Development of Health Information System Strategy in Somalia:

A step-wise approach

Draft Concept Note, 23 July 2022

Background

Decision-makers at all levels need reliable, timely and comparable health-related data to make evidence-informed policies and decisions, allocate and manage resources, analyse population health, monitor health systems performance and evaluate health reforms. Monitoring progress towards the health-related Sustainable Development Goals (SDGs) and targets also requires sound data. Furthermore, disaggregated data is a key ingredient to assess progress in health equity and gender equality, ensuring that no one is left behind – the central, transformative promise of the 2030 Agenda for Sustainable Development.

The health of the population is largely determined by social determinants of health, which are elements of the social, economic and physical environments interacting with individual biological factors and behaviours, shaping the health status of the population¹. Consequently, health information refers to processed data on key areas such as social determinants of health, risk factors, health status and health systems components including service delivery and utilization, immunization coverage, human resources for health, essential medicines and medical supplies, health emergency preparedness and response, as well as health financing and expenditure. Civil registration and vital statistics (CRVS - notably births, deaths, causes of deaths) related to the whole population are also important health information.

As one of the six building blocks of the health system, an effective health information system (HIS) is essential; and provides data and statistics on various aspects of health and health systems. An HIS can obtain information and data from a wide variety of data sources. Data can be collected through population-based sources such as surveys and CRVS system, institution-based data sources (e.g. facility-based sources, health management information system – HMIS) and public health surveillance systems (integrated disease surveillance and response, IDSR). Hence various data sources can be used to collect health information, yet still be part of an HIS. A well-functioning HIS is a prerequisite for the generation of reliable and timely health-related data².

Somalia's current health information and disease surveillance systems use the District Health Information Software 2 (DHIS2); however, they are fragmented with challenges in terms of the availability of reliable and timely information, and the use of data. As in-country data and information often is missing, there has been a reliance on estimates provided by various multilateral organisations; estimates which may not always reflect the reality in the country³. The Federal Ministry of Health (FMOH) has in several documents, including in the Health Information System Statistical Plan 2018-2022 and the Somalia National Action Plan for Health Security 2020–2024, emphasized the need for adequate, reliable and timely health information. The Essential Package of

¹ Dahlgren G, Whitehead M. 1991. Policies and Strategies to Promote Social Equity in Health. Stockholm, Sweden: Institute for Futures Studies.

² Everybody's Business, Strengthening Health Systems to Improve Health Outcomes, WHO Framework for Action, World Health Organization, 2007.

³ Assessment Summary for Somalia, Data from 2013-2018, SCORE for Health Data Technical Package, World Health Organization, March 15, 2021.

Health Services (Somalia EPHS 2020) calls for an integrated HIS to capture data on health service delivery. The Health Sector Strategic Plan 2022-2026 highlights the need to establish an effective HIS that provides accurate and timely health data for evidence-based planning and implementation, supported by effective monitoring and evaluation (M&E) and by targeted research as a problem-solving tool. Consequently, the FMOH intends to develop an HIS Strategy 4,5,6,7, that can guide HIS improvement, which can reinforce informed decision-making and strengthen Somalia's capacity to monitor national health development and the health status of the population. It will also respond to the data demands from partners, and to monitor the impact of the WHO's Thirteenth General Programme of Work (GPW13) for 2019–2023 which emphasizes the use of data for health policy development and implementation.

The FMOH Somalia requested WHO Somalia country office to provide Technical Assistance to the development of a HIS Strategy. This Concept Note outlines the methodology and steps needed that the FMOH and WHO propose for the development of the HIS Strategy.

Objective of the Health Information System Strategy

The general objective of a Health Information System Strategy is to highlight what health information is needed for better decision making to improve population health and the health system; as well as to outline the strategic direction and actions needed so that such health information can be collected, stored and be made available for decision-making purposes.

Proposed Methodology and Steps to Development of the HIS Strategy

The FMOH and WHO propose that the development of a HIS strategy in Somalia involves finding the answers to three crucial questions:

- I. What health information is already available from which systems and data sources?
- II. What health information do we need and want (given available resources)?
- III. What do we need to do to obtain the health information that we need and want?

The three questions define the steps needed in order to develop the HIS strategy.

Step 1: Comprehensive assessment of current health information system

The comprehensive HIS assessment of the current health information situation is a situation analysis that will inform the development of the HIS Strategy. The comprehensive assessment of currently

⁴ Somalia National Development plan 2020 to 2024, The Path to Just, Stable and Prosperous Somalia, The Ministry of Planning Investment and Economic Development.

⁵ Health Information System Statistical Plan 2018-2022, Federal Ministry of Health and Human Resources, Federal Government of Somalia.

⁶ Essential Package of Health Services, Implementation Strategic Plan (EPHS-ISP), June 2021, Federal Republic of Somalia, Ministry of Health and Human Services

⁷ Somalia Health Sector Strategy Plan 2022-2026 (HSSP III), Draft, Ministry of Health and Human Services, Federal Government of Somalia

available health information is intended to answer the question: What health information is already available from which systems and data sources?

Through a consultative process with its Member States, the WHO Regional Office for the Eastern Mediterranean (WHO EMRO) has developed an approach for the assessment of an HIS focusing on three main components: monitoring health determinants and risks; assessing health status, including morbidity and cause-specific mortality; and assessing health systems performance.

Several methods are proposed to be used when undertaking the comprehensive assessment. These include desk review of various documents and systems, field visits, key informant interviews, focus group discussions and assessment workshop with partners.

The comprehensive assessment will result in a draft assessment report which will be disseminated and discussed with partners on conclusions and the way forward. The final assessment report must be approved by the FMOH.

Purpose of the assessment

Within the context of changing data needs at the national, regional and international levels, the key objectives of the assessment are to:

- 1. Review the different sources of data for HIS (i.e. population based and facility-based, surveys and routine data collection, special studies, service records and individual records, and surveillance or community systems).
- 2. Assess the national health information systems including databases available to increase understanding of and identify areas for improvement particularly on information flow and systems-level use of data.
- 3. Provide an understanding of data sources content, data elements, associated reporting burden, and how these information systems are used and by whom.
- 4. Study the existing governance structures, HIS functions, infrastructure and support mechanisms to sustain generation of high quality of data.
- 5. Appraise data management and standard practices applied to enhance quality assurance and support use of data for decision-making.
- 6. Assess the strengths and opportunities for improvement of HIS procedures and domains with respect to management and governance; infrastructure; standards for data management; data collection and processing; and data analysis, dissemination and use.
- 7. Provide a way forward for strengthening the national integrated HIS in line with global and regional HIS standards, indicator frameworks and guidelines.
- 8. Recommend strategies that build capacity of the information management system enabling it to produce core indicators on disease burden and surveillance, mortality, health access and utilization, and human resources, including responding to the information requirements of sustainable development goals and universal health coverage (UHC).

Activities to be undertaken by the assessment team

The assessment team will be led by WHO EMRO with support of international consultants, the Federal Ministry of Health and WHO Somalia Country Office. The team will undertake an assessment of the existing HIS and is expected to:

1. Review relevant background document and assessment reports, publications and materials related to HIS in Somalia.

- 2. Conduct field visits (in separate teams) to selected facilities at different levels (primary health unit, health centre, district hospital, referral hospital), in different context (urban, rural, displaced settlement), including other relevant institutions responsible for HIS-related data. Prior to the field visit, the assessment teams will participate in an orientation session on objectives, work methods, assessment tools, etc.
- 3. Conduct a 2-day national workshop in Somalia with key partners and stakeholders to identify and consolidate key issues from the field visits related to HIS and formulate the way forward for their solution, including identifying priorities.
- 4. Critically evaluate existing governance structures and capacities in order to translate stated government policy and international obligations into practice to standardize reporting of health situation and trends in Somalia and at the regional and international level.
- 5. Present results of the assessment to all departments of the Federal Ministry of Health, the state level Ministries of Health, other national stakeholders and partner to ensure understanding and agreement on the findings.

Expected outputs of the assessment

The following are the key outputs of the assessment:

- 1. Field visits to selected facilities conducted and reported
- 2. National workshop facilitated
- 3. Final HIS Assessment Report with clear way forward approved by the Federal Ministry of Health.

Step 2: Development of draft Health Information System Strategy with preliminary Road Map for Key Priority Actions

The comprehensive assessment will inform the development of the HIS Strategy. The HIS strategy aims at identifying: What health information do we need and want (given available resources)?

The HIS strategy will also include a road map for key priority actions required in order to obtain the health information that has been identified as needed and wanted for planning and decision-making purposes. Consequently, the road map will answer the question: How are we going to get this health information system in place? What do we need to do to obtain the health information that we need and want?

A draft strategy will be complied. As the process of developing the HIS strategy should be participatory, all relevant partners and stakeholders will be involved in consultations and a one-day workshop where the draft strategy with a preliminary Road Map for Key Priority Actions will be presented and discussed.

Step 3: Final Health Information Strategy with Road Map for Key Priority Actions

The one-day workshop with relevant partners and stakeholders mentioned in Step 2 will inform the final HIS Strategy including the Road Map for Key Priority Actions. The final HIS Strategy will be compiled after the workshop. The final HIS Strategy with the Road Map for Key Priority Actions should be verified and approved by the Federal Ministry of Health.

Work Modalities and Team

Technical Working Group for development of the HIS Strategy (TWG-HIS) will comprise of various partners included federal member state level ministries and the National Bureau of Statistics (NBS), headed by the FMoH, supported by WHO Country office. The TWG will oversee the work with the development of the HIS Assessment, the HIS Strategy with the road map. The Terms of Reference of the TWG-HIS will be developed by the FMoH. Minutes of meetings will be compiled and distributed to partners after each meeting.

The actual work with the comprehensive assessment, the development of the HIS strategy and road map for key priority actions will be undertaken by a team comprising of members from FMoH, NBS, partners involved in HIS (IOM, SPIDER, UNICEF, UNFPA and the World Bank) and the WHO Country Office, technically guided by WHO EMRO and international consultants. As part of the assessment, the team will take part in an orientation session prior to field visits. The orientation session will clarify the objectives, work methods and assessment tools to be used during the assessment.

WHO Somalia Country Office has a Memorandum of Understanding with SPIDER, the Swedish Program for ICT in Developing Regions, of Stockholm University. SPIDER is a centre focusing on digitalization for international development. SPIDER has undertaken assessments of digitalization of electronic health records in Somalia, within the project called Health Alliance for Digital Development & Action (HADDA). SPIDER could therefore be member of the HIS assessment team.

WHO EMRO in collaboration with WHO Country Office Somalia will have the overall responsibility to lead implementation of the comprehensive HIS assessment and will work with the Federal Ministry of Health and other national partners and stakeholders. WHO EMRO will provide guidance during all phases of the assessment and the strategy development; facilitate the co-ordination of team members' roles and responsibilities during the mission, and be responsible for writing the final assessment report and the draft strategy document with the road map.

WHO Country Office Somalia in collaboration with the Federal Ministry of Health will coordinate all in-country logistics such as identification of facilities and institutions for field visits during the assessment, identification of participants for the national workshop and any other logistics for the successful implementation of the assessment. In country logistics will be coordinated in consultation with WHO EMRO.

Budget and Funding Arrangements

The costs of the assessment will be covered by WHO. The WHO Somalia Country Office will fund transport and accommodation (if needed) for WHO staff and Federal / State MOH staff members, as well as funding related to transportation within Somalia for all members of the assessment team.

WHO EMRO will fund international travel to and from Somalia for EMRO staff and for the international consultants, as well as fund the international consultants' fees.

Overview of Activities and Timeline

WHO estimated that the work with the comprehensive assessment and the development of the HIS and the Road Map for Key Priority Actions will require an estimated 16 weeks in total.

Table 1 below provides an overview of the activities undertaken in steps 1, 2 and 3. Table 2 gives an overview of the timeline of the development of the HIS strategy, from start to end-product.

As the comprehensive HIS assessment and the HIS Strategy development involve WHO EMRO and international consultants, as well as many partners and stakeholders, two weeks have been blocked in red in Table 2 below. These two weeks specifically concern:

- 1. the field visits and the national workshop with partners and stakeholders which will take place either 10-15 September or 10-18 September, depending on number of teams and feasibility.
- 2. The development of national HIS strategy workshop with partners and stakeholders, which will take place *during the first week of October*.

Table 1: Overview of Activities

Step	Activity										
Step 1	Comprehensive Assessment										
	Planning and preparations										
	Desk review of documents										
	Assessment team orientation session on objectives, work methods, assessment										
	tools, etc.										
	Field visits to states and national level organisations, Key Informant Interviews, Focus Group Discussions Assessment workshop with partners and stakeholders										
	Draft report writing										
	Consultations with FMOH and partners										
	Final assessment report										
Step 2	Development of draft HIS Strategy and draft Road Map for Key Priority										
	Actions										
	Preparations and draft strategy writing										
	Consultative HIS strategy development workshop with partners and										
	stakeholders										
Step 3	Final HIS Strategy and Road Map for Key Priority Actions										
_	Final HIS strategy writing										
	Consultations with FMOH and TWG-HIS										
	FMOH approval of HIS Strategy										
	Dissemination										

Table 2: Timeline for development of HIS Strategy for Somalia

Activities		Planned duration in months and weeks, 2022														
		July				August				September				October		
Activities	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Fact finding mission on HIS (undertaken 26-30 June, 2022) and seminar 1 July, 2022																
Development of Concept Note																
Identification and recruitment of consultant(s)																
Planning and logistics preparations for the HIS assessment (field visits and national workshop)																
Review of documents																
Field visits and including national workshop (Alternative dates depending on number of teams and feasibility: 10-15 September or 10-18 September)																
Analysis and draft assessment report preparation																
Preparations for national HIS strategy development																
Development of national HIS strategy workshop with partners and stakeholders																
Finalization of HIS assessment report																
Finalization of HIS strategy including Road Map																
FMOH approval of HIS strategy including Road Map																
Dissemination of HIS Strategy																

