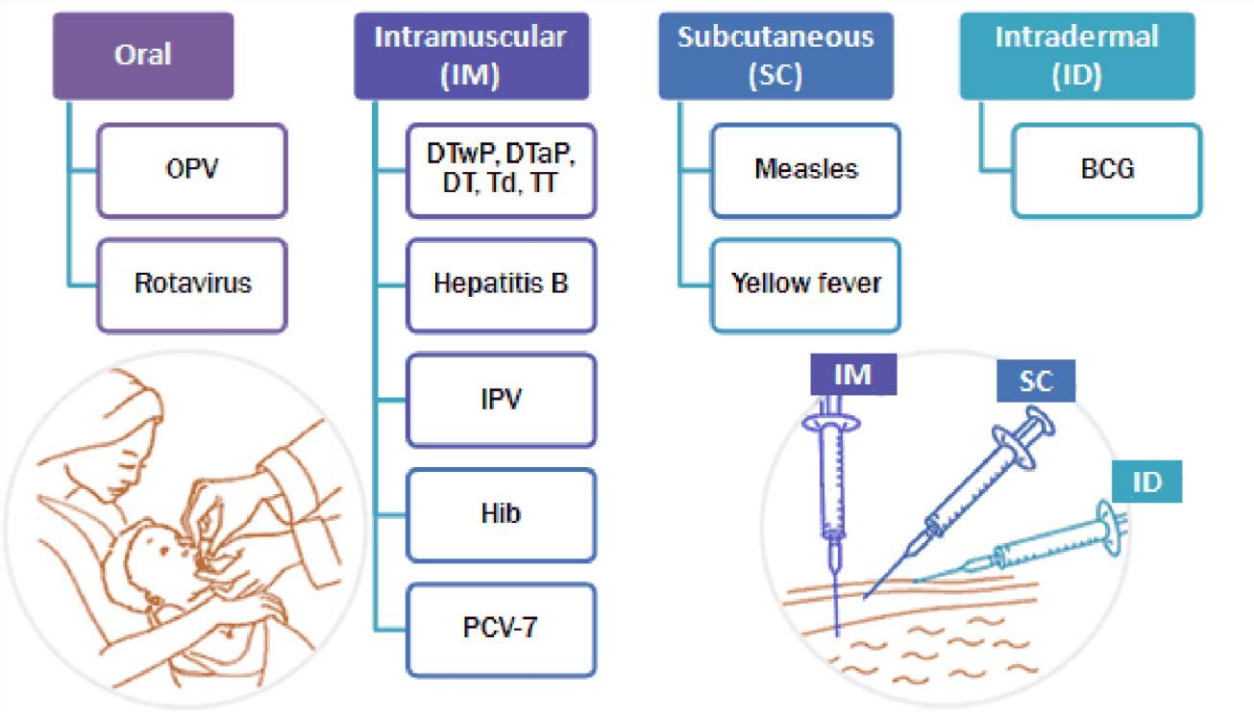
The national EPI policy pursues the global standards and protocols for routes of administration. The following are instructions to be strictly observed:

1. Vaccine administration differs according to the vaccine antigenicity and composition:
    a. BCG is administered intra-dermally on left upper arm
    b. DPT-HepB-Hib is given intramuscularly on antero-lateral side of Right mid-thigh
    c. IPV is given intramuscularly on antero-lateral side of left mid-thigh
    d. Td is injected intramuscularly on Left Upper Arm
    e. Measles vaccine is administered subcutaneously on Right Upper Arm
    f. For pneumococcal vaccine, preferred sites in the anterolateral thigh muscle, for infants and young children, and deltoid muscle or older children and adults.
2. The preferred site for intramuscular injection in infants and young children is the anterolateral aspects of the mid-thigh since it provides the largest muscular mass.
3. In adult women, the deltoid is recommended for routine intramuscular injection of Td.
4. The buttock should not be used routinely as an immunization site for infants, children, or adults because of the risk of injury to the sciatic nerve.

Table 6: Summary of Route of Administration and Injection Site:

Vaccine	Route of administration	Injection site
BCG	Intradermal	Left upper Arm
DPT-HepB-Hib	Intramuscular	Outer mid-thigh of the right leg
IPV	Intramuscular	Outer mid-thigh of the left leg
OPV	Oral	By Mouth
Measles	Subcutaneous	Right upper arm
Tetanus-diphtheria	Intramuscular	Outer, upper left arm

Routes of administration vary to maximize effectiveness of vaccine*



*WHO Vaccine Safety Basics e-learning course

The policy stresses that clear instructions including illustrative graphics for the vaccination injection site should be made available at all health centers. Orientation of new staff on standard operating procedures should always be prioritized. The policy reiterates that the standard of care and the overall requirements for immunization including injection safety should be continuously inspected.

6.8 Reconstitution of Vaccines:

1. A freeze-dried vaccine will always be reconstituted using the diluent supplied with it for the purpose. It is essential that only the pre-cooling of diluent a day before the session (with the same batch number) supplied with the vaccine be used.

6.9 Missing Doses

The policy objective reiterates that all children will be targeted to complete their immunization schedule before the age of one year. But, in cases where doses are missed and children reach ages of more than one year, those children are eligible to receive vaccination up to 23 months:

- All antigens that a child is eligible must be given as soon as possible with appropriate intervals between doses and recorded in the registers and child health cards.

- Screening is preferably done on the basis of written records available at the facility in the registers or the vaccination card with the parents/caretakers. But, due to the low card retention rate in Somaliland, verbal screening could/may also be done to determine vaccination status. If immunization history is not clear or unknown, the decision –

whether to vaccinate again or not - is to be made by the facility health worker and it's recommended that it should be based on risk benefit analysis.

- To minimize the missed opportunity, this policy strongly recommends that any child attending at health facility should be screened if possible and should be given any necessary vaccine antigen.
- Use widespread health education activities to tackle misconception about immunization contraindications such as diarrhoea, vomiting, low grade fever etc.

6.10 Contraindications to Immunization

Policy guidelines and recommendations
In general, the EPI recommends that health workers should use every opportunity to immunize eligible children and eligible woman; vaccines should be given to all eligible children and eligible woman of childbearing age attending outpatient clinics.
Children who are hospitalized should be immunized as soon as their general condition improves and at least before discharge from hospital.
Generally speaking, live vaccines of **Measles, OPV and BCG** should not be given to individuals with immune deficiency diseases or to individuals who are immune-suppressed due to malignant disease, therapy with immunosuppressive agents, or irradiation[14]. However, both measles and oral poliomyelitis vaccines should be given to persons with HIV/AIDS. Children with symptomatic HIV infection should not be immunized with BCG and yellow fever vaccines. Children who are known to be HIV-infected, even if asymptomatic, should **not** be immunized with BCG vaccine.
A severe adverse event following a dose of vaccine (anaphylaxis, collapse or shock, encephalitis/encephalopathy, or non-febrile convulsions) is a true contraindication to immunization. Such events can be easily recognized by the mother and the health worker. A second or third DPT-HepB-Hib injection should not be given to a child who has suffered such a severe adverse reaction to the previous dose. Vaccines containing the whole cell pertussis component should not be given to children with an evolving neurological disease (e.g. uncontrolled epilepsy or progressive encephalopathy).
Persons with a history of anaphylactic reactions (generalized urticarial, difficulty in breathing, swelling of the mouth and throat, hypotension, or shock) following egg ingestion should not receive vaccines prepared on hen's egg tissues (e.g. yellow fever vaccine and influenza vaccine).
All adverse events following immunization must be reported and investigated.

[14] WHO guidelines: Immunization in practice: a practical resource guide for Health workers – 2004 update

6.11 Conditions which are NOT Contraindications to immunization

Minor illnesses such as upper respiratory infections or diarrhoea, with fever <38.5 C

a) Allergy, asthma or other atopic manifestations, hay fever
b) Prematurity, (small for dates) babies
c) Malnutrition
d) Breastfed child or non-breastfed child.
e) Family history of convulsions
f) Treatment with antibiotics, low-dose corticosteroids or locally acting (e.g. topical or inhaled) steroids
g) Dermatoses, eczema or localized skin infection
h) Chronic diseases of the heart, lung, kidney and liver
i) Stable neurological conditions, such as cerebral palsy and Down's syndrome
j) History of jaundice soon after birth.

7. Immunization Service Delivery Strategy

7.1 Service delivery outlets and strategies:

Under the Government public health law, immunization services should be delivered through all public health facilities. The new policy encourages to explore innovative approaches to expand the vaccination activities through all possible channels including the private health facilities.

a) Immunization services should be delivered primarily at all health facilities (Health Centre, Referral health Centre and hospitals), as an integral component of child health services in EPHS and primary health care.
b) Immunization services should also be provided through outreach sessions and through mobile teams by adopting RED (reach every district) approach or any other mass campaign strategies.
c) Outreach services from the health facilities should be provided in all areas in the jurisdiction of the concerned facility as agreed in the health facilities micro-plans and according to catchment areas identified.
d) EPI Mobile teams are recommended and may be deployed in hard to reach areas and as a strategy to serve nomadic population.
e) At fixed EPI centres, immunization of all target groups with all antigens will be carried out by a trained health worker on Immunization in all working days of the week.
f) Outreach activities in the specified areas will provide immunization services to all target groups with all antigens by a trained health worker on Immunization at least once every month or as planned in the district/ health facility micro-plans.
g) The MoHD will support to the private clinics and hospitals, the provision of cold chain equipment, training of staff, vaccines distribution and recording and reporting tools.

7.2 Health workers roles & responsibilities in immunization

According to the existing public health law qualified health workers should be responsible to deliver and monitor the vaccination services in different facilities, sessions, and campaigns.

- At fixed center, immunization services should be provided by the trained staff, specifically designated for this duty by head of the facility.
- Health workers engaged in vaccination activities must be technically updated regularly to be fully responsible to ensure quality and safety.
- Health workers at facilities should be responsible for outreach and mobile activities to the communities within their catchment area.
- Community health workers should be responsible for social mobilization for routine immunization activities in their own catchment areas.
- The health facility team leader/head should be responsible to supervise and monitor vaccination activities including vaccine recording, reporting and stock monitoring in the health facility.

7.3 Supplemental Immunization Activities

The Ministry of Health Development (MoHD) through its EPI program shall decide to conduct SIAs against polio, measles, MNT, or any other disease as deemed necessary. The policy also recommends that partners in EPI should be part of the decision-making process.

7.3.1 Vitamin A supplementation

Policy guidelines
➢ Vitamin A supplementation will be provided to all children between 6 months to 59 months with the recommended doses along with OPV on National Immunization Days and during any other supplemental immunization activities (e.g. Measles follow up campaign) ➢ Vitamin A supplementation will also be provided to children at the time they receive the first measles dose (9months) and the second measles dose (15-18 months) as a part of the essential routine EPI service delivery package. It must also be provided between 6 months to 59 months with the recommended doses during supplemental immunization activities against measles. ➢ WHO recommends that Vitamin A should be administered to children with acute measles. Once measles is diagnosed, one dose of 50,000 IU to children less than 06 months, 100,000IU to children aged 06 to 11 months and 200,000 UI to children above 12 months and above. A second dose should be administered the following day. ➢ Vitamin A supplement of one dose of 200,000 IU will be given to all women postpartum within 6 weeks of delivery.

7.4 Minimizing missed opportunities:

1. A missed opportunity for immunization occurs when a child or woman of childbearing age comes to a health facility or outreach site and does not receive any or all of the vaccine doses for which he or she is eligible.
2. To reduce missed opportunities, all health facilities seeing women and children should offer immunization services on every visit, according to the immunization schedules.
3. The immunization status of all children and child bearing women in the target age group should be screened routinely and immunization should be provided at every opportunity. Health workers should be taught which are true and which are false contraindications, and supervisors should monitor compliance with recommendations. Steps for minimizing missed opportunity will include:

- All vaccines, for which a child and women of child bearing age are eligible, will be administered simultaneously.
- A false contra indication must never be the cause of refusing immunization to a child.
- Multi-dose vial policy will be fully implemented. Health workers shall not refuse vaccination to avoid opening a multi-dose vial for a small number of eligible children or even for one child.
- All health facilities shall screen patients and accompanying children / women for incomplete immunization or missed doses and will offer immunization services.

7.5 Vaccination in Emergency Settings:

Somaliland is a prone to both man-made and natural disasters thus the policy of the Government during emergencies recommends that Measles and OPV/ IPV shall be the first immunization response along with Vitamin A Supplementation in any humanitarian disaster. Routine immunization should be maintained during emergency situation; however, safety of vaccinators and care givers should always come first. It is always important to adhere to local authorities' decisions regarding service delivery during emergency. Routine immunization should be considered in response, recovery and development plans. Supplementary immunization activities may also be considered if recommended by the ICC/ NITAG.

8. Recording, Reporting and Storing Data

In general, the health sector policy is to strengthen information and health intelligence system of the country with the purpose of establishing reliable, relevant, timely and complete health information that operates at the health facility, district, regional, and national level. Health information facilitates the decision-making process and it fosters the planning process of all health programs. Immunization entirely depends on proper information system in terms of planning, implementation and evaluation activities. It is widely believed that poor recording and reporting of immunization activities has been very damaging and has negatively impacted on developing evidence-based policies and strategic planning for EPI.

Policy Recommendations

- Integration of all EPI routine information systems into the DHIS2/ HMIS
- Regular coordination between the various levels of service delivery
- Enhancing staff and institutional capacities in data management
- All necessary data recording, data storing, and data processing tools must be made available in all relevant facilities.
- Have a backup system at all EPI levels to avoid inaccessibility of the date whenever needed.

The facility level vaccination activities' recording and reporting is critical for the program and special attention is required. The health facility staff should be always encouraged to keep up the momentum of improving the recording and reporting activities. Checking and crosschecking of the vaccination records is recommended. Feedback from the higher levels on the regular reports they receive is absolutely vital and should be practiced at all levels. Regular orientation for staff on the importance of quality recording and reporting is strongly recommended. Exploring options for keeping the records, for example, in the event of loss or damage to the facility is very helpful. In other words, a backup system should always be made available.

Recommended action points at health facility Level
1. All health workers providing immunization services should keep records of all immunizations provided, in the daily registers, vaccination cards, vaccine control book and tally sheets.
2. All immunizations given in static center or outreach site or during mobile round should be entered in the daily register.
3. Every child or WCBA immunized for the first time should be given a vaccination card with instructions for card retention. In case of card loss, a new card will be given to the child/woman with entry of previous vaccination based on the facility record.
4. On the last working day of the month there should be a meeting at the facility level which should be attended by the vaccinator and head nurse during which vaccination records should be validated and monthly report prepared.
5. Reporting of adverse events following immunizations (AEFI) should be incorporated in the routine monthly reporting systems. Reporting of adverse events following immunization should be the responsibility of every health worker especially the worker who administered the vaccine and his/ her supervisor.
6. All health facilities with established EPI centres and all outreach sites should officially submit end activity report at the end of every month to the next higher office. 7. The monthly report should reach the next higher health office before the end of first week of the next month.
8. All facilities shall retain a copy of all reports and are required to produce the copies of reports for data quality assessment needs.

The recommended policy action points with regards to recording and reporting procedures from the district to higher levels in the country is outlined in the following table:

Table 7: Reporting procedures by level

Level	Recommended actions for reporting
District Level	1. All reports will be compiled at the district level by the EPI focal person and validated by the district team. 2. Report will be submitted to the regional office regularly at the designated reporting timeframe.
Regional Level	1. All reports will be compiled at the regional level by the EPI Coordinator. 2. Report will be submitted to the national office regularly at the designated reporting timeframe. 3. 3. Availability of vaccine control book and electronic stock management tool (SMT) at regional and central level for trucking vaccine movement.

The performance of the vaccination activities depends on the quality of reporting. The EPI national policy recommends the report compilation, the cross-checking, the submission, the analysis and the feedback should be meticulously undertaken. Periodic staff orientation on the importance of reporting is advised. The leadership and management at all levels should be closely monitoring the reporting quality. Different reporting levels are required to establish necessary forums for reviewing the process on regular basis. Strong collaboration between the different levels and all partners on recording and reporting is advised.

9. Social Mobilization (SM) and Demand creation for EPI;

The EPI policy urges to scale up SM efforts at Regional, District, community and household level with the purpose of increasing demand for immunization and encourage care givers to utilize existing services. The policy strongly advocates pursuing innovative approaches and interventions for improving SM program performance at all levels.

The SM target is to mobilize various societal groups such as health committees, religious structures, professional associations, NGOs, the private sector, women's associations, youth groups, and school programs. The policy pinpoints to use the social media more effectively and sensitize the media before it engages the Social mobilization program for EPI to appropriately disseminate the necessary information to people. As well as, all relevant digital innovation of mass media including Mobile message platforms such as SMS can be explored as reminders to parents to complete immunization and for tracking missed children.

10. Monitoring and Evaluation

The policy reiterates that quality program monitoring and evaluation should always be maintained at all levels. Every effort should be made to continuously and consistently improve local capacities for effective monitoring.

Policy action areas:

1. The EPI program shall have a five-year cMYP and annual work plans for the country against which all EPI achievements shall be monitored
2. All regions/districts and health facilities shall have their respective micro-plan to guide immunization activities.
3. The country will conduct regular data quality assessment to ensure quality, accuracy, time lines and completeness of the immunization coverage reporting system.
4. The policy recommends the health system strengthening (HSS) activities for EPI should be regularly monitored and reviewed.
5. The EPI policy recommends skill development initiatives such as in-service and on-the-job training sessions on program monitoring.

10.1 Indicators for monitoring and evaluation

The country will use the following indicators for monitoring and evaluation of its national EPI program.

Table 8: Key Indicators

Indicator type/level	Indicator description
National	1. Immunization coverage indicators (GCG coverage, IPV coverage, OPV0 coverage, Penta1 and Penta3 coverage. Measles coverage and dropout rate) at national level
Subnational	2. Immunization coverage at Regional, District and facility level
Drop-out	3. Annual drop-out (Penta1/Penta3) rate
Vit. A	4. Vitamin A supplementation coverage
Supply	5. Vaccine stock-out and vaccine wastage
Safety	6. Injection Safety data
Financing	7. Financing and details of expenditure
AEFI	8. Number of AEFI cases reported and outcome
Outbreak	9. Number of Vaccine preventable diseases cases reported

10.2 Use of monitoring chart and minimizing dropout rate

- All facilities are required to have a catchment population and annual, quarterly and monthly target.
- All health facilities should use the immunization monitoring chart to track performance of immunization activities as against the facility's monthly, quarterly and annual targets
- The health workers should convey EPI standard essential messages to the parents/caregiver during the immunization session to minimize dropouts.
- Using the register and the tickler file, the Health workers should prepare a list of dropouts by village/section and engage[15] CHWs, FHW and local elders to trace dropouts and advise on the resumption of their vaccination.
- A difference of more than 10% between Penta1 and Penta3 coverage should alert the facility and should be discussed during monthly review meetings.

10.3 Program implementation review meetings

The purpose of review exercises at all levels is to ensure that the national immunization policy and strategic plans are effectively pursued.

- A review meeting for routine EPI activities should be conducted once every month in the Facility and district levels and will be attended by all EPI related staff including all supervisors.
- Recommendations of the review meeting should be shared with the regional EPI office and implemented at the district.
- A review meeting should be held at the regional level at least once every three months attended by concerned district supervisors.
- A review meeting should be held at national level at least every 6 months and attended by regional supervisors.
- A national review meeting, with the participation of all stakeholders, should be conducted on an annual basis.

10.4 Reporting of administrative coverage

- Administrative coverage will be calculated using doses administered
- The Ministry of Health Development (MoHD) in collaboration with WHO and UNICEF will compile annual administrative coverage and shall submit the JRF to WHO and UNICEF on time.
- The figures submitted in the JRF shall be the official estimate of the country, endorsed by the government.

[15] Engaging CHWs and the community through its local and traditional leaders is an integral component of RED approach and is a requirement for local ownership and sustainability of immunization programs.

10.5 Coverage evaluation and external EPI review

The immunization policy underscores the importance of evaluation of the programs through all possible mechanisms. The periodic vaccination coverage survey is hereby recommended with the support of Somaliland partners. In addition, the policy urges partners to give attention to equity analysis through periodic studies.

1. Independent EPI coverage evaluation survey should be conducted in the country at least once in 5 years, before development of new cMYP.
2. External EPI review of various aspects of the program including service provision, coverage, surveillance, monitoring mechanisms, inventories etc. will be carried out as required.
3. In order to tackle the issue of the increasing dropout rate, the policy urges partners to undertake the following.
    - Health education, community engagement, and default tracing and orientation of service providers is urgently needed.
    - In addition, immunization register and data quality must be consistently supervised and monitored.

10.6 Reporting requirements

The Ministry of Health Development (MoHD) recognizes its international obligation regarding reporting requirements with respect to:

1. Joint Reporting Form to WHO and UNICEF
2. Annual Progress Report to Gavi,
3. Other reporting requirements as advised by WHO and UNICEF in the spirit of partnership
4. UHC progress report to WHO with focus on women and children is essential.

Some of the above-mentioned reports are legally-binding and must be fulfilled by the MoHD. The policy underlines the importance of shared responsibility and program accountability in order to uphold the principles of partnership and collaboration.

11. Ensuring Safety Injections

The policy on safety promotes strict rules and protocols to be consistently observed:

Policy Action Level	What Has to Be Done
Safe injection	1. Every injection given to administer a vaccine must be safe (for 2. the vaccinator, recipient, community and environment). Safety will be ensured by administering vaccine using appropriate equipment and according to the recommended procedures for injection (AD syringes), ensuring sterilization and safe disposal.
Type of syringe and equipment	1. Only AD syringes will be used in all immunization sessions to 2. administer injectable vaccines. Puncture resistant containers (safety box) for collecting and disposing of used syringes, needles and other injection materials must be provided and used in all immunization activities.
Waste management/ Incinerator equipment's	1. In facilities with incinerators, all immunization wastes (safety box 2. filled with used syringes) will be incinerated daily or when required. In facilities without incinerators, all immunization wastes (safety box filled with used syringes) will be burnt and buried in pits within the compound of the health facility. 3. Private hospitals providing immunization service should have quality-control incinerators and disposal facilities.

12. Cold Chain and Vaccine Management

12.1 Cold chain inventory: Policy recommendations and action points

1. Ensure that cold chain equipment inventory at central, regional, district and facility level including the private should be developed annually and updated quarterly.
2. Cold chain inventory will be used to plan for replacement of equipment, while corrective and preventive maintenance will be conducted on need basis.
3. Decisions for any cold chain equipment replacement should be made on the basis of the cold chain inventory and results of periodic assessments by MoHD. The policy reiterates the importance of staff capacities in logistics and cold chain management.
4. MoHD to inspect and make yearly assessment of cold chain inventory in public andprivate cold chain facilities/stores.

12.2 Availability of cold chain equipment:

- Policy guidelines

1. Facilities functioning as fixed centers should ideally have:
   - At least one ice-lined refrigerator with freezing compartment or a simple ILR with a separate freezer (for freezing of icepacks), Temperature chart and temperature monitoring device, two cold boxes and four vaccine carriers.
   - At least one cold box; and at least two vaccine carriers for every outreach team
2. Cold chain and other required equipment for these centers will be provided by MoHD.
3. National, Regional and Districtlevel EPI stores should have sufficient ILRs and freezers according to their needs.
4. No other products (lab reagents, food, etc.) must be stored in the vaccine refrigerator.

12.3 Repair and maintenance: policy recommendations

1. The Regional and National EPI offices should be equipped so that they may provide support for major repairs of cold chain equipment and its jurisdiction.
2. All regions and districts should be equipped to carry out minor repairs and maintenance of the cold chain equipment.
3. All Cold Chain Equipment must be according to the global Standards that should be WHO/UNICEF prequalified.
4. The Government has full responsibility to regulate vaccines and cold chain equipment based on NRA rules

12.4 Vaccine management

Policy guidelines:

1. The systems of shipment, storage, handling, reconstitution and administration should ensure that the quality of vaccines is maintained in line with international standards.
2. Vaccines should ideally not be stored for more than a period of six months at national level, three months at the regional level, one month at both the district and facility level.
3. All vaccine should be stored at temperature in between +2 to +8 degrees except OPV that should be stored at –15 to -25 degrees, if stored for three or more months.
4. Vaccines, syringes and safety boxes will always be supplied as “bundle” of all three items to all levels from the central to service delivery level.
5. All vaccines will be procured with the support of UNICEF from a WHO pre-qualified and accredited manufacturers.
6. The government of Somaliland will establish National Regulatory Authority that will be the body responsible for ensuring quality of the incoming vaccines.
7. Vaccine management assessment, using standard WHO/UNICEF tools such as Effective Vaccine Management (EVM), will be carried out regularly for every three years.

12.5 Supply of vaccines, syringes and safety boxes

1. Vaccine supply should be on the basis of target population or approved micro plan.
2. The MoHD should be responsible for ensuring regular supply of vaccines to all levels.
3. The MoHD should maintain reserve supply of vaccines for three months' country wide requirement.
4. Facilities should ensure collection/receipt of one months' supply of vaccines for all EPI activities in their catchment area.
5. Buffer stock of one month must be maintained at the regional and district levels, andtwo weeks at least at the facilities with fixed centers.

12.6 Use of multi-dose vials of vaccine in subsequent immunization sessions

1. Multi dose vials of OPV, IPV, DPT-HepB-Hib, and Td from which one or more doses of vaccines have been removed during an immunization session maybe used in subsequent immunization sessions for up to a maximum of 4 weeks, provided that all of the following conditions are met:
    a. the expiry date has not passed;
    b. the vaccines are stored under appropriate cold chain conditions;
    c. the vaccine vial septum has not been submerged in water;
    d. aseptic technique has been used to withdraw all doses;
    e. The vaccine vial monitor (VVM), if attached, has not reached the discard point.

2. The policy underlines that vaccine vials without labels must not be used. Given the quality with respect to efficacy and safety, the policy fully supports the global WHO guidelines on the use multi-dose vials as illustrated above.

12.7 Use of vaccine vial monitors in immunization services

1. VVMs should be used to monitor the potency of the vaccine at every level and to identify the weak link in the cold chain if any, and to calculate the wastage of the vaccine.
2. All vaccines will be procured with VVMs, where available.
3. Everyone responsible for cold chain and those who use the vaccine must know how to use and interpret the VVMs.

13. Surveillance and Outbreak Response

13.1 Surveillance of Vaccine Preventable Diseases

The surveillance is an important and integral component of any immunization program. In Somaliland comprehensive surveillance data on vaccine preventable diseases must be collected, analyzed and feedback in the program, to guide activities. Hence this

EPI policy is to enhance and sustain national efforts for strengthening the epidemiological surveillance of vaccine preventable diseases in the country. The policy strongly recommends scaling up disease surveillance efforts and keeps the country free from Vaccine Preventable Diseases (VPD) through the watchful eye of integrated disease surveillance system and the delivery of quality immunization services. The policy encourages all partners to work on feasible options for tackling the challenges facing the surveillance program.

1. The surveillance system of VPD should collect aggregate data on all VPD diseases; and case-based data on selected diseases as will be determined by the government.

The following VPD diseases are currently under surveillance:

- Acute Flaccid Paralysis (AFP)
- ○ Measles/Rubella ○ Diphtheria ○ Pertussis ○ Hepatitis B ○ Neonatal Tetanus

2. All the above disease should be reported by all health facilities
3. The list of reportable VPD will be regularly updated by the government.
4. The designated health workerin the facility will be responsible for reporting of VPDs to the Regional Health Officer (RHO), with a written certificate of notification containing the format particulars, who in accordance must investigate the source of the VPD/notifiable disease and if necessary, take the remedial action considered necessary to hold the spread of the subject disease, then RHO will report to public health director and the Director General of MoHD.
5. Weekly reporting of AFP and measles and monthly reporting of other VPD is recommended.
6. Prompt and appropriate outbreak response should be an integral component of VPD surveillance. The policy underlines that laboratory confirmation is important for certain vaccine-preventable diseases, including polio and measles. For these diseases, a national laboratory network must be established.

14 Adverse Events Following Immunization (AEFI)

Definition: An adverse event following immunization (AEFI) is a medical incident that takes place after an immunization, causes concern and is believed to be caused by the immunization.

1. Although vaccines are extremely safe, as with all medicinal products vaccines are not totally free of adverse reactions. The occurrence of an adverse event after the administration of a vaccine, however, does not prove that the vaccine caused the symptom. AEFI occur even in the most careful conditions nevertheless only rarely is there a direct causal connection between the vaccine and the adverse event.
2. All immunization programs should monitor adverse events following immunization. Casualty assessment committee should be established to investigate any AEFI report.
3. Each Adverse Event Following Immunization (AEFI) should be investigated and efforts should be made to determine its cause.
4. The detection of AEFI should be followed by appropriate measure and communication with parents, health workers, and if several persons are affected, with the community.
5. If the adverse event was determined to be due to program errors, operational problems must be solved, by appropriate logistical support, training and supervision.
6. All AEFI will be reported by the concerned health care provider to the next higher Office for response using standard reporting format.
7. District health office will share the reports with the regional offices for any further action on monthly basis. The district will also maintain a line listing of AEFI.
8. Reporting of AEFI will form an integral part of the routine reporting of the program.

15 Advocacy and Communication

The policy underlines the importance of advocacy in EPI program and urges the concerned institutions and organizations to scale up advocacy efforts. The policy strongly recommends consolidated efforts by all stakeholders including the community and civil society organizations (CSOs) to promote the benefits of immunization, the importance of equity and the overarching call of UHC. Religious leaders and structures should be encouraged to assist in all matters related to promoting the vaccination program against the target diseases. Communication is critical and should be thoroughly reviewed in order to identify and pinpoint the major obstacles the program has experienced. The current policy calls for immediate attention to the following few action points:

Policy guidelines:

1. Currently existing advocacy and communication strategies for health, should be reviewed and a uniform and comprehensive communications strategy developed to be used across the country.
2. Advocacy at all levels should target the key decision makers including political leaders, religious leaders, clan elders, women and youth, and all opinion leaders.
3. Social mobilization activities should continue to target the whole population in general and the parents in particular.
4. Program communication should use all forms of mass media and other sources of information and dissemination with focus on the following:
    - House hold/community and caretaker mobilization and education towards the benefits of Immunizations and information related to Vaccine Preventable Diseases.
    - The importance of completing immunization schedule of all antigens ○ The importance of community participation and acceptance
5. The Ministry of Health Development (MoHD) will conduct annual vaccination weeks in line with Global and Regional themes

16 Collaboration with Local Institutions

Inter-sectoral collaboration (IC) is critical for all health programs including immunization. The EPI policy outlines that IC is the joint action taken by health and other government sectors, as well as representatives from private, voluntary and non-profit groups, to improve the health of populations. The policy, therefore, calls for pursuing all options to strengthen collaboration with line ministries, CSOs through health-in-all policies (HiAP) approach[16]. Alliances, coalitions, cooperatives whatever form possible should be established at all levels. Every efforts should be made to explore innovative approaches and options for reinforcing the existing collaboration. Seeking international experiences on intersect oral action will remain a key aspect of the national effort towards strengthening partnerships on immunization. Somaliland is committed to the SDGs and particularly honors the partnerships goal, where a collective vision is absolutely necessary for pursuing the UHC 2030 goal in particular and SDGs in general.

[16] HiAP approach, Adelaide Statement, 2010, a Joined up Government action

16.1 Collaboration With Other Government Institutions

Policy guidelines:

The Ministry of Health Development (MoHD) provides both policy and strategic direction in implementing the strategy including the roll out to its decentralization government system at district and lower levels. Other ministries such as Ministry of Education and Ministry of Religious Affairs, Ministry of Interior, Ministry of Information, will use the strategy to guide the development and implementation of all immunization activities.

1. The Ministry of Health Development (MoHD) should collaborate with the Ministry of Education and Ministry of Religious Affairs to make screening of children for vaccination a mandatory procedure for kindergarten/school enrollment. A mechanism to vaccinate children for missed doses will be established. The current inactive school health program must be revitalized and the draft school health should be endorsed.
2. The health sector should collaborate and seek the assistance of all other ministries such as ministries of Finance, Information, Religion, Women and Family Affairs and other government agencies in the implementation of vaccination activities.
3. The health sector should collaborate and seek the assistance of all government organs in making reporting of reportable diseases a mandatory requirement as will be stipulated in further and successive directives.
4. National and regional-level collaboration bodies working under the national high level intersectoral action (ISA) for promoting EPI program should be established. A clear TOR for the intersectoral group should be developed and endorsed by all line ministries.

16.2 Collaboration and Partnership With Non-governmental Organizations and UN Agencies

The stakeholders have varied roles to ensure the implementation of the Somaliland EPI policy, based on the strategic directions of the national health policy.The EPI policy reaffirms the government's aspirations for stronger partnership with the global vaccine alliance (Gavi), UNICEF, and WHO. Such partnerships, will continue with greater spirit and with a collective vision for improving immunization outcomes in this country. The policy upholds the establishment of high-level interagency forum where joint decisions are collectively taken, where agencies transfer expertise to locals, where high level national EPI benchmarks and targets are deliberated, and where program sustainability and financing (external and domestic) are examined. Action points and policy recommendation are provided below:

1. The MoHD should provide leadership in all collaborative programs related to policy development, joint planning, implementation, joint monitoring and joint evaluation
2. The MoHD should periodically undertake stakeholder analysis and develop database for partnership to use as observatory tool for EPI partnership program
3. The health sector will collaborate with UN health supporting agencies in all matters related to EPI activities. The policy acknowledges the existing collaboration and meanwhile recommends that there is always a room for improvement vis-à-vis cooperation and partnership with all UN agencies and notably with UNICEF, WHO, UNFPA, WFP, UNDP, FAO and UN Habitat. On SDGs the health goal is a cross-cutting

which brings many key players together and improving the lives of women and children, and is indeed a key component of the polices of all these agencies

4. The policy encourages stronger lobbying for increased funding.
5. Collaboration with professional associations, academic institutions, and nongovernmental organizations through technical forums are strongly recommended. The academia is expected to play a major role in program planning and evaluation. It is a major collaborator with MoHD in research activities and in health surveys, including the vaccination program. Further areas of collaboration in expanding immunization activities should be explored with medical and public health schools.

17 Program Coordination

Coordination in immunization program is a governance function and is a key ingredient for improving the performance of the vaccination. Strong coordination among actors in EPI is vital and should always remain central to the overall health system strengthening efforts especially in countries in political transition. The presences of large number of actors often pose a serious challenge to the health authorities. Among others, poor coordination undermines the ownership and always impedes efforts to achieve successful and sustained aid and cooperation. Ownership, itself presents particular difficulties in situations of fragility and conflict which is further aggravated by the large number of health supporting agencies engaged in delivering various programs and projects. Poor coordination affects the focus on results where national benchmarks and targets are poorly met given the fragmentation of efforts. Effective coordination fosters ownership which once developed represents a win-win situation for the government and its partners. Coordination ensures joint assessments, progress towards shared responsibility and mutual accountability. It promotes inclusive development partnerships where issues are collectively addressed, and decisions are made through a broader consultative process. Given the importance of program coordination the policy advises that regular assessments should be undertaken to ensure that coordination at all levels is running smoothly. It is crucial to review the organizational structure at national and subnational levels; to review the tools and resources such as stakeholder's data-base, and communication channels; and to examine the implementation of proposed tasks for coordinating bodies.

The national policy EPI calls that necessary technical and material support should be provided regional level and national teams to strengthen EPI coordination at all levels. The EPI teams at regional and district level should be strengthened through skill development interventions. The national EPI policy recognizes the following coordinating forums and urges for continuous improvement of the existing structures, TORs, composition, organization, methodology, and input and output performance indicators. The nationals should provide the necessary leadership for convening the following immunization coordination activities on regular basis.

- EPI working group (Monthly)
- EPI review meetings (Monthly at district level, Quarterly at Regional /National level).
- EPI planning meetings (Quarterly and Annually)
- Cold chain review meeting jointly with UNICEF.
- Facilitating ICC meetings at national level and regional level
- Joint appraisals
- GAVI review meetings.

18 EPI Capacity-building Initiatives

The national immunization policy reiterates the high level commitment of the government to strengthen skill development activities under the capacity building initiatives, through continuous transfer of knowledge and expertise. It addresses to all partners, particularly the World Health Organization and UNICEF to assist in the following areas:

1) Leadership and management of immunization managers at national, Regional and District level.
2) Immunization practices
3) Micro planning
4) Cold chain training along with UNICEF.
5) Data quality improvement
6) Surveillance
7) Health system strengthening [planning, proposal writing etc.]
8) UHC 2030 and SDGS
9) Role of CSOs
10) Integrated and supportive supervision & monitoring
11) Communication strategy
12) Equity analysis

19. Conclusion

The EPI policy document is a living document which is subject to continuous review, adjustments and updates. Fifteen health agencies were engaged in deliberating the development of an evidence-based policy, designed to tackle the major challenges facing the vaccination program. The policy development process identified nine strategic directions for improving planning, implementation and monitoring phases of EPI program. High level commitment to program sustainability through enhanced collaboration and dedicated leadership is one of the key policy messages.

Linking the immunization to the higher national development frameworks such as the universal health coverage and SDGs is a priority decision for the government to ensure the immunization services remain central to attaining some of the SDGs health-related goals. The policy recommends the functional integration of EPI into the overall health system framework, it calls for exploring innovative approaches in reaching the missing children and it supports the introduction of new vaccines and additional doses for existing vaccines like 2nd dose of MCV and IPV vaccines. The guiding principles of the immunization program as expressed in the national policy is the realization of equitable services with the purpose of “leaving no one behind”.

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