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Sida Decentralised Evaluation

NIRAS Sweden AB

Evaluation of Sweden's support to health systems in Somalia through PHAS, SPIDER and WHO

Final Report

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**Final Report
June 2025**

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The views and interpretations expressed in this report are the authors' and do not necessarily reflect those of the Swedish International Development Cooperation Agency, Sida.

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Abbreviations and Acronyms

AFENET	African Field Epidemiology Network
Africa CDC	Africa Centers for Disease Control and Prevention
ANC	Ante-Natal Care
CMAM	UNICEF's Community Management of Acute Malnutrition data collection tool
DHIS2	District Health Information Software 2
EPHS	Essential Package of Health Services
EHR	Electronic Health Records System
EQ	Evaluation Questions
EU	European Union
FETP	Field Epidemiology Training Programme
FGD	Focus Group Discussions
FGoS	Federal Government of Somalia
FMoH	Federal Ministry of Health and Human Services (Somalia)
FMS	Federal Member States (of Somalia)
FoHM	Folkhälsomyndigheten (Public Health Agency of Sweden, PHAS)
GHSA	Global Health Security Agenda
HADDA	Health Alliance for Digital Development and Action
HIS	Health Information System
HISP	Health Information Service Provider Network
HMIS	Health Management Information System
HSS	Health Systems Strengthening (HSS)
HSSP III	Health Sector Strategic Plan 2022–2026 (Somalia)
IANPHI	International Association of National Public Health Institutes
ICT	Information Communication Technology
IDSR	Integrated Disease Surveillance and Response (IDSR) System (IDSRS)
IHR	International Health Regulations
KasmoDev	Consulting firm in East Africa and Horn of Africa
KII	Key Informant Interview
MCH	Maternal and Child Health
MoH&HS	Ministry of Health and Human Services (Federal Government Somalia)
MoU	Memorandum of Understanding
NAPHS	National Action Plan for Health Security
NBS	Somali National Bureau of Statistics
NGO	Non-Government Organisation
NIH	National Institute of Health (Somalia)
NPHIs	National Public Health Institutes

ABBREVIATIONS AND ACRONYMS

OECD DAC	Organisation for Economic Cooperation and Development – Development Assistance Committee
OGOW	OGOW Health (a Canadian Somali e-health start, with an electronic health record tool)
ONA	Organisational Network Analysis
PHAS	Public Health Agency of Sweden
RAAD	In Somali it means "to trace" - name of EHR system developed by NomadiLab for SPIDER
SDGs	Sustainable Development Goals
Sida	Swedish International Development Cooperation Agency
SIDRA	Somali Institute for Development Research and Analysis
SOP	Standard Operating Procedures
SSA	Sub Saharan Africa
SPIDER	The Swedish Programme for ICT in Developing Regions, Stockholm University, Sweden
SRHR	Sexual and Reproductive Health and Rights
TCC	Technical Coordination Committee
ToC	Theory of Change
ToR	Terms of Reference
TWG	Technical Working Group
TWT	Technical Working Team
UHC	Universal Health Coverage
WFP	World Food Programme
WHO	World Health Organization
WHO-AFRO IDSR	WHO African Region Integrated Disease Surveillance and Response

Preface

This Evaluation of Sweden's support to health systems in Somalia through PHAS, SPIDER and WHO) was commissioned by the Embassy of Sweden in Nairobi, Somalia section.

The evaluation took place from November 2024 to April 2025 and was conducted by:

- Ms. Francesca Cook, Team leader;
- Dr. Yibeltal Alemayehu, International health expert; and
- Dr. Mohamed Ahmed Omar Jimale, National health expert.

The forward-looking workshop took place in Nairobi in May 2025.

Ms. Katarina Lundblad managed the evaluation process at NIRAS. Mr. Ted Kliet provided quality assurance advice. Mr. Erik Turner, Programme Officer, managed the evaluation at the Embassy of Sweden in Nairobi, Somalia section.

The authors would like to acknowledge and thank all of those who gave their valuable time to contribute to the evaluation.

Executive Summary

Introduction

This evaluation was commissioned by the Embassy of Sweden in Nairobi, Somalia Section (hereafter Embassy of Sweden), to **assess Sweden's contribution to strengthening the Somali health system** through support to three complementary interventions. These are (i) the Public Health Agency of Sweden (PHAS) strengthening the Somalia National Institute of Health (NIH); (ii) The Swedish Programme for ICT in Developing Regions, Stockholm University (SPIDER), through the Health Alliance for Digital Development and Action (HADDA) project, advancing digital health and health information systems; and (iii) The World Health Organization's Office in Somalia (WHO) enhancing health surveillance, the health system, and providing advice to and cooperating with PHAS and SPIDER, and liaising between these interventions and Somali institutions. The evaluation covers the period from 2019 to early 2025.

The **primary purpose** of the evaluation is: to assess the relevance, effectiveness, coherence, and sustainability of the interventions; and to generate lessons to inform future programming, particularly in fragile and conflict-affected settings. Primary users include the Swedish Development Agency (Sida), the Embassy of Sweden, PHAS, SPIDER, WHO and Somali health actors.

The evaluation employed a **mixed-methods approach**, triangulating qualitative and quantitative data. While the evidence base¹ was sufficient to reach robust findings, it was limited by data scarcity, political changes in Somalia affecting access and institutional continuity, and inherent challenges linked to operating in fragile contexts and accounting for political complexities. As such, conclusions must be viewed within the constraints typical of evaluations in these environments.

Key Findings

This section presents a **consolidated synthesis of the main findings** in response to the Evaluation Questions. It is intended to provide an integrated overview of findings across the three initiatives (PHAS, SPIDER, and WHO), combining perspectives that are presented

¹ This included key informant interviews (15 scoping interviews, 36 data collection interviews; and an additional 32 persons interviewed during 6 field visits to health centres in the three pilot regions (Federal Member States) of Puntland, Galmudug and Banaadir, (in one region the interviews were conducted virtually). Over 20 documents were consulted, along with relevant websites.

separately in the main text of the report. Responses related to contributions to 'health system strengthening', 'lessons' and 'implications for fragile settings' are also addressed in separate sections of this executive summary.

EQ1: What progress and outcomes have been achieved in relation to the planned results (as expressed in the Theory of Change and project documents)? To what extent have the interventions contributed to strengthening capacity in the areas of core public health functions in the health sector/system in Somalia? What are any unexpected effects?

Overall Progress and Achievements

Across the three interventions meaningful progress was made towards strengthening critical health system capacities in Somalia, despite operating in a complex fragile and volatile environment.

PHAS made significant strides in developing the Somalia National Institute of Health (NIH) by supporting its initial strategic and operational frameworks, strengthening governance, and surveillance capacities, and enhancing Somalia's engagement in regional/international public health networks. Training activities, carried out in partnership with WHO, in outbreak investigation, data analysis, and public health research contributed to building institutional foundations.

SPIDER's HADDA programme advanced digital health capacities through the development and piloting of the RAAD electronic health record system, strengthening Somalia's health information system (HIS) foundations. SPIDER also fostered capacity-building amongst frontline health workers and introduced processes for greater digital interoperability aligned with the national District Health Information Software 2 (DHIS2) system.

WHO played a vital role in reinforcing the Integrated Disease Surveillance and Response (IDSR) system, supporting surveillance strengthening, health data governance, and facilitating technical coherence and alignment across interventions. The organisation also provided consistent technical advice to national authorities, helping to anchor gains in Somalia's broader health sector strategies, and provided most of the FETP capacity trainings.

Together, these interventions contributed to improvements in disease surveillance, data use for planning and response, nascent research capacity, and digital health innovation — all of which are essential building blocks for a strong health system in Somalia, and to Health Information System (HIS) and the Health Management Information System (HMIS).

Strengths

- **Institutional Foundations:** PHAS contributed to building Somalia's NIH as a credible entity, though its consolidation remains fragile.
- **Surveillance Strengthening:** WHO and PHAS support to IDSR and field epidemiology training improved Somalia's capacity to detect and respond to outbreaks.
- **Digital Health Innovation:** SPIDER's RAAD platform introduced a user-centred, interoperable electronic health record system, piloted in priority regions.
- **Capacity Building:** All three interventions provided targeted, context-sensitive capacity-building initiatives that enhanced individual and organisational skills.

- **Visibility and Networks:** Somalia's engagement in international public health forums (through PHAS, WHO, and SPIDER support) elevated the country's public health profile and connections with the broader community of practice, including within the diaspora.

Challenges and Limitations

Despite these gains, several cross-cutting challenges affected the depth and sustainability of achievements:

- **Political Fragility:** Changes in government leadership led to institutional disruptions, particularly affecting the continuity of the National Institute of Health (NIH).
- **Infrastructure Constraints:** Weak internet, electricity, limited device availability, and health facility infrastructure limited the scalability of digital health initiatives.
- **Partial Integration:** Private sector health actors², responsible for the majority of healthcare delivery in Somalia, were not particularly engaged across interventions, so that gains in the "health system" refers to a system that addresses about 40% of the population.
- **Data Fragmentation:** Although progress was made, health information systems remain fragmented, and full interoperability is yet to be achieved.
- **Reliance on External Funding:** Progress across all three interventions remained heavily dependent on external financial and technical support, raising sustainability concerns.

Unexpected Effects

Several positive, though unplanned, effects emerged:

- Somalia's increased participation in regional public health fora, supported by PHAS and WHO, strengthened institutional visibility and confidence.
- The piloting of RAAD catalysed broader national discussions about digital health governance, and the need for less electronic health record (EHR) fragmentation.

EQ2: To what extent have the chosen methods and aid modalities been effective?

Overall Effectiveness

Across the three interventions, Sweden's chosen methods and aid modalities proved largely effective and appropriate for the fragile Somali context, though with some notable lessons for future programming.

PHAS employed a peer-to-peer institutional cooperation model, focusing on mentorship, strategic planning, and joint technical work with Somali counterparts. Study visits, field

² SPIDER foresaw the need to work with private sector actors but this dimension was not favoured by government counterparts. SPIDER has started a private sector pilot in Jubaland.

epidemiology training, and hands-on capacity development initiatives were well-received by Somali stakeholders and helped to build trust and professional skills.

SPIDER adopted an adaptive, innovation-driven approach through the Health Alliance for Digital Development and Action (HADDA) programme, promoting a human-centred design for the RAAD electronic health record platform. SPIDER's methods emphasised local engagement, capacity building, and alignment with national health information priorities, increasing relevance and a sense of government ownership.

WHO applied a facilitative and cooperation-focused modality, embedding technical assistance, supporting national Integrated Disease Surveillance and Response (IDSR), and fostering coherence across interventions; whilst also carrying out a huge number of key actions in support of health system strengthening. WHO's technical leadership and normative guidance were key to anchoring the efforts of PHAS and SPIDER within national health strategies.

Together, the interventions demonstrated that context-sensitive, partnership-oriented modalities can achieve meaningful results, even amid persistent political and operational challenges.

Strengths and Achievements

- **Peer Learning and Embedded Support:** PHAS's peer-learning approach, combined with WHO's embedded technical assistance, facilitated trust-building and professional development.
- **Adaptive Digital Innovation:** SPIDER's flexible, user-centred design approach enabled the successful piloting of RAAD despite infrastructural limitations.
- **Coordination Mechanisms:** WHO's support for the Federal Ministry of Health and cross-institutional forums strengthened the normative framework, strategies, approaches, and information exchange.
- **Flexible Financing and Modality:** Sida's flexibility in financing allowed partners to adapt approaches to changing realities on the ground, a key enabler of success.
- **Complementary Strengths:** The combination of institutional strengthening (PHAS, WHO), digital transformation (SPIDER, WHO), and normative technical support (WHO, PHAS) proved mutually reinforcing.

Challenges and Limitations

- **Operational Role Clarity:** The division of labour between PHAS, SPIDER, and WHO was not fully formalised at the outset. Non-financial Memorandums of Understanding were concluded but lacked detailed operational action plans.
- **Sustainability Mechanisms:** While methods effectively built individual and organisational capacity, sustainability strategies (e.g., retention of staff, institutional embedding) were less robust.
- **Infrastructure Constraints:** Digital methods, such as RAAD roll-out, were hampered by underlying infrastructural deficits (electricity, internet, hardware, finance).
- **Follow-Up Mechanisms:** Post-training alumni networks, structured follow-ups, or communities of practice were promoted to an extent but were mostly not fully operationalised or sustained.

EQ3: To what extent has the intervention responded to the needs and priorities of Somalia? How coherent is the intervention in the context of Somalia?

Overall Responsiveness and Coherence

Sweden's support, through PHAS, SPIDER, and WHO, demonstrated a high degree of alignment with Somalia's national health needs, priorities, and strategies. Each intervention addressed critical capacity gaps identified by Somali authorities, while maintaining coherence with broader international health frameworks such as the International Health Regulations, Universal Health Coverage goals, and WHO-AFRO's Integrated Disease Surveillance and Response (standards).

PHAS's support to the Somalia National Institute of Health directly responded to an explicit request from the Somali Federal Ministry of Health, addressing the urgent need for independent-institutional capacity to manage surveillance, research, and public health leadership functions. The SPIDER HADDA project responded to national priorities for strengthening health information systems, focusing on digitalisation and data-driven decision-making, in close coordination with Somali stakeholders. WHO's support reinforced national health security priorities, facilitated surveillance system strengthening, and helped align the other interventions with Somalia's broader health governance frameworks. All interventions were coherent with the Somali context.

Strengths and Achievements

- **Alignment with National Strategies:** All interventions were aligned with Somalia's Health Sector Strategic Plan III (2022–2026), the National Action Plan for Health Security, and Somalia's Digital Health Strategy.
- **Complementarity Across Interventions:** Over time, PHAS, SPIDER, and WHO strengthened synergies, particularly in areas such as disease surveillance, digital health innovation, and health information system strengthening.
- **International Standards Compliance:** The interventions adhered to and promoted international best practices, ensuring Somalia's progress toward global health security and Universal Health Coverage targets.
- In addition, Somalia's engagement in regional and continental public health networks, supported by PHAS and WHO, **enhanced visibility**. WHO's support helped create informal spaces for dialogue and technical alignment across international and Somali stakeholders, even when formal coordination structures were weak.

Challenges and Limitations

- **Private Sector Engagement:** Somalia's health sector is predominantly private, yet engagement with private health actors in surveillance, data reporting, and digital health integration was extremely limited across all three interventions.
- **Fragmentation Risks:** Somalia is a precariously governed country with embedded fragmentation - the projects worked within this context but still were affected by it, for example, the multiplicity of digital tools across the country, extremely rare occurrence of donor meetings convened by the Federal Government.
- **Political Sensitivities:** Institutional strengthening efforts, such as those supporting the National Institute of Health, were vulnerable to shifts in government leadership and

political dynamics, which complicated the sustainability of alignment and responsiveness efforts, as PHAS, towards the end, had to shift away its main focus away from NIH and towards the One Health unit in the Federal Ministry of Health, which included several functions that had been (or were still) in the NIH purview.

EQ4: To what extent are the results achieved likely to be sustainable? Have the interventions contributed to strengthening system resilience in Somalia?

Overall Sustainability and Resilience

Sweden's support contributed meaningfully to strengthening key foundations of Somalia's health system. However, the sustainability of these gains remains highly vulnerable to political, financial, and infrastructural fragilities that characterise the Somali context.

PHAS's work significantly improved, relative to the context, public health surveillance, research, and institutional governance capacities of the National Institute of Health. However, following political leadership changes, the National Institute of Health was effectively mostly emptied out functionally partially dismantled with transfer/duplication of its functions to/within the Federal Ministry of Health. This illustrated how fragile institutional gains can be without formal legal and budgetary anchoring, and clear support across partisan political groups. SPIDER's introduction of the RAAD electronic health record platform laid the critical groundwork for digital transformation. It also demonstrated that - to endure - digital solutions must be matched by investments in basic infrastructure, digital literacy, long-term maintenance systems, financing, and regulatory framework for oversight over all health actors, to reduce fragmentation and increase quality. WHO's support in embedding Integrated Disease Surveillance and Response practices and developing the Health Information Strategy strengthened system-level coordination and resilience. At the same time, full operationalisation depends on sustained political and financial commitment, and a more concerted effort to encourage regulatory frameworks that include the private sector.

In sum, the interventions made important contributions to enhancing system functionality and resilience, but without structural consolidation — including legal mandates, reliable and longer-term funding, governance mechanisms anchored in law — sustainability remains at risk.

Strengths and Achievements

- **Capacity Building Foundations:** Trainings, mentorship, and system improvements delivered by PHAS, SPIDER, and WHO have built a stronger technical and institutional base for Somalia's health sector.
- **Health Information System Strengthening:** Investments in surveillance and digital health developments represent essential steps toward greater health system integration, data-driven health management, and outbreak preparedness.
- **National Strategy Alignment:** Embedding intervention efforts within national health policies and strategies improved likelihood that gains will be institutionalised over time.
- **National Ownership:** Efforts were made to work through Somali government structures, build Somali capacity, and support Somali-led initiatives (e.g., development of the Health Information Strategy, institutionalisation of the Integrated Disease Surveillance and Response system), as well as to include actors Member States of the Somali Federation.

- **Flexibility and Adaptation:** Partners demonstrated flexibility in adapting to changing political realities, helping to preserve critical functions even as institutions evolved.
- The **heightened visibility** of Somalia's health institutions, fostered, for instance by PHAS's networking support, and WHO's efforts to support IDSR and key strategies, policies, and systems, and reporting, created new opportunities for regional partnerships and technical collaboration. This fostered confidence in health system progress.

Challenges and Limitations

- **Political Fragility:** Institutional sustainability is affected by political volatility and policy discontinuity. Without legal recognition and dedicated federal budget lines, entities like the National Institute of Health remain vulnerable to restructuring or marginalisation.
- **Infrastructure and Human Resources:** Scaling digital health innovations like RAAD requires ongoing investment in electricity, internet, facility equipment, and skilled personnel — areas that remain underdeveloped, and outside the remit of the project.
- **Donor Dependency:** Heavy reliance on external funding, with limited domestic resource mobilisation, continues to threaten the durability of system improvements.
- **Limited Contingency Planning:** Exit strategies, risk scenarios, and sustainability planning were not systematically embedded from the outset in the three interventions.

Conclusions

The section below provides a synthesis of thematic conclusions, intervention-specific conclusions, and conclusions regarding the overall contribution by Sweden to the health system.

Thematic Conclusions

Sweden's support has had a demonstrable and positive impact on Somalia's health system strengthening efforts. Through a combination of institutional development, digital innovation, and health security reinforcement, the interventions addressed strategic needs in a highly challenging environment. Each intervention made tangible progress in its respective domain: PHAS in public health institution-building, SPIDER in electronic health records (EHR) development, and WHO in support to the normative framework, disease surveillance and response system enhancement and overall alignment with national priorities and international frameworks.

Sweden's support also generated positive unintended effects — including increased regional engagement), heightened national interest in digital health governance, and growing informal synergies across interventions. These outcomes underscore the value of long-term presence and flexibility in fragile settings.

Critically, the evaluation highlights that capacity development gains, while meaningful, remain precarious in fragile settings without corresponding legal, financial, and political anchoring. Institutional fragility and leadership turnover in Somalia significantly affected the resilience of the National Institute of Health, underlining the importance of formalising structures early and planning proactively for political transitions.

The limited integration of private sector actors, despite their dominant role in Somali healthcare delivery, emerged as a significant gap. Future efforts to strengthen data systems, regulation, and service integration must actively include private providers to avoid systemic fragmentation.

When aiming to boost coordination and coherence across these independent development interventions, precisions and clarity related to coordination roles, mechanisms and realistic expectations could have been enhanced to maximise synergies from the outset.

The donor community as a whole, it is worth noting, does not seem to have "one vision, one strategy" or a "sector-wide approach" in terms of ensuring its approaches reinforce the health system as a whole and decrease the fragmentation it is experiencing, to the contrary.

Intervention-Specific Conclusions

PHAS: PHAS made significant early contributions by helping build up the Somalia National Institute of Health (NIH) and reinforcing Somalia's public health functions. It facilitated the development of the NIH's strategic and operational frameworks, enhanced surveillance and research capacities, and initiated critical collaborations with international networks such as the International Association of National Public Health Institutes and the Africa Centres for Disease Control and Prevention. Capacity-building efforts in data management, outbreak investigation, and public health research were particularly noted for their effectiveness.

PHAS's discreet and partnership-driven approach catalysed important momentum, positioning the NIH as a nascent national public health actor and promoting Somalia's visibility in regional and continental health fora. These achievements effectively built critical public health capacities and elevated Somalia's international public health profile. However, they remain fragile: political turnover led to changes in leadership, reallocation of staff, and the duplication of core NIH functions within the Federal Ministry of Health. As such, the sustainability of these gains depends on securing legal status and financial stability for the NIH and embedding institutional functions within a stable governance framework.

Nevertheless, PHAS's intervention laid strong foundations. Its flexible adaptation post-2023 to continue supporting Somalia's core public health functions — notably through One Health initiatives — demonstrated commendable responsiveness and ongoing relevance, despite the inability to continue direct support to the NIH following a government request in 2024.

SPIDER: SPIDER's work through the HADDA programme contributed meaningfully in addressing Somalia's fragmented health information landscape. Through the development and piloting of the RAAD electronic health record platform, SPIDER helped lay the groundwork for a more integrated and interoperable national health management information system. The RAAD platform was carefully aligned and totally interoperable with Somalia's District Health Information Software 2 (DHIS2) system, facilitating future full integration and full direct reporting into the DHIS2.

Capacity-building activities, including the training of frontline health workers and local researchers, helped build technical competencies in digital health. The establishment of stakeholder coordination mechanisms promoted local ownership and alignment with national priorities.

The successful introduction of RAAD, marked a promising step in advancing Somalia's health data management agenda; as did the formal endorsement of the RAAD by the Federal Government of Somalia. However, broader systemic adoption of digital platforms remains constrained by Somalia's fragmented governance environment, limited infrastructure, and persistent interoperability challenges with legacy systems. Despite these constraints, SPIDER's approach was innovative, contextually appropriate, and highly appreciated by Somali stakeholders — demonstrating that digital health interventions can succeed in fragile settings when locally grounded and aligned with national strategies. Moving forward, for the system as a whole (beyond SPIDER), sustained support, stakeholder engagement, and robust interoperability solutions will be essential for scale-up and institutionalisation of digital health innovation.

WHO: WHO Somalia played an indispensable and constructive role in supporting the health system in Somalia overall, through WHO standard actions that were strongly reinforced by the staff funded by Sida; and thereby in supporting the PHAS and SPIDER initiatives. It played a key role in strengthening Somalia's health information and surveillance systems, facilitated of the Integrated Disease Surveillance and Response (IDSR) system rollout and, crucially, FETP training. Alignment with regional and international health standards was a particularly notable set of achievements, contributing to more coherent and systematic disease reporting.

Through Sida-financed staff positions, WHO enhanced liaison and cooperation support functions between Somali institutions and Swedish-supported projects. The presence of WHO-supported personnel enabled more consistent engagement with Federal and Member State Ministries of Health and supported the development of the national Health Information Strategy 2025. WHO's normative leadership and technical anchoring were key assets for the effectiveness and strategic positioning of the other Swedish-supported initiatives.

Although operational clarity between WHO, PHAS, and SPIDER could have been stronger at the outset, WHO's technical leadership, convening power, and continuous presence provided essential stability, legitimacy, and momentum across the interventions and helped navigate complex political transitions, embedding the interventions within Somalia's broader health governance framework.

Beyond that, using the Sida-funded staff, WHO played a pivotal role in operationalising Somalia's National Institute of Health (NIH), guiding its 2021–2023 Operational Plan and supporting a wide spectrum of public health functions, from digital visibility to service delivery. It led the establishment of the Field Epidemiology Training Program (FETP) and expanded it to over 400 trainees; strengthened Somalia's surveillance architecture by establishing the Integrated Disease Surveillance and Response (IDSR) system, integrating DHIS2 for real-time data reporting, and supporting outbreak detection within 24 hours; supported IHR (2005) self-assessments and risk profiling, developed the HIS strategic plan, and reinforced research and data systems through continuous engagement with technical working groups. Additional institutional gains included operationalising the National Medicines Regulatory Authority, National Health Professionals Council, and Public Health Emergency Operations Centres (PHEOCs), while enhancing laboratory systems, supply chain management, and governance mechanisms. WHO further promoted health security through the

One Health approach and initiated a Progression Pathway for Governance of Mixed Health Systems to engage the private sector.

WHO's contributions in Somalia were instrumental in laying the foundations of a functioning public health system, notably through the operationalisation of the National Institute of Health and other parts of the Federal Ministry of Health, and the establishment of core systems for surveillance, health information, emergency response, and regulatory oversight. These efforts, underpinned by the development of national plans and institutional platforms, contributed to improved outbreak response capacity, data-driven decision-making, and a more coordinated governance architecture. The expansion of the Field Epidemiology Training Programme and the strengthening of the IDSR and DHIS2 systems point to significant progress in national capacity. However, institutional fragility, the absence of formal policy endorsements in some areas, and the nascent stage of cross-sectoral coordination continue to constrain sustainability. Continued focus on integration—particularly with community-level surveillance, the private sector, and the animal health domain—is needed to consolidate gains and advance Somalia's health security agenda.

Conclusions on the Contribution by Sweden to Health System Strengthening

Sweden's approach to supporting Somalia's health system through a multi-pronged, partner-driven model proved relevant, adaptive, timely, and forward-looking. Contributions were well aligned with Somali national priorities and international standards, addressing critical gaps, including in institutional capacity, digital health infrastructure, disease surveillance, health policy frameworks and strategies, and alignment with international normative frameworks.

While the interventions achieved important outcomes, their sustainability remains vulnerable to Somalia's volatile political economy, fragmented governance, and donor-dependence. Nonetheless, the overall contribution represents a substantive, strategic, and commendable effort towards building the foundations of a more resilient Somali health system.

The methods and aid modalities applied were mostly well-suited to the fragile and dynamic context. Peer learning, digital innovation, and embedded technical assistance generated tangible results. Future programming could enhance effectiveness by ensuring earlier and further role clarity among partners, embedding sustainability mechanisms more explicitly, and coupling digital innovation with support for necessary infrastructure development and federal regulatory frameworks.

Lessons Learned

The lessons detailed in the main body of the report are summarised as follows.

1. **Institution-building in fragile contexts requires both technical and political strategies:** Strengthening technical capacities, including for institutional governance structures, is necessary but not sufficient. Institutional resilience depends on formal legal mandates and dedicated budget lines, strategies for resource mobilisation, and political commitment to sustain reforms across leadership transitions. Fragmented donor actions - without sector-wide approaches, or "one vision one strategy" coordination basically compound the fragmented and disjointed system they came to help fix. This is especially

true when the public administration's ability and interest in coordinating actors and encouraging one coherent approach is low.

2. **Flexibility and adaptability are critical to success:** The ability of PHAS, SPIDER, and WHO to adapt to evolving political, institutional and on-the-ground realities in Somalia was a major strength, but also evidence of major challenges. Interventions are most sustainable when they anticipate volatility and embed adaptive management approaches from the outset.
3. **Local ownership must be reinforced at every stage:** The success of PHAS, SPIDER, and WHO was due in part to their ability to adapt approaches and work through Somali institutions with a strong focus on local ownership and Somali driven processes. This is a work in progress and complex in fragile settings with highly volatile political environments.
4. **Multi-actor coordination enhances impact but requires clarity and investment:** Partnerships between international and national actors can amplify results, but they require clear roles, structured coordination mechanisms, and continuous dialogue to avoid fragmentation and duplication. Sufficient leveraging of private sector actors and private public partnerships can amplify coherence and enhanced quality of care and data quality and coherence.
5. **Health systems strengthening in fragile settings require regulatory frameworks and benefit from public-private engagement:** In contexts where private actors deliver the majority of health services, building public health capacity needs to go hand-in-hand with improving the regulatory environment and oversight over the private sector. It is essential to ensure that information-sharing mechanisms, protocols and systems include the private sector as a key actor.
6. **Investments in digital health need adequate basic infrastructure, devices and capacity: RAAD focused its roll-out in health centres with access to a degree of connectivity, electricity, funding for one year, and ability to absorb some devices (via training).** Digital health solutions like RAAD have strong potential, but their success depends on (expanding) reliable electricity, internet access, frontline workforce readiness, sufficient device availability and accessibility, and sustained external funding for health centres. Technical innovations connected to mapped out plans for foundational system strengthening (connectivity, etc.) can help reinforce scalability and sustainability.

Recommendations

These recommendations are **synthesised** from the main report and highlight the collaborative nature of proposed actions, recognising that success in complex and fragile settings requires coordinated efforts across multiple actors; Federal Ministry of Health, Sida, PHAS, SPIDER, WHO. They represent recommendations on what should **continue to be emphasised** as well as new areas to explore.

Intervention-specific Recommendations

Sida

- **Institutionalise strategic mapping and coordination requirements.** When financing multiple health interventions in the same country, Sida could consider to conduct and periodically update a mapping of how these initiatives complement each other and integrate expectations for inter-programme coordination into each agreement. Or request that they make this clear in their project proposals. These should include formalised roles, responsibilities, and coordination outputs to reduce fragmentation and promote coherence.
- **Require implementers to include risk and political economy analysis.** Ensure that project designs integrate explicitly political risk and scenario planning for fragile settings, as relevant to the sector. This includes assessing the implications of leadership turnover, institutional duplication, or shifting mandates, as was seen with the National Institute for Health in Somalia.
- **Develop minimal conditions or pre-requisites for system-building interventions.** Prior to funding institution-building efforts like a national public health institute, consider setting minimum political and legal preconditions (e.g., legal mandates, budget lines) or a staged approach to funding, conditioned on progress toward institutional embedding.
- If and when **Memorandums of Understanding** are agreed linking different interventions (such as those for PHAS, WHO, SPIDER) ensure these are then followed up by concrete action plans or practical agreements and arrangements.

PHAS

- Build close **consideration of legal, budget line, and structural embedding** of a national public health institute when designing a project. When this structural anchoring is missing or partial, focus more on support systems and public health functions from the start, rather than on a more institution-centric support approach. Consider whether PHAS, in cooperation with other actors, can help solidify legal and structural embedding when needed. Use political analysis more to create planning around how to ensure sustainability even when institutions are politically vulnerable.
- **Embed long-term continuity strategies from the outset.** Given the fragility of achievements under changing political contexts, future interventions could include continuity mechanisms, such as transition planning for leadership changes, staff retention incentives or plans for rebuilding if staff transfer, and how to help anchor ownership across government.

SPIDER

- **Plan for scale-up of electronic health record system(s) in resource-constrained environments** - consider increased focus on cross-sector collaboration. If SPIDER or the FMoH were looking toward scaling RAAD further, future planning could focus even more on "the plans and geographic focus" of actors addressing infrastructure bottlenecks—such as providers of solar power, device procurement schemes, and mobile data /internet connectivity solutions—. This may help to ensure that the implementation of electronic health record system(s) can more strongly expand its focus on scaling-up

more strongly expand its scale-up focus. Strengthening coordination with Ministries of Energy, ICT, or infrastructure-focused donors and private sector actors is essential to enabling sustainable digital health uptake.

- **Continue to support RAAD interoperability and integration with District Health Information Software 2 (DHIS2) reporting.** SPIDER should continue aligning the RAAD platform with DHIS2 standards, ensuring seamless data flow from facility to regional and national levels, while also strengthening health worker capacity in data use and analysis. As electronic health record use expands, governance mechanisms (data privacy, system integration protocols, reporting standards) would continue to be an area of cooperation with the Federal Ministry of Health and WHO.
- **Strengthen national digital health governance and ownership.** Beyond technical support, SPIDER could deepen its engagement in institutionalising digital health governance. This includes working with actors such as the WHO in supporting the Federal Ministry of Health in operationalising national health information system strategies, developing digital health standards, and helping establish regulatory frameworks for all actors (private sector) data inclusion and system interoperability nationwide. Advertise take-up by UNICEF and formal endorsement by the Federal Government of Somalia of RAAD as "the" national tool for EHR.

WHO

- **Clarify and strengthen and future "liaison" or "coordination support" roles in collaborative projects.** Ensure that WHO-hosted or contracted positions funded by donors have clearly defined responsibilities linked to the intended outcomes of all collaborating projects (e.g., PHAS, SPIDER). Or make it clear, if these positions are intended to boost WHO support generally in **areas of common interest**. Use well-defined Terms of Reference and job descriptions, deliverables, and performance indicators to ensure alignment and accountability.
- **Continue to act as a backbone support organisation for systems integration.** Given its normative authority and presence, WHO could continue to strengthen its role in convening actors (government, donors, digital health providers) around unified strategies for the Health Management Information System, Integrated Disease Surveillance and Response System, regulatory frameworks, and reinforced health workforce development.
- **Continue to champion regulatory frameworks and whole-of-system coherence.** Use WHO's influence and legitimacy to continue to advocate for and to continue to support the development of enforceable health data regulations, and health-related regulatory frameworks, working the Somali Federation, and especially continue to focus on bringing the private sector into national health reporting systems, standards and protocols and reducing fragmentation (including in surveillance data).

Thematic Recommendations

The evaluation proposes recommendations under seven strategic themes, each aimed at enhancing the relevance, coherence, and sustainability of Sweden's support to Somalia's health system. The bullets below summarise the recommended actions; full details and justification are provided in the main report. They highlight the collaborative nature of proposed actions,

recognising that success in complex and fragile settings requires coordinated efforts across multiple actors and project interventions. These reflect points or areas that need continuously to be emphasised.

Donor Policy and Funding Modalities - for Fragile Settings

- **Apply the principles for fragile states** focused on "do no harm" and reducing, not compounding, systems fragmentation. This is reinforced by continual use of political economy analysis and in-depth coordination mechanisms and dialogue across international actors.
- **Improve donor-side coordination and planning frameworks**, for example, through sector-wide approach mechanisms, through better and more practical coordinating and planning - towards one coherent "approach/visions" by the international community.
- **Explore innovative funding models.**
Test pooled funding, performance-based financing, or public-private partnerships.
- **Link financial support to engagement in reforms at legal, policy and governance levels.**
Use financial support as an opportunity to help advance legal reforms, sustainability commitments, and improved governance structures.

Sustainability and Transition Planning

- **Plan in more detail for sustainability**, through exit plans embedded from the early stages, and with phased transition strategies, early engagement with potential alternative funders, funding strategies, clear benchmarks for responsible exit.
- **Embed risk management and contingency planning** into institutional strategies.
- Continue institutionalising core public health functions through **standard procedures** and accountability mechanisms.

Institutional Capacity and Legal Frameworks

- Anchor technical assistance within **broader institutional reform agendas**.
- **Encourage the finalisation** adoption and enactment of **governance frameworks**, including draft NIH Bill and digital health policies, standard operating procedures and protocols, and development of regulatory frameworks.
- **Institutionalise planning cycles** with embedded governance roles, autonomy safeguards, and leadership succession.

Coordination and Role Clarity

- **Clarify mandates** across actors to prevent duplication and fragmentation.
- **Establish joint planning** and coordination mechanisms early if different interventions are expected to interact, cooperate or work together.
- **Sustain engagement** during institutional transitions to protect gains and memory.

Strategic Use of Personnel, Expertise, and diaspora

- Deploy seconded and embedded expertise with **clear mandates** and dual accountability.
- Reconsider a **PHAS liaison role** to ensure continuity and alignment.
- **Leverage Somali diaspora** and institutions for contextual relevance and long-term capacity.

Digital Health Systems and Data Governance

- **Finalise** and implement national digital health **governance frameworks**.

- Further develop a RAAD **sustainability and scale-up plan** including **secure phased external support for** electronic health records **financing**.
- **Address foundational infrastructure needs** (electricity supply, connectivity, device procurement).
- **Strengthen frontline digital capacity** through training, support, and retention incentives backed by in-the-field facility-level monitoring feedback of user experiences and needs.

Inclusion and Equity - towards co-creation and ideation

- **Strengthen private sector and regional inclusion** - member state of the federation are most supportive when they are involved at early stages and throughout; this is true for private sector actors as well.
- **Ensure participatory and inclusive reforms**, co-design approaches for broad engagement.
- **Communicate clearly that pilots** (e.g., RAAD roll-out) are intended as pre-cursors to national-scale strategies.

Implications for Future Programming in Fragile Settings

This evaluation confirms that strengthening health systems in fragile contexts demands more than technical interventions. It requires a dual approach: building technical capacity while simultaneously navigating complex political, institutional and precarious financial realities.

Where private actors dominate health service delivery, future programmes **should invest early** in proactively engaging them in health governance, national health strategies, and health management and information systems, recognising their dominant role in service delivery and data generation.

Building institutional resilience requires **deliberate political engagement**, long-term **partnerships**, and **embedding** new capacities within legal, regulatory and budgetary frameworks. Investments in digital innovation for health offer important opportunities but must be matched by support for the basic infrastructure and human resource foundations required for sustainability.

Success requires not only technical interventions but deliberate efforts to secure legal mandates, financing, and cross-institutional ownership. Programmes and multi-actor initiatives must **plan from the outset for political and financial volatility**, embedding proactive scenario planning, continuity strategies, and political economy analysis as integral elements of design and implementation. Exit and transition strategies are important to maintain critical functions through political change and financial ebbs.

Finally, fragile settings require that international support remains flexible, anchored in political analysis and fragile states principles, be long-term, and attuned to evolving national priorities, while ensuring that gains are anchored structurally to endure beyond external involvement.

1 Introduction

1.1 BACKGROUND AND CONTEXT

1.1.1 Brief Historical Background and Current Administrative Structure in Somalia

Somalia's colonial history is marked by partition and domination by European powers and Ethiopia in the late 19th and early 20th centuries. The northern region, modern-day Somaliland, was a British protectorate (British Somaliland), while the southern region, known as Italian Somaliland, was controlled by Italy. Additionally, parts of western Somalia were ceded to Ethiopia under colonial agreements. After World War II, Italian Somaliland became a United Nations Trust Territory under Italian administration. Somalia gained independence in July 1960, when British Somaliland and Italian Somaliland united to form the Somali Republic. The early years were marked by optimism, but political instability and clan divisions soon surfaced, setting the stage for decades of conflict.

Since **independence** in 1960, Somalia has faced persistent conflict, civil wars, presence of warlords and extremist groups, and humanitarian crises. In 2012, Somalia politically transitioned from decades of unrest through an indirect election of a new federal parliament and president, and the adoption of a provisional constitution. Since then, the Federal Republic of Somalia (*Jamhuuriyadda Federaalka Soomaaliya*) has experienced a succession of crises, drought, floods, locusts and other calamities. Current President Hassan Sheikh Mohamud, who was President from 2012 to 2017, returned to office in the 2022 presidential election.³

In relation to its **administrative structure**, Somalia has two levels of government: the Federal Government of Somalia (FGS); and the Federal Member States (FMS). These include both state and local governments. The FMS also have their own constitutions and armed forces. The FGS has a series of Ministers; these are accompanied by State Ministers from the Federal Member States. As of October 2023, the Federal Republic of Somalia has these Federal Member States: Galmudug, Hirshabelle, Jubaland, Puntland, South West. Somaliland also considered a Member State (MS) declared independence in 1991 but remains mostly

³ <https://euaa.europa.eu/country-guidance-somalia-2023/structure-somali-governance>

unrecognised as such. Khatumo⁴ was officially recognised as a Federal Member State in April 2025. Banaadir is an administrative region, but is included as a "Member State" in many lists. Somalia has 18 administrative regions: Awdal, Bakool, Banaadir, Bari, Bay, Galguduud, Gedo, Hiiraan, Jubbada Dhexe (Middle Jubba), Jubbada Hoose (Lower Jubba), Mudug, Nugaal, Sanaag, Shabeellaha Dhexe (Middle Shabeelle), Shabeellaha Hoose (Lower Shabeelle), Sool, Togdheer, Woqooyi Galbeed.

The Somali diaspora is one of the most significant consequences of decades of conflict and instability. Millions of Somalis have fled their homeland, seeking safety and opportunities abroad. The diaspora is a critical source of remittances, which constitute a significant portion of Somalia's economy, and a vital channel for maintaining cultural and familial ties. In recent years, the diaspora are returning. **Sweden** has one of the largest Somali communities in Europe, with approximately 70,000-80,000 Somalis (about half are born in Somalia, and half are 1st generation Swedes⁵). The Somali migration to Sweden began in the late 1980s and early 1990s during the onset of Somalia's civil war. The Somali-Swedish community is primarily concentrated in urban areas (Stockholm, Gothenburg, Malmö, and smaller towns like Borlänge and Växjö). Somali-Swedes play an essential role in Somalia's recovery and international engagement and are active in advocating for Somalia through remittances, political engagement, and initiatives to support development and humanitarian efforts in Somalia.

1.1.1 Somalia Health System Overview

Somalia's health system faces immense challenges due to decades of conflict, underinvestment, governance challenges, and natural disasters. The health system is fragmented, largely privatised, and mainly limited to urban centres. This leaves vulnerable populations in rural and conflict-affected areas without adequate services. Disease outbreaks, poor sanitation, malnutrition, cardio-vascular disease, maternal and child health issues dominate the disease burden and compound the health crises.

Public health services: According to the National Library of Medicine⁶ (Somalia) a 2023 assessment shows that Somalia has approximately 846 public healthcare facilities, including 7 reference hospitals, 27 district hospitals, 248 maternal and child health clinics, 544 health posts. These facilities are distributed across the country's administrative regions and form the backbone of the public health system.

Private health services: The private sector constitutes a significant portion of Somalia's healthcare landscape. Estimates indicate the existence of approximately 3,500 private health

⁴ SSC-Khaatomo Administration, acknowledged as an interim administration in 2023, has been recognised as a Federal Member State by the Federal Government of Somalia, during the visit of the Prime Minister on 14th April 2025.

⁵ Some also are 2nd generation Swedes but there are no figures on this readily available.

⁶ <https://www.ncbi.nlm.nih.gov/>

facilities⁷, of these 6% hospitals, 32% clinics, 4% diagnostic centres, 58% pharmacies. There appear to be roughly 1 120 private clinics operating across the country. The figures vary but the private sector accounts for 60-70% of total health expenditure in Somalia. It is fragmented, underregulated, and primarily concentrated in urban areas

Somali Plans and Aspirations: The Somali Health Sector Strategic Plan (HSSP III) for 2022–2026 outlines priorities for achieving Universal Health Coverage (UHC) and aspires to develop a health system that can provide equitable and affordable access to quality health services. The strategy integrates lessons learned from previous plans and aligns with global health goals. It aims to strengthen health governance, increase human resource capacity, improve access to affordable medicines, and enhance health information systems/health infrastructure. It focuses on expanding the Health Information System (HIS) to improve data-driven decision-making; and to establish integrated community-based surveillance and monitoring.

Access to health services and data: With limited access to health data, and health services (below 30% of the population have access to services) and significantly underserved rural communities, communicable diseases, malnutrition, and maternal and child health issues dominate the disease burden of Somalia.

Health information and how this is managed are identified as key building blocks of any health system⁸. A strong health information system (HIS) is critical to ensuring the quality and continuity of care at the service delivery level: informing decisions related to health planning and resource allocation; monitoring and evaluation of health programmes and services; and strengthening accountability mechanisms at all levels of the health sector. Part of this, discussed further below, includes health management information systems (HMIS).

Health Information System: in Somalia plays a critical role in generating data and analysis for monitoring the health of the overall population (to the extent that data permits), programme monitoring, planning, policy-making, and assessing progress toward Universal Health Coverage (UHC) and health-related Sustainable Development Goals (SDGs). Health Information System (HIS) include all data collection, including surveys such as demographic and health surveys, vital statistics, the Health Management Information System (see below) and data from DHIS2 (see below).

Health Management Information System: is a key component of the broader Health Information System, as it represents a system to collect, manage and use data specifically designed to support planning, management, and decision-making by health facilities and health authorities. Normally, health management information systems (HMIS) use data captured as a routine part of service delivery. The system's evolution has been significant, starting from

⁷ <https://www.opml.co.uk/insights/coverage-capacity-and-constraints-private-sector-health-facilities-somalia>

⁸ This is universally accepted and also a key tenet of the World Health Organization.

initial and rudimentary Excel and Access-based mechanisms to the implementation of the District Health Information Software 2 (DHIS2) in 2017.

DHIS2⁹: is an open-source software platform system for digitalising the collection and analysis of (aggregate) health data. In 2025, DHIS2¹⁰ is the world's largest HMIS platform, used by 73 low and middle-income countries, and is deployed at a national scale by more than 70 Ministries of Health, covering key health data for over 40% of the global population. Including NGO-based programmes, DHIS2 is in use, to some extent, in more than 100 countries. DHIS2 is used to record aggregate information on data related to patients such as immunisation, or disease. This allows disease surveillance, and an overview of immunisation levels.

In Somalia, most data are initially collected on paper, and aggregate data are uploaded into DHIS2. Integrating surveillance data into DHIS2 is seen as a key investment in the overall HIS, and this is ongoing. DHIS2 is currently the primary platform for health data management in the public sector. By integrating routine health data from public health facilities, DHIS2 has streamlined the aggregation and reporting processes, and contributed to improved data reporting rates. The 2020–2021 DHIS2 revisions have enhanced system capabilities, with standard operating procedures and training manuals; and improved capacity to integrate new health programmes with a cloud-based server for better data management and accessibility. The system's structure integrates data at multiple administrative levels, and this supports decision-making and planning processes.

According to the WHO EMRO¹¹ as of September 2022, a total of 641 health facilities in Somalia were reporting data to the District Health Information Software 2 (DHIS2) system. This represents (in 2022) 91% of public facilities.(as compared with a national average of 62% in 2016). This figure encompasses various types of facilities, including the below (but excludes health facilities located on Somaliland):

- 3 national hospitals
- 26 regional hospitals
- 35 district hospitals
- 5 private hospitals
- 386 health centres
- 140 primary health care units
- 46 tuberculosis centres

⁹ DHIS2 is an open-source software platform developed in collaboration between the HISP Centre at the University of Oslo <https://www.mn.uio.no/hisp/english/about/index.html> and the 23 local groups in Africa, Asia, the Middle East, and the Americas that make up the HISP network. More than 80 countries worldwide use DHIS2 for collecting and analysing health data. <https://dhis2.org/>.

¹⁰ According to <https://docs.openfn.org/>

¹¹ [WHO EMRO Dashboards](#)

DHIS2 has, therefore, improved data aggregation and reporting efficiency, and this encompasses various health data, such as morbidity, maternal and child health, and immunisation. However, challenges persist, including data quality issues, regional disparities in reporting coverage, and gaps in private sector reporting and interoperability remain. This represents critical limitations because, for instance, DHIS2 currently does not include contributions from the private health sector, which accounts for approximately 70% of health services provided in Somalia. (This is because the regulatory framework in Somalia does not require the (largely unregulated) private sector to provide data to the DHIS2. So national aggregates include mainly public sector-related data. Fragmentation persists due to parallel donor-supported data collection systems and a lack of system interoperability between and with existing surveillance and data platforms. Other challenges persist (in the public sector) such as reliance on paper-based data capture, limited data analysis at the health facility level, insufficient training facilities for health workers, inadequate electronic systems for laboratory data management, and the generally unreliable infrastructure (e.g., inconsistent internet connectivity and power supply). These further impede system efficiency. Moreover, DHIS2 remains heavily reliant on fragmented and often un-coordinated donor funding, which undermines coordination between programmes and their sustainability. Infrastructural challenges, including limited internet connectivity, insufficient training, and lack of standardised health information management systems at the level of the Federal Member States of Somali, hinder the public system's efficiency and scalability. In addition, data quality and use at local decision-making levels remain limited. Weak governance capacity at all levels compounds these challenges.

Electronic Health Records (EHR) System: is a digital version of a patient's paper chart (i.e., medical record, or record of the medical visit) and is a digital system for storing and managing patient information, including medical history, diagnoses, treatments, lab results, and vaccinations. It serves as a centralised repository of health information that is collected and managed digitally, enabling improved efficiency, accessibility, and quality of healthcare delivery. It can support improved efficiency, accessibility, and quality of care by centralising health data and enabling its secure sharing among healthcare providers, government institutions, and international partners. EHRs are especially critical in Somalia's fragmented healthcare system, where continuity of care and rapid responses to public health emergencies are often hindered by limited resources and infrastructure. Additionally, EHRs can strengthen national health programmes by monitoring and evaluating services such as maternal health, immunisations, and disease control efforts, provided they are coherent and interoperable and compatible. Data from EHR systems would improve quality and reliability of data provided to DHIS2. In Somalia different EHRs are operating, these are of different natures, and are entirely or partly incompatible with DHIS2 due to lack of interoperability. At times they may be interoperable but are not, in practice, integrating their data into the DHIS2.

An Integrated Disease Surveillance and Response (IDSR) System: is a designed and applied to enhance national disease surveillance systems by improving coordination and integration of surveillance resources and functions for all priority diseases across all levels of the health system. In Somalia, the IDSR aims to develop adequate surveillance and response capacities at each level of the public national health system, with a focus on the district level. It seeks to

effectively link efficient public health actions with data from multiple surveillance and response systems, as well as laboratory evidence. The World Health Organization (WHO) has been implementing IDSR strategies in Africa since 1998. Strategic Priority 2 of the 2021–2025 WHO Country Cooperation Strategy for Somalia emphasises the roll-out of IDSR for real-time detection and response to disease outbreaks and other health security threats. IDSR related data (i.e., surveillance data and response data) are being integrated into the DHIS2. Data collected and analysed (via systems such as DHIS2) are crucial for a well-functioning IDSR, as are the data collected by the private sector (which tend not to be integrated into DHIS2 and are largely not present in the IDSR system, therefore).

The Integrated Disease Surveillance and Response (IDSR) system in Somalia is currently implemented within DHIS2 (though this was not initially the case according to key informants)—it is a dedicated DHIS2 module or configuration tailored to capture notifiable diseases and outbreak-prone events. This implementation aligns with broader regional practice: in many African countries, DHIS2 has been customised to support IDSR reporting, especially following WHO and Africa CDC guidance to integrate surveillance functions into national HMIS platforms. In Somalia, the IDSR component now uses DHIS2 infrastructure for reporting, data aggregation, and dashboard visualisation; and it is configured to reflect the WHO-AFRO IDSR guidelines, adapted to Somalia's context. IDSR reporting in Somalia is largely aggregate. Health facilities and districts submit weekly or monthly summary reports, which indicate the number of suspected cases or deaths by disease. The data typically includes counts (e.g., suspected cholera cases, measles alerts) rather than individual patient records.

1.1.2 International Health Assistance Landscape

International actors are pivotal to Somalia's health sector enhancement. The Somali government relies heavily on external funding for public health initiatives, making it vulnerable to changes in international priorities.

The international community focuses on enhancing the health system and health outcomes through OECD DAC donors, non-traditional donors, international NGOs, international/multilateral agencies and organisations (e.g., United Nations entities, Global Health Initiatives (including -Global Fund, GAVI, Global Financing Facility, SUN movement), World Bank, etc). Both humanitarian and longer-term development assistance are provided in the health sector; with the often 'blurry' lines between not always coordinated provisions. Somali diaspora remittances sent directly into Somalia, as well as contributions to various international and other NGOs are also related factors. Returned Somalia diaspora also provide knowledge and technical know-how to the health sector.

International actions range from provision of health and nutrition services to capacity building and system strengthening to facilitate health governance, and the implementation of the Essential Package of Health Services (EPHS) and an Integrated Disease Surveillance and Response System to enhance epidemic control.

The **World Health Organization** (WHO) plays a central role in supporting Somalia's health system.¹² It operates within the complex humanitarian and development context, and collaborates closely with the Federal Ministry of Health, state and regional authorities. Its focus is to provide technical assistance, help coordinate health emergency responses, enhance essential public health functions, including strengthened disease surveillance systems, immunisation and communicable disease control, health information system development. WHO also contributes to policy development and the operationalisation of key health governance structures, often serving as a critical partner in mobilising international support for health priorities identified by Somali authorities.

Traditional donors contribute significant financial resources, with at times some large-scale health interventions. They provide solid technical expertise, knowledge, and capacity building, with a strong focus on universal health coverage, maternal and child health, and disease prevention. These donors often assist in the development of national health policies and frameworks. For example, amongst financing various types of health actions, Sweden has been contributing funding to establish the National Institute of Health, and to strengthen technology uptake for digitalised data collection, as well as helped to address emergency/humanitarian needs.

Non-traditional donors (i.e., non-DAC donors) often provide more flexible funding without strict conditionalities; they can be quicker in responding to crises compared to traditional donors. They tend to focus on building visible health infrastructure, such as hospitals and clinics, with limited focus on system strengthening, systemic improvements or sustainability. Non-traditional donors sometimes lack transparency in funding and implementation, making it harder for the broader donor community to know what they are doing and to avoid duplication, overlap or creation of parallel systems.

Private Sector actors dominate health service provision and delivery, in primary, secondary and tertiary medicine; and cover an estimated 60-70% of health services, primarily in urban areas. In addition, limited regulatory frameworks and limited oversight over the private sector, and important affordability challenges (in part due to private sector rates) restrict equitable access to quality health services.

1.1.3 Coordination of the International Health Assistance Landscape

Coordination: The Federal Government of Somalia (FGS) and Federal Member States (FMS) coordinate health governance under a federal structure, and focus on developing an Essential Package of Health Services (EPHS). However, public sector funding is heavily reliant on external donors due to limited government revenue. Investments in the Health Information System and management of health information are ongoing, such as integrating surveillance

¹² <https://www.who.int/countries/som/>

data into District Health Information Software 2 (DHIS2), but these **efforts remain fragmented** for various reasons, including due to parallel donor systems. Donor coordination efforts, and the extent to which gaps are transparent and duplication of effort avoided are not consistently and entirely clear.

In addition, **limited regulatory frameworks** and **limited oversight** over the **private sector**, and important affordability challenges restrict equitable access to quality health services. There is **little coordination** with the public system, including in relation to data collection and data sharing, including low levels of interoperability of data generated in private sector and its inclusion in the DHIS2 national platform. Efforts are underway to **foster public-private partnerships** to expand coverage and enhance quality, and to investigate how to better regulate private sector health services and personnel, and co-create regulatory frameworks, but these have had limited success so far. The different Federal/Member State administrative layers also compound governance and bureaucracy-related challenges. Reliable data collection at each level is a key requirement for functional health systems and a major challenge in Somalia.

Around 2020, the Federal Government of Somalia established, and intended to chair, a Health Sector Coordination Committee. This was meant to be the principal health coordination platform in the country. The intention was to **bring together a diverse array of stakeholders** to align efforts to strengthen the health sector. It intended to include representation from the Member State Ministries of Health, Ministry of Finance, Ministry of Water and Energy, Donor agencies, UN organisations, multilaterals, CSOs, private sector representatives.¹³ Its mandate was to have been to review policies and strategies, develop annual workplans, map and mobilise resources, conduct joint reviews, strengthen the health information system. However, during the evaluation period, only one joint health meeting was planned by the Federal Government of Somalia, in 2025. Though the Federal Government of Somalia convenes a **monthly technical working group**, donors do not usually attend these.

The “**Somali Health Partners Group**” is a key coordination platform consisting of bilateral and multilateral donors engaged in the Somalia health sector, including WHO, UNICEF and UNFPA. It meets regularly in Nairobi to discuss strategic priorities, alignment and coordination. Other international and UN entities (WFP and IOM) and government officials are invited on an as-needs-basis. This is a transformation of the former “Somali Health Donors Group” that had originally been a donors-only coordination platform, but evolved during the COVID-19 pandemic to include partners with better on-the-ground-insights¹⁴.

¹³ <https://www.globalhealthpartnerships.org/resources/ukphs-somalia-scoping-assessment-report/>

¹⁴ WHO, UNICEF and UNFPA. This is the case for partner coordination groups in other countries also, such as Kenya, Ethiopia, according to WHO.

The **humanitarian cluster**¹⁵, convened by WHO, meets regularly and is considered to be very well coordinated.¹⁶

Private sector actors are not particularly coordinating with or focusing on united strategies or coherent approaches or division of labour, and external actors do not appear to have been successful in helping the Federal Government establish a reinforceable regulatory framework that would require the private sector to do so. Few private actors seem to have focused on sharing their health data or ensuring the interoperability of the health data they generate to ensure that the health data they generate could feed into the national DHIS2 platform. No regulatory framework or legislation requires them to do so.

So, whilst there are coordination efforts, there are also **significant challenges** related to fostering fully **coordinated** efforts between and amongst the Somali government (at Federal and Member State levels), international and national private sector, and international public sector partners. In general, there is insufficient coordination across the international community by the FGoS, and within and across the broader community of actors. This is not unusual in a fragile setting.

1.1.4 Swedish Assistance to Health System Strengthening in Somalia

The Embassy of Sweden in Nairobi currently provides Sida-financed support to several health-related development initiatives in Somalia (UNICEF health and protection services for Somali women and children; the World Bank “Damal Caafimaad”; the PHAS project; the SPIDER project; and WHO Somalia positions (WHO) (two currently, and a PHAS-seconded position in 2021–2022). Through Sida, Sweden also supports humanitarian actions in the health sector, inter alia, to UNICEF and via the WHO's health emergency appeals.

Since 2019, funding from the Swedish International Development Agency (Sida) has supported efforts to strengthen Somalia's health system. This includes initiatives to establish a Somali National Institute of Health (NIH), improve the Health Information System (HIS), and reinforce the overall Health Management Information System (HMIS) through a national electronic health record system (EHR) .

To achieve these objectives, the Public Health Agency of Sweden (PHAS) was selected to provide direct technical assistance to the Somali government for the establishment of the

¹⁵ The humanitarian cluster system is a coordination mechanism used by the United Nations and other humanitarian organisations to respond to crises. It is designed to organise humanitarian actors into core sectors, such as water, health and food security and closely coordinate actions.

¹⁶ Coordination Information here is largely based on data from scoping interviews.

Somalia National Health Institute¹⁷. Similarly, the Swedish Programme for ICT in Developing Regions (SPIDER) was chosen to enhance HMIS, by focusing on the EHR (digital solutions), and its input towards better governance, and integration of health information. SPIDER and PHAS both operated from Sweden, in essence. To provide key country-based liaison and coordination functions and advise and collaborate with PHAS and SPIDER interventions, as well as focus on the IDSRS and broader HMIS and HIS efforts and strategies, Sida agreed that WHO - Somalia would host a seconded Health Systems Strengthening (HSS) Policy Adviser from PHAS (funded by Sida) from 2021–2022¹⁸. Sida currently funds two staff positions (Health Systems Officer, and Surveillance Officer).

Oversight of these interventions—implemented respectively by the partners PHAS, SPIDER, and the WHO Somalia Office—is provided through the Embassy of Sweden in Nairobi's Somalia section. This relationship is seen as a partnership to provide support to strengthening the health system of Somalia.

1.2 THE EVALUATION ASSIGNMENT AND PURPOSE

The evaluation assignment: The Embassy of Sweden in Nairobi's Somalia section requested one evaluation of these three initiatives, and NIRAS was tasked to conduct the “Evaluation of Sweden’s support to health system strengthening in Somalia through the PHAS, SPIDER, and WHO.”

The **main evaluation purpose** is: (1) to help inform Sida on the effectiveness of the listed interventions – and the unique set up of Swedish agencies supporting Somalia agencies – in contributing to health system strengthening, including on the contribution agreement modality itself; and (2) to help PHAS, SPIDER, WHO, Sida and other stakeholders in the continued effort of health system strengthening in Somalia. (As stated in the Terms of Reference.)

The evaluation aims to assess coherence and the interventions' alignment with Somali priorities; progress towards planned results; effectiveness of approaches and modalities; prospects for sustainability (coordination, fragmentation), and provide lessons learned.

¹⁷ In 2014, the FMoH Somalia approached the PHAS and asked it to provide support for the establishment of a National Public Health Institute in Somalia. After lengthy discussions, PHAS took this request to Sida for funding. Sida in turn asked PHAS to submit a proposal regarding capacity building and strengthening of the NIH in Somalia. The proposal was developed in collaboration with FMoH. The suggestion came from Somalia and PHAS. Sida agreed to fund PHAS, and in that view “selected” PHAS to carry out the work.

¹⁸ This was the result of a lengthy tri-partite discussions and strategic joint thinking between PHAS, Sida, and WHO-Somalia, but not the FMoH. The secondment was not repeated however, once it came to an end after one year. Instead, it was agreed to fund staff positions at WHO-Somalia (filled by Somali staff).

The **evaluation objects** are:

- **PHAS:** the Public Health Agency of Sweden intervention to strengthen the National Health Institute Somalia and related foundational actions.
- **SPIDER:** the Swedish Programme for ICT in Developing Regions intervention to launch a (national) Electronic Health Record system in Somalia (EHR); and to support Health Alliance for Digital Development and Action (HADDA).
- **WHO - Somalia:** Three positions within the WHO Somalia office. One PHAS secondee "Health Systems Strengthening Policy Adviser" (2021-2022); and two locally contracted staff positions (Health Systems Officer, and Surveillance Officer). These were funded by Sida, and based on non-financial memorandums of understanding¹⁹ between WHO and PHAS, and WHO and SPIDER. They aimed to work in partnership with the respective interventions and to facilitate and support the activities, and to focus on surveillance and management areas.

The **evaluation scope** covers the interventions' respective starting dates, until 2025. PHAS from June 2019; SPIDER from November 2019; and WHO from June 2021.

The **primary users** of this evaluation are:

- Embassy of Sweden in Nairobi, Somalia Section.
- Public Health Agency of Sweden (PHAS).
- SPIDER, University of Stockholm.
- World Health Organisation (Somalia).

The **intended use of the evaluation** is to understand what progress has been made, guide strategic discussions on next steps and provide lessons, including in relation to undertaking similar actions in other fragile contexts.

1.3 EVALUATION METHODOLOGY AND APPROACH

The inception report agreed a set of **evaluations questions** (EQs), adapted from the original questions specified in the ToR (5). These EQs have been used as the structuring principles in Chapter 3, 4 and 5, which present the findings of the evaluation for each intervention.

The inception report (Annex 4) provides the details of the approach, methods and tools. In addition, Annex 6 provides a detailed overview of the methods and analytical tools as envisaged and actually applied. The methodological challenges and constraints are outlined as are the ways source criticism (reliability of information, gaps in information and the way

¹⁹ Memorandum of Understanding between WHO and PHAS, and WHO and SPIDER were very general statements intended to be project collaboration agreements through which the signators agreed to establish a partnership. In practical terms this meant that the three entities would cooperate together as specified in those agreements, which were vague, and did not result in anything more concrete in terms of joint action plans.

triangulation of data from different sources took place). Also, there is a discussion of the different types of (potential) bias and the ways in which the evaluation team has handled these. Below we succinctly present the approach, methods and tools and how they were used to integrate data collection and analysis to assess the three interventions.

1.3.1 Overall Approach

The evaluation adopted a **mixed-methods approach** combining qualitative and quantitative data collection and analysis. Quantitative data was collected primarily from secondary sources, qualitative data was primarily collected from primary sources (virtual interviews and field visits). By examining institutional and data system capacity changes, the evaluation assessed the effectiveness, coherence, efficiency, sustainability, and scalability of the interventions implemented by PHAS, SPIDER, and WHO. This approach allowed a comprehensive understanding of the interventions' contributions to health system strengthening in Somalia.

Key principles used during the evaluation included a utilisation focus, including a forward-looking workshop in Nairobi with primary evaluation users and a small sub-set of key donor participants at the close of the process; and a theory-driven analysis to examine the theory of change (ToC) of each of the interventions and subsequent actions in relation to effectiveness. Also applied was a context-sensitive principle that acknowledged Somalia's socio-political, economic, and security challenges while designing data collection strategies, and the need to build trust around confidentiality of key informants, and what they shared. Given the brevity of the evaluation period and the data available, the evaluation was not able to use a gender-equity lens beyond noting that health centre focus of the interventions was on maternal and child health units.

In terms of primary approaches used, the evaluation team was able to qualitatively examine the extent to which institutional and data system capacity had improved, examine secondary reporting data and primary qualitative key informant insights, and primary field data. This provided an understanding of resilience, leadership and data system use. The team also was able to spot check and assess digital interventions, and data uptake improvements by using secondary reports and key informant insights.

In terms of methods and tools, the methodology involved several that were designed to analyse available data in order to realistically evaluate and analyse the effectiveness, effects, coherence and complementarity, and sustainability of the three interventions. Analysis also focused on lessons on the modalities, lessons for fragile environments, and the extent to which Sweden has helped enhance the health system in Somalia.

Originally, the evaluation had intended to apply an institutional maturity model, to evaluate the organisational readiness, resilience and operational maturity of the National Institute of Health (NIH). However, sufficient data was missing; and key informant and implementor accounts of governance, leadership, operational processes, and maturity levels (developing, established) were contradictory. It was therefore not possible to apply a maturity assessment scorecard. The team was able, nevertheless, to assess progress, which clearly stagnated. The evaluation also applied a capacity development assessment to gauge awareness, motivation, skills, staff attrition, etc. It also assessed the readiness, adoption and functionality of the EHR platform

RAAD²⁰. An important source of these last two assessments was direct observation in health centres coupled with focus group discussions and informant interviews. The evaluation used process tracing to assess intervention activities against the intended outcomes in the theories of change for each intervention. Finally, the evaluation applied organisational analysis to assess the extent to which the three interventions functioned as a network of sorts.

1.3.2 Data Collection

The evaluation used primary and secondary qualitative and quantitative data and triangulated the findings from different sources to ensure robust conclusions. Primary data collection was a substantial source of insights and qualitative (and some quantitative) data. This involved key informant interviews (15 scoping and 36 data collection; and 6 field visits to health centres in the three pilot regions (Federal Member States) of Puntland, Galmudug and Banaadir, (individual interviews and focus group discussions, in total 32 interviewed). One field visit was conducted virtually. Secondary data collection was also an important source for analysis. This included review of documents and websites. Lists of key informant categories, observed health centres, and documents reviewed are available in Annex 2 and Annex 3 respectively.

1.3.3 Limitations and Challenges

The evaluation faced the following limitations and methodological challenges. These are discussed in more detail in Annex 6.

Severe time and capacity constraints: The evaluation team reviewed three interventions within the budget and time period usually attributed to an evaluation covering a single intervention (project or programme). Coupled with paucity of data, limitations in easily securing interviews, this constrained the evaluation team's ability to go into the same depth as would be possible had it been a single intervention. Nevertheless the evaluation team has confidence that it derived sufficiently robust findings to draw relevant conclusions for each intervention as well as overall in relation to Sweden's contributions to strengthening the health system in Somalia.

Inaccessibility of key informants: The ability to have meaningful interactions with key informants in Somalia was greatly helped by the Somali team member, who conducted field visits and some key interviews. However, slowness in responding to interview requests and unavailability of key informants drew the information gathering over a much longer time period, was limiting, complicated timely triangulation, and curtailed analysis time. Lack of capacity of the entire team to interact in Somali or be together in Somalia was a constraint.

²⁰ RAAD in Somali it means "to trace" - it is the name of the EHR platform customised by NomadiLab for HADDA project coordinated by SPIDER and owned and endorsed by the Federal Ministry of Health.

Security constraints: Ongoing insecurity in parts of Somalia limited the evaluation team's ability to all be in Somalia, and for the Somali-expert to conduct in-person data collection beyond health facilities in Mogadishu and in Dhusamareeb. This posed a particular methodological challenge for assessing community-level impacts. To mitigate this, the evaluation relied heavily on virtual data collection methods, but connectivity to interviewees and timely availability remained important constraints.

Political changes and non-linear progression of success: Changes in the Federal government and resulting decisions (to modify leadership of the NIH, and to transfer its functions for example) resulted in significant evolutions and so collecting data and having interactions with a sufficient number of key informants was constrained. Methodologically, the dismantling or “emptying out” of some relevant entities (relevant to the evaluation) showed that progression is not always linear in fragile contexts – institutions and systems can be built up and move forward – and then pushed backwards as in a ‘yo-yo effect’. The paucity of recent data, and very different perspectives and insights across key informants and institutions posed a methodological challenge in terms of triangulation, especially in the absence of recent data. The team had to resort to making its “best judgement” inferences.

Paucity and quality of data: Somalia's health information systems face significant challenges with fragmented data collection and gaps in completeness, timeliness and accuracy. This limited severely the evaluation's ability to draw robust conclusions about health system performance and impacts. The evaluation team used multiple data sources and did its best to triangulate these with key informant insights.

Attribution complexity: Given the complex, long-term nature of health system strengthening and the impossibility to attribute observed changes solely to the Sida-supported interventions, the team applied contribution analysis to assess how the interventions plausibly influenced changes, while acknowledging other contributing (enabling and constraining) factors.

Informant bias: In a highly political fragile and transitional context such as Somalia, informant bias, and recall bias are important factors that limit data quality, sometimes limit the ability to have meaningful interactions, or to understand the veracity of what is being shared. In several instances, extremely conflicting insights were provided in interviews and in written materials. This created a methodological challenge. The team triangulated across the three interventions and informants (some of whom spoke about all three), used documentation were relevant and used a balanced approach to mitigate this.

1.4 THE EVALUATION PROCESS

The evaluation phases are presented in detail in the inception report (see Annex 4). The evaluation began with a start-up and scoping phase that included start-up meetings with evaluands (PHAS, SPIDER and WHO-Somalia), the Embassy of Sweden, multiple interviews, stakeholder mapping, and initial data and document review. The inception phase included a deeper project document review, identifying the theories of change for the three interventions, identifying stakeholders (stakeholder analysis). It also included developing a stakeholder engagement plan, detailed methodology, evaluation matrix, data collection tools and work plan, confirmed during a remote inception session. The data collection phase included in-person and

virtual key informant interviews, site visits to health facilities in Mogadishu and in Dhusamareeb with interviews and focus group discussions, data and document review. Regular communication was maintained with the Embassy and the evaluands, including some sharing of initial feedback where needed. The verification, analysis, and reporting phase involved a rigorous analysis of collected data, triangulating information from different sources to developing findings. This included actions such as analysing interview transcripts to identify key themes and patterns, synthesising data, assessing if and how interventions had influenced observed or claimed changes. The team iteratively developed and refined the findings, conclusions, and lessons learned through internal team discussions and consultations with key stakeholders where needed. It compiled these into this "Final Evaluation Report". The team used analytical insights to provide suggestions to the Somalia section of the Swedish Embassy in Nairobi - for the agenda and participants of a seminar to discuss implications of the evaluation findings for (other) fragile settings.

2 The Evaluated Interventions

2.1 PHAS: STRENGTHENING THE SOMALIA NATIONAL INSTITUTE OF HEALTH

Background: The International Association of National Public Health Institute (IANPHI) defines national public health institutes as government agencies, or closely networked groups of agencies, which provide science-based leadership, expertise, and coordination for countries' public health activities. In alignment with this definition, the Africa Centers for Disease Control and Prevention (Africa CDC) adopted a Framework for National Public Health Institutes (NPHIs) in Africa, which defines NPHIs as "... science-based government institutions or organisations that promote health by coordinating public health functions and programmes to prevent, detect, and respond to public health threats, including infectious and non-infectious diseases and other health events." The framework also emphasises the role of NPHIs in supporting national compliance with International Health Regulations (IHR, 2005), advancing the Global Health Security Agenda (GHSA) and strengthening national health systems.

The project: As mentioned, in 2019 Sweden agreed to establish a project intended to help enhance the first independent Somalia National Institute of Health aimed at and capable of improving core public health functions, including enhancing emergency preparedness, addressing health disparities, and fostering evidence-based policy and leadership in Somalia's health sector. This was the result of protracted dialogue by the Federal Government of Somalia (and its Federal Ministry of Health) who had initially approached the Public Health Agency of Sweden (PHAS) in 2014 for this purpose. The Public Health Agency of Sweden (PHAS) was, following mutual agreement, engaged and financed by Sida to collaborate with the Federal Ministry of Health and Human Services (FMoH) in helping to enhance the National Institute of Health Somalia (NIH) and assist its subsequent capacity development in the areas of disease surveillance, data management, research capacity, organisational capacity, and networking. The project covers the period June 2019 to May 2025²¹. The financial envelope was 40 MSEK (approximately USD 4 million). It originally was intended for 3 years but was prolonged with no cost-extension.

Sweden anticipated that this initiative would not only improve Somalia's ability to respond to disease outbreaks and public health challenges but also contribute to long-term sustainability

²¹ To note that there are on-going discussions between Sida and PHAS on a no cost-extension until end of November 2025.

by equipping the government with robust governance and technical capacity to rebuild and maintain its health system. The decision therefore aligned with Sweden's development cooperation strategy, which prioritised health system strengthening, institutional capacity-building, and equitable access to healthcare, particularly for women and children.

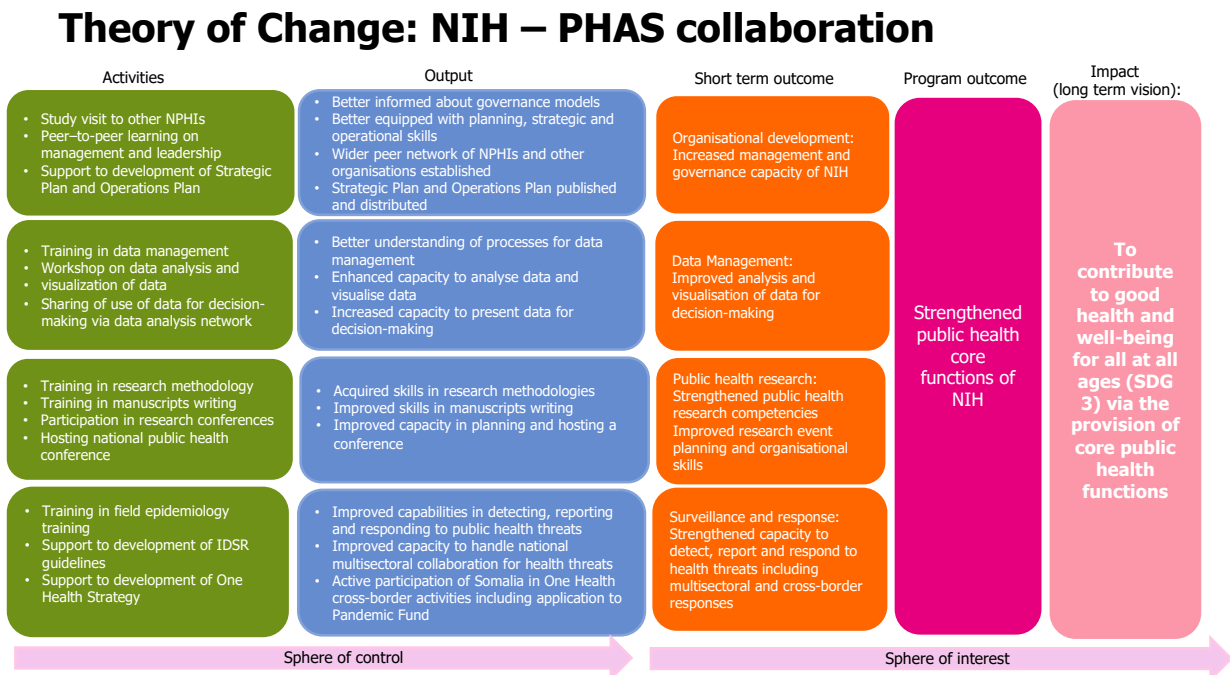
The **overall goal** is to enhance and solidify an independent public health agency, the National Institute of Health in Somalia, in cooperation with the Federal Ministry of Health (FMoH) and Member State Ministries of Health. The **aims** are to set up and strengthen core public health functions within NIH:

- Organisational development
 - Increased management and governance capacity of NIH.
- Data Management
 - Improved analysis and visualisation of data for decision-making.
 - Public health research
- Strengthened public health research competencies.
 - Improved research event planning and organisational skills.
- Surveillance and response
 - Strengthened capacity to detect, report and respond to health threats including multisectoral and cross-border responses.
- Widened network²² for research, learning and sustainable relations.

The Theory of Change: The PHAS–NIH collaboration was guided by a structured Theory of Change (ToC) developed in 2020 and updated in 2024. When the leadership for NIH was replaced in 2023, some of the NIH functions were duplicated within the Federal Ministry of Health. PHAS decided then to continue to focus on strengthening of core public health functions, mainly in the One Health unit of the FMoH, and shifted its focus away from the NIH. Some NIH functions were, as a result of priority shifts by the Government, anyway duplicated in main units of the FMoH proper, such as the One Health unit. It outlined a clear pathway from technical inputs (training, peer learning, support to strategy documents) to short-term outcomes (enhanced institutional capacity, improved data management and research skills), medium-term outcomes (better surveillance, multisectoral response capacity, and participation in cross-border health initiatives), and long-term public health impact (contribution to SDG 3 – good health and well-being through strengthened core public health functions). Table 1 presents a visual overview of the ToC.

²² IANPHI membership, Africa CDC, NPHIs in SSA, AFENET, WHO, SPIDER/Stockholm University, Umeå University, Statistics Sweden, etc.

Table 1 NIH - PHAS Theory of Change (Source: PHAS)



2.2 SPIDER: DIGITAL HEALTH SOMALIA

Background: Somalia lacks a national initiative to consolidate and utilise health data for informed decision-making, which undermines the capacity of health authorities to deliver equitable and effective health services. The fragmented health information systems hinder evidence-based planning, particularly for marginalised and remote populations. In order to address the critical gap in coordinated health data infrastructure, Sweden decided to fund the strengthening of Somalia's National Health Management Information System (HMIS) in particular through an Electronic Health Records System (EHR).

The project: Digital Health Somalia 2019-2025 aligns with Sweden's commitment to strengthen health systems and promote digital solutions for development.²³ It aims to establish a national electronic health record (EHR) system that is interoperable with DHIS2. By establishing an EHR system, the project aims to directly strengthen the national HMIS by

²³ SPIDER conducted a needs assessment, very early on, and this highlighted that Somalia lacked a HIS/HMIS Strategic Plan. One key recommendation was for HADDA to support the development of this Plan. Consequently, HADDA prioritised this effort and initially focused on working with the Ministry of Health and Human Services (FMoH) to develop the plan to contribute to HIS governance and strengthening the country's health systems. This responsibility was later transferred to WHO. So the SPIDER focus is on EHR.

providing accurate and timely data for decision-making. Sweden expected the project to enhance the Somali health sector's capacity for data-driven management, leading eventually to improved accessibility and quality of health services, and to realising the broader goal of diminishing health inequalities in a very challenging context. The financial envelope was 45 MSEK.

To deliver the project, Sweden chose to partner with the Swedish Programme for ICT in Developing Regions (SPIDER) because it was considered to have good potential to bring significant value to managing this HMIS-based project. As a specialised institution with expertise in ICT for development, SPIDER leverages a strong network of Swedish and international experts to implement innovative digital solutions. Its established track record in managing complex ICT-based development initiatives helps ensure an evidence-based and methodical approach to strengthening health management information systems. SPIDER also conducts comprehensive audits, stakeholder assessments, and engages in capacity building efforts. Furthermore, its operational research capabilities and ability to collaborate with local partners would, it was believed, help ensure that the intervention was contextually relevant and sustainable. In addition, SPIDER's experience in integrating technology into public health initiatives was expected to ensure a robust foundation for Somalia's digital health infrastructure because SPIDER combines technological expertise, local engagement, financial diligence, and a commitment to sustainable development. This increased the chances that the project would deliver both immediate and longer-term health system improvements through a stronger electronic health system (EHR) that is a key component for a functional HMIS.

SPIDER coordinates the Health Alliance for Digital Development and Action (HADDA) programme in Somalia. HADDA aims to enhance maternal and child health outcomes and promotes health equity by supporting the establishment of EHR system across Somalia, and urges the unification of the Health Management Information System (HMIS). SPIDER through the HADDA project collaborates closely with Somalia's federal and regional Ministries of Health to develop an integrated EHR that is workable, functional and financially feasible for both Member States and Federal entities. SPIDER engages in dialogue with WHO, UNICEF, the Swedish Public Health Agency, and the Somali National Health Institute to support this initiative. HADDA is a collaboration between SPIDER and the Federal Ministry of Health and Human Services (FMoH). This coordinated intervention aims to strengthen *the Somali health system* by integrating EHR as a key enabler to improving Maternal and Child Health (MCH) outcomes and to reducing health inequalities in Somalia. To deliver the project, SPIDER also partners with broader digital health and HMIS stakeholders²⁴ as well as local organisations for

²⁴ KasmoDev was the initial implementing consulting firm; later replaced by NomadiLab. SIDRA is the local research and analysis partner.

implementation and research, including NomadiLab, SIDRA, and previously, KasmDev, to develop and test a EHR and roll-out a process of digital transformation.

Specific EHR-related strategies include:

- Digitalise health data storage and share in selected regions through the adoption of a human-centred technology.
- Build capacity/data management to support ongoing digitalisation.
- Support research through local researchers.
- Train for and test the EHR in selected facilities.
- Establish a digital health and EHR stakeholder group.

Key aims of the HADDA programme (SPIDER project) include:

- Provide input towards the development of a feasible and integrated EHR system, as represented by the RAAD platform, for both Federal and Member State entities.
- Reduce use of multiple and fragmented health tools and data sets, and paper registries.
- Ease the administrative burden of frontline health professionals.
- Align the HADDA programme with HMIS priorities at both national and regional levels, and influence the establishment of a HMIS Strategy.
- Support capacity-building efforts to ensure effective implementation and management of digital health systems.
- Facilitate interoperability between EHR data and national health databases (DHIS2).
- Enhance research and evaluation efforts to inform future digital health interventions, and health-related policies and decisions.

The main instrument that facilitates HADDA's objectives is the development of **RAAD** platform—an EHR system customised from the open-source EHR system called Bahmni. NomadiLab in collaboration with SPIDER, SIDRA, and the Federal Ministry of Health and Human Services (FMoH) led the customisation of Bahmni to the context of the Somali health system. The RAAD system is designed to replace paper registries and eliminate the use of multiple fragmented digital data tools (e.g., immunisation and nutrition databases), reducing the administrative burden on clinical staff while improving the quality of health data.

The RAAD has been introduced and piloted in a few facilities. The Federal Government has adopted it as its "official" platform, but at the moment there are many competing systems introduced by other partners and private hospitals.

Interoperability is a core feature of RAAD, allowing its data to integrate seamlessly into the national District Health Information Software 2 (DHIS2) system. This integration enhances the Federal Government's ability to implement its National Healthcare Strategy, ensuring more comprehensive and reliable health data management. Preserving confidentiality of individual medical records while sharing aggregated health information is a key focus.

The RAAD platform is a Bahmni-based cloud resident application²⁵ that enhances digital patient information management at the health facility level. It aims to enable real-time registration of patients' personal details, clinical encounters, laboratory investigations, prescriptions, and immunisation

To support the digital transformation of health information management in Somalia, HADDA focuses, mainly but not only through RAAD, on:

- Digitalising health data storage and enabling data sharing (using human-centred technology), with use of open-source platforms (Bahmini-based platforms) and ensuring interoperability with Somalia's national DHIS2.
- Building data management capacity to support ongoing digitalisation efforts at the frontline health centres.
- Supporting locally-driven research by involving local researchers in the evaluation of EHR implementation, the assessment of HMIS-related needs, and related research.
- Training frontline healthcare professionals on RAAD. Testing RAAD usage and conducting pilot tests in selected facilities, and then rolling out.
- Helping to establish digital health and EHR stakeholder coordination groups (run by FMoH) to ensure ongoing coordination and innovation Technical Coordination Committee (TCC) and Technical Working Team (TWT) whilst building governance capacity and oversight of the Federal Government of Somalia (FGoS).

The HADDA programme provides training in HMIS tools not just RAAD, including train-the-trainer models. Specifically:

- DHIS2 (the national HMIS platform, maintained by WHO and MoH).
- Electronic Health Records (EHR) system (RAAD).
- General digital health literacy and system integration.
- All activities are relevant in relation to the national RAAD vision.

HADDA develops and pilots the RAAD EHR platform at the health facility level:

- RAAD serves as the overarching *national digital health vision*.
- DHIS2 is the national HMIS backbone, used at district and national levels.

²⁵ Bahmni is an open-source electronic medical record system. It is an integrated digital healthcare solution created by Thoughtwork.

- HADDA's EHR systems operate at the facility level, feeding into DHIS2.
- Training and capacity building enable health workers and managers to use and sustain these systems, but staff retention is an issue.
- Stakeholder coordination through a Technical Coordination Committee (TCC) underpins all layers, striving for alignment, accountability, and adaptation.

The Theory of Change (ToC) and the main intentions of the HADDA programme focus on:

- Strengthening the stewardship and governance capacity of the FMOH so that it engages with key stakeholders, and is better able to ensure that domestic and external resources are aligned with health information system priorities.
- Supporting use and management of appropriate technology to digitalise the paper-based HMIS tools (themselves fragmented) at selected healthcare facilities.

The ToC identifies three main areas of activities:

- Capacity-building: Train Somali professionals to digitalise health data.
- Evidence generation and research: Collect and analyse evidence to inform system development.
- Collaboration across sectors: Coordinate with funders and implementors; align initiatives with the principles for digital development and digital investment.

It is aimed to realise the following longer-term key outcomes:

- Continuous improvement in health systems capacity for equitable service delivery.
- A robust data-informed policy framework for Somalia's health system.
- Integrated HIS that supports universal health coverage in Somalia.

Table 2 Theory of Change for the SPIDER/HADDA pilot project (Source: SPIDER)

Activities	Outputs	Programme Outcomes	Long Term Outcomes/Impact
Capacity Building: Train Somali professionals to digitalise health data	Training programmes delivered on RAAD usage, data collection, and analysis	Enhanced capacity of health sector professionals to use digital tools for data collection, planning and decision-making	Continuous improvement in health systems capacity for equitable service delivery.
Evidence Generation and Research: Collect and analyse evidence to inform system development	Implementation and research evidence collated and analysed Research outputs aligned with national health priorities	Evidence informs patient care, and eventually the national health system development, covering additional programme areas and regions	A robust data-informed policy framework for Somalia's health system.
Collaboration Across Sectors: Coordinate with funders and implementors; align initiatives with digital health principles	Stakeholder consultations conducted Adherence to Digital Investment Principles and Principles for Digital Development.	Improved collaboration among funders and implementors strengthens the national (Digital) Health System	Integrated health information systems support universal health coverage in Somalia.
↔ Sphere of Control		↔ Sphere of Interest	

2.3 WHO: PHAS/SPIDER SUPPORT

Background: The World Health Organisation (WHO) is a key stakeholder in Somalia, with a strong mandate and historically established presence in the health sector. WHO - Somalia supports most aspects of health systems strengthening in Somalia, including the strengthening of health management information systems as a component of the broader national Health Information System. Its efforts revolve around strengthening HMIS tools such as DHIS2 for collecting, analysing, and reporting aggregate health data, while also contributing to the broader HIS infrastructure in alignment with Somalia's national health strategies. WHO - Somalia always works closely with the Federal Ministry of Health and Human Services and the Ministry's partners to align their efforts with national priorities and global standards.

Given its role in supporting and reinforcing ongoing efforts in health system coordination, digitalisation, and disease response, linkages between WHO and the projects run by PHAS and SPIDER were deemed strategically critical. Sweden's decision to partner with WHO in Somalia therefore focused on facilitating PHAS and SPIDER partnerships with Somalia entities, and ensuring coherence with on-going efforts to address critical gaps in the country's health system, and help coordination.

This partnership with WHO aligns with Sweden's strategic goal of promoting equitable health access, particularly for women and children, and responds to the urgent need for sustainable health system development in Somalia. Through it, Sweden anticipated to contribute to long-term improvements in Somalia's health outcomes while enhancing the operational effectiveness of its broader health sector engagement, in particular its PHAS and SPIDER projects. Non-

financial memoranda of understanding (MoUs) were signed between WHO and PHAS, and WHO and SPIDER to formalise this collaboration, and also between SPIDER and PHAS.

The project: Support to WHO intends to further strengthen the efforts of PHAS on the establishment of NIH; and SPIDER on the strengthening of HADDA and the Health Information System. It also intends to enhance management of the Integrated Disease Surveillance and Response System (IDSRs). The financial envelope was roughly 6.7 MSEK, over four years.

Relevant extracts from the grant agreement between Sweden and WHO, signed in late 2021, well after the two other projects had started (in 2019), and entitled "Support project NIH/HMIS" include:

- art. 2: *This Grant Agreement relates to a financial contribution to be made by Sweden to WHO to finance two Staff Positions to **support** the Public Health Agency of Sweden and Stockholm University/SPIDER Center **activities** in Somalia, called "Support project NIH/HMIS" which is outlined in Annex I.*
- In Annex I, activities are referred to as: *In order for WHO to effectively provide **dedicated technical, operational and coordination** support on the ground to both the important SIDA-funded programmes, ... the ToR for the two positions were attached to the grant agreement. These ToR are not detailed, with no deliverables.*

The specific focus of the support project includes:

- Facilitate PHAS in strengthening the capacity of the National Institute of Health of Somalia.
- Provide support to SPIDER, including its activities in pilot locations.
- Ensure that PHAS and SPIDER efforts reinforce, and are complementary to, strengthening the IDSR System, and other health system-related efforts.
- Help establish federal health related strategies or policies (that incorporate, as feasible, relevant PHAS/SPIDER insights).

The project involved the quasi-simultaneous deployment of a Sida-funded PHAS secondee to WHO in Nairobi (2021–2022) and the recruitment of two Sida-funded national professional officers embedded within WHO Somalia. Together, these staffing modalities aimed to reinforce WHO's support to Somalia's health system strengthening and enhance coordination with the PHAS and SPIDER interventions. The secondee, based in Nairobi and Swedish, was well positioned to liaise with Sida, PHAS, SPIDER, WHO, and NIH, facilitating strategic and operational linkages. In parallel, the two Somali national officers—one focusing on health systems and the other on surveillance—were embedded in the national context, providing direct technical support, strengthening liaison with Federal and Member State actors, and offering grounded feedback on operational realities.

The Theory of Change: The theory of change envisioned that by embedding dedicated WHO support to the SPIDER and PHAS initiatives WHO would provide critical support to SPIDER and PHAS. This support would help SPIDER and PHAS assess needs, devise strategies to

strengthen Somalia's health system, reinforce the National Institute for Health, improve disease surveillance, modernise digital health information management, and build data and research capacity.

The activities were expected to produce short-term outcomes that would contribute to programmatic outcomes like strengthened public health functions (improving health security and resilience), better quality and use of health data for policymaking, more coherent health policies, enhanced institutional capacity, and coordinated stakeholder efforts for health system strengthening. Intended impact was a sustainable, resilient health system in Somalia. Table 3 provides a visual overview of ToC details.

Table 3 Theory of Change - PHAS-seconded position and two WHO staff positions (all Sida-funded). (Source: WHO-Somalia)

Theory of Change – PHAS secondment and WHO staff positions (all Sida-funded)		
Activities	- Assessment of needs. - Provide technical assistance for NIH operationalisation (support PHAS). - Train health professionals in surveillance, data management. - Develop and expand EHR in collaboration with SPIDER. - Advise on health policy and strategy development. - Coordinate stakeholders for aligned health interventions. - Develop sustainability and evaluation frameworks.	↑ Sphere of Control ↓
Short-Term Outcomes	- NIH established as a capable public health institution (by PHAS primarily). - Field epidemiology training programme implemented (linked to IDSRS) also with PHAS. - Integrated HIS strengthened and disease surveillance improved, also with SPIDER generated RAAD data into the IDSRS system. - National Health Information Strategy 2025 finalised and initiated. - Health professionals trained in evidence-based health management. - Policy and strategies aligned with WHO standards.	
Programme Outcomes	- Strengthened public health functions reinforce health security & resilience. - Improved data quality, accessibility, and use for policymaking. - Coherent policies. - Enhanced workforce and institutional capacities. - Coordinated stakeholder efforts drive cohesive health system strengthening.	↑ Sphere of Interest ↓
Impact	- A sustainable, resilient health system in Somalia capable of addressing emergencies, improving health outcomes, and supporting long-term health development goals.	

3 Evaluation - PHAS

Evaluation reports usually have separate chapters, each outlining findings, lessons learned, and recommendations. Due to the nature of this evaluation, that evaluates three distinct and large interventions, we have chosen to use Chapters Three, Four, and Five to present findings and evaluative analysis for each of the three interventions, responding to EQ1–EQ4. Chapter Six offers reflections related to the modalities chosen by Sweden overall (part of EQ5). Chapter Seven presents the extent to which the support of Sweden has contributed to “move the needle” on health system strengthening in Somalia. Subsequently lessons learned from the interventions are provided in Chapter Eight, conclusions in Chapter Nine and recommendations in Chapter Ten. Finally, Chapter Eleven highlights generalised implications for working in (other) fragile settings (part of EQ5).

Annex 1 presents an overview of all the evaluation questions and intervention-adapted sub-questions used to investigate the three interventions.

This chapter provides consolidated responses to the evaluation questions (EQ) as they pertain to this intervention. The findings under each of the questions are followed by an evaluative analysis and a presentation of priorities for the future.

3.1 EQ1 - PHAS

EQ1: What progress and outcomes have been achieved in relation to the planned results (as expressed in the Theory of Change and project documents)? To what extent have the interventions contributed to strengthening capacity in the areas of core public health functions in the health sector/system in Somalia? What are any unexpected effects?

Context: This question seeks to determine whether the PHAS intervention achieved its intended outcomes, particularly in terms of institutional strengthening of the NIH and its contribution to core public health functions such as surveillance, research, training, and governance. It also looks at unexpected effects — positive or negative — of the intervention. Somalia’s institutional fragility, high staff turnover, and volatile political climate mean that capacity-building is often uneven and vulnerable to setbacks. Hence, achievements need to be examined both in relation to the plans and in light of contextual constraints.

3.1.1 Findings (EQ1)

PHAS’s intervention in Somalia made important strides in developing the nascent NIH and strengthening core public health capacities, though gains have been uneven and at times fragile given Somalia’s context. In terms of **institutional development**, PHAS played a critical role in responding to the request from the FMoH to help (establish and) support the NIH. PHAS helped to define NIH’s functions, set up its internal structures, and draft key documents like the NIH Operational Plan (2021) and the NIH Strategic Plan (2024–2028). It also helped

support the establishment of the NIH Board of Directors. The Board was responsible for strategic guidance and governance oversight. The Director of the NIH reports to the Board of Directors as well as to the Minister of Health. (This is an unusual double-reporting schema and poses institutional quandaries and creates lack of clarity around ultimate responsibility and decisional governance oversight.) These foundational steps were undertaken in collaboration with the Federal Ministry of Health and Human Services (FMoH) and WHO, aligning NIH's goals with the broad national health strategies. However PHAS, WHO and the broader donor community failed to help the NIH establish a legal mandate²⁶, with a dedicated federal budget line. NIH and PHAS set up working groups to plan for and implement joint activities, and held a biweekly-meeting for overall coordination and to guide NIH activities. Several interviewees noted that PHAS was instrumental in shaping a shared vision for the NIH in its formative and operational stages through leadership coaching, joint planning sessions, and promoting transparent staff hiring and oversight processes. However, with the political transition in 2023²⁷ and a change in NIH leadership²⁸, many of these governance gains stalled or were reversed. Documents reportedly went missing, the coordination meetings ceased, and institutional memory weakened – underscoring the fragility of progress in Somalia and the risk of reforms being more person-dependent than system-embedded (compounded by the lack of legal status for the NIH overall).

On **data management and use for decision-making**, PHAS provided substantial support in partnership with WHO and SPIDER, as well as Statistics Sweden which at the time was supporting capacity development within the Somali National Bureau of Statistics (NBS) (responsible for national health statistics). This included training health information staff in data analysis and visualisation (for example, developing dashboards using Power BI²⁹) with the aim to strengthen use of data for decision and policy making. The three training programmes included participants from NIH, FMoH, Ministries of Health in Member States, and NBS. This helped foster connections between these groups, helping to lay the groundwork for fostering collaboration amongst and between them. The development of data dashboards, outbreak investigation tools, and standard operating procedures (SOPs) for data validation were

²⁶ Parliament has not passed a law to establish and govern the NIH.

²⁷ As a result of Federal elections, the Federal Government of Somalia changed. This led, not surprisingly to shifts in leadership nominations. This included requesting the Director of the NIH to resign, replacing him. Many staff transferred out of NIH towards the FMoH or elsewhere. Some of the functions habitually under the aegis of the NIH began to also be carried out in units under the FMoH. The information on this was not entirely clear, with quite contrasting accounts of functionality and placement of responsibilities across key informants and documentation. See also Annex 1.

²⁸ During the period June 2019 until 2025, which is the evaluation period, the NIH has had four directors. According to PHAS, since its creation, the NIH has had five directors.

²⁹ Power BI is a collection of software services, apps, and connectors that work together to turn unrelated sources of data (e.g., Excel spreadsheet, or collection of cloud-based and on-premises hybrid data warehouses) into coherent, visually immersive, and interactive insights.

seen as important milestones by NIH and FMoH stakeholders. Data quality and timeliness improved in pilot areas, and NIH surveillance data became more visible in joint planning and outbreak responses by 2022–2023. However, linkages between these enhanced data systems and real-time decision-making remained weak in many parts of the health system. Policymakers showed interest in using data but were often constrained by institutional silos, shifting mandates, and reporting delays. One positive development was the increased use of surveillance data during coordinated responses to outbreaks, but broader policy influence of data was limited – especially after key public health functions ordinarily assigned to a NIH were duplicated (in 2023) in other departments in the Federal Ministry of Health, and some staff were pulled out of NIH to the (other) FMoH departments. (NIH was "semi-autonomous" in that it had no budget line and no legal mandate but was treated, for all intents and purposes, as though it were separate, semi-autonomous entity, with the afore mentioned Board etc.) When the One Health Unit was established within the FMoH, in 2024, even more public health functions (ordinarily found in a NIH) were duplicated/shifted.

In public health research, PHAS helped boost a previously weak area of the Somali health sector. The agency supported development of a National Public Health Research Agenda and facilitated NIH's first-ever national health research conference in 2022. This involved local universities and Member State Ministries of Health. PHAS advisors coached NIH staff on research skills – developing a Terms of Reference for an ethics committee, research protocol development, helping to set up a literature review, and to conduct basic data analysis. These inputs built momentum and confidence in NIH's role as a research leader, according to NIH and FMoH respondents. Research capacity building activities were jointly undertaken by PHAS, WHO, Umeå University, and Lund University. They also involved, for instance, the Ethiopia Public Health Institute. The Addis Continental Institute of Public Health was included in the training. Such collaborative training opportunities created networking opportunities and broadened professional contacts between NIH and universities both within and outside Somalia. However, tangible research outputs (e.g. peer-reviewed publications or major studies) remained few by the time of this evaluation. The political and institutional disruptions in 2023 also affected this area: staff who had been trained or involved in NIH research initiatives were reassigned to other departments, or left all together, and high-level support for research waned. Several (many) experienced staff members also left the NIH. The research agenda that was formulated is a positive legacy, but its implementation has stalled and will require renewed investment and coordination across the Ministry to move forward.

Surveillance and outbreak response was one of the most visible areas of progress. WHO and PHAS contributed directly to the roll-out of the Integrated Disease Surveillance and Response system. This moved Somalia towards a fragmented, paper-only based disease surveillance system to a partially digital platform aligned with WHO standards for IDSR systems. So, Somalia's surveillance system transitioned from a patchwork of ad hoc (paper) reports to a more standardised IDSR platform with weekly reporting from health facilities (some paper, some digital). The technical assistance and capacity-building provided by PHAS proved key for this progress. Important activities were co-hosting Field Epidemiology Training Programme (FETP) workshops with WHO and AFENET, and helping to institutionalise practices such as regular risk assessments and after-action reviews for outbreaks. These

advances positioned Somalia to respond more coherently to outbreaks such as cholera and COVID-19, with clearer reporting lines and coordination between NIH, WHO, and the MoH&HS. However, the sustainability of these gains became uncertain after NIH's role was diminished post-2023. A few NIH surveillance staff were absorbed into the FMoH One Health Unit. Without a clear mandate for NIH, the continuity of the organisation is at risk. Interviewees stressed the need for renewed institutional anchoring and stable leadership in order to maintain and further develop progress in surveillance (e.g. IDSR and FETP outputs) and of the NIH generally.³⁰

One Health Strategy: Discussions around One Health concepts began as early as 2013 in Somalia. The idea being that by promoting multisectoral collaboration and strengthening the health system's ability to address complex health challenges at the human-animal-environment interface, the entire health system benefits. HSSP II does not explicitly focus on this. The principles of the One Health strategic framework and strategy are present explicitly in the HSSP III for 2022-2026 health sector strategic plans. Recent efforts from PHAS in strengthening the health system align with these principles: since 2024, PHAS has collaborated with FMoH on the recently established One Health Unit in the FMoH.

Beyond the planned outcomes, several **unexpected positive effects** emerged from the PHAS–NIH collaboration. PHAS's largely behind-the-scenes technical approach helped catalyse national recognition of the NIH and fostered stronger linkages between public health knowledge and decision-making. For example, the engagement spurred unanticipated momentum in establishing Somalia's first health research journal (the *Somali Health Action Journal*) and in strengthening institutional relationships with regional bodies like the Africa Centres for Disease Control and Prevention (Africa CDC). Exposing NIH staff to regional and international public health platforms (such as Africa CDC's International Conference on Public Health in Africa (CHPIA)) improved institutional confidence and highlighted NIH's strategic value within Somalia and beyond. Several stakeholders noted that these experiences repositioned NIH as a more central player in the country's health system, boosting its legitimacy and the professional identity of its staff. High-profile events supported by PHAS –

³⁰ It is worth noting that the responsibility for surveillance and HMIS data was never fully transferred to NIH, and remained in large part within the FMoH, according to PHAS, although the responsibility for FETP lies with NIH (at least at the moment).

like the Garowe Conference³¹ and NIH Research Exhibition³² – further elevated NIH’s profile, enabling Somali health leaders to engage with international experts and peer institutions.

However, these benefits also brought new challenges. The increased visibility of NIH created heightened expectations amongst Somali stakeholders for greater NIH autonomy, dedicated budgetary support, and formal legal status. These expectations often exceeded what PHAS (as a technical partner) could deliver on its own, given that these issues are for the Parliament to decide. PHAS did meet several times with the decision-makers to impress the importance of a legal status and dedicated budget line (while knowing that overall budgets are minimal). (This reveals a gap between symbolic achievements and structural realities. It also raises the issue of whether, before advancing on what is nominally presented as a semi-autonomous or independent institute, it makes sense to first ensure that the legal status questions have been decided formally, before spending time on setting it up as a functionally separate institute, even if, on paper, semi-attached to the FMOH). Moreover, despite better recognition of NIH, there were persistent coordination gaps with other health actors and programmes not directly involved in the PHAS collaboration – a reminder that broader health system integration remained incomplete. This is not surprising in fragile contexts, where ministries of health struggle to maintain a proactive coordination role, and in which donors - while agreeing that coordination is key - find it difficult to fully coordinate. There is only so much that a technical partner such as PHAS can do to promote better collaboration and coordination with the broader international community, or across the Somali health actors. As mentioned already, PHAS encouraged events and capacity building to be as inclusive of a cross-section of Somali public health actors as possible. Private health actors were not part of the equation or reach out.

Organisational development, management and networking: PHAS financed NIH membership in IANPHI, and supported the Director General and a staff member to attend

³¹ This was the first Somali Health Research Conference in Garowe from January 2022 to February 2022, hosted by the Puntland State Ministry of Health. The conference aimed at convening health researchers, academics, and healthcare system practitioners to present their ongoing research projects and share their successes and challenges along with the gaps their studies had identified. The conference brought together a network of Somali health professionals, from Federal and State-level organisations, and from international collaborating partners to identify the research needs and priorities to be considered for implementation. It organised panel presentations and discussions on important health system, areas current and future concerns confronting the health sector across the country. It created actionable recommendations.

³² The NIH held its first-ever Annual Research Exhibition Program in Mogadishu in 2022. The week-long event showcased progress and accomplishments in public health research activities throughout Somalia, and produced detailed findings to guide policymakers and experts. Attendees included WHO dignitaries, Directors from the Federal Ministry of Health Somalia, the NIH, the Somalia National Bureau of Statistics. The 3rd day included university research directors and public health research professionals. The last day had junior researchers and public health research professionals.

IANPHI Annual Meetings. This supplied an excellent networking opportunity and a learning opportunity through sharing experiences unique to NPHIs. PHAS has also fostered networking with other relevant partners, notably other NPHIs in sub-Saharan Africa. Before the IANPHI Annual Meeting held in Stockholm in 2022, 12 staff members of NIH Somalia were invited to a 2-day side event on management of NPHIs and IDSR with participants from the NPHIs in Ethiopia, Mozambique, Zimbabwe along with participants from Africa CDC, US CDC, ECDC, Sida and MoFA Sweden. The event was an arena for exchange of knowledge and experiences, and created a networking opportunity.

PHAS's contributions significantly strengthened the foundations of Somalia's public health system, and built up key public health functions within the NIH, which were later transferred or duplicated in (other) departments of the FMoH. Key interventions included:

- **Support to the reinforcement of core public health functions ability to deliver:** Technical support for example, for the development of an IDSR, which helped institute weekly surveillance reporting across Somalia's regions.
- **Strategic planning:** Development of the NIH Strategic Plan (2024–2028), providing Somalia's first roadmap for a public health institute aligned with national health goals.
- **Workforce development:** Joint design and roll-out of the FETP, training over 95 frontline public health workers in surveillance and outbreak response.
- **Research and learning:** Convening the Garowe Conference and NIH Research Exhibition, which raised awareness of research for health policy and launched the *Somali Health Action Journal* – bringing Somali universities together with government and international researchers.
- **Institutional governance for research:** Assistance in setting up the NIH Board of Directors, a National Ethics Review Board, conducting health research priority-setting, and initiating research dissemination platforms.

These efforts were widely acknowledged by Somali stakeholders as addressing critical gaps in surveillance, data use, human resources, and institutional leadership in the health sector.

3.1.2 Evaluative Analysis (EQ1)

The institutional development of the NIH stands out as a major achievement, demonstrating the potential of international partnerships to build public health capacity in a fragile setting. PHAS's support was not only technical and financial but also relational – it successfully convened Somali health actors around a shared vision for the NIH and the broader health system. By embedding experts within the Federal Ministry of Health and Human services and working hand-in-hand with local leadership, PHAS helped the NIH take shape as a credible public health institution capable of coordinating surveillance, research, and training. Moreover, PHAS's multi-dimensional approach (spanning governance, data, research, and emergency response) showed that even a modestly sized intervention can catalyse system-wide improvements when it is strategically targeted.

However, the **fragility and sustainability of these gains** became evident after the 2023 leadership transition at NIH. Much of the progress proved shallow once key individuals were removed from their positions, or felt they should leave or transfer elsewhere. Several key

informants and international donors underscored that important documents and data vanished and committees and units stopped functioning. This highlights that improvements were not yet sufficiently institutionalised (in part due to the lack of legal status for the NIH but potentially, given its fragility, lack of political economy analysis on the perceptions of power and privilege that link to success, perceived international interactions etc, and how difficult delicate balance of power and perceptions is in fragile contexts with few available resources. The extent to which the incoming Government preferred to fold the NIH into the FMoH was explained by several key informants as partly linked to a perception of access to resources. This political economy lens, while helpful, does not necessarily provide any easy answers and it is not clear that PHAS and other involved actors could have done much to prevent the gutting-out of NIH. In essence, reforms were riding on the commitment of individuals rather than being locked into solid and sustainable organisational federally solid processes, and NIH legal status. This underscores a crucial lesson: building lasting capacity requires embedding new practices into formal structures (such as policies, standard procedures, laws and secure civil service positions) so they endure beyond the champions who introduced them. It also requires ensuring that successes achieved by one actor in the health system (NIH) is perceived as a win and a gain for whole health system.. Fostering organisational culture, and buy-in, within the entity and beyond (to the broader Federal government) is also key.

The **translation of technical gains into policy impact** remained limited. While PHAS did help to enhance data and surveillance systems (improving Somalia's epidemiological intelligence, providing training and capacity to create dashboards and to analyse data), those gains often did not feed into decision-making or policy formulation in a systematic way. The absence of strong feedback loops – where data and evidence inform budgets, plans, and actions – meant that improved information did not always lead to better health interventions. Strengthening such linkages (for instance, requiring that quarterly surveillance reports be reviewed in high-level health sector meetings) would increase the likelihood that PHAS's contributions result in tangible health outcomes. (This would have been the focus of PHAS had the changes at NIH not occurred.) These points also beg the question of public health functions and where they sit in the health system (in Somalia). While many of the NIH staff were transferred within the health system overall, this resulted (in some instances) in parallel sets of functions, and in the gutting out of NIH capacity, in favour of that function being carried out elsewhere. Whilst holding on to, and enhancing capacity of, the *function* in the system is positive, lack of independence when those functions are not in an (independent) NIH is problematic (science driven vs political imperative driven). Additionally, whilst PHAS now focuses more on supporting the One Health Unit, the original intention, and indeed request from the FGoS, was to reinforce the NIH specifically. And the focus on ensuring the crucial translation of technical gains to policy impact is more complex than ever.

At the same time, **PHAS's discreet, trust-based approach** yielded positive unintended outcomes by enhancing the NIH's reputation and its networks. The intervention helped position NIH as a professional, non-political actor in Somalia's health arena, which in turn unlocked opportunities (like the creation of a health journal and participation in continental forums) that were not foreseen initially. These reputational gains have significant value: they created momentum and a sense of prospects and possibilities for Somalia's nascent public health

institute. However, this also highlights a tension between symbolic progress and structural consolidation. NIH's heightened profile created expectations for autonomy and resources that outstripped what PHAS alone could provide. In other words, visibility ran ahead of the NIH's institutional maturity. Without a commensurate increase in structural support (e.g. legal mandate, domestic funding), there is a risk that these largely symbolic gains could be lost or lead to frustration. Going forward, capitalising on the momentum realised will require converting reputational boosts into concrete commitments – for example, using NIH's new stature to advocate for a formal legal act and structural government budget allocation to secure its future.

Overall, PHAS made **measurable progress** in strengthening Somalia's public health architecture – particularly in establishing the NIH and improving the building blocks of surveillance, data use, and research. The intervention effectively addressed key capacity gaps and was **highly relevant** to Somalia's needs. Yet, the durability of these achievements is in question. They remain heavily contingent on political will and institutional stability, which Somalia struggles to maintain. The evaluation evidence suggests that without strategies for **continuity and resilience** (such as institutionalising knowledge, securing long-term funding streams, ensuring legal status of the NIH and a dedicated budget-line allowing fundraising specifically, and planning for inevitable leadership transitions³³), even well-designed capacity gains can quickly erode. Thus, the PHAS experience highlights both the possibilities and the limits of projectised external support in a fragile context: meaningful change can be initiated and achieved, but sustaining it requires long-term commitment and embedding change beyond individual actors, and using political analysis to continually consider risk(s) and create contingency plans and scenario modelling.

3.1.3 Reflections on the Theory of Change (EQ1)

The PHAS intervention largely adhered to the strategic logic articulated in its Theory of Change. Most short- and medium-term outcomes were partially achieved, particularly in the areas of strategic planning, technical skill-building, and systems development (IDSR, research protocols, data visualisation). The ambition to contribute to long-term public health functions was directionally sound, and the intervention's coherence with national and global frameworks supported this pathway.

³³ Leadership transitions in fragile contexts, and particularly in Somalia, are inevitable and predictable. External actors could consider using political analysis, risk and contingency modelling to think through the implications of different scenarios, and consider when dialogue (on the pros and cons of (for example) removing a director general, or shifting staff from one place to another) should take place and with whom, and what levels external actors might be able to put into play to preserve progress and create continuity. These are issues typical of fragile countries, including for health sectors therein, that tend to be a strong focus of external funding and attention.

However, institutional resilience — a key assumption underpinning the ToC — proved fragile. The disruption following the leadership transition at NIH, and PHAS's subsequent shift in focus, exposed a gap between the envisioned institutional sustainability and the actual political context. While core technical capacities improved, they did not consistently consolidate into institutionalised functions, suggesting that future ToCs in such contexts must explicitly recognise the high political risks present in fragile settings, recognise the need to use political and risk analysis continuously, to be adaptable enough to integrate mitigation strategies for political turnover and continue to prioritise systems (for example, the request to PHAS from FGoS was focused on helping with the NIH. When leadership of NIH is swapped out, and staff are transferred out/quit, what does PHAS do? Start all over again (as it were) with NIH? Shift focus to the functions away from NIH?). First and foremost the ToC could usefully include more detailed focus on the preconditions or *sine qua non* and assumptions for success. It is not entirely clear the extent to which this was, or not, sufficiently the case within the ToC underlining the PHAS intervention.³⁴

As said, PHAS made tangible progress in strengthening Somalia's public health architecture, particularly through its support to the NIH. The intervention addressed key capacity gaps in governance, research, and surveillance. However, these gains proved highly vulnerable to political turnover, exposing a risk in how deeply institutionalised the development and building up of the NIH proved to be. There could perhaps have been more focus, earlier on, and continuously, on considering how, within the broader system to create and sustain understanding of *why* having an NIH is not the same as having the public health functions an NIH performs in *another* part of the health system. During 2024 and 2025, PHAS redirected its support to focus mainly on support to One Health activities in the FMoH, and away from its support to the NIH (including because the FGoS requested them not work with the NIH any longer). While it is important for a country to have strong public health functions, the request from the FMoH to PHAS and the underlying *raison d'être* for the collaboration was around the building up of the NIH. The NIH perceived the transfer of focus and funding with some distress. The gutting out of NIH has highlighted a need for risk and scenario building, and continuity planning in future capacity-building efforts.

Anecdotes from government informants also indicated some confused perceptions concerning financial provisions and whether the NIH was benefitting over-proportionally, compared with the FMoH. Informants also shared perceptions around whether this "independent" institution,

³⁴ NIH, FMoH, WHO and PHAS had planned to have the PHAS delegation visit Mogadishu in October 2023, to host a seminar on the role of NPHIs in core public health functions, with an aim to highlight the importance of NPHIs, the functions they carry, and their crucial need for funding. The PHAS trip to Mogadishu was cancelled due to security issues (as a result of Quran burning in Sweden). The workshop was also cancelled.

with its own (external) funding source(s³⁵), might somehow be perceived to represent a threat to higher-up federal authority. These are anecdotes. The point to retain here is that the political economy dimensions need a stronger place in the assumptions in the ToC and in adaptive programmatic decisions along the way.

3.1.4 Priorities for the Future (EQ1)

The below priorities for the future pertain to the NIH, not to the PHAS intervention itself, and are simply in relation to the evaluation question.

- Secure a **structural budget line** for the NIH (in the Federal budget).
- **Ensure institutional continuity** of NIH's strategic planning, governance processes, and core functions across leadership transitions: Institutionalise NIH's strategic planning and governance processes so they continue even if leadership changes. For example, important documents and decisions should be stored in shared systems and oversight committees should have a mandate that survive personnel turnover. Personnel should have clear job qualification requirements.
- Link **data to action** more systematically: Strengthen policy linkages between surveillance and data systems and robust planning structures and actual decision-making.
- Reinforce **research capacity** through predictable funding, and research-to-policy feedback mechanisms and creating a mechanism to promote and use research in national health planning and policy dialogue.
- Reinforce the NIH's core public health functions (surveillance, research, governance) by **embedding them institutionally** (i.e., legal status agreed by Parliament),.
- Examine **duplication of functions** elsewhere (i.e., One Health unit). Review the **usefulness** of a continued NIH in future if One Health carries all functions.
- Support **long-term strategies** that link technical training to **system-wide uptake** and **policy impact**.
- **Leverage NIH visibility** and support institutional mechanisms to **preserve and capitalise** on visibility gains — such as formal documentation of NIH achievements, strengthened communications units, and strategies to sustain engagement with regional and global platforms (e.g. Continental African Public Health Conference,, Africa CDC).
- Safeguard technical gains by ensuring that these gains (e.g. FETP, IDSR, research ethics) are **embedded into national health workforce planning**, budgeting, and legal frameworks. This may help to prevent reversal during political turnover or institutional change, along with legal status securement of any NIH.

³⁵ Important to remind here that no funding is transferred from Sweden "to" the NIH. Funding is complicated in Somalia and tends to go through third-party funding mechanisms and is mostly related to either a specific "consultancy task", per diem attendance at an event, or overhead costs such as (according to the informants) alleged payment of functional costs such as a car and driver for the NIH DG. The point here is the perception of what is and not financed by Sweden.

EQ2: To what extent have PHAS chosen methods and aid modalities been effective

Context: This question examines how the PHAS/NIH project was implemented and whether its delivery methods and aid modalities contributed to achieving the intended capacity-building and institutional development results. PHAS operated in Somalia through peer-to-peer learning exchanges, training workshops, mentorship arrangements, short-term study visits, and an expert secondment to the WHO country office. The project was carried out in partnership with the WHO, SPIDER, and Statistics Sweden, with funding and strategic support from Sweden. The evaluation looks at how well these methods built the capacity of Somali institutions, and the extent to which methods were effective. It also considers strengths and weaknesses in these arrangements – for example, whether coordination mechanisms and role allocations were optimal, and if the approaches taken were suited to Somalia’s context.

3.2 EQ2 - PHAS**3.2.1 Findings (EQ2)**

PHAS emphasised capacity-building methods grounded in institutional cooperation. These included interactive peer learning sessions, hands-on training workshops, structured mentoring, and study visits abroad. Interviews with Somali health officials consistently highlighted the value of these modalities – particularly practical trainings on topics such as Integrated Disease Surveillance and Response (IDSR) systems, data analysis with Power BI, outbreak investigation, and applied research methods. Study visits to public health institutes in Sweden and Ethiopia were reported to have had a transformative effect on participants. These trips helped Somali health leaders understand how a national public health institute functions and provided models that could be adapted to the Somali context. Although some planned visits were interrupted by the COVID-19 pandemic, the knowledge exchange continued through virtual seminars, which helped sustain the momentum of learning. Another notable modality was the Field Epidemiology Training Programme (FETP) implemented jointly with WHO. This in-service training and mentorship programme helped build epidemiological skills in the Federal Ministry of Health and Human Services, and NIH. While high staff turnover and limited resources in Somalia hampered the continuity of FETP cohorts, respondents noted that the hands-on mentoring model was particularly effective for transferring knowledge and building a network of trained epidemiologists within the health system.

Moreover, though there a data analysis network for persons trained in data analysis was established with PHAS help - and it was intended to allow for sharing of applied use of Power Bi (for example), no key informants mentioned it, and instead underscored the lack of a structured post-training follow-up or alumni network.

The collaboration with partners – WHO, SPIDER, Statistics Sweden – was important for the project’s effectiveness, as was Sweden who financed the intervention and provided strategic oversight and political backing, which ensured high-level commitment and continuity for PHAS’s work. WHO, as the primary in-country implementing partner, guaranteed that activities were aligned with international health norms and facilitated direct access to Somalia’s Federal Ministry of Health. WHO’s support (including hosting a PHAS secondee in Nairobi during an early year of project implementation) was particularly important in legitimising the

nascent NIH within Somalia's fragmented political context and in coordinating day-to-day project activities with government counterparts. Meanwhile, SPIDER's contribution was critical in the domain of digital health systems. Working in parallel to PHAS under Swedish funding, SPIDER led efforts to strengthen Somalia's health information system. This was accomplished, for example, by mapping existing health information tools, providing training on data management platforms, and improving the integration of new tools (such as the RAAD electronic health record system) into the national DHIS2 platform. This focus on e-health and data complemented PHAS's institutional capacity-building by addressing systemic gaps in health information management.

Coordination amongst PHAS, WHO, and SPIDER improved markedly over the course of the project. By 2022, the partnership, according to key informants, had become more coherent and interlinked, largely thanks to WHO's convening of regular planning meetings. Technical Working Groups (TWGs) and other forums were established to join efforts where relevant, and to continue to avoid duplication and create synergies. Data analysis workshops, FETP training sessions, are good illustrations of areas where PHAS and SPIDER (with Statistics Sweden) or PHAS and WHO supported joint efforts (for example in data analysis and outbreak analytics). Several key informants remarked that by the later stages of the project, the three partners seemed to be "speaking with one voice", and their inputs were clearly mutually reinforcing. There were still occasional challenges in clarity of roles (especially during transitions, such as when PHAS's direct secondment evolved into WHO-locally contracted staff), but overall the triangulated partnership delivered results that none of the actors could have achieved alone. The complementary strengths – PHAS's technical and capacity expertise and funding, WHO's country presence and normative authority, and SPIDER's digital solutions – collectively advanced the project's objectives in a synergistic manner. Table 4 provides a succinct outline of the various roles and modalities used for the main actors.

Table 4 Institutional Roles and Modalities

Actor	Primary Roles	Key Modalities Used
PHAS	Strategic guidance, institutional development, training, funding	Secondment, technical missions, peer exchange
WHO	Normative guidance, coordination, technical implementation	Liaison staff, TWGs, joint planning facilitation
SPIDER/HADDA	HIS/digital health strengthening, tool development, systems mapping	Interoperability work, digital innovation grants
FMoH	Political leadership, coordination, strategic oversight	Policy approval, MoUs, participation in TWGs
NIH	Implementation of surveillance, research, training, and early institutional building	TWGs, strategic planning, training delivery

3.2.2 Evaluative Analysis (EQ2)

The methods and modalities chosen by PHAS proved to be innovative and largely effective in building capacity, especially during the stable implementation period. The peer-to-peer exchanges, immersive training, and mentoring approaches were widely appreciated by Somali

counterparts and appeared to instil professional confidence and new skills. These modalities capitalised on learning-by-doing and relationship-building, which are crucial in fragile contexts. However, a clear lesson is that such gains need to be better anchored institutionally. This is a duty for the Somali government (i.e., to embed the NIH in law) but begs the questions of what pre-conditions should exist before external support is provided (i.e., to build NIH). In Somalia's volatile environment, many capacity gains remained person-dependent³⁶ and at risk of dissipating once trained individuals moved on. This means that newly acquired skills were not always systematically applied or passed on *within* the institutions, even if they may have remained within the overall health system. This indicates that the project could have further strengthened its effectiveness by planning for even more sustained mentoring, on-the-job support, and looking for ways to help retain trained staff in key positions, despite frequent lack of "pay-roll" salaries, and the perennial lack of federal finance issue (out of the control of the project, obviously).

The aid partnership model leveraged important comparative advantages but also revealed some difficulties. The collaboration with WHO – thanks in part to Sida's enabling financing – and contributions provided by SPIDER to the health system - helped reinforce achievement of PHAS-related objectives. The model helped ensure alignment with government processes, provided access to global expertise. The initial embedding of a PHAS secondee within WHO Somalia created a strong link between PHAS and other relevant actors, exemplifying how a liaison modality can work well. The two WHO national officers worked closely with the secondee. When the secondee left, these two were not always as tightly focused on PHAS-related (or SPIDER-related) priorities. Though various factors could have played a role here, most importantly, the roles and responsibilities *between* the three projects were not clearly defined from the outset, since these were entirely separate interventions. Non-financial MoUs were created, but these remained relatively general. There was no ensuing "joint programme" or "joint actions" or "mapping table" produced as a result (though some activities were delivered in cooperation, as stated previously). Moreover, the roles and responsibilities of the Sida-funded positions in WHO were never agreed in any detail in relation to eventual *specific* support from WHO to PHAS and SPIDER. Instead the MoUs were intended to guide the work and interactions across the three institutions, (according to the Government of Sweden). Frustrations were repeatedly shared over the lack of clarity around those roles. In relation to separate health interventions in Somalia funded by Sweden, it is worth noting that there was also no explicit "mapping" of how and where the various interventions complemented each other, or were intended to "cooperate", before their inception. Whilst the MoUs attempt to tie

³⁶ Even if the trained individual moves from NIH to another part of the health system, and that person's capacity is not lost **to the system**, it is, nevertheless not retained in the institution the project was focused on building up (NIH).

the interventions together, they do not appear to really have been particularly effective as they never resulted in concrete written agreements on how to move forward.

In sum, the chosen delivery methods were mainly appropriate and yielded positive results, but if Government of Sweden's intention is to ensure coherence across various health interventions, and to foster collaboration between and amongst them, this is best decided before projects documents are agreed. MoUs need, clearly, to be accompanied with plans of action. Staff positions would need clearly stated roles and responsibilities related to the intended linking to the interventions (PHAS and SPIDER).

3.2.3 Priorities for the Future (EQ2)

- **Define clear partnership roles and staff responsibilities:** Future programmes should establish well-defined liaison roles or secondment arrangements with specific deliverables tied to project objectives. This would ensure continuity and accountability when key personnel changes occur, and avoid gaps or misalignment in implementation.
- **Institutionalise post-training support:** To prevent capacity gains from fading, incorporate structured follow-up for all training and peer-learning and research exchange activities. For example, create communities of practice, mentorship networks, or refresher sessions that keep alumni engaged and supported in applying new skills on the job, including a focus on how to help ensure these remain active and accessible.
- **Consider how best to coordinate with key actors at, or before, inception:** Map out which actors do what and how best to plan and coordinate with relevance and in a timely manner. While government leadership at a formal level is important, informal information exchange and learning are important in the interim. Build these elements into the project design from the start (especially for multi-actor or multi-project initiatives). Regular coordination meetings, shared work plans, and joint monitoring frameworks (under government leadership, or not) can help to avoid or reduce any fragmentation and ensure partners' efforts are complementary from day one.

EQ3: To what extent has PHAS responded to the needs and priorities of Somalia? How coherent is the PHAS/NIH project in the context of Somalia? To what extent has the intervention aligned with the Somali government's health priorities?

Context: This question assesses whether the PHAS/NIH initiative was relevant to Somalia's request to PHAS to help build and reinforce a national institute of health, and whether the intervention was well-aligned with national priorities and other interventions in the health sector. It also examines the coherence of these interventions – both internally (how the various project components fit together) and externally (how well they complement other interventions by government, donors, non-governmental and private sector actors). In essence, the evaluation looks at whether the PHAS support was doing “the right things” and doing them in coordination with Somalia's plans and stakeholders, rather than working at cross-purposes or in isolation. Given that the Federal Government of Somalia has its Health Sector Strategic Plans and that numerous players operate in the health domain, ensuring alignment, to the extent possible, with

national strategies and complementarity with other initiatives is critical for the project's effectiveness and sustainability.

3.3 EQ3 - PHAS

3.3.1 Findings (EQ3)

The PHAS/NIH project was explicitly designed to align with Somalia's health priorities and international public health standards, and to support the building up of the Somali National Institute of Health. This directly responded to a critical institutional gap in Somalia's health system: after years of conflict and state fragility, the country lacked a dedicated public health agency responsible for disease surveillance, research, and health security coordination. The strengthening of the NIH through PHAS thus filled an identified need in the national health architecture. From the outset, PHAS worked in tandem with Somali authorities and WHO to ensure that NIH's mandate and its programmes fit within Somalia's Health Sector Strategic Plans and other policy frameworks. PHAS advisors assisted in drafting key strategic documents for the nascent institute, including the NIH Operational Plan (2021) and later the NIH Strategic Plan (2024–2028), aligning these with the country's health priorities and with global goals such as the Universal Health Coverage (a strong WHO focus) and the Sustainable Development Goals (SDGs). WHO played a central role in guiding this alignment. For example, by embedding internationally recommended approaches like Integrated Disease Surveillance and Response and ensuring compliance with the International Health Regulations in Somalia's plans. In practice, this meant that new surveillance systems, outbreak investigation protocols, and laboratory standards encouraged by PHAS and introduced through combined efforts between FMoH, NIH, PHAS, WHO were modelled on global best practices and tailored to Somali needs with WHO's technical assistance.

Coordination mechanisms led by WHO further cemented the project's alignment and coherence with broader efforts. Encouraged by WHO, the Federal Ministry of Health used its convening authority to bring together PHAS, SPIDER, Somali health officials, WHO, and other partners in joint planning forums. Each year, planning meetings and health sector coordination forums (sometimes under the umbrella of WHO's Country Cooperation Strategy 2021–2025) were held with Somali authorities to set annual priorities and review progress. PHAS's activities were integrated into these forums, ensuring that they complemented other ongoing health initiatives and responded to the government's evolving needs. This close coordination meant, for instance, that PHAS's support to develop a One Health strategy was done in collaboration with WHO and aligned with both global One Health frameworks, Africa's CDC Strategy, and Somalia's own policies. Similarly, WHO positions (funded by Sweden) helped to uphold international laboratory quality standards (such as a stepwise laboratory improvement process for diagnostic labs) and synchronise these with national health security plans. These measures illustrate that the PHAS intervention was **not a standalone, donor-driven project**; rather, it was embedded within Somalia's health system planning processes and aligned with national strategies and international norms.

A major focus of **alignment and coherence** was the health information and digital systems domain, addressed by the SPIDER-led HADDA project that was **implemented in parallel** to

PHAS. Fragmentation of health information systems in Somalia was a known issue – various partners had over the years introduced disparate data collection tools that were not interoperable. HADDA directly tackled this challenge in coherence with PHAS’s objectives towards better data. It began with a comprehensive mapping of all existing health information management systems and digital tools in use across Somalia’s health sector. Using these findings, SPIDER and the Ministry’s Department of Planning and Policy formulated a strategy to rationalise and integrate systems, centring on Somalia’s national District Health Information Software (DHIS2) platform as the backbone. Importantly, HADDA did not aim to create a new, parallel system; instead, it worked to ensure interoperability among existing systems and to build local capacity in managing digital health platforms. For example, one output was aligning a new electronic health record system (the RAAD EHR) with the DHIS2-based national health information system, so that data from pilot e-health interventions could feed into the national repository. Training and technical support were provided to ministry and hospital IT staff to harmonise data flows and reduce duplication of reporting. This approach to digital health was welcomed by Somali officials, PHAS and WHO as a pragmatic step toward greater system-wide coherence in data management, even if full integration of all legacy systems remained a work in progress. Some partners initially expressed concern about potential overlap or lack of clarity in the digital domain, but these were addressed partially through joint technical reviews and stakeholder engagement sessions. Overall, the HADDA initiative complemented PHAS’s work by strengthening the health information infrastructure that NIH and the Ministry rely on, thereby responding to a critical sector need (better data for decision-making) in a coordinated fashion.

The PHAS/NIH intervention was generally compatible with and complementary to other major health sector efforts in Somalia. On the positive side, government and WHO informants reported that PHAS’s work to build public health functions at NIH meshed well with initiatives by other international partners such as the World Bank and Gavi. Those larger programmes focus on health systems strengthening and service delivery (e.g., immunisation, primary care), and PHAS’s more specialised focus on public health surveillance, research, and training filled a niche that was not covered by others. By adhering to International Health Regulations and supporting Somalia’s national Health Security Action Plan, PHAS ensured it was not duplicating efforts but rather adding value in areas like epidemic preparedness that align with both government and donor priorities. There was no indication of conflict or redundancy between PHAS and the activities of UN agencies or NGOs in the health sector – in fact, PHAS often worked through WHO to complement those efforts.

However, engagement with or focus on one notable set of stakeholders, namely private health sector actors, was very limited/absent. Somalia’s private sector includes a large number of clinics, pharmacies, and laboratories that provide a very significant share (60 - 70 per cent) of healthcare services across the country. Despite their important role, informants noted that private providers were largely absent from any PHAS, WHO, or SPIDER-supported, discussions on surveillance systems, health information reporting, or public health training (although SPIDER did initiate a pilot with a private health facility in Jubaland toward the end of the evaluators' work period).

PHAS activities and capacity-building were directed almost exclusively at public sector institutions (the Ministry of Health, NIH, and regional public health officials). This is because the underlying purpose was to help reinforce and fortify the public health system and its functionality. At the same time, and given the preponderance and importance of the private sector presence in health service delivery in Somalia, this gap meant that opportunities for broader system coherence were missed – for example, disease reporting and IDSR efforts did not systematically include (data from) private clinics and labs (the vast majority in Somalia), which clearly resulted in very incomplete surveillance data, since public sector service delivery is around 40% of the health service delivery overall, according to the World Bank and other sources. Likewise, building data systems without input from the private sector means that potential interoperability issues will persist if private facilities continue using separate reporting and analysis tools. Stakeholders suggested that any next phase or phases of the PHAS/NIH initiative should find ways to bring private healthcare actors into national health strategies, as their buy-in is important to develop a truly integrated and functional health system.

While federal or state regulatory frameworks are the purview of the government, the fact that these regulatory frameworks are incomplete and that the FGoS and the FMoH do not have the oversight capacity to understand what the private sector is doing, or to require their health data to be provided and uploaded into, for example, the DHIS2, obviously restricts the quantity of health data and analysis generated by the Government to about 40% of the actual total (public and private) health sector for Somalia. While the "public sector" focus of working with a government and a NPHI is clear for an intervention such as PHAS, whose entire focus is this, a political economy analysis would have underscored how and why helping the government's ability to regulate the private sector in relation to data collection, data provision (and/or data analysis) would have been beneficial overall, and in particular in relation to questions around **coherence**. This is a clear example of the sorts of dimensions that may be present in fragile settings that are not "usual" in more stable or better functioning public governance systems. According to informants, discussions on how to ensure data capture from the private sector was not particularly a focus in interactions with PHAS. While this was not an intention of the intervention, it is a dimension that could have usefully been considered.

Table 5 presents an overview of the alignment and coherence between some of the actors.

Table 5 Alignment and Coherence Mapping

Project Element	Aligned National Priorities	International Standards/ Frameworks
NIH establishment	Health Sector Strategic Plan (HSSP III); National Development Plan	International Health Regulation; Universal Health Coverage; SDGs
Surveillance system (IDSR)	Epidemic preparedness; health security	WHO-AFRO IDSR unit; International Health Regulation
Research agenda	National research development; training priorities	Good research governance practices
Digital health (RAAD/HADDA)	e-health Strategy; data interoperability	DHIS2 standards; International Telecommunications Union-WHO digital principles
One Health coordination	FMoH cross-sectoral health planning	Global One Health Frameworks (Food and Agriculture Organization - World Org for Animal Health, OIE division -WHO)

Within the totally separate and individually-managed projects within the Sweden-funded health portfolio (PHAS/NIH, SPIDER/HADDA, and the WHO support), internal coherence evolved and improved over time. The original project documents were not intended specifically to work with the other interventions. Nevertheless, several joint Technical Working Groups were created to span areas any potential area of overlap, including one on surveillance (bringing together IDSR work from PHAS and WHO with data system inputs from SPIDER and Statistics Sweden) and another on research and knowledge exchange. These platforms enabled some cross-project learning and helped prevent duplication of effort.³⁷ This coherence across the interventions was facilitated by Sida's flexible funding (which allowed adjustments and joint activities) and by the strong working relationships that developed between the PHAS experts, the SPIDER team, and the WHO liaison staff.

3.3.2 Evaluative Analysis (EQ3)

The PHAS/NIH project has been largely successful in aligning with Somalia's needs and priorities, demonstrating a high degree of relevance and a growing coherence with other interventions. By focusing on establishing and strengthening the National Institute of Health, the project targeted a priority gap in Somalia's health system – one that is fundamental for

³⁷ For example, PHAS and SPIDER both provided training on data analysis (epidemiological data through PHAS; health management information through SPIDER/HADDA), and through coordination they were able to develop complementary training materials and target different audiences (NIH epidemiologists and MoH health information officers). Somali stakeholders (including NIH staff) observed that the various support streams gradually became more unified – effectively “speaking with one voice” – especially on initiatives to strengthen the IDSR network and national health information management.

long-term health security and capacity. The alignment with national strategies (like the Health Sector Strategic Plans and health security plans) and adherence to international standards (IDSR, IHR, One Health, etc.) were commendable. They did not happen by accident, but were the result of intentional planning and partnership. PHAS worked hand-in-hand with the Ministry of Health, guided by WHO's technical expertise, to ensure that all major activities were embedded in government-led plans. This meant that the project's contributions (surveillance improvements, data systems, training programmes) reinforced Somalia's own objectives rather than creating parallel structures.

In a context where donor-driven initiatives can sometimes bypass local systems, PHAS took an approach that built local ownership – evidenced by Somali officials developing the NIH's strategy and policies with close guidance from PHAS.

The evaluation also identified areas where the project's alignment and coherence could have been stronger. One notable shortcoming was the lack of engagement with the private health sector. By not suggesting, or working with the FGoS/FMoH, the need to have regulatory frameworks to bring private providers into the fold of national surveillance and health information efforts, or by not suggesting an interim approach to do so, the project missed an opportunity to help create a more inclusive and comprehensive health system strengthening effort. In effect, the reach of PHAS-supported improvements in disease reporting and data use was limited to the public sector, which reduces their overall impact and usefulness. While private sector is **not** the classic remit of PHAS or work with NPHIs, in this context, it would have been useful, especially for the FGoS.

Overall, PHAS was responsive to Somalia's priority needs and generally coherent with the wider health sector context. A more inclusive approach would include broadening stakeholder engagement (to encompass all key health system actors) and building robust structures regulate and legislate actors (e.g., NIH, private sector) and to safeguard alignment and coordination through the inevitable political and institutional changes in Somalia's environment.

3.3.3 Priorities for the Future (EQ3)

- **Maintain and refresh alignment through political changes:** It is critical to regularly reaffirm the alignment of project objectives with Somalia's national health plans and international standards, especially during periods of political turnover. Future phases could include formal check-ins or re-planning sessions, or "transition information transfer" with government when new officials are appointed, to ensure continued ownership and commitment to shared goals.
- **Engage the private health sector in national programmes:** To improve system-wide coverage and coherence, actively include private sector health providers in relevant training, surveillance, and health information systems initiatives. Their participation (for instance, in IDSR reporting networks or data interoperability efforts) will close the gaps in disease monitoring and make health interventions more comprehensive. This is possible even in the absence of oversight regulatory frameworks and legislation requiring private health actors to report data to the FGoS and member state MoH.

- **Consider encouraging legislation:** Consider legislation and regulatory oversight frameworks as essential elements for the FGoS to establish in order to properly anchor, for example, a NPHI, and to regulate actions of, and capture data from, the private sector.
- **Secure sustainability of digital health investments:** Clarify governance and ownership of digital platforms introduced (such as the RAAD EHR and other e-health tools) and develop a sustainability plan for them. This should involve the Federal and Member State Ministries of Health and arguably private tech partners in managing and updating these systems, to avoid fragmentation or abandonment of digital health solutions after project support winds down.

EQ4: To what extent have institutional linkages and country ownership been fostered? What is the likelihood of sustainability of results?

Context: This question examines the depth of country ownership and institutional buy-in over time. It also considers the sustainability of the results achieved — whether capacities and systems developed will continue functioning beyond the period of donor support. In fragile states such as Somalia, sustainability is always a challenge, due to political volatility, weak institutions, and dependency on external funding. Nonetheless, this question aims to assess whether PHAS support was integrated enough into national processes to foster institutional anchoring and continuity, and whether there was a deliberate “exit” or transition plan in place.

3.4 EQ4- PHAS

3.4.1 Findings (EQ4)

Country ownership of the NIH, and the PHAS/NIH initiative, was strong in its early to mid-stages. This was, according to informants, in part thanks to excellent, experienced and highly knowledgeable leadership at the NIH, a strong working relationship with PHAS, and concerted efforts by PHAS to guide and advise (rather than “own” or “control”).

During 2020–2022, the NIH was essentially co-created with the Federal Government: Somali authorities were involved in the design of the project and NIH’s establishment was a flagship endeavour of the Ministry of Health. The Ministry showed commitment by dedicating qualified staff to NIH, endorsing its strategic and operational plans, and participating actively in joint oversight meetings. Multiple interviewees confirmed that at that time the NIH was viewed as a Somali institution (with PHAS as a supportive partner), rather than a donor-driven project. This sense of ownership was evident in the language used by officials – referring to “our NIH” – and in the fact that NIH-related initiatives were integrated into the Ministry’s own workplans and reporting. PHAS’s strategy of working through the Ministry and helping to build NIH capacity (rather than setting up a parallel project office) further reinforced local ownership. At the same time, the Parliament did not create a legal status for the NIH, and there was no dedicated “NIH” budget line. This means that its “legitimacy” was not enshrined in law, and depended on commitment from the Ministry and the FGoS.

The NIH, and the joint initiative, took a downturn following political changes in 2023, and the replacement of NIH’s leadership with a person whose experience and knowledge were quite different to that of the outgoing leadership. According to PHAS, between October 2023 and

September 2024, the NIH undertook no activities with PHAS³⁸. According to government and other informants, NIH undertook various activities, though somewhat haltingly. Many NIH staff (who had been central to supporting the NIH) had been reassigned (or left) during this period (some moved into the Ministry's One Health Department). According to some informants "the NIH had been gutted".

With the lack of activities carried out by NIH, and the fact that public health functions had been either transferred out of NIH or were duplicated at One Health, PHAS concentrated its efforts on ensuring and supporting core public health functions within the FMoH (e.g., One Health). Despite bi-weekly meetings between NIH and PHAS until September 2024, the NIH informed the evaluation team that it felt sidelined – and perceived that PHAS had “abandoned” them, claiming that there was minimal engagement compared to before – whilst at the same time the Ministry continued to clearly engage with PHAS/WHO on surveillance and One Health, but now outside the NIH framework. In September 2024 the NIH declared it no longer wished to continue to collaborate with PHAS, and the bi-weekly meetings ceased, (according to PHAS).

By end of 2024, **Somali ownership** of NIH had apparently splintered. Interviews with WHO staff and other partners corroborated that the NIH's role diminished starting in late 2023: interactions that used to happen via NIH were happening through other channels of the Ministry. Essentially, the momentum of local ownership (built earlier) was not sustained through the political transition, demonstrating that change in leadership and priority can quickly erode progress and trust, made easier by the lack of legal status of the NIH. The diminished country ownership of the NIH appears to be largely due to internal Somali politics. At the same time informants did suggest that the shift of focus by PHAS to the public health functions at One Health was perceived as a shift away from its support of the NIH, and this may have inadvertently supported the impression that the PHAS/NIH collaboration was a donor-driven endeavour and something that belonged to the past leadership.

Regarding **sustainability and exit planning**, the project did not have a formal “exit strategy” document, but PHAS did take several steps intended to foster sustainability of the various accomplishments. One major step was helping the NIH and Ministry develop forward-looking strategies and policies – for example, the NIH Strategic Plan (2024–2028) was meant to guide actions well beyond PHAS's support period. PHAS also championed the development of national guidelines and Standard Operating Procedures in areas like surveillance (IDSR) and data analysis, embedding improved practices into official documents. By training a critical mass of staff in the Ministry and NIH in core public health functions (surveillance, data management, research methods), PHAS aimed to create local expertise that would remain in-country. Aligning project activities with WHO frameworks (like IDSR and the International

³⁸ NIH leadership, according to PHAS, did participate in the IANPHI Annual meeting in Kigali in February 2024, and in the Africa CDC International Public Health Conference in Lusaka in November 2023. This participation was organised, funded and supported by PHAS.

Health Regulations) was another tactic to ensure that Somalia would continue to receive support and normative guidance from WHO even after PHAS funding ended – effectively “plugging” Somalia into a global support system.

Despite these measures, the **continuity of institutional capacities** proved vulnerable to shocks. The political transition of 2023 was a significant shock: with leadership change, some of the burgeoning systems (e.g. the NIH-led TWGs, the fledgling research unit, etc.) were not carried forward. Another was the departure of PHAS’s embedded secondee in 2022, which removed a key actor for coordination. After these events, PHAS’s work continued in a technical sense (through WHO and short missions), but the institutional focus blurred – and as noted, NIH as an institution was no longer the centrepiece. Breakdowns in the PHAS/NIH relationship, when NIH declared it no longer wished to work with PHAS, meant that some elements of the planned sustainability (like mentoring NIH management or institutionalising NIH’s governance processes) were left incomplete.

The **sustainability of specific outputs** has been mixed:

- On the one hand, certain tools and practices have endured. For example, the IDSR weekly surveillance reporting mechanism remains in place and is now part of routine operations of the Ministry and WHO. Many of the individuals trained in surveillance are still using those skills in their current roles (even when working in the One Health Unit). The digital platforms and skills introduced by SPIDER/HADDA, such as DHIS2 use and the RAAD pilot systems, continue to function in the facilities where they were established, and are supported by WHO and the Ministry. In other words, some of PHAS’s contributions have become institutionalised at the operational level – i.e. “the way things are done”.
- On the other hand, higher-level institutional structures and plans have not fared as well. The NIH Strategic Plan and other strategic documents, for instance, have largely been shelved under the current NIH leadership. Without active champions, those plans are not being implemented. The governance improvements (joint planning forums led by NIH) faltered or ceased, meaning the processes PHAS helped to set up did not survive the transition. Additionally, newly established structures in the Ministry, like the One Health Unit, have taken over some (former) NIH functions but not all. This has resulted in disjointed sustainability, where pieces of the PHAS legacy continue, but not under the NIH umbrella or guided by a unified vision. This is not due to PHAS but to shifts in Somali requests. The footnote³⁹ provides an illustration.

³⁹ The former NIH DG requested PHAS support a Health Security Advisor to strengthen FETP, health security, surveillance, etc within NIH. NIH developed a ToR for the position. The advisor was recruited using a recruitment company. The new leadership informed PHAS that NIH was not interested in having this advisor. As the FMoH saw the value in having an experienced health security advisor, the advisor was appointed to the FMoH instead, where the One Health Unit is now being established.

Key informants expressed concern that without deliberate efforts to re-anchor NIH and institutional memory, many of the achievements could dissipate. For example, unless the NIH Bill (to legally establish the institute) is finalised and passed, NIH's mandate remains unclear and subject to political whim. Similarly, if the research agenda and journal launched with fanfare do not get institutional support (funding, staffing) from either government or new donors, they may lapse entirely. The impression is that sustainability was partially achieved at the technical level (Somalia today has better tools, skills, and systems than in 2019 thanks to the project), but not secured at the institutional level (the entity meant to steward those improvements – the NIH – is currently underutilised and under-supported). Key achievements and risks are outlined in Table six, below.

Table 6 Overview of analysis of risks related to achievements

Thematic Area	Achievements	Fragilities / Risks
Governance & Institutions	NIH formally established with strategic plan and political endorsement	Dependent on specific leadership; weakened after the 2023 transition
Surveillance	Functional IDSR system rolled out nationally; FETP initiated	Institutional responsibility blurred between NIH and One Health Department
Research	National research agenda developed and first NIH-led conference held	Limited funding; weak implementation; staff reassigned
Data Management	Power BI tools adopted; IDSR digitised; staff trained	Data not consistently used for decision-making; feedback loops absent
Digital Health (HADDA)	RAAD EHR developed; HIS tools mapped and integrated with DHIS2	Long-term sustainability uncertain; weak subnational ownership
Coordination	Joint planning forums initiated; WHO facilitated cross-actor alignment	Initial fragmentation; collaboration improved only in later project phases

3.4.2 Evaluative Analysis (EQ4)

Initially, PHAS did well to foster local ownership – working through government systems, branding the initiative under Somali leadership, and being responsive to local priorities. This approach paid dividends in engagement and uptake: Somali stakeholders felt the NIH was “theirs”, which is arguably the ideal in capacity development. However, the fragility of that ownership became apparent when the political winds shifted. True country ownership is tested during transitions; in this case, when tested, it was found wanting. The abrupt change in NIH engagement post-2023 suggests that the partnership's foundations, while solid in technical terms, were not yet deeply rooted politically and institutionally. One reason might be that the project heavily relied on personal relationships (between the PHAS team and the former NIH leadership) as the conduit of ownership. When those individuals left, the sense of mutual commitment did not automatically carry over to their successors. This highlights a limitation in how ownership was cultivated – it needed to be broadened and institutionalised beyond a few champions. More systematic approaches (like formal induction of new leaders into the partnership, or having the partnership governed by a multi-stakeholder board) might have preserved joint ownership through the change.

The sustainability prospects of the PHAS-supported reforms appear uneven. On a positive note, some behavioural and system changes have stuck – weekly disease surveillance is now routine, and digital health discussions in Somalia are more advanced than before, partly thanks to PHAS

and SPIDER's work. These are encouraging signs of sustainability in practice. Additionally, because the interventions were aligned with WHO and processes of the Ministry, these agencies can carry forward parts of the work (for instance, WHO continues to support FETP training and IDSR). Yet, the lack of a clear exit or transition plan meant that when PHAS scaled down its direct involvement, a gap in support occurred that was not fully mitigated. Sustainability was left to the assumption that the Ministry, NIH or WHO would naturally continue everything, but in reality, competing priorities and limited capacity meant some components received insufficient attention. For example, research capacity building did not have another "champion" once PHAS stepped back, so it largely stalled.

The evaluation finds that technical sustainability (the continuation of specific tools or skills) was stronger than institutional sustainability (the continuation of an organisational capability and mandate). The Somali health system has retained some new functions, but the NIH as an institution failed to attain a self-sustaining trajectory. Without a formal mandate and structural budget, NIH's future is uncertain. The PHAS project was perhaps optimistic that demonstrating success would help ensure that any new Somali authorities would continue to support the NIH.

In conclusion, Somali ownership was achieved, thanks in large part to PHAS, but not maintained, due to factors out of the hands of PHAS, and the sustainability of results is only partial. The intervention built considerable national and local goodwill and capacity, showing that even in a conflict-affected state, ownership is possible when working through local institutions. However, sustaining that requires resilience planning: building systems that can absorb shocks like leadership changes. The likelihood of long-term impact from PHAS's work will depend on actions taken beyond the project's formal end – notably, whether the NIH is reinvigorated and legally empowered, and whether Somali authorities, or external actors, are able and willing to allocate resources to keep key programmes running. Should this not be the case, some of the advances linked to the NIH risk erosion over time, which would be a loss of the significant investments made. Even if the public health function capacities are maintained (good sustainability technically) the fact that these are mostly not within a NIH, translates as lack of sustainability of the NIH as an (semi-autonomous) institution.

3.4.3 Priorities for the Future (EQ4)

- **Develop and maintain institutional continuity** plans for public health bodies like NIH, including leadership succession protocols. For example, try to encourage that when senior leadership or key staff leave, there is a brief overlap or an induction for their successors about ongoing programmes. Donors and partners can support this by creating "transition briefs" so new officials understand past progress and commitments and help preserve institutional memory and commitment.
- **Re-engage and reinforce structured engagement** with NIH post-transition to preserve earlier gains; signalling that support for its mandate continues. Keeping NIH at the centre of public health efforts is vital to not lose progress made in its formative period.
- Ensure that sustainability strategies go beyond tools and training to include **institutional mandates**, budget lines, and performance monitoring. This means working with Somali authorities to secure domestic budget lines for core public health functions or with donors on sequenced financing transitions (so there is continued funding when donors leave). It is

imperative to push for legal frameworks (like the NIH Act) that formalise roles and responsibilities, and establish government-owned performance monitoring. This will result in improvements that are more likely to continue independently of external aid.

- Deploy political analysis (political economy analysis) at early stages and continue to do so through the life cycle of the project - to help anchor progress and adjust to political realities.

4 Evaluation - SPIDER

This chapter provides consolidated responses to the evaluation questions (EQ 1-4) as they pertain to this intervention. The findings under each of the questions are followed by an evaluative analysis and a presentation of priorities for the future.

4.1 EQ1 - SPIDER

EQ1. What progress and outcomes have been achieved in relation to the planned results (as expressed in the Theory of Change and project documents)? To what extent have the interventions contributed to strengthening the capacity of the health sector/system in Somalia? What are any unexpected effects?

4.1.1 Findings (EQ1)

SPIDER's HADDA programme has contributed substantially to Somalia's digital health transformation, with measurable progress across the three intended outcome areas: capacity building, evidence generation, and sectoral collaboration. The development and phased roll-out of the RAAD electronic health records (EHR) system marked a key achievement. Designed through an inclusive, human-centred approach, RAAD has been installed in over 20 health facilities—primarily in maternal and child health units—in Banadir, Galmudug, and Puntland, with expansion to Jubaland under way. Feedback from facility staff confirms its perceived utility for clinical follow-up and patient record continuity.

Capacity development was extensive, with over 95 frontline health workers and IT staff trained across 13 sites. Post-training assessments (conducted by SIDRA) indicated a marked improvement in digital literacy, particularly in patient registration and module use. However, only 8% of the health workers received any form of in-service follow-up, and paper-based systems remain in widespread use due to infrastructural gaps, digital hesitancy, and high staff turnover. Despite this, SPIDER's layered training model—combining classroom learning, digital tutorials, and peer mentoring—laid a foundation for improved digital competency.

In terms of evidence generation, RAAD has enhanced the quality and timeliness of facility-level data, particularly in Maternal and Child Health (MCH) and immunisation. SPIDER and its partners supported baseline assessments, digital literacy surveys, and real-time data audits. These revealed inconsistencies in manual reporting and systemic limitations in data validation. SPIDER and NomadiLab have collaborated closely with the FMoH and other stakeholders involved in the DHIS2 system to achieve the integration of RAAD and DHIS2. However, despite the fact that RAAD is interoperable with DHIS2, actual integration has not been fully realised yet by the public health clinics. Manual data transfers are still the default mechanism for submitting service delivery reports, and there is currently no nationally endorsed interoperability protocol in place. As a result, none of the health facilities visited by the

evaluation team were able to transfer aggregate service delivery data directly from RAAD to the DHIS2 reporting system.

Coordination platforms—specifically the Technical Coordination Committee (TCC) and the Technical Working Team (TWT)—played a central role in aligning digital health actors. These bodies enabled SPIDER to promote interoperability, co-design system features, and coordinate with WHO, SIDRA, NomadiLab, and Federal and Member State health authorities. Despite occasional ambiguity over roles (e.g. during the transition of the HIS strategy to WHO), this structure fostered broad ownership and helped anchor digital health governance within the Ministry of Health(FMoH).

Unexpectedly, the programme stimulated unsolicited demand for RAAD from non-targeted facilities and contributed to a shift in attitudes among FMoH actors who began to see health data as a strategic asset. Engagement with Somali diaspora technologists through NomadiLab further reinforced contextual relevance and local ownership.

Table 7, 8 and 9 provide overviews of progress against the ToC outcomes, planned implementation and outcome achievements.

Table 7 Progress on SPIDER/HADDA Theory of Change Outcome Framework

SPIDER/HADDA Theory of Change - Progress						
Activities	Outputs	✓ List	Programme Outcomes	✓ List	Long Term Outcomes / Impact	✓ List
Capacity Building: Train Somali professionals to digitalise health data	Training programmes delivered on RAAD usage, data collection, and analysis	✓	Enhanced capacity of health sector professionals to use digital tools for data collection, planning and decision-making	✓	Continuous improvement in health systems capacity for equitable service delivery	✓ with continuous progress
Evidence Generation and Research: Collect and analyse evidence to inform system development	Implementation and research evidence collated and analysed. Research outputs aligned with national health priorities Development of RAAD and contextualisation	✓	Evidence informs patient care, and eventually the national health system development, covering additional programme areas and regions	progress	A robust data-informed policy framework for Somalia's health system	✓ with continuous progress
Collaboration Across Sectors: Coordinate with funders and implementors; align initiatives with digital health principles	Stakeholder consultations conducted Adherence to Digital Investment Principles and Principles for Digital Development	✓	Improved collaboration among funders and implementors strengthens the national (Digital) Health System	✓	Integrated health information systems support universal health coverage in Somalia	✓ and continual progress

Table 8 Progress on the SPIDER/HADDA Implementation Plan

SPIDER/HADDA Implementation Plan – Progress		
Planned Outcome and Action	√ List	Comment
Strengthening the stewardship and governance capacity of the Ministry of Health so that it engages with key stakeholders, and is better able to ensure that domestic and external resources are aligned around Health Information System priorities through:	√	
Helping to create and strengthen the functions of the Health Management Information System Steering Committee	√	The committee helped ownership and Government governance capacity
Providing key input (baseline assessment; analysis) towards the development of policies, a strategy, and a monitoring and evaluation framework for the Health Information System	√	Baseline assessment, analysis yes. Some input to the monitoring and evaluation framework
Supporting the use and management of appropriate technology to digitalise the paper-based HMIS tools (which themselves are fragmented) at selected healthcare facilities, through:	√	
Coordination of the Health Alliance for Digital Development and Action (HADDA) programme	√	
Creation of a Government "owned" electronic health records platform (called RAAD)	√	
Support to a number of healthcare facilities to digitalise (some of) the paper-based HMIS Tools	√	6 pilots. About 20 in progress. Results are mixed
Including through support to ICT infrastructure at those facilities (ICT equipment; ICT services)	progress	Help line set up; equipment and services have some progress
Development of a SOP (standard operating procedure) for managing the digital health information system	x	Suggested to TCC as MoH function that is needed

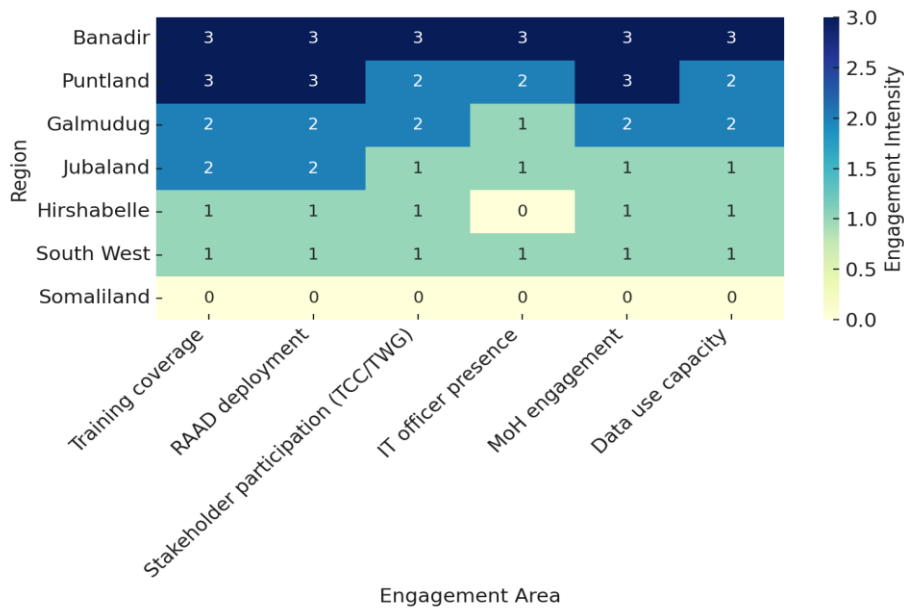
Table 9 Other achievements (Source: SIDRA)

Outcome Area	Key Achievements	Evidence Source
Capacity Development	Over 95 health workers trained; 67% could register patients post-training	SIDRA post-training reports
Evidence Generation	RAAD improved data timeliness and facility-level MCH/immunisation data quality	SPIDER monitoring data, RAAD pilot reports
Sectoral Collaboration	TCC and TWT operational; MoH endorsement of RAAD	TCC minutes; MoH endorsement letters

The project had an initial scope to introduce the EHR system in the Federal Member States of Banaadir, Galmudug, and Puntland. In addition to working in the three regions, SPIDER also has engaged in additional Federal Member States. Table 10 below illustrates the relative intensity of engagement across key areas such as RAAD deployment, training, IT support, and MoH involvement in the three initially targeted states and the four additional states. This was due to many factors including which were the earliest start-up pilot targets, which had better infrastructure (electricity, connectivity, presence of NGO-funded stable health centres, accessibility etc). Table 10 is a "snap shot" and merely indicates progress of the programme.

Table 10 Coverage and Engagement Heatmap

Coverage and Engagement Heatmap – SPIDER/HADDA Across Somalia



4.1.2 Evaluative Analysis (EQ1)

SPIDER/HADDA has laid credible foundations for a national digital health system, though full realisation of the Theory of Change remains a work in progress. The RAAD platform exemplifies principles of digital development—open source, modular, participatory—yet its practical utility is constrained by Somalia’s fragile infrastructure and inconsistent digital readiness across the Federal states. The reliance on limited IT hardware, slow helpdesk responsiveness, and erratic power supply hampers system uptake. Initial design assumptions—such as staff stability and internet access—proved optimistic. SPIDER focused on these dilemmas and tried to address them. For example, it set up an "offline option" of RAAD, a setup that allows health facilities to operate RAAD with connectivity needed only when syncing data to the central server without requiring continuous internet access. This demonstrates the application of a context-sensitive approach to Somalia’s infrastructure landscape. At the same time, lack of devices (for example for each consultation room) meant that a lot of data continued to be collected on paper, and dual (paper/digital) record-keeping continues to undermine RAAD’s full functionality.

Nonetheless, the initiative has catalysed change: digital literacy has improved, data is increasingly used for planning, and political interest in health information systems has grown. Capacity gains are observable, but fragile. Without systematic induction, retention strategies, and ongoing technical accompaniment, training impacts are likely to erode over time. Moreover, coordination structures—though widely praised—remain donor-dependent and are not yet fully embedded in government routines.

Evidence generation was robust at the health facility level, but limited at the policy level. Despite the availability of real-time data, its uptake in national health planning is nascent. The lack of formalised interoperability protocols and overlapping digital systems (e.g., UNICEF’s

CMAM tool, which is their "community management of acute malnutrition" tool) continues to fragment the data landscape. This, despite the national declared preference for RAAD and DHIS2 as the national (i.e., federal) platforms. Similarly, while RAAD's conceptual alignment with DHIS2 is strong, and it is interoperable (in digital IT terms) but its use is not fully integrated by health workers. By this we mean that none of the health facilities we visited were able to submit their service delivery reports from RAAD to the DHIS2 reporting system without the need to manually transfer some of the data, even if the data that was collected directly on devices (meaning collected digitally) was "transferrable" or "integrate-able".

The demand from non-pilot sites and the strengthening of monitoring and evaluation capacities were important system-wide effects not originally foreseen. These signal a degree of institutional traction that could be leveraged for scale-up. However, significant risks remain: infrastructure bottlenecks, high turnover of staff, uneven state engagement, and fragile system trust. Without a national roadmap, long-term financing plan, and regulatory clarity, progress may stall. More significantly, the intention to ensure Federal Government "ownership" of RAAD was effective, as it is officially "the" preferred EHR platform by the Federal Government.

4.1.3 Priorities for the Future (EQ1)

- Adopt and enforce a **national interoperability framework** to ensure seamless RAAD-DHIS2 integration.
- Establish **minimum infrastructure readiness standards** (connectivity, power, hardware) prior to system roll-out in new facilities.
- Strengthen **digital training pathways** through pre-service education and structured induction processes for new health workers.
- **Institutionalise mentoring** and support by embedding peer coaching, decentralised helpdesks, and regional technical focal points.
- Develop a **sustainable human resource strategy** to reduce staff turnover and formalise knowledge retention within health facilities.
- Create a **national RAAD scale-up plan with financing scenarios**, costed expansion targets, and Ministry of Health oversight mechanisms.
- **Leverage the Ministry's coordination platforms** (i.a., TCC, TWT) to align donor support and maintain joint accountability for system governance.

4.2 EQ2 - SPIDER

EQ2. How effective have selected methods been in achieving the planned results?

4.2.1 Findings (EQ2)

SPIDER's methods reflected a deliberate design focused on contextual relevance, co-creation with Somali partners, and alignment with international digital development standards. Key methodological features included: use of open-source platforms (Bahmni-based RAAD), partnership with Somali-led technical (NomadiLab) and research (SIDRA) institutions, and the establishment of multi-actor coordination structures such as the Technical Coordination Committee (TCC) and Technical Working Team (TWT).

SPIDER leveraged its ICT expertise and global networks to design and develop RAAD with features including Somali-language interfaces, modular architecture, and integration potential with DHIS2. The design was guided by baseline needs assessments and user feedback from over 160 health facilities. Notably, the development process included participation by Somali diaspora technologists, and implementation was embedded within the Ministry of Health's governance structures.

Training methods were multi-layered and adapted to the Somali context. SPIDER deployed train-the-trainer models, Somali-language video materials, and facility-level peer mentoring. These approaches contributed to measurable improvements in user capacity (e.g. 97% of trained staff were able to register patients post-training). NomadiLab also managed the helpdesk system, though responsiveness varied across locations.

Collaboration with WHO and PHAS was more limited in operational terms. WHO's primary contribution was at the policy and strategy level—particularly the transition of the HMIS Strategy development from SPIDER to WHO. WHO also led the IDSR and FETP initiatives, which complement SPIDER's digital health aims, albeit through separate channels. Interaction between the WHO digital health team and SPIDER appears to have been occasional rather than systemic. Collaboration with PHAS/NIH was likewise sporadic, with some joint technical events but limited day-to-day coordination.

Despite SPIDER's emphasis on localisation and digital public goods, challenges in system responsiveness, interoperability, and scalability persist. RAAD remains only partially integrated with DHIS2. Uniquely identifying patients across visits is a prevailing challenge of medical record systems in Somalia, due to the absence of a national identification system. In response, RAAD was designed to generate a unique patient ID at the time of registration with the intention of allowing patient records to be retrieved using multiple identifiers, including system-generated ID, patient name, mobile phone number, and name of village. This multi-identifier approach provides a practical substitute for a centralised ID system. However, these identifiers are often shared by more than one person and also change over time. This poses, amongst other issues, obvious challenges for the continuity of care. For example, consultation regarding continuity of care related to Ante-Natal Care (ANC) visits highlighted difficulties in identifying the correct unique patient id, and in registering the patient using that patient id, when the visit was, for example, the 2nd or 3rd ANC. The importance of verifying and understanding which ANC visit the patient is having (1st, 2nd etc) is important for the

continuum of care. Field evidence also highlighted continued reliance on paper systems whilst also using digital system when feasible (i.e., direct digital recording, or paper recording and transfer to digital later). Health clinics also expressed frustrations around bottlenecks in pharmacies difficulties in being able to prescribe specific dosages using the digital system, which allegedly did not allow the health worker to adjust dosage and length of prescriptions. Health centres also expressed frustrations about helpdesk delays. While tools were technically sound, frontline workflows were not always fully incorporated in system design or updates. This was partly because not all consultation rooms had laptops; and access to convert paper to online data was not always smooth.

4.2.2 Evaluative Analysis (EQ2)

SPIDER's selected methods—particularly its emphasis on Somali-led partnerships, iterative design, and alignment with digital development principles—represent strong practice in fragile-state digital health interventions. The use of open-source platforms and avoidance of donor branding helped promote national ownership and local trust. The programme's co-design and localisation ethos enabled RAAD to gain institutional traction, particularly with the Federal Ministry of Health and regional health authorities in the three pilot region Member States.

However, the translation of global design principles into facility-level functionality proved uneven. RAAD's architecture was well conceptualised, and it was based on an extensive user-centred design process, according to SPIDER, with structured focus group discussions with end-users, in various areas, and including ministry staff. This feedback played a key role in the development and design of RAAD. But usability challenges expressed during field evidence gathered by the evaluation team, and interviews, suggest there is, nevertheless, a gap between IT design and clinical workflow realities. The responsiveness of the technical support structure—particularly the helpdesk managed by NomadiLab—was also underscored as a critical bottleneck, with health workers voicing frustration over delayed responses and over unresolved technical issues. This undermined their confidence in the system. In particular, there were multiple suggestions that IT teams and helpdesk staff would have perhaps benefitted from having team members with more solid and deeper understanding of the health sector, health dimensions and the clinical needs of the health workers, on a continual basis, within the IT teams. SPIDER recently initiated a help-desk ticketing system, designed to improve efficiency in responding to report requests, by being able to track the order of, and delay in, responses. This should help identify bottle-necks in response times.

Training methods were well designed but under-resourced for long-term uptake. The programme's adaptive, multilingual training materials and peer support mechanisms were assets, but high staff turnover and insufficient post-training mentoring diluted impact. The absence of a structured induction framework and formal institutional links to the health workforce system (e.g. lack of integration with the human resources processes of the Ministry of Health) constrained the effectiveness of SPIDER's capacity-building methods.

Coordination methods were robust at the national level, particularly through the TCC and TWT. At the same time, these structures remained donor-dependent and lack full institutionalisation within the Ministry's routines. While WHO and PHAS efforts complemented SPIDER's digitalisation objectives at a strategic level, they were not leveraged

to full effect in operational terms. The opportunity to build stronger synergy—especially in training, health surveillance, and shared data infrastructure—was only partially realised.

Overall, SPIDER’s methods achieved several of their intended results—especially in terms of systems development and local ownership and the system has been developed through participatory methods. While RAAD and HADDA design were developed through participatory methods, continually ensuring that the system design responds to the clinical workers' health data needs, and focusing on the improvement of support structures and responsiveness mechanisms are crucial to be able to continue to have good alignment between system functionality and evolving user needs.

4.2.3 Priorities for the Future (EQ2)

- **Formalise user feedback mechanisms** to ensure that regular system updates are informed by health worker needs and workflows.
- Strengthen and decentralise technical support by **embedding health-sector knowledge in helpdesk teams** and expanding regional focal points.
- Accelerate development of **a national digital health protocol** to guide interoperability, system compatibility, and standardised implementation.
- **Clarify handover mechanisms** to ensure that the Ministry of Health can assume full ownership of RAAD, with a clear system for ensuring that the technology partners who have been so far involved, are able to continue to provide continuity.
- Consider how to encourage a **multi-sectoral business model**: Ensuring the sustainability and continued growth of the national EHR system, and its effective integration with other health and administrative systems, requires a multi-sectoral business model. Continued collaboration with technical partners will be essential to support long-term capacity strengthening, system interoperability, and innovation.
- Improve⁴⁰ RAAD functionality in key modules regarding data capture or useability feature requests (i.a., ANC tracking, pharmacy inventory, patient age categorisation), based not just on remote feedback but on **direct field observation**.
- **Leverage** WHO’s technical leadership more **proactively** to align standards, surveillance systems, and HIS architecture.
- Establish **a shared performance monitoring framework** across Sida-funded actors to track complementarities, overlaps, and gaps.

⁴⁰ SPIDER suggests that it has already started to address some of these data capture issues.

4.3 EQ3 - SPIDER

EQ3. To what extent have the interventions responded to the needs and priorities of Somalia? How coherent are the projects in the context of Somalia? To what extent have interventions aligned with the Somali government's health priorities?

4.3.1 Findings (EQ3)

The SPIDER/HADDA programme (and PHAS/NIH interventions) broadly aligned with national health priorities, as set out in the current Somalia's National Development Plan, the Health Sector Strategic Plan (HSSP), and the Essential Package of Health Services (EPHS). It is important to note that the Federal Ministry of Health formally endorsed RAAD as Somalia's preferred electronic health records platform. SPIDER's collaboration with Somali technical institutions and emphasis on open-source, interoperable systems responded to the government's stated objectives of strengthening health governance and digitalisation, and keeping within the DHIS2 interoperability.

At the national level, alignment was reinforced through joint engagement in policy processes, particularly the Health Information System (HIS) Strategy. SPIDER supported the early drafting of the strategy, later handed over to WHO for finalisation. The TCC and TWT served as platforms to ensure strategic and technical coherence among actors, including WHO, UNICEF, PHAS/NIH, and SIDRA. WHO's advisory role, particularly on DHIS2 and IDSR, complemented SPIDER's digital systems orientation, though collaboration remained loosely structured.

At the same time, coherence across Federal Member States was uneven. Puntland stakeholders, for example, reported limited involvement in RAAD design and implementation planning, despite their regular involvement in TCC and TWT meetings. In Puntland, as well as in Banadir and Galmudug, parallel HMIS platforms remain in use, whilst coordination levels with Federal efforts vary. In Puntland, according to interviews, the HADDA decision-making system was sometimes considered overly centralised. This is indicative of broader political tensions between the Puntland state government and the Federal Government, and the challenges of reflecting regional contextual needs and realities. HADDA, however, importantly, does have mechanisms to adapt to (and reflect) these regional variations.

SPIDER made deliberate efforts to reduce fragmentation by aligning RAAD with DHIS2 and avoiding duplicative tools. Nonetheless, multiple parallel systems remain operational. UNICEF's CMAM tool for nutrition data and other donor-funded platforms (e.g. Taiwan's supported e-health systems) are not integrated with RAAD, and not DHIS2 inter-operable, reflecting the absence of a binding national interoperability framework. The proliferation of

private EHR platforms (e.g., OGOW, see footnote⁴¹) further compounds this, as there is no enforceable standard for digital health tools across Somalia. And health workers may juggle multiple e-tools. Table 11 provides a consolidated overview of the actual integration of digital health tools and their integration. This is not related to the scope of the SPIDER project. It provides a snapshot on e-tools in the health system of Somalia.

Table 10 Tools Across Somalia & Use in Somalia (source: combined web search)

Digital Tool	Sponsoring Agency	Primary Use	Interoperability with DHIS2	Geographic Reach
RAAD	SPIDER/FMoH	Electronic health record platform (Maternal and Child Health)	Interoperable. (Some structured health reports have been transmitted directly from RAAD to DHIS in some pilot facilities.) Paper collection remains.	Public: Banadir, Puntland, Galmudug, Jubaland
DHIS2	WHO/FMoH	Aggregated HMIS		Nationwide
CMAM (Nutrition)	UNICEF	Nutrition tracking	Not integrated	Nationwide
OGOW	Private (Donor-backed) (World Vision, B&M Gates)	E-health unique patient records, immunisation Facility records	Not integrated	Private clinics: (various) South Central, Puntland
Taiwan EHR	Taiwan/FMoH	Electronic health record platform	Not integrated	Select private facilities: Somaliland

Engagement with the private sector was very limited. Apart from a single pilot in a Jubaland facility, private health providers were excluded from RAAD design, training, and coordination mechanisms. This represents a significant gap given the already mentioned central role of the private sector in health service provision. In Somaliland it was reported that e-health is primarily carried out by private sector (thanks mostly to Taiwan aid).

⁴¹ OGOW Health Somalia <https://ogowhealth.com/en/>, is an e-health start up, and a good example of the various e-tools with similar purposes to RAAD or CMAM. It aims to improve healthcare by leveraging data and technology to enhance care paths, access to patient data, & reporting. Through electronic medical records, and unique patient id numbers, it aims to access and update patient information electronically, replacing traditional paper records, use the OGOW digital patient record system. The platform uses both mobile apps and web-based tools to reach a wide range of users, including health workers and community health workers. It includes a caregiver interface for immunization schedules and educational videos on basic healthcare and disease prevention. The platform sends SMS reminders to caregivers about vaccination appointments and other health-related information. Community Health Worker receive support via mobile-health tools to help them carry out their work in underserved communities. OGOW Health provides dashboards to help access real-time, consolidated data on health indicators. It was awarded by Bill and Melinda Gates and works with various partners (e.g., World Vision and UNICEF).

Coordination amongst the Sida-funded interventions (SPIDER/HADDA, PHAS/NIH, WHO support) was generally constructive but lacked systematic structures. While joint participation in the TCC and occasional workshops facilitated some information exchange, there was no overarching coordination mechanism to align strategic planning or implementation. The presence of Sida-funded WHO staff did not appear to generate strong operational synergy with SPIDER or PHAS, and opportunities for shared planning and technical integration were not fully realised. At the same time, the interventions were complementary and their combined actions were helpful in moving the health system forward, and there was interaction at various levels. Table 12 provides some comparative data across the three interventions in relation to key thematic imperatives.

Table 12 Stakeholder Roles & Responsibilities Map – SPIDER/HADDA Ecosystem

Function / Role	MoH	SPIDER	WHO	NIH	PHAS	Sweden / Sida
Governance	Leads national HIS governance (chairs TCC, TWGs)	Supports MoH participation in governance platforms	Facilitates coordination	Links data to surveillance and response	Supports NIH through institutional partnerships	Participates in health governance forums and TCC
Policy and Strategy	Sets digital health priorities and strategy	Aligns system design with national strategy	Advises on HIS and DHIS2 policy integration	Contributes to national health intelligence	Advises on public health system strengthening	Funds and influences strategic direction; promotes public sector ownership
Capacity Building	Coordinates training delivery with partners	Delivers Training of Trainers and supports regional scale-up	Supports FETP and IDSR training	Leads FETP and public health research	Contributes to NIH training (FETP, lab systems)	Supports capacity via financing of SPIDER/HADDA and PHAS
Technical Design	Approves platforms and ensures alignment with DHIS2	Leads RAAD development and IT customisation (NomadiLab)	Advisory role on standards and digital architecture	Advises on surveillance system design	Provides technical backstopping via NIH	Finances system design through implementing partners
Financing	Manages national health budgets with donor support	Funded by Sida; limited direct financing to MoH	Mobilises funding through the health cluster	Has limited direct funding role	Works through Sida; not a direct financier	Provides core funding (SPIDER/HADDA, PHAS/NIH); coordinates with WHO
Data Use	Oversees DHIS2; supervises use of RAAD data.	Supports research (SIDRA), dashboard design, and health data use.	Coordinates HIS performance review with MoH and partners.	Uses RAAD and other tools for analytics and research.	Promotes use of data for decision-making.	Requires results reporting; uses data to inform continued support.

Table 13 shows some of the complementarity and coordination aspects.

Table 13 Complementarity and Coordination Matrix

Functional Area	SPIDER/HADDA	PHAS/NIH	WHO
Digital Health Systems	RAAD platform development, digital architecture, system co-design	Public health data focus, indirectly supports digital HIS via NIH	Global standards, DHIS2 guidance, HIS strategy facilitation
Health Research & Evidence Use	Partnership with SIDRA, support for dashboard analytics	Leads national research agenda and public health evidence	Support to MoH and partners for HIS performance review
Surveillance & Disease Intelligence	Indirect support via data systems feeding into surveillance	Primary lead on IDSR, FETP, outbreak surveillance	Leads coordination of IDSR; supports national roll-out
Institutional Capacity Development	Support to MoH and subnational IT teams, training of trainers and training design	Institutional development of NIH; technical support	Chairs coordination platforms, technical advice to MoH
National Strategy & Policy	Input to HIS Strategy and TCC processes; digital investment principles	Supports NIH and MoH with governance and planning	Convening role in HIS Strategy and donor alignment
Training & Workforce Development	Training of Trainers on RAAD; facility-level data collection use	FETP training, public health workforce capacity	Support to IDSR, FETP and HMIS capacity development

4.3.2 Evaluative Analysis (EQ3)

The interventions demonstrated strong vertical alignment with Somalia's national health strategies and international digital development standards. SPIDER's early contributions to the HIS Strategy, support to government-led coordination platforms, and investment in locally relevant digital tools represented a coherent and principled approach. WHO's complementary support to disease surveillance and DHIS2 architecture enhanced strategic coherence, albeit largely at the national level.

However, horizontal alignment—across Federal Member States, donors, and private actors—remains weak. The fragmentation of HMIS tools is symptomatic of limited enforcement capacity, uneven subnational coordination, and persistent international donor, international NGO and bilateral donor-driven siloes (a point made repeatedly in interviews and back-up my evidence). RAAD's conceptual strength has not yet translated into full interoperability or national consistency. The absence of a government-endorsed digital governance framework limits Somalia's ability to prevent the proliferation of parallel platforms and to enforce integration.

While the HADDA initiative made strides in integrating health information systems, the issue of health data fragmentation in Somalia is not fully resolved. The long-term success of digital solutions like the RAAD EHR will depend on clear governance, support, and integration into the national strategy beyond the project's lifecycle.

The exclusion of private providers represents a strategic blind spot on the part of the FMoH. SPIDER had integrated the private sector into its original design phase of HADDA. But the decision to focus on public clinics was made by the FMoH, irrespective of who made the decision, the limited attention that has been placed to the private sector as a beneficiary/user/partner for the RAAD system has been a missed opportunity for the project's life. These actors operate a substantial share of health facilities and are crucial for comprehensive data capture, yet they remain outside the formal digital health governance ecosystem. Similarly, while the roles of WHO and PHAS/NIH were broadly complementary to SPIDER, synergies were underleveraged, in part due to lack of a Sida-facilitated joint planning framework that was placed in an oversight "level" to encourage integrated interventions. The WHO staff were intended in part to help provide support at coordination, technical and operational levels, but as discussed, this was not part of structured planning. This implies that Sida's health sector portfolio did not consist of a deliberately integrated set of interventions, but efforts were made to create synergies and liaisons were possible.

Federal-Member State dynamics also pose challenges to national coherence. While SPIDER engaged effectively at the central level, its reach and consultation processes at the regional level were inconsistent. This risks undermining the legitimacy and uptake of national digital tools in contexts where state authorities exercise substantial autonomy. This issue was recognised when the interventions were conceptualised, and attempts to include Member States were made, but the extent of integration and allocation of resources etc was not entirely in the hands of the interventions.

The combined picture is one of principled design and national alignment, but limited operational coherence. Efforts at harmonisation were genuine, and partially successful, but structural constraints—political, institutional, and technical—continue to inhibit full-system integration.

4.3.3 Priorities for the Future (EQ3)

- **Formalise a federal digital health governance framework** with enforceable standards for HMIS interoperability, including roles for Federal Government and Member State actors.
- **Accelerate adoption** of a national interoperability protocol, ensuring all digital tools (e.g. RAAD, CMAM, DHIS2) operate within a unified architecture.
- Develop a **strategy to engage (or co-create with) the private sector**, incorporating their systems into the national digital health ecosystem through incentives and regulation or perhaps exploring co-financing.
- Reinforce Federal-Member State coordination by encouraging **inclusive planning processes** and equitable representation of regional authorities in national digital health platforms.
- Establish a **Sida-driven coordination mechanism** to align planning, monitoring, and learning across SPIDER/HADDA, PHAS/NIH, and WHO interventions.
- **Continue to Leverage** WHO's convening power to ensure alignment of vertical disease surveillance systems (e.g. IDSRS) with broader HIS reforms.

- **Track and report on system integration efforts**, including reduction in parallel reporting tools and consolidation of digital platforms.
- Deploy **political analysis** (political economy analysis) at early stages and continue to do so through the life cycle of the project - to help anchor progress and adjust to political realities.

4.4 EQ4 - SPIDER

EQ4. To what extent are these efforts scalable in the future and anchored in Somali ownership and co-creation? What is the sustainability of the interventions beyond the project period? What factors might hinder sustainability in the Somali context?

4.4.1 Findings (EQ4)

The SPIDER/HADDA programme incorporated several mechanisms aimed at long-term sustainability and Somali ownership. As has been outlined before, RAAD was developed as a government-owned digital public good, with open-source code, Somali-language interfaces, and co-design led by Somali technical actors (NomadiLab, SIDRA). The Federal Ministry of Health (FMOH) formally adopted RAAD as the national EHR system, and governance was embedded through the Technical Coordination Committee (TCC) and Technical Working Team (TWT). These structures brought together government, donors, and technical partners, and were central to stakeholder alignment and accountability.

Sustainability features were also embedded in training and system support. SPIDER used train-the-trainer models, peer mentoring, and video tutorials in Somali, which enabled local health workers and IT officers to manage the system with increasing autonomy. Decentralised support was introduced to reduce reliance on external IT teams. However, these mechanisms remain fragile. Helpdesk functions continue to depend heavily on NomadiLab, and feedback from facilities indicates delays in issue resolution and limited responsiveness. There is very high attrition amongst health care workers at health facilities, largely due to low or no remuneration and heavy workloads caused by dual, cumbersome and time-consuming paper- and electronic-based administration, large number of patients). This due in part to short funding windows for health facilities and lack of salaries for health workers.

There is no formalised exit or transition strategy. While RAAD is hosted on a government server, ongoing technical oversight, system upgrades, and troubleshooting are still dependent on SPIDER and its implementing partners. Likewise, the scaling-up of RAAD to additional regions is occurring without a costed national expansion plan or clear financing strategy. This raises concerns about medium-term continuity once donor support is withdrawn. In particular because the quasi-totality of health entities that FMOH identified are almost entirely dependent on a combination of NGO funding and healthcare worker volunteers. (SPIDER had encouraged a mix of public and private clinics, but FMOH priority was public, and remains so). Health entities apparently (according to interviews) are rarely able to predict funding beyond one year. Additionally, inability for many workers to receive salaries results in very high turnover (their e-training and e-experience has become an advantage on the job market, so they are likely to leave the clinic if not the sector). Replacement and induction processes are largely informal and unsystematic. In sum, it is not predictable how long each health facility may last. Health infrastructure deficits — including unreliable power, limited internet access, and shortages of

functioning laptops — continue to inhibit scalability. Although SPIDER gradually shifted procurement to local suppliers, most facilities remain under-equipped.

Despite these constraints, political interest in digital health and signs of domestic demand are increasing. Non-pilot facilities have requested inclusion in future RAAD phases, and several regional Ministries of Health expressed commitment to sustaining digital tools. The Federal Ministry's leadership in convening TCC meetings and its co-drafting of the HIS Strategy signal emerging institutional ownership.

WHO's contribution to sustainability lies primarily in policy development, rather than system operation. Its support to DHIS2 standardisation, IDSR integration, and health system governance reinforces the broader architecture that RAAD depends on, but does not directly reduce SPIDER's operational load. The role of WHO digital health staff seconded and hired through Sida's financial support was not clearly defined in sustainability terms, though they did strengthen interaction across key entities and this is a sustainability factor.

In relation to scalability, this is dependent on multiple factors - financial predictability, access to consistent connectivity and electricity, sufficient finance for adequate laptops, ability to avoid high attrition rates for e-trained health workers, ability to provide e-training and help regularly. Table 14 reviews some of these factors in the SPIDER (RAAD) pilot areas.

Table 11 Readiness Assessment for RAAD Scale-Up. Source: SIDRA draft report 2024, 31 facilities

Region	Facility Type	Computer Availability (%)	Internet Access	Staff Literacy (Basic) (%)	Computer Literacy (Basic) (%)	Staff Prior EHR Experience (%)
Banaadir	Hospital	100%	Yes	High (65-75%)		Limited (22%)
	Referral Health Centre	100%	Yes	Moderate		Limited
	Health Centre	17%	Yes	Moderate (50-60%)		Limited
	Primary Health Unit	0%	Yes	Low		None
Galmudug	Hospital	67%	Yes	Moderate (50-60%)		Limited (22%)
	Referral Health Centre	N/A	N/A	N/A		N/A
	Health Centre	0%	Limited	Low to Moderate (40-50%)		None
	Primary Health Unit	0%	Limited	Low		None
Puntland	Hospital	75%	Yes	Moderate (50-65%)		Limited (22%)
	Referral Health Centre	N/A	N/A	N/A		N/A
	Health Centre	20%	Limited	Moderate (40-50%)		None
	Primary Health Unit	0%	Limited	Low		None

4.4.2 Evaluative Analysis (EQ4)

SPIDER's emphasis on co-creation, open-source design, and government-led coordination has established a strong normative basis for sustainability. RAAD is seen as a Somali-owned platform, and national stakeholders widely acknowledge its relevance and utility. The use of local technical institutions and the deliberate avoidance of donor branding have helped shift the digital health discourse from external innovation to national governance.

However, the enabling environment for sustainability remains weak. The system still relies on project-based funding, ad hoc support structures, and externally managed infrastructure. There is no institutionalised funding stream within the Ministry of Health to maintain RAAD, and

staff retention mechanisms are lacking. Without a defined national transition plan, there is a high risk that gains will dissipate when donor support ends.

Scalability is feasible in principle but constrained by infrastructure bottlenecks, governance gaps, and human resource instability. The enthusiasm of non-pilot health facilities and political champions provides an opportunity—but without a costed roadmap, scaling-up may further strain existing support systems and reinforce regional inequities. The partial inclusion of Federal Member States (e.g. Somaliland) and the absence of private sector engagement also limit the representativeness and comprehensiveness of national expansion. It is worth noting that Somaliland is beyond the scope of SPIDER, and the HADDA.

WHO and PHAS provide critical support to system-level sustainability, but their contributions remain disconnected from SPIDER's implementation to deliver integrated, long-term impact. Institutionalisation of the TCC/TWT within Ministry of Health structures, national budget lines for digital health, and clear post-project accountability mechanisms will be essential to consolidate current gains.

Potential Sustainability Pathway – SPIDER/HADDA: Systemic constraints and enablers are key to considering a potential pathway towards sustainability. These are presented in table 15.

Table 12 Systemic Constraints and Enablers

Focus Area	Enabling Factors	Constraints
Governance	TCC/TWT; MoH ownership of RAAD	No formal digital health regulatory framework or standard protocols, fragmentation of tools
Technology	Open-source tools; local tech partnerships	Limited infrastructure and support systems
Human Resources	Training tools in Somali; peer mentoring	High turnover; weak induction systems
Financing	Donor commitment (Sida)	No national budget lines for digital health/EHRs
Coordination	MoU with job descriptions	Lack of structured joint planning across Sida funded actors

In considering a potential pathway towards sustainability, key enablers, key risks, and key steps, include.

ENABLERS

- ✓ Embedded IT officers
- ✓ Open-source architecture
- ✓ Decentralised training (Training of Trainers model)
- ✓ Modular and adaptable system design
- ✓ Stakeholder ownership (Federal Ministry of Health, local Ministries of Health)
- ✓ Stakeholder ownership (NIH and other relevant actors)
- ✓ Partnerships with local actors (NomadiLab, SIDRA)

RISKS

- ⚠ Donor dependency for financing infrastructure and operations
- ⚠ High staff turnover and lack of retention strategy
- ⚠ Limited infrastructure and unreliable connectivity
- ⚠ Absence of endorsed national digital governance framework
- ⚠ Fragmented coordination among actors and donors
- ⚠ No formal exit or sustainability plan in place

So key steps to foster sustainability would entail:

- **Progress towards eliminating** dual administrative systems and enhancing efficiency in data use including addressing infrastructure deficits (power, connectivity, equipment) and resulting trust deficits in e-systems.
- **Securing dedicated funding** for infrastructure development and maintenance, system updates, and post-project technical support.
- Ensuring a workable system that can be scaled up for "help desk" and digital contextualisation design actions (e.g., functions delivered currently via NomadiLab in cooperation with Government).
- **Considering options related to creating a national ID system** or national patient ID numbers to enhance reliability of patient related data and to help ensure better continuity of individual patient care. E-tool related UPIs (by RAAD and other platforms) fragment the landscape and encounter challenges.
- **Institutionalise a (continually available) training system** to address the high rate of staff turnover and maintain and raise digital literacy levels.
- **Continue to monitor post-project performance** (e.g., function delivered by SIDRA) to assess RAAD uptake and functionality once SPIDER funding ceases.

4.4.3 Priorities for the Future (EQ 4)

- **Develop a national RAAD sustainability roadmap**, with clear financing strategies, governance roles, and timelines for handover to Ministry of Health structures.
- Consider **consolidating a broad plan to expand budget allocation** to health facilities (i.e., institutionalise digital health within national and subnational budgets or consider options if national budgets are unavailable), including costed budget line items for hardware, connectivity, training, and technical support. Consider public-private partnerships.
- Reflect on **how to scale-up workable technical oversight** (currently provided by NomadiLab) with defined responsibilities and financing.
- **Embed digital health competencies** into ITC teams and into pre-service health worker training; establish **standard operating procedures** for onboarding new staff.

- **Expand minimum infrastructure packages** (power, connectivity, IT equipment and devices per service point) as a precondition for RAAD scale-up so it is able to be fully successful.⁴²
- Reinforce **decentralised support systems**, including regional IT focal points and peer mentoring networks to ensure continuous user assistance.

⁴² To be clear, SPIDER did aim to have a minimum infrastructure package, and pilots were targeted using those condition points. The scale-up strategy targeted three service points (i.e., devices) per facility. Model facilities had seven service points per facility for full-scale implementation. But field observation and interviews in the three pilot regions repeatedly referred to one service point per area (consultation/lab/pharmacy) or too devices in consultation rooms, so paper was used in consultation rooms without devices. There was at times hierarchy as to where/who had device access.

5 Evaluation – WHO Somalia

This chapter provides consolidated responses to the evaluation questions (EQ 1-4) pertaining to this intervention. The findings are followed by evaluative analysis, and priorities for the future.

5.1 EQ1 - WHO

EQ1: To what extent has WHO contributed to achieving the intended results, the Theory of Change, and strengthening Somalia's health system?

5.1.1 Findings (EQ1)

WHO made significant contributions to national health systems strengthening in Somalia, primarily through its technical and normative support roles. Notably, it helped ensure alignment between Sida-funded interventions (PHAS and SPIDER) and international frameworks (IHR 2005, IDSR) and Somalia's national strategies (e.g., the Health Sector Strategic Plan 2022-2026 - HSSP III). WHO also supported key processes such as national planning towards a "National Action Plan for Health Security" (NAPHS)⁴³, and other key institutional reforms, including the enhancement of the National Institute of Health (NIH) and its capacity to carry public health functions. It promoted the use of DHIS2 and concerted focus on health information systems, and eventually ensured that the IDSR is interoperable with the DHIS2, and linked to it. In digital health, WHO validated SPIDER's RAAD platform to ensure alignment with regional frameworks and the national health information system architecture, and helped promote the adoption by the Federal Government of RAAD as the national platform, and helped anchor Somali backing for the (SPIDER) pilot-roll out.

A tangible WHO contribution to systems-strengthening, in relation to this evaluation scope, was through its joint support for the Field Epidemiology Training Programme (FETP), which covered approximately 400 frontline officers by early 2025. These officers now form a core

⁴³ National Action Plan for Health Security (NAPHS) is a chief focus of WHO which works with countries to develop a country owned, multi-year, planning process meant to accelerate the implementation of IHR core capacities. It is based on a One Health for all-hazards, whole-of-government approach; captures national priorities for health security, brings sectors together, identifies partners and allocates resources for health security capacity development. This is a work in progress for Somalia.

human resource for Somalia's Integrated Disease Surveillance and Response (IDSR) system. It is worth noting that out of the 400 trained in FETP, 35 were supported by Swedish funding (PHAS) and 365 were supported by other funders, coordinated by WHO. WHO also helped digitise surveillance workflows by integrating IDSR reporting into the DHIS2 platform, improving interoperability and real-time data capture.

The support provided through Sida-funded positions evolved over the period. The initial secondment of a PHAS advisor to WHO (2021–2022) (in Nairobi) was widely seen as catalytic, and provided a strong liaison function, helping to enforce links between WHO, PHAS, SPIDER, NIH, and the Federal Ministry of Health. This also helped to embed early and essential alignment with WHO frameworks. Two national professional Sida-funded WHO staff (a Surveillance Officer and a Health Systems Strengthening Officer) were based in Mogadishu. The two officers worked closely with the secondees, and continually with the Somali health authorities, and had specific and crucial roles in supporting actions linked to the health information system and the disease surveillance system. The two officers also interacted with SPIDER and PHAS on various occasions, and helped ensure connections and alignment with national entities (e.g., FMOH), and helped organise joint activities. They also contributed to other core mandate areas of the WHO. Generally, results in these areas are visible and positive.

At the same time, these Sida-funded positions lacked any explicitly detailed definition (from Sida) of the specific roles they were expected to fulfil and any specific deliverables (in particular related to the PHAS and SPIDER projects). A task of cooperating with and facilitating the (other two) Sida funded projects was not clearly spelled out and this expectation was not entirely clear to WHO, SPIDER or PHAS. The grant agreement mentions "*coordinated support on the ground to the projects*" but this is not further spelled out. There had been an intention that the HSS officer would convene coordination meetings, guide discussions, and promote a joint PHAS/SPIDER/WHO plan. This was in reality limited to occasional information sharing, and some joint actions, but no real coordination of activities - particularly as SPIDER and PHAS both had their own established plans, had launched their independent projects several years before the Sida-funded positions at WHO, and never really "recognised" a "coordinator" role for WHO. Moreover, though the various non-financial MoUs between these three actors helped to indicate areas of common interest, they did not tie into anything concrete, and never resulted in - for example - any action plans. The MoUs were also established well after the individual launch of the projects. (An actual "oversight" role by WHO would have been institutionally impossible.)

At the same time, all the work the Sida-funded positions carried out did contribute positively towards PHAS and SPIDER objectives, generally speaking, in one way or another. The evaluation findings point clearly to the following concrete achievements that were strongly supported by the staff-positions in Somalia, and would have been difficult without them:

- Operationalised the National Institute of Health.
- Developed NIH Operational Plan (2021 -2023) and implemented, from physical working space, website and visibility to actual public health functions.
- Established the Field Epidemiology Training Program (FETP). Sweden funded the very first cohort in 2021. Over 400 to date, also with other support.
- Established the Integrated Disease Surveillance and Response (IDSR) System.

- Integration of the DHIS2 platform for real-time data collection and reporting.
- Capacity to detect and respond to major outbreaks within 24 hours of reporting.
- Risk assessment profile. IHR (2005) State Party Annual Reports (an annual self-assessment of the country on IHR implementation).
- Strengthened Health Management Information Systems.
- HIS strategic plan developed and in use (although not officially endorsed).
- Strengthened research capacity.
- Provided continuous support to HIS TWG (PSM, HIS, RMNCAH, NCDs, PPP)
- Helped set up the establishment and operationalisation of the Public Health Emergency Operation Centres (PHEOCs) and related emergency response network.
- Enhanced the Public Health Laboratory capacity/system.
- Operationalised the National Medicine Regulatory Authority.
- Strengthened the essential medicine supply management system
- Operationalised the National Health Professionals Council.
- Contributed to private sector engagement dialogue; actual collaboration on technical guides and service delivery; governance by starting the Progression Pathway for Governance of Mixed Health Systems (a WHO developed tool).
- Promoted health security measures and the One-Health approach.
- Further developed the IDSR system further development (in progress): integrating the community surveillance data, and strengthening coordination with the animal sector for zoonotic disease surveillance.

Overall, WHO's technical and normative guidance contributed to pertinent national-level strategies and platforms, processes, guidance, and training - and helped institutionalise surveillance functions, strengthen the NIH, inform national digital strategies, support expanded use of DHIS2, advance FETP, reinforce the IDSR system, promote policy coherence, and back the adoption of RAAD as a national platform. WHO's support did not focus -- as an objective -- on coordinating the Sida-funded interventions as much of the strategic and operational direction of PHAS and SPIDER was self-driven or guided by the Federal Ministry of Health, but it did cooperate extremely well with these two interventions, where warranted, and was perceived by informants as having provided a supporting role.

5.1.2 Evaluative Analysis (EQ1)

In relation to expectations from Sida, a weakness was the absence of a clearly detailed and explicit Terms of Reference for the Sida-funded positions, and explicit agreements across WHO, SPIDER and PHAS regarding how these related specifically to their own projects, and what their roles therein would be. Another difficulty was the lack of clarity around what was actually meant by key terms in the grant agreement with WHO (as this related to the two national positions), such as "*coordinated support on the ground to both of the important Sida-funded programmes*". The evaluative lesson here is that effectiveness hinges on the provision of clear arrangements (and in this case job descriptions and expected deliverables) amongst all actors involved, including between Sida and WHO.

Nevertheless, WHO (including through the Sida-funded positions) fulfilled a critical role in anchoring the two Sida-funded project interventions in a coherent, standards-based national framework. Joint activities did take place (i.a., FETP training workshops). WHO clearly helped shape important strategy and policy documents from the FMOH, reinforced federal surveillance capacity and the integrated disease surveillance and response system, brought international legitimacy to key structures, such as the NIH, and helped create a conducive framework for the HMIS related work. All of this was directly and indirectly relevant and helpful to the two Sida-funded projects (PHAS, SPIDER). The main assumption in the Theory of Change that WHO's presence and credibility would catalyse coherence, help move the projects along, and reinforce sustainability (by helping to ensure linkages and liaison with the FMOH) largely held true. This is further detailed below.

Analytical Reflection on the WHO Theory of Change and Results

The Theory of Change (ToC) developed for WHO's contribution recognised its comparative advantage as a technical authority and convener with an established presence in Somalia and capacity to host Somali staff. It assumed that WHO's credibility, trusted relationship with the FMOH, and its Sida-funded positions would catalyse coherence, sustainability, and normative alignment across Sida-supported health system efforts (PHAS, SPIDER, and national initiatives such as IDSR). WHO broadly fulfilled this role: it maintained alignment with international standards (e.g. IDSR and IHR), supported policy development (e.g. the National Action Plan for Health Security and the draft Public Health Institute Bill), and ensured continuity during political transitions, validating the ToC's strategic rationale.

However, key assumptions within the ToC did not fully materialise. The expectation that WHO would act as a dedicated liaison for PHAS and SPIDER was only partly realised (mostly because this lacked clear defining and mechanisms by Sida). The seconded staff and the national staff—while contributing to alignment with international frameworks and supporting national strategies—did not have the mandate or accountability to *directly* support or *coordinate* PHAS or SPIDER, as discussed previously. Similarly, the assumption that WHO would serve as a coordination hub for Sida-funded actors proved unrealistic (particularly in the absence of detailed job descriptions, agreed deliverables, and a quadri-partite agreement (Sida, WHO, SPIDER, PHAS). The grant agreement focus is on *coordination support on the ground* - and WHO did provide coordination support between the FMOH and the projects where it could. However, again, lack of clarity of roles created some confusion, and SPIDER was not particularly interested in WHO's coordination support in its negotiations with FMOH or Member States MoH.

Overall, the ToC remains relevant in its broad framing: WHO added value as a technical adviser, normative guide, and coherence facilitator. It provided technical, operational, and coordination support to activities on the ground linked to PHAS and SPIDER. All the same, the ToC would have benefited from more clearly detailed assumptions regarding staff/seconded roles, potential coordination roles or mechanisms, and the extent of WHO's operational control in reality. A clearer delineation between WHO's general mandate and the targeted support expected to PHAS and SPIDER, might have resulted in a greater clarity all around.

Conclusion: WHO’s strategic support added systemic value. It contributed meaningfully to strengthening Somalia’s health system through normative alignment, technical capacity-building, and institutional and policy support. It played a pivotal role in developing (or encouraging) and embedding IDSR, DHIS2, IDSR and the FETP, and in advising on structures or platforms like the NIH and RAAD. It had a catalytic effect, and interacted in areas relevant to PHAS and SPIDER, but not entirely in the way originally envisaged in the Theory of Change due to some ambiguity in the grant agreement and lack of detailed job descriptions.

5.1.3 Priorities for the Future (EQ1)

- **Invest in performance monitoring mechanisms:** If independent projects run by different institutional entities are expected to coordinate, they should agree a formal framework for reviewing joint actions and progress at regular intervals, linked to national strategic goals.
- **Clarify and formalise any future staffing arrangements:** Any project-funded positions embedded within WHO (intended to provide technical, operational and coordinated support on the ground to independent projects run by other entities) should have specific and detailed job-related ToRs, clear deliverables and reporting lines. Any WHO roles related to third entities should be explicitly agreed by all parties, whilst remaining within the remit of the WHO.
- **Establish dedicated liaison functions:** *If* WHO is expected to play a coordinator role across Swedish-funded interventions, it needs a focal point explicitly tasked and empowered to do so, within the remit of the WHO.
- **Expand WHO’s support for subnational implementation:** While national-level contributions have been strong, future support should focus on ensuring capacity and systems are embedded at state and district levels.
- **Strengthen data use for decision-making:** WHO and partners should support more systematic use of IDSR and DHIS2 data at subnational levels, ensuring that trained staff and digitised systems are operationalised beyond reporting.

5.2 EQ2 - WHO

EQ2: How appropriate and effective were the support modalities used by WHO in contributing to Sida-funded objectives?

5.2.1 Findings (EQ2)

WHO’s core modalities of technical accompaniment, normative guidance, and policy dialogue were broadly highly appropriate to Somalia’s volatile, institutionally fragile health system context. These approaches contributed to strengthening foundational public health functions, promoting alignment with international standards, and embedding donor-supported initiatives within national frameworks. WHO maintained close relationships with the Federal Ministry of Health (FMoH) and the National Institute of Health (NIH), providing consistent technical support even during political transitions, thereby ensuring continuity for key initiatives such as Integrated Disease Surveillance and Response (IDSR), NIH development, and digital health workstreams (e.g., Health Management Information System strengthening).

An illustrative example was the Field Epidemiology Training Programme (FETP), where WHO, in partnership and national stakeholders (namely NIH), coordinated the training of 400 participants — of which 35 were funded through PHAS and the remainder supported by other funders.

The secondment of a PHAS-funded senior professional to WHO in 2021–2022 provided an important bridge between Sida-funded programmes, WHO technical teams, and Somali counterparts. Based in Nairobi, the secondee facilitated interactions with SPIDER and PHAS activities, supported WHO engagement on digital health, institutional development, and normative platforms, and initiated coordination meetings that strengthened collaboration between actors. Stakeholders consistently characterised this role as “catalytic.”

Additionally, two Sida-funded national professional officers embedded within WHO—the Surveillance Officer and the Health Systems Officer—supported a range of relevant activities including FETP delivery, stakeholder meetings, capacity-building workshops, and Ministry engagement. They contributed to WHO-led actions that were relevant to PHAS and SPIDER areas of work. However, neither their Terms of Reference, nor that of the seconded PHAS staff member, included specific job tasks, objectives, or deliverables specifically tied to Sida-funded projects.

During the government turnover period and until now, WHO, as a stabilising technical partner, was able to maintain engagement with (new) NIH leadership, which helped ensure that NIH and IDSR workstreams continued to some degree, despite political sensitivities.

5.2.2 Evaluative Analysis (EQ2)

WHO’s support modalities—grounded in technical accompaniment, normative alignment, and institutional engagement—were highly appropriate for Somalia’s health system development context and contributed meaningfully to broader health system strengthening objectives. Its ability to maintain programme coherence, foster public health resilience, and embed initiatives within national frameworks during periods of political flux positioned WHO as a credible and stabilising partner.

Sida’s modality of funding catalytic positions (both seconded and national staff) at WHO proved moderately effective in linking WHO normative agendas with Sida-funded programmes. The secondee’s convening role and the contributions of the national staff strengthened operational delivery and provided critical technical continuity. Nevertheless, the lack of formalised planning, clear role definitions, and position-specific accountability frameworks meant that the catalytic positions could not systematically prioritise or report against PHAS and SPIDER-specific objectives. Their contributions largely depended on natural overlap between WHO’s mandate and Sida’s programme areas, rather than explicit coordination mechanisms.

The underlying Sida assumption—that embedded positions within WHO would provide *dedicated technical, operational, and coordination support* for PHAS and SPIDER—was only partially realised. While WHO’s engagement lent credibility and operational stability to Sida-

funded initiatives, WHO did not function as a designated coordinating hub for these programmes. Accountability arrangements remained diffuse, limiting the potential for more structured synergies between Sida-funded interventions.

Overall, WHO's modalities were effective for broader health system support, and supported PHAS and SPIDER intentions, but were not focused solely on specific distinct needs of Sida-funded programmes, due to design and accountability constraints at the position and institutional levels.

5.2.3 Priorities for the Future (EQ2)

- **Continue to leverage and reinforce WHO's technical and advisory role:** working through WHO to strengthen health system foundations in fragile contexts, and complementing its normative and technical engagement with catalytic staffing support can strategically reinforce its capacity and reach and help create continuity.
- **Clarify the purpose and scope of embedded positions from the outset:** Future funding of catalytic staff within WHO should specify whether roles are intended to support WHO's normative mandates, or whether they are expected to directly advance and coordinate Sida-supported programmes. Terms of Reference including deliverables should be explicitly aligned with the intended function.
- **Strengthen joint ownership of planning and performance monitoring:** Where embedded staff are intended to focus only or mostly on Sida-funded projects, Sida and WHO should co-develop staff workplans, deliverables, performance frameworks to ensure alignment with Sida programme goals while responsive to WHO's institutional realities.
- **Adapt coordination expectations to WHO's institutional mandate:** If future Sida-supported programmes require WHO to play a broader coordination role, this expectation should be formalised early and adequately resourced. Phrases such as "*to effectively provide dedicated technical, operational and coordination support on the ground to both the important Sida-funded programmes*" needs to be explained and defined with precision.

5.3 EQ3 - WHO

EQ3: To what extent has WHO's support contributed to alignment, coherence, and reduced fragmentation in Somalia's health system?

5.3.1 Findings (EQ3)

WHO played a valuable role in fostering alignment of Sida-funded initiatives (PHAS, SPIDER) with national policies, technical frameworks, and international standards. Its technical authority and close collaboration with the Federal Ministry of Health (FMoH) enabled it to help embed these interventions within existing and emerging government-led strategies. Notably, WHO contributed to the development of the National Action Plan for Health Security (NAPHS), promoted the use of DHIS2 as a national platform, and supported Somalia's alignment with the International Health Regulations (IHR 2005) and Integrated Disease Surveillance and Response (IDSR) system.

WHO actively encouraged the integration of the RAAD platform into the national health information system. It served on the HADDA/RAAD technical committee, focused with SPIDER on interoperability with DHIS2 and alignment with IDSR and the national e-health strategy. This helped mitigate the risk of siloed digital investments and ensured coherence with other donor-supported platforms (e.g. the planned World Bank digital health investment). WHO's role reinforced SPIDER's positioning within a national digital ecosystem.

In surveillance, WHO's promotion of standardised IDSR tools and reporting chains unified previously fragmented vertical systems. NGOs and partners began feeding data into a centralised government-led system, whereas previously they maintained separate surveillance streams. Similarly, WHO's technical leadership and advocacy helped ensure that data from both RAAD and other digital platforms converged into DHIS2, reducing data fragmentation and improving access for decision-makers.

However, WHO's influence over institutional or political fragmentation was limited. While it supported the drafting of the Public Health Institute Bill (still not passed into law) and helped formalise coordination mechanisms (e.g., the Health Sector Coordination Forum), fragmentation persisted due to political interference and weak institutional mandates. For instance, the 2023 political sidelining of NIH following the removal of its leadership and partial absorption of its public health function into the FMoH, highlighted that promising and very relevant structural progress could be reversed by political decisions. WHO did not have the mandate or leverage to prevent this.

Similarly, regional fragmentation persisted. Multiple parallel systems still exist (e.g. humanitarian reporting platforms, private digital health systems), underscoring limits to WHO's reach (and mandate) in overcoming fragmentation driven by politics, federalism, donor governance models, international health actor approaches, and private sector actors..

5.3.2 Evaluative Analysis (EQ3)

WHO was most effective in reducing technical fragmentation—particularly in surveillance and health information systems—through its standard-setting role and convening of technical working groups. Its guidance contributed to the convergence of reporting protocols and systems, and it added political credibility to PHAS and SPIDER efforts by anchoring them in national frameworks. These contributions were essential to help realise system coherence and institutional legitimacy.

However, WHO's ability to address institutional or political fragmentation was constrained. It lacked enforcement authority and could not compel adherence to coordination frameworks or prevent politically motivated institutional changes. Donors and international partners such as the World Bank were cited as more successful in attaching conditions to protect institutional integrity, whereas WHO—functioning as a technical partner—did not have comparable leverage. Coordination across partners was improved through WHO's technical engagement but remained partial and vulnerable to external disruption.

WHO contributed meaningfully to reducing technical fragmentation and promoting coherence by embedding donor-supported initiatives in national systems, standardising protocols, and guiding data integration. It was less able to address fragmentation rooted in politics, donor

silos, or federal tensions, and there was no expectation, at all, that it should. Particularly since, in this context any "leverage" is linked to the volume of financial resources provided. WHO's normative influence was strongest in areas like surveillance and the health information system, but it lacked the tools or mandate to address structural and governance-related fragmentation, which persisted in key areas such as institutional leadership, subnational inclusion, and funding pathways.

5.3.3 Priorities for the Future (EQ 3)

- **Promote political economy-informed approaches to fragmentation:** Build analysis of federal dynamics and donor parallelism into planning, and seek joint advocacy approaches where WHO alone lacks leverage. Remind the international community of fragile states principles and why they are important.
- **Enhance inclusion of marginalised regions:** Advocate for more systematic inclusion of underserved areas in national initiatives, supported by transparent allocation mechanisms.
- **Consider how the international community can help to reinforce institutional stability** and policy continuity, particularly during leadership transitions.
- **Support continuity mechanisms:** Reinforce institutionalisation practices such as onboarding briefings, accompanied technical mentoring and documentation handovers to mitigate the impact of leadership churn on programme coherence.

5.4 EQ4 - WHO

EQ4: To what extent has WHO contributed to sustainable institutional arrangements and national ownership of Sida-supported initiatives?

5.4.1 Findings (EQ4)

WHO has played a critical role in establishing foundational public health institutions and systems in Somalia. It supported the building up and formation of the National Institute of Health (NIH), helped draft the Public Health Institute Bill (not yet passed into law), facilitated the integration of surveillance and emergency response into national structures, and provided ongoing technical support for platforms like the Health Sector Coordination Forum and rapid response teams. WHO also promoted institutionalisation of the Integrated Disease Surveillance and Response (IDSR) system,.

At times, these institutions functioned as intended—for example, NIH led Somalia's COVID-19 response and hosted the Field Epidemiology Training Programme (FETP), while technical coordination mechanisms enabled joint planning. An important aspect of the approach to FETP training and roll-out was to ensure good involvement of the Member State Ministries of Health, and cohorts included a broad representation of different regions across Somalia. This helped to consolidated the "institutionalisation" of FETP, ownership and buy-in outside of the Federal Government, and was thanks in part to WHO influence and coordinating help.

These efforts reflected a strong intent to help Somalia's transition from fragmented, donor-driven responses to sustainable national systems. WHO's guidance also supported formalisation of surveillance roles and protocols, and the alignment of digital tools (such as

SPIDER's RAAD system) with national e-health strategies. It ensured IDSR was embedded in the NAPHS process and linked it to public health laboratories and the DHIS2 platform.

However, national ownership of these institutions and systems remained partial and inconsistent. Despite policy-level endorsement, the NIH lacked legal and financial safeguards. The Public Health Institute Bill, drafted by WHO and PHAS in 2021, had not been passed by early 2025. The Ministry's ability to override NIH's semi-autonomous mandate—evident in the allegedly politically motivated dismissal of its director in 2023 highlighted the absence of structural protections, or perhaps highlighted that this position is considered "political" as opposed to "technical" or "science-driven". WHO and other authorities (international and national) in the world of health would tend to view this position as first and foremost crucially technical/science driven, and meant to be, in essence, neutral. This turnover, and the resulting loss of trained and expert staff, stalled NIH functions and weakened the institution's credibility. In terms of funding, and the overall health system, FETP graduates—numbering (impressively) over 400—remain largely funded through external projects and have not been integrated into the government payroll. Similarly, digital platforms like RAAD and core surveillance functions continue to rely on external financing and project-based staffing.

Outside NIH, WHO also helped the Federal Government of Somalia to establish coordination forums and technical committees, but their sustainability was mixed. Donor feedback suggests that these often lapsed and without a strong external focus, donors tended to leave their coordination and coherence exchanges to a minimum.

WHO, as a technical partner, could not directly influence government staffing decisions or parliamentary processes, as this would be outside its remit. Its advocacy, training, and technical design laid the foundation for institutional sustainability, but implementation and ownership rested with Somali actors. WHO's role was helpful but not sufficient to ensure the longevity of Sida-supported reforms.

5.4.2 Evaluative Analysis (EQ4)

WHO contributed meaningfully to institutional frameworks, legal drafts, and technical capacity, but Somalia's institutions remain fragile and donor-dependent. The WHO-PHAS collaboration made important gains in establishing the NIH, formalising surveillance systems, and strengthening coordination structures. These initiatives were coherent, standards-based, and aligned with global public health norms.

Yet, Somali government actors did not consistently protect or sustain these achievements. Political volatility, lack of legislative follow-through, and weak fiscal commitments undermined institutional durability. WHO's strategy of embedding capacity into national systems was sound, but sustainability faltered due to limited domestic ownership.

WHO's position as a trusted facilitator enabled progress during moments of alignment, but without conditionality tools or political leverage, it could not enforce sustainability. In contrast, other international partners like the World Bank were allegedly able to somewhat encourage (protect) institutional continuity through funding conditionalities—an approach not available to WHO under its normative and technical mandate, (nor, for that matter, to Sweden).

Therefore, WHO’s contribution to sustainability lay in designing, institutionalising, and advocating for systems aligned with national and international frameworks. Its support helped establish institutions like the NIH, surveillance systems like IDSR, and digital frameworks like DHIS2. These were major steps towards long-term institutionalisation. However, sustainability was frequently undermined by political interference, legal inertia, and underinvestment. National ownership—though acknowledged rhetorically—was inconsistently translated into legal, financial, or operational commitment. WHO’s role was necessary in establishing systems, but insufficient to ensure their survival in a low-capacity, high-volatility environment.

5.4.3 Priorities for the Future (EQ4)

- **Reinforce legal frameworks and political accountability:** Support advocacy for the passage of the Public Health Institute Bill and other legal protections to insulate institutions like NIH from political interference.
- **Integrate trained personnel into civil service structures:** Work with the FMoH and partners to transition FETP graduates and other staff performing critical roles from project-based contracts to government payrolls.
- **Design sustainability pathways in all new initiatives:** Ensure that digital platforms, coordination forums, and technical bodies have ownership, funding strategies, and institutional homes from the outset.
- **Promote institutional resilience through transition protocols:** Develop standard operating procedures for leadership changes, including encouraging safe-keeping of documentation, handovers, and capacity protection.
- **Coordinate with financing partners to align sustainability incentives:** Work alongside international partners with budget support or conditionality leverage (e.g., World Bank, EU) to jointly promote institutional continuity and reform adoption.

6 Engagement Modalities and Their Effectiveness

The preceding chapters have examined each of the three interventions funded by Sweden. In this chapter, which draws on the preceding chapters, we look at the extent to which the engagement modalities that Sweden employed were effective overall. This corresponds to EQ

6.1 ENGAGEMENT MODALITIES AND THEIR EFFECTIVENESS

Sweden adopted a multi-pronged approach to support Somalia's fragile health system, focusing on complementary modalities through separate standalone interventions. This included a peer-to-peer institutional partnership with PHAS to establish Somalia's National Institute of Health (NIH), a digital health initiative led by SPIDER to modernise health information systems, and strategic support from WHO through (Sweden-funded): secondment (from PHAS) and two directly hired positions. Each modality was chosen to address specific system gaps – from public health leadership to health data management – under a unifying goal of strengthening Somali health governance and services. This thematic synthesis examines how effectively these modalities functioned (their advantages and drawbacks).

6.2 PEER PARTNERSHIP WITH PHAS (INSTITUTION-BUILDING)

Sweden's decision to work through PHAS as an implementing partner brought a credible, science-based public health institution to the table – one that could engage Somali counterparts as a peer rather than as a traditional donor programme. This peer-to-peer modality proved effective in transferring knowledge and building trust. PHAS experts worked hand-in-hand with Somalia's Federal Ministry of Health and helped to reinforce the nascent National Institute of Health, focusing on core public health functions like disease surveillance, outbreak response, data analysis, and research coordination. The advantages of this approach were evident in tangible outputs: for example, Somalia's first NIH Strategic Plan (2024–2028) was developed, weekly disease surveillance reporting was instituted across all regions, Public Health Emergency Operations Centres were strengthened, and a Field Epidemiology Training Programme (FETP) trained 400 Somali outbreak responders, 35 of these funded by PHAS.

PHAS also fostered local ownership – Somali officials co-developed strategies and policies alongside PHAS, ensuring alignment with national priorities and international standards (e.g. the International Health Regulations). However, the PHAS modality also faced limitations. As a technical agency, PHAS could not directly address political or fiscal constraints that surfaced as NIH's profile grew – Somali stakeholders began expecting greater NIH autonomy and government budget support that PHAS alone could not deliver. Sweden, as an important donor

to the health sector of Somalia was not able to help mitigate this issue, and no steps were taken at the higher political level. This revealed a gap between the project's catalytic achievements (e.g. high-profile conferences, improved capacity) and the structural changes needed for NIH's full empowerment. It also reveals political tight ropes for international donors in fragile settings. Furthermore, PHAS's capacity-building gains proved fragile when leadership turnover hit the NIH in 2023 – several improvements unravelled because they had been person-dependent and were not yet embedded into institutional processes. These challenges highlight that while a peer partnership can rapidly bolster capacity and legitimacy, its impact needs to be anchored through formal institutional adoption and broader system support to be sustained. Equally, recognising that dual support systems, rebuilding the capacity and approach within NIH, while supporting similar functions shifted to other FMoH units is necessary in the non-linear progress within fragile states was a challenge for PHAS.

6.3 DIGITAL HEALTH INITIATIVE VIA SPIDER (INNOVATION AND LOCAL OWNERSHIP)

To address Somalia's weak health information systems, Sweden engaged SPIDER as an implementing partner to lead the HADDA programme – a digital transformation initiative cantered on deploying an electronic health records platform called RAAD. SPIDER's modality emphasised co-creation with Somali stakeholders, and Somali service providers and research entities, the use of open-source technology, and iterative design. This approach had very clear strengths in a fragile-state context: it promoted national ownership (RAAD was developed with local tech partners and eventually endorsed by the Federal Ministry of Health as Somalia's preferred e-health platform. SPIDER's remote location (Sweden) and its initial low familiarity with working in Somalia was a constraint, though mitigated by the modality choices it made.

In terms of results, the RAAD system was rolled out in over 30 health facilities (primarily maternal and child health centres) in several Member States of the Somali Federation, bringing digital patient registration and record-keeping to these sites for the first time. More than 95 frontline health workers and IT staff were trained in its use, significantly improving their digital literacy and ability to collect and use health data. The programme also strengthened the national health information infrastructure by establishing coordination forums – a Technical Coordination Committee and Technical Working Teams – that brought together government, WHO, and various implementers to harmonise digital health efforts.

RAAD was intentionally designed to be interoperable with Somalia's District Health Information Software (DHIS2) and facilitated the handover of broader HMIS strategy work to WHO for long-term stewardship. SPIDER's plan to work using global goods and to encourage digital-use to be fully integrated into health centre behaviour, and to grow in that direction, has moved forward, and SPIDER has consciously tried to adapt to ground-realities. It recognised the challenges of working in fragile settings (with poor overall resources). A few of SPIDER-targeted health clinics were, indeed, able to generate direct complete digital reporting from RAAD to DHIS2, that actually by-passed paper data. This showed proof of concept but it was not yet the norm. Overall, progress with the digital system, relatively complex all the same, in the low-resource, high-turnover setting has proved challenging, as expected by SPIDER. RAAD's full integration with legacy systems (meaning full integration into clinic-worker

behaviour and data collection modality) remains only partial. Many facilities continue to rely on paper records alongside RAAD due to constraints related to power, too few available devices, connectivity, and workforce turnover/skills. The FMoH also continues to encourage dual system recording (paper and digital) partly due to recognition that many clinics do not have the tools or needed capacity to fully shift to RAAD only, and worries over reliability of an electronic-only data system. It was also focused on perceptions concerning usability – frontline health workers reported frustrations with certain modules and slow technical support; and perceptions concerning feedback that indicated that the tech design did not always align with on-the-ground realities or needs of the health workers, compounded by the fact that most facilities had one or few laptops whilst there were several consultation rooms, so that paper recording was necessary often, in any event. This was confirmed during the evaluation's field discussions, where reactions to digitalisation as a modality for furthering EPHS (in this case related to maternal and child health) was mixed, with some positive anecdotes concerning better continuum of care, but many anecdotes expressing inability to do provide this continuum, and frustrations, as already mentioned, over too few devices requiring that paper data be collected first and then uploading it. Also workers mentioned having to transfer data to too many e-tools of which RAAD was only one.

In relation to the modality of sub-contracting from SPIDER to local entities, such as NomadiLabs, or SIDRA, the evaluation team findings show that Somali officials appreciated the fact that SPIDER embedded HADDA using local implementation actors; and this helped to create a sense of reinforcing local capacity to carry out the actions and sustain RAAD, including beyond SPIDER involvement (assuming financing availability for those local actors). At the same time, managing from Stockholm had its limitations, including the extent to which it was feasible for SPIDER staff to go to the various field clinics across the regions to interact and observe directly. This points more to the difficulties in gathering monitoring data in complex situations not to the (positive) modality overall of using local actors. At the same time, as for any project managed remotely, the on-the-ground-realities were filtered through the interactions between SPIDER and its implementors. This is true for any such project modality, and is not at all unusual.

Additionally, while SPIDER collaborated with WHO and PHAS at the strategic level, day-to-day operational synergy was limited initially; opportunities to jointly plan trainings or share data were only gradually realised and possibly could have been leveraged earlier.

Overall, SPIDER's innovative, locally-focused modality drove forward Somalia's digital health capacity and instilled a vision of data-driven health care, but its impact was constrained by practical implementation hurdles and lack of basic infrastructure and financing.

6.4 WHO SUPPORT (COORDINATION AND NORMATIVE GUIDANCE)

Recognising WHO's convening and normative authority in Somalia's health sector, Sweden augmented its bilateral projects by funding a PHAS expert to be seconded to WHO in Nairobi (2021–2022) and hiring two WHO national-positions in Somalia dedicated to health systems strengthening and surveillance. This modality aimed to help embed Swedish-funded initiatives

more firmly within Somalia's broader health architecture and ensure coherence with international norms and frameworks.

In practice, this approach strengthened linkages between PHAS's work on establishing the NIH and WHO's ongoing technical engagement with the Ministry, helping to align efforts and prevent duplication. Stakeholders noted that having a PHAS secondee based within WHO provided credibility, access to technical expertise, and opportunities for synchronised planning – for example, enabling greater coherence between surveillance capacity building and support to the Integrated Disease Surveillance and Response (IDSR) system. Likewise, WHO's involvement helped ensure that initiatives aligned with international standards and recommendations.

The linking model – working through WHO as a platform – demonstrated the value of multilateral engagement. It combined PHAS's technical expertise, SPIDER's innovation in digital health, and WHO's on-the-ground presence and normative authority, enabling more coherent interactions that might otherwise have remained fragmented.

At the same time, despite references in grant agreements, the roles of these positions were not explicitly designed or managed to directly, systematically, and solely advance Sida-funded project objectives. Their job descriptions and Terms of Reference did not clearly link them to Sida-supported deliverables. While the national officers contributed meaningfully to WHO's broader workstreams in surveillance, capacity building, and stakeholder engagement—areas relevant to PHAS and SPIDER—the secondee was perceived as more closely aligned with project priorities, possibly due to professional background, physical location (Nairobi), and nationality (Swedish), which may have facilitated proactive engagement.

In parallel, expectations from Sida that WHO would assume a cross-project coordination role were not clearly detailed, formalised, or jointly agreed.

The experience underscores an important lesson: while the embedding modality can add significant value by anchoring donor-supported efforts within national strategies and technical frameworks, and by facilitating interactions with government actors, dedicated roles require clear objectives, formalised joint oversight, and mechanisms to ensure that expected contributions to specific project goals are both intentional and measurable.

6.5 A MULTI-PRONGED MODALITY

Overall, Sweden's multi-pronged approach meant it had a relatively comprehensive engagement through PHAS, SPIDER, and WHO. This **added significant value to Somalia's health system trajectory**. By the end of the evaluation period, Somali stakeholders observed far greater coherence and synergy in external support than in earlier years.

What started as parallel projects became an increasingly coordinated package of support, largely thanks to deliberate adjustments like joint planning meetings and helped by the Somali government's creation of cross-cutting technical working groups. This better coherence amplified the collective impact – for example, when data training provided by SPIDER was coordinated with surveillance training by PHAS, it ensured different cadres (health information

officers vs. epidemiologists) were each reached with relevant skills, reinforcing each other's work rather than duplicating.

Such interplay meant the interventions could tackle interrelated problems (institutional weakness, poor information, low capacity) in concert. Not all potential synergy was realised and many gaps remained. Large parts of the health sector (notably the private sector and some vertical programmes) were outside the immediate scope of these projects and thus less influenced by the improvements.

And the sustainability of the gains – from digital systems to trained personnel – is not at all assured without continued investment and government commitment. Nonetheless, the strategic combination of modalities under Sweden's support has **materially strengthened Somalia's health system** on a few fronts, leaving it better equipped than before to move toward national health goals and to handle future challenges.

Sweden's experience in Somalia offers several modality lessons for health system strengthening in fragile contexts. Choosing complementary partners and modalities can yield a whole greater than the sum of its parts, but this works best if coordination is jointly and explicitly planned and roles are crystal clear from the outset. In this case, the triad of a peer institution, a tech-focused implementer, and a multilateral agency was appropriate and innovative, leveraging each actor's comparative advantage. Future programmes should hard-wire coordination mechanisms and joint governance from the start, and ensure that any secondments or funded positions come with defined roles, clear expectations, and accountability mechanisms.

7 Sweden's Contribution to Health System Strengthening in Somalia

The preceding evaluation chapters have examined each of the three interventions funded by Sweden, according to the evaluation questions, and the extent to which the engagement modalities that Sweden employed were effective overall. This conclusion chapter examines the extent to which, overall, these contributions helped Sweden to help move the needle on strengthening Somalia's health system. This chapter is evaluative and draws on the previous chapters.

Sweden's multi-pronged support to Somalia's fragile health sector – through the PHAS/NIH partnership, the SPIDER/HADDA digital health programme, and strategic engagement with WHO – has **collectively advanced a more resilient, coordinated, and enhanced Somali health system**. Taken together, Sweden's three interventions– have achieved a whole **greater than the sum of its parts**, aligning with Somalia's national health priorities and Sweden's strategic objective of building long-term health sector resilience.

7.1 COLLECTIVE CONTRIBUTIONS

Rather than classic "standalone" projects, these interventions were deliberately chosen to complement each other. Each addressed different building blocks, and their interplay (especially as coordination improved mid-course) created a more holistic impact on health system resilience than any single project could have achieved.

7.2 INSTITUTIONAL CAPACITY AND GOVERNANCE

A cornerstone of Sweden's contribution was the establishment and empowerment of Somalia's National Institute of Health. Through PHAS's guidance, the NIH evolved from a concept into a functioning institution with a clear mandate, organisational structure, and strategic plan. This has filled a long-standing gap in health sector leadership – Somalia had, for a time, a comparatively well-functioning and dedicated public health agency to lead disease surveillance, research, and health promotion, which is fundamental for long-term health security. Though the NIH is not currently functioning well, the public health functions themselves (that a NIH is usually responsible for) have been fortified (even if many are visibly transferred out of NIH). Complementing this, WHO's policy support helped draft essential frameworks (such as a National Action Plan for Health Security). It also helped to draft a Public Health Institute Bill (though this is still not passed). These were both aimed at trying to solidify the NIH's legal and strategic foundations. Meanwhile, SPIDER's work on the health information side strengthened governance mechanisms within the Federal Ministry of Health: it helped the government to operationalise the Health Management Information System

Steering Committee and technical working groups that bring together federal and state authorities to discuss and oversee digital health initiatives.

By **strengthening coordination platforms and institutional policies**, the interventions collectively improved health sector governance. Somali health authorities, for instance, gained experience in steering donor-supported projects through these committees, enhancing their capacity to coordinate multiple stakeholders and align external support with national plans. All three efforts reinforced the principle of government ownership – PHAS by co-planning with the Federal Ministry, SPIDER by embedding its work in Ministry-led committees, and WHO by ensuring alignment with national strategies – thereby avoiding parallel systems and instead bolstering the **stewardship role** of Somali institutions.

7.3 SURVEILLANCE AND HEALTH SECURITY

Strengthening Somalia's ability to detect and respond to health threats was a unifying theme across the interventions. Significant progress was made in disease surveillance systems, a critical component of health system strengthening. PHAS and WHO collaborated to expand the IDSR network nationwide, establishing weekly epidemic reporting from all regions and enhancing outbreak investigation capacity.

Through the joint PHAS-WHO efforts, over 400 Somali epidemiologists, surveillance officers, and public health workers were mentored or trained (including in FETP) to form a cadre of skilled personnel who can sustain these surveillance functions. This **directly addressed a major health system weakness** by injecting human capacity and formal processes for disease monitoring and response. The presence of WHO (augmented by Swedish support) ensured that these surveillance improvements met international standards and were linked to global systems. For example, Somalia's reporting into WHO's global epidemic tracking improved, and its compliance with the International Health Regulations was actively promoted. Additionally, PHAS's support in setting up Public Health Emergency Operations Centres provided Somalia with institutional infrastructure to manage crises like droughts or disease outbreaks in a more coordinated way.

These advancements were **interdependent** with SPIDER's contributions: the digital tools introduced by SPIDER (such as the RAAD EHR) enhanced real-time data collection and outbreak reporting, feeding into the surveillance system. By the end of the programme period, Somali officials noted that efforts to strengthen IDSR, whether through training, digital reporting tools, or lab network improvements, were converging – the various support streams were seen as “speaking with one voice” in bolstering the country's epidemic surveillance and response capabilities. In essence, Sweden's interventions collectively fortified Somalia's health security backbone, from community-level reporting all the way to national and international coordination.

7.4 HEALTH INFORMATION SYSTEMS AND DIGITAL TRANSFORMATION

A major stride in health system strengthening was in the realm of health information, where the combined work of SPIDER, PHAS, and WHO has helped to begin to modernise Somalia's

data landscape. Prior to these efforts, Somalia's health information was fragmented and largely paper-based. This is still the case. However, the HADDA programme coordinated by SPIDER introduced the RAAD electronic patient-health record system, marking a concerted attempt towards using digital patient records in public health facilities. By piloting RAAD in a few facilities across Banadir, Galmudug, Puntland and then expanding the number of facilities using RAAD (about 30), (and preparing expansion to Jubaland), the programme has not fixed (had not replaced) the "paper-registration data system" but it has built **proof-of-concept sites** for how digital tools could improve health service delivery and data reporting. At the same time, issues of interoperability remain, though these are being ironed out, and issues related to access to, and use of, individual data are also being considered.

Health workers in those facilities, once trained, were able to register patients and track services electronically, improving continuity of care for mothers and children and generating higher quality data for decision-makers. At the same time, WHO's support to the national DHIS2 platform and HMIS policy ensured that these new facility-level systems did not remain isolated pilots – instead, data from RAAD were designed to flow (at least via manual integration initially) into the national health information system, complementing the aggregate statistics captured by DHIS2. PHAS contributed by using NIH as a hub for data analysis training and advocating for evidence-based decision-making, linking the value of these digital systems to broader public health goals.

Together, the interventions helped Somalia develop a **more coherent health information architecture**: one where routine health statistics, disease surveillance, and patient-level records are increasingly interoperable and overseen by a government-led committee. Notably, according to informants, but not verified by the evaluation team, the Somali government is purportedly considering endorsing the RAAD platform as the country's standard for electronic health records. This consideration is a testament to this collective influence – it **signals political recognition** of the advances, and, in some ways, a potential commitment to sustain and scale the digital health investments (though these would have to continue to be financed externally for the foreseeable future). Challenges remain (RAAD is very far from fully scaled or seamlessly integrated, and many multiple other parallel information tools still exist), but the foundational work done by SPIDER (technical innovation), WHO (capacity, standards and strategy), and PHAS (capacity building and data use) has helped to **jump-start Somalia's digital health era** in line with its national strategic objectives.

At the same time, the lack of interaction, co-creation, or co-financing with the **private sector**, given its predominance in health service delivery, and its use of digital health tools, across Somalia is a huge gap that threatens the overall coherence, sustainability and scalability of Somalia's health system. There is also a huge opportunity for international (public sector) partners to explore how to fortify public-private partnerships in their delivery and interactions with the Government. SPIDER has suggested, to the FMoH, the need to include private sector from the beginning. Whilst some international partners have focused in this area (e.g., World Bank, Switzerland) this mostly under-developed dimension is worth considering.

7.5 HUMAN RESOURCE CAPACITY AND LEARNING CULTURE

Underpinning all the above were intensive capacity-building efforts that have, in aggregate, strengthened the Somali health workforce and created a nascent culture of continuous learning and improvement. PHAS's approach of long-term mentorship, twinning, and on-the-job training imbued Somali professionals at the NIH, the Federal Ministry and health ministries at state level with new skills in epidemiology, data management, and health leadership.

SPIDER's trainings empowered frontline health workers and regional health officials with digital competencies that were previously scarce in the health sector. Across the projects, workshops and joint exercises (such as outbreak simulations, data review meetings, and research conferences like the Garowe Public Health Conference) brought together participants from different states and institutions, fostering networks of professionals committed to improving health services. These efforts collectively expanded the human capital of the health system – not only through the number of people trained, but through creating new roles and teams (e.g., surveillance officers in the NIH, IT focal points in health facilities, and an expanded WHO field team) that will carry forward the work.

Importantly, the interventions also elevated the importance of data and evidence in the health system's mindset. Thanks to the joint work, Somalia now has its first public health journal and a National Research Ethics Board (supported by PHAS) to encourage home-grown research. Ministry officials, initially hesitant about digital systems, began to see health data as a strategic asset for planning – a shift in attitude partly credited to the visibility of tools like RAAD and the analytic products generated through the NIH. This change in culture is a soft but critical aspect of system strengthening: it means future policies and programmes can be built on a more informed, data-driven foundation.

7.6 LOOKING FORWARD

Choosing complementary partners and modalities can yield a whole greater than the sum of its parts, but only if coordination is planned and pursued, and roles are crystal clear from the outset. In this case, the triad of a peer institution, a tech-focused implementer, and a multilateral agency was appropriate and innovative, leveraging each actor's comparative advantage. However, initial ambiguities in role division had to be overcome mid-course, and the effectiveness of embedded support waned when responsibilities became unclear. Future programmes should hard-wire coordination mechanisms and joint governance from the start, and ensure that any secondments or funded positions in partners come with defined mandates and accountability.

Sustainability must be built into design. Capacity gains and new systems are at risk of evaporating in volatile environments if they rely on individual champions or external funding alone. The Somalia interventions highlight the need for institutionalisation – for instance, creating civil service positions to retain trained experts, integrating digital tools into government budgets and IT support systems, and passing policies and legislation that lock in new practices. An early focus on transition planning (how Somali authorities will take over functions and financing) is crucial to preserve achievements.

National ownership and alignment with local priorities are indispensable for lasting impact. The constructive, if at times slow, alignment of PHAS, SPIDER, and WHO efforts under Somali leadership (through ministry-led plans and committees) proved far more effective than a siloed approach. It ensured relevance and built legitimacy for the reforms. This can be remembered in fragile contexts going forward by engaging a wider circle of actors, including for example (as is relevant and necessary) the private health sector or local academia, to broaden the base of support. Exploring public-private partnerships in Somalia is likely to be a *sine qua non* for real scalability and sustainability in the long run.

Lastly, innovation (like digital health) should go hand-in-hand with strengthening fundamentals – technology can leapfrog some gaps but must be paired with investments in basic infrastructure such as electricity supply, connectivity, computer/laptop provision, and IT services access, with the fundamentals of people, processes, and policy. The Somali case shows that even cutting-edge solutions need analogue back-ups: training, maintenance, and policy frameworks to guide their use. In sum, Sweden's engagement in Somalia demonstrates the promise of a holistic, partnership-driven approach to health system strengthening. It underlines that with patience, flexibility, and a commitment to learning and adapting, even a conflict-affected health system in the setting of a fragile state can be put on a path toward greater resilience and equity. The challenge ahead will be to consolidate and build on these gains – a task that will require continued collaborative effort, rooted in the lessons of what has and hasn't worked in this joint endeavour.

8 Lessons Learned

The lessons presented below draw on Sweden's engagement in Somalia's health sector through the Public Health Agency of Sweden (PHAS), SPIDER, and the World Health Organization (WHO), in close collaboration with Somalia's Ministry of Health and other actors. They reflect stakeholder perspectives from across federal, regional, and international levels and are grounded in observed implementation realities between 2021 and 2025.

Together, these insights highlight recurring challenges and enablers in institutional development, digital health integration, coordination, and sustainability. The synthesis does not isolate lessons by actor or project but distils them into cross-cutting themes, to inform strategic reflection by those working in similar fragile and conflict-affected settings. While contextualised in Somalia, many lessons carry broader applicability across development and health system strengthening efforts. It is useful to keep in mind that these interventions were originally designed to be three years in duration, and were extended. In all cases, this time period (even extended) is extremely brief for the sorts of outcomes intended. The budgets were also relatively small.

1. Partnerships, Ownership, and Political Engagement

- **Designing solutions in partnership with national entities and users is a winning strategy.** Deep local engagement, co-creation, and adherence to national standards (such as DHIS2 interoperability) foster legitimacy and improve uptake.
- **Strong national leadership and policy backing are pivotal.** Clear endorsement, defined mandates, and ministerial convening power help sustain innovation and align actors in fragile settings.
- **Relationships matter — and so does institutionalisation.** Trust-based partnerships delivered early success but were vulnerable to leadership changes. Institutionalising roles and codifying responsibilities are key to continuity.
- **Public health institutions can be built in fragile states — but they require continuity and political and financial backing.** National ownership is bolstered with sustained support and clear transition planning.
- **Government engagement and ownership are non-negotiable.** Even in contexts with weak capacity, coordination routed through national authorities helps ensure alignment and sustainability.
- **Partial inclusion weakens national ownership.** National initiatives that bypass Member States or exclude the private sector risk undermining buy-in and legitimacy and coherence.

2. Capacity Building and Sustainability

- **Training boosts capacity but requires structured follow-up.** Initial capacity-building is strengthened when linked to mentoring, communities of practice, and institutionalised induction especially in high-turnover contexts.
- **Institutional capacity building requires more than one-off trainings.** Without embedded systems, individual capacity gains quickly fade. Resources allocated for follow-on support and retention mechanisms can help.
- **Despite building with sustainability in mind, the lack of an exit strategy undermines long-term prospects.** Programmes and projects that incorporate co-financing or financing strategies, local capacity, and transition planning from the outset may be more sustainable.
- **Pilot success can spur broader demand.** Demonstrating benefits catalyses uptake, but programmes must be prepared to respond strategically to that demand.
- **Investing national resources is key to sustainability.** Establishing budget lines and gradually increasing domestic financing for systems, salaries, and maintenance is essential.
- **Think long-term from the start.** Digital pilots in fragile states often fail to scale due to the absence of transition strategies. Defining endgames early may help planning and exits.

3. Technology, Systems Integration, and Local Contexts

- **Foundational investments must accompany digital innovation.** Without stable electricity supply, hardware, internet access, and skilled personnel, digital tools risk to be underutilised, and less trusted.
- **Technical integration and user context matter.** Planning for interoperability and aligning with existing workflows reduces duplication and resistance.
- **Normative alignment is valuable but insufficient.** WHO's standards and strategic guidance add value, but institutional uptake requires political support, domestic resources, and national enforcement.

4. Coordination, Roles, and Implementation Models

- **Coordination and alignment enhance effectiveness.** Alignment with national priorities and international norms doesn't happen organically—it requires early joint planning and active facilitation.
- **Sida-funded secondments and staff positions can catalyse collaboration if well designed.** Clearly defined mandates, oversight structures, and ToRs are essential for embedded technical assistance to deliver targeted results.
- **Limited information-sharing and fragmented implementation diminish impact.** Siloed operations reduce opportunities for synergy (e.g. shared training, data systems, planning cycles).

5. Working in Fragile and Conflict-Affected Contexts

- **Adaptive planning and risk mitigation are essential in fragile states.** Political changes, security and conflict-related challenges must be anticipated through contingency planning, phased roll-outs, and dual systems.
- **Pilot successes need to be matched by implementation resilience.** Momentum generated in early stages risks stalling in the absence of strategies to cope with instability, financing shifts, or political turnover.

9 Conclusions

Sweden's support to Somalia's health system through PHAS, SPIDER/HADDA, and WHO contributed meaningfully to institutional development, digital transformation, and public health systems strengthening. Operating in one of the world's most fragile and politically complex contexts, these interventions demonstrated that ambitious reforms are possible — but also highly vulnerable to disruption without sustained engagement, clear role definition, and embedded systems for continuity.

This chapter presents conclusions in two parts:

- **Thematic conclusions** that synthesise cross-cutting insights; and
- **Intervention-specific conclusions** that highlight the unique contributions, strengths, and limits of each actor.

9.1 THEMATIC CONCLUSIONS

1. Ambitious institutional development can be initiated in fragile settings, but must be anchored in systems, not personalities.

The PHAS-led support to the Somali NIH showed that a national public health institute can be created and operationalised even in a politically volatile context. Progress in strategic planning, surveillance systems, data analysis, and research structures demonstrated tangible institutional growth. However, these gains were not sufficiently locked into formal systems and were susceptible to political changes. When leadership changed, many governance mechanisms and knowledge assets weakened or ceased functioning. Institutional development in fragile settings requires legal mandates, procedural continuity, and embedding of roles and norms across layers of government. One of the characteristics of fragile contexts is exactly the (overriding) problem that has surfaced in this evaluation. Other than mitigating (or solving) the fragility as such, international partners (public and private) need to explore how to strongly encourage governments in transition to safeguards gains. Coordinating a joint position, to the extent possible, may be helpful.

2. Digital transformation is possible and can generate momentum, but will falter without enabling conditions and systemic integration.

SPIDER's co-development of RAAD marked a significant advance in Somalia's health information architecture. The EHR system was designed collaboratively and endorsed by the Federal Government, contributing to improved data quality and digital literacy in pilot sites. Yet structural constraints — such as inadequate infrastructure, staff turnover, and reliance on manual processes — limited scale and integration. Without sustained investment in connectivity, training, equipment, and financing, digital tools will remain partially used and

unable to replace fragmented systems. Interoperability must be accompanied by clarity on ownership, financing, and maintenance.

3. WHO added critical normative and technical value — especially for IDSR — but its convening and coordination role was underutilised.

WHO was instrumental in introducing and operationalising IDSR in Somalia, supporting national uptake of WHO-aligned surveillance systems, FETP, and governance protocols. It provided the backbone for many normative frameworks that PHAS and SPIDER leveraged. The funded-positions were catalytic but they also highlighted the need for future WHO roles to be defined perhaps in more detail, with both policy and operational dimensions, supported by joint accountability and regular review, as appropriate.

4. Coordination and coherence across actors increased over time but remained dependent on individuals and donor facilitation.

Initially, the Sida-funded interventions operated with some fragmentation, but over time, collaboration improved, particularly through joint technical platforms and WHO-facilitated dialogue. Synergies between digital health (SPIDER), surveillance (PHAS), and normative support (WHO) became more evident in 2022–2023. However, coordination remained informal and vulnerable to turnover of senior staff. Without institutional mechanisms and jointly owned results frameworks, coherence risks erosion when key individuals leave. This highlights the importance of planning joint inception phases and governance structures from the outset.

5. Ownership was achieved but not sustained — and must be actively managed through transitions.

Early engagement with Somali authorities created strong ownership, especially around NIH and digital health policy. PHAS and SPIDER worked closely with counterparts of the Federal Ministry of Health, and WHO's presence facilitated national alignment. However, ownership faltered after leadership changes, particularly at NIH. New counterparts were not fully integrated into existing partnerships, and continuity was not assured. Political changes also eroded ownership as is demonstrated in the role of the Federal Ministry of Health (the Federal Minister of Health played a major part in this issue). Country ownership is not a one-off achievement — it must be renewed through re-engagement, orientation, and inclusive planning when institutional shifts occur.

6. Equity and inclusion require more than geographic coverage — they require political signalling and stakeholder engagement.

Targeting select regions and actors for pilot activities made operational sense. However, in Somalia's politically sensitive environment, limited engagement of some federal Member States and the private sector created perceptions of exclusion. The absence of clear communication around long-term plans for nationwide scale-up of RAAD, and lack of structured involvement of private health providers in surveillance or data systems, hampered, obstructed and reduced system-wide legitimacy. In fragile states, equity is not just about who receives services, but who feels included in reform design and governance. Use of political economy analysis, and updating this, is a *sine qua non* in any fragile setting, for all actors.

9.2 INTERVENTION-SPECIFIC CONCLUSIONS

PHAS/NIH

PHAS contributed significantly to the consolidation of Somalia's NIH and laid the groundwork for a functioning public health institution, and related health functions. Its peer-to-peer approach enabled trust-building and alignment with national strategies. Progress was visible in disease surveillance (IDSR), outbreak response (FETP), data visualisation, and the initiation of a research agenda and journal. However, these advances were vulnerable to political transition. The 2023 leadership change at NIH disrupted momentum, and many PHAS-supported structures lost traction. The absence of a formal transition strategy, or re-engagement plan, made it difficult to preserve institutional gains.

Despite these challenges, the PHAS intervention remains a rare example of public health institution-building in a fragile setting. Its contribution to strengthening core functions, particularly in surveillance and data systems, has had lasting influence, including through systems now hosted in other Federal Ministry of Health departments. But without legal status, stable leadership, and continued engagement, the NIH risks being marginalised. PHAS demonstrated the potential of a relational, flexible, and targeted approach, but also showed that institutions need more than trust: they need a legal mandate and dedicated budget line, strategic frameworks and political backing to survive.

SPIDER/HADDA

SPIDER's HADDA programme achieved notable progress in digital health infrastructure, training, and stakeholder coordination. The co-development and piloting of RAAD — an open-source EHR platform — helped shift discourse in Somalia toward integrated, government-owned digital health solutions. Training initiatives and the establishment of governance structures such as the TCC and TWT helped to build national capacity and accountability.

At the same time, the intervention encountered challenges common to fragile contexts: infrastructure limitations, uneven regional uptake, dual reporting systems, and limited follow-up. RAAD is mostly used in parallel to paper registration, and in some clinics RAAD is used to generate complete reporting into DHIS2. This progress is growing but partial. Health facilities continue to rely mainly on paper systems in parallel to digital, and only some are generating direct reporting into DHIS2. The absence of a comprehensive national interoperability framework, standard operating protocols, and the under-engagement of the private health sector (outside of SPIDER scope) within a federally unified framework, poses ongoing risks generally to the widespread use of RAAD (and DHIS2). While political adoption of RAAD as the federal standard was a significant achievement, long-term sustainability depends on sustained Federal and Member State MoH "ownership", phased scale-up, and institutionalisation of support structures, including technical helpdesks and digital literacy pathways; and a regulatory framework to bring all actors and health service providers' data into the federal (public) system for data collection (DHIS2). (This is beyond SPIDER scope.)

WHO - Somalia

WHO's engagement in Somalia's health sector was highly appropriate and contributed meaningfully to health system strengthening, particularly in surveillance, public health coordination, and technical continuity during political transitions. WHO's support modalities — normative guidance, technical accompaniment, and institutional embedding — reinforced national frameworks and protected programme coherence. WHO appropriately and usefully played a dual role as technical guide and stabilising actor.

The Sida-funded staffing modality, while catalytic in effect, lacked the specificity and design mechanisms needed to fully maximise a dedicated support to PHAS and SPIDER objectives, revealing the need for clearer role definition, shared oversight, and targeted deliverables in future staffing modalities. Overall though, WHO was particularly influential in embedding IDSR and IHR-aligned systems in Somalia's health architecture, supported PHAS and SPIDER through policy frameworks, training systems and linkages with Ministry of Health planning mechanisms. WHO also provided a degree of momentum and connectivity across Sida-funded actors. WHO's contribution strengthened system resilience and alignment, and it remains essential as a normative authority and national anchor. Its continued engagement in areas such as the draft NIH Bill, digital health strategy, and surveillance governance can help bridge technical progress with institutional reform.

10 Recommendations

This chapter presents a synthesis of recommendations derived from Sida's support to Somalia's health sector through PHAS, SPIDER/HADDA, and WHO - Somalia. Grounded in the evaluation's findings, conclusions, and lessons learned, the recommendations address core challenges and opportunities across institutional development, digital health, coordination, and sustainability. Rather than repeating project-specific and question specific suggestions contained in Chapters 3, 4 and 5 as "Priorities for the Future", this chapter distils recommendations into thematic areas relevant across actors. Each is tagged with the relevant stakeholder(s) to facilitate ownership, coherence, and actionable follow-up. While contextualised in Somalia, many recommendations carry broader relevance for system-strengthening efforts in fragile and conflict-affected settings. Some of these recommendations include actions that are already being undertaken by the various actors, but are included here to emphasise them as key focus areas moving forward.

1. Sustainability and Transition Planning

- **Plan for sustainability from the outset.** Develop costed transition strategies and phased handover plans that include institutional capacity transfer, domestic financing pathways, and early engagement with future funders. (*PHAS, WHO, SPIDER, Federal Ministry of Health, Sida*)
- **Embed risk management and contingency planning into institutional strategies.** Prepare for political turnover, operational disruptions, and realignment needs through documented handover processes, flexible programme design, and short-term bridging mechanisms. (*PHAS, NIH, Federal Ministry of Health, Sida*)
- **Institutionalise core public health functions.** Ensure that critical services such as surveillance, research governance, and data systems remain operational across leadership cycles through standard operating procedures, rotating technical groups, and internal accountability mechanisms. (*PHAS, NIH, Federal Ministry of Health, WHO, SPIDER*)
- **Ensure responsible exits and continuity.** Avoid abrupt withdrawal from fragile institutions; instead, plan gradual phase-outs with clear timelines, capacity benchmarks, and continued support from successor partners where needed. (*Sida, PHAS, WHO, SPIDER*)

2. Institutional Capacity and Legal Frameworks

- **Continue to anchor technical assistance in broader institutional development.** Link support for specific functions (e.g. IDSR, RAAD) to long-term institutional strengthening, including strategic planning, monitoring and evaluation systems, and organisational culture. (*PHAS, WHO, Federal Ministry of Health, SPIDER*)

- **Support finalisation and enactment of national governance frameworks.** Prioritise adoption of the NIH Bill and digital health governance policies, ensuring legal mandates, oversight provisions, and protection from political interference. (*Federal Ministry of Health, WHO, Sida, PHAS*)
- **Institutionalise strategic and operational planning cycles.** Link activities to multi-year strategic plans (e.g. NIH Strategic Plan 2024–2028), backed by performance monitoring, transparent reporting, and public communication of progress. (*NIH, Federal Ministry of Health, PHAS*)
- **Strengthen national stewardship through formal governance integration.** Embed institutions like NIH into Federal Ministry of Health governance structures with defined autonomy, dedicated budget lines, technical leadership roles, and predictable leadership transition protocols. (*Federal Ministry of Health, NIH, WHO, PHAS*)

3. Coordination and Role Clarity

- **Clarify roles and mandates in multi-actor settings.** Define responsibilities between Federal Ministry of Health departments, NIH, and other institutions to prevent duplication or fragmentation — particularly in areas such as surveillance, outbreak response, and research oversight. (*All actors*)
- **Reinforce joint planning and governance mechanisms.** Establish shared steering committees, coordination forums, and cross-institutional dialogue platforms from the outset of new programmes. (*All actors*)
- **Clarify WHO's convening role in Sida-funded initiatives.** Align expectations with mandate, operational bandwidth, and support mechanisms to avoid ambiguity in leadership or coordination. (*WHO, Sida, other actors (PHAS, SPIDER)*)
- **Define coordination frameworks in tripartite arrangements.** Involve all partners in establishing reporting protocols, joint planning modalities, and shared accountability systems. (*Sida, PHAS, WHO, SPIDER*)
- **Bridge institutional transitions without abandoning existing partnerships.** When public health functions shift from one national institution to another — for example, from NIH to the One Health Unit — development partners must actively bridge the transition. This means coordinating across both entities, maintaining open communication, and ensuring that redistributed functions continue to receive technical and financial attention. Continued engagement with the NIH remains critical for sustaining institutional memory and upholding gains made in surveillance, research, and knowledge systems, and in helping to establish and maintain a NPHI. (*PHAS, Federal Ministry of Health, WHO, Sida*)

4. Strategic Use of Personnel, Expertise and diaspora

- **Use secondments and embedded experts strategically.** Ensure all embedded roles have a clear Terms of Reference, programme-linked objectives, regular performance reporting, and accountability to both host institutions and donors. (*PHAS, WHO, Sida, SPIDER*)

- **Consider reinstating a dedicated PHAS liaison role in Somalia.** A clearly mandated in-country focal point could maintain continuity, represent PHAS interests, and support alignment across implementing partners. *(PHAS, Sida)*
- **(Continue to) leverage diaspora⁴⁴** and Somali-led institutions, and firms. Engage local expertise and institutions to ensure contextual relevance, while building long-term national capabilities through technical support and peer learning. *(All actors)*

5. Digital Health Systems and Data Governance

- **Finalise and implement** clear federal standards for interoperability across EHRs, DHIS2, IDSR, and programme-specific tools, with the long-term goal of moving away from paper systems. *(Federal Ministry of Health, WHO, SPIDER)*
- **Enhance RAAD sustainability and scale-up plan.** Include costed expansion, infrastructure readiness benchmarks, and timelines for Federal Ministry of Health assumption of oversight, or international entities' assumption of oversight as a transition. *(SPIDER, Federal Ministry of Health, Sida)*
- Consider the extent to which it is possible to have **joint approaches** to infrastructure enhancement (electricity supply, connectivity), salary financing, sufficient procurement of ITC hardware and services, along with *training and roll-out of software and data platforms (i.e., RAAD, DHIS2, IDSR)*
- **Reconsider how to support facility-level monitoring** on the use and challenges related to digital health and EHR systems, and how to capture the feedback in a timely and constructive manner. Review help desk functions and how these support this and may need to be expanded or reinforced. *(Federal Ministry of Health, SPIDER, WHO)*
- **Expand /institutionalise digital and surveillance training**, if possible in any induction programmes, and foster stronger mentoring networks and consider how to help address attrition/retention incentives (e.g., salaries). *(Federal Ministry of Health, SPIDER, WHO)*
- **Secure strategies for increased financing for EHR.** Support phased integration of digital health into national and subnational budgets, backed by donor-aligned technical assistance and resource mobilisation. *(Federal Ministry of Health, Sida, WHO).*

6. Inclusion and Equity

- Explore how to **better engage with private sector actors**, and to engage with and focus on underrepresented states in national health initiatives. Include them in data systems, capacity-building, and planning platforms to ensure full-system coherence and national legitimacy. *(Federal Ministry of Health, NIH, SPIDER, Sida)*

⁴⁴ Including Connect Somalia, which engages Somali diaspora to further strengthen diaspora engagement.

- Ensure all reforms are **inclusive by design**. Use participatory processes, co-design, and incentives to bring actors who are often marginalised into national efforts. (*Federal Ministry of Health, WHO, SPIDER*)
- Ensure **political sensitivity** in pilot designs. Piloting digital tools or institutional models in select regions can be practical, but must be paired with transparent communication about long-term plans for national roll-out. In politically fragmented settings, signalling eventual inclusion of all Member States can build trust and prevent perceptions of favouritism or exclusion. (*SPIDER, Federal Ministry of Health, Sida*).

7. Donor Policy and Funding Modalities

- Focus on **where blockages to better coordination lie**; create strategy to overcome them.
- Explore innovative funding modalities for nascent institutions. Consider expanded use of instruments such as **pooled funding**, performance-based financing, or private-public or private-international organisation-public partnerships of some sort, including for financing linked to the roll-out of RAAD, while addressing fiduciary risks. (*All actors*).
- Consider **linking funding to policy engagement**. Combine financial support with diplomatic engagement to advance legal frameworks, governance reforms, and sustainability and continuity commitments. (*Sida*).
- When funding multiple partners that are working on inter-connected endeavours, require **actors to coordinate** from the outset to reduce risk of siloed actions, and devise a workable monitoring framework. (*Sida*)

8. Political Economy Analysis and Fragile States Principles

- Working in fragile states and settings is highly political. For sustained progress - using political economy analysis is crucial at all stages - planning, implementation. Being mindful of the Fragile States Principles⁴⁵, agreed by donors almost 20 years ago is also very important.

⁴⁵ https://www.oecd.org/en/publications/2025/02/states-of-fragility-2025_c9080496.html

11 Implications for Fragile Settings

This chapter presents implications for actors who intend to strengthen health systems in other fragile settings, based on the outcomes and insights presented in this evaluation report.

Implications for Strengthening Health Systems (health sector) in Fragile Settings

Even in fragile and conflict-affected environments with very low capacity, establishing core public health functions is achievable through adaptive, long-term approaches that prioritise national ownership and resilience. International donors and technical agencies should play a supportive role that strengthens local capacity without creating dependency, helping institutions eventually stand on their own. Key lessons from recent experience highlight the value of peer partnerships, transferable strategies (and awareness of common risks), and the importance of embedding new capabilities in national systems with strong local ownership and adaptability. They also point to how important it is to remember how necessary it is to be realistic about what can be achieved, and to use humility in attitudes, expectations, and approaches; to think in much longer time-frames (not 3 years, or even 5 years, but longer); and to understand that a lot can be achieved with comparatively low financial envelopes, when these are used carefully.

Peer Partnerships as Catalysts for Institution-Building

Peer-to-peer institutional partnerships can serve as powerful catalysts for building public health capacity in fragile settings. Rather than operating as a traditional donor project, a well-established public health agency works alongside a nascent national institute as a mentor and collaborator. For example, in one case a foreign public health agency embedded within a post-conflict Ministry of Health for several years, providing hands-on support while co-designing a new national public health institute. This twinning approach leverages the mature agency's experience to develop the governance, skills and systems of its emerging counterpart, and it builds mutual trust: local authorities are far more receptive to guidance from a peer acting as an advisor, not an outside consultant. Such partnerships can also align with multilateral actors to create a supportive ecosystem around the new institute. They bring mutual benefits – strengthening the fragile country's health capacities while giving the supporting agency valuable practical insights.

However, the peer model must be rooted in respect for national leadership. The external partner's role is to empower and backstop local authorities, not to supplant them. When done well, a peer partnership can jump-start essential public health functions even in very low-capacity environments. It demonstrates solidarity in global health and accelerates institution-building, but always with the aim of handing over full ownership to national stakeholders.

Transferable Strategies and Common Risks in Institutional Development

Certain institution-building strategies have broad applicability across fragile contexts, but familiar risks must be managed. One key strategy is to focus early efforts on establishing a few core public health functions that clearly demonstrate the new institution's value – for example, disease surveillance and outbreak response, health information analysis, or frontline epidemiology training. By delivering visible results in these priority areas (such as detecting outbreaks early or training “disease detectives”), a nascent agency can quickly build credibility.

Another strategy is to adopt a phased, multi-year approach. Early “quick wins” – like launching an initial training cohort or piloting a simple reporting tool – help generate momentum and stakeholder buy-in, while longer-term tasks (such as drafting the institute's legal mandate or developing its workforce) progress in parallel. Responsibilities should gradually shift to national staff under a jointly developed roadmap, so that over time the institute is prepared to function autonomously.

Introducing and sustaining technology in fragile environments and in severely resource-constrained facilities is reinforced when co-creation and user-centred design is used when developing digital platforms, and when digital innovation is paired with infrastructure investment (e.g., solar power, hardware, connectivity, training). There is clear value in providing ongoing support and layered capacity-building to support health worker digital literacy and IDSR training over time.

Even with these approaches, several common risks can undermine progress if not addressed:

Over-reliance on individual champions: Fragile initiatives often hinge on one or two visionary leaders, which becomes a vulnerability if all progress rests on them. High turnover means a departure can stall momentum. To guard against this, leadership must be institutionalised by building teams and governance mechanisms that outlast any single person.

Political interference or shifting priorities: A new public health agency may be pulled off course by short-term political interests or changes in government. It needs a clear legal mandate and broad stakeholder backing to insulate it from politicisation. In practice, this could include statutory autonomy over technical decisions and budget use, so the institute maintains its mission despite political changes.

Dependence on external aid: Donor funding and foreign expertise are critical at the start, but if not gradually replaced by domestic support the institution may collapse when external aid ends. Sustainability should be built in from the outset – for instance, securing government budget lines for core functions, training local staff to take over expert roles, and diversifying funding sources.

By recognising these risks at the outset, national leaders and international partners can take steps to mitigate them. This means balancing the influx of external support with deliberate efforts to build local systems and capacity that will endure beyond the project's lifetime.

Embedding Systems, Fostering Ownership, and Adaptation, Building Resilience

For lasting impact, it helps **to embed** new public health capacities within national structures from the outset, accompanied by genuine local ownership and an ability to adapt. In practice, this means aligning new surveillance, information, or training initiatives with the country's health architecture under national leadership. For example, rather than creating a parallel disease reporting system, an international partner might help the country adapt an existing and internationally recognised surveillance framework (e.g., IDSR) to local needs and implement it through the national public health institute. Capacity-building activities should be channelled through government institutions where feasible (such as the health ministry and local training schools) so that improvements become part of an enduring national programme, not stand-alone donor projects. This approach leaves behind institutional memory, established processes, and a skilled workforce that continue to function after external support recedes, and helps then to ensure interoperability and integration of digital systems with the national health information platforms. Equally important, embedding interventions in local systems builds confidence: stakeholders see the new processes as “theirs,” not as foreign impositions. Over time, this also strengthens the institute's authority within the health system. Coordinating efforts across external actors helps fragile governance systems to be less over-whelmed, and may lower fragmented efforts.

Fostering national **ownership** at every stage is just as critical. Visions and plans that are co-created with national stakeholders and **adapted** to context rather than imported as a one-size-fits-all blueprint, are helpful. Jointly designing solutions for local public health problems takes more time but ensures the institution is tailored to context and secures strong buy-in. Integrating insights on co-developing digital tools with ministries can help advance ownership and embed planning and budget processes. Aligning with national frameworks and helping to advance data governance or digital health strategies helps ownership also. A sense of national ownership also helps to promote continuity: if domestic officials are steering the effort (with donors only advising), and national capacity is being applied and increased, activities are more likely to withstand political upheavals or crises. External partners should remain in the background as advisors, allowing the local institution to lead and take credit for successes.

Resilience

Finally, adaptation and **resilience** are paramount for a nascent institution in a volatile setting. Plans and systems must be flexible enough to adjust to changing conditions – whether shifts in leadership, funding shocks, or emerging health threats. A co-developed plan is inherently more adaptable, since local owners will modify it as needed rather than waiting for external direction. Building resilience also means avoiding single points of failure: the institute should not depend on any one leader, political patron, or donor funding source. Diversifying support – for instance, securing a government budget line and multiple donor contributions – helps buffer the organisation against shocks. It also means focusing on building resilience into systems (digital or others) when donor support ends or when political support or funding is unstable. The imperative to adhere to standard (surveillance or others) and maintaining reporting systems can act as a resilience lever.

In such settings, sustaining gains also requires **explicit planning** for political transitions. When leadership changes, as seen in the NIH case, partnerships can falter unless mechanisms are in place to orient new actors and reaffirm commitments. Regular “reset” dialogues, strategic briefings, and handover protocols should be anticipated from the outset — not introduced reactively — to safeguard institutional memory and reinforce alignment with evolving authorities.

Above all, a focus on solving practical problems rather than imposing rigid complex solutions seems effective. For example, it is better to co-create a simple tool that local staff can maintain than to introduce a high-tech system that cannot be sustained without foreign help. By embedding new systems in local structures, fostering genuine ownership, and enabling adaptation, international support can help create public health institutions that are tailored to their context and likely to endure, and help build resilience.

Co-Developing Solutions Instead of Imposing Blueprints

A final lesson is the value of co-developing plans, structures, and tools with national counterparts rather than imposing pre-made blueprints. Fragile states are highly context-specific; what works in one country’s public health system may not neatly fit another’s. Imposed solutions often fail to take root, especially if they are seen as foreign or misaligned with on-the-ground realities. By contrast, when international experts engage local stakeholders in jointly diagnosing problems and designing interventions, the resulting plans tend to be more realistic and accepted. Equally true when Fragile States Principles are mindfully deployed and political analysis is properly used. Co-development was a cornerstone of the approach in the recent public health agency project, where a multi-year strategy for the nascent national health institute was formulated through intensive consultation between the donor agency, WHO advisors, and the Federal Ministry of Health. This participatory process helped to ensure that the institute’s structure and focus areas responded to the country’s actual needs (such as strengthening outbreak response and health promotion) and dovetailed with existing national policies.

At the same time, when building an NIH in a fragile context, and given that political transitions (in fragile contexts) include high risks that political transitions will result in institute leaders being replaced, or in the functions of an institute being shifted away from the institution to the Ministry - in the absence of legal mandate and a dedicated budgetary line- it may be key to consider the degree to which a dedicated nominal budget line for a national institute of health, and or, the legal status of an NIH, are *sine qua non* conditions for creating a project intended to bolster the NIH, even in a situation of almost total dependence on external funding; or, to the contrary, considering whether or not it makes sense to reinforce a separate “independent” institute; or whether, given potential risks, it makes sense to reinforce the key so-called “NIH” public functions simply within the Ministry proper. This would imply that the “independent” function of a separate “NIH” or “public health agency” would disappear. This may be worth the wicket given the pressing need to, first and foremost, support the public health functions that an NIH would ordinarily carry, and worry about *who* carries these on a second level. The obvious implication here is that a NIH, ordinarily independent, is not subsumed into political considerations of a Minister (i.e., a politician) and is rather driven by science. In the subsumed

architecture, the science and independence are clearly at risk. Importantly, co-development builds local capacity in planning and management: as national staff work side by side with international counterparts on drafting guidelines or setting up information systems, they acquire the skills to maintain and adapt those tools after the project ends.

Avoiding a rigid blueprint also allows for flexibility and learning. In unstable environments, conditions can change rapidly – a surge of displacement, a new government, or an epidemic may upend original assumptions. If plans have been co-created with local partners, they are more likely to include contingency options and can be recalibrated with input from those partners. Moreover, when the local institution feels ownership of the plan, it is more willing to modify and experiment rather than waiting for external instructions. This adaptability is critical for success in volatile contexts. Development literature advises that institutional reforms should aim at “solving problems rather than selling solutions,” meaning the focus should remain on addressing practical issues on the ground rather than implementing a predetermined model for its own sake. In practice, this could mean the difference between insisting on a high-tech surveillance software that the country cannot maintain, versus jointly developing a simpler reporting tool that local IT staff can manage – the latter being far more sustainable. International partners should therefore approach fragile-setting projects with humility and a learning attitude, bringing ideas but also listening and adjusting. By co-designing interventions, they help create public health institutions that are tailor-made for their context, and thus more likely to endure and thrive.

Donor-dependent platforms, even when nationally endorsed, face a high risk of stalling without a clear transition to government ownership. This includes not only financial commitments but governance arrangements, routine operational support, and long-term maintenance plans. A digital tool’s success hinges not just on uptake during the project cycle, but on whether ministries can lead, fund, and adapt it once external partners step back. In Somalia’s context, almost entirely reliant on external funding, this translates into considerations on length of donor commitments, on co-financing, and on volume.

Overall, strengthening health systems and national institutes for health in fragile settings is a complex but achievable endeavour when guided by these lessons. Peer institution partnerships can jump-start capacity while modelling practices of good governance and collaboration. Proven strategies – like concentrating on core functions, planning over a multi-year horizon, and embedding new capabilities into national frameworks – can be adapted to different contexts, provided that stakeholders remain vigilant against known pitfalls. The overarching principle is to help national actors be in the driver’s seat. When public health functions migrate from one structure to another — support should follow both the functions, and the institution, unless the initial imperative is somehow abandoned. Donors and implementing agencies must coordinate transitions to avoid fragmentation, and continue to work with both old and new structures to ensure continuity of service and institutional memory.

Annex 1 Evaluation Questions

Effectiveness and Effects

EQ1: What progress and outcomes have been achieved in relation to the planned results (as expressed in the Theory of Change and project documents)? To what extent have the interventions contributed to strengthening the capacity of the health sector/system in Somalia? What are any unexpected effects⁴⁶?

Sub-questions (PHAS)

1. To what extent has PHAS supported organisational development of NIH and increased management and governance capacity?
2. To what extent has PHAS enhanced data management and improved analysis and visualisation of data for decision-making? Are there any links to observed policy changes?
3. To what extent has PHAS boosted public health research, and strengthened research competencies and improved research event planning and organisational skills?
4. To what extent has PHAS improved surveillance and response capabilities to detect and respond to public health threats including by working across sectors and borders?

Sub-questions (SPIDER)

1. In relation to system design and development: to what extent has the developed HMIS been installed and operationalised in targeted Maternal and Child Health clinics across the Federal States where SPIDER operates?
2. In relation to capacity building: to what extent have SPIDER-supported health facilities adopted the HMIS for routine data collection and reporting?
3. In relation to evidence generation and research: to what extent has SPIDER/HADDA advanced the collection and analysis of

⁴⁶ The usual word here is « Impact » but an impact evaluation is something else, so we use here «effect» so as not to create confusion.

evidence/data to inform system development? Has the evidence/data informed national health system development or informed national health priorities? Have results provided data for policies or policy frameworks for Somalia's health system?

4. In relation to collaboration across sectors: to what extent has SPIDER coordinated with funders and implementors and aligned initiatives with digital investment principles and principles for digital development? Has SPIDER fostered a multisectoral collaboration towards integrated health information systems that support Universal Health Coverage (UHC) in Somalia? Has WHO assisted here?

Sub-questions (WHO)

1. To what extent have the two WHO-funded staff positions (Health Systems Officer and Surveillance Officer) and the seconded position (from PHAS) contributed to the implementation of the PHAS/NIH and SPIDER/HADDA projects?
2. To what extent has WHO's technical or political support facilitated alignment and integration of the NIH and HADDA initiatives with broader health system strategies in Somalia?
3. What evidence exists to show that WHO's involvement has enhanced the Somali health system's ability to respond to health challenges, and enhance the IDSRS? Have updated IDSRS guidelines been implemented in most regions? To what extent is this connected to the two funded staff positions?

EQ2: How effective have the selected methods been in achieving the planned results?

Sub-questions (PHAS)

1. How well have the chosen methods (e.g., peer-to-peer learning, training workshops, and study visits) supported capacity-building and institutional development goals?
2. To what extent has collaboration with partners such as SPIDER, Sida, and WHO contributed to achieving planned results?
3. Sub-questions (SPIDER)
4. How effectively has SPIDER leveraged its ICT expertise and global networks to support the development of Somalia's digital health infrastructure?
5. To what extent has SPIDER's collaboration with local partners like KasmDev ensured contextual relevance and sustainability of the HMIS/digital system it is proposing?
6. How efficient has SPIDER been in conducting needs assessments, ensuring inter-operability of digital systems (with DHIS2) and aligning with international digital health standards (e.g., Principles for

Digital Development)? Has collaboration with WHO or with PHAS/NIH contributed to efficiency and coherence?

Sub-questions (WHO)

1. What is the main “value-added” of the two staff positions in WHO, and is this according to the terms laid out in the non-financial MoUs?
2. To what extent, and how, would progress by the PHAS and SPIDER projects have been affected without them?
3. To what extent have they contributed WHO progress on IDRSR? And elsewhere?

Coherence and Complementarity

EQ3: To what extent have the interventions responded to the needs and priorities of Somalia? How coherent are the projects in the context of Somalia? To what extent have interventions aligned with the Somali government’s health priorities?

Sub-questions

1. To what extent has alignment of the PHAS/NIH and SPIDER/HADDA projects with the Somali Federal Government’s health priorities and international standards been addressed? How has WHO supported this?
2. How compatible has each intervention been with other interventions in the sector, including in relation to the private sector?
3. Are there “competing” HMIS tools/systems – across Somalia – what or how does HADDA address potential multiplicity of HMIS tools?
4. To what extent have the three Sida-funded interventions complemented each other? Have collaboration and knowledge sharing amongst PHAS/NIH, SPIDER/HADDA, and Somali stakeholders taken place? How was this supported by WHO?

Sustainability

EQ4: To what extent are these efforts scalable in the future and anchored in Somali ownership and co-creation? What is the sustainability of the interventions beyond the project period? What factors might hinder sustainability in the Somali context?

Sub-questions (PHAS)

1. What evidence suggests that the Somali government and other stakeholders have embraced ownership of the PHAS/NIH initiative? Has this evolved over time? If so, why?
2. Is there a sustainability or “exit” plan? What functional steps are aimed at sustainability? How sustainable are the developed outputs (e.g., strategic plans, data management tools, One Health Strategy) in the possible absence of continued external funding or technical support?

3. What mechanisms have been established to ensure institutional resilience and scalability of the NIH in the future?
4. How effectively has the project fostered co-creation (research) amongst Somali stakeholders and with international partners?

Sub-questions (SPIDER)

1. What mechanisms has SPIDER established to ensure the long-term functionality and scalability of the HADDA? Is there a sustainability or “exit” plan? What functional steps are aimed at sustainability?
2. How has SPIDER’s collaboration with Somali institutions and health professionals contributed to local ownership and capacity development?
3. To what extent are there efforts to address potential challenges such as funding gaps, technological maintenance, and stakeholder coordination, which would affect sustainability?
4. How has SPIDER ensured that the digital solutions can be scaled-up nationally and integrated into Somalia’s broader health strategy? What other similar systems exist and what is their scale?

Sub-questions (WHO)

1. How has WHO worked to build local capacity and ownership for the continued implementation of the NIH and HADDA initiatives?
2. To what extent have WHO’s actions contributed to the scalability of health information systems and integrated surveillance responses and the continued functioning of the NIH as an independent institution?
3. If Sida funding ends, will WHO still deploy designated staff to assist in the operation of the HADDA, the NIH, the IDSRS?

Lessons Learned

EQ5: What lessons can be drawn from the joint cooperation modality between Swedish public entities (Sida and PHAS for NIH; and Sida and SPIDER for HADDA); and from the staff support to WHO? How can these inform similar projects in other developing countries? What other lessons come to light?

(note, there is one Chapter for Lessons Learned that covers all interventions, as Sida requires).

Sub-questions (PHAS)

1. What are the strengths and limitations of the joint modality approach in achieving health system strengthening goals?
2. How did PHAS membership in global networks (e.g., IANPHI, WHO, EU initiatives) benefit the intervention?
3. What specific advantages or challenges emerged from working in Somalia’s context?
4. Can lessons from this initiative inform Sweden’s and PHAS engagement in similar health system projects in other fragile or conflict-affected settings?

Sub-questions (SPIDER)

1. What specific challenges and successes have emerged from SPIDER's application of ICT expertise to Somalia's health sector?
2. How have SPIDER's achievements and its partnerships with local implementers, Somali diaspora experts, and global networks influenced the project's outcomes and sustainability?
3. What insights can be gained about operationalising digital health solutions in fragile, conflict-affected and resource-constrained settings?
4. Can SPIDER's approach serve as a model for future digital health projects in developing countries?

Sub-questions (WHO)

1. What challenges and successes have emerged from funding WHO staff positions to support project implementation and coherence?
2. Can the partnership model with WHO inform Sweden's future engagements in fragile contexts in health system strengthening?

Annex 2 Key Informants

Due to GDPR and confidentiality, names and titles have been omitted from the publication.

Scoping Interviews

Summary (scoping interviews)

Organisations	Number of interviewees
Development Partners	5
Funding Agency	1
Implementers	2
International NGO	2
UN Agencies/WB	5
Grand Total	15

List of interviewees for scoping interviews

SN	Name of Interviewee	Organisation	Role
1	Respondent	UK FCDO Nairobi	Staff member
2	Respondent	WHO Somalia	Staff member
3	Respondent	SPIDER, DVS, U of Stockholm	Staff member
4	Respondent	UNICEF	Staff member
5	Respondent	Embassy of Finland in Nairobi	Staff member
6	Respondent	Canada CIDA	Staff member
7	Respondent	SDC Switzerland	Staff member
8	Respondent	Embassy of Sweden, Somalia Section	Staff member
9	Respondent	Save the Children	Staff member
10	Respondent	Save the Children	Staff member
11	Respondent	WHO - Somalia	Staff member
12	Respondent	UNICEF	Staff member
13	Respondent	World Bank (Damaal Cafimaad health project.)	Staff member
14	Respondent	PHAS	Staff member
15	Respondent	USAID	Staff member

Data Collection Interviews

Summary (Key informant interviews)

Organisations	Number of key informants
NIH/FMOH	8
PHAS	6
SPIDER/Nomadi Lab/SIDRA	6
State MoH	6
Swedish Government	1
WHO	7
Grand Total	34

List of interviewees for key informant interviews

SN	Name of Interviewee	Organisation	Position
1	Respondent	WHO EMRO	Staff member
2	Respondent	WHO EMRO	Staff member
3	Respondent	WHO	Staff member
4	Respondent	WHO	Staff member
5	Respondent	WHO (Geneva)	Staff member
6	Respondent	WHO Somalia	Staff member
7	Respondent	NIH/FMOH	Staff member
8	Respondent	NIH/FMOH	Staff member
9	Respondent	NIH	Staff member
10	Respondent	PHAS	Staff member
11	Respondent	PHAS	Staff member
12	Respondent	NIH	Staff member
13	Respondent	PHAS Sweden	Staff member
14	Respondent	NIS	Staff member
15	Respondent	MoH of Puntland	Staff member
16	Respondent	MoH of Galmudug	Staff member
17	Respondent	Nomad Innovation Lab/FMOH	Staff member
18	Respondent	FMOH	Staff member
19	Respondent	FMOH	Staff member
20	Respondent	Sidra	Staff member
21	Respondent	MoH Somaliland	Staff member
22	Respondent	Interview Notes	Staff member
23	Respondent	MoH Somaliland	Staff member
24	Respondent	UD-MH, MFA, Sweden	Staff member
25	Respondent	Former PHAS	Staff member

SN	Name of Interviewee	Organisation	Position
26	Respondent	PHAS (and secondee to WHO)	Staff member
27	Respondent	SPIDER	Staff member
28	Respondent	SPIDER	Staff member
29	Respondent	SPIDER	Staff member
30	Respondent	SIDRA	Staff member
31	Respondent	WHO Somalia	Staff member
32	Respondent	MoH of Galmudug	Staff member
33	Respondent	Benadir Regional Administration	Staff member
34	Respondent	NIH	Staff member

Health Facilities Visited

Summary

State	Number of health facilities	Number of people interviewed
Banaadir	2	14
Galmudug	2	16
Puntland	2	2
Total	6	32

List of Health Facilities Visited

SN	Name of Health Facility	Type of Health Facility	State	District/City	Type of interview	Number of People
1	Dayah Health Center	Health Center	Galmudug	Dhusamareeb	In-person FGD	8
2	Galgadud Regional Hospital	Hospital	Galmudug	Dhusamareeb	In-person FGD	8
3	Hamaarweyne Health Center	Health Center	Banaadir	Mogadishu	In-person FGD	6
4	Waaberi Health Center	Health Center	Banaadir	Mogadishu	In-person FGD	8
5	Gambool Health Center	Health Center	Puntland	Garowe	Individual Virtual	1
6	Waaberi Health Center	Health Center	Puntland	Garowe	Individual Virtual	1

Annex 3 Documents Reviewed

1. Abdifatah Diriye Ahmed. Establishing a National Public Health Institute in a fragile country – lessons learnt from Somalia.
2. Africa CDC. (2018). Providing a Legal Framework for a National Public Health Institute (NPHI).
3. Africa CDC. (No Date). Framework for Development of National Public Health Institutes in Africa.
4. Ahmed, A. D. (2024). Advancing public health in somalia: A comprehensive report on the Somali National Institute of Health's progress, achievements, challenges, and recommendations: 2020 - 2023.
5. Ahmed, A. D., Ahrne, M., & Tegnell, A. (2024). Collaboration between the Public Health Institutes of Somalia and Sweden 2014-2024.
6. Ahrne, M. (2023). Collaboration between the National Institute of Health Somalia and the Public Health Agency of Sweden. Paper presented at the 16th European Public Health Conference 2023.
7. Cardno Emerging Markets. (September 2021). Somali Private Sectors Partnerships in Health Market Systems Assessment.
8. Directorate of National Statistics, F. G. o. S. (2020). The Somali Health and Demographic Survey 2020.
9. Embassy of Sweden. (2021). WHO - NIH/HMIS STÖD: Decision on Contribution.
10. Embassy of Sweden. (2024a). DIGITAL HEALTH SOMALIA 2019-2022: Appraisal of Intervention.
11. Embassy of Sweden. (2024b). DIGITAL HEALTH SOMALIA 2019-2022: Conclusion on Performance.
12. Embassy of Sweden. (2024c). SOMALIA NATIONAL HEALTH INST (NIH) 2019-2022: Conclusion on Performance.
13. Embassy of Sweden Somalia Country Team. (2024). SOMALIA NATIONAL HEALTH INST (NIH) 2019-2022: Appraisal of Intervention.
14. Federal Republic of Somalia Ministry of Health and Human Services. (2021). DRAFT IMPLEMENTATION PLAN FOR HADDA PROGRAM: AUGUST 2021-DECEMBER 31, 2022.

15. Gregory J. Wilson and Sarah Redd. Strengthening Somalia's health systems: emerging stronger from Covid-19. Humanitarian Policy Group. Online roundtable, 2 September 2020.
16. Kasmu Dev, & SPIDER. (2021). HMIS Technical Assessment Report in Banaadir, Galmudug and Puntland of Somalia.
17. Ministry for Foreign Affairs. (2018). Strategy for Sweden's development cooperation with Somalia 2018–2022.
18. Ministry of Health & Health Services. RAAD Electronic Health Record System Roadmap Version 0.1.
19. Ministry of Health and Human Services Federal Government of Somalia. (2021). SOMALIA HEALTH SECTOR STRATEGIC PLAN 2022–2026 (HSSP III).
20. NIH, & PHAS. (2024). Advisory on Program Development and Grants Coordination for the National Institute of Health-Somalia.
21. NIH Somalia. (2021). NATIONAL INSTITUTE OF HEALTH OPERATIONAL PLAN 2021 - 2023.
22. NIH Somalia. (2022). REPORT OF THE FIRST NATIONAL INSTITUTE OF HEALTH RESEARCH CONFERENCE: Laying the Foundations for Health Research in Somalia (30th January - 1st February 2022).
23. NIH Somalia. (2023a). CPHIA 2023: BREAKING BARRIERS: REPOSITIONING AFRICA IN THE GLOBAL HEALTH ARCHITECTURE.
24. NIH Somalia. (2023b). NATIONAL INSTITUTE OF HEALTH STRATEGIC PLAN 2024-2028.
25. NIH Somalia. (2024). NATIONAL INSTITUTE OF HEALTH REVISED OPERATIONAL PLAN 2024 - 2028 (DRAFT).
26. NIH Somalia, & PHAS. (2018a). Agreement between NIH Somalia and PHAS regarding the project "Capacity Development of the National Institute of Health Somalia".
27. NIH Somalia, & PHAS. (2018b). MoU between NIH Somalia and PHAS.
28. No Author. (2023). DEVELOPMENT ASSISTANCE FOR A NEW ERA - Freedom, empowerment and sustainable growth (Annex to II:1 A at Government meeting of 14 December 2023). Retrieved from
29. OECD. (2024). Rethinking Health System Performance Assessment: A RENEWED FRAMEWORK. *OECD Health Policy Studies*. Retrieved from <https://doi.org/10.1787/107182c8-en>.
30. PHAS. (2018). Capacity development of the National Institute of Health Somalia (NIH Somalia).

31. PHAS. (2023). Capacity development of the National Institute of Health (NIH) Somalia 2019-2025: Activity report 1 June 2022 - 31 May 2023.
32. PHAS, & WHO. (2022). Amendment to Project Collaboration Agreement.
33. Project collaboration agreement between WHO and PHAS. (2020).
34. Public Health Agency (Sweden). (2020). Workshop: Reconstructing public health institutions in Somalia. *European Journal of Public Health*, 30.
35. Said, A. S., & Kicha, D. I. (2024). Implementing health system and the new federalism in Somalia: challenges and opportunities. *Front Public Health*, 12, 1205327. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/38362207>. doi:10.3389/fpubh.2024.1205327
36. Sida. (2024a). Collaboration between National Institute of Health Somalia and Public Health Agency Sweden - strengthening core public health functions 1 June 2023 - 31 May 2024, project year 5 Annual Meeting.
37. Sida. (2024b). Second amendment to the agreement on support project NIH/HMIS between Sweden and WHO (Sida contribution no. 14291).
38. SIDRA. (2023). Usability and Acceptability (End User Assessment) of Electronic Patient Health Records System (EHR). Retrieved from
39. SIDRA, & SPIDER. (2021). Health System Strengthening through the Digitalisation of Somalia Health Management Information System: Baseline and Capacity Needs Assessment Report May 2021.
40. Somali Federal Republic Ministry of Human Development & Public Services. (2013). Approval letter for the establishment of the National Institute of Health under the Directorate of Health, Federal Ministry of Human Development & Public Services.
41. Somali Federal Republic Ministry of Human Development & Public Services. (2021). Approval letter for the National Institute of Health (NIH) mandate: roles and responsibilities, and organogram.
42. SPIDER. (2018). Proposal for a National Health Information System in Somalia: Data for health systems strengthening.
43. SPIDER. (2020). Health Alliance for Digital Development and Action (HADDA) Programme (2019-2023): Annual report (2019-2020). Retrieved from
44. SPIDER. (2021). Health Alliance for Digital Development and Action (HADDA) Programme (2019-2024): Annual report (2021). Retrieved from
45. SPIDER. (2022). Health Alliance for Digital Development and Action (HADDA) Programme (2019-2024): Annual report (2022). Retrieved from
46. SPIDER. (2023). Health Alliance for Digital Development and Action (HADDA) Programme (2019-2024): Annual report (2023). Retrieved from

47. Sweden and WHO. (2020). Standard Grant Agreement for Specified Program Support (Support project NIH/HMIS) between Sweden and WHO.
48. The Ministry of Health and Human Services of the Federal Government of Somalia. (2020). *Essential Package of Health Services (EPHS)*.
49. University, U. Interpreting and synthesizing scientific evidence: An interdisciplinary workshop (Rapport 2023 11 28).
50. Warsame, A. (2014). Opportunity for health systems strengthening in Somalia. *Lancet Glob Health*, 2(4), e197-198. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25103053>. doi:10.1016/S2214-109X(14)70010-5
51. WHO, & IANPHI. (2024). Application of the essential public health functions: an integrated and comprehensive approach to public health.
52. WHO, & PHAS. (2021). Non-Financial MoU between WHO and PHAS.
53. WHO Regional Office for the Eastern Mediterranean. (2024a). Comprehensive assessment of Somalia's health information system 2022. Licence: CC BY-NC-SA 3.0 IGO. Cairo.
54. WHO Regional Office for the Eastern Mediterranean. (2024b). Proposal to Sweden to renew agreement providing financial support for two WHO staff positions to assist PHAS and SPIDER activities in Somalia. Cairo.
55. WHO Somalia. (2022). Strengthening the public health system in a conflict setting: an example of a unique partnership between WHO, Sweden and Somalia working towards achieving health for all.
56. WHO Somalia. (2023a). Progress Report to the Somalia Team at the Embassy of Sweden in Kenya WHO and Sweden in Somalia: An innovative partnership for strengthening the health sector 2019 – 2023.
57. WHO Somalia. (2023b). Strategic Dialogue between Sweden and WHO Somalia (12-14th December 2023).
58. World Health Organization Regional Office for the Eastern Mediterranean. (2022). Country Cooperation Strategy for WHO and Somalia 2021–2025.

Annex 4 Inception Report



Evaluation of Sweden's support to health system strengthening in Somalia through PHAS, SPIDER and WHO

NIRAS Inception report

Embassy of Sweden in Nairobi, Somalia Section

7 February 2025

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Abbreviations

Africa CDC	Africa Centers for Disease Control and Prevention
DHIS2	District Health Information Software 2
EPHS	Essential Package of Health Services
EHR	Electronic Health Records System
ET	Evaluation Team
EU	European Union
FGD	Focus Group Discussions
FGS	Federal Government of Somalia
FMS	Federal Member States (of Somalia)
FoHM	Folkhälsomyndigheten (public health agency of Sweden)
FMoH	Federal Ministry of Health (Somalia)
GHSA	Global Health Security Agenda
HADDA	Health Alliance for Digital Development and Action
HIS	Health Information System
HMIS	Health Management Information System
HSSP III	Health Sector Strategic Plan 2022–2026 (Somalia)
IANPHI	International Association of National Public Health Institutes
ICT	Information Communication Technology
IDSRS	Integrated Disease Surveillance and Response System
IHR	International Health Regulations
KI	Key Informant
KII	Key Informant Interview
MCH	Maternal and Child Health
MoH&HS	Ministry of Health and Human Services (Federal Government Somalia)
MoU	Memorandum of Understanding
NGO	Non-Government Organisation
NIH	National Institute of Health (Somalia)
NPHI	National Public Health Institutes
OECD DAC	Organisation for Economic Cooperation and Development – Development Assistance Committee
ONA	Organisational Network Analysis
PHAS	Public Health Agency of Sweden
PM	Project Manager
QA	Quality Advisor
RAAD	In Somali it means "to trace" - name of EHR system developed by NomadiLab
SDGs	Sustainable Development Goals
Sida	Swedish International Development Cooperation Agency

SPIDER	The Swedish Program for ICT in Developing Regions, U. of Sweden
SRHR	Sexual and Reproductive Health and Rights
ToC	Theory of Change
ToR	Terms of Reference
UHC	Universal Health Coverage
WFP	World Food Programme
WHO	World Health Organization

1 Introduction

1.1 Overview of the scoping and inception phase

The Embassy of Sweden in Nairobi, Kenya, Somalia Section, commissioned NIRAS to evaluate Sweden's health system strengthening efforts in Somalia through the Public Health Agency of Sweden⁴⁷ (PHAS), the Swedish Program for Information Communication Technology (ICT) in Developing Regions⁴⁸ (SPIDER) and the World Health Organization – Somalia Office⁴⁹ (WHO). The evaluation team has used scoping and inception phases to:

1. Conduct a preliminary document review.
2. Hold familiarisation interviews with the Embassy of Sweden and the three interventions (PHAS, SPIDER and WHO).
3. Hold scoping interviews with selected key informants.
4. Establish an overview of available data.
5. Identify an initial set of stakeholders/informants: map an engagement plan.
6. Review and revise the evaluation questions.
7. Refine the evaluation approach, methodology, and develop an evaluation matrix.
8. Update the workplan, timeline, milestones and deliverables.

1.2 Inception report structure

This inception report is organised as follows:

- Section 1: Introduces the report and an overview of what was done during the scoping and inception phases.
- Section 2: Provides a brief overview of Somalia and its health system.
- Section 3: Briefly describes Sweden's support to health system strengthening through the three organisations, namely PHAS, SPIDER and WHO.
- Section 4: Presents the evaluation purpose, scope, and revised evaluation questions.
- Section 5: Outlines the selected approach and methods for the evaluation, including data collection tools, and limitations.
- Section 6: Provides the evaluation plan with the phases of the evaluation; milestones and deliverables; risk management; quality assurance; and an updated work plan.

At the end of the inception report, the following annexes are found:

- Annex 1. Evaluation matrix.
- Annex 2. Theories of change of the interventions.
- Annex 3. Key informants and stakeholder engagement plan.

⁴⁷ In Swedish this is the *Folkhälsomyndigheten (FoHM)* and the website is <https://www.folkhalsomyndigheten.se>

⁴⁸ <https://spidercenter.org/index.php/project/hadda/> (University of Stockholm)

⁴⁹ <https://www.who.int/countries/som> (WHO Somalia Country Office website)

- Annex 4. Data collection guides.
- Annex 5. Potential indicators of success.
- Annex 6. Documents consulted and scoping interviews conducted.

2. Somalia

2.1 Historical background

Somalia's colonial history is marked by partition and domination by European powers and Ethiopia in the late 19th and early 20th centuries. The northern region, modern-day Somaliland, was a British protectorate (British Somaliland), while the southern region, known as Italian Somaliland, was controlled by Italy. Additionally, parts of western Somalia were ceded to Ethiopia under colonial agreements. After World War II, Italian Somaliland became a United Nations Trust Territory under Italian administration. Somalia gained independence in **July 1960**, when British Somaliland and Italian Somaliland united to form the Somali Republic. The early years were marked by optimism, but political instability and clan divisions soon surfaced, setting the stage for decades of conflict.

Since independence, Somalia has faced persistent conflict and humanitarian crises. In 1969, a coup led by Major General Mohamed Siad Barre established a socialist regime. Barre's government collapsed in 1991, and plunged the country into civil war as clans vied for power. The war devastated the nation's infrastructure and governance, creating fertile ground for warlords and extremist groups like Al-Shabaab. Somalia has also endured numerous famines, exacerbated by war, drought, locusts, and poor governance. The 1992 famine claimed approximately 300,000 lives, and drew international attention and humanitarian interventions. More recently, the 2011 famine killed an estimated 260,000 people, with children the most affected. Ongoing droughts and conflict have continued to create severe food insecurity and displacement.

The Somali diaspora is one of the most significant consequences of decades of conflict and instability. Millions of Somalis have fled their homeland, seeking safety and opportunities abroad. The diaspora is a critical source of remittances, which constitute a significant portion of Somalia's economy, and a vital channel for maintaining cultural and familial ties. In recent years, the diaspora are returning.

The four main countries with significant Somali diaspora populations are: Kenya (in refugee camps and in Nairobi); Ethiopia (in refugee camps, and in Addis Ababa); United States (concentrated in cities like Minneapolis, Columbus, and Seattle, Somali-Americans are among the largest African immigrant groups in some states); **United Kingdom** (a significant Somali community, particularly in London and other urban centres, and the **United Kingdom** is an active hub for Somali political and social activism).

Sweden has one of the largest Somali communities in Europe, with approximately **70,000-80,000 Somalis (about half are born in Somalia, and half are 1st generation Swedes⁵⁰)**. The Somali migration to Sweden began in the late 1980s and early 1990s during the onset of Somalia's civil war. The Somali-Swedish community is primarily concentrated in urban areas (**Stockholm, Gothenburg, Malmö**, and smaller towns like Borlänge and Växjö). Somali-Swedes play an essential role in Somalia's recovery and international engagement and are active in advocating for Somalia through remittances, political engagement, and initiatives to support development and humanitarian efforts in Somalia.

2.2 Administrative structure

In 2012, Somalia politically transitioned from decades of unrest through an indirect election of a new federal parliament and president, and the adoption of a provisional constitution. Since then, the Federal Republic of Somalia (*Jamhuuriyadda Federaalka Soomaaliya*) has experienced a succession of crises, drought, floods, locusts and other calamities. Current President Hassan Sheikh Mohamud, who was President from 2012 to 2017, returned to office in the 2022 presidential election.

As of October 2023, the Federal Republic of Somalia has seven federal member states: Galmudug, Hirshabelle, Jubaland, Puntland, Khatumo⁵¹, South West and Somaliland. Somalia has 18 administrative regions: Awdal, Bakool, Banaadir, Bari, Bay, Galguduud, Gedo, Hiiraan, Jubbada Dhexe (Middle Jubba), Jubbada Hoose (Lower Jubba), Mudug, Nugaal, Sanaag, Shabeellaha Dhexe (Middle Shabeelle), Shabeellaha Hoose (Lower Shabeelle), Sool, Togdheer, Woqooyi Galbeed.

Somalia has two levels of government: the Federal Government of Somalia (FGS); and the Federal Member States (FMS). These include both state and local governments. The FMS also have their own constitutions and armed forces. The FGS has a series of Ministers; these are accompanied by State Ministers from each of the Federal Member States.

Somalia is de-facto ruled by a gentleman's agreement among the dominant clan-families. Based on this agreement, also known as the 4.5 power-sharing formula, key positions in the State apparatus, including parliamentary seats, are (more or less) proportionally distributed amongst the main clan families as well as the 0.5 quota representing minorities.⁵²

South-Central Somalia includes 5 Federal Member States: Jubaland, South-West, Benadir, Hirshabelle and Galmudug. Mudug region is divided between Galmudug and Puntland; Galmudug controls the southern half of the region.⁵³

⁵⁰ Some also are 2nd generation Swedes but there are no figures on this readily available.

⁵¹ Between 2012 and October 2023, Khatumo was not officially a Federal Member State.

⁵² https://coi.euaa.europa.eu/administration/easo/PLib/2023_02_EUAA_COI_Report_Somalia_Security_situation.pdf [Actors, 2.1., pp. 24-25]

⁵³ Idem [Security 2023, 2.5.2., p. 147].

Puntland is an autonomous Federal Member State within Somalia, established in August 1998 as an entity that represents clans belonging to the Harti clan collective. Puntland has developed significant institution-building and governance mechanisms. It continues to be affected by security, humanitarian, political, and socio-economic challenges.⁵⁴

Somaliland declared its independence in 1991 during the civil war taking place in the rest of Somalia.⁵⁵ The backbone of Somaliland's administration was drawn from the Somali National Movement, which comprises several Isaaq clans.⁵⁶ Somaliland has embarked on an institution-building and democratisation process, which combines, in a hybrid entity, traditional and modern forms of governance that make it relatively distinct from other parts of Somalia. In terms of territorial control and influence, some areas of Sool and Sanaag regions and the area of Ayn (Togdheer region) are contested between Somaliland and Puntland.⁵⁷ Internationally, Somaliland remains largely unrecognised, despite a recent increase in the number of states with which it holds diplomatic relations.⁵⁸ It is therefore included in the evaluation as a Federal Member State.

2.3 Current health sector

2.3.1 Overview of health status

Somalia's health system⁵⁹ faces immense challenges due to decades of conflict, underinvestment, governance challenges, and natural disasters. The health system is fragmented, largely privatised, and mainly limited to urban centres. This leaves vulnerable populations in rural and conflict-affected areas without adequate services. Disease outbreaks, malnutrition, and poor sanitation compound the health crises.

With limited access to health services (below 30% of the population) and significantly underserved rural communities, communicable diseases, malnutrition, and maternal and child health issues dominate the disease burden of Somali. Key health indicators reflect the health issues Somalia contends with, according to data released in 2022⁶⁰:

- Maternal mortality rate of 223 per 100,000 live births (2020 data)
- Neonatal mortality rate of 18 per 1,000 live births (2022 data)
- Under-5 mortality rate of 37 per 1,000 live births (2022 data)

⁵⁴ Idem [Actors, 7.6., p. 102]

⁵⁵ Idem [Actors, 7.7., p. 108].

⁵⁶ Idem [Actors, 3.4.2. p. 54].

⁵⁷ Idem [Security 2023, 1.2., p. 22; Actors, 7.7.1., p. 110].

⁵⁸ Idem [Actors, 7.7.1., p. 109; KSEI 2021, 3., p. 72].

⁵⁹ This section draws from <https://www.who.int/countries/som> WHO site for Somalia.

⁶⁰ <https://iris.who.int/handle/10665/377319> "Comprehensive assessment of Somalia's Health Information System" WHO for FMOH Somalis

2.3.2 Health service delivery and governance

Somali Plans and Aspirations: The Somali Health Sector Strategic Plan (HSSP III) for 2022–2026 outlines priorities for achieving Universal Health Coverage (UHC) and aspires to develop a health system that can provide equitable and affordable access to quality health services. The strategy integrates lessons learnt from previous plans and aligns with global health goals. It aims to strengthen health governance, increase human resource capacity, improve access to affordable medicines, and enhance health information systems/health infrastructure. It focuses on expanding the Health Information System (HIS) to improve data-driven decision-making; and to establish integrated community-based surveillance and monitoring.

Public and Private Sector Contributions: The Federal Government of Somalia (FGS) and Federal Member States (FMS) coordinate health governance under a federal structure, and focus on developing an Essential Package of Health Services (EPHS). However, public sector funding is heavily reliant on external donors due to limited government revenue. Investments in the Health Information System, and management of health information, are ongoing, such as integrating surveillance data into District Health Information Software 2 (DHIS2), but these efforts remain fragmented for various reasons, including due to parallel donor systems. Donor coordination efforts, and the extent to which gaps are transparent and duplication of effort avoided are not consistently and entirely clear. Moreover, private sector providers dominate health service provision and delivery, in both primary, secondary and tertiary medicine; and cover an estimated 60-70% of services, primarily in urban areas. In addition, limited regulatory frameworks and limited oversight over the private sector, and important affordability challenges restrict equitable access to quality health services. There is little coordination with the public system, including in relation to data collection and data sharing. Efforts are underway to foster public-private partnerships to expand coverage and enhance quality, and to investigate how to better regulate private sector health services and personnel, but these have had limited success so far. The different federal/state administrative layers also compound governance and bureaucracy-related challenges. Reliable data collection at each level is a key dimension.

2.4 Health information overview

Health information is identified as one of the key building blocks of a health system⁶¹. A strong health information system is critical to ensuring the quality and continuity of care at the service delivery level; informing decisions related to health planning and resource allocation; monitoring and evaluation of health programmes and services; and strengthening accountability mechanisms at all levels of the health sector. Part of this, discussed below, includes Health Management Information Systems.

⁶¹ This is universally accepted and also a key tenet of the World Health Organization.

The **Health Information System** (HIS) in Somalia plays a critical role in generating data and analysis for programme monitoring, planning, policy-making, and assessing progress toward Universal Health Coverage (UHC) and health-related Sustainable Development Goals (SDGs).

The system's evolution has been significant, starting from initial and rudimentary Excel and Access-based mechanisms to the implementation of the District Health Information Software 2 (DHIS2) in 2017.

Health Management Information System (HMIS) is a key component of the broader Health Information System, as it represents a system to collect, manage and use data specifically designed to support planning, management, and decision-making by health facilities and health authorities. Normally, it uses data captured as a routine part of service delivery.

DHIS2⁶² is an open-source software platform system for digitalising the collection and analysis of (aggregate) health data. It is widely used in more than 80 countries around the globe. In Somalia, most data are initially collected on paper, and aggregate data are uploaded into DHIS2.

Integrating surveillance data into DHIS2 is seen as a key investment in the overall HIS, and this is ongoing. The World Health Organization conducted a comprehensive assessment of Somalia's HIS in 2022⁶³. This showed that implementation of DHIS2 had significantly improved the rate of public health facilities reporting via DHIS2, which rose from 62% in 2016 to 91% in 2022. In fact, DHIS2 is currently the primary platform for health data management in the public sector. By integrating routine health data from public health facilities, DHIS2 has streamlined the aggregation and reporting processes, and contributed to improved data reporting rates. The 2020 – 2021 DHIS2 revisions have enhanced system capabilities, with standard operating procedures and training manuals; and improved capacity to integrate new health programmes with a cloud-based server for better data management and accessibility. The system's structure integrates data at multiple administrative levels, and this supports decision-making and planning processes.

DHIS2 has, therefore, improved data aggregation and reporting efficiency, and this encompasses various health data, such as morbidity, maternal and child health, and immunisation. However, gaps in private sector reporting and interoperability remain. This represents critical limitations because, for instance, DHIS2 currently excludes contributions from the private health sector, which accounts

⁶² DHIS2 is an open-source software platform developed in collaboration between the HISP Centre at the University of Oslo <https://www.mn.uio.no/hisp/english/about/index.html> and the 23 local groups in Africa, Asia, the Middle East, and the Americas that make up the HISP network. More than 80 countries worldwide use DHIS2 for collecting and analysing health data. <https://dhis2.org/>.

⁶³ World Health Organization. Regional Office for the Eastern Mediterranean.(2024). Comprehensive assessment of Somalia's health information system 2022. World Health Organization. Regional Office for the Eastern Mediterranean. <https://iris.who.int/handle/10665/377319>.

for approximately 70% of health services provided in Somalia. So national aggregates include mainly public sector-related data. Fragmentation persists due to parallel donor-supported data collection systems and a lack of system interoperability between and with existing surveillance and data platforms. Other challenges persist (in the public sector) such as reliance on paper-based data capture, limited data analysis at the facility level, insufficient training facilities for health workers, inadequate electronic systems for laboratory data management, and the generally unreliable infrastructure (e.g., inconsistent internet connectivity and power supply). These further impede system efficiency. Moreover, DHIS2 remains heavily reliant on fragmented and often un-coordinated donor funding, which undermines coordination between programmes and their sustainability. Infrastructural challenges, including limited internet connectivity, insufficient training, and lack of standardised health information management systems, hinder the public system's efficiency and scalability. In addition, data quality and use at local decision-making levels remain limited. Weak governance capacity at all levels compounds these challenges.

Electronic Health Records (EHR) System is a digital version of a patient's paper chart and is a digital system for storing and managing patient information, including medical history, diagnoses, treatments, lab results, and vaccinations. It serves as a centralised repository of health information that is collected and managed digitally, enabling improved efficiency, accessibility, and quality of healthcare delivery. It can support improved efficiency, accessibility, and quality of care by centralising health data and enabling its secure sharing among healthcare providers, government institutions, and international partners. EHRs are especially critical in Somalia's fragmented healthcare system, where continuity of care and rapid responses to public health emergencies are often hindered by limited resources and infrastructure. Additionally, EHRs can strengthen national health programmes by monitoring and evaluating services such as maternal health, immunisations, and disease control efforts. Data from EHR systems would improve quality and reliability of data provided to DHIS2.

An **Integrated Disease Surveillance Response System (IDSRS)** is a strategy for improving the performance of national disease surveillance systems through reforms aimed at better coordination and integration of surveillance resources and functions for all priority diseases at all levels of the health system. In Somalia, the aim of the IDSRS⁶⁴, while focused at the district level, is to develop sufficient surveillance and response capacities at each level of the national health system and effectively link efficient public health action with all available data – information from multiple surveillance and response systems as well as laboratory evidence. WHO has been implementing IDSRS strategies in Africa since 1998. The Strategic Priority 2 of the 2021–2025 WHO Country Cooperation Strategy for Somalia prioritises IDSRS roll-out for real time detection and response to

⁶⁴ The WHO presentation of IDSRS Somalia is available on https://www.emro.who.int/images/stories/somalia/documents/policy_brief_idsrs.pdf?ua=1

disease outbreaks and other health security threats. Data collected and analysed via the DHIS2, the HMIS, the HIS are key to well-functioning IDSRS. So are data collected by the private sector.

2.5 International health assistance landscape

International actors are pivotal to Somalia's health sector enhancement. The Somali government relies heavily on donor funding for public health initiatives, making it vulnerable to changes in international priorities.

The international community focuses on enhancing the health system and health outcomes through OECD DAC donors, non-traditional donors, international NGOs, international/multilateral agencies and organisations (e.g., United Nations entities, Global Financing Facility, World Bank, etc). Both humanitarian and longer-term development assistance are provided in the health sector; with the often 'blurry' lines between not always coordinated provisions. Somali diaspora remittances sent directly into Somalia, as well as contributions to various international and other NGOs are also related factors. Returned Somalia diaspora also provide knowledge and technical know-how to the health sector.

International actions range from provision of health and nutrition services to capacity building and system strengthening to facilitate health governance, and the implementation of the Essential Package of Health Services (EPHS) and an Integrated Disease Surveillance and Response System to enhance epidemic control.

Traditional donors contribute significant financial resources, with at times some large-scale health interventions. They provide solid technical expertise, knowledge, and capacity building, with a strong focus on universal health coverage, maternal and child health, and disease prevention. These donors often assist in the development of national health policies and frameworks. For example, amongst financing various types of health actions, Sweden has been contributing funding to establish the National Institute of Health, and to strengthen technology uptake for digitalised data collection, as well as helped to address emergency/humanitarian needs.

Non-traditional donors (i.e., non-DAC donors) often provide more flexible funding without strict conditionalities; they can be quicker in responding to crises compared to traditional donors. They tend to focus on building visible health infrastructure, such as hospitals and clinics, with limited focus on system strengthening, systemic improvements or sustainability. Non-traditional donors sometimes lack transparency in funding and implementation, making it harder for the broader donor community to know what they are doing and to avoid duplication, overlap or creation of parallel systems.

There are significant challenges related to fostering fully **coordinated** efforts between the Somali government (at Federal and State levels), and international private sector and public sector partners. In general, there is insufficient coordination across the international community, within the broader "donor" community, and amongst traditional donors (despite their donor health coordination

committee that meets regularly to exchange information and tries to create a modicum of coordination. The humanitarian cluster⁶⁵ is well coordinated in comparison.⁶⁶

Thus, many actors operate relatively independently or work in silos, resulting in fragmented or overlapping programmes, and uncoordinated or redundant efforts. These factors in turn compound potential duplication or gaps in delivery and potentially slow-down positive developments towards building a functional, efficient, inclusive health system. Given the high dependency and heavy reliance on international actors by the FGS and FMS, this creates a fragile health system vulnerable to funding cuts, and shifting diaspora and donor priorities and imperatives.

3. Sweden's support to health system strengthening in Somalia through PHAS, SPIDER and WHO

3.1 Overview

Since 2019, funding from the Swedish International Development Agency (Sida) has supported efforts to strengthen Somalia's health system. This includes initiatives to establish a Somali National Institute of Health (NIH), improve the Health Information System (HIS), and reinforce the overall Health Management Information System (HMIS) through a national electronic health record system (EHR) .

To achieve these objectives, the Public Health Agency of Sweden (PHAS) was selected to provide direct technical assistance to the Somali government for the establishment of the Somalia National Health Institute. Similarly, the Swedish Programme for ICT in Developing Regions (SPIDER) was chosen to enhance HMIS, by focusing on the EHR (digital solutions), and its input towards better governance, and integration of health information.

WHO Somalia primarily aims to enhance the HMIS within the HIS, by focusing on operationalising and strengthening systems like DHIS2, and IDSRS. In 2021, the WHO Somalia office received Sida funding to support three staff positions. From 2021-2022, WHO received a seconded staff member from PHAS (funded by Sida). This position, Health Systems Strengthening (HSS) Policy Adviser, was part of the Sida support to WHO (PHAS/SPIDER Support). The tasks of the adviser included amongst others to, in collaboration with colleagues of WHO and PHAS, conduct a Health Information Systems Assessment to inform the HIS strategy, and to compile a Country Data Profile for Somalia and the WHO Country Cooperation Strategy for Somalia. Currently, Sida funds two staff positions (Health Systems Officer and Surveillance Officer), and funded a seconded officer (Health Systems

⁶⁵ The humanitarian cluster system is a coordination mechanism used by the United Nations and other humanitarian organisations to respond to crises. It is designed to organise humanitarian actors into core sectors, such as water, health and food security and closely coordinate actions.

⁶⁶ Coordination Information here is largely based on data from scoping interviews.

Strengthening (HSS) Policy Adviser) from PHAS in 2021-2022. These two current positions are intended to be dedicated to the PHAS and SPIDER interventions, as well as to the IDSRS and broader HMIS and HIS efforts. These staff members are intended to play a key role in leveraging WHO's global expertise to further improve the health system.

Oversight of these interventions—implemented respectively by PHAS, SPIDER, and the WHO Somalia Office—is provided by Sida through the Embassy of Sweden in Nairobi's Somalia section, who also requested this evaluation.

Table 13 provides an overview of the three initiatives.

Table 13. Summary of health system strengthening projects supported by Sweden

	PHAS	SPIDER	WHO
Project name	Somalia National Health Institute	Digital Health Somalia	PHAS/SPIDER Support
Focus area	NIH	EHR	HIS and HMIS
Government counterpart	Somalia National Institute of Health	Ministry of Health and Human Services (MoH&HS)	NIH MoH&HS
Implementation period	Start: June 2019 End: May 2025	Start: November 2019 End: June 2025	Start: June 2021 End: May 2025
Budget	SEK 40 million	SEK 40 million	SEK 4.3 million
Funding mechanism	Swedish International Development Cooperation Agency (Sida)	Sida via the Swedish Embassy in Nairobi (Somalia division)	Sida via the Swedish Embassy in Nairobi (Somalia division)
Main objectives and strategies	Strengthen core public health functions: Support the establishment and organisational capacity strengthening of the Somalia NIH	Digital Health Somalia: Strengthen the health information system in Somalia.	Support initiatives of PHAS and SPIDER; strengthen HMIS including IDSRS

Sub-sections below provide a description of the projects with the theories of change of these interventions and further details are provided in Annex 2.

3.2 PHAS: Establishing and strengthening the Somalia National Institute of Health

Background: The International Association of National Public Health Institute (IANPHI)⁶⁷ defines national public health institutes as government agencies, or closely networked groups of agencies, which provide science-based leadership, expertise, and coordination for countries' public health activities. In alignment with this definition, the Africa Centers for Disease Control and Prevention (Africa CDC) adopted a Framework for National Public Health Institutes (NPHIs) in Africa⁶⁸, which defines NPHIs as "... science-based government institutions or organisations that promote health by coordinating public health functions and programmes to prevent, detect, and respond to public health threats, including infectious and non-infectious diseases and other health events." The framework also emphasises the role of NPHIs in supporting national compliance with International Health Regulations (IHR, 2005), advancing the Global Health Security Agenda (GHSa) and strengthening national health systems.

The project: As mentioned, in 2019 Sweden agreed to establish a project intended to set up the first independent Somalia National Institute of Health aimed at and capable of improving core public health functions, including enhancing emergency preparedness, addressing health disparities, and fostering evidence-based policy and leadership in Somalia's health sector. The Public Health Agency of Sweden was engaged and financed by Sida to collaborate with the federal Ministry of Health and Human Services in helping to establish the NIH and assist its subsequent capacity development in the areas of disease surveillance, data management, research capacity, organisational capacity, and networking.

Sweden anticipated that this initiative would not only improve Somalia's ability to respond to disease outbreaks and public health challenges but also contribute to long-term sustainability by equipping the government with robust governance and technical capacity to rebuild and maintain its health system. The decision therefore aligned with Sweden's development cooperation strategy, which prioritised health system strengthening, institutional capacity building, and equitable access to healthcare, particularly for women and children.

PHAS is the National Public Health Institute (NPHI) of Sweden. As such it provides peer-to-peer institutional capacity building based on long term practical experiences from working not only in Sweden but also in several other countries. PHAS was therefore chosen to lead the project due to its established expertise in successfully implementing capacity-building projects in diverse international settings, its credibility, technical expertise, institution building knowledge, experience in coordinating national public health efforts and access to global networks such as IANPHI. PHAS is also an active participant in WHO and European Union public health initiatives. PHAS and the Ministry of Health and Human Services of the Federal Government of Somalia have access to a wealth of knowledge,

⁶⁷ <https://www.ianphi.org/includes/documents/sections/tools-resources/nphi-core-functions-and-attributes.pdf>

⁶⁸ <https://africacdc.org/download/framework-for-development-of-national-public-health-institutes-in-africa/>

best practices, and technical resources to inform the project. PHAS and NIH Somalia are NPHIs, and both are members of IANPHI.

The project covers the period June 2019 to May 2025.⁶⁹

The **overall goal** is to establish an independent public health agency, the National Institute of Health in Somalia, in cooperation with the Federal Ministry of Health and originally five, currently seven⁷⁰ regional (federal member state) ministries of health.

The **aims** are to set up and strengthen core public health functions within NIH:

- Organisational development⁷¹
 - Increased management and governance capacity of NIH.
- Data Management
 - Improved analysis and visualisation of data for decision-making.
- Public health research
 - Strengthened public health research competencies.
 - Improved research event planning and organisational skills.
- Surveillance and response
 - Strengthened capacity to detect, report and respond to health threats including multisectoral and cross-border responses.
- Widened network⁷² for research, learning and sustainable relations.

The initial results of the project confirm that PHAS has supported the creation of a management structure and key functions within NIH-Somalia. It has provided technical expertise, institutional capacity development, trainings and opportunities for peer-to-peer research networking and exchanges in international conferences and workshops.

3.3 SPIDER: Digital Health Somalia 2019-2022

Background: Somalia lacks a national initiative to consolidate and utilise health data for informed decision-making, which undermines the capacity of health authorities to deliver equitable and effective health services. The fragmented health information systems hinder evidence-based planning, particularly for marginalised and remote populations. In order to address the critical gap

⁶⁹ The length was extended by two years with a no-cost extension, until 31 May 2025, due to the low pace of implementation during the COVID-19 pandemic.

⁷⁰ As of October 2023, the Federal Republic of Somalia officially has seven federal member states with their own ministries of health; Galmudug, Hirshabelle, Jubaland, Puntland, Khatumo, South West, and Somaliland. This is an increase of two since start of PHAS project.

⁷¹ According to the NIH Operation Plan 2021-2023, NIH Strategic Plan 2024-2028 and Operation Plan.

⁷² IANPHI membership, Africa CDC, NPHIs in SSA, AFENET, WHO, SPIDER/Stockholm University, Umeå University, Statistics Sweden, etc.

in coordinated health data infrastructure, Sweden decided to fund the strengthening of Somalia's National Health Management Information System (HMIS) in particular through a focus on EHR.

The project: Digital Health Somalia 2019-2022 aligns with Sweden's commitment to strengthen health systems and promote digital solutions for development.⁷³ It aims to establish a national electronic health record (EHR) system that is interoperable. By establishing an EHR system, the project aims to directly strengthen the national HMIS by providing accurate and timely data for decision-making. Sweden expects the project to enhance the Somali health sector's capacity for data-driven management, leading eventually to improved accessibility and quality of health services, and to the broader goal of fewer health inequalities in a very challenging context.

To deliver the project, Sweden chose to partner with the Swedish Program for ICT in Developing Regions (SPIDER) because it was considered to have good potential to bring significant value to managing this HMIS-based project. As a specialised institution with expertise in ICT for development, SPIDER leverages a strong network of Swedish and international experts to implement innovative digital solutions. Its established track record in managing complex ICT-based development initiatives helps ensure an evidence-based and methodical approach to strengthening health management information systems. SPIDER also conducts comprehensive audits, stakeholder assessments, and capacity-building efforts. Furthermore, SPIDER's operational research capabilities and ability to collaborate with local partners would, it was believed; help ensure that the intervention was contextually relevant and sustainable. In addition, SPIDER's experience in integrating technology into public health initiatives was expected to ensure a robust foundation for Somalia's digital health infrastructure because SPIDER combines technological expertise, local engagement, financial diligence, and a commitment to sustainable development. This increased the chances that the project would deliver both immediate and longer-term health system improvements through a stronger EHR system that is a key component for a functional HMIS.

In this light, SPIDER helps to coordinate the Health Alliance for Digital Development and Action (HADDA) programme in Somalia. HADDA aims to enhance maternal and child health outcomes and promote health equity by supporting the establishment of EHR system across Somalia, and urging the unification of the Health Management Information System (HMIS). HADDA collaborates closely with Somalia's Federal and regional Ministries of Health to develop an integrated EHR that is feasible for both member states and federal entities. HADDA and SPIDER engage in dialogue with WHO, UNICEF, the Swedish Public Health Agency, and the Somali National Health Institute to support this initiative. The project is a collaboration between SPIDER and the Ministry of Health and Human Services (MoH&HS). This coordinated intervention aims to strengthen the EHR as a key enabler to

⁷³ Please note that SPIDER conducted a needs assessment, very early on, and this highlighted that Somalia lacked a HIS/HMIS Strategic Plan. One key recommendation was for HADDA to support the development of this Plan. Consequently, HADDA prioritised this effort and initially focused on working with the Ministry of Health to develop the plan to contribute to HIS governance and strengthening the country's health systems. However, this responsibility was later transferred to WHO. So the SPIDER focus is on EHR.

improving Maternal and Child Health (MCH) outcomes and to reducing health inequalities in Somalia. To deliver the project, SPIDER also partners with broader digital health and HMIS stakeholders,⁷⁴ as well as local organisations for implementation and research, including NomadiLab, SIDRA, and previously, KasmDev, to develop and test a EHR and roll-out a digital transformation.

Specific EHR-related strategies include:

- Digitalise health data storage and share in selected regions through the adoption of a human-centred technology.
- Build capacity / data management to support ongoing digitalisation.
- Support research through local researchers.
- Train for and test the EHR in selected facilities.
- Establish a digital health and EHR stakeholder group.

The initial results of the project – After initiating an assessment of the digital transformation of health information systems under the HADDA programme - SPIDER focused on the creation of a system for electronic health records (EHR) in selected health facilities; and on its implementation). It did baseline assessments and technical audits, and actions aimed at strengthening governance through partnerships with the Ministry of Health at both federal and state levels (in selected states). SPIDER focused on capacity-building, local ownership, and integration of EHR systems to enhance data quality, accessibility, and usage.

Key achievements of the HADDA programme include:

- A baseline report to lay the foundation for the WHO-coordinated master plan for HMIS.
- Technical assessments to map out the needs for technology infrastructure and development.
- Engaging health workers to inform the design of the digital health system and the EHR.
- Workshops on technology, network coordination, results-based management, leadership, and digital investment principles.
- Launching the diaspora program "Connect Somalia" in March 2023.
- Selecting and engaging beta test clinics.

These efforts aimed to create a unified EHR, strengthen Somalia's capacity to digitalise health data, and produce research evidence to inform further development of the country's health system.

⁷⁴ KasmDev is a regional consulting firm specialised in strategic business solutions across Eastern Africa and the Horn of Africa, including Somalia. kasmdev.com It was the initial implementing partner. But, due to limited technical expertise it was later replaced by NomadiLab, which did have the needed skills and knowledge. SIDRA is the local research partner.

3.4 WHO: NIH/SPIDER Support

Background: The World Health Organisation (WHO) is a key stakeholder in Somalia, with a strong mandate and historically established presence in the health sector. WHO Somalia supports the strengthening of Health Management Information Systems as a component of the broader Health Information System. Its efforts often revolve around strengthening HMIS tools such as DHIS2 for collecting, analysing, and reporting aggregate health data, while also contributing to the broader HIS infrastructure in alignment with Somalia's national health strategies. WHO Somalia often works closely with the Ministry of Health and partners to align their efforts with national priorities and global standards.

Given its role in supporting and reinforcing ongoing efforts in health system coordination, digitalisation, and disease response, linkages between WHO and the projects run by PHAS and SPIDER were deemed strategically critical. Sweden's decision to partner with WHO in Somalia therefore focused on facilitating PHAS and SPIDER partnerships with Somalia entities, and ensuring coherence with on-going efforts to address critical gaps in the country's health system.

This partnership aligns with Sweden's strategic goal of promoting equitable health access, particularly for women and children, and responds to the urgent need for sustainable health system development in Somalia. Through it, Sweden anticipates to contribute to long-term improvements in Somalia's health outcomes while enhancing the operational effectiveness of its broader health sector engagement.

The project: Support to WHO intends to further strengthen the efforts of PHAS on the establishment of NIH; and SPIDER on the strengthening of HADDA/the HIS. It also intends to enhance management of the IDSRS. The project is operationalised through the financing of two staff positions at WHO office in Somalia, based on memorandums of understanding (MOUs) with PHAS and SPIDER. A third position (secondment to WHO from PHAS) was financed by Sida for 2021-2022.

Specific focus areas of the WHO as part of the PHAS/SPIDER support project include:

- Facilitate PHAS in its establishment of NIH.
- Provide support to SPIDER, including in pilot locations.
- Ensure that PHAS and SPIDER efforts reinforce, and are complementary to, strengthening the IDSRS, and health system-related efforts.

The **initial results**⁷⁵ of the project (though these are actions to which WHO role is linked though for most WHO is not the main actor) include such aspects as (apparently) better health sector governance, operationalisation of the NIH, establishment of a Field Epidemiology Training Program (FETP) system, Public Health Emergency Operations Centers (PHEOCs), improved diagnostic and

⁷⁵ Data drawn from the document outlining the « Strategic Dialogue between Sweden and WHO Somalia 12-14-2023 ».

surveillance capabilities via seven (new) public health laboratories; and an improved Integrated Disease Surveillance and Response system.

4. The assignment

4.1 Evaluation context

Sweden's development cooperation with Somalia⁷⁶ aims to contribute to sustainable peace, strengthened resilience, greater respect for human rights, gender equality, environmentally and climate-resilient sustainable development, and health equity with a focus on sexual and reproductive health and rights (SRHR).

The Embassy of Sweden in Nairobi currently provides Sida-financed support to several health-related development initiatives in Somalia (UNICEF health and protection services for Somali women and children; the World Bank "Damal Caafimaad"; the PHAS project; the SPIDER project; and three WHO Somalia staff positions (WHO) (two currently, and a PHAS-seconded position in 2021-2022). Through Sida, Sweden also supports health related humanitarian actions, inter alia, to UNICEF and via the WHO's health emergency appeals.

Ordinarily each of these initiatives are the object of separate evaluations. However, it was decided during 2024 to evaluate three of these simultaneously. NIRAS was tasked, under the Sida framework agreement for evaluation services, to conduct the "Evaluation of Sweden's support to health system strengthening in Somalia through the PHAS, SPIDER, and WHO."

As a result of initial familiarisation interviews with the primary users of the evaluation, the evaluation team decided in agreement with the Embassy of Sweden in Nairobi to include a scoping phase and to conduct scoping interviews with the broader donor community active in the health sector in Somalia, extend discussions with primary partners, and ensure greatest value-added and "fit-for-purpose" approaches. This scoping phase revised the team's understanding of the assignment and helped to refine the evaluation questions (see below).

4.2 Evaluation purpose and scope

The main purpose of the evaluation is to assess delivery of three interventions across two key focus areas, and provide lessons learnt:

1. People and systems/institutions – with a focus on assessing enhancement of the capacities of staff, institutions and systems supported by the actions; the appropriateness and effectiveness of approaches used to build capacity; and the likelihood of sustained benefits.

⁷⁶ Sweden's strategy for Somalia originally covered the period 2018-2022. This has been extended. A new strategy is expected in 2025. For more information refer to <https://www.government.se/contentassets/2918db075d7f450b8137e5ffd27c01eb/strategy-for-swedens-development-cooperation-with-somalia-2018-2022.pdf>

2. Technology and data solutions – with a focus on the relevance and effectiveness of the systems, methods, capacity building, and technology rolled out to health centres (stakeholders), and their utility in improving health system functioning in Somalia (pilot regions); and the likelihood of sustained benefits or scaling-up of the EHR pilots.

The evaluation objects are:

- PHAS: the Public Health Agency of Sweden intervention to establish a National Health Institute Somalia;
- SPIDER: the Swedish Program for ICT in Developing Regions intervention to launch a (national) Electronic Health Record system in Somalia (EHR); and to support Health Alliance for Digital Development and Action (HADDAA); and
- WHO: Three staff within the WHO Somalia office. One PHAS secondee "Health Systems Strengthening (HSS) Policy Adviser" (now defunct) focused on initial foundational approaches for a NIH; and two local hire staff positions to facilitate the activities of PHAS and SPIDER, based on non-financial memorandums of understanding between WHO and these two entities; and to assist in reinforcing the Integrated Disease Surveillance and Response System and the Health Management Information System, amongst other focus areas.

The **scope of the evaluation** covers the interventions from their respective starting dates:

- PHAS from June 2019.
- SPIDER from November 2019.
- WHO from June 2021.

The evaluation will assess coherence of the three interventions in the Somali context and their alignment with Somali priorities; progress towards planned results; effectiveness of approaches and modalities; prospects for sustainability (coordination, fragmentation). It will provide lessons learnt on these aspects.

The **primary users** of this evaluation are:

- Embassy of Sweden in Nairobi, Kenya, Somalia Section.
- Public Health Agency of Sweden (PHAS).
- SPIDER, University of Stockholm.
- World Health Organisation (Somalia).

The **intended use of the evaluation** is to understand what progress has been made, guide strategic discussions on next steps and provide lessons, including in relation to undertaking similar actions in other fragile contexts.

4.3 Evaluation questions

The terms of reference (ToR) for the evaluation contain a comprehensive set of pertinent evaluation questions that cover the OECD DAC evaluation criteria. As a result of preliminary interviews with the primary users (Embassy of Sweden-Somalia section, and the three partners) and scoping interviews with the broader donor community focused on health, these questions have been slightly revised and re-grouped. A common set of overarching questions, some with sub-questions, are presented below. The sub-questions (and indicators of success, provided further on) will be used to guide data

gathering and analysis and to respond to the overarching questions (EQ1 to EQ5, see below). The final report will not provide answers for each sub-question.⁷⁷

4.3.1 Effectiveness and Effects⁷⁸

EQ1: What progress and outcomes have been achieved in relation to the planned results (as expressed in the Theory of Change and project documents)? To what extent have the interventions contributed to strengthening the capacity of the health sector/system in Somalia? What are any unexpected effects?

Sub-questions (PHAS)

1. To what extent has PHAS supported organisational development of NIH and increased management and governance capacity?
2. To what extent has PHAS enhanced data management and improved analysis and visualisation of data for decision-making? Are there any links to observed policy changes?
3. To what extent has PHAS boosted public health research, and strengthened research competencies and improved research event planning and organisational skills?
4. To what extent has PHAS improved surveillance and response capabilities to detect and respond to public health threats including by working across sectors and borders?

Sub-questions (SPIDER)

1. In relation to system design and development: to what extent has the developed EHR been installed and operationalised in targeted Maternal and Child Health clinics across the Federal States where SPIDER operates?
2. In relation to capacity building: to what extent have SPIDER-supported health facilities adopted the EHR for routine data collection and reporting?
3. In relation to evidence generation and research: to what extent has SPIDER/HADDA advanced the collection and analysis of evidence/data to inform system development? Has the evidence/data informed national health system development or informed national health priorities? Have results provided data for policies or policy frameworks for Somalia's health system?
4. In relation to collaboration across sectors: to what extent has SPIDER coordinated with funders and implementors and aligned initiatives with digital investment principles and principles for digital development? Has SPIDER fostered a multisectoral collaboration towards integrated health information systems that support Universal Health Coverage (UHC) in Somalia? Has WHO assisted here?

⁷⁷ The evaluation team may provide an annex to the final evaluation report with succinct summaries for each sub-question if time permits.

⁷⁸ The usual word here is « Impact » but an impact evaluation is something else, so we use here « effect » so as not to create confusion.

Sub-questions (WHO)

1. To what extent have the three WHO-funded staff positions (Health Systems Strengthening (HSS) Policy Adviser, Health Systems Officer and Surveillance Officer) contributed to the implementation of the PHAS/NIH and SPIDER/HADDA projects?
2. To what extent has WHO's technical or political support facilitated alignment and integration of the NIH and HADDA initiatives with broader health system strategies in Somalia?
3. What evidence exists to show that WHO's involvement has enhanced the Somali health system's ability to respond to health challenges, and enhance the IDSRs? Have updated IDSRs guidelines been implemented in most regions? To what extent is this connected to the Sida-funded staff positions?

EQ2: How effective have the selected methods been in achieving the planned results?

Sub-questions (PHAS)

1. How well have the chosen methods (e.g., peer-to-peer learning, training workshops, and study visits) supported capacity-building and institutional development goals?
2. To what extent has collaboration with partners such as SPIDER, Sida, and WHO contributed to achieving planned results?

Sub-questions (SPIDER)

1. How effectively has SPIDER leveraged its ICT expertise and global networks to support the development of Somalia's digital health infrastructure?
2. To what extent has SPIDER's collaboration with local partners like KASMODev ensured contextual relevance and sustainability of the EHR system it is proposing?
3. How efficient has SPIDER been in conducting needs assessments, ensuring inter-operability of digital systems (with DHIS2) and aligning with international digital health standards (e.g., Principles for Digital Development)? Has collaboration with WHO or with PHAS/NIH contributed to efficiency and coherence?

Sub-questions (WHO)

1. What is the main "value-added" of the Sida-funded staff positions in WHO, and is this according to the terms laid out in the non-financial MoUs; and to the ToR for the PHAS seconded staff member?
2. To what extent, and how, would progress by the PHAS and SPIDER projects have been affected without them?
3. To what extent have they contributed WHO progress on IDSRs? And elsewhere?

4.2.3 Coherence and Complementarity

EQ3: To what extent have the interventions responded to the needs and priorities of Somalia? How coherent are the projects in the context of Somalia? To what extent have interventions aligned with the Somali government's health priorities?

Sub-questions

1. To what extent has alignment of the PHAS/NIH and SPIDER/HADDA projects with the Somali Federal Government's health priorities and international standards been addressed? How has WHO supported this?

2. How compatible has each intervention been with other interventions in the sector, including in relation to the private sector?
3. Are there “competing” EHR tools/systems – across Somalia – what or how does HADDA address potential multiplicity of these? Does this matter? Why or why not?
4. To what extent have the three Sida-funded interventions complemented each other? Have collaboration and knowledge sharing amongst PHAS/NIH, SPIDER/HADDA, and Somali stakeholders taken place? How was this supported by WHO?

4.3.3 Sustainability

EQ4: To what extent are these efforts scalable in the future and anchored in Somali ownership and co-creation? What is the sustainability of the interventions beyond the project period⁷⁹? What factors might hinder sustainability in the Somali context?

Sub-questions (PHAS)

1. What evidence suggests that the Somali government and other stakeholders have embraced ownership of the PHAS/NIH initiative? Has this evolved over time? If so, why?
2. Is there a sustainability or “exit” plan? What functional steps are aimed at sustainability? How sustainable are the developed outputs (e.g., strategic plans, data management tools, One Health Strategy) in the possible absence of continued external funding or technical support?
3. What mechanisms have been established to ensure institutional resilience and scalability of the NIH in the future?
4. How effectively has the project fostered co-creation (research) amongst Somali stakeholders and with international partners?

Sub-questions (SPIDER)

1. What mechanisms has SPIDER established to ensure the long-term functionality and scalability of the HADDA? Is there a sustainability or “exit” plan? What functional steps are aimed at sustainability?
2. How has SPIDER’s collaboration with Somali institutions and health professionals contributed to local ownership and capacity development?
3. To what extent are there efforts to address potential challenges such as funding gaps, technological maintenance, and stakeholder coordination, which would affect sustainability?
4. How has SPIDER ensured that the digital solutions can be scaled-up nationally and integrated into Somalia’s broader health strategy? What other similar systems exist and what is their scale?

⁷⁹ For example, local expertise sufficiently trained so as to be employed across the Health Information System.

Sub-questions (WHO)

1. How has WHO worked to build local capacity and ownership for the continued implementation of the NIH and HADDA initiatives?
2. To what extent have WHO's actions contributed to the scalability of health information systems and integrated surveillance responses and the continued functioning of the NIH as an independent institution?
3. If Sida funding ends, will WHO still deploy designated staff to assist in the operation of the HADDA, the NIH, the IDSRS?

4.3.4 Lessons Learnt

EQ5: What lessons can be drawn from the joint cooperation modality between Swedish public entities (Sida and PHAS for NIH; and Sida and SPIDER for HADDA); and from the staff support to WHO? How can these inform similar projects in other developing countries? What other lessons come to light?

Sub-questions (PHAS)

1. What are the strengths and limitations of the joint modality approach in achieving health system strengthening goals?
2. How did PHAS membership in global networks (e.g., IANPHI, WHO, EU initiatives) benefit the intervention?
3. What specific advantages or challenges emerged from working in Somalia's context?
4. Can lessons from this initiative inform Sweden's and PHAS engagement in similar health system projects in other fragile or conflict-affected settings?

Sub-questions (SPIDER)

1. What specific challenges and successes have emerged from SPIDER's application of ICT expertise to Somalia's health sector?
2. How have SPIDER's achievements and its partnerships with local implementers, Somali diaspora experts, and global networks influenced the project's outcomes and sustainability?
3. What insights can be gained about operationalising digital health solutions in fragile, conflict-affected and resource-constrained settings?
4. Can SPIDER's approach serve as a model for future digital health projects in developing countries?

Sub-questions (WHO)

1. What challenges and successes have emerged from funding WHO staff positions to support project implementation and coherence?
2. Can the partnership model with WHO inform Sweden's future engagements in fragile contexts in health system strengthening?

5. Approach and methodology

5.1 Overall approach

The evaluation adopts a **mixed-methods approach** combining qualitative and quantitative data collection and analysis. Quantitative data collection will be from secondary sources. By examining institutional and data system capacity changes, the evaluation will assess the effectiveness, coherence, efficiency, sustainability, and scalability of the interventions implemented by PHAS, SPIDER, and WHO. This approach ensures a comprehensive understanding of the interventions' contributions to health system strengthening in Somalia. Annex 1 presents the evaluation matrix.

Key principles guiding the evaluation include:

- A. **Utilisation Focus:** Stakeholder engagement throughout the process to ensure actionable insights and lessons learnt. This includes a lessons learnt and forward-looking workshop in Nairobi with primary evaluation users and a small sub-set of key donor participants, at the close of the process. Interaction along the evaluation process will also provide on-going learning opportunities for primary evaluation users.
- B. **Theory-Driven Analysis:** Application of contribution analysis to validate causal pathways and results outlined in each intervention's Theory of Change.
 - **Gender and Equity Lens:** Assessment of the inclusivity and equity of interventions, (and maternal and child populations).
 - **Context-Sensitive Evaluation:** Acknowledges Somalia's socio-political, economic, and security challenges while designing data collection strategies. This includes ensuring **confidentiality** of key informants, including what they say.

The evaluation focuses on:

- C. **Institutional and Capacity Development:** Assesses how the NIH has been established and its operational readiness; Assessing how SPIDER has enhanced digital capacity and infrastructure in its pilot centres.
- D. **Digital Interventions in Health Sector:** Assesses how SPIDER has improved data uptake and IT systems in order to produce data needed for improved health outcomes.

Primary approaches are:

1. **Institutional and Data System Capacity Evaluation:** This examines changes in governance structures, institutional practices, data management, and capacity-building outcomes. This approach will look for institutional resilience, public health leadership, and the (effective) use of data systems for decision-making.
2. **Theory-Based Contribution Analysis:** Using theories of change as a foundation, this approach sketches the causal pathways of observed changes to which the interventions have been contributing. Contribution analysis will clarify the extent to which these interventions have built capacity and influenced system-level outcomes, while considering the broader context and external enabling and disabling factors.

5.2 Methods and tools

The following tools may be applied across qualitative and quantitative data collection processes:

1. Institutional Maturity Model⁸⁰

Purpose: Evaluate organisational readiness, resilience, and operational maturity of NIH.

Components:

- Define dimensions: governance, leadership, operational processes, partnerships, and resource mobilisation.
- Assess maturity levels: nascent, developing, established, resilient, combining data from documents, interviews..

Output: A maturity assessment summary (or scorecard) highlighting NIH's development status, strengths, and areas for improvement (if feasible, snap shot October 2023; snap shot October 2024).

2. Capacity Development Scorecard⁸¹

Purpose: Assess progress in capacity outcomes.

Assess:

- Staff's awareness, motivation, and skills.
- Practices, teamwork, and knowledge dissemination processes.
- Institutional resilience and leadership.

Data Sources:

- Interviews with staff and stakeholders.
- Review of strategic plans, training materials, and governance frameworks.

Output: An overview that illustrates capacity gains and gaps, possibly a scorecard.

⁸⁰ Institutional Maturity Model is a structured framework used to assess and enhance an organisation's capabilities over time, typically progressing through defined levels of maturity. It involves evaluating key dimensions such as governance, capacity, processes, and systems to identify gaps and prioritise actions for sustainable development. In this instance it will be used as a grid against which to (try to) assess progress.

⁸¹ Capacity Development Scorecard is a tool used to evaluate and track an organisation's progress in building and enhancing its capacity across specific domains, such as governance, human resources, systems, and infrastructure. It provides a structured approach to identify strengths, weaknesses, and areas requiring intervention.

3. Process Tracing⁸²

Purpose: Identify plausible causal links between interventions and observed institutional change.

Components:

- Assess intervention activities against intended outcomes in the ToC.
- Gather evidence to confirm or challenge causal links.
- Triangulate evidence from multiple sources to validate findings.

Output: A contribution analysis explaining institutional progress.

4. Digital Health Capacity

Purpose: Assess health information performance metrics – i.e. - the readiness, adoption, and functionality of the RAAD.

Indicators:

- Governance: Policies to support the roll-out of RAAD.
- Infrastructure: Availability of technology and connectivity.
- Capacity: Health worker training and RAAD system adoption.
- Integration: Interoperability of RAAD with DHIS2; and alignment national health strategies.
- Percentage of health facilities reporting through RAAD (EHR).
- Completeness, timeliness, and accuracy of reported data.
- Use of (digital) data for decision-making by regional and federal authorities.

Process:

- Use focus groups and interviews to gather feedback on reliability and usability of digital tools and ability of staff to use them and share data. Important indicators: Are the tools user-friendly and reliable; How has women and children's health data collection and reporting improved? What challenges remain for implementation or adoption? Are there competing systems? Why?

Output: Insights into user experience and possibly performance or trend analysis.

⁸² Process Tracing is a qualitative research method used to identify and analyse causal mechanisms within a specific process it is similar to the contribution analysis approach. It involves systematically collecting and examining evidence to connect intermediate steps, ensuring that the sequence of events or decisions aligns with hypothesised causal pathways. There may not be enough data to do complete process tracing.

5. Organisational Network Analysis (ONA)⁸³

Purpose: Evaluate partnerships and collaboration between NIH, SPIDER, WHO, and stakeholders.

Process:

- Identify interactions (e.g., what, and collaboration frequency).
- Assess the strength, quality, and any gaps in the partnerships.

Output: Network overview to show engagement and collaboration levels.

5.3 Data collection

The evaluation will use primary and secondary **qualitative** and **quantitative** data and triangulate findings from different sources to ensure robust conclusions.

5.3.1 Primary data collection

Key Informant Interviews (KIIs): Structured interviews with stakeholders, including

- Federal and state government health officials.
- Staff and former staff of the National Institute of Health (NIH), including leadership, and technical advisors; and of SPIDER.
- SPIDER and PHAS project implementers.
- WHO country office staff, including those currently in the two funded positions (Health Systems Officer and Surveillance Officer), and the previous seconded staff.
- Health centre professionals and trainees in health centres trained by SPIDER.
- Members of health committees (at any level).
- Members of the donor community, including Sida and other funding partners.
- Representatives from PHAS and SPIDER to understand implementation challenges and successes.

Field visits:

- Observations, interviews, at selected health centres, and state health offices to validate data and assess infrastructure and workflow improvements.
- Focus Group Discussions with health workers and community representatives to assess perceptions of capacity-building activities, data system utility, and health system changes.

⁸³ ONA is a method used to analyse the relationships, interactions, and information flows within between organisations, and helps identify strength of interaction, possible key influencers, bottlenecks, and opportunities to enhance collaboration, communication, and overall interactions.

- Selected health centres and regional health facilities in pilot areas to observe data functionality and interview users, on-site observation of operations and data uptake; discussions with trainees and supervisors; verification of improvements in infrastructure, equipment, and workflow.
- State government offices.
- NIH office.

Areas of focus:

- Effectiveness of capacity-building activities, such as training; peer-to-peer learning.
- Contributions of NIH, HADDA/RAAD, & IDSR systems to health system strengthening.
- Perceived sustainability and scalability of the interventions.
- Coherence of collaboration between PHAS, SPIDER, and WHO.
- Practical impacts of training and tools provided under the interventions.
- Changes in institutional practices or decision-making influenced by the projects.
- Perceptions of improved capacity and skills.
- Perceptions of the utility of system/institutional strengthening and data systems strengthening. Perceptions on sustainability, uptake, fragmentation and coordination.

5.3.2 Secondary data collection

Document reviews and analysis:

- Review of annual reports, theory of change, appraisal /monitoring documents, operational plans, other strategic documents, training materials, and meeting minutes to triangulate data from interviews and field visits.
- Project documentation (e.g., PHAS and SPIDER progress reports, technical support plans, and MoUs).
- WHO's IDSR system reports, including surveillance bulletins and dashboards.
- NIH publications, such as research reports and policy recommendations.
- SPIDER's digital health project results.
- Health facility performance data from Somalia's Ministry of Health and Human Services.

Analysis of available WHO, NIH, HADDA performance metrics data, including:

- Proportion of HADDA health facilities reporting.
- Data completeness, timeliness, (and utilisation rates).
- Number of health workers trained and their subsequent outputs.
- Health facility performance data – such as indicators such on maternal and child health reporting, surveillance reporting rates, and uptake of digital tools.
- Number of health workers trained in RAAD and FETP epidemiology.
- Health data reporting coverage (e.g., % of health facilities using SPIDER or IDSR systems).
- Use of data for policy or operational decisions by NIH.

5.3.3 Lessons learnt workshop

The evaluation team leader plans to conduct a lessons learnt and strategic brainstorm exchange (workshop) with the principal users of the evaluation and a small number of interested donors, and

any other relevant stakeholders, to be decided in cooperation with the Embassy. This will take place after the evaluation report has been approved. The intention is to hold this learning and strategising session in Nairobi, budget and capacity permitting.

5.4 Indicators and success metrics

The evaluation will seek to use, as feasible, the following key indicators (see also Annex 5):

Institutional Strengthening

- Evidence of sustained governance and leadership within NIH.
- Enhanced capacity for research and policy advocacy.
- Enhanced capacity of health centres to use RAAD and use digital health information.
- Improved peer networks.

Data System Functionality

- Increased coverage and utilisation of RAAD and IDSR systems.
- Integration of digital health solutions into national strategies.

Sustainability

- Mechanisms ensuring long-term functionality of systems and institutions.
- Evidence of local ownership and co-creation in project outputs.

Scalability

- Replication of successful models from pilot areas in other regions or contexts.
- Plans and resources to sustain and expand interventions.

5.5 Limitations and mitigation principles

The evaluation will most likely face several limitations that will need to be carefully managed. These include:

Time and capacity constraints: The evaluation team is reviewing three interventions within the budget and time period usually attributed to one intervention evaluation. This constrains the evaluation team's ability to go into depth and will necessarily require the team to be synthetic and draw broad line conclusions. Detailed evidence may be a challenge and depends in part on availability of data from partners; and the ability to have meaningful interactions with key informants. The national expert will be able to (help) conduct some interviews in Somali language. Lack of capacity of the whole team to interact in Somali is a constraint, as interpreted conversations can be tricky.

Security constraints: Ongoing insecurity in parts of Somalia limits the evaluation team's ability to conduct in-person data collection and this poses a particular challenge for assessing community-level impacts. To mitigate this, the evaluation will rely more heavily on remote data collection methods (e.g., phone / video interviews) and existing monitoring data for field locations. Limited site

visits will be conducted, by the national evaluator, to health facilities in Mogadishu and in Dhusamareeb. Connectivity to interviewees will most certainly also pose challenges.

Political changes and non-linear progression of success: Changes in the governments (federal or state level) may have resulted in significant evolutions across the health system and within relevant government entities. This may create challenges related to data collection and availability of key informants. If recent changes in government have dismantled or emptied out some relevant entities (relevant to the evaluation) – these may currently appear quite different to where they were 18 months ago. To mitigate this, the evaluation team will focus on the understanding that progression is not always linear in fragile contexts – institutions and systems can be built up and move forward – and then pushed backwards as in a ‘yo-yo effect’.

Data quality and availability, data paucity: Somalia's health information systems face significant challenges, with fragmented data collection and gaps in completeness, timeliness and accuracy. This may limit the evaluation's ability to draw robust conclusions about health system performance and impacts, particularly for the earlier years of the interventions. To mitigate the effects of poor data quality the evaluation team will triangulate multiple data sources and clearly acknowledge data limitations in the analysis.

Attribution complexity: Given the complex, long-term nature of health system strengthening, it will be difficult to attribute observed changes solely to the Sida-supported interventions. Consequently, the evaluation will apply contribution analysis to examine how the interventions have plausibly influenced changes, while acknowledging other contributing (enabling and constraining) factors.

Recall bias: For interventions dating back to 2019, stakeholder recall of earlier activities and outcomes may be limited. The evaluation will rely on documentation where possible and clearly note where findings are based on (potentially) imperfect recall.

COVID-19 and climatic shock disruptions: The pandemic and the 2022 drought most likely impacted both health system functioning and the implementation of the interventions. This creates challenges for assessing "typical" performance. The evaluation team will consider how these events affected implementation and outcomes, as relevant.

6. Work plan, deliverables, risk management

6.1 Phases of the evaluation

The evaluation phases are presented below.

6.1.1 Start-up and scoping phase

The evaluation began with a virtual start-up meeting with the Embassy of Sweden (Nairobi) and start-up discussion with key managers in PHAS, SPIDER, WHO to confirm the evaluation scope, approach and timeline. Key documents were identified, and an initial stakeholder mapping was conducted. The evaluation team reviewed available documentation and monitoring data to gain a general overview of the three interventions. A number of scoping and information interviews were held with project leadership and the donor community focused on health and the health system in Somalia to better understand the contextual setting, the reality of the sector, and help understand expectations and set priorities for the evaluation. Scoping allowed the evaluation team to verify that what we propose

is feasible in relation to the ToR and the overall budget. This phase revealed the need to conduct a lessons learnt workshop in Nairobi at the end of the evaluation. For this an additional budget increase was requested and is currently pending. A list of interviewed institutions is available in Annex 6. The evaluation team conducted scoping interviews with 14 key informants, and had several interactions with the Embassy and managing staff of the three projects

6.1.2 Inception phase

The inception phase involved project document review for the PHAS, SPIDER and WHO interventions, reviews of the Theories of Change, and identification of stakeholders (stakeholder analysis) and the development of an engagement plan. As per ToR of the evaluation, the inception report includes a detailed methodology, evaluation matrix, data collection tools and work plan. A remote inception session will be held to discuss the draft inception report with key stakeholders. This will validate the evaluation questions and sub-questions, and the methodology. Once the inception report is finalised⁸⁴ and approved by the client, the data collection phase will start.

6.1.3 Data collection phase

The data collection phase will involve in-person and online key informant interviews (KIIs), focus group discussions (FGDs), data review and document review. Site visits to health facilities in Mogadishu and in Dhusamareeb will be conducted by the national evaluator. The evaluation team will also undertake a more in-depth review of project monitoring data and any available health system performance indicators, and triangulate this information with primary data collection. Throughout this phase, the evaluation team will maintain regular communication with the Embassy to share emerging findings and adjust the approach as needed.

6.1.4 Verification, analysis and reporting

The verification, analysis, and reporting phase involves a rigorous analysis of all collected data, triangulating information from different sources to develop robust findings. This will involve:

- Analysing interview and FGD transcripts to identify key themes and patterns.
- Synthesising quantitative data.
- Conducting contribution analysis to assess if and how the interventions have influenced observed changes.

The team will iteratively develop and refine the findings, conclusions, and lessons learnt through internal team discussions and – where needed – consultations with key stakeholders. This process will ensure that the evaluation produces evidence-based and actionable recommendations that are relevant to PHAS, SPIDER, WHO, the Embassy, and Sida. The main output of this phase will be a comprehensive evaluation report, including:

⁸⁴ To note that the accepted final inception report replaces the original terms of reference for the evaluation.

- Executive summary.
- Detailed findings organised by evaluation question.
- Conclusions addressing the overall effectiveness and impact of the interventions.
- Specific, actionable recommendations (and lessons) for future health system strengthening efforts.

A draft final report will be submitted for stakeholder review, with the final report incorporating feedback received. The ET will review feedback with each primary user to ensure validity and relevance.

The evaluation will conclude with a small workshop (potentially in Nairobi) to discuss the findings and lessons learnt, and potentially brainstorm on future directions. The workshop will include primary evaluation users and a small set of wider donors active in the health sector in Somalia. This will provide an opportunity to reflect on and discuss the emerging findings, ensuring their utility.

6.2 Risk management

The risk management matrix aligned to this evaluation is presented below. This will be proactively managed during the lifetime of the evaluation.

Risk	Risk Impact	Risk mitigation
Poor quality or limited availability of data	Medium	• Triangulate data from multiple sources • Use qualitative methods to fill quantitative gaps • Work with partners to access project level data • Full transparency about data limitations in reporting
Difficulty accessing key stakeholders, particularly Government of Somalia personnel	Medium / High	• Schedule interviews well in advance • Offer the possibility of face-to-face interviews if deemed relevant and within the budget • Engage international partners to facilitate connections • Cast a wide net for interviewees to mitigate the occurrence of (potential) non-respondents
Challenges in attribution due to multiple actors in health sector	Medium / High	• Use contribution analysis approach • Clearly define and articulate the scope of the interventions' support • Engage other donors and partners to understand the broader context
Language barriers	Low	• Use and engage the national evaluation expert to lead interviews in Somali (with interpretation for team where needed).
Stakeholder resistance to engage / evaluation fatigue	Low / Medium	• Clearly communicate the purpose and benefits of the evaluation • Minimise the burden on participants through well organised interviews and interactions

Stakeholder disagreements with evaluation findings and conclusions	Low	Apply a utilisation-focused approach to the process whereby findings are triangulated to ensure credibility and transparency, and validation with the users
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6.3 Milestones and deliverables

The evaluation will include the following milestones and deliverables:

Deliverables	Participants	From ToR	Initial Proposed Deadlines	NIRAS Updated deliverables
Start-up meetings	Embassy, evaluators, 3 projects	October 1 large meeting with all parties. 1 Plus bilateral meetings between evaluators and all parties.	End October 2024	Multiple, virtual, bilateral start-up meetings, last one on 21 November
Inception phase	Evaluators	Allow a <i>minimum</i> of 4 weeks from the start-up meeting to draft an inception report, but additional weeks are highly recommended.	30 November	December 2024 – January 2025
Draft inception to QA	To Quality Assurance Advisor	<u>Not included in ToR</u>		13 January
Draft inception report	To Embassy of Sweden - Somalia section	October	4 December	17 January 2025
Intended users read the draft inception report	Primary users	Allow at least 1 week for comments		17-23 January
Deadline for comments from intended users to evaluators	Primary users	End October	11 December	24 January

Inception meeting	Embassy, evaluators, three agencies	End October (week 43). PHAS and SPIDER will be in Nairobi that week.	12 December	29 January
Revise inception report	Evaluators	Allow at least 1 week for revision, although this depends on how many revisions are requested]		
Deadline final inception report		November	18 December	7 February
Approval of inception report	Embassy of Sweden - Somalia section	Not included in ToR	8 January 2025	11 February
Data collection & analysis	Evaluators	Allow a <i>minimum</i> of 4 weeks for data collection & analysis	January – February 2025	11 February – 7 March
Draft report writing phase	Evaluators	[Allow at least 2 weeks for report writing]		10 March to 6 April
Draft report to QA		<u>Not included in ToR</u>		7 April
Submission of draft evaluation report		November	4 March 2025	11 April
Primary users read and comment draft report	Primary users	Allow at least 1 week for comments		
Deadline for comments from intended users to evaluators		End November	11 March 2025	18 April
Final report writing phase	Evaluators	[Allow at least 1 week for revisions]		
Final evaluation report submission		December /January	20 March 2025	28 April
Approval of final report	Embassy of Sweden - Somalia section i	Not included in ToR	26 March 2025	2 May

Strategy workshop in Nairobi	Embassy, evaluators, three agencies, donors	December /January	27 March 2025	5-7 May
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6.4 Workplan

2024-2025				FC	YA	MAO	QA	October		November				December				January					February				March				April				May		
								w43	w44	w45	w46	w47	w48	w49	w50	w51	w52	w1	w2	w3	w4	w5	w6	w7	w8	w9	w10	w11	w12	w13	w14	w15	w16	w17	w18	w19	w20
Inception Phase																																					
Start-up meeting,				0,50	0,25	0,25																															
Desk review and methods development and scoping interviews				3	2																																
Drafting inception report				2	1																																
QA inception report, January 13							1																														
Submission of draft inception report, January 17																																					
Comments/no-objection sent by Stakeholders, January 24																																					
Inception meeting (virtual) January 29				0,5	0,25	0,25																															
Revision of inception report based on comments				1	0,5																																
Submission of final inception report, February 7																																					
Approval of inception report, February 11																																					
Sub-total, inception phase:				7,0	4,0	0,5	1																														
Data Collection Phase																																					
Preparations				2	1	1																															
Field visits / Key informant interviews						2																															
Remote key information interviews (online/telephone)				8	4	3,5																															
Additional desk review				3,5	2,5	2																															
Sub-total, data collection:				13,5	7,5	8,5	0																														
Data Analysis and Reporting Phase																																					
Report writing				10	3	2																															
QA draft report							1																														
Submission of draft evaluation report, April 10																																					
Feedback from stakeholders on draft report, April 17																																					
Finalisation of the report				2	1																																
Submission of final evaluation report, April 28																																					
Broader Donor workshop in Nairobi (if funding available), May 5-7				3,5	0,5	1																															
Sub-total, analysis and reporting:				15,5	4,5	3	1																														
Total days				36,0	16,0	12,0	2,0																														

Initials: FC = Francesca Cook; YA = Yibeltal Alemayehu; MAO = Mohamed Ahmed Omar; QA = Quality Assurance

Annex 1 - Evaluation matrix

The evaluation matrix was elaborated during the inception phase. It includes the evaluation questions organised by OECD-DAC evaluation criteria, what data collection methods will be used, and the source of information, including the reliability of these sources. The matrix is based on the methods presented in the inception report and addresses each evaluation objective to ensure that the appropriate data are collected during the assignment. The evaluation matrix should enable the evaluation stakeholders to understand how data will be triangulated and how the evaluation team will implement the mixed-methods and utilisation-focused approach.

The evaluation matrix is presented below. It presents the list of evaluation questions and sub-questions; methods and tools; data sources; and availability and reliability of data.

Evaluation matrix (Table)

The below evaluation matrix was elaborated during the inception phase. The evaluation questions are organised by OECD DAC evaluation criteria, suggested data collection methods, and the source of information, including the reliability of these sources. The matrix is based on the methods presented in this inception report and addresses each evaluation objective to ensure that the appropriate data are collected during the assignment. The evaluation matrix should enable the evaluation stakeholders to understand how data will be triangulated and how the evaluation team will implement the mixed-methods and utilisation-focused approach, and to use the results as learning tool.

Table 14 Evaluation Matrix

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
Effectiveness				
EQ1: What progress and outcomes have been achieved in relation to the planned results (as expressed in the Theory of Change and programme documents)? To what extent have the interventions contributed to strengthening the capacity of the health sector/system in Somalia? What are any unexpected effects?		• Institutional Maturity Model • Capacity Development Scorecard • Process Tracing • Contribution Analysis	• Key informant interviews (KIIs) with NIH staff, PHAS, and SPIDER implementers. • Health facility performance data, including reporting coverage and use of RAAD. • NIH strategic plans, operational documents, and progress reports. • Theories of Change for PHAS, SPIDER, and WHO interventions.	• Availability: Likely strong for programme-specific data, such as NIH progress reports, usage statistics, and strategic plans. • Reliability: Moderate. While programme-level data are reliable, gaps in broader health system data (e.g., private sector contributions or long-term impacts) may affect triangulation. Stakeholder recall bias is also a potential limitation for qualitative data.
	Sub-questions (PHAS) 1. To what extent has PHAS supported organisational development of NIH and			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	increased management and governance capacity? - To what extent has PHAS enhanced data management and improved analysis and visualisation of data for decision-making? What links to policy change? - To what extent has PHAS boosted public health research, and strengthened research competencies and improved research event planning and organisational skills? - To what extent has PHAS improved surveillance and response capabilities to detect and respond to public health threats including by working across sectors and borders?			
	Sub-questions (SPIDER) - In relation to system design and development, to what extent has the developed EHR been installed and operationalised in targeted Maternal and Child Health clinics across the Federal States where SPIDER operates? - In relation to capacity building, to what extent have SPIDER-supported health facilities adopted the EHR for routine data collection and reporting? - In relation to evidence generation and research, to what extent has SPIDER/EHR advanced the collection and analysis of evidence/data to inform system development? Has the evidence/data informed national			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	health system development or informed national health priorities? Have results provided data for policies or policy frameworks for Somalia's health system? 4. In relation to collaboration across sectors, to what extent has SPIDER coordinated with funders and implementors and aligned initiatives with digital investment principles and principles for digital development? Has SPIDER fostered a multisectoral collaboration towards integrated health information systems that support UHC in Somalia? Has WHO assisted here?			
	Sub-questions (WHO) 1. To what extent have the Sida-funded WHO-funded positions (Health Systems Officer; Surveillance Officer; and Health Systems Strengthening Policy Adviser) contributed to the implementation of the PHAS/NIH and SPIDER/EHR projects? Were the MoUs sufficient or should they have been followed with partnership agreements delineating expected outcomes from the collaborations? 2. To what extent has WHO's technical or political support facilitated alignment and integration of the NIH and EHR initiatives with broader health system strategies in Somalia? 3. What evidence exists to show that WHO's involvement has enhanced the Somali health			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	system's ability to respond to health challenges, and enhance the IDSRS? Have updated IDSR guidelines been implemented in most regions? To what extent is this connected to the Sida-funded staff positions?			
EQ2: How effective have the selected methods been in achieving the planned results?		• Focus Group Discussions (FGDs) • Contribution Analysis	• Training or capacity related materials and reports from PHAS and SPIDER. • KIIs with health professionals and local implementers. • PHAS project documentation on needs assessments • SPIDER's project documentation on needs assessments and digital health standards. • WHO assessments of gaps and needs; review of MoUs against output. • ToC pathways and indicators for assessing the effectiveness of methods.	• Availability: High for capacity materials, plans, reports, meetings, and needs assessments conducted by PHAS and SPIDER. • Reliability: High for programme documentation, but qualitative data from KIIs or FGDs may be affected by subjective perceptions of participants and their availability/reachability.
	Sub-questions (PHAS) 1. How well have the chosen methods (e.g., peer-to-peer learning, training workshops, and			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	study visits) supported capacity-building and institutional development goals? 2. To what extent has collaboration with partners such as SPIDER, Sida, and WHO contributed to achieving planned results?			
	Sub-questions (SPIDER) 1. How effectively has SPIDER leveraged its ICT expertise and global networks to support the development of Somalia's digital health infrastructure? 2. To what extent has SPIDER's collaboration with local partners like KasmDev ensured contextual relevance and sustainability of the RAAD/digital system it is proposing? 3. How efficient has SPIDER been in conducting needs assessments, ensuring inter-operability of digital systems (with DHIS2) and aligning with international digital health standards (e.g., Principles for Digital Development)? Has collaboration with WHO or with PHAS/NIH contributed to efficiency and coherence?			
	Sub-questions (WHO) 1. What are the main "value-added" of the three Sida-funded staff positions in WHO, according to the terms laid out in the non-financial MoUs?			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	2. To what extent, and how, would progress by the PHAS and SPIDER projects have been affected without them? 3. To what extent have they contributed WHO progress on IDRSR? And elsewhere?			
Coherence and Complementarity				
EQ3: To what extent have the interventions responded to the needs and priorities of Somalia? How coherent are the projects in the context of Somalia? To what extent have interventions aligned with the Somali government's health priorities?		• Organisational Network Analysis (ONA) • Document Review • Contribution Analysis	• Memorandums of understanding (MoUs) between PHAS, SPIDER, and WHO. • Reports on donor coordination and alignment with Somali government priorities. • KIs with Somali Federal Government health officials and donors. • ToC for assessing coherence and alignment with Somali health priorities.	• Availability: Moderate. Alignment data (e.g., government policies and MoUs) is available, but documentation on donor coordination and coherence might be less comprehensive. • Reliability: Moderate. Data on coordination and alignment may be anecdotal or subjective, relying heavily on KIs and document reviews.
	Sub-questions 1. To what extent has alignment of the PHAS/NIH and SPIDER/HADDA projects with the Somali Federal Government's health priorities and international standards been addressed? How has WHO supported this?			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	2. How compatible has each intervention been with other interventions in the sector, including in relation to the private sector? 3. Are there “competing” EHR tools/systems – across Somalia - what or how does HADDA address potential multiplicity of EHR tools? Does it matter? 4. To what extent have the three Sida-funded interventions complemented each other? Have collaboration and knowledge sharing amongst PHAS/NIH, SPIDER/HADDA, and Somali stakeholders taken place? How was this supported by WHO?			
Sustainability				
EQ4: To what extent are these efforts scalable in the future and anchored in Somali ownership and co-creation? What is the sustainability of the interventions beyond the project period? What factors might hinder sustainability in the Somali context?		• Institutional Maturity Model • Digital Health Capacity Assessment • Contribution Analysis	• KIs with Somali government officials, NIH leadership, and SPIDER implementers. • Documentation on sustainability plans and funding mechanisms. • Progress reports on health system integration efforts (e.g., DHIS2 interoperability). • ToC pathways describing how sustainability was envisioned and achieved	• Availability: Moderate to High. Sustainability plans and funding mechanisms are typically well-documented for donor-funded projects. • Reliability: Moderate. Projections about scalability and sustainability rely on assumptions, making some data inherently speculative.

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	1. What evidence suggests that the Somali government and other stakeholders have embraced ownership of the PHAS/NIH initiative? Has this evolved over time? If so, why? 2. How sustainable are the developed outputs (e.g., strategic plans, data management tools, One Health Strategy) in the possible absence of continued external funding or technical support? 3. What mechanisms have been established to ensure institutional resilience and scalability of the NIH in the future? 4. How effectively has the project fostered co-creation (research) amongst Somali stakeholders and with international partners?			
	Sub-questions (SPIDER) 1. What mechanisms has SPIDER established to ensure the long-term functionality and scalability of the HADDA? 2. How has SPIDER's collaboration with Somali institutions and health professionals contributed to local ownership and capacity development? 3. To what extent does the sustainability plan address potential challenges such as funding			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	gaps, technological maintenance, and stakeholder coordination? 4. How has SPIDER ensured that the digital solutions can be scaled nationally and integrated into Somalia's broader health strategy? What other similar systems exist and what is their scale?			
	Sub-questions (WHO) 1. How has WHO worked to build local capacity and ownership for the continued implementation of the NIH and HADDA initiatives? 2. To what extent have WHO's actions contributed to the scalability of health information systems and integrated surveillance responses and the continued functioning of the NIH as an independent institution?			
Lesson Learnt				
EQ5: What lessons can be drawn from the initial joint modality between Swedish public entities (Sida and PHAS for NIH; and Sida and SPIDER for HADDA); and from staff		• Contribution analysis • Focus Group Discussions (FGDs) • Lessons Learnt Workshop (for validation)	• KIs with project implementers (PHAS, SPIDER, WHO) and health system users and Embassy • Review data and examples of modality successes/failures.	• Availability: Moderate. Detailed documentation on project design and implementation is likely available from PHAS, SPIDER, WHO, and Embassy but the evaluation team lack time to review.

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
support to WHO? How can these inform similar projects in other countries? What other lessons come to light, as drawn from the evaluation findings?			• Reports and minutes from Embassy, SPIDER, PHAS and WHO on operational challenges. Or KII discussions on this issue.	• Reliability: Moderate for documented lessons; moderate for qualitative reflections, as these may be influenced by stakeholder biases or recall limitations.
	Sub-questions (PHAS) 1. What are the strengths and limitations of the joint modality approach in achieving health system strengthening goals? 2. How did PHAS membership in global networks (e.g., IANPHI, WHO, EU initiatives) benefit the intervention? 3. What specific advantages or challenges emerged from working in Somalia's context? 4. How can lessons from this initiative inform Sweden's and PHAS engagement in similar health system projects in other fragile or conflict-affected settings?			
	Sub-questions (SPIDER) 1. What specific challenges and successes have emerged from SPIDER's application of ICT expertise to Somalia's health sector? 2. How have SPIDER's achievements and its partnerships with local implementers, Somali			

Evaluation questions	Sub-questions	Methods and tools	Data sources	Availability and reliability of data
	diaspora experts, and global networks influenced the project's outcomes and sustainability? 3. What insights can be gained about operationalising digital health solutions in fragile and resource-constrained settings? 4. How can SPIDER's approach be a model for future digital health projects?			
	Sub-questions (WHO) 1. What challenges and successes have emerged from funding WHO positions to support project implementation and coherence? 2. What insights can be gained about leveraging WHO's technical expertise and country presence in fragile contexts like Somalia? 3. How can the partnership model with WHO inform Sweden's future engagements in fragile contexts in health system strengthening?			

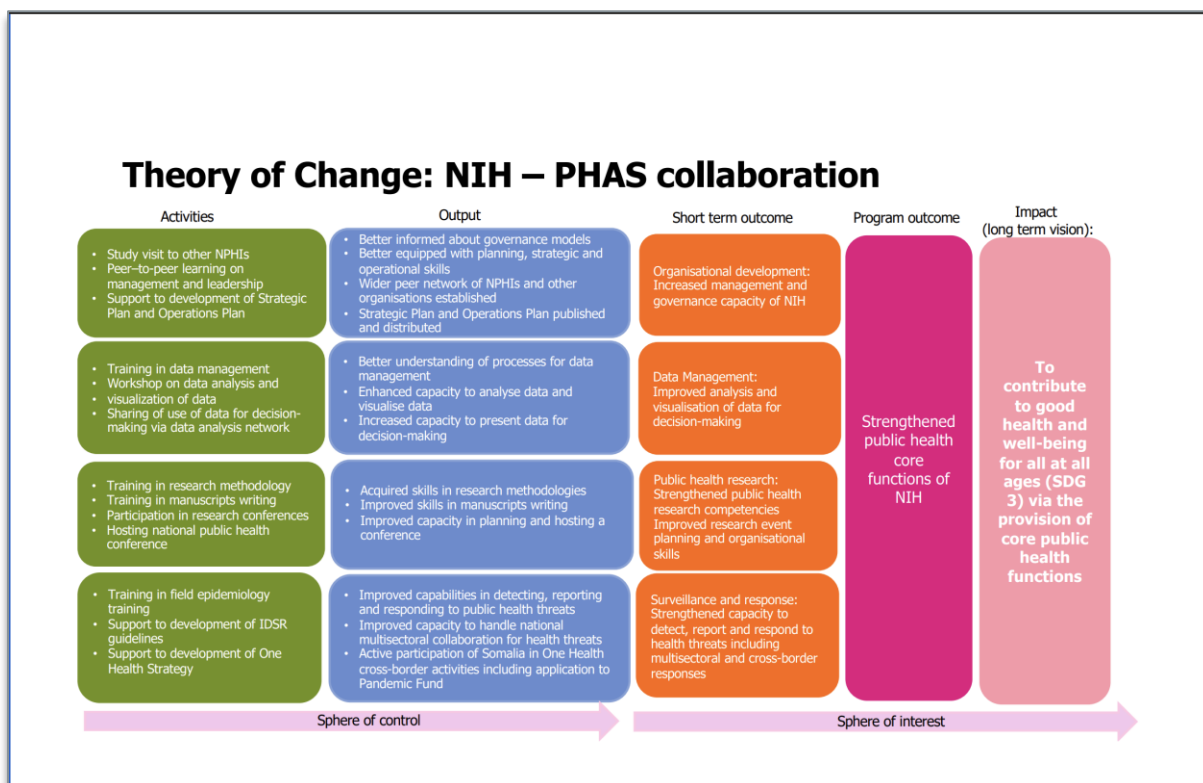
Annex 2 – Theories of change

This annex presents briefly the Theory of Change for each of the three funded projects.

Theory of Change for PHAS

The Theory of Change for the PHAS project is outlined in the figure below. It was provided by PHAS.

Figure 1 Theory of Change for PHAS



The **Theory of Change for the SPIDER/HADDA** pilot project is outlined in the below figure.

Figure 2 Theory of Change for the SPIDER/HADDA pilot project

Activities	Outputs	Programme Outcomes	Long Term Outcomes/Impact
Capacity Building: Train Somali professionals to digitalise health data.	- Training programmes delivered on RAAD usage, data collection, and analysis.	- Enhanced capacity of health sector professionals to use digital tools for data collection, planning and decision-making.	Continuous improvement in health systems capacity for equitable service delivery.
Evidence Generation and Research: Collect and analyse evidence to inform system development.	- Implementation and research evidence collated and analysed. - Research outputs aligned with national health priorities.	- Evidence informs patient care, and eventually the national health system development, covering additional programme areas and regions.	A robust data-informed policy framework for Somalia's health system.
Collaboration Across Sectors: Coordinate with funders and implementors; align initiatives with digital health principles.	- Stakeholder consultations conducted. - Adherence to Digital Investment Principles and Principles for Digital Development.	- Improved collaboration among funders and implementors strengthens the national (Digital) Health System.	Integrated health information systems support universal health coverage in Somalia.
←→ Sphere of Control		←→ Sphere of Interest	

Sphere of Control: Activities such as EHR system design, capacity building, and evidence generation are directly managed by project stakeholders, ensuring accountability and focus.

Sphere of Interest: The long-term impact depends on sustainability, scalability, and integration into Somalia's broader health agenda.

Sphere of Influence: Outputs like operational EHR and evidence-based reports rely on collaboration with local stakeholders and adherence to development principles, and ability of system to use.

Theory of Change for Sida-funded staff positions at WHO

Based on the documentation provided, the evaluation team pulled together a “Theory of Change” in relation to the WHO Sida-funded staff-positions financed by the project and which were the main purpose of the project with WHO. It may be that the staff positions are responsible for matters beyond those contained in the below Theory of Change. This is illustrated in below figure 3.

Figure 3 (draft) Theory of Change: WHO Staff Positions Supporting SPIDER and PHAS in Somalia

Theory of Change –Sida-funded WHO staff positions		
Activities	- Assessment of needs. - Provide technical assistance for NIH operationalisation (support PHAS). - Train health professionals in surveillance, data management - Develop and expand EHR in collaboration with SPIDER. - Advise on health policy and strategy development. - Coordinate stakeholders for aligned health interventions. - Develop sustainability and evaluation frameworks.	↑ Sphere of Control ↓
Short-Term Outcomes	- NIH established as a capable public health institution (by PHAS primarily). - Field epidemiology training programme implemented (linked to IDSRS) also with PHAS. - Integrated HIS strengthened and disease surveillance improved, also with SPIDER generated RAAD data into the IDSR system. - National Health Information Strategy 2025 finalised and initiated. - Health professionals trained in evidence-based health management. - Policy and strategies aligned with WHO standards.	
Programme Outcomes	- Strengthened public health functions reinforce health security & resilience. - Improved data quality, accessibility, and use for policymaking. - Coherent policies - Enhanced workforce and institutional capacities. - Coordinated stakeholder efforts drive cohesive health system strengthening.	↑ Sphere of Interest ↓
Impact	- A sustainable, resilient health system in Somalia capable of addressing emergencies, improving health outcomes, and supporting long-term health development goals.	

Overall aim

Provide a seconded PHAS staff member (2021-2022) and two staff positions - Health Systems Strengthening Officer and Surveillance Officer - to help PHAS and SPIDER and WHO to assess needs, help devise strategies to strengthen Somalia’s health system, help reinforce National

Institute for Health, help improve disease surveillance, modernise health information management, and build data and research capacity.

Inputs

1. **Funding:** Financial support from Sida for three WHO positions (Health Systems Strengthening (HSS) Policy Adviser, Health Systems Officer, and Surveillance Officer).
2. **Technical Expertise:** WHO's knowledge and capacity in health systems, disease surveillance, and digital health integration.
3. **Political Expertise:** WHO's knowledge of Somalia and close connections with FGD and FMS.
4. **Collaboration:** Partnerships with PHAS, SPIDER, and Somalia's Ministry of Health.
5. **Resources:** Tools, digital platforms, and frameworks for health information systems and disease surveillance systems; international standard bearer.

Activities/Outputs

1. Provide Technical Assistance and Capacity Building
 - Provide assistance to PHAS as needed in order to help them in the establishment and operationalisation of the Somalia National Institute of Health (NIH).
 - Train Somali health professionals in disease surveillance, data management, and digital health tools.
2. Strengthen Health Systems
 - Provide assistance as needed to SPIDER to develop and expand the Health Information System (HIS), and help ensure integrated digital platforms in collaboration with SPIDER.
 - Improve disease surveillance systems through the Integrated Disease Surveillance and Response (IDSR) framework.
3. Offer Policy and Strategic Guidance
 - Assist Somali government to develop the National Action Plan for Health Security (2025).
 - Advise SPIDER and PHAS, HADDA and NIH on health policy reforms (and ensure policy-related suggestion from the two projects are aligned with WHO international standards).
4. Coordinate Stakeholders
 - Coordinate efforts among WHO, PHAS, SPIDER, and other stakeholders to align health interventions with Somalia's national health strategies.

Short Term Outcomes (including as a result of support to PHAS, SPIDER and Ministry of Health)

1. Institutional Development
 - NIH established as a capable public health institution (as a result of support role to PHAS)
 - Field epidemiology training programme implemented.
2. Enhanced Health Systems
 - National Health Management Information System (HMIS) extended and integrated including key component focused on EHR (i.e., as a result of interaction with SPIDER).
 - Integrated disease surveillance and response system strengthened.

3. Capacity Development
 - Somali health professionals trained in data-driven health management (as a result of support role to SPIDER and to PHAS).
 - Local expertise in digital health established (as a result of support role to SPIDER).
4. Policy and Planning Milestones
 - National Health Information Strategy 2025 finalised and initiated.
 - Policy in place of Integrated Disease Surveillance and Response System in place.

Longer Term Outcomes (including as a result of support to PHAS, SPIDER and Ministry of Health)

1. Strengthened public health functions in Somalia, that reinforce health security and resilience.
2. Improved health data quality, accessibility, and use for evidence-based policymaking.
3. Coherent policies
4. Enhanced capacity of Somalia's health workforce and institutions for sustainable health system management.
5. Effective stakeholder collaboration leading to a cohesive approach to health system strengthening.

Impact

A sustainable, resilient health system in Somalia capable of addressing public health emergencies, improving population health outcomes, and supporting long-term health development goals.

Overview of roles and intentions for the three projects

I. Role of SPIDER (the Swedish Program for ICT in Developing Regions, hosted by Stockholm University)

Data is key for informed public health decisions, and this requires health workers able to collect, collate and analyse health and nutrition data, in order to improve the ability to measure and track health outcomes, and the impact of health-related endeavours. It is also pivotal for any Integrated Disease Surveillance and Reporting system.

In this context of health system strengthening in Somalia, SPIDER (based in University of Stockholm with strong experience and expertise in Digital Health) focuses on improving digital health infrastructure and the EHR component of a strengthened health information management system (HMIS). It provides advice to the Federal Ministry of Health (MoH) in Somalia. If the opportunity arises, and where relevant, SPIDER/HADDA cooperates with the WHO and the Swedish Public Health Agency in Somalia, as well as with the Somalia National Institute for Health (NIH). It transferred its initial focus on assessing HMIS related needs, and working on a HIS/HMIS strategy to the WHO.

The SPIDER Center, alongside the Federal Ministry of Health and health authorities in Puntland, Galmudug and Banaadir, launched a three-year pilot project titled "Health Alliance for Digital Development and Action" (HADDAA). This project, funded by the Swedish International Development Agency (SIDA), aims to strengthen capacity in Somalia to digitalise patient health data and produce research evidence that will enhance the data quality going into the DHIS2 platform and thereby to inform and further develop Somalia's health system. The project has piloted an EHR system called "RAAD" in Puntland, Galmudug and Banaadir. The pilot aims to expand from 6 initial pilots to an additional 60+ by end of 2025. It also cooperates and coordinates interactions with other relevant actors to inform and help enhance Somalia's focus on the development and expansion of EHR use at national level across Somalia.

Through the below functions and responsibilities, SPIDER supports the establishment of a foundational digital health infrastructure in Somalia. This should help to enable more efficient and data-driven health services, especially in maternal and child health.

SPIDER's main functions and responsibilities in Somalia include:

1. **Digital Health Implementation:** SPIDER leads the rollout of health information technology (RAAD EHR system), specifically in the regions of Banaadir, Galmudug, and Puntland. This digital system for recording patient data electronically is interoperable, and feeds into the national DHIS2 platforms (where health data is aggregated).
2. **Capacity Building and Training:** SPIDER builds digital health capacity for health workforce in the clinics it works with, through training on RAAD and data management, and technology usage to enhance the skills and effectiveness of healthcare providers.
3. **Supporting Data-Driven Decision-Making:** By establishing an EHR (RAAD), SPIDER helps health authorities collect, store, and analyse health data. This helps in making informed decisions and in theory helps to shape health decisions or policies. The focus is on real-time data usage for disease surveillance, resource allocation, and improving healthcare delivery.
4. **Research and Local Relevance:** SPIDER incorporates a research component to ensure the digital solutions are tailored to local needs. Partnering with local researchers, SPIDER aims to make its interventions culturally relevant and sustainable by continuously assessing the project's results and adapting to community-specific requirements for greater impact.
5. **Stakeholder Coordination:** SPIDER facilitates the creation of a local digital health stakeholder group that includes local health authorities, NGOs, and international partners. This network is intended to promote ongoing digitalisation efforts and ensure that digital health solutions align with Somalia's broader health goals.
6. **Enhancing Sustainability:** SPIDER's role also includes ensuring that digital health systems are sustainable beyond the project term. This involves fostering local ownership, use of local materials, services and people, supporting MoH's capacity to maintain and expand the digital health infrastructure, and aligning with Somalia's national health strategies; and providing locally procured IT hardware to pilot regions.

II. Role of PHAS in Somalia

The Public Health Agency of Sweden (PHAS) (in Swedish the Folkhälsomyndigheten (FMH) <https://www.folkhalsomyndigheten.se>) is tasked (amongst other things) with monitoring, reporting and actively participating in public health work within the EU and internationally.

The Public Health Agency of Sweden (PHAS), through with financial support from the Swedish International Development Cooperation Agency (Sida), launched a multi-year, strategic capacity development project (2019–2023) “Capacity development of the National Institute of Health, Somalia”, in partnership with the Federal Ministry of Health and Human Services. This was a result of a decision in Somalia to establish the NIH, and a request to Sweden to provide assistance. The overall goal of the PHAS project is to support an independent National Institute of Health in Somalia, and to strengthen its organisational and institutional capacity in areas such as health workforce development for public health, field epidemiology training, emergency response, disease surveillance prevention and health promotion activities. The aim is for the independent National Institute of Health to become a national centre of expertise that advises the Government on planning and operationalising appropriate and effective national responses to public health topics, including threats. The NIH would also be the main technical body for improving surveillance, laboratory detection and epidemic risk management in the country. The main focus is on reinforcing key functions (whether they are in a NIH or in a Ministry of Health).

The Public Health Agency of Sweden (PHAS) therefore plays a crucial role in strengthening public health capacity in Somalia through its collaboration with the National Institute of Health (NIH) of Somalia. <https://nih.gov.so> PHAS is a key partner focused on helping to build key elements of a self-sustaining public health system in Somalia, and aims to equip the NIH with the necessary skills, networks, and operational capabilities to address Somalia’s public health needs independently. PHAS recognises that work in challenging environments means that linear paths to mission impact and institutional resilience are not always possible, and that this challenge is quite ‘normal’ in Somalia, not exceptional. The PHAS approach tries to break away from linear, results-based management-thinking to acknowledge that theories of change must be mitigated or adapted to uncertain and threatening environments. The focus is on ensuring that key functions are being carried out (whether they are located within an NIH or within a Ministry of Health department).

PHAS main functions and responsibilities in Somalia include:

1. Capacity Building for Public Health Functions:

- PHAS supports the development of core public health functions within Somalia's NIH, including disease surveillance, data management, and public health research.
- This includes training in epidemiology through the Field Epidemiology Training Program (FETP) and providing workshops on research methodology and data analysis.

2. Data Management and Decision-Making:

- PHAS aids in enhancing the NIH's capacity to use, manage, and analyse health data. This supports data-driven decision-making and better response to public health issues across Somalia.

- The partnership involves workshops and knowledge-sharing sessions focused on data visualisation and analytical skills.
- 3. **Organisational Development:**
 - PHAS assists in the organisational development of the NIH, aligned with the NIH's Operational Plan (2021-2023) and Strategic Plan (2024-2028).
 - This includes establishing a governance structure within the NIH and developing the skills of NIH leadership and management teams to create a sustainable, well-functioning public health agency; and to interact with Ministry of Health components.
- 4. **International Networking and Collaboration (research):**
 - PHAS helps connect the NIH with global health institutions, such as Africa CDC, IANPHI, WHO, and others, to foster knowledge exchange and collaboration on public health issues.
 - These networks provide Somali health professionals access to peer learning, resources, and best practices in public health.
- 5. **Sustainable Public Health Infrastructure:**
 - PHAS supports the development of a resilient, independent public health infrastructure in Somalia. This aims to reduce the Somali health system's reliance on external support and foster long-term sustainability.
 - The collaboration is focused on establishing a foundation for Somalia's public health operations that can withstand future health challenges and be independently managed by Somali health authorities.
- 6. **Strategic and Operational Support:**
 - Through ongoing support and training, PHAS assists with strategic and operational management at the NIH, enabling the institute to lead national health initiatives effectively.
 - PHAS also provides guidance in planning public health policies, aligning Somalia's public health priorities with international standards and best practices.

III. Role of WHO in Somalia

WHO has a broad set of focus areas that are relevant to both the PHAS and SPIDER projects:

1. Strengthening Disease Surveillance and Health Information Systems:
 - WHO helps to develop and enhance Somalia's health management information systems (HMIS) and disease surveillance frameworks. This involves helping the Federal government to aim towards an integrated system to collect and analyse health data across regions; to improve data quality, accessibility, and use. This should allow Somali health authorities to better track diseases, allocate health resources, and respond to public health emergencies.
 - PHAS work within NIH (FETP training etc) and SPIDER work with HADDA/RAAD are relevant to the proposed use and functioning of the IDSR (Integrated Disease Surveillance and Response) system, that WHO is focused on enhancing and solidifying.

2. Support to the National Health Institute (NIH):
 - WHO collaborates with PHAS and ensures alignment with WHO standards, and complements as necessary PHAS's institutional capacity-building expertise in organisational development and epidemiology training. And policy and strategy work - (see below).
3. Capacity Development and Training:
 - WHO supports capacity development at both federal and regional levels in particular in training health professionals in disease surveillance, data management, and use of digital health tools to ensure data-driven decision-making.
 - WHO also supports the development of local expertise to use health data to monitor and to plan policy, to help build a resilient health workforce in Somalia.
4. Advising on Policy Development and Health System Reform:
 - WHO provides policy guidance to the Somali government, and helps ensure that policies and strategies align with international health standards and best practices; and advises on public health legislation, resource allocation, and sustainable health financing.
 - WHO's policy support includes using needs assessments and an evidence base to devise a HIS strategy (with MoH Somalia) aimed at several things including ensuring efficient data collection at aggregate and individual levels, and patient tracking and response capabilities, particularly for maternal & child health services, a priority. This directly links to activities spear-headed by SPIDER/HADDA, but also to actions by PHAS/NIH.
5. Monitoring, Evaluation, and Sustainability Planning:
 - WHO works with other actors to develop a framework for monitoring and evaluating the progress and impact of health system interventions. This includes tracking health outcomes, resource use, and system performance.

V.1 WHO and PHAS

As the UN lead technical agency for health, WHO provides technical support, facilitates relevant partnerships, assists capacity-building endeavours with PHAS project (non-financial MoU 2021).

V.2. WHO and SPIDER

WHO and SPIDER agreed (non-financial MoU in early 2021) to collaborate on developing an integrated and digital HIMS, and integration with an IDSR system in Somalia.

Annex 3 - Stakeholder analysis and engagement plan

The evaluation team conducted a stakeholder analysis, summarised below, in order assess the involvement and influence of key parties in the Somalia health initiatives supported by Sweden and to develop an engagement plan.

Stakeholder Analysis

Key Stakeholders:

1. Public Health Agency of Sweden (PHAS/FoHM):
 - **Role:** Leads the establishment of Somalia's National Institute of Health.
 - **Interests:** Strengthening Somalia's public health governance, enhancing research capacity, and improving surveillance and emergency response systems.
 - **Influence:** High, as the main technical lead in NIH development.
2. SPIDER (Swedish Program for ICT in Developing Regions):
 - **Role:** Develops Somalia's Electronic Health Records system, as part of HMIS, through the HADDA project and development and roll-out of RAAD.
 - **Interests:** Advancing digital health infrastructure, ensuring data-informed health policies, and promoting ICT-enabled solutions for equitable healthcare.
 - **Influence:** High, as a technical driver of digital health solutions.
3. World Health Organization (WHO):
 - **Role:** Provides strategic support and technical assistance through three ⁸⁵ funded positions, facilitating collaboration between PHAS, SPIDER, and Somali stakeholders.
 - **Interests:** Aligning health interventions with international health standards; improving Somalia's emergency preparedness and response.
 - **Influence:** Medium to high, as a coordinator and technical partner.
4. Somali Federal Government:
 - **Role:** Oversees the health system and implements the Essential Package of Health Services (EPHS).
 - **Interests:** Strengthening governance, improving health policy, health regulatory framework, public service delivery, and achieving Universal Health Coverage (UHC).
 - **Influence:** Medium, with limited resources but essential for local legitimacy and scalability.
5. Federal Member States (e.g., Puntland, Galmudug, Banaadir):
 - **Role:** Execute health programmes and maintain regional health governance.

⁸⁵ Health Systems Strengthening (HSS) Policy Adviser seconded by PHAS, funded by Sida, 2021-2022; Health Systems Officer; and Surveillance Officer. The two latter are WHO-hired Somalis in the WHO Office in Mogadishu.

- **Interests:** Strengthening regional/state health systems and policies; influencing federal level; and enhancing data collection capabilities.
 - **Influence:** Medium, critical for localised implementation.
- 6. Healthcare Clinics (Public).⁸⁶
 - **Role:** Deliver health services, including data reporting and integration.
 - **Interests:** Access to training, resources, and sustainable systems for improved data uptake, data recording and health service delivery.
 - **Influence:** Low to Medium, as implementers of health initiatives.
- 7. Swedish Embassy in Kenya (Somalia Section):
 - **Role:** Oversees funding and alignment with Sweden's strategic goals.
 - **Interests:** Ensuring impactful, sustainable development aligned with Sweden's broader priorities.
 - **Influence:** High, as the primary funder.
- 8. Somali Diaspora:
 - **Role:** Provide remittances and technical expertise; Found key entities such as NomadiLab. HADDA has also benefitted from diaspora engagement and initiative.
 - **Interests:** Supporting Somalia's recovery and contributing to sustainable health solutions.
 - **Influence:** Medium, a valuable resource for expertise and funding.

⁸⁶ Had the evaluation team had more time, it would have been preferable to review private sector clinics and contrast and compare.

Stakeholder Analytical Grids

Below are draft stakeholder analysis grids. These help us to identify significant actors that are key to a quality evaluation of the three projects, and to better situate their interests, needs, and influence on the projects and on health systems in Somalia.

Table 15 Stakeholder Analytical Grid

	Stakeholder	Interests and Needs	Influence and Importance	Significance	Impact	Overall Assessment
Internal	Public Health Agency of Sweden	Demands: Efficient establishment of NIH, capacity building. Wishes: Effective institutional strengthening.	Significance: Key technical lead and implementer. Impact: High; essential for successful establishment of NIH.	10	10	High
		Primary Interest: Stronger public health governance in Somalia. Secondary Interest: Knowledge transfer.	Challenges: Alignment with Somali political and institutional dynamics.			
Internal	SPIDER	Demands: Development and operationalisation of EHR. Wishes: Adoption of RAAD digital tool.	Significance: Central to digital health infrastructure development. Impact: High; pivotal to achieving UHC.	10	10	High
		Primary Interest: Deployment of digital health solutions. Secondary Interest: Scalability across fragile contexts.	Challenges: Fragmented systems, ensuring interoperability.			
Internal	World Health Organization (WHO)	Demands: Alignment with global standards. Wishes: Strengthened health systems and preparedness.	Significance: Strategic coordination and technical expertise. Impact: Medium-High; facilitates collaboration.	9	9	Medium

		Primary Interest: Integration of surveillance and response systems. Secondary Interest: Capacity building.	Challenges: Political delays, logistical constraints.			
Internal	Swedish Embassy (Somalia Section)	Demands: Oversight of projects and alignment with Sweden's goals. Wishes: Achieving sustainable outcomes.	Significance: Oversees funding and aligns priorities. Impact: High; critical for funding continuity.	10	10	High
		Primary Interest: Effective resource use and outcomes. Secondary Interest: Positive diplomatic impact.	Challenges: Coordination across partners.			
External	Somali Federal Government	Demands: Sustainable health governance and service delivery. Wishes: Enhanced public health capacity.	Significance: Essential for legitimacy and implementation. Impact: Medium; enables policy integration.	8	8	Medium
		Primary Interest: Health equity and outcomes. Secondary Interest: Economic benefits.	Challenges: Limited resources, political instability.			
External	Federal Member States	Demands: Regional governance and operational systems. Wishes: Enhanced capacity to manage health regionally.	Significance: Critical for local-level implementation. Impact: Medium; facilitates decentralised systems.	7	7	Medium
		Primary Interest: Equitable service delivery. Secondary Interest: Digital system alignment with regional needs.	Challenges: Funding. Uniformity. Balancing federal and regional priorities. Regulatory oversight. Private sector.			
External	Healthcare Centres	Demands: Access to resources and training. Wishes: Reliable data systems and infrastructure.	Significance: Direct implementers of health services, and users of data training and data systems. Impact: Low-Medium; requires external support.	6	6	Low

		Primary Interest: Enhanced data-informed healthcare. Secondary Interest: Professional development.	Challenges: Low regulatory oversight. Several systems across Somalia (no uniformity). Cost of saving info.			
External	Somali Diaspora	Demands: Mechanisms to contribute expertise and remittances. Wishes: Support Somalia's recovery.	Significance: Source of funding and expertise. Impact: Low; valuable for funding and advocacy.	5	5	Not possible to engage
		Primary Interest: National system sustainability. Secondary Interest: Global perception of Somalia.	Challenges: Limited formal engagement mechanisms.			
External	Other Donors	Demands: Learn lessons and strategies from the evaluation. Avoid duplication of effort. Coordinate actions.	Significance: Source of background data, key expertise on Somalia and on health, and on donor environment; and perception information.	6	6	Low
		Primary interest: Enhanced governance; enhanced health care.	Challenges: turn-over; limited interaction with projects.			

Table 16 Overview of institutions

Institution	Interest	Influence
Public Health Agency of Sweden	High	High
SPIDER	High	High
WHO	High	High
Somali Federal Government	High	High
Swedish Embassy (Somalia Section)	High	High
Federal Member States	Medium	High
Healthcare Providers	High	Medium-Low
Somali Diaspora	High	Medium -Low
Other Development Partners	Medium	Medium -Low

Table 17 Influence and interest matrix

	High Influence	Medium-Low Influence
High Interest	Public Health Agency of Sweden SPIDER WHO Somali Federal Government Swedish Embassy (Somalia Section)	Healthcare Providers Somali Diaspora Experts
Medium-Low Interest	Federal Member States	Other Development Partners

Stakeholder engagement plan

Our stakeholder mapping exercise allowed the team to identify stakeholders (and intended users) and establish an engagement plan. We define 'stakeholders' as individuals or organisations affected in some way by the outcome of the evaluation process or affected by the performance of the projects or involved in delivering the projects, or both. The exercise identified key stakeholders, assessed their interests and motivations, constraints, influence. This helped us to identify key entry points for engagement and devise practical and realistic strategies for engagement. It also allowed the team to verify stakeholder needs (in relation to the evaluation) and clarify stakeholder participation.

To note, this has been informed by initial conversations with the PHAS, SPIDER, WHO and the Embassy of Sweden (Somalia Section) and background documentation provided by them; as well as interviews with other development actors working on health in Somalia. The stakeholder analysis is preliminary. The list reflects stakeholders constituting primary and secondary network categories.

The project managers and development actors have provided suggested list of key informants. In the below tables we removed emails and telephone numbers but the evaluation team has these. Importantly, **it will not be possible to engage with each of the (below listed) suggested key informants, given time-span and size of the evaluation.** Where and when possible, interviews of national health providers, data staff, and government officials will take place primarily in Somali. It will not be possible to engage with representatives of the Somali diaspora. The evaluation team will endeavour to ensure a balanced representation across different stakeholder groups (the Diaspora point notwithstanding). It is aimed to hold roughly 40 interviews/focus group discussions.

The primary stakeholder engagement modus will be through one-on-one interviews (virtual or in person) using a semi-structured set of interview questions, adapted to the institution and individual in question.

A second modus will be field observations including through focused group discussions (FGD) in the field (primarily in relation to SPIDER/HADDA and the health facilities that have received training). These will be in Mogadishu and in Dhusamareb and will include two visits to health facilities in each region; FGD with health centre staff; key informant interviews (KII) with SPIDER field teams; and key informant interviews with representatives from the HMIS teams of the relevant MoH.

PHAS NIH collaboration: Strengthening core public health functions – List of key informants

Due to GDPR and confidentiality, names and titles have been omitted from the publication.

Table 18 List of Key informants, PHAS (31 key informants, 14 priority and 17 additional)

Organisation	Title	Name
Federal Ministry of Health		
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
National Institute of Health		
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
Ministry of Health Development (MoHD), Somaliland		
	Staff member	Respondent

	Staff member	Respondent
	Staff member	Respondent
WHO-Somalia		Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
PHAS team		Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent
	Staff member	Respondent

SPIDER-HADDA – List of Key Informants

This list has been provided by SPIDER management staff to the evaluation team.

Due to GDPR and confidentiality, names and titles have been omitted from the Publication.

Table 19 List of Key Informants, SPIDER-HADDA (27 key informants, some for focus group discussions)

Organisation	Title	Name
Field Visits		
Dayah Health Center (HC) – Dhusamareeb	Staff member	Respondent
Regional Hospital – Dhusamareeb	Staff member	Respondent
Hamaarweyne HC - Mogadishu	Staff member	Respondent
Waaberi HC – Mogadishu	Staff member	Respondent
Gambool HC – Garowe	Staff member	Respondent
Waaberi HC – Garowe	Staff member	Respondent
Health Facilities		
Waberi HC (BRA)	Staff member	Respondent
Dayah HC (GM)	Staff member	Respondent
Waberi HC (PL)	Staff member	Respondent
Waberi HC (Banadir)	Staff member	Respondent
Puntland	Staff member	Respondent
BRA	Staff member	Respondent

SPIDER Staff		
SPIDER	Staff member	Respondent
SPIDER	Staff member	Respondent
SPIDER	Staff member	Respondent
SPIDER	Staff member	Respondent

Government Officials		
FMoH	Staff member	Respondent
FMoH	Staff member	Respondent
FMoH	Staff member	Respondent
MoH Puntland	Staff member	Respondent
MoH Puntland	Staff member	Respondent
MoH Puntland	Staff member	Respondent
MoH Galmudug	Staff member	Respondent
MoH Galmudug	Staff member	Respondent
MoH Galmudug	Staff member	Respondent
Implementing Partners		
NomadiLab	Staff member	Respondent
NomadiLab	Staff member	Respondent
NomadiLab	Staff member	Respondent
NomadiLab	Staff member	Respondent
NomadiLab	Staff member	Respondent
NomadiLab	Staff member	Respondent
NomadiLab	Staff member	Respondent
SIDRA	Staff member	Respondent
SIDRA	Staff member	Respondent
diaspora Initiative consultant	Staff member	Respondent

Annex 4 - Data collection guide

Data collection consists of document collection and analysis, gathering available and relevant data from the relevant institutions and key informants; and conducting interviews and focus group discussions. The evaluation questions are the main framework against which discussions with informants will be framed using a semi-structured interview approach. The interview questions will be adapted to the key informant or the focus group discussion, as required and relevant and in relation to data gathered. Below a set of concise interview questions for guidance is provided. Semi-structured interviews generally last 30 minutes to 1 hour. Focus group discussions may last 2 hours.

PHAS/NIH Semi-structured Interview Guide

1. **Effectiveness of Outcomes:** What progress and outcomes have been achieved in relation to bolstering key functions usually linked to a NIH, or enhancing the health system in Somalia, overall? Can you give a couple of examples? What factors have contributed to or hindered this success?
2. **Capacity Development:** How have the trainings, the research workshops and provision of technical and other expertise provided by PHAS influenced NIH institutional governance, how it manages and analyses data, and its approach to research and building research capacity in Somalia or in Somalia's NIH?
3. **Impact of Outputs:** Can you provide examples of how strategic plans, operational tools, or peer networks have led to tangible improvements in Somalia's public health functions/ in functions at the NIH?
4. **Collaboration and Efficiency:** How effective has the collaboration been with the Federal Ministry for Health, State Health Ministries, and other partners? What about interactions with SPIDER (focus on EHR and RAAD through HADDA) and the WHO? How has this interaction helped NIH? For example, WHO work on the IDRS and how the RAAD feeds info into the IDRS portion of the DHIS2 system?
5. **Alignment with National Priorities:** What mechanisms are in place to ensure sustainability and local ownership of NIH initiatives? To what extent have PHAS initiatives aligned with Somalia's national health strategies? Is there duplication of functions between the Ministry of Health and the NIH? Where does NIH sit and how does it align to the Ministry? How does this help or hinder Somalia's health-related priorities?
6. How have improvements in NIH ability to use surveillance, data analysis and response capabilities affected public health threat management in Somalia? How?
7. **Ownership and Co-Creation:** What evidence shows Somali stakeholders have embraced ownership of these initiatives?
8. What unexpected effects (positive or negative) have emerged from the implementation of this PHAD programme focused on bolstering NIH functions?
9. **Lessons for the future:** Based on your experience, what was successful and what was not – what suggestions for the future?
10. **Sustainability:** What mechanisms have been established to ensure the sustainability and scalability of PHAS/NIH efforts in the absence of external funding?

SPIDER/HADDA Semi-structured Interview Guide - Macro Level

1. **Design:** What was the process used to design RAAD? Who was involved? Was it "adjusted" or "tailor-made" for each health clinic/facility? How? How do you collect feedback?
2. **Capacity:** What measures were used to train health workers to use the system? What were main positive and negative aspects? What has been the experience to learn about and to use the RAAD?
3. **Ownership:** How has SPIDER fostered local ownership of RAAD and EHR-system in the health clinic/facility? For example, is it adjusted for specific needs of the health clinic or is it a standard EHR that is the same in all the pilots? What do patients think of the EHR? How does SPIDER know? How is the interface of information between the health worker, the pharmacy, and the lab at the clinic? How engaged are clinics in long-term plans to use RAAD? How much "ownership" do patients have? How do you know?
4. **Progress :** How do you monitor progress? Do all health clinic workers in each clinic use RAAD? Is it easy to connect it into the DHIS2? Do you use less paper and more electronic systems? Or do you have first paper, and then transfer to EHR and then to DHIS2 - electronically or via printed paper? Does it create extra work?
5. **Impact:** What are the main successes of the RAAD pilot initiative? Has the RAAD helped to improve electronic data collection? data analysis? Has it been uploaded into DHIS2 so it can inform health decision-making in Somalia? How do you know? What were some main challenges? For example, has the information generated by the EHR helped to provide better evidence about the community/or City? Has this made any changes in health solutions provided? How has SPIDER pushed for the data to be used and analysed effectively?
6. **Digital Health Impact:** To what extent has SPIDER's efforts to install RAAD and an EHR (for individual patients at the local level) helped to increase discussions at the federal level or national level about the need for a unified EHR system or at least for widespread use of EHR systems (RAAD or others) across Somalia? For example, has the information generated by the RAAD helped to provide better evidence about the community/or City? Has this resulted in any changes in what or how health solutions are provided?
7. **Sustainability:** What mechanisms are in place to ensure the scalability and long-term functionality of SPIDER/RAAD/HADDA's digital health initiative? How will it be scaled up, using what financing, and who will do it? What are the concrete plans in place to expand? Examples? How will the 60+ additional clinics come on board in 2025?
8. **Alignment and Standards** Is the EHR in line with Somalia's health strategy? What does SPIDER do to promote alignment with DHIS2 and other EHR systems in Somali? How does it interact with the Ministry of Health? Other actors? How does it help align actors and unite them?
9. **Lessons Learnt:** What are the main successes and challenges? For the next roll out of RAAD, what are the main things to remember or to think about?

HADDA/SPIDER Semi-structured Interview Guide at field level / Field visits and health worker

1. **System Knowledge:** What is your understanding of how RAAD/ EHR system works, and why? Was RAAD "adjusted" or "tailor-made" for your health clinic? How?
2. **Capacity Development:** How have training or capacity-building sessions helped you use and apply RAAD effectively? Is it easy to use? Is there a Help Desk or a "help" person? How has this helped you? How do you make sure the data goes into the DHIS2? Who does that? Are there enough tablets/computers/electricity to make this a tool you use all the time?
3. **Impact and Feedback:** How has the EHR system/RAAD affected your work? What do you like about it? What challenges have you faced? Any suggestions for improvement?
4. **Comparison:** How does the EHR/RAAD system⁸⁷ compare to the traditional paper register system in your experience? Do you use both systems in parallel?
5. **Resource Management:** Does your health clinic have the resources it needs to use RAAD, to maintain the infrastructure and to access the cloud, and to pay for needed subscriptions? To train new health workers?
6. **Strengths and Successes:** What would you say are the biggest strengths or successes of the RAAD so far?
7. **Future Improvements:** What changes or improvements would you suggest for the future?
8. **Ease of Use:** How easy is the patient registration process to use? Do you find it effective? What feedback have you heard from patients or other staff?
9. **Patient Flow:** Can you describe the patient flow from registration to receiving medication? Are there any bottlenecks or challenges? Have you been able to retrieve data about a patient from the "RAAD" cloud? How has this helped the patient? What about in relation to pharmacies or laboratories? Is the electronic system shared with them? Does this help patients or health care workers? How?
10. **Follow-ups and Reporting:** How do you manage patient follow-ups and reporting? Are there any practices that could be improved? Does RAAD help in this? How could it help if it does not? How do you send data to the DHIS2? Can you describe the process? Do you send electronic data to the district level or do you have to print out the data and send it on paper? Or how does reporting work?

It is proposed also to observe reporting (and to see if there is dual reporting – i.e. the register and the system) in the health centres. Also to try to understand if a pre-condition has been met for moving the system into the production phase which is: minimising reporting variance to ensure the data in the register closely matches the data in the system.

WHO Semi-structured Interview Guide

⁸⁷ RAAD system is part of HADDA and aims to strengthen Somalia's health system using digital tools for data and knowledge sharing.

1. **Contributions to NIH and HADDA:** How have the WHO-funded positions (Health Systems Officer; Surveillance Officer; and previously the Health Systems Strengthening Policy Adviser) contributed to implementing these projects, or laying the groundwork to help them be successful?
2. **Effectiveness of Support:** Has WHO technical support facilitated alignment of NIH and HADDA initiatives with broader health strategies in Somalia? If so, how? Can you give an example? What role has WHO played in aligning the NIH and HADDA projects with Somalia's broader health system strategies? Can you talk about the assessment of needs related to installing an EHR system across Somalia, and the Strategy related to this? Did WHO take over these dimensions from SPIDER and what has WHO achieved with Somalia so far?
3. **Impact on Health System Response:** What evidence exists to show WHO's involvement has enhanced Somalia's health system's needs related knowledge, its health strategies, or its response capabilities (related to Swedish-funded initiatives and positions)?
4. **Collaboration and Knowledge Sharing:** Has WHO fostered collaboration between Swedish partners, Somali stakeholders, and other actors? Can you give an example?
5. **Alignment and Standards:** How has WHO helped ensure alignment between SPIDER and PHAS initiatives with Somali government priorities and international health standards? What has WHO done to enhance coordination and data-sharing? What about IDRS?
6. **Sustainability:** How effectively has WHO built local capacity and ownership for the ISDRS? What mechanisms has WHO established to ensure the sustainability and long-term impact of its Sida-funded roles?
7. **Scalability and Integration:** To what extent has WHO contributed to the scalability and integration of health information and surveillance systems in Somalia?
8. **Lessons Learnt:** What challenges and successes have emerged from WHO's interactions with SPIDER and PHAS, and how can these inform future partnerships? What insights can be drawn from WHO's role in enhancing collaborations in other fragile and conflict-affected settings?

Annex 5 - Potential indicators of success

The inception report provides a succinct indication of potential indicators of project success. Below we present a longer list of potential indicators that we will look for as we collect evidence. While gathering qualitative and quantitative data, the evaluation will look for evidence related to the indicators presented below. These indicators are suggestions for what might be found, and what we intend to look for. The evaluation will not cover each and every one of these but will use data collected to help inform its overall aggregated evaluation findings and conclusions. For much of the data, unless available in documents available to the evaluation team, the timeframe is too short to find the data. Interviews will help fill out this data.

Institutional Strengthening Indicators

Governance and leadership:

- Existence of a strategic plan or operational framework adopted and implemented by the NIH.
- Evidence of NIH involvement in national health policymaking (e.g., published policy briefs, recommendations).
- Any government health policies or plans informed by NIH data or advice.
- Established governance structures, such as functional boards, committees, or leadership teams within the NIH.
- Evidence of sustained institutional governance and leadership at NIH (e.g., strategic decisions or national health policies informed by NIH).
- Number and quality of partnerships established (e.g., with local universities, global health organisations).
- Peer networks and collaboration outputs among stakeholders, including joint initiatives.
- OR any of the above within the Ministry of Health enhanced because of PHAS efforts.

Advocacy and influence:

- Mechanisms for feeding information from NIH to Federal decision-makers.
- Frequency and reach of NIH advocacy efforts (e.g., policy briefs, public awareness campaigns).
- Signs of NIH's ability to articulate public health priorities and influence government action.
- NIH's capacity to convene stakeholders to address national public health challenges (e.g., meetings, task forces).
- NIH's contribution to addressing specific Somali health challenges through research (e.g., disease burden studies, outbreak investigations).

Research capacity:

- Number of research studies conducted or commissioned by NIH (e.g., peer-reviewed publications, technical reports).
- Research output aligned with national health priorities (e.g., maternal and child health, infectious diseases).

- NIH's ability to secure funding for research activities (e.g., grants, partnerships).
- Frequency and quality of NIH-hosted events, such as public health research conferences or workshops.
- Participation of NIH staff in regional or global research networks.
- Number of health workers trained in EHR, FETP/epidemiology, and surveillance.
- Uptake of knowledge and skills among NIH and HMIS users (qualitative evidence from interviews).
- Evidence of enhanced capacity to respond to public health threats, such as disease outbreaks.

Networking and partnerships:

- Number and type of partnerships established with local and international stakeholders (e.g., universities, WHO, donor agencies).
- Engagement in global public health networks, such as IANPHI or WHO-led initiatives.

Institutional resilience:

- NIH's ability to function independently of external technical assistance or funding.
- Mechanisms in place to sustain capacity-building efforts.
- HADDA ability to function independently; deal with staff fluctuations, etc.

Data System Strengthening Indicators

Data capacity service delivery:

- Proportion of health facilities using the RAAD. Data on how data from RAAD is reported to DHIS2 including the sub-set IDSR system.
- Functionality of SPIDER assisted health centres for data reporting.
- Increased capacity of health centres to collect, analyse, and use health data for decision-making (e.g., % of health centres using RAAD and its uptake into DHIS2).
- Evidence of increased capacity to conduct health surveillance, data analysis, or research (NIH) because of better data from RAAD or from IDSR.
- Development and dissemination of operational guidelines, training manuals, or tools by SPIDER.
- Satisfaction levels of trainees with the quality and relevance of capacity-building activities.

Health information systems:

- Functionality of HADDA/RAAD and IDSR systems (e.g., uptime, user satisfaction, integration across regions).
- Number of trained health workers actively using RAAD.
- Quality and utilisation of health data for planning and decision-making (e.g., evidence of data-informed resource allocation).
- Percentage of districts and health facilities covered by IDSR reporting. RAAD reporting.

Equity and access:

- Coverage of underserved or marginalised populations in health data systems particularly for women and children (i.e., where are the centres SPIDER focused on; what mechanisms are there in the NIH to ensure focus on women and children in marginalised areas?)
- Are female and male data technicians trained – why – or why not – what difference does this make?

Sustainability and scalability:

- Evidence of replication or scaling of successful models in other regions or states, or plans to do so
- Availability of funding or institutional support mechanisms and resources to sustain capacity building, system operations, institutional support mechanisms.
- Integration and alignment of NIH, RAAD, and IDSR with national health priorities.
- Degree of coherence among PHAS/FoHM, SPIDER, WHO, and Somali stakeholders.

Key Considerations for Lessons Learnt

- What modalities were most effective (e.g., WHO staffing, SPIDER's ICT expertise, PHAS public health leadership expertise?)
- What operational challenges hindered implementation, and how were they addressed? What risk management/resilience is potentially possible in the future?
- How can similar interventions in fragile contexts be designed for greater impact, sustainability, and scalability?

Annex 6 – Documents consulted

Scoping Interviews

About 15 interviews took place during the scoping and inception phase:

- Embassy of Sweden – Somalia Section
- Project managers at WHO, SPIDER, FoHM
- Bilateral and multilateral donors focused on the health sector in Somalia: Canada, ECHO, Finland, SDC Switzerland; UK FCDO, USAID, UNICEF, World Bank
- International non-governmental organisations such as: Action Against Hunger, Save the Children.

Documents

Background documents

- 2024 Sweden's strategy for Somalia 2018-2022. <https://www.government.se/contentassets/2918db075d7f450b8137e5ffd27c01eb/strategy-for-swedens-development-cooperation-with-somalia-2018-2022.pdf> (extended to 2025)
- 2024 Implementing Health System and the New Federalism Somalia - Opportunities & challenges (Said & Kicha) - Frontiers in Public Health 2024
- 2024 Application of Essential public health functions WHO IANPHI 2024
- 2024 Global Health Security Agenda – website : <https://globalhealthsecurityagenda.org>
- 2023 European Public Health Conference - Abstract of Collaboration between the National Institute of Health Somalia and the Public Health Agency of Sweden
- 2022 WHO Comprehensive Assessment of Somalia's Health Information System
- 2021 Somali Private Sector Partnerships in Health – Market Systems Assessment Swiss TPG
- 2020 Somalia Essential Package Health Services – Executive Action and General. MHHS FGS - 2020
- 2020 Round Table Learning Note Strengthening Somalia's Health Systems: emerging stronger from COVID-19 HPG- ODI 2020 Abstract 4G Workshop-
- Reconstructing public health institutions in Somalia. European Journal of Public Health – Vol 30 – Supplement 5 – 2020
- Africa-CDC-NPHI-Development-Framework-EN - Africa Union and Africa CDC
- 2020 The Somalia Health and Demography Survey - SHDS - 2020
- 2014 Opportunity for health systems strengthening in Somalia - The Lancet, Vol 2, April 2014 www.thelancet.com/lancetgh

The evaluation team received a great many documents from related specifically to the three projects under evaluation as well as related to Somalia. These are not each listed below. Instead, we provide an indication of the type and number of documents.

PHAS (about 33 documents)

Project agreements

MoU between PHAS and WHO

Annual reports to Sida

NIH documents and reports

Consultants reports

IANPHI Annual Meeting Stockholm 2022 Side event

Meeting preparation documents

SPIDER/HADDA (about 16 documents)

Project agreements with Sida and related documents

MoU between SPIDER and WHO

Annual reports to Sida

HADDA documents and reports

Concept Paper

Implementation Risk Plan

RAAD HER Roadmap

Somali Health Inform System Strategy Inception Report

SPIDER_SIDRA Final Draft Report on Usability and Acceptability of HER

WHO (about 20 documents)

Grant agreement and extensions

Notes on strategic dialogues

Research and concept papers

Inauguration of first Geographic Health Information System Centre in a WHO Country Office 2023

MoUs with PHAS and with SPIDER

Somalia specific (several... including)

Strategy for Sweden's development cooperation with Somalia 2018-2022

Somalia-Health-Sector-Strategy-Plan-III

Somalia Essential Package of Health Services 2020 – Executive Action

Annex 5 Terms of Reference

Terms of reference for Evaluation of Sweden's support to health system strengthening in Somalia through the Public Health Agency of Sweden (PHAS), SPIDER and WHO

Introduction

Sweden's development cooperation with Somalia (2018-2022, extended to 2024) has the objectives to contribute to sustainable peace, strengthened resilience to crises and disasters, greater respect for human rights, gender equality, environmentally and climate-resilient sustainable development and health equity with focus on Sexual and Reproductive health and Rights (SRHR).

Somalia has experienced decades of conflict, humanitarian crises, natural disasters, coupled with recent shocks of the COVID-19 pandemic, recurring drought and locust infestation. Despite gradual progress in the health sector, for example in maternal health, there remains huge challenges in equitably financing health services and realising children's, in particular girls', right to health. In terms of indicators on health, sexual, reproductive health and rights, as well as nutrition, Somalia ranks among the worst in the world. Due to drought, conflicts, and insecurity, the expected acute health needs in 2024 amount to approximately 6.7 million persons across the country.

The health sector is almost exclusively financed by bilateral donors or by multilateral international organisations. The funding level from the federal government is extremely low and in practice means scant resources for public health care service delivery for the population.

Sida has an overarching goal, and two strategic objectives relating to health;

Health equity focusing on sexual and reproductive health and rights

- Greater and equitable access to health and medical care, focusing on women and children.
- Greater access to and respect for sexual and reproductive health and rights.

There are currently four agreement partners related to the health objective, of which the Public Health agency of Sweden, Stockholm University/SPIDER, and WHO are three. The final one is Save the Children Sweden.

2. About the evaluation object: interventions to be evaluated

2.1 PHAS: Somalia National Health Institute

The Public Health Agency of Sweden (PHAS) has a 6-year (2019-2025) collaborative project with the National Institute of Health (NIH) Somalia on capacity-building, which is funded by Sida with a total of

SEK 40 million. The original agreement with Sida has been extended by two years, until 31 May 2025, due to the low pace of implementation during the COVID-19 pandemic.

The overall goal of the project is to establish an independent public health agency, the National Institute of Health (NIH) in Somalia in cooperation with the National/Federal Somali Ministry of Health and the five regional ministries of health⁸⁸.

The project aims to strengthen core public health functions⁸⁹⁹⁰ within NIH including:

- Disease surveillance - ISDS TWG, Field Epidemiology Training Programme (FETP)
- Data management, analysis and visualisation of data – use of data for decision-making (data analysis workshops and network)
- Public health research capacity – research methodology workshops and research conference
- Organisational development according to the NIH Operation Plan 2021-2023, NIH Strategic Plan 2024-2028 and Operation Plan
- Widened network for learning and sustainable relations – IANPHI membership, Africa CDC, other NPHIs in SSA, AFENET, WHO, SPIDER/Stockholm University, Umeå University, Statistics Sweden, etc.

In addition, the collaboration will include capacity development of strategic and operational management.

The project has supported the creation of a management structure as well as key functions of NIH. It has provided trainings and opportunities peer to peer networking and exchange in international conferences and workshops.

2.2 SPIDER: Digital Health Somalia

SPIDER is leading the implementation of a health system strengthening in support of the Federal Ministry of Health Somalia, a project that started 2019 and is set to run through 2024, with plans for an extension until 30 June 2025. The original agreement with Sida has been extended due to delays caused by COVID-19 pandemic and procurement processes which impeded the procurement of essential digital solutions. This project is funded by Sida via the Embassy in Nairobi (Somalia division) with a total budget of SEK 40 million.

The primary objective of the project is to improve public health, more specifically maternal and child health, by strengthening the health information system in Somalia. This is to be achieved through the digitalisation of health data storage and sharing in the selected regions of Banaadir, Galmudug and

⁸⁸ As of October 2023, the Federal Republic of Somalia officially has seven federal member states with their own ministries of health; Galmudug, Hirshabelle, Jubaland, Puntland, Khatumo, South West and Somaliland.

⁸⁹ <https://www.ianphi.org/includes/documents/sections/tools-resources/nphi-core-functions-and-attributes.pdf>

⁹⁰ <https://africacdc.org/download/framework-for-development-of-national-public-health-institutes-in-africa/>

Puntland. The essential element of the project is the implementation of human centred technology which adapts to the needs of health workforce, and the national health system and care pathways. The initiative also integrates capacity-building and data management components to support the ongoing digitalisation of Somalia's health information systems.

A research component underpins the project implementation strategy, ensuring that the initiative is deeply rooted in the realities of the community it serves. SPIDER has partnered with local researchers who work alongside the implementation team in real time, are able to capture and respond to evolving project needs and emerging challenges. Engaging local researchers ensures that the initiative remains culturally relevant, sustainable, and truly anchored within the communities the project aims to support. Integration of research into the implementation underscores the commitment to evidence-based practices and continuous learning.

The project has the following specific objectives;

- Review baseline data and conduct a needs assessment for health information systems and digital infrastructure in Banaadir, Galmudug, and Puntland.
- Leverage local expertise and the Somali diaspora to implement or adapt appropriate digital solutions according to needs identified by the MoH and the workforce in selected clinics.
- Support the creation of an interoperable data system for better health record management and enhanced healthcare access.
- Build digital health capacity by developing HMIS structures and accumulating knowledge and evidence.
- Oversee the installation, testing, and operation of HMIS in selected health facilities across Banaadir, Galmudug, and Puntland.
- Conduct ongoing evaluations throughout the project's lifecycle to track results and ensure future sustainability, especially in making data collection more streamlined to health staff and the routines to be more efficient, allowing health staff to focus on their expertise.
- Establish a digital health and HMIS stakeholder group to drive digitalisation and enhance local workforce capacity in Somalia.

2.3 WHO:

The overall objective of this contribution is to strengthen the health system in Somalia by supporting the building and strengthening of essential public health functions.

The specific objectives of the intervention is to:

- 1) Support the establishment of an independent National Institute for Health (NIH) in Somalia, and;
- 2) Strengthening the Health Management Information System (HMIS) in pilot locations across Somalia, as well as working towards the development of an integrated disease surveillance and response system in Somalia.

This intervention can be considered a support-intervention to the above two, as it is intricately linked to them and shares objectives.

3 Evaluation purpose and scope

The purpose of the evaluation is two-fold: A) to help inform Sida on the effectiveness of the listed interventions – and the unique set up of Swedish agencies supporting Somalia agencies - in contributing to health system strengthening, including on the contribution agreement modality itself; and B) to help PHAS, SPIDER, WHO, Sida and other stakeholders in the continued effort of health system strengthening in Somalia.

- Help Sida and its partners PHAS, SPIDER and WHO assess progress of the on-going interventions and learn from what works well and less well;
- What outcomes, intended or not can be observed and verified with the application of outcome harvesting methodology (unintended outcomes)?
- Help Sida assess progress of its portfolio of projects/programmes to inform strategic decisions;
- Help Sida assess and learn from what works well and less well in the strategy implementation. The evaluation will be used to inform decisions on adjustments, improvements or serve as an input for a new strategy period;
- Help inform Sida of the advantages and disadvantages on the modality of having a cooperation agreement with Swedish government agencies;
- Provide inputs to partners and other stakeholders in the continued efforts to strengthen the health system including building up a public health agency in in Somalia;

The evaluation scope is limited to the start of the individual agreements:

PHAS from June 2019, SPIDER from November 2019, and WHO from June 2021.

If needed, the scope of the evaluation may be further elaborated by the evaluator in the inception report.

4 Evaluation objective

The objective is to gather as much knowledge as possible related to the formulated purpose above (A and B) and to the questions below and to analyse and deliver conclusions and recommendations for Sida, partners and other stakeholders.

The evaluation shall be carried out according to *OECD /DAC's Quality standards for development evaluation* and its evaluation criteria. However, all criteria will not be equally focused on in this evaluation. The following evaluation questions indicate where the focus shall lie.

5 Evaluation questions

1. What progress can be observed in terms of the planned results and outcomes as expressed in programme documents and agreed work plans.
2. To what extent have the interventions objectives and design responded to *the partner organizations'* needs and priorities?
3. How compatible has the intervention been with other interventions in the sector where it is being implemented? To what extent have the three interventions complemented each other?

4. To what extent have interventions aligned with the Somali government's health priorities
5. To what extent has the intervention contributed to strengthen the capacity of the health sector in Somalia? How did the intervention achieve this?
6. How effective has the selection of modalities and methods been in terms of achieving the planned results?
7. What is the sustainability of the interventions beyond the project period, including ownership of solutions and creation of jobs which employ local expertise.

Questions are expected to be further developed in the tender by the tenderer and further refined during the inception phase of the evaluation. Please note that in line with Sida's utilisation-focused approach, the final evaluation questions should always serve the overall purpose of the evaluation.

Information will be collected both through reviews of key documents and interviews with partner organisations, other key stakeholders and donors. It is foreseen that the evaluation team visit Nairobi, Kenya, where several stakeholders are represented. Interviews with Somalia based actors will be made online.

6. Evaluation quality

Evaluation quality concerns both the **evaluation approach**, i.e. how the evaluation work is implemented, and **evaluation methodology**, i.e. how the conclusions are made.

When it comes to the **evaluation approach**, the evaluation shall:

- be utilisation-focused
- take Sida's development perspectives into account
- make sure no one is harmed

The evaluation shall be utilisation-focused which means that the evaluators must facilitate the entire evaluation process with careful consideration of how all aspects of the evaluation will affect the use of the evaluation. Therefore, the evaluation must be planned and conducted in ways to enhance the utilisation of both the findings and of the process itself, to inform decisions and improve performance. This approach entails close interaction between the evaluators and the primary users in the evaluation assignment. The interaction must last throughout the entire evaluation process. An important component of this participatory approach is to enable joint knowledge creation between evaluators and the users of the evaluation. The evaluation process shall be adapted to major context changes if needed, so that the evaluation always continues to serve the overall purpose/intended use.

Whenever relevant the evaluation shall take Sida's five development perspectives into account, when they design and implement the evaluation.⁹¹ The perspectives shall be integrated in all Sida's operations and shall therefore be considered in the evaluation design and implementation of the evaluation.

The evaluators must consider if any part of their work can harm any group, especially groups that face discrimination. If so, they need to mitigate these risks. In cases where sensitive or confidential issues are to be addressed in the evaluation, evaluators have to ensure an evaluation design and process that do not put informants and stakeholders at risk in any step of the evaluation process.

When it comes to **evaluation methodology**, the evaluation shall:

- be reliable
- be transparent

Reliable means that the ambition at the outset is that the evaluators will handle all relevant methodological challenges so that each conclusion can be trusted beyond reasonable doubt and can hold up against external scrutiny. A lower level of reliability for specific questions is only acceptable if it is due to reasons that was not foreseeable at the outset or if it was agreed at start of the evaluation.

Transparent means that it shall be clear to the users of the evaluation how reliable each conclusion is. Hence, when a conclusion is stated it shall be clear if it is speculative or whether there are some other specific methodological considerations that affect the reliability.

Furthermore, it shall be possible for the users to understand how the evaluators handle relevant methodological challenges for each conclusion. The methodological challenges includes (to the extent relevant):

- How data was collected and processed. This includes sampling methods, interview techniques and cleaning protocol, as required by the chosen evaluation design.
- How source criticism was applied. This includes assessing the potential biases of the sources, and assessing how the sources know what they claim. When a source is triangulated it includes an assessment of whether the triangulated sources are independent from each other and/or have opposing biases.
- How the evaluators arrived at descriptive conclusions. This includes the operationalization of concepts, e.g. a description of how concepts are defined in terms of observables.
- How the evaluators inferred causality. This means describing how the evaluators move from observations (e.g. observing that the cause happened and that the effect happened), to inferring that there is a causal link between cause and effect. A respondent claiming that there was a causal effect is not, in itself, sufficient

⁹¹ The five development perspectives are: poor people's perspective, gender, human rights, conflict sensitivity and the impact on the environment and climate. Please note that what we are speaking of here is how the evaluation is implemented. Any of the perspectives could also be examined by one or several of the evaluation questions.

evidence, unless there has to be some reason to believe that the respondent were able to infer causality.

- How generalisation beyond the collected data is made (e.g. through representative sampling or some theory based argument). If the generalisation is based on an informal assessment, then this should be made clear to the users.

The evaluators shall have an **independent quality assurance** during the evaluation process. One aim of the quality assurance should be to ensure that the evaluation meets the quality expectations that are outlined in these ToR. Evaluators should be prepared to share the evaluation data and analysis in a GDPR compliant manner, with Sida upon request.

In addition to the criteria outlined above, the evaluation shall conform to OECD/DAC (2010) “Quality Standards for Development Evaluation” and OECD/DAC (2014) “Glossary of Key Terms in Evaluation”, as well as the OECD/DAC (2021) “Applying Evaluation Criteria Thoughtfully”.

7. Required qualifications

Team Leader qualifications

The Team leader shall have the following qualifications:

- Extensive (minimum 10 years) experience of international development cooperation.
- Have led or been a team member in at least 3 evaluations of international development cooperation projects during the last 6 years.
- Fluency in English, written and verbal.

The team leader shall also submit a sample report written in English by him or herself from a similar assignment.

Team member qualifications

If there are team members, they shall have the following qualifications:

- Experience of international development cooperation.
- Recent (during the last 6 years) and proven experience of evaluations and similar reviews of international development cooperation projects.
- Fluency in English, written and verbal

Other qualifications

The following qualifications are required of team leader or team member:

- Experience of health sector development
- Knowledge of the mandates and roll of Swedish government agencies, preferably related to health
- Experience from Somalia
- Other language skills, relevant to the assignment

All proposed team members/evaluators must be independent from the evaluation object and evaluated activities and have no stake in the outcome of the evaluation.

8. Time schedule

Sida estimates that the review will take approximately 10 calendar weeks to complete. A definitive time plan will be discussed and agreed with the provider in the inception period.

The table below lists key deliverables for the evaluation process. Dates are tentative and alternative deadlines for deliverables may be suggested by the consultant and negotiated during the inception phase.

Deliverables	Participants	Deadlines
1. Start-up meeting/s (virtual)	Embassy, evaluators, agencies three	October One larger meeting with all parties. Plus bilateral between evaluators and all parties.
2. Inception phase	Evaluators	Allow a <i>minimum</i> of 4 weeks from the start-up meeting to draft an inception report, but additional weeks are highly recommended.]
3. Draft inception report		October
4. Intended users read the draft inception report	Primary users	Allow at least 1 weeks for commenting
5. Deadline for comments from intended users to evaluators		End October
6. Inception meeting – preferably in Nairobi otherwise digital	Embassy, evaluators, agencies three	End October (week 43). PHAS and SPIDER will be in Nairobi that week.
7. Revise inception report	Evaluators	[Allow at least 1 week for revision, although this depends on how much revisions you ask for]

8. Deadline final inception report		November
9. Data collection & analysis phase	Evaluators	Allow a <i>minimum</i> of 4 weeks for data collection & analysis
10. Debriefing/validation workshop(s)/ meeting(s)	Embassy, evaluators, three agencies	Tentative [STATE TENTATIVE DATE(S)]
11. Participatory workshop(s) for joint knowledge creation	Evaluators; Primary users; Other relevant stakeholders	Tentative [STATE TENTATIVE DATE(S)]
12. Draft report writing phase	Evaluators	[Allow at least 2 weeks for report writing]
13. Submission of draft evaluation report		November
14. Primary users read and comment draft report	Primary users	Allow at least 1 weeks for comments
15. Deadline to submit comments to evaluators		End November
16. Final report writing phase	Evaluators	[Allow at least 1 weeks for revisions]
17. Final evaluation report		December /January
18. Dissemination Seminar Virtual	Embassy, evaluators, three agencies Other actors?	December /January

9. The deliverables

The evaluators shall, during the course of the evaluation, produce a number of deliverables. These are outlined below.

The proposal

Before the evaluation starts the evaluators shall submit their proposal. This is described in the call-off document.

The inception report

The inception report will form the basis for the continued evaluation process and shall be approved by Sida before the evaluation team proceeds with the implementation. At this time the methods to be used will be reviewed, as well as the activity plan and time frame. The inception report should be written in English. The inception report should be maximum 4 pages.

The inception report should further develop the **evaluation approach**, including:

- how to apply the utilisation-focused approach e.g. how the intended users will participate in and contribute to the process
- how to apply Sida's development perspectives to the evaluation process
- how to make sure no one is harmed by the evaluation

The inception report should also develop and refine the stakeholder analysis that is outlined in section 4 above. The stakeholder analysis should describe:

- the different stakeholders' interests or values in the evaluation process
- the stakeholders' roles in the evaluation process
- a clear process description of stakeholder participation

During the inception phase, the evaluator and the users shall agree on who will be responsible for keeping the various stakeholders informed about the evaluation and how to ensure their participation.

The evaluators should develop the **design and methods** in detail during the inception phase and present them in the inception report. This involves describing how the methodological challenges in section 8 will be handled for each evaluation question:

- how to collect and process data
- how to apply source criticism
- how to make descriptive conclusions
- how to infer causality
- how to generalise beyond the data generated

All limitations to the evaluation design and methods shall be made explicit, in addition to any remaining underlying assumptions. The consequences of these limitations and assumptions for the evaluation outputs should be discussed. This information should usually be presented in the form of an evaluation matrix.

As a general rule, the evaluators should develop the **theory of change** of the intervention in the inception report. The inception report should at a minimum include:

- a description of the rationale for the intervention
- the objectives of the intervention
- how the evaluated intervention has – or is expected to – support end-beneficiaries
- major underlying factors/assumptions that affect the success of the intervention

The inception report should include a reassessment of the **evaluability**⁹² of the evaluation questions. The reassessment can lead to that Sida agrees to adjust the evaluation questions or the scope of the evaluation, but only under the following conditions:

- the reassessment of the evaluability is based on information that was not known when the evaluators accepted the proposal and which could not have been foreseen by the evaluators when they wrote the proposal, and
- the reassessment is based on things that are verifiable (at least in principle) by Sida

The inception report should include a detailed **time and work plan**, including:

- number of working days for each team member for the remainder of the evaluation
- space for reflection and learning between the intended users of the evaluation

Deliverables during the data collection and analysis phase

During the data collection and analysis phase, the evaluators will implement the data collection and analysis plan developed during the inception phase.

As mentioned above, an important component of Sida's utilisation focused approach is to enable joint knowledge creation between the evaluators and the users of the evaluation. The evaluators therefore need to plan for and conduct **participatory workshop(s)** with different key stakeholders in a relevant manner to the particular evaluation.

The final report

The final report should be no more than 30 pages excluding annexes. It shall be written in English. The report should be written in a plain, clear and unambiguous language. It should be easily understood by the primary users of the evaluation, as defined in these ToR, and the form of the report should be appropriate given the purpose(s) of the evaluation. It should have a clear structure and follow the format and instructions outlined in Sida's report template for decentralised evaluations (see Annex C). To assure these goals the report should be professionally proof-read.

The executive summary of the final report should be maximum 6 pages. In the executive summary the key findings should be presented as early as possible in the text. It should be clear to the reader how reliable each conclusion is, especially if a conclusion is based on less reliable evidence.

The executive summary should easily be understood by all intended audience(s), including both primary and secondary users. Hence, in terms of the accessibility of the language, the requirements are higher for the executive summary than for the rest of the report.

⁹² Evaluability is defined as "the extent to which an activity or a program can be evaluated in a reliable and credible fashion."

The main body of the report shall present the findings, conclusions, recommendations and lessons learned separately and with a clear distinction between them. Recommendations should flow logically from conclusions and be specific and directed to relevant intended users.

It should be clear which recommendations are most important / priority to address.

Evaluation findings shall flow logically from the data, showing a clear line of evidence to support the conclusions. Conclusions should be substantiated by findings and analysis, meaning each finding should be presented in a way that clarifies what evidence it is based on and how reliable that evidence is. Hence, the reader should be able to understand how the evaluators handled all the methodological problems outlined in section 8 above, to the extent relevant (i.e. data collection and processing, source criticism, descriptive conclusions, causal inference and generalisations).

The **final report annexes** shall always include:

- the ToR
- the stakeholder analysis⁹³
- the evaluation matrix (or equivalent presentation).

The inception report does not have to be included in its entirety in the final report annexes. However, major diversions from the assignment as outlined in these ToR, should be described in the final report annexes. The annexes shall describe:

- the purpose of the evaluation, specifically who is supposed to use the evaluation and for what
- how the utilisation-focused approach has been implemented during the evaluation, including how the intended users participated in and contributed to the process and how process use was facilitated, i.e. how the evaluators created space for reflection
- how the evaluators applied Sida's development perspectives to the evaluation process, and how they made sure no one was harmed by the evaluation

The final report annexes can also include evaluation management issues e.g. who was consulted when and key meetings that were held. Lists of key informants/interviewees shall only include personally identifiable data if this is deemed safe and relevant (i.e. when it is contributing to the credibility of the evaluation) based on a case based assessment by the evaluator and the commissioning unit/embassy. The inclusion of personally identifiable data in the report must always be supported by written or otherwise recorded consent.

Publication of the final report

⁹³ The stakeholder analysis can be excluded if there is a good reason to do so, e.g. where it includes sensitive information. If so, this should be discussed and agreed with Sida before delivery of the final report.

The evaluator shall, upon approval by Sida/Embassy of the final report, and using Sida's template for decentralised evaluations (see Annex C) and submit it to Nordic Morning (in pdf-format) for publication and release in the Sida publication database. The order is placed by sending the approved report to Nordic Morning (sida@ljungbergs.se), with a copy to the responsible Sida Programme Officer as well as Sida's Evaluation Unit (evaluation@sida.se). Write "Sida decentralised evaluations" in the email subject field. The following information must always be included in the order to Nordic Morning:

1. The name of the consulting company.
2. The full evaluation title.
3. The invoice reference "ZZ980601".
4. Type of allocation: "sakanslag".
5. Type of order: "digital publicering/publikationsdatabas.

The annex of the final report shall be submitted as a separate pdf-file.

The call-off response

See the call-off inquiry document for mid-sized evaluations.

Organisation of evaluation management

This evaluation is commissioned by the SWEDISH EMBASSY Nairobi. The primary intended user are the Embassy and the three agencies.

The evaluator and the Embassy as well as that three agencies have contributed to the ToR and will be provided an opportunity to comment on the inception report as well as the final report, but will not be involved in the management of the evaluation. Hence the commissioner will evaluate tenders, approve the inception report and the final report of the evaluation. The start-up meeting and the debriefing/validation workshop will be held with the commissioner and the partaking parties.

10. Budget

The maximum budget for the assignment is XX (excluding VAT).

The budget shall be attached and divided into fees and reimbursables.

Annex A: Project/Programme documents – to be provided

Annex B: List of key documents – to be provided

Annex C: Data sheet on the evaluation object

Information on the evaluation object (i.e. intervention) Folkhälsomyndigheten	
Title of the evaluation object	Somalia National Health Institute
ID no. in PLANIt	13061
Dox no./Archive case no.	

Activity period (if applicable)	2019-06-01 - 2025-05-31
Agreed budget (if applicable)	40 MSEK
Main sector	Health
Name and type of implementing organisation	Public Health Agency of Sweden, Public Sector Institution
Aid type	Project type
Swedish strategy	Somalia

Information on the evaluation object (i.e. intervention) SPIDER	
Title of the evaluation object	Digital Health Somalia
ID no. in PLANIt	13062
Dox no./Archive case no.	
Activity period (if applicable)	2019-11-01 - 2024-12-31
Agreed budget (if applicable)	40 MSEK
Main sector	Health
Name and type of implementing organisation	SPIDER, University of Stockholm
Aid type	Project type
Swedish strategy	Somalia

Information on the evaluation object (i.e. intervention) WHO	
Title of the evaluation object	WHO- NIH/HMIS support
ID no. in PLANIt	13114
Dox no./Archive case no.	
Activity period (if applicable)	2021-06-01 - 2025-05-30
Agreed budget (if applicable)	6,8 MSEK

Main sector	Health
Name and type of implementing organisation	WHO, multilateral organisation
Aid type	Project Type
Swedish strategy	Somalia

Information on the evaluation assignment	
Commissioning unit/Swedish Embassy	Embassy of Sweden Nairobi , Somalia Section
Contact person at unit/Swedish Embassy	Erik Turner erik.turner@gov.se
Timing of evaluation (mid-term, end-of-programme, ex-post, or other)	End of programme

Annex 6 Methods, Tools and Critical Reflections

INTRODUCTION

The Inception Report for the *Evaluation of Sweden's Support to Health Systems in Somalia (through PHAS, SPIDER and WHO)* outlined a range of evaluation methods and tools intended to structure the assessment. These included both analytical frameworks (like Theory of Change and contribution analysis) and data-gathering tools (such as capacity scorecards, maturity models, process tracing, interviews, field observations, etc.). Below we explain the extent to which, or how, these were applied to produce the Final Report and shape the closing workshop.

Each key method or tool is examined, comparing its intended use and rationale per the Inception Report with its actual application. We consider each tool's effectiveness, added value and limitations, as well as any challenges or reasons for deviations from the original plan. We also provide some reflections on source reliability (source criticism) and triangulation, and discuss risks of bias and how these were mitigated.

11.1.1 Overview of the Evaluation Approach

The evaluation of Sweden's support to health systems strengthening in Somalia through PHAS, SPIDER and WHO was conducted between November 2024 and April 2025. The evaluation applied a mixed-methods approach combining qualitative and quantitative data collection and analysis. It was theory-driven, utilisation-focused, and context-sensitive, acknowledging Somalia's socio-political fragility and operational constraints. The evaluation team used a broad set of evaluation tools and frameworks to assess effectiveness, effect, coherence, complementarity, and sustainability.

11.2 COMPARATIVE ANALYSIS OF METHODS AND TOOLS

11.2.1 Theory of Change and Theory-Driven Analysis and Contribution Analysis

The evaluation was structured around the Theory of Change (ToC) for each intervention. These ToCs, formulated in collaboration with the implementing partners and agreed in the Inception Report, were used to assess how each intervention contributed to the intended results. Contribution analysis was applied to assess the plausibility of change pathways, and to test the assumptions underlying the ToCs.

In practice, the evaluation team was able to use the ToCs effectively to frame evaluation questions, analyse evidence against assumptions, and assess whether activities contributed to observed outcomes. The ToC lens was useful in identifying both expected and unintended effects, as well as areas where assumptions shared with evaluators did not hold. This enabled

a structured assessment of contribution and added rigour to the evaluation's findings. However, the team remained cautious of confirmation bias, and actively sought disconfirming evidence.

Intended Use (Inception): The evaluation was designed to be *theory-driven*, using each intervention's Theory of Change (ToC) as a foundational framework. The Inception Report proposed applying **contribution analysis** to validate the causal pathways outlined in the projects' ToCs. This meant the team would use the ToCs to formulate hypotheses about how activities lead to outcomes, then gather evidence to confirm or challenge these links. The rationale was that a theory-driven approach would ensure the evaluation stays grounded in the interventions' intended logic, thereby directly assessing whether results occurred as envisaged and why (or why not). The inception phase compiled the ToC diagrams for PHAS, SPIDER (HADDA), and the WHO-supported staff positions in an annex, underlining their importance for shaping evaluation questions and indicators. The approach was also coupled with a **context-sensitive** principle – recognising Somalia's fragile socio-political setting – to adapt data collection and protect informants. The plan was to use ToCs to drive a structured, theory-based evaluation, examining each step of the assumed change process.

Actual Application: In practice, a **theory-driven analysis** was carried out, examining how the interventions performed against their ToCs. We ("the evaluators") applied contribution analysis to assess how plausibly each project's activities influenced observed changes, while being careful to acknowledge other contributing factors in Somalia's complex environment. This use of ToCs proved valuable: it provided a clear lens to evaluate effectiveness, linking outcomes back to planned inputs and outputs. For example, the analysis could identify which expected results in the ToC were achieved and where assumptions did not hold, thereby pinpointing gaps or unexpected influences. The ToC framework added structure and *explanatory power* to the evaluation findings – an added value in understanding not just *what* happened, but *how*.

A limitation, however, was the risk of confirmation bias – focusing on the ToC might have caused evaluators to seek evidence aligning with the prescribed pathways. The team mitigated this by actively looking for disconfirming evidence and by keeping the analysis *open to context*: the Final Report notes that observed changes could not be attributed solely to the Swedish-funded projects, given the complex, long-term nature of health system change. Overall, grounding the evaluation in the Theory of Change was helpful in structuring inquiry and assessing effectiveness, but it required careful handling to remain critical and account for Somalia's variable context.

11.2.2 Institutional Maturity Model

The Inception Report proposed applying a maturity model to assess the organisational development of the National Institute of Health (NIH), using dimensions such as leadership, governance, operations and partnerships.

In practice, the maturity model could not be fully implemented. Data was incomplete, contradictory, or missing for several dimensions. Informants had differing views on institutional capacity, and political changes had reversed earlier progress. As a result, a maturity scorecard was not feasible. Nevertheless, the team assessed institutional fragility and resilience qualitatively, identifying key achievements and regressions. This confirmed the value of the

intended model but also underscored the challenge of using maturity frameworks in fluid institutional environments.

Intended Use (Inception): A key tool proposed was an **Institutional Maturity Model** to evaluate the National Institute of Health (NIH)’s organisational development over time. The inception plan suggested defining dimensions such as governance, leadership, operational processes, partnerships, and resource mobilisation, and then assessing NIH’s maturity on a scale (e.g. nascent, developing, established, resilient). The idea was to combine data from documents and interviews to score the NIH’s capacity at baseline (around October 2023) and again at endline (end 2024/early 2025). This structured approach was expected to yield a *scorecard* or summary highlighting NIH’s development status, strengths, and areas for improvement. The rationale for this tool was to provide an objective, snapshot measurement of institutional strengthening – an area central to the Swedish support (especially via PHAS’s work with the NIH). If feasible, the maturity model would illustrate progress (or lack thereof) in NIH’s organisational readiness and resilience, thereby directly addressing evaluation questions on capacity-building and sustainability.

Actual Application (Final/VO): In implementation, the maturity model proved *difficult to apply*. The Final Report explains that the evaluation initially intended to apply an institutional maturity model, but **sufficient data was missing and informants gave contradictory accounts** of NIH’s governance, leadership and operations, especially since progress had clearly “slid backwards” by the time of evaluation. The full set of reasons for this was difficult to piece together and to verify.

In other words, the NIH did not show a clear forward trajectory that could be readily measured on a maturity scale – in fact, political and staffing upheavals had reversed some gains, with major documents allegedly removed, and a “tabula rasa” situation (allegedly) making the situation complex. As a result, producing a quantified maturity *scorecard* was not possible. Instead, the team assessed NIH’s progress qualitatively. They still examined aspects of institutional development, noting areas of capacity built under the project (such as establishment of certain functions) but also regression (e.g. leadership changes, loss of momentum).

The intended added value of the maturity model – a structured, visual progress gauge – could not be realised due to the data gaps and non-linear institutional trajectory. This highlights a limitation: such models require stable reference points and consistent data, which were lacking in Somalia’s dynamic context. Nonetheless, even without a formal scorecard, the evaluators gleaned insights: for instance, they concluded that NIH’s operational maturity was in fact fragile and had possibly *declined* in some respects post-intervention, an important finding. The challenge here was primarily the **lack of reliable data and the “yo-yo” effect of institutional change in a fragile context**, which made a simplistic maturity rating unfeasible. The Final Report candidly acknowledges this limitation and the team’s resort to narrative judgement in lieu of the planned maturity grid.

So, the use of the maturity model was limited in practice – it informed the evaluators’ thinking but did not yield the concrete output envisioned, due to challenges of inconsistent evidence and context volatility.

11.2.3 Capacity Development Assessment

A capacity development assessment was planned to evaluate improvements in awareness, motivation, skills, institutional practices and team functioning. Data collection would be based on interviews, observations, and documentation.

The team implemented this assessment effectively, if qualitatively. Interview findings, observations in health facilities, and training records helped assess staff capacity and retention. The team documented gains in knowledge and practice, alongside challenges such as high attrition. While a formal capacity scorecard was not produced, the assessment provided a comprehensive understanding of human and organisational capacity, as well as systemic weaknesses undermining sustainability.

Intended Use (Inception): Alongside the institutional lens, the Inception Report proposed a **Capacity Development Scorecard** to assess human and organisational capacity outcomes.

This tool was meant to gauge improvements in staff awareness, motivation, skills, and practices, as well as institutional processes like teamwork and knowledge sharing. The evaluators planned to gather data through interviews with staff and stakeholders and review documents (strategic plans, training materials, frameworks).

The output would ideally be an overview or “*scorecard*” showing capacity gains and remaining gaps. The rationale was to have a semi-structured way of measuring capacity building results attributable to the interventions (especially relevant for PHAS’s and SPIDER’s training and WHO’s mentorship components). By quantifying or systematically assessing factors such as staff skills, institutional resilience, and leadership, the evaluation could have provided evidence of strengthened capacity (or lack thereof) in a more nuanced way than raw indicators. In essence, this was a tool to translate qualitative capacity changes into a structured assessment, highlighting progress in capability development over the project period.

Actual Application (Final/VO): In the Final Report, the team notes that they “applied a capacity development assessment to gauge awareness, motivation, skills, attrition etc.” among personnel and institutions”. This indicates the intended capacity areas were indeed examined, but the term “scorecard” is not explicitly mentioned in the final documentation of results. The evaluation gathered evidence of training outcomes, skills transfer and staff retention, in a sampled way (six sites), as well as through primary data from interviews. For example, findings highlight that many Somali health officials valued the practical trainings (e.g. in disease surveillance and outbreak analytics) delivered by PHAS and partners, implying improved knowledge and competencies. At the same time, the evaluation identified serious challenges such as **high staff attrition in health facilities**, which undermined sustained capacity – many trained workers left due to low pay and heavy workloads, leading to losses of expertise. Also accounts of the extent to which the healthcare workers were able to seamlessly use the intended system varied a lot.

The capacity assessment added value by systematically probing these dimensions (motivation, skills, turnover) through interviews and group discussions. Direct observation during field visits also enriched this analysis – for instance, evaluators could see whether health workers were confidently using new tools (a proxy for skill uptake) or hear from groups about teamwork and knowledge sharing. One limitation was that the assessment remained largely qualitative; due to time and data constraints, it did not culminate in a neat “scorecard” with numeric ratings,

(and some qualitative primary data contradicted secondary quantitative data). Instead, it yielded a narrative summary of capacity strengths and weaknesses.

Despite this, the approach was useful in highlighting critical human resource issues. A concrete added value was uncovering **not just the gains** (e.g. enhanced skills, new practices) **but also the fragility of those gains** – such as how quickly capacity could dwindle if institutional support faltered (e.g. trained NIH staff being reassigned or leaving once project support ended). So, the capacity development assessment was used to pinpoint areas of progress and concern in skills and institutional practices, even though it remained a qualitative appraisal rather than a formal scorecard due to practical constraints.

11.2.4 Digital Health Capacity (RAAD System Assessment)

Given SPIDER's role in launching the RAAD electronic health record system, the Inception Report proposed a focused assessment of digital health readiness and adoption. This would include infrastructure, human resources, data quality, and interoperability.

This was implemented through field observation, review of SPIDER documentation, and stakeholder interviews. The evaluators verified use of RAAD in pilot facilities, assessed staff confidence in using the system, and reviewed progress in integration with DHIS2. They also noted gaps in policy support and dual system burdens (paper and digital). While comprehensive quantitative data was lacking, the qualitative assessment was effective in highlighting digital health progress and challenges.

Intended Use (Inception): Given the SPIDER/HADDA project's focus on e-health, the Inception Report singled out a **Digital Health Capacity** assessment, centred on the RAAD electronic health records platform. The idea was to evaluate the readiness, adoption, and functionality of RAAD in Somalia's health system.

The inception plan listed specific performance indicators: for instance, checking governance (policies supporting RAAD rollout), infrastructure (IT equipment and connectivity), human capacity (training of health workers and uptake of RAAD), integration (interoperability with DHIS2 and alignment with national strategies), and usage metrics (percentage of facilities reporting via RAAD, data completeness/timeliness).

The rationale was to have a focused assessment of this digital intervention's maturity – essentially a way to measure how far the pilot electronic health record system had progressed toward institutionalisation. This reflects a tailored tool for the SPIDER component, acknowledging that success in digital health involves technology adoption and data use, which can be monitored via such indicators.

Actual Application (Final/VO): The evaluation did conduct a targeted examination of the RAAD system's implementation. The Final Report notes that the team **“assessed the readiness, adoption and functionality of the RAAD”** as part of its methods.

In practice, this meant reviewing SPIDER project documents and data on RAAD deployment, and – crucially – visiting health facilities to *observe RAAD in action*. The evaluators were able to *“spot check and assess digital interventions and data uptake improvements”* through secondary reports and primary insights. For example, they looked at how many sites spot-checked were using RAAD, whether health workers could operate it, and how the data flowed into the national DHIS2 system. Field visits provided first-hand evidence: the team observed

challenges like facilities having to run **dual systems (paper and RAAD)**, most patient-care rooms lacking a computer, and difficulties re-using patient identifies during 2nd or 3rd ANC visits which burdened staff; as well as successes like real-time patient registration capabilities introduced by RAAD. Triangulating back with SPIDER also demonstrated some discrepancies between what is being reported to SPIDER (in relation to uptake, use of electronic only, ability to use and reapply unique patient IDs, etc.) and what the evaluation's field visits, observations and interviews revealed. The evaluation used its best judgement in this instance, favouring primary rather than secondary data.

The added value of this assessment was in highlighting concrete operational issues and progress in Somalia's digital health initiative. It identified remaining gaps – e.g. policy support and interoperability efforts were underway but fragmented. Despite limitations, the evaluation was able to document that RAAD had made important strides (like enabling electronic record-keeping in pilot sites) while also facing typical pilot-phase challenges (like inconsistent uptake and the need for wider integration). It also noted many elements outside of the immediate remit (e.g., health centres' lack of connectivity, computer literacy, electricity, funding).

So, the digital health capacity tool was minimally applied but the approach did help to yield insights that enriched the evaluation's conclusions on health information systems strengthening – though envisioned metrics (e.g. exact percentages of facilities fully using RAAD) could not be rigorously triangulated due to data paucity (and despite data provided by SIDRA).

11.2.5 Process Tracing

Process tracing was intended to track intervention activities against outcomes in the ToCs, allowing for causal inference and triangulation.

The evaluation applied process tracing to good effect, especially in the assessment of contribution and coherence. The team tested whether intervention activities plausibly led to outcomes, and assessed alternative explanations. Where data was insufficient to confirm links in the causal chain, the evaluation made careful, transparent inferences. Process tracing added rigour and nuance to findings.

Intended Use (Inception): The Inception Report included **Process Tracing** as a qualitative method to investigate causality – essentially to track the chain of events from inputs to outcomes for each intervention.

The plan was to systematically gather evidence for each step in the causal pathway defined by the Theory of Change, checking whether and how intervention activities led to intermediate outcomes and ultimately to strengthening Somalia's health system. Key components of this approach were: mapping intervention activities against intended results in the ToC, collecting evidence to confirm or refute each hypothesised link, and triangulating across sources to validate findings. The expected output was a form of contribution analysis, explaining the degree to which the interventions contributed to observed institutional changes.

The rationale for process tracing was to go beyond mere correlation and *probe causation* – important in a complex multi-actor environment. By employing process tracing, the evaluators intended to build a credible narrative (or proof) of how Sweden's support may have led to certain outcomes (e.g. improved disease surveillance or data use), considering alternative explanations along the way. However, the inception team did caution that there might not be

enough data or evaluation-time for complete process tracing, indicating awareness of potential limitations up front.

Actual Application: The Final Report indicates that process tracing was used to structure the analysis of effectiveness. Specifically, the evaluation “used process tracing to assess intervention activities against intended outcomes in the theories of change for each intervention”. In practice, this meant the team reviewed timelines and sought evidence for each critical outcome in the ToC: for example, they examined whether PHAS’s peer-learning and training activities actually resulted in increased NIH capacity, or whether SPIDER’s digital tool deployment led to improved data practices. The evaluators triangulated interview testimonies, documents, and any available data to see if the causal sequence held.

This approach proved effective in identifying plausible contributions – the Final Report’s analysis sections often discuss how an intervention influenced an outcome while noting other factors. For instance, they concluded that PHAS’s work *contributed* to an enhanced reputation for NIH and some sustained practices (like outbreak analytics), even though political turnover later eroded some of these gains, and conflicting reports as to whether original NIH functions had been transferred to other units within the Ministry of Health were not verifiable (lack of time, and access).

The added value of process tracing was in giving the evaluation nuance: rather than simplistically crediting or blaming the projects for outcomes, the report tried to provide a stepwise explanation of change and acknowledge where evidence was strong or weak. One evident limitation was data availability. As foreseen, certain links were hard to verify due to scant quantitative data or loss of institutional memory (staff turnover), or lack of access to other informants. The evaluators had to sometimes make “*best judgment*” inferences when faced with conflicting accounts of what happened and when.

Despite these challenges, process tracing anchored by the ToCs allowed the team to draw credible connections between the interventions and system-level observations. It helped demonstrate contribution without over-claiming attribution, by explicitly considering and ruling out (when possible) other influences. In summary, the method was implemented largely as intended – albeit adapted to data realities – and it added analytical rigor to the evaluation’s effectiveness conclusions. The main challenge was ensuring enough evidence at each causal step; where evidence fell short, the team transparently noted the uncertainty.

11.2.6 Key Informant Interviews

Key Informant Interviews (KIIs) were central to the evaluation, and were expected to provide insight across stakeholder categories, including government, implementing partners, health workers, and donors.

This method was fully implemented, with over 40 interviews conducted, including during field visits. Informants were selected for diversity and institutional relevance. Interviews provided critical evidence on relevance, effectiveness, effect, coherence, coordination, and sustainability. Challenges included limited availability of some informants, translation needs, and political sensitivities, but triangulation and use of a Somali team member helped mitigate these.

Intended Use (Inception): Traditional **Key Informant Interviews (KIIs)** were a cornerstone of the data collection strategy from the outset. The Inception Report outlined plans for structured interviews with a broad range of stakeholders.

This included federal and state health officials, NIH leadership and staff (current and former), SPIDER leadership and project staff, WHO regional and country office leadership and staff (including the Sida-funded positions, and the secondee), health facility personnel and trainees, community health committee members, other donors, and local implementing partner representatives. Such a comprehensive list reflects the goal of capturing diverse perspectives – from high-level policymakers to on-the-ground health workers – to build a well-rounded evidence base. The rationale for KIIs was clear: given the qualitative nature of many evaluation questions (e.g. regarding effectiveness, relevance, coherence), in-depth interviews would provide insights into processes, perceptions of change, and context that hard data alone could not supply. Moreover, interviews were seen as a means to fill information gaps due to limited documentation. The inception phase had already begun scoping interviews and stakeholder mapping, signalling that KIIs would be pivotal in understanding each intervention’s story and outcomes.

Actual Application (Final/VO): In implementation, key informant interviews proved to be a *primary source* of data and insights, as confirmed by the Final Report.

The evaluation conducted a mix of in-person and virtual interviews, ultimately engaging a substantial number of informants across the stakeholder spectrum. These interviews yielded qualitative data that underpinned many findings – for example, interviews with Somali health officials consistently highlighted the value of PHAS’s trainings and mentorship, information that might not appear in written reports.

KIIs were also critical for understanding less tangible outcomes like collaboration dynamics and political challenges. The added value of the interviews was their ability to provide *contextual depth*: they brought out success stories, frustrations, and explanations for why certain activities worked or didn’t. For instance, through interviews, the evaluators learned about coordination issues (or lack thereof) between WHO staff and other projects, and picked up on the differing narratives (e.g., government vs. donor views) about the NIH’s trajectory. However, the process was not without challenges. The Final Report notes “**inaccessibility of key informants**” as a significant limitation – some interviewees were slow to respond or unavailable altogether.

This stretched out the data collection timeline and at times impeded timely triangulation of facts. Additionally, language and trust barriers existed: the Somali national team member played an essential role in conducting interviews in Somali, conducting field visits, and providing nuanced cultural context perspectives, which greatly enhanced access and the candour of responses. The Ethiopian team member was able to use comparative skills related to the health systems in Ethiopia and East Africa, to provide in-depth comparative context. Both of these team members were health professionals, and were hence able to ask important and detailed questions, and fully probe answers. The two non-Somali team members could not directly engage in Somali language.

This potentially limited the richness of some interviews, and the direct access to some key individuals who had no English. Despite these hurdles, the evaluation managed to secure meaningful interviews. The evidence from KIIs was effectively triangulated with documents and observations to form robust conclusions.

So, interviews were extensively utilised as intended; they were effective in uncovering information that would otherwise be missed, though the team had to work around access issues, time lags, and bias risks inherent to self-reported data (mitigated by comparing multiple viewpoints). Without the KIIs, the evaluation would likely have lacked explanatory insight, but with them, it gained a nuanced, human perspective on the support's effects and limitations.

11.2.7 Field Visits and Direct Observation

The Inception Report foresaw field visits to health facilities to observe implementation and validate documentary and interview findings.

This was implemented, including group discussions with frontline workers, in Banaadir Galmudug as well as virtually in Puntland. Observations enriched the evaluation, providing first-hand insight into facility-level digitalisation, use of training, and infrastructure gaps. Security constraints limited geographic coverage, and one visit was conducted virtually. Nevertheless, direct observation significantly enhanced data reliability.

Intended Use (Inception): The Inception Report recognised on-site and virtual **field visits** as a vital component to validate and enrich the evaluation. It proposed visits to selected health centres and regional health offices in the project's pilot areas. During these visits, the team would conduct observations and on-site interviews, and potentially convene **focus group discussions (FGDs)** with health workers and community representatives. The aim was to directly see the infrastructure improvements, equipment provided, digital systems in use, and workflow changes that the interventions supported. For example, observing a clinic using the RAAD system or a lab improved by NIH training would provide concrete evidence of outputs. FGDs and informal conversations on site would capture perceptions about capacity-building activities and the usefulness of new systems. The rationale was that certain outcomes (especially related to service delivery and data use) can be better assessed in person – by observing how things function on the ground and hearing from beneficiaries in their own environment. Field visits were also intended to triangulate and verify information from reports or interviews (e.g. confirming if a piece of equipment is actually present and in use, or if a process introduced by the project is practiced routinely).

Actual Application (Final/VO): The evaluation did carry out field visits, albeit with modifications due to security constraints. Site visits were conducted in Mogadishu and Dhusamareeb, covering health facilities in the three pilot regions, with one of the visits carried out virtually because certain areas were inaccessible.

The Somali national evaluator visited facilities in person Banaadir Galmudug, observing conditions and interviewing local staff, while other team members joined via video calls for at least one location. During these visits, the team also held group discussions with available health workers (serving the role of FGDs) to gather collective feedback on the interventions.

A virtual visit to Puntland facilities was also effected.

This direct observation proved pretty effective. It provided **evidence that was unattainable from afar** – for instance, the evaluators saw first-hand the dual record-keeping burden (paper registers alongside RAAD) that health workers faced, lending credibility to reports of workload issues. They also observed the presence (or absence) of equipment and connectivity needed for the digital health system, and noted the level of activity at facilities. Such insights added a reality check to the more optimistic accounts in written reports. The field visits thus added significant *value* in validating the outputs and immediate outcomes of SPIDER and related efforts.

However, the extent of field observation was limited. **Security and logistical challenges** meant the team could not visit many sites beyond the capital and one region; community-level impacts were particularly hard to assess as travel to remote or insecure districts was unsafe. This said, a virtual visit to a third site was conducted. A virtual field visit, while better than nothing, cannot capture the same detail as being there in person – for example, subtle interactions or informal conversations might be missed. Despite these limitations, the field visits that did take place were pivotal in grounding the evaluation and were very useful. They enabled cross-verification of data (what interviewees claimed vs. what was observed) and yielded practical recommendations (such as addressing the heavy workload issue, which was evident on the ground). (The Final Report mentions that the inability for the whole team to be on-site (only the Somali expert travelled in-country) was a constraint, partly mitigated by remote methods.)

Overall, the evaluation applied field visits and direct observation largely as intended for the accessible areas, and this method seems to have been worthwhile in revealing on-the-ground realities; the main challenge was the restricted scope of travel, leaving some gaps in geographical coverage and community perspectives. (A project in Jubaland, recently launched, with a private sector partner, was not at all part of the evaluation (the information came too late).

11.2.8 Organisational Network Analysis (Partnerships)

A light-touch Organisational Network Analysis (ONA) was proposed to assess the coordination and complementarity between PHAS, SPIDER and WHO, and their Somali counterparts.

The evaluation did not conduct a formal ONA but applied qualitative organisational analysis. Evidence was gathered on interactions, planning coordination, and joint activities. The evaluation found that while there was some alignment in intent, coordination mechanisms were sometimes limited or unevenly used. This tool was effectively applied in a narrative form and helped assess coherence.

Intended Use (Inception): To assess **collaboration and coherence**, the Inception Report proposed using an *Organisational Network Analysis (ONA)* approach.

The focus was on evaluating partnerships and interactions between the NIH, SPIDER, WHO, and other stakeholders involved. The plan involved identifying the frequency and nature of interactions (e.g., joint activities, information exchange) among these actors, and then assessing the strength and quality of their relationships, as well as any gaps or silos.

The expected output was a network overview or map illustrating how well the three Swedish-supported interventions (PHAS, SPIDER, WHO staff) were working as a *cohesive network* versus independently. The rationale was that Sweden's support spanned multiple channels

(bilateral via PHAS, multilateral via WHO, and a digital initiative via SPIDER) which were intended to be complementary. An ONA would help determine if these channels were synergistic – for example, did the NIH establishment effort (PHAS) and the digital health pilot (SPIDER) coordinate their work? Did the WHO-funded advisors facilitate connections between the two? By examining the network, the evaluation could comment on **coherence and complementarity**, which were part of the evaluation criteria per the Terms of Reference.

Actual Application (Final/VO): In the Final Report, the evaluators report that they used “organisational analysis to assess the extent to which the three interventions functioned as a network of sorts.”

A formal, data-driven ONA (with sociograms or quantitative network measures) was not conducted, but the team did qualitatively analyse the partnerships and linkages. They gathered evidence on coordination mechanisms – for instance, noting whether there were joint planning meetings, overlapping activities, or referral of participants between PHAS and SPIDER programmes; and the extent to which there were any joint planning documents (there were not) providing an overview of how and when the three organisations interacted/worked together/complemented each other. To be fair, PHAS and SPIDER were first set up independently. The WHO “coordination” component evolved later. The findings suggest that **the synergy between the interventions was relatively sporadic**. The evaluation found that beyond some ad-hoc cooperation (such as occasional joint workshops, joint training (FETP) or participation in common coordination forums), there was no strong, overarching coordination aligning all three components.

The Sida-funded WHO staff, intended to enhance coordination, did not end up creating robust operational links between SPIDER and PHAS. The Sida-funded secondee from PHAS to WHO did create strong linkages between WHO and PHAS and WHO and SPIDER, in the early stages of the evaluation period, and these were effective, but the momentum this had created dissipated somewhat, or at least transformed into something more nebulous.

This analysis of interactions was crucial for assessing coherence: it added value by identifying missed opportunities for collaboration as well as any positive complementarities. For example, the report notes that while PHAS and SPIDER did coordinate to avoid duplicating training audiences in data analytics, *no formal mechanism* existed to integrate their planning.

The limitation of the ONA approach in practice was that it relied on interview narratives and documented meeting records rather than network surveys – meaning the analysis was somewhat subjective and possibly incomplete (it might not have captured all interactions). Also, mapping a “network” of essentially three main actors (plus their Somali counterparts) is inherently a small sample – the evaluators could qualitatively describe relationships without needing complex network visualisation. Challenges in using this tool included the fact that some stakeholders had departed, so reconstructing the full history of collaboration depended on recall. Nonetheless, the evaluation effectively applied the spirit of ONA by examining the partnership aspect. It provided a narrative that *contrasted intentions vs reality*: Sweden’s multifaceted support was intended to be complementary, but in practice the three components often operated in parallel with only modest convergence. Identifying this gap was important for learning, highlighting that future multi-channel aid should build in stronger coordination structures. In summary, the ONA was used in a *light-touch, qualitative* manner – it did yield

insights into network dynamics and added evidence under the coherence criterion, even though it was not a formal network mapping exercise due to data and scope limitations.

11.2.9 Forward-Looking Workshop Lesson Learnt Workshop

An initial inception report validation process took place to ensure agreement with the proposed approach. This was complemented by a strategic reflection and validation workshop to engage key users and share findings at the end of the evaluation process.

This workshop took place in Nairobi in May 2025, involved Sida, PHAS, SPIDER, WHO-Somalia, and other stakeholders. It served to validate findings, contextualise lessons, and inform recommendations, but above all it was aimed at contributing perspectives on future strategies in fragile settings and unpacking complex issues in the context around ownership, sustainability and other points. The workshop strongly strengthened the learning dimension and utilisation-focus of the evaluation.

Intended Use (Inception): The Inception Report anticipated holding a **lessons learnt and strategic reflection workshop** toward the end of the evaluation.

The plan was for the team leader to facilitate a brainstorming session with primary evaluation users (Embassy of Sweden/Sida and Somali health authorities) and a select number of interested donors or stakeholders. This was to take place after the draft evaluation findings were ready (ideally once the report was approved) – effectively making it a *validation and forward-looking exercise*.

The rationale was twofold: (1) **Validation** – to present preliminary conclusions and learnings to key stakeholders and verify their accuracy or get additional context (a form of triangulation through discussion); and (2) **Utilisation and learning** – to engage stakeholders in interpreting results and brainstorming strategic implications and recommendations for the future. By doing so, the evaluation would not only be a one-way reporting process but also a capacity-building moment, ensuring that insights were digested and that there was buy-in for the recommendations. The workshop was intended to be held in Nairobi (where the Somalia section of the Embassy is based) if budget and security permitted, emphasising an interactive, face-to-face learning opportunity at the culmination of the evaluation, important when discussing relatively complex and sensitive issues as they related to a fragile and politically challenging country.

Actual Application (Final/VO): Indeed, a “forward-looking workshop” took place in Nairobi in May 2025 with primary evaluation users and a small subset of donor representatives, as documented in the Final Report.

This session occurred at the close of the evaluation process, aligning with the plan. During the workshop, the evaluation team shared key findings, and stakeholders discussed the lessons and future strategies and implications for fragile settings generally. In terms of effectiveness, this workshop added considerable value. It served as a reality check for the evaluators: participants could confirm whether the conclusions resonated or point out any inaccuracies. It also enriched the evaluation by incorporating stakeholder reflections on why certain results occurred and how to address challenges moving forward. For example, if an evaluation finding was that coordination was weak, the workshop could generate concrete suggestions on how to improve it in future programmes. Additionally, the workshop helped co-create forward-looking thinking

(plans?) for the broader community. The Final Report's recommendations section was already based on some collaborative input, as many recommendations are practical and aligned with Somalia's context (a need emphasised by participants).

A limitation of such workshops can be **bias or defensiveness** – stakeholders might be inclined to defend their programmes or shift blame. However, having a range of participants (including funder, donors, implementers, experts,) can balance this out. The evaluation team's facilitation is key to mitigate any single voice dominating. Another challenge is ensuring the workshop's insights are captured. The team agreed to consider whether the documented results of discussions might be appended to the final deliverable. Ultimately, the occurrence of this workshop demonstrates a commitment to a participatory evaluation process. It made the evaluation more *utilisation-focused*, as stakeholders did not just passively receive a report but actively engaged in the learning process. The result was likely stronger ownership of the findings and recommendations, and an opportunity to take time and space to reflect at the strategic level on what challenges fragile contexts create in health systems, and what sorts of alternative thinking might help. In summary, the planned workshop was appropriately planned and was likely be fruitful in validating results and charting future actions, with the only caveats being the typical ones of facilitation and representation.

11.3 METHODOLOGICAL CONSTRAINTS AND CHALLENGES

The evaluation faced several methodological constraints. Security risks limited field presence beyond key regions. The team had to rely on one Somali team member for in-country work, which constrained direct in-country data collection (though virtual interviews with informants in Somalia were held by all team members). Political instability and staff turnover made it difficult to secure some informants or validate historical events. Data availability was a recurring issue, with limited recent, accurate, or disaggregated data.

The time and resource frame were also a huge limitation: evaluating three distinct interventions under a single budget and schedule required trade-offs. Finally, institutional volatility meant some intended methods (e.g. maturity model) had to be adapted.

11.4 SOURCE CRITICISM (RELIABILITY, TRIANGULATION, AND GAPS)

The evaluation applied careful source triangulation. Given Somalia's weak health data systems, reliance on routine health statistics was limited. Instead, the team combined interview evidence, field observations, and documentation. When sources conflicted, greater weight was given to corroborated evidence and documentation.

The team recognised the limitations of each source type: project documents tend to highlight achievements; interviews may reflect bias or institutional interests; field observations are limited in scope. The team mitigated these risks by using multiple sources and validating findings through cross-verification. The Somali evaluator's role was central to eliciting candid insights and interpreting local dynamics.

While gaps remained – particularly in outcome data and private sector information – the evaluation presents a credible and well-substantiated picture, based on methodical use of available sources.

Any evaluation is only as good as the sources and data behind it. This evaluation had to contend with significant source limitations and thus employed careful **triangulation** to enhance reliability. A major issue was the **paucity and patchiness of quantitative data** on Somalia's health system performance.

Health information systems were fragmented, and data on outcomes (e.g. health indicators) were incomplete or inconsistent. This meant the evaluators often could not draw firm conclusions from statistics alone. To compensate, they leaned on multiple types of evidence: interview testimonies, project reports, direct observations, and any available secondary data. Triangulation was explicitly used as a methodological principle – findings were only considered robust if supported by more than one source.

For example, an assertion that “RAAD improved data collection” would be checked against interview comments, on-site observations, and whatever monitoring data existed, rather than relying on a single report. This approach strengthened reliability: where sources converged, confidence in the finding grew; where they diverged, the team investigated further or reported the discrepancy. The Final Report notes that in instances of *extremely conflicting information between informants and documents*, the team compared accounts across different stakeholder groups and gave more weight to primary sourced observed evidence when available. This demonstrates a critical approach to sources – not taking any one account at face value if it stood alone or contradicted others.

11.5 BIAS CONSIDERATIONS

Several forms of bias were recognised and addressed. Stakeholder bias was mitigated by interviewing a diverse sample, ensuring anonymity, and triangulating claims. Recall bias, especially on past events, was checked against documentation. Framing bias was reduced by explicitly seeking unexpected outcomes and testing ToC assumptions.

Evaluator bias was addressed through internal team discussion, inclusion of a Somali evaluator, and stakeholder validation during the Nairobi workshop. Political sensitivity, particularly around NIH developments, was navigated by documenting institutional changes transparently and noting contradictory perspectives. The evaluation avoided attributing results simplistically, and used contribution analysis to show plausible influence without over-claiming impact. Overall, while recognising the potential for bias in any evaluation, the team undertook consistent efforts to ensure neutrality, accuracy, and contextual fairness throughout the process.

Institutional bias and perspective gaps were recognised and addressed as well. Each category of source had its biases: government officials might portray outcomes in a positive light or downplay problems for political reasons; implementing agencies (PHAS, SPIDER, WHO) could be inclined to highlight successes of their work; documents like progress reports often focus on achievements due to their reporting nature; meanwhile, front-line health workers might emphasise practical challenges on the ground. The evaluators were aware of these tendencies and treated sources accordingly. For instance, when NIH staff and external partners gave different accounts of NIH's functionality, the truth likely lay in between. The evaluation's use of a national Somali team member was helpful for **source credibility** – it improved access to more candid local perspectives and helped interpret nuanced answers in context (mitigating the risk of only hearing the donor/implementer narrative). Still, there were **gaps in source information** that even triangulation could not fully close.

The Final Report mentions “very different perspectives and insights across key informants and institutions” and a lack of up-to-date data, which “*posed a methodological challenge in terms of triangulation*”, forcing the team to make best-judgment calls.

This is a transparent admission that not all findings could be 100% verified. For example, the actual status of the NIH by 2024 had to be inferred from partial evidence since some relevant stakeholders were no longer present and documentation had gaps, and reports conflicted to a large extent depending on the informant. The evaluation mitigated this by explicitly citing sources for specific findings and by indicating uncertainty where appropriate.

The **use of primary vs. secondary sources** was balanced. Primary data (interviews, direct observations) provided current, first-hand insight – essential in a context where secondary data were outdated or absent. Secondary sources (project documents, strategies, prior evaluations) provided a framework and factual background, and were used to cross-verify claims (e.g. checking if an outcome claimed in interviews was recorded in a report or data set). There is evidence of **triangulation between primary and secondary**: for example, if the SPIDER project report claimed a certain number of facilities using RAAD, or a certain level of dual or single use, or use of unique patient id's etc, the team would verify this during field visits and interviews at those facilities. Regarding **reliability**, the evaluators treated each source critically. They questioned the reliability of some success stories if not collaborated, just as they treated complaints with caution if coming from a single disgruntled individual. The Final Report explicitly addresses *informant bias and recall bias in a fragile context* as factors affecting data quality.

By acknowledging this, the evaluators used a healthy source criticism mindset – they did not assume all statements as facts, especially knowing that memory and personal bias can skew narratives (some events being a few years past, stakeholders may remember selectively). In sum, the evaluation strove for a *triangulated, well-substantiated evidence base*, conscious of each source’s reliability. While constraints in data and access meant that some conclusions relied on limited evidence, the team was transparent about those cases. The combination of sources – despite their individual flaws – provided a more reliable overall picture than any single source could. The evaluators’ methodological sections and annexes (listing documents and informants) further allow readers to judge the breadth of sources, enhancing the credibility of the evaluation process. In addition, the strong health background and expertise, related both to Somalia and to East Africa of two team members allowed for important correlation and contextualisation related to the health system and health related actions.

Bias Considerations (Stakeholder and Evaluator Biases). Bias can creep into evaluations from many angles – stakeholder inputs, methodological designs, and even the evaluators themselves – especially in a complex political environment like Somalia. The evaluation was conscious of several **bias risks** and took steps to mitigate them, though some biases inevitably lingered. One major concern was **stakeholder or informant bias**. In a highly political, fragile context, people interviewed may have had agendas or fears influencing their responses. The Final Report acknowledges that “*informant bias, and recall bias, are strong factors*” in such a setting. For example, a government official might paint a rosy picture of the NIH’s performance to align with a national narrative, or conversely, a former staff member might overly criticise after a fallout. Recognising this, the evaluators did not rely on single-source

claims and maintained anonymity/confidentiality to encourage frankness. They also sought to include a range of stakeholders to balance perspectives – if one donor said one thing and a local NGO said another, hearing both would counteract one-sided views.

Recall bias was another issue: given the multi-year timeframe (2019–2025) and staff turnover, some informants might misremember details of what happened early on. The team likely cross-checked timelines with documentation to reduce errors from faulty memory. Still, as noted, in some cases they received “*extremely conflicting insights*” from different sources, indicative of bias or divergent experiences. They managed this by triangulation and by making judgement calls on credibility. For instance, if most interviewees (from different backgrounds) echoed a similar point, the team could be more confident that it wasn’t just bias speaking.

Methodological framing bias was also a consideration. By structuring the evaluation around the projects’ own Theories of Change, there was a risk of *confirmation bias* – i.e., focusing on proving the expected results and missing unanticipated outcomes. The team mitigated this by explicitly asking about unexpected effects and by using an open-ended contribution analysis approach.

The evaluation questions were adapted to ensure they weren’t leading or ignoring certain criteria (they included OECD/DAC criteria like coherence and sustainability, which forced looking beyond just intended outputs). Another framing bias could be an *over-emphasis on success stories* (common when relying on project documents or guided site visits). The evaluators appear to have been careful here: they probed for challenges and failures as much as successes. The presence of critical findings (e.g. on lack of coordination, or NIH setbacks) in the Final Report shows they did not fall prey to only reporting positive outcomes.

Evaluator bias/positioning is also pertinent. The team comprised an East African/international health and evaluation expert; and a national health and evaluation expert; and a seasoned international expert (specialised in systems analysis but not in health). There is always a risk that evaluators bring their own assumptions – for example, preconceived notions of what a health systems project *should* achieve, or might unconsciously give more weight to articulate English-speaking informants. The inclusion of a Somali expert and an East Africa expert on the team was a deliberate strategy to balance this. The Somali expert in particular could navigate local context, pick up on subtleties that outsiders might miss, and challenge or validate interpretations the others had. However, even this may have introduced bias in the Somali context. There’s no indication of that here, but it’s a general risk and anyway there was triangulation across the team.

Language and cultural positioning played a role: since not all team members spoke Somali. Important nuances might be lost or filtered. The team identified this as a limitation in inception and used mitigation measures (e.g. having the national expert lead those interviews). Still, an evaluator not understanding the language firsthand can’t fully control for what he or she does not *hear*. They acknowledged that “interpreted conversations can be tricky”, showing awareness of this potential bias.

Contextual and **political biases** also loomed. Somalia’s context is one where open criticism can be sensitive. Some interviewees might have self-censored due to fear of repercussions or due to nationalist sentiment (not wanting to admit a foreign-supported project had issues). The evaluation took place during a period of political change (a new government altering NIH leadership), which likely meant some informants cast events in a political light. For example,

supporters of the old NIH leadership might blame the government for setbacks, whereas officials might downplay the NIH’s struggles as just reorganisation. The evaluators navigated this by noting the political changes as a factor and by not attributing everything to the project itself.

They also operated with an understanding that **progress in Somalia is non-linear** and subject to governance upheavals – this contextual understanding helped them avoid the bias of assuming linear progress or attributing blame simplistically. Furthermore, **institutional bias** (where each organisation views outcomes from its own interest) was evident: PHAS, WHO, and SPIDER each emphasised the importance of their piece of the puzzle. The evaluators, being external, had to position themselves neutrally. The Final Report tried to provide a balanced critique of each intervention (noting strengths and weaknesses) so as not to adopt any single institution’s bias. Lastly, confirmation bias on the part of evaluators was tempered by the team’s internal discussions and the closing workshop. By debating evidence among themselves and then with stakeholders, they reduced the chance that one person’s biased interpretation prevailed. The workshop in Nairobi aimed to quickly surface if an interpretation was off-base according to all of those on the ground, allowing the team to adjust, if needed, in an addendum.

Overall, while various biases were at play in this evaluation, the team showed a high degree of self-awareness and implemented strategies to mitigate them – from triangulating sources to involving local expertise and engaging in critical reflection with stakeholders. No evaluation in a complex environment can be entirely free of bias, but by documenting conflicting information, acknowledging limitations like informant bias, and being open about the context’s influence, this evaluation managed to present findings that are as fair and balanced as possible. The end result is a critical yet constructive assessment that accounts for multiple viewpoints and remains sensitive to the Somali context, which was precisely the intent for a professional, unbiased evaluation process.

11.6 ILLUSTRATIVE VIGNETTES: EXAMPLES OF METHODS IN PRACTICE

To complement the methodological narrative above, these short examples illustrate how specific tools and approaches yielded insight or encountered challenges during the evaluation:

Illustrative Vignettes: Examples of Methods in Practice

 Tool or Method	 Example in Practice
Maturity Model Limitations	Conflicting accounts of NIH progress and setbacks in 2023 meant governance data was too inconsistent for a maturity scorecard.
RAAD System in Practice	Field visits confirmed that Facilities continued using both RAAD and paper systems. Staff found this duplicative and burdensome, limiting data use despite strong support for RAAD.
Process Tracing and Attribution	A clear link was traced between PHAS-supported FETP training and improved disease surveillance. Elsewhere, attribution was confounded by other donors.

 Tool or Method	 Example in Practice
Informant Divergence	MoH and WHO gave opposing accounts on WHO-funded roles’ effectiveness. Evaluation triangulated with third-party and documentary evidence.
Observational Insight	In Dhusamareeb, evaluators saw unutilised digital tools and persistent stockouts despite official reports suggesting readiness.
Bias Awareness	At the Nairobi workshop, some stakeholders are likely to have defended project success beyond what field evidence showed. Facilitators planned to balance perspectives constructively.

11.7 CLOSING REFLECTION

The evaluation team applied a broad set of methods and tools, adapted them pragmatically to Somalia’s complex and resource-constrained context. While some intended tools were modified due to data or access challenges, core principles of rigour, triangulation, relevance and transparency were mostly upheld. This annex documents how the evaluation was conducted, but also how its design was critically applied, challenged, and improved through field realities and stakeholder dialogue.



Evaluation of Sweden's support to health systems in Somalia through PHAS, SPIDER and WHO

This evaluation, commissioned by the Embassy of Sweden in Nairobi, assesses Sweden's contribution to strengthening the Somali health system through three interventions: the Public Health Agency of Sweden (PHAS), SPIDER's HADDA project, and WHO's support in Somalia. It aims to determine the relevance, effectiveness, coherence, and sustainability of these interventions and to generate lessons for future programming in fragile settings. The interventions made significant progress in strengthening Somalia's health system, particularly in public health functions, digital health innovation, and disease surveillance. However, sustainability is challenged by political instability, infrastructure deficits, and reliance on external funding. The evaluation highlights the need for legal and financial anchoring of institutional gains and greater engagement with private health actors. Key recommendations include enhancing coordination among interventions, embedding sustainability mechanisms, improving digital health infrastructure, and ensuring legal and financial support for health institutions. Future efforts should focus on integrating private sector actors and maintaining flexibility to adapt to the volatile Somali context.

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