

Draft Health Systems Integration Maturity Framework for Uganda

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Introduction

Background

The pursuit of integrated, resilient, and people-centred health systems has gained renewed global urgency, particularly in the wake of successive health emergencies, such as COVID-19, and uncertainties following freezes and cuts to donor funding at the beginning of 2025. These crises have exposed the fragility of fragmented health delivery models and underscored the need for coordinated systems that can absorb shocks while maintaining essential services. In Uganda, the historical evolution of the health system—characterised by a proliferation of vertical, donor-funded programs—has yielded substantial gains in targeted areas, including HIV, tuberculosis (TB), malaria, and maternal and child health. However, it has also contributed to the persistence of siloed planning, duplicated reporting systems, parallel supply chains, and fragmented financing structures.

Efforts to “integrate” these vertical programs into the broader health system are not new, yet the absence of a clear measurement framework has limited progress. Integration, while widely advocated in policy discourse, remains an ambiguous and contested concept, interpreted variously as co-location of services, harmonisation of guidelines, pooled financing, or joint supervision. Without a common language or tool to assess the extent and nature of integration across dimensions and levels of the health system, stakeholders lack the evidence needed to inform reforms, target investments, or monitor improvements.

The Ministry of Health (MoH), in collaboration with development partners, aims to strengthen the integration of service delivery within the health sector through a mechanism that can be tracked, monitored, and evaluated to enhance the long-term effectiveness of services and demonstrate equity. This effort is in line with a broader technical assistance package to strengthen and sustain an integrated, people-centered, quality and efficient health system, through coordinated service delivery package including pooled funding and equitable health sector programming in the spirit of achieving a one plan, one budget and one monitoring and evaluation (M & E) for the sector. This effort is also aligned with the recommendations of the WHO-led Cross-Programmatic Efficiency Analysis (CPEA) for building stronger, integrated service delivery mechanisms.

To address this gap, the Ministry of Health in Uganda, in collaboration with sectoral technical partners, has developed a framework to support the delivery of integrated health services. Developed as a structured tool, Uganda’s Health System Integration Maturity Framework (SIMF) aims to assess the maturity of integration across key dimensions and levels of the health system. The SIMF offers a practical framework for evaluating how well health programs (especially those historically structured as vertical initiatives) are embedded within national, regional, district, and facility-level systems. It serves both as a diagnostic instrument and a strategic roadmap, allowing stakeholders to identify bottlenecks, benchmark progress, and prioritise dimensions for deeper integration.

The development of the SIMF is part of a broader national effort to assess the current status of service delivery integration and provide practical tools to accelerate progress. This assignment

encompasses a comprehensive situation analysis of integration practices across national and subnational levels, inclusive stakeholder consultations to validate findings and shape a realistic action plan, the creation of integration guidelines and an operational checklist, and the design and piloting of a government-owned maturity framework. It also includes support for documenting lessons learned to inform future strategic planning and contribute to global health learning.

This report presents the rationale, development process, conceptual foundations, structure, and initial application of Uganda's SIMF. Drawing on global maturity frameworks, local stakeholder consultations, and pilot applications during the situational analysis for integration, this illustrates how the SIMF can be used to support integrated health system strengthening in a manner that is context-sensitive, actionable, and aligned with national health goals. It is divided into four main sections/parts. Part I is the introduction, which focuses on the background, rationale, purpose, and objectives of the SIMF. Part II covers the development process and conceptual foundations of the framework. Part III elaborates the framework's structure. Part IV focuses on the Next steps in refining the SIMF.

Rationale and Purpose

Uganda's commitment to universal health coverage, health system resilience, and long-term sustainability necessitates a shift from siloed programming to integrated health system delivery. The rationale for developing an integration maturity model stems from the need to assess, visualise, and manage the extent of integration across essential health system dimensions. The SIMF recognises that integration is a process, not an endpoint. It evolves through intentional design, institutional reform, and system-wide learning.

The purpose of the SIMF is threefold. First, it provides a diagnostic tool that allows stakeholders to understand current integration levels and identify areas for improvement. Second, it facilitates alignment of vertical programs with national strategies, thereby supporting harmonisation of planning, financing, service delivery, monitoring, and community engagement. Third, the SIMF promotes accountability and transparency by encouraging joint reviews of integration status and collective action planning.

The SIMF is designed to be applicable across diverse health programs and adaptable to different levels of the system. It recognises that integration is not binary but rather a spectrum, from fragmented, standalone operations to fully harmonised, government-led structures. Moreover, the SIMF is not only about technical alignment; it also engages with the political economy of integration by highlighting structural disincentives, informal practices, and systemic path dependencies that shape how programs interact over time.

Therefore, the SIMF also plays a critical role in guiding transitions, particularly as donor funding shifts and Uganda assumes greater domestic responsibility for health financing and delivery. By mapping integration levels, the SIMF helps anticipate transition risks, identify institutional gaps, and promote locally owned strategies to sustain health outcomes.

Objectives of the SIMF

The overarching objective of the SIMF is to strengthen health system integration in Uganda through a standardised framework that can be applied at national, regional, district, and facility levels. Specifically, the SIMF seeks to:

Enable systematic assessment of integration maturity across key domains of the health system.

Facilitate strategic planning, policy coherence, and coordination across programs and sectors to ensure effective alignment and integration.

Guide prioritisation of reforms, capacity development, and resource allocation.

Foster shared learning, transparency, and joint accountability between national and subnational stakeholders.

Track integration progress over time and generate actionable evidence for decision-making.

The SIMF is not only an assessment tool but also a planning and learning instrument. It supports dialogue among actors and institutions, encourages adaptive management, and contributes to embedding integration as a core value of the health system.

Development Process AND Conceptual Foundations OF THE FRAMEWORK

Methodology for Framework Development

The SIMF was developed iteratively alongside the development of an integration assessment tool used in the situational analysis. The iterative process was anchored in the customised SELFIE framework by Leijten et al (2018), using a Likert-style scale to measure the extent of integration across key system components. The goal was to assess integration using five standardised statements per component, which represent progressive levels of integration, ranging from “not integrated” to “fully integrated.” The tool development process was modelled on Mokkink et al (2006) (1) and involved several steps.

Conceptual Mapping and Literature Review

The framework is grounded in interdisciplinary theory and empirical evidence drawn from global health systems research, public administration, and organisational development. Its development was informed by a focused narrative review of international maturity models, national health policy frameworks, and practical field insights on integration challenges and opportunities within Uganda’s health sector, as part of the Situational analysis. The goal was to produce a context-sensitive tool that is technically robust, politically feasible, and practically usable by national, district, and facility-level actors.

The process began with a structured review of existing maturity models in health systems, supply chains, organisational collaboration, and digital governance. The review focused on extracting the following components from each model: a) the number and nature of maturity levels; b) the domains or dimensions assessed; c) structural and behavioural indicators used to define each level. To a limited extent, we explored the application experiences, including their strengths and limitations, as well as the adaptation processes used in low- and middle-income countries (LMICs). Key models are detailed in section 3.

A related literature review (section 4 below) focused on unpacking the concept of health services integration. It considered the various definitions and dimensions of integration from the literature and the implications for Uganda’s integration agenda.

Stakeholder Engagement and Co-design

Recognising the importance of contextual relevance, ownership, and validation, the SIMF has been refined through a series of stakeholder consultations conducted in conjunction with the development of the situational analysis report. The categories of actors involved include:

A multi-stakeholder National Advisory Committee on Integration (NACI) that brings together the Ministry of Health (MoH) departments, such as Planning, Clinical Services, Health Information, and National Disease Control, as well as other sector partners.

Online MoH meetings with District Health Officers (DHOs) and Facility Managers during the rollout of MOH integration guidelines.

Civil society organisations, other Development partners and implementing organisations.

Workshops and bilateral engagements were used to share and validate assumptions, refine conceptual definitions, and ensure the integration assessments reflect realities on the ground. Stakeholders were asked to reflect on whether the proposed dimensions (e.g., financing, supply chain, Human Resources for Health (HRH), community programming) effectively captured core integration challenges and whether the five-level maturity scales were granular enough to reflect real progress and bottlenecks under each dimension. This participatory co-design approach helped ensure that the SIMF would be applicable at multiple levels—national, regional/district, and

facility—and adaptable across diverse programs (e.g., PMTCT, HIV, malaria, TB, RMNCAH).

Practical application, validation and further refinements of the draft framework

The draft SIMF has been piloted through assessments during the situational analysis of integration in Uganda, drawing on a document and literature review, as well as primary data from various interviews. The primary data collection methods during these assessments included 22 key informant interviews (KIIs) with national-level policymakers (e.g., MoH directors, program heads), as well as DHOs and Facility-level managers, such as hospital directors.

The interviews were guided by a structured template based on SIMF dimensions. Respondents were asked to describe integration practices, challenges, innovations, and coordination dynamics across programs. Their responses were then mapped against the SIMF scoring statements.

Qualitative analysis of interview transcripts enabled the team to: a) validate whether the maturity levels accurately captured observable realities; b) identify dimensions with clear integration progress and those with persistent fragmentation; and c) refine the phrasing of the scale statements to improve usability. Quantitative scores were derived through consensus among the core CHAI, MakSPH and MoH officials.

Findings from literature, consultations, and field testing were synthesised into a full model framework. This iterative validation ensured that the SIMF was not only theoretically grounded but also empirically aligned with Uganda's operational realities. The SIMF is being finalised as both a conceptual tool and a practical instrument to facilitate benchmarking, planning, supportive supervision, and policy dialogue. Future phases will involve digitisation, incorporation into routine reviews (e.g., Joint Annual Reviews, District League Tables), and adaptation for sector-wide performance monitoring.

Conceptual Foundations for the SIMF

The Uganda SIMF is informed by global evidence and theoretical insights on integration, systems thinking, and maturity modelling. It draws inspiration from international frameworks such as the Capability Maturity Model Integration (CMMI) (REF), WHO Joint External Evaluation (JEE) guidance, and health systems integration maturity models.

At its core, the SIMF combines concepts from systems thinking, maturity modelling, and multilevel governance to provide a comprehensive tool for assessing and guiding integration across functions and levels within the health system. The following conceptual principles underpin the SIMF:

Systems Thinking: Recognising the interdependence of functions (e.g., financing, human resources, governance) and feedback loops that affect performance across system levels.

Health System Integration: The deliberate combination of programmatic structures, processes, and resources to deliver coordinated, efficient, and people-centred services.

Maturity Modelling: A staged framework that defines progressive levels of capacity and institutionalisation, enabling benchmarking and guided improvement.

Multilevel Governance: Emphasising coordination and coherence across macro (national), meso (district), and micro (facility/community) levels.

Systems Thinking and Integration Dimensions

The SIMF is underpinned by systems thinking, which emphasises the interdependence of health system components and the dynamic interactions between actors, institutions, and functions. Health systems are not linear or static—they are complex adaptive systems characterised by feedback loops, path dependencies, and emergent behaviours. Integration, therefore, must be understood not merely as the colocation of services or merging of functions, but as a process of aligning policies, incentives, processes, and relationships across multiple domains and levels.

The Situational analysis unpacked the concept of integration and also reviewed multiple frameworks of integration. The components of the SELFIE framework, in the table below, were

adopted as the core of the measurable integration dimensions. It was adopted for the purpose of developing relevant tools that cover the domains. The framework has been used widely in Europe and LMICs to explore and design programs to support chronic care, especially for the elderly and contexts with HIV, TB and NCDs. First published in 2018, and has over 250 references and has been applied to about 47 projects that were exploring or planning health service integration projects. The framework was adapted to the health system in Uganda's decentralised levels of healthcare provision before it was used to assess the status of integration. Table 1 provides an overview of the main components and their descriptions.

Table SELFIE Framework for Health Service Integration as adapted to Uganda

These dimensions are not independent, but interlinked levers whose coordination determines the overall system's performance. Integration also includes "software" elements such as trust, leadership, political commitment, and institutional culture—all of which influence how integration is pursued and sustained.

Maturity Model as a Basis for Progressive Anchoring

SIMF adopts a maturity model approach, inspired by several frameworks. As noted, a focused review of some maturity frameworks was conducted to inform the main their main propositions and tenets. Across the seven reviewed models summarised in the table 2, a consistent feature is the use of structured, progressive maturity levels—typically in four to five stages—to assess the quality and evolution of collaboration or integration processes. These levels, ranging from ad hoc or incipient to managed, institutionalised, and optimizing, provide a developmental framework for guiding improvements in coordination, accountability, and shared decision-making. For instance, UNICEF's four-level model (Mozambique) evaluates maturity across domains such as governance, service access, and monitoring, while Ho et al. (2016) and Awasthy et al. (2018) apply 5-level frameworks rooted in Capability Maturity Model Integration (CMMI) principles to measure increasingly strategic and performance-driven collaboration.

The table illustrates how different maturity models emphasise distinct but complementary dimensions, ranging from institutional alignment and leadership(2) to participatory processes and group memory (3). Most models include structured self-assessment tools to facilitate benchmarking across units, teams, or sectors. For Uganda's SIMF, these frameworks offered a tested pathway to design a robust, level-based tool that not only assesses integration but also guides the incremental institutionalisation of health service integration. The narrative in the table thus reflects both the diversity of application contexts and a shared commitment to structured, stage-wise progression.

Table : Top of Form

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Comparative Summary Table of Maturation Models

The maturity models above offer Uganda a staged approach to track and improve integration across vertical and horizontal system levels. Adopting a 5-level structure, as seen in most models, would allow Uganda to:

Diagnose current integration status across core domains (e.g., data, governance, financing).

Benchmark between sectors and districts to promote learning and healthy competition.

Guide capacity-building and policy reform based on realistic integration trajectories.

Visualize and track progress through tools like spider diagrams or dashboards.

Design feedback loops to ensure that integration is continuously improved rather than static.

Multilevel Governance and Contextual Alignment

Uganda operates a decentralised and tiered health system, with service delivery under the purview of local governments and urban authorities. Recognising that integration must occur at and across

multiple levels of the health system, the SIMF applies a multilevel governance lens. It differentiates integration maturity at:

National (Macro) Level: policies, financing mechanisms, strategic leadership, and national data systems.

District/Regional/Subnational (Meso) Level: Planning, coordination, budgeting, and oversight functions at regional, district and sub-district levels.

Facility/Community (Micro) Level: Service organizations, frontline supervision, community linkages, and client interface.

This differentiation ensures that assessments reflect both the structural enablers at higher levels and the operational realities at the frontline. It also supports coherence between national reforms and local implementation. For example, a policy directive on integrated maternal and HIV services (macro level) must be matched by district-led joint planning (meso level) and actual delivery of co-located services (micro level). The SIMF enables the identification of gaps across these levels, allowing stakeholders to tailor interventions appropriately.

Global Benchmarks and Strategic Alignment to Ugandan Context

The development of the SIMF drew on international maturity models used in global health, especially the WHO Joint External Evaluation (JEE) tool, which assesses health security system capacities across functional domains. The JEE covers capacity domains, provides statements reflective of desirable status, indicators and rating approach. It has been applied in several countries (REF) and allows for self-evaluation and joint external evaluation, which combines in-country and external partners. It is consensus oriented and draws a range of methods and data sources.

These global frameworks provided useful language, scale structures, and conceptual anchors that informed Uganda's SIMF. However, adaptation was essential to reflect Uganda's institutional architecture, vertical program legacy, decentralization policy, and evolving donor landscape. Specifically, the SIMF is aligned with the National Development Plan III, National Health Policy (NHP III) and Human Capital Development Program Action Plan, the Universal Health Coverage Roadmap, which emphasize multisectoral coordination and integration as a strategy for efficiency and improved access to health services. The SIMF also aligns with recent the Rationalization of Government Agencies and Expenditure (RAPEX) efforts to enhance coordination and efficiency in the government. As articulated in the situational analysis, SIMF also aligns with Program-specific transition strategies, particularly for HIV/AIDS, which advocate for the mainstreaming of vertical investments into the broader health system.

This alignment ensures that SIMF findings and recommendations feed directly into existing reform platforms and accountability mechanisms. It also allows integration maturity to be tracked alongside broader health sector performance frameworks such as the District League Table and Joint Review Mission indicators.

Elaborating the Service Integration Maturity Framework

The SIMF is presented in Annexe 1. It is structured around the SELFIE components, adapted to Uganda (see Table 1 above). These dimensions are not isolated pillars; rather, they reflect the interdependent capabilities that must evolve together for integration to be sustainable. Each domain is assessed across five levels of maturity, ranging from no integration (Level 1) to full institutionalisation and system-wide coherence (Level 5). The framework is also sensitive to context and governance scale, differentiating how integration manifests across macro (national), meso (district), and micro (facility/community) levels. These aspects are briefly elaborated below.

The Five Levels of Maturity

For each domain, five qualitative anchor statements representing a continuum of integration were formulated. The general principle that guided the construction of the anchoring statements was the stakeholders aspirations and expectations at full integration of the component in the Uganda

setting. For example, the ideal integration for the Policy and Governance component involved the full mainstreaming of regulations, policies, plans, and operational actions to support strong government ownership and clear mandates for service integration among partners at the national, district, or facility levels. Scenarios were created to offer a range of realistic but progressive growth of the component and assigned scores as appropriate. The statements were identified from interviews as well as from literature concerned with assessing the integration phenomenon (6-8). These statements were informed by existing literature on integration measurement, national policy documents, and preliminary key informant interviews. The statements (see Appendix 1) were structured as below:

Level 1: No integration (fragmented, vertical, or standalone program components); colour code red. Level 2: Minimal alignment or recognition of integration in planning or structure; colour code orange. Level 3: Partial integration - e.g. with limited interoperability or shared processes; colour code yellow. Level 4: Strong alignment - e.g. with shared resources and joint governance; colour code light green. Level 5: Full integration – e.g. with seamless coordination and unified service delivery; colour code green.

Likert Scale Structure

Each dimension is rated on a five-point Likert-type scale (1 = Not Integrated, 5 = Fully Integrated), with respondents or assessors selecting the level that most closely matches their observation or experience. This structure enables benchmarking, guides prioritisation of reforms, and allows systems to set realistic goals for institutional development. The SIMF's staged design reflects that integration is not a one-time achievement but a continuous journey. It encourages iterative learning and recognises that different domains (e.g., financing vs. service delivery) may mature at different paces due to institutional legacies, political incentives, and technical complexity.

Flexibility, Customization, and Cross-Cutting Adaptation

The SIMF is intentionally designed to be flexible and adaptable. Integration as a concept has many dimensions and applications vary depending on the overall purpose and contingencies in the immediate contexts- especially the setting and its starting features and resources(6, 8). This variability is a cause for the complex and nuanced application and tracking of its maturation at the national, sub-national and facility levels. To this effect, SIMF is designed to be adapted to the different needs and expectations at these different levels and at the level of each health program and support systems. To illustrate the 3-level adaptations, table XX is provided for one of the components of the HIS framework. The full set of worked examples is provided in Annex 3.

Three-Level Structure: To reflect Uganda's decentralised health governance structure, the SIMF applies its scoring framework at three levels:

Macro (National Level): Focuses on national policy, strategic guidance, resource allocation, and regulatory frameworks. Integration at this level includes harmonised national policies, joint financing frameworks, and integrated monitoring and evaluation (M&E;) systems.

Meso (Regional/District/Subnational Level): Emphasises regional and district planning, coordination, supervision, and community interface. Integration is assessed through regional coordination and supervision structures, joint DHT planning, harmonised district-level monitoring and evaluation, and coordination of supply chains across programs.

Micro (Facility and Community Level): Concentrates on service delivery points and community health structures. Integration is observed through co-located services, multi-skilled staff, integrated registers, joint outreach activities, and feedback mechanisms from clients and communities.

Dimension 1. Policy and Governance Integration

Adaptability to different programs and cross-cutting issues

While standard scoring rubrics are provided, the tool can be customised based on programmatic focus (e.g., HIV, NCDs, maternal and child health, and other disease-specific integration planning) or implementation geography (e.g., refugee health programs. urban health etc). Cross-cutting

issues—such as gender equity, digital health, and climate resilience—can be overlaid on SIMF assessments to ensure a comprehensive approach. The model is also compatible with other assessment tools, such as the JEE and the Harmonised Health Facility Assessment (HHFA).

Next Steps

Mainstream the integration agenda into institutional plans and budgets

All relevant institutions, including the Ministry of Health departments, district health offices, and implementing partners, should incorporate service integration as a strategic priority in their annual work plans and budgets. This step ensures that integration is not treated as a parallel or ad hoc initiative but is fully embedded within routine planning, implementation, and resource allocation cycles. It also provides the basis for sustained government and partner investment, policy alignment, and long-term system transformation.

Finalize and institutionalise SIMF scoring tools and digital integration in DHIS2

Following pilot testing and stakeholder input, the SIMF scoring tools should be refined to enhance usability, contextual relevance, and alignment with existing service delivery protocols. These tools can be integrated into DHIS2 to support regular assessment, visualisation, and progress tracking and related decision-making. Institutionalisation will include endorsement by the MoH, updating national HMIS guidelines, and building interoperability with other monitoring systems.

Integrate SIMF indicators in national sector performance reviews

Selected SIMF indicators, reflecting key integration domains, should be embedded into the Health Sector Performance Monitoring Framework. This will enable the systematic tracking of integration maturity at national and subnational levels during Joint Review Missions (JRM), Annual Health Sector Performance Reports (AHSPRs), and other accountability platforms, ensuring visibility and follow-through on integration goals.

Build capacity of Regional Integration Coordination Structures, District Health Teams (DHTs) and health facilities for self-assessment

Targeted training and mentorship should be provided to ICS, DHTs, sub-county health workers, and facility in-charges to equip them with the skills needed to use the SIMF tools independently. This includes building competencies in conducting participatory assessments, interpreting maturity scores, identifying bottlenecks, and generating context-specific improvement plans. Emphasis will be placed on strengthening local ownership and fostering a culture of continuous quality improvement.

Use SIMF results to inform investment priorities and drive accountability reforms

Maturity assessment findings should serve as a critical input for national and district-level investment decisions. By identifying where integration is weak or fragmented, the government and partners can better target financial and technical resources. Moreover, SIMF-generated evidence will support broader accountability reforms, including performance-based financing, support supervision, and strategic purchasing arrangements that incentivise integration and efficiency.

Conclusion

The SIMF represents a tool and opportunity to systematically assess, plan and track efforts for advancing the country's health system toward greater integration, resilience, and sustainability. Amidst persistent challenges posed by fragmented programming, vertical financing, and parallel delivery structures, the SIMF offers a structured and context-appropriate framework for diagnosing, guiding, and accelerating integration efforts across the health sector.

By defining clear levels of integration maturity, anchored in the lived realities of Uganda's health governance structures, the SIMF enables policymakers, district health teams, development partners, and health facility managers to engage in constructive dialogue around what integration means, why it matters, and how it can be practically expanded and nurtured. It moves beyond

abstract aspirations of “harmonisation” and “alignment” to provide actionable, evidence-informed benchmarks for progress.

The SIMF’s emphasis on inclusivity—capturing macro (national), meso (district), and micro (facility/community) levels—ensures that integration is understood as a whole-system transformation, not a top-down technical reform. Its multidimensional approach acknowledges the interdependence of service delivery, financing, governance, health information, supply chains, and community engagement. By making these connections visible, the SIMF helps to break institutional silos, reduce duplication, and promote collective accountability.

Importantly, the SIMF is designed not as a one-off assessment tool, but as a learning and improvement mechanism. It fosters iterative dialogue, supports adaptive planning, and embeds integration into routine monitoring and review processes. This positions the SIMF as a vital instrument for managing donor transitions, promoting health system resilience, and strengthening Uganda’s pursuit of Universal Health Coverage (UHC).

As the country continues to face complex public health threats, evolving disease burdens, and shifting geopolitical dynamics in health financing, the Integration Maturity Model provides a strategic compass. Its widespread application, supported by government leadership and collaboration with development partners, can help translate fragmented efforts into unified, people-centred health responses that are locally owned and sustainably financed.

The success of the SIMF will ultimately depend on its institutionalisation through policy adoption, inclusion in routine performance reviews, and active use in priority setting at all levels. With deliberate investment, sustained political commitment, and cross-sectoral engagement, SIMF can serve as a cornerstone for building a more integrated, equitable, and effective health system for all Ugandans.

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Annexe 1: The Service Integration Maturity Framework

Annexe 2: Steps in applying the Service Integration Maturity Framework (SIMF)

Overview

Operationalising the SIMF requires a deliberate, phased, and participatory process that translates the framework into actionable assessments and improvements. This section outlines the methodology and practical considerations for using the SIMF to assess the integration of health programs across Uganda's health system levels. SIMF implementation follows a phased approach:

Team formation: Composing the multidisciplinary participants in the process of applying the framework

Orientation and Training: Stakeholders are introduced to the framework through sensitisation and capacity-building workshops.

Tool Adaptation: SIMF tools are customised for different levels and programs.

Data Collection: This includes policy review, key informant interviews, focus group discussions, and facility observations.

Scoring Workshops: Stakeholders jointly assess and score each domain using the SIMF scale.

Validation: Triangulation of findings across macro, meso, and micro levels.

Analysis: transforms data collected through the SIMF process into actionable insights that inform strategic planning, policy dialogue, and health systems strengthening

Action Planning: Sites co-develop improvement plans, informed by their SIMF scores.

Preparatory Phase: Stakeholder Engagement and Tool Customisation

The SIMF process begins with an intensive preparatory phase, which lays the foundation for inclusive participation and contextual relevance. This involves early engagement with the Ministry of Health (MoH), implementing partners, district leadership, and relevant program managers. The objectives in this stage are threefold: to foster stakeholder buy-in, tailor the tool to the Ugandan health sector context, and build institutional capacity for future use.

Team Formation and Stakeholder Engagement: The SIMF should be applied by a multi-disciplinary team representing both vertical programs and cross-cutting system functions. The team should ideally include Ministry of Health technical leads, district-level managers, health facility in-charges, implementing partners, and community health representatives. This diversity ensures that the perspectives of planners, providers, funders, and end users are incorporated into the assessment process.

Orientation and Capacity Building: Before commencing assessments, stakeholders should be oriented to the SIMF's structure, purpose, and scoring logic. A half-day orientation workshop may be conducted to build a shared understanding of the model. Facilitators should provide examples of integration scenarios across dimensions and levels to ensure consistency in interpretation.

Tool Customisation Workshops: Based on context, the scoring statements may be adapted to fit the realities of different programmatic areas (e.g., HIV, maternal and child health, community systems).

Selection of Implementation Sites: A purposive sampling of regions, districts, facilities or programs ensures representation of geographical, epidemiological, and operational diversity—including refugee-hosting districts, hard-to-reach areas, and urban settings.

Data Collection and Scoring

Once preparatory work is completed, the SIMF proceeds into the data collection and scoring phase. This is the technical heart of the process and requires careful design to ensure accurate and credible findings.

Data Collection Approach

The application of the SIMF relies on a combination of qualitative and quantitative methods. It includes a desk review of strategic plans, budgets, supervision reports, and data from the health information system. Observations complement these, as do key informant interviews with program managers, facility heads, and district officials, as well as focus group discussions with frontline workers and community health structures. Primary data are collected from MoH units, district offices, health facilities, and community actors.

Scoring of each domain should be informed by evidence and triangulated across sources. Each score must be justified by documented evidence or field insights. Where divergence of opinion exists, facilitators guide participants toward a collective score, while documenting dissenting views for transparency. For example, the integration of M&E may be assessed by comparing registers and reporting forms across programs, analysing DHIS2 data use, and interviewing staff to gauge their experience with data feedback mechanisms.

Consensus-Based Scoring and Validation

To reduce bias and promote shared ownership, scoring should be done through structured, facilitated consensus meetings with diverse stakeholders, typically in district workshops or national validation meetings. These sessions—reminiscent of the JEE approach—bring stakeholders together to discuss available evidence and agree on a score for each domain and level. Scoring is accompanied by a rationale that documents the evidence considered, identifies any gaps, and outlines the conditions that must be met to progress to the next level. Participants include representatives from various programs (e.g., HIV, malaria, TB, RMNCAH), planning units, finance departments, VHT coordinators, and health workers.

Each SIMF domain is scored on a scale of 1 to 5 to fit the statement that aligns most with the evidence. Scoring must differentiate between macro, meso, and micro realities. For instance, a national policy may mandate joint supervision (Level 5 macro), but if districts are not implementing it consistently (Level 2 meso), the system cannot be said to be fully integrated.

Findings from interviews, document reviews, and scoring workshops are triangulated to validate patterns and identify inconsistencies. This improves the reliability of final domain scores.

Analysis and action planning

Analysis

The analysis stage transforms data collected through the SIMF process into actionable insights that inform strategic planning, policy dialogue, and health systems strengthening. It involves both quantitative and qualitative methods, producing a comprehensive understanding of integration maturity across different programmatic and geographic contexts.

Quantitatively, the SIMF scoring results are compiled and aggregated across all seven dimensions at macro, meso, and micro levels. These scores offer a snapshot of integration performance, enabling users to compare maturity levels across various domains and locations.

Visual representations such as spider diagrams, bar charts, and integration heatmaps are developed to illustrate strengths, gaps, and priority areas. These tools enhance interpretation and provide compelling evidence for decision-makers and stakeholders. Spider diagrams are particularly useful for displaying integration profiles of individual facilities or districts, highlighting where integration is most advanced and where additional efforts are needed. These visuals are easy to interpret and have been effective in communicating integration challenges to both technical and non-technical audiences.

In parallel, qualitative data from interviews, discussions, and observations are analysed thematically to explain the numerical scores. This analysis reveals the institutional drivers, bottlenecks, and innovations that influence integration outcomes. For example, a facility may receive a low score on financing integration not because of inadequate capacity, but due to donor-driven constraints or unclear national guidelines. Capturing these narratives ensures that the SIMF process goes beyond scoring to understand the structural and political economy dynamics deeply affecting integration.

The synthesis of quantitative and qualitative data yields detailed integration profiles for the country, each region, district, facility, or program. These profiles describe the current maturity level per dimension, explain the rationale behind the scores, and highlight context-specific challenges and enablers. Comparative synthesis reports are also produced to analyse trends across multiple sites and identify patterns that may inform national-level reforms.

Action planning and outputs

Beyond profiling, the SIMF process produces prioritised and actionable recommendations. These are grounded in stakeholder input and aligned with the realities of the health system.

Recommendations may range from technical fixes, such as harmonising data tools, to systemic reforms, such as strengthening pooled financing or establishing joint supervision protocols. Action planning matrices are developed to assign responsibilities, timelines, and resource implications for each proposed intervention.

Another key output of the SIMF process is the documentation of stakeholder experiences and feedback. This includes reflections on the process itself, perceived utility of the tool, and suggestions for improvement. These insights are crucial for the iterative refinement of the SIMF and for fostering sustained stakeholder engagement.

Ultimately, the SIMF outputs are designed to support real-time learning and adaptive management. They are intended not only for MoH use but also for districts, facilities, development partners, and civil society organisations working to advance health systems integration. Through structured analysis and stakeholder feedback, the SIMF fosters a culture of continuous improvement and shared accountability, helping to bridge the persistent gap between policy intent and implementation realities.

Annex 3: Adapted Maturity Model at three systems levels

Dimension 1. Policy and Governance Integration

Dimension 2. Financing Integration

Dimension 3. Service Delivery Integration

Dimension 4. Human Resources for Health (HRH) Integration

Dimension 5. Health Information Systems (HIS) Integration

Dimension 6. Supply Chain Integration

Dimension 7. Community Engagement Integration

Dimension 8. Monitoring and Evaluation (M&E) Integration

Dimension 9. Sustainability and Ownership Integration