Gates Multi-Country SRS Planning and Experience Sharing Conference

Going Far Together!

2-5 June, 2025
Ramada Resort, Dar es Salaam - Tanzania

Hosts, Organizers, and Facilitators

Contents

Abbreviations

ACDC	Authentic Chained Data Containers
AI	Artificial Intelligence
ASAL	Arid and Semi-Arid Lands
CAPI	Computer-Assisted Personal Interviewing
CDA-MCCOD	Complete Diagnostic Autopsy Informed Medical Certification of Cause of Death
CDC	Centre for Prevention and Disease Control
CDCF	CDC Foundation
CHAMPS	Child Health and Mortality Prevention Surveillance
CHAs	Community Health Assistants
CHIS	Community Health Information System
CHO	Community Health Officer
CHPs	Community Health Promoters
CHWs	Community Health Workers
CoD	Cause of Death
CODA	Cause of Death Assistant
COVERS	Collection of Vital Events Information through Sample Registration Systems
COVID-19	Corona Virus Disease of 2019
CRDM	Collaborative Requirements Development Methodology
CRS	Civil Registration Services
CRVS	Civil Registration and Vital Statistics
CSA	Community Surveillance Agent
CSA	Community Surveillance Agent
D4H	Data for Health
DAK	Digital Adaptation Kit
DHIS2	District Health Information System (Software 2)
DHS	Demographic and Health Survey
EA	Enumeration Area
GoTHOMIS	Government of Tanzania Health Operation Management Information System
GPS	Global Positioning System
HDSS	Health and Demographic Surveillance System
HH	Household
IANPHI	National Institute of Health of Mozambique
ICT	Information Communication Technology
IDSR	Integrated Disease Surveillance and Response

IHI	Ifakara Health Institute
IPRS	Integration Population Registration System
JHU	John Hopkins University
JICA	Japan International Cooperation Agency
KHIS	Kenya Health Information System
KNBS	Kenya National Bureau of Statistics
KNBS	Kenya National Bureau of Statistics
MCCD	Medical Certification of Cause of Death
MITS	Minimally Invasive Tissue Sampling
MMR	Maternal Mortality Rate
MO	Medical Officer
MOH	Ministry of Health
MoH	Ministry of Health
MP	Member of Parliament
NBS	National Bureau of Statistics
NGAO	National Government Administrative Officers
NIMR	National Institute for Medical Research
P-MCCOD	Physician Assigned Medical Certification of Cause of Death
RITA	Registration, Insolvency and Trusteeship Agency
SAVVY	Sample Vital Registration with Verbal Autopsy
SDG	Sustainable Development Goal
SMS	Short Message System
SRS	Sample Registration System
Swiss TPH	Swiss Tropical and Public Health Foundation
UHC	Universal Health Coverage
USAID	United States Agency for International Development
VA	Verbal Autopsy
VACCOD	Verbal Autopsy Certificate of Cause of Death
VA-COD	Verbal Autopsy Informed Cause of Death
VIVA	Vital Insights for Vital Action
WHO	World Health Organization

Executive Summary

This report summarizes the proceedings, findings, and insights from the third multi-country convening on Sample Registration Systems (SRS), held on 2-5 June, 2025 in Dar es Salaam, Tanzania. The conference brought together 11 country teams and technical partners to accelerate national efforts in improving mortality surveillance through the design and implementation of fit-for-purpose SRS platforms.

Background and Purpose

Accurate and timely mortality and cause of death (CoD) data are vital for informed public health decision-making, resource allocation, and emergency preparedness. While civil registration and vital statistics (CRVS) systems remain the gold standard, many countries—particularly in Africa—continue to face challenges with completeness, timeliness, and integration. Sample Registration Systems provide an interim yet powerful approach to generate population-level mortality data in contexts where CRVS systems are not yet fully functional.

Building on previous engagements, this convening aimed to achieve the following specific objectives:

1. Review situational assessments and refine SRS designs
2. Create a learning space for countries to exchange implementation experiences
3. Develop national strategies for resource mobilization
4. Identify priority post-conference activities to advance SRS planning and implementation.

Prior to the conference, country teams had drafted situational assessment reports, completed a funder landscaping tool, and had advance discussions on SRS protocol/design.

Technical Sessions Overview

The convening featured a series of technical presentations that laid the groundwork for evidence-based SRS development. Topics included SRS design options and core decisions, community and facility data integration, quality assurance methods, interoperability with CRVS platforms, and use of mortality data for health system responsiveness. Notably, several of these sessions directly informed the structure and content of group exercises as shown in the detailed sections of the report.

On the final day, countries engaged in a structured funding landscape exercise to identify domestic and external financing opportunities for sustaining their SRS platforms. This helped ground their strategic planning in financial reality and supported early thinking around long-term resourcing needs.

Highlights of the Convening

Countries that have already designed and/or implemented SRS programs shared their experience, and teams from Ghana, Kenya, Mali, Pakistan, Senegal, and Tanzania that are in the planning stage presented their SRS situational assessments. Both sets of presentations highlighted critical system gaps, current data sources, and opportunities for integration, while also showcasing innovative approaches to stakeholder mapping, governance, and data systems.

Group sessions focused on system interoperability, stakeholder coordination, data flow and funding mapping, and system governance, culminating in country teams drafting and refining design outlines.

A concluding panel and plenary discussion brought together a panel consisting of representatives from countries that have implemented SRS programs as well as countries at different stages of SRS development to share reflections on sustainability.

Key Takeaways

- SRS is a high-impact, scalable solution for countries struggling with incomplete CRVS systems. It offers a practical way to fill mortality data gaps and enhance surveillance in the medium term.
- Governance and stakeholder engagement are critical. Many countries identified a need to clarify roles, align mandates, and ensure institutional ownership across ministries, agencies, and community-level actors.
- Community-level reporting remains a major bottleneck, especially in rural areas. CHWs and local leaders should be integrated more deliberately into data collection strategies, and informal practices (e.g., burial permits, traditional reporting) must be acknowledged in design decisions.
- There is no one-size-fits-all model. Countries must adapt SRS design to their existing infrastructure, policy landscape, and human resource realities—while still aligning with global standards.
- Political and financial commitment is key. Donor support remains important, but sustainability will depend on domestic leadership, cross-sector partnerships, resource mobilization, and consistent investment in system capacity and digital tools.
- Long-term success hinges not only on funding but also on strong legal frameworks, institutional mandates, and early stakeholder alignment.
- Sustainability must be planned from the outset, with clear ownership, political support, and pragmatic steps to embed SRS within existing systems and national priorities.

The sections that follow offer a detailed account of the different presentations, panel discussions and Q&A, design choices, and lessons shared.

Introduction

Across many developing countries — and with particular urgency in Africa — there is growing recognition of the critical need for accurate, timely, and representative mortality and cause of death (CoD) data. Yet many countries continue to face significant challenges in generating and using such data consistently. Weaknesses in existing systems, including fragmented data collection processes, under-registration of vital events, and limited interoperability, have created persistent gaps in public health intelligence. The COVID-19 pandemic further exposed these vulnerabilities, underscoring the importance of near real-time mortality surveillance for health security, emergency response, and effective policy-making.

Sample Registration Systems offer a practical, scalable approach to address these gaps. By capturing continuous data on births, deaths, and causes of death from a representative sample of the population, SRS can provide empirical estimates to inform health planning and monitoring, especially in contexts where civil registration and vital statistics systems are incomplete or underdeveloped. SRS can also complement efforts to strengthen CRVS systems over time, as emphasized in the *United Nations Principles and Recommendations for a Vital Statistics System*, which notes that while a well-functioning civil registration system is the gold standard for mortality statistics, alternative approaches such as SRS can provide essential data where CRVS systems remain weak.

The Africa Centres for Disease Control and Prevention (Africa CDC) further reinforced this approach through its *Continental Framework for Strengthening Mortality Surveillance in Africa*, which offers countries a blueprint for establishing integrated, sustainable surveillance systems that include SRS. This second convening on SRS planning and experience-sharing brought together government and technical teams from across Africa and Asia to reflect on country progress, share lessons from situational assessments, and refine their national strategies for SRS design and implementation.

The goal of this convening on SRS planning and experience-sharing was to support the development of robust, integrated, and fit-for-context SRS designs based on situational assessment results as well as resource mobilization plans. Best practices and lessons learned from cross-country experiences were shared for further guidance. The convening brought together government and technical teams from across Africa and Asia to reflect on country progress, share lessons from situational assessments, and refine their national strategies for SRS design and implementation. The focus was on creating a vision for each country's SRS, unpacking what was learned during the situational assessments, designing SRS programs with representation and integration, and identifying resources needed to develop and implement the designed SRS programs.

The sessions combined technical presentations, peer exchanges, collaborative design exercises, and in-depth discussions on governance, data integration, digital solutions, and resource planning. Through this process, countries identified strategic pathways forward and deepened their commitment to building sustainable SRS platforms that serve national priorities and reduce reliance on external funding. With participation from 11 countries, the convening reinforced the importance of cross-country learning and collective problem-solving in advancing Africa's mortality surveillance agenda. At the end of the conference, country teams had developed country-led, costed, and actionable plans to generate mortality data that can be used for routine decision-making, tracking health indicators, and building resilient public health systems.

The Opening Session

Setting the Stage for Strengthening SRS Systems

The first day of the conference opened with a clear articulation of its overarching goal: *To support the development of robust, integrated, and country-led Sample Registration Systems (SRS) that produce reliable, timely, and usable mortality data.*

Participants were introduced to the flow of the four-day agenda, which combined technical presentations, country experience sharing, and structured group work. The conference was

designed to equip country teams with practical tools and guidance to advance or initiate SRS development tailored to their national contexts.

Partner Reflections

Samantha Dolan from the Gates Foundation offered a compelling reflection that reaffirmed the Foundation's long-standing commitment to strengthening health and statistical systems across low- and middle-income countries. She underscored the critical role of Sample Registration Systems in generating reliable mortality data, not just from health facilities, but also from communities, particularly among the most marginalized and underserved populations.

Sam emphasized that effective SRS development requires more than technical inputs — it demands strong national leadership and ownership, institutional capacity, integration into broader CRVS and health information systems, and a commitment to sustainability. She encouraged participants to use the conference as an opportunity to reflect deeply on the "how" and "why" of system-building, and posed several critical questions to guide national planning:

- Does an SRS align with our national priorities for strengthening civil registration and vital statistics?
- What policy decisions will be informed by the data generated from an SRS?
- Can an SRS be designed to produce representative data for the entire country, including rural, urban, and hard-to-reach populations?
- What institutions would need to be involved, and do they have the necessary capacity?
- What is the estimated cost of establishing and maintaining the SRS?
- Are there funding sources available for start-up or capacity-building costs?
- Can the SRS be integrated with or complement existing CRVS, health information systems, or demographic surveillance systems?

These questions, she noted, are not just technical, they are foundational to ensuring that SRS implementation is fit-for-purpose, context-appropriate, and ultimately country-led. Her remarks helped set the tone for the conference: that countries must lead with their own vision, while partners walk alongside — not ahead.

Opening Remarks

Speaking on behalf of the Minister of Health, Hon. Jenista Mhagama (MP), the Regional Commissioner of Dar es Salaam, Hon. Albert Chalamila, officially opened the 2025 Sample Registration System Conference with a warm welcome to delegates and a call to embrace both the technical and cultural richness of Tanzania. He acknowledged the collective commitment of participating countries and development partners to strengthening Civil Registration and Vital Statistics (CRVS) and mortality surveillance systems, emphasizing that such efforts are vital for equitable development.

He highlighted the transformative role of the Sample Registration System as a reliable and continuous source of data on births, deaths, and causes of death. Tanzania's decision to host this year's conference, he noted, reflects its strong national commitment to developing robust mortality data systems. With support from global partners, including the Gates Foundation, the country is actively designing an SRS that is inclusive and representative of both urban and rural populations.

The Commissioner noted that the conference theme, *"Evidence for Equity: Strengthening Sample Registration Systems to Inform Policy and Save Lives,"* speaks to the power of timely, high-quality mortality data to reduce disparities, improve accountability, and guide impactful health and social policies.

He applauded the technical and financial contributions of key partners—Swiss TPH, Vital Strategies, Johns Hopkins University, WHO, US CDC, Africa CDC, and others—and underscored Tanzania's belief in the power of partnerships to drive sustainable progress.

In closing, he reminded participants that behind every statistic is a human story, and the systems being built today shape a better future for all. He wished participants fruitful discussions, deeper collaboration, and a renewed commitment to data-informed policymaking, officially declaring the conference open.

Keynote Address: Continental Efforts for Strengthening Mortality Surveillance

Presenter: Atuheire Emily, Mortality Surveillance Program Lead - Africa CDC

Emily opened her address with a clear and urgent message: *Africa must act decisively to strengthen its mortality surveillance systems.* Drawing from the lessons of the COVID-19 pandemic, she underscored how timely and reliable mortality data is critical for gauging disease burden, monitoring outbreaks, and informing health system responses — not only in times of crisis, but also for long-term planning and accountability.

Persistent Gaps and Challenges in Mortality Data Systems

Despite the acknowledged importance of mortality data, she noted that many African countries continue to face persistent challenges. Civil Registration and Vital Statistics systems — the globally endorsed gold standard — remain weak or underdeveloped in large parts of the continent. Dr. Atuheire highlighted several key obstacles: outdated legal frameworks governing death registration; fragmentation across multiple, non-interoperable systems; limited technical capacity in cause-of-death determination; and slow progress in digitalizing mortality reporting systems.

She reiterated that while CRVS remains foundational, it cannot deliver on its own. It must be complemented by approaches like Sample Registration Systems and mortality surveillance to create more responsive, real-time data ecosystems.

Africa CDC's Continental Framework for Mortality Surveillance

Over the past two years, the Africa CDC has developed and published a Continental Framework for Mortality Surveillance — a strategic guide for countries aiming to build integrated, scalable systems. Dr. Atuheire explained that this framework brings a *surveillance lens* to mortality data, shifting the emphasis from retrospective reporting to real-time detection and response.

Key pillars of the framework include the integration of mortality surveillance into national data ecosystems, continuous death recording mechanisms, improved data transfer and feedback loops, and — crucially — the use of data as a proactive driver of decision-making. Standardization and quality assurance are woven throughout the approach to ensure comparability across countries.

The framework also provides a phased implementation model that supports planning, coordination, capacity-building, and system monitoring — enabling countries to conduct a realistic assessment of their current situation and build SRS programs that are contextually appropriate and operationally feasible.

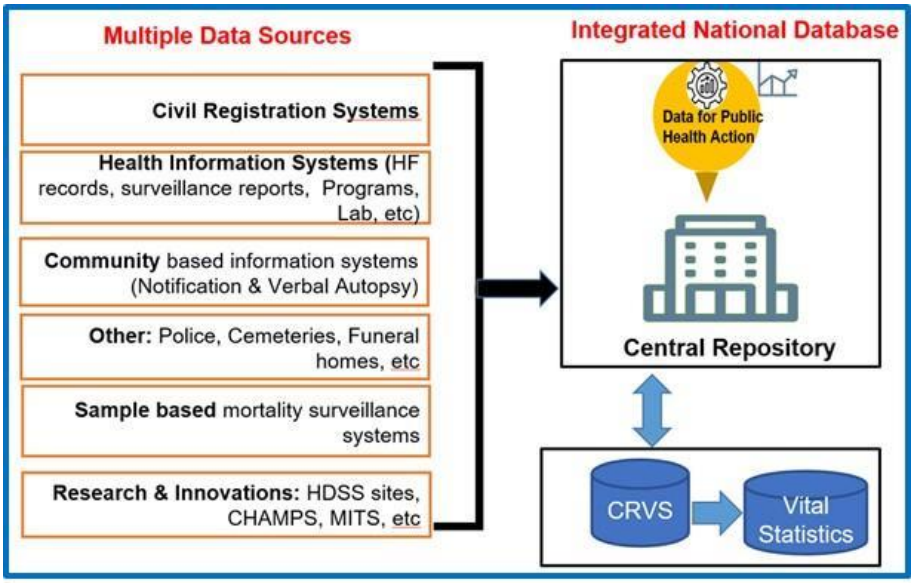
Core Functions and Supporting Mechanisms

Dr. Atuheire described the core functions of a strong mortality surveillance system: real-time, continuous death recording; secure and efficient data transfer; and regular analysis and dissemination. These core functions must be supported by enabling mechanisms such as legal and policy reforms, sufficient human resource capacity, digital infrastructure, and long-term financial sustainability strategies.

She emphasized that sustainability must be considered from the outset. Investments in SRS and mortality surveillance should not be treated as temporary or donor-driven projects, but as building blocks of future-ready national systems.

Strategic Implementation and Alignment

A recurring theme in Emily's keynote was the importance of alignment. Countries, she argued, should design SRS initiatives not as standalone efforts, but as stepping stones toward broader national mortality surveillance systems. This means thinking strategically about how SRS can support wider goals — from epidemic preparedness and equitable health planning to monitoring Sustainable Development Goals.



A unified mechanism for death reporting that fully aligns with CRVS operations

She encouraged governments to seize the current momentum to strengthen institutional capacity, coordinate stakeholders, and begin scaling systems over the next 5–10 years. The Africa CDC, she added, continues to offer technical support, mentorship, and tools to guide countries on this journey — from data analysis and systems integration to policy alignment and governance structures.

Closing Reflections

In her concluding remarks, Dr. Atuheire called on countries to take a bold, proactive stance: integrate SRS within broader surveillance and planning frameworks; utilize Africa CDC's growing body of technical materials and guidance; and tailor system designs to address local priorities, whether improving data quality, enhancing epidemic response, or informing policy.

She left participants with a powerful reminder: *"Behind every number is a life. Behind every system we build is the future we shape — for our families, our communities, and our continent."*

Articulating a Vision for SRS and Building an Investment Case

Presenter: Daniel Cobos, SwissTPH/Vital Strategies

Opening the first technical session of the conference, Daniel Cobos laid a strong foundation for the week's discussions by guiding participants through the importance of articulating a clear, compelling vision for Sample Registration Systems. Drawing inspiration from *Thinking in Systems* by Donella Meadows, he described a vision as a compass—something that offers long-term direction even in times of complexity and uncertainty.

He explained the critical distinctions between a vision, mission, and goals. A vision, he said, is the desired future state; a mission outlines the purpose of the initiative; and goals are the measurable outcomes used to assess progress. To illustrate the risks of working without a unifying vision, Daniel cited striking examples, including the famously unfinished Winchester House in the United States and the UK's National Programme for IT—large-scale projects that faltered despite significant investments, primarily due to a lack of coherent direction.

He emphasized that a strong SRS vision must be clearly articulated and grounded in each country's specific context. It should be informed by a thorough situational assessment and embraced by stakeholders across relevant sectors. A meaningful vision, he argued, should go beyond technical language to reflect real aspirations—such as improving the availability and use of mortality data to inform policy, advance equity, and support national priorities like Universal Health Coverage.

Such a vision should outline where a country hopes to be by a specific year, like 2030, and describe the system's core contributions and attributes. These might include the ability to generate timely, policy-relevant data; its integration with existing systems; its inclusiveness and sustainability; and its capacity to respond to emerging needs. He cautioned against visions that are too generic or overly aspirational, urging country teams instead to aim for concise, operationally useful statements that can serve as both roadmaps and advocacy tools.

Daniel concluded with a call to action for countries to treat vision-building not as a checkbox exercise, but as the starting point for constructing effective, long-term mortality surveillance systems that are truly transformative.

This presentation led into a group activity where country teams developed their SRS visions and presented them both as a visual board and as a written statement. The group activity is reported in detail in the following section titled "Highlights of Group Activities", however, below are some quick observations on the exercise.

There is a strong convergence across countries on key principles: government-led systems aligned with national strategies; integration with CRVS and health data platforms; complete and timely death registration; and the use of mortality data to drive equitable, evidence-based public health action. Countries like Ghana and Kenya explicitly articulated how their vision fits within broader timelines and planning frameworks, while Tanzania's visual representation emphasized layered system coordination and stakeholder roles. While each vision reflected its country's unique starting point and priorities, the collective ambition was clear: to design scalable, interoperable SRS platforms that can evolve into comprehensive national systems over the coming decade.

Countries with notable successes in their mortality data systems

In this session, countries that are implementing mortality data systems presented shared their experiences for peer learning.

Tanzania: Building on decades of experience to strengthen mortality surveillance

Presenter: Honorati Masanja, Ifakara Health Institute

Tanzania's presentation offered a rich historical account of its evolution in mortality surveillance and CRVS, tracing efforts from the pre-independence era to present-day national initiatives. The country has long invested in health and demographic surveillance, with early systems like

MTUHA (Health Management Information Systems), national censuses, and longitudinal HDSS sites such as Rufiji, Ifakara, and Magu providing key data for public health planning.

A notable milestone is the Sample Vital Registration with Verbal Autopsy (SAVVY) initiative, launched in 2009 in collaboration with the Ministry of Health, the National Bureau of Statistics (NBS), and the National Institute for Medical Research (NIMR). SAVVY has provided nationally representative mortality estimates and has been instrumental in identifying causes of death, particularly in settings with limited medical certification.

Tanzania has significantly advanced its mortality surveillance systems by:

- Expanding Verbal Autopsy (VA) implementation across 18 of 26 regions.
- Establishing a phased national CRVS-VA system, supported by the Bloomberg D4H initiative.
- Scaling up the Medical Certification of Cause of Death (MCCD), including integration into pre-service training and an e-learning platform.
- Reducing ill-defined causes of death from 50% (2019) to 15% (2024).
- Rolling out ANACONDA and other quality review tools to improve data usability.

The presentation also highlighted legal and digital reforms, such as the 2019 amendment to the Births and Deaths Registration Act and the roll-out of the e-RITA platform, aimed at integrating CRVS with national ID and social service systems. Despite persistent challenges—including fragmented systems, limited technical capacity, and a weak community death notification mechanism—Tanzania stands out for its long-term commitment, institutional collaboration, and progressive digital transition in mortality surveillance.

India: A nationally led, scalable model anchored in policy and practice

Presenter: Anand Krishnan, All India Institute of Medical Science

India's SRS is one of the oldest and largest in the world, covering ~8 million people. A standout feature is its government-led structure, fully funded and operated by Indian Statistical Service officers, ensuring policy alignment and sustainability. A major success has been the institutionalization of VA since 1999, with continuous improvement in tools and procedures.

A best practice is the MINErVA network, which coordinates cause-of-death estimation using a pool of over 1,300 physician coders and 27 partner institutions. They've made notable progress in reducing the time from death to report release, cutting it from 600 to 120 days by digitizing data collection and streamlining VA coding. India has also developed online training modules for coders, showing commitment to quality. The integration of SRS with other data systems and the use of dashboards for data visualization were also highlighted as steps toward enhanced data use, though data uptake remains an area for further work.

Bangladesh: Modular, digital, and locally anchored through SVRS

Presenter: Alamgir Hossen, Bangladesh Bureau of Statistics

Bangladesh's Sample Vital Registration System, established in 1980, stands out for its modular structure, real-time digital tools, and integration of local female registrars, reflecting a deep commitment to both innovation and inclusivity. The system now covers over 313,000 households across 2,766 Primary Sampling Units (PSUs), using a national sampling frame tied to the latest population census.

A key success is the country's modular approach, which allows SVRS to collect data not only on births and deaths, but also on maternal health, marriage, migration, ICT access, family planning, and household assets. Modules are carefully timed (monthly or annually) and use GPS tagging, audio verification, and photographs for quality assurance.

A best practice is the deployment of Computer-Assisted Personal Interviewing (CAPI), combined with a five-tier coordination model led by the Bangladesh Bureau of Statistics. The system is managed by local female registrars — an inclusive design choice — and monitored through divisional and district coordinators. Real-time dashboards and use of geofencing enhance oversight and responsiveness.

Bangladesh's experience demonstrates how technological sophistication, modular flexibility, and gender-inclusive governance can be harmonized to deliver a robust and nationally owned SRS.

Mozambique: Integration, ownership, and innovation through SIS-COVE

Presenter: Ivalda Macicame, Instituto Nacional de Saude

Mozambique's transition from COMSA to SIS-COVE reflects a deliberate move toward a government-owned and policy-aligned system. A key success is the integration of mortality surveillance with CRVS, health information systems, and disease surveillance, making SIS-COVE one of the most comprehensive platforms in the region.

A best practice is the real-time data reporting system linked to the National Health Observatory and provincial dashboards. This has enhanced visibility and use of data for planning at multiple levels. Mozambique also stands out for its community-based surveillance model, which collects pregnancy outcomes and deaths through trained community agents. The use of automated cause-of-death assignment tools (e.g., InterVA, InSilicoVA) and strong dissemination strategies — from radio spots to multisectoral roundtables — reflect a commitment to transparency and stakeholder engagement.

A particularly successful example is the CRVS pilot in Inhambane province, where SIS-COVE contributed to increasing birth registration rates from 15% to 54%, demonstrating impact on legal identity systems.

Sierra Leone: Speed, transparency, and community engagement with HEAL-SL

Presenter: Rashid Ansumana, Njala University

Sierra Leone's HEAL-SL program distinguishes itself through its technology-driven approach and rapid turnaround of mortality data — aiming to move "from field to cause of death" in under 15 days. A major success is the fully electronic fieldwork system, which includes GPS tracking, real-time dashboards, dual physician coding, and AI-supported reconciliation.

A best practice is the audio recording of interviews with centralized random review, ensuring quality through accountability. HEAL-SL also demonstrated impressive influence on national estimates — its maternal mortality data led the WHO to revise Sierra Leone's MMR downward, recognizing the value of high-quality subnational data.

Additionally, HEAL-SL's public dashboards and integration of ChatGPT-based coding tools reflect an openness to experimentation and innovation, setting a new bar for quality assurance and data use in fragile settings. Their efforts to track malaria deaths spatially, study COVID excess mortality, and explore educational disparities show the broader research value of the system.

Zambia: Intentional design and early digital integration

Presenter: Stephen Chanda, Zambia National Public Health Institute

Zambia is in the foundational stages of building its SRS-VS system but has already established a strong example in its methodical, design-first approach. A standout feature is its ICT baseline assessment, which identified severe fragmentation in mortality data systems and guided the development of a unified, digital solution.

A best practice is Zambia's decision to embed system integration and digital workflows from the outset, including interoperability with platforms like DHIS2 and CRVS. They've clearly defined their minimum data elements for mortality analysis, and the system design was shaped through adaptation of Digital Adaptation Kits (DAKs) Digital Adaptation Kits - an emerging global tool for digital health system alignment. The developers of DAK have applied WHO's SMART guidelines for health service delivery globally in the DAK design.

Though implementation is still in progress, Zambia's forward-thinking planning and cross-ministerial collaboration signal a commitment to building a resilient and future-ready system.

The country presentations provided compelling illustrations of how diverse national contexts are shaping the evolution of Sample Registration Systems and mortality surveillance. Despite differences in scale, institutional history, and system maturity, there was a shared recognition of

the urgent need for nationally led, technically sound, and digitally enabled platforms capable of producing timely, high-quality mortality data.

All countries demonstrated commitment to:

- Verbal autopsy integration, with varying levels of automation and physician involvement;
- Data digitization to accelerate collection, coding, and reporting processes;
- Policy-relevant outputs, aligning mortality data with planning, budgeting, and public health interventions.

Shared trajectories and strategic takeaways

Across the six countries, three unifying trends emerged:

1. *Ownership and policy anchoring:* Each country placed a premium on systems that are nationally owned, with technical coordination situated within Ministries of Health or national statistics offices. Integration with broader policy frameworks — including UHC and SDG monitoring — was a recurrent theme.
2. *Digital innovation and interoperability:* Whether through AI-enabled VA (Sierra Leone), mobile reporting dashboards (Mozambique), or e-learning tools (India), countries are innovating with digital tools while emphasizing system integration.
3. *Sustainability through design and capacity-building:* Zambia and Bangladesh underscored the importance of early design and capacity investments, while countries like Tanzania and India illustrated how gradual, sustained reform can pay long-term dividends.

Each country demonstrated practical pathways in balancing scale, speed, data quality, and sustainability. Their experiences collectively offer a rich set of lessons for others embarking on or refining their mortality surveillance journeys.

Panel Discussion and Q&A with Presenters: Lessons for Countries Initiating SRS

The panel discussion and Q&A captures both the technical reflections and the real-world challenges countries are navigating as they operationalize and scale their SRS programs. :

What would countries do differently if they were to start all over developing their SRS?

- **Mozambique** emphasized the importance of engaging the Ministry of Health (MOH) from the outset to ensure alignment and buy-in, particularly when the proposed model involves community health workers (CHWs). While Mozambique aimed to anchor its platform in community-level data collection, concerns about CHW workload emerged. A key lesson was the need to align SRS responsibilities with existing human resources capacities and to sensitize frontline workers to the value of the data they generate. Leveraging existing platforms and initiatives was also underscored.
- **India** highlighted that sustainability starts with domestic funding. The Indian SRS, which operates with approximately USD 5 million annually, is entirely government-funded, ensuring stability. India also emphasized the importance of involving data users early on and addressed the perception that CHWs are overburdened — noting this is often more about perception than capacity.
- **Sierra Leone** recommended conducting comprehensive stakeholder mapping at inception, especially for countries aiming to integrate SRS with other systems. They cautioned that donor funding volatility makes sustainability planning essential from day one.
- **Zambia** reinforced the idea that mortality surveillance is a multi-institutional undertaking. Success depends on creating structured coordination mechanisms across agencies. Zambia urged countries to consider long-term sustainability plans and coordination strategies early in the process.
- **Tanzania** stressed the centrality of governance. From their own assessments, it became clear that while technical elements may be advancing, the governance structure — including decision-making authority and functioning of technical working groups — remained unclear. They advised new countries to clearly define institutional ownership of SRS and begin thinking about how to transition from donor support to national systems.

On System Design and Tools:

- **India** described their use of a hybrid model, including an in-house electronic data processing system and tools under development that will soon be made public goods — including a VA tool powered by AI and a user-friendly platform for physician coding. They are currently exploring pilot opportunities with countries like the Philippines.
- **Mozambique** uses e-Verbal Autopsy and Social Autopsy tools supported by Johns Hopkins University. These are linked to dashboards accessible to the MOH and integrated with DHIS2. However, non-facility death registration remains low, and overall CRVS coverage is still limited.
- **Sierra Leone** reported 5% population coverage in their SRS using a homegrown, adaptable platform with built-in analytics features.

- **Zambia** shared that their 2020 CRVS data revealed only 18% death registration coverage, with even lower figures for births. Their system incorporates tools selected based on functional needs, with an emphasis on including quality assurance mechanisms and the capacity to capture community deaths, which facility-based tools often miss.

SRS–CRVS Linkages: Opportunities and Bottlenecks

Panelists reflected on the widely acknowledged goal of linking SRS to CRVS systems to create comprehensive, interoperable platforms. However, countries acknowledged persistent barriers:

- **Sierra Leone** pointed to legislative hurdles — particularly around death certification, which legally must be performed by physicians, posing constraints in rural and under-resourced settings.
- **Tanzania** reported on a pilot in 10 wards to test the linkage between SRS and community-based mortality surveillance. Encouragingly, RITA (Registrar General's office) has expressed openness to system integration.
- **Mozambique** is piloting integration in one province and has already observed benefits. However, the need for legal reforms and attention to interoperability remains critical.
- **Zambia** is pursuing legal reforms to enable smoother integration. Their model trains Community Surveillance Agents (CSAs) to collect comprehensive data at the household level, including required CRVS information.

The panel discussion offered valuable reflections for countries at various stages of SRS development. The collective advice underscored the need to build for sustainability, secure governance clarity, plan early for interoperability, and design with users and long-term integration in mind**.**

Reviewing Situational Assessment Results and Implications for SRS Design

Presenter: Daniel Cobos, Swiss TPH

Daniel opened his presentation by inviting country teams to take a critical look at their recently completed situational assessments — not simply as diagnostic exercises, but as strategic foundations for shaping their Sample Registration System designs. The session served as a bridge between the analytical work already done and the design decisions that would follow, asking participants to reflect on how existing strengths and weaknesses in their national systems could inform the path forward.

Drawing on cross-country comparisons, Daniel highlighted that many of the assessments were comprehensive and rich in detail. However, he pointed out a recurring gap: most lacked action-oriented summaries that could clearly guide the next steps. He urged countries to move from descriptive assessments to actionable frameworks, linking their findings to specific decisions required in the SRS design process.

A central concern was the absence of population denominators in several assessments — a seemingly technical oversight with major implications. Without this information, countries risk designing systems that cannot accurately calculate death rates or other vital indicators. Legal reviews were also a common feature of the assessments, but often stopped short of identifying concrete legal barriers or enablers for SRS implementation. For instance, few explored whether community-based reporting would be legally permissible, or what amendments might be needed to facilitate data sharing between agencies.

Governance arrangements emerged as another area of variation and uncertainty. Daniel observed that countries proposed a range of institutional anchoring points for their SRS systems, but often lacked clarity on how decision-making and accountability would be structured. This lack of clarity could hinder implementation and long-term sustainability.

Daniel emphasized that the situational assessments should do more than identify problems — they should help define solutions. He encouraged countries to link their findings to the 12-step

SRS design framework shared earlier in the conference, focusing in particular on gaps that would impact the system's integration, scalability, and sustainability.

A particularly striking insight was the widespread dysfunction of birth and death notification systems. In many countries, these systems were underperforming or completely non-functional. This reality, Daniel noted, challenged the viability of passive surveillance approaches and strengthened the case for more proactive, transformative SRS models that integrate community and facility-based data.

He concluded by urging participants to use their assessments as launch pads for designing context-specific, costed action plans. He reminded them that a well-functioning SRS cannot exist in isolation. It must be purposefully positioned within broader CRVS and health information ecosystems. To support these efforts, Daniel introduced a set of tools that countries could use to guide their design decisions — tools that would help translate assessment findings into robust, evidence-based strategies.

Transitioning into a group activity

This presentation was followed by a group activity where country teams reviewed their situational assessments, designs, and implementation plans, to decide what activities are needed to complete their SRS design. Country teams presented their deliberations in plenary the details of which are in the section on Group Activities that follows.

However, below are highlights on cross-cutting themes, common challenges, and promising practices that emerged which offer valuable insights into shared priorities and diverse strategies for SRS development across the different countries.

Fragmented systems, shared ambition: Across the participating countries, a common challenge was the fragmentation of mortality data systems. Despite these fragmented landscapes—where data on births, deaths, and causes of death are often collected in parallel or overlapping systems—countries shared a clear ambition: to build integrated, sustainable, and government-led Sample Registration Systems (SRS) that are interoperable with existing platforms such as CRVS, DHIS2, and health management information systems.

Gaps in cause-of-death data: Another widely acknowledged issue was the limited availability and poor quality of CoD data, particularly for deaths occurring outside health facilities. Many countries are looking to VA tools as a solution to improve cause-of-death ascertainment in community settings.

Digital tools: available but underutilized: Several teams highlighted that digital platforms capable of collecting vital event data already exist within their national systems. However, these tools are often siloed and not fully leveraged. Integration of these platforms was seen as both feasible and essential for effective mortality surveillance.

Legal and governance frameworks lag behind: Weak legal frameworks and unclear governance structures emerged as a major cross-cutting constraint. Many countries are still operating under outdated legal instruments or lack enforcement mechanisms. In several cases, roles and responsibilities for mortality surveillance remain poorly defined, hindering system accountability and data quality.

Human resource constraints: A shortage of trained personnel, especially for cause-of-death certification, was another shared concern. To address this, many countries plan to leverage community-level actors—such as CHWs —as key agents in their mortality data systems. This move aligns with broader efforts to decentralize data collection and increase community engagement.

Distinctive approaches and promising practices

While the challenges were often similar, several countries stood out for innovative approaches or clear planning strategies:

- **Ghana** developed three hybrid SRS models and assessed them using a structured scoring matrix across the 12 SRS design steps. This helped guide decisions on model selection and scale-up, making Ghana a leader in evidence-based design.
- **Kenya** showcased a rich system architecture that includes a digital Unique Personal Identifier (UPI) system and robust community-level digital tools. Notably, Kenya provided a candid reflection on funding sustainability gaps and the need for stronger governance structures.
- **Mali** focused heavily on immediate follow-up actions and setting up governance mechanisms. Their post-conference roadmap included convening high-level stakeholders in Bamako and initiating protocol discussions—a strong example of translating conference momentum into concrete next steps.
- **Pakistan** applied a power-interest grid and network analysis to identify key actors, map their levels of influence and interest, and plan tailored engagement strategies. This stakeholder mapping is a valuable model for advocacy and coordination in the early stages of system development.
- **Senegal** demonstrated capacity to monitor monthly mortality trends from 2021 to 2024 and presented a clearly phased implementation plan. Their national vision was equity-driven and emphasized system complementarity rather than replacement.
- **Tanzania** distinguished itself through its integration plan, mapping 20 data collection forms and eight systems. By embedding CHWs into the SRS process and opting for enumeration (rather than projections) to determine denominators, Tanzania offered a pragmatic, forward-looking model.

Summary observations

The presentations revealed a wide spectrum of system maturity and design coherence. Some countries, like Ghana and Senegal, already have well-structured frameworks and phased implementation plans. Others, such as Mali and Pakistan, are still focused on readiness assessments and building stakeholder consensus.

Governance and ownership structures also varied. Countries like Tanzania and Kenya are solidifying institutional leadership—typically under Ministries of Health or National Statistics Offices—while other teams are still determining which agencies will lead SRS implementation.

Integration readiness is promising across the board. Systems like Senegal's RGEC, Tanzania's multi-platform digital infrastructure, and Pakistan's array of digital assets offer a strong foundation for future interoperability between SRS and CRVS systems. However, the degree of integration maturity differs widely and will shape how quickly each country can scale its initiatives.

Final reflection

One of the strongest takeaways from the cross-country presentations was the recognition that there is no single blueprint for SRS implementation. Each country must tailor its approach to its institutional, political, and technical realities. Yet, the collective willingness to share experiences, reflect candidly, and adapt lessons learned reflects a regional momentum toward smarter, more responsive mortality surveillance systems.

The VIVA Platform (the website and SRS Technical Package)

Presenter: Fred Van Dyk, Johns Hopkins University

The session introduced country teams to VIVA – Vital Insights for Vital Action, an online platform developed by the Johns Hopkins University to support countries with SRS design and implementation.

The VIVA website is a central hub for accessing the SRS Technical Package, guidance documents, and sample tools. It contains detailed documentation, planning templates, and data collection protocols.

The Collection of Vital Events Information through Sample Registration Systems (COVERS) Zambia 2024 was a featured example of how VIVA resources supported Zambia in developing a comprehensive guide for SMSS implementation.

Participants were shown how to access VIVA using Chrome (with translation tips for French speakers) and were encouraged to use it as a practical companion throughout the SRS design process.

The presentation reinforced the fact that no country is starting from scratch; shared tools, templates, and lessons learned can help speed up and strengthen national efforts.

The platform provides practical tools for sample design, data visualization, and more. Fred emphasized that SRS is not only about problems (e.g., mortality rates), but also about hope and progress, placing people at the center of health system improvement. Participants were encouraged to explore https://viva.jhuhost.org and contribute to future developments.

Design options for an SRS

Presenter: Agbessi Amouzou, Johns Hopkins University

Agbessi's presentation delved into the technical and strategic considerations countries must address when designing a Sample Registration System. He began by reflecting on the limitations of the term "Sample Registration System" itself, noting that while the name focuses on sampling and registration, the true breadth and ambition of an SRS go well beyond those concepts. It is

not merely a data collection mechanism—it is a foundational system for mortality surveillance and vital statistics, with implications for public health, governance, and development.

To guide countries through the complex process of developing an SRS, Agbessi introduced a structured 12-step roadmap. While the initial two steps—vision-setting and situational assessment—had already been discussed earlier in the workshop, his focus turned to the crucial next steps, particularly those involving decision-making and system design.

He outlined seven core decisions that each country must make when designing an SRS that fits their context and goals:

1. **Integration with Civil Registration and Vital Statistics Systems**

   Countries must decide whether to fully integrate their SRS with CRVS, establish data linkages between the two, or maintain partial alignment. Full integration enables seamless workflows, while partial linkages involve limited information exchange. Zambia's experience, for instance, shows how hybrid approaches can work, though full integration may require legal or institutional reforms.

2. **Choice of Geographic Sample Unit**

   The selected sampling unit becomes the structural base of the SRS. Options include census enumeration areas, which are statistically rigorous; administrative units like districts, which are more policy-relevant but prone to changes; or other units such as villages. Whatever the choice, the units must be mappable, stable, and usable for longitudinal data collection.

3. **Statistical Domain of Interest**

   Countries need to decide on the level of statistical output required—national only, or also sub-national. Sub-national disaggregation improves data utility but drives up sample size and costs. Prioritizing certain regions can offer a middle ground.

4. **Minimum Dataset and Types of Data to be Collected**

   Mortality surveillance involves more than counting deaths. It requires capturing key information about each death (numerator) and maintaining updated population estimates (denominator). Countries should define their core indicators early and ensure they align with user needs and analytical goals.

5. **Data Collection Strategy**

   Several options are on the table: community-based reporting by trained workers, facility-based data capture, or hybrid models combining the two. China's system, which uses both community and facility data, illustrates the potential benefits and complexities of hybrid models. Retrospective surveys may still play a role, though they offer limited value for timely monitoring.

6. **Data Completeness Assessment**

   Accuracy and completeness are non-negotiable. This can be achieved through dual recording (e.g. capture-recapture techniques), where an independent verification team revisits the population to validate reported events. Another method involves embedding completeness modules in periodic surveys, as seen in Bangladesh. Even basic comparisons with other mortality estimates can provide a rough gauge of coverage.

7. **Phasing and Scale-Up Strategy**

   A phased rollout, starting in a few high-priority areas, allows countries to test and refine their approach. This strategy also makes it easier to manage resources and gain political buy-in while building capacity for nationwide implementation.

Throughout the presentation, Agbessi reminded participants that no system is perfect and there is no gold standard free from errors. All methods—whether linked or standalone—come with trade-offs. However, statistical techniques can be used to estimate true mortality patterns from incomplete data, and countries should focus on building systems that are fit-for-purpose rather

than perfect. He also emphasized that integration should not be seen as a purely technical endeavor. It is a strategic decision involving people, institutions, and political will. Designing effective governance structures early in the SRS development process is key to sustainability.

Finally, Agbessi encouraged country teams to begin applying these decisions using the "8-question framework" shared earlier in the workshop. If certain decisions couldn't yet be made due to data gaps, teams were advised to identify those gaps explicitly and formulate plans to address them.

Collaborative Requirements Development for SRS and Systems Integration

Presenter: Kingsley Arhin-Wiredu, CDC/ CHISU

This session focused on how countries can use the Collaborative Requirements Development Methodology (CRDM) to design integrated and sustainable Sample Registration Systems. The methodology provides a structured yet flexible framework to help stakeholders collaboratively plan systems that are technically sound, interoperable, and institutionally embedded.

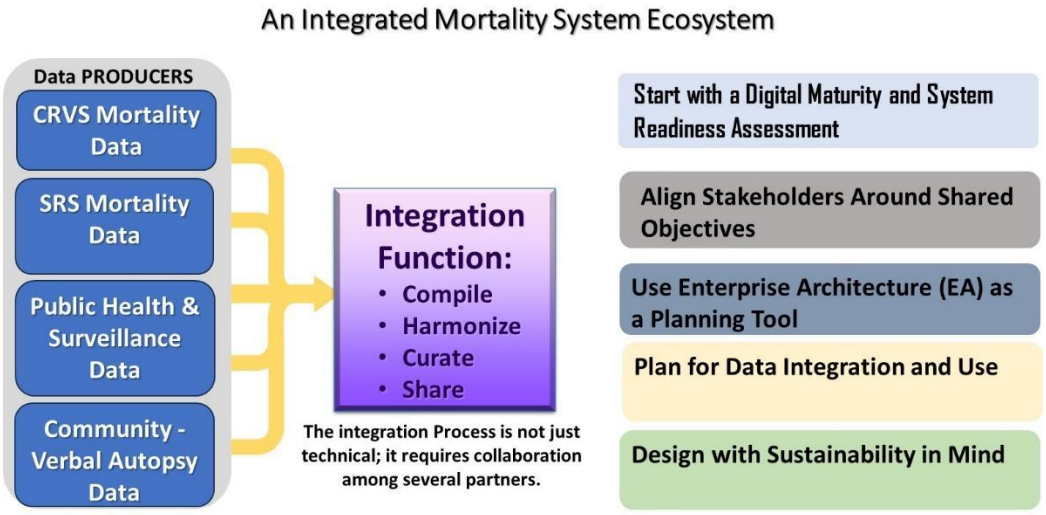
The presentation began by addressing persistent barriers to effective mortality data collection and use. In many countries, mortality data is fragmented across multiple, disconnected systems. Ministries, IT departments, and health agencies often operate in silos, which leads to limited coordination, delayed data access, and underutilization. These challenges undermine the ability of SRS programs to deliver timely, complete, and actionable information, even though their value in closing mortality data gaps is widely recognized.

CRDM offers a pathway to overcome these challenges by promoting collaborative planning from the outset. One of the critical missteps in many SRS initiatives is the failure to clearly define what data is needed, who will use it, and for what purpose. Additionally, unclear or absent governance structures frequently result in unresolved questions around data ownership, privacy, and protection. Without a strong governance framework, systems struggle with credibility, security, and compliance.

The presentation emphasized the need to situate SRS within an integrated mortality data ecosystem. This ecosystem may include administrative records, civil registration and vital statistics systems, and community-level reporting structures. These components vary by country, but when aligned, they can collectively enhance the timeliness and utility of mortality data for national planning and public health response.

Kingsley outlined five key steps to guide integration efforts:

1. An assessment of digital maturity and system readiness;
2. Aligning stakeholders around shared objectives;
3. Using enterprise architecture as a planning tool to map how systems, people, and processes interact;
4. Planning intentionally for data integration and end-use;
5. Designing with sustainability in mind from the outset.



The presentation also introduced three integration typologies:

- **Integration at the point of data collection**, which involves collecting once and using data many times. This requires well-defined minimum data elements and standardized tools.
- **Digital integration**, which focuses on compiling data from different sources into centralized systems, dependent on interoperability standards.
- **Integration at the point of data use**, which applies when real-time integration isn't feasible but still allows for comparative analyses and decision-making.

Of the three, integration at the point of collection was identified as the most critical. When done effectively, it reduces duplication, enhances quality, and improves timeliness—allowing SRS to better support program monitoring and public health decision-making.

A simplified planning roadmap was proposed to guide countries through the design process:

1. Achieve alignment among high-level stakeholders and map all relevant data users;
2. Define system requirements clearly—what data is needed, who needs it, how it will be governed;
3. Design the system using procedural documentation, clear role descriptions, and visual system maps.

These steps are supported by tools such as the VIVA platform's 12-step guide and the Digital Adaptation Kits (DAK), which help countries visualize and document workflows, roles, and integration points.

The session closed with four pillars for successful integration:

- A strong SRS should function within a broader ecosystem rather than in isolation;
- People, processes, and technology must be aligned to support each other;
- Collaborative requirements development fosters ownership and consensus among stakeholders;
- Enterprise architecture enables long-term system planning and adaptability.

Participants were reminded that building a functional SRS is not simply a technical endeavor—it is a collaborative, iterative process that draws strength from inclusivity, clarity of purpose, and alignment across sectors.

Highlights on Q&A and live demonstration

A live demonstration was conducted using Kenya's proposed SRS system as a working example to illustrate how the CRDM process works in practice. The Kenya team agreed to walk the plenary through their proposed system setup, showcasing how to identify key actors and outline their responsibilities.

The team outlined a practical example of how to map roles and responsibilities, using the following personas:

1. Community Health Promoter (CHP)
2. Community Health Assistant (CHA)
3. Assistant Chief (responsible for reporting unnatural deaths)
4. Police (Ministry of Interior – part of CRVS investigation)
5. Civil Registrar (Ministry of Interior)
6. Family Members

The objective is to ensure that all community deaths are captured and reported without omissions.

Reflecting both current and idea practices the team identified the following core task set:

- The CHP reports deaths using the electronic Community Health Information System (e-CHIS).
- The CHA verifies the reported death using a computer system.
- The Family notifies the Assistant Chief of the death.
- The Assistant Chief then reports the death (through a D2 notification).
- The Police are informed by the Assistant Chief when the death is unnatural.

It was emphasized that all relevant actors must be included in the documentation to avoid leaving critical stakeholders out of the planning process. Teams were advised to refer back to their situation assessments to identify existing structures and pinpoint areas where change is needed. The exercise confirmed how documenting core roles and tasks across all actors helps to define workflow, technology needs, and integration points.

Reactions and Feedback on the Demonstration:

- The Pakistan team, which is at the early stages of designing its SRS, noted that the CRDM template would be very helpful during their planning phase. They found that it helps to put roles, processes, and data flows into clearer perspective.
- It was also mentioned that a series of template tables would be developed and made available to help country teams document their specific requirements more systematically.

Key takeaways from the Q&A session:

- CRDM creates clarity on system requirements by defining what needs to happen, by whom, and how data will flow. The process provides a systematic way to document and simplify complex processes, and align them with integration goals.
- Regardless of typology**,** defining clear program requirements through CRDM is essential to success.

Kingsley concluded by emphasizing that integration is both a technical and institutional process, and successful SRS systems are not just built—they are *co-created*, through collaboration, clarity, and shared vision.

How SRS can help fill mortality data gaps in DHS and support SDG tracking

Presenter: *Bill Weiss, Johns Hopkins University*

Bill Weiss delivered a practical and thought-provoking presentation on how SRS can complement and fill gaps left by Demographic and Health Survey, especially in countries relying on DHS for mortality estimates and tracking progress toward SDG targets.

Using a **"**stoplight approach**"** (Green = good, Yellow = somewhere in between, Red = bad), Bill compared how SRS and DHS perform across six key mortality data functions. He explained that if the score is green, it means the approach is good at estimating mortality rates as it provides both the numerator and denominator. Below are some of the functions Bill used as examples:

1. *Estimating mortality rates for all ages and events*
    - DHS: Yellow – Primarily focused on under-five, infant, and neonatal mortality; often omits adult and maternal mortality.
    - SRS: Green – Provides continuous data across all age groups and mortality events, including maternal and adult deaths.
2. *Frequency of mortality updates (annual)*
    - DHS: Red – Typically conducted every 5 years; retrospective in nature, hence not timely**.**
    - SRS: Green – Designed for continuous or annual updates, allowing timely response to emerging health priorities.
3. *Provision of subnational mortality estimates*
    - Both: Yellow – Limited by sample size and cost. DHS often targets regional levels; SRS subnational estimates possible but resource-intensive.
4. *Cause of death estimation across age groups*
    - DHS: Red – Cause-of-death is not collected; sometimes added post-survey for under-five deaths only and at additional cost.
    - SRS: Green – Through VA**,** SRS allows routine cause-of-death determination across all age groups, critical in a world where non-communicable diseases (e.g., cancers, hypertension) are overtaking infectious diseases.
5. *Providing denominators for rates (by age, sex, other)*
    - Both: Green – Both systems can produce valid population denominators necessary for calculating mortality and birth rates.
6. *Flexibility to support special studies*
    - DHS: Yellow – Limited flexibility; everything must be planned in advance.
    - SRS: Green – SRS platforms can support special studies or data extensions as needed, providing adaptability for evolving national interests.

Why this matters now

Bill noted that many countries currently rely on DHS for critical indicators, but DHS frequency is declining**,** and many surveys are scaling back on mortality modules (especially maternal mortality). This creates a growing gap that SRS is well-positioned to fill—not as a replacement**,** but as a complementary, cost-effective, and continuous system.

Insights from the Q&A

- DHS reliance remains high, especially for under-five mortality. However, SRS is better suited to track maternal and adult mortality, offering more flexibility and lower cost in the long run.

- Sample size and maternal mortality: While maternal mortality is harder to estimate annually, SRS allows for pooled data (e.g., over two years) to improve precision — outperforming DHS, which uses a sibling history method but is limited by sample size.
- Government engagement and cost: Weiss shared examples of how governments have been convinced to fund field testing of SRS models by showing cost breakdowns. Even countries with strong HIS still use surveys—but more selectively.
- SRS enables faster programming: Even slight year-to-year changes in mortality rates can inform policy adaptation and resource targeting, giving SRS strong value for decision-makers.

Bill encouraged country teams to reconsider reliance on surveys alone, and instead see SRS as a scalable foundation for real-time, locally owned mortality data, supporting planning, budgeting, and evaluation far beyond what periodic surveys can offer.

Developing a Plan for Defining an SRS Design

Presenter: Matt Boyas, Mitre and Malik Kante, Johns Hopkins University

Matt opened the session by referencing a slide from Kingsley's earlier presentation, which emphasized the importance of collaborative requirements development as a foundation for impactful SRS design. He urged country teams to ensure that all relevant stakeholders are engaged throughout the SRS proposal development process. Beyond identifying "*who*" to engage, he stressed the importance of clarifying *why* each stakeholder should be involved, *what* information is needed, *by whom*, and *how* that information will be used. This level of clarity, he noted, would help ensure that the resulting system is both usable and responsive to real needs.

Following this, Malik from Johns Hopkins University (JHU) led participants through the SRS Proposal Development Template**.** The template provides clear instructions for writing each section of the proposal and includes examples from countries that have already drafted their proposals. It also directs users to sources of additional information to guide their work.

Key aspects of the template include:

- Detailed elements for reporting which will support countries in protocol design.
- Guidance on team structure, including descriptions for each level of the SRS team. The Mozambique team structure was used as a case study.
- Instructions on identifying a management team and recruiting support staff.
- Information about available training and procedural resources.

Country teams were also informed that job description templates and various reporting tools are available on the VIVA website. These tools come in Word, PDF, and editable formats, making them immediately usable by country teams.

Country teams were encouraged to begin working on their proposals immediately after the conference and that preliminary conversations with potential funders should be initiated and convening stakeholder workshops or other preparatory engagements considered.

It reiterated that the VIVA website is a living resource. Feedback from participants to enhance its utility and completeness was welcomed.

To conclude, Matt introduced the five key decisions that countries must address in their SRS proposal development:

1. Conducting formative research to inform data collection, reporting processes, and integration with CRVS systems.
2. Establishing the SRS management and implementation team.
3. Selecting appropriate data collection tools.
4. Defining the data system, including digital solutions and data flow.
5. Securing ethical clearance.

Country teams were tasked to reflect on the five additional questions as they fine-tune their SRS programs. The issue of ethical clearance was clarified and participants were informed that even though data collection for public health purposes may not always require formal clearance, challenges may arise when countries seek to publish the data. Additionally, some donors may mandate ethical clearance regardless of classification. Matt acknowledged that countries are at different stages of readiness and encouraged them to continue from wherever they currently are in the process.

Resource Mobilization for Sustainable SRS Implementation

Presenter: Emily Atuheire – Africa CDC

This was an interactive session that offered countries a practical roadmap to mobilize resources for their Sample Registration Systems (SRS). Atuheire Emily began by gauging participants' familiarity with funding landscapes. With a quick show of hands each country team had at least one member with prior exposure in funding landscape exercises. She reminded participants of the funding landscape tool shared ahead of the conference, which countries had used to document stakeholders and funders currently engaged—or potentially interested—in supporting SRS-related activities. These funders included government bodies, development partners, and community service organizations. In addition, countries had attempted to map out funding opportunities and alignment with national priorities and donor interests. Despite this groundwork, Emily emphasized that more effort was needed to move from assessment to action. Countries were urged to focus on applying these insights and crafting practical strategies to secure resources and build sustainable SRS systems.

Core Resource Mobilization Strategies

Emily structured her presentation around five key pillars that collectively framed a practical approach to resource mobilization for Sample Registration Systems.

The first pillar emphasized the importance of evaluating resource needs for SRS. Countries were encouraged to begin with a clear and detailed articulation of what they are requesting. This involves translating their SRS plans into cost estimates that reflect the financial implications of implementation. Emily noted that strong costing is essential—it not only informs planning but also lays the foundation for compelling and credible funding proposals.

The second pillar focused on developing proposals that make a strong case for support. Emily stressed that proposals must be technically sound and realistic in design. Sustainability should not be an afterthought but a core element woven throughout the proposal. Equally important is the crafting of audience-specific messages. Countries were urged to tailor their messaging to resonate with different stakeholders—be it policymakers, planning authorities, ministries of health, or donors—each of whom views SRS through a different lens. She reminded participants that both the timing and consistency of these messages across internal and external audiences are critical in securing support.

The third pillar addressed the need to secure internal support. Emily pointed out that technical teams alone cannot drive the resource mobilization process. It is crucial to identify and engage internal champions—individuals within government structures, such as the Ministry of Health or Planning—who can advocate for SRS at senior decision-making levels. These champions often have better access to funding pathways and can play a strategic role in mobilizing support. Their involvement should begin early, ensuring that they are well-informed and fully invested in the process.

The fourth pillar involved donor engagement through a well-crafted engagement plan. Emily advised countries to develop structured fundraising strategies that identify top-priority donors and outline how to approach them. Teams should assign clear roles—determining who will develop messaging, who will deliver it, and who will lead follow-up activities. Effective advocacy, she emphasized, must go beyond national borders and engage development partners as well. Importantly, countries were encouraged to secure some level of financial commitment

from their governments by December, which would serve as a signal of ownership and potentially unlock co-financing opportunities.

The fifth and final pillar focused on long-term strategic considerations. Sustainability and system integration were recurring themes throughout the presentation. Emily encouraged countries to embed their SRS within existing infrastructure wherever possible—for example, by leveraging established networks of community health workers. She also recommended identifying existing resources that could be reallocated or enhanced. Countries should design phased implementation plans based on their unique contexts and what is realistically achievable. Engaging key stakeholders—especially the ministries of health, planning, and finance—early and continuously was presented as essential to ensuring alignment, buy-in, and long-term success.

Emily also noted that Africa CDC is conducting training in several countries to support needs-based planning approaches, offering additional technical support to teams.

Country Reflections on Resource Mobilization

After the main presentation, participants heard from several country representatives who shared real-world experiences in SRS-related fundraising.

Zambia (Steven)

Zambia focused on crafting an SRS business case grounded in the central question: *Why SRS?* The team tailored their pitch to the interests of different stakeholders by aligning proposed indicators with partner priorities. Coordination of fragmented funding streams was highlighted as a challenge, with a recommendation to develop a phased approach that matches funder timelines and project activities. Zambia's experience emphasized the value of planning funding flows around donor cycles and capacities.

Sierra Leone (Ronald)

Sierra Leone shared a story of leveraging political will even in the absence of immediate funding. While initial support came from the Bill & Melinda Gates Foundation, the country also engaged USAID, CDC, JICA, and the World Bank. Advocacy was conducted both collectively and through one-on-one meetings. A resource mobilization plan helped coordinate engagements with Parliament's health committee and local government stakeholders. Chiefs and community leaders also played a role, especially when mortality data was shared at district and chiefdom levels to make the case for continued investment.

South Africa (Joy)

Drawing from her experience in South Africa, Joy described how stakeholders worked collaboratively to address gaps in mortality and birth data quality. With CDC support, the country developed a well-costed proposal involving multiple ministries. Importantly, each stakeholder took ownership of specific tasks, ensuring shared accountability. When a funding opportunity from Bloomberg Philanthropies arose, the team was ready with a comprehensive proposal that secured support for data quality and impact initiatives.

Additional Insights from Mozambique

During the Q&A, Mozambique shared insights on working with both the Gates Foundation and the Global Fund. A key challenge related to government payment structures, which made it difficult to support community surveillance roles through salaried positions. While donor funds were available, administrative bottlenecks made it difficult to disburse them within government constraints. The Mozambique team stressed the importance of working with national finance and administration teams to solve these issues before field implementation begins.

Final Takeaways

Emily closed the session with a reminder: while external funding is important, countries must also explore how to leverage existing resources. Cost mapping should include all available assets—human, technical, and institutional—to create credible, fundable, and realistic SRS proposals.

Highlights from Group Activities

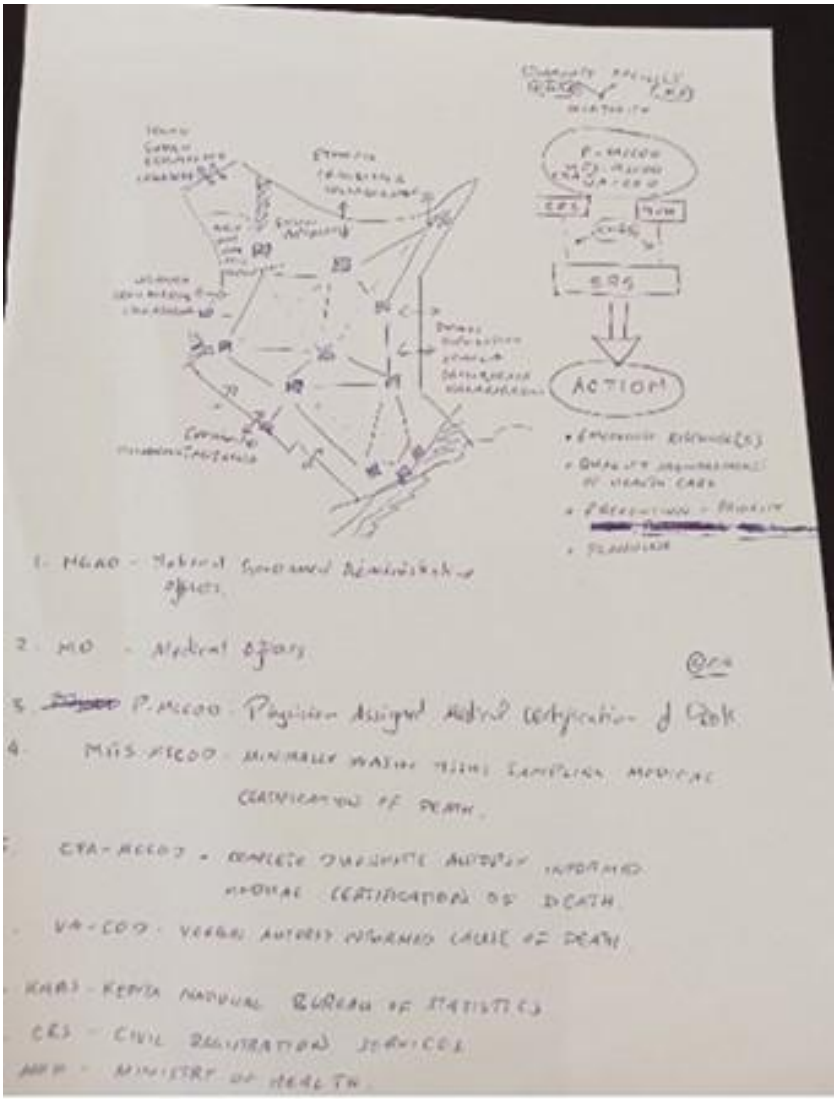
1. Vision Development

In this session, country teams engaged in a collaborative visioning exercise designed to lay the strategic foundation for developing integrated, sustainable Sample Registration Systems. This process was guided by a set of prompts and reflections that encouraged teams to define a clear, forward-looking, and context-specific vision for their national mortality surveillance systems. Teams were asked to consider the purpose, users, design attributes, and anticipated outcomes of their SRS, drawing from both their current data gaps and future public health goals. They were encouraged to present their ideas both as written statements and as conceptual diagrams that highlighted national ownership, data quality, integration, and utility for decision making.

Part1. Vision Board

Below is a sample visual representation of a functioning SRS Vision presented by the Kenya team. The SRS vision shows how it works, who is involved, and what it delivers.

Part 2. Vision Statements



Visual presentation of Kenya's SRS Vision

After designing their visual boards, country teams worked on crafting written vision statements that clearly show what the SRS will deliver (its contribution), the target beneficiaries, the timeline, system attributes, integration elements and its impact.

Below are vision statements for the different countries.

Ghana:

"By 2050, to establish a nationally representative DMA collection system within the next five years that accurately captures quality (timely, complete) mortality data, enabling the estimation of mortality rates across all ages and all causes of mortality based on precise denominators, for public health action to achieve UHC."

Kenya:

"Representative, integrated and reliable mortality surveillance system for action"

Senegal:

"By 2050, Senegal will have a secure, continuous, real-time, sustainable national digital surveillance system for data on births, deaths, and causes of death by age group and gender, using an integrated, collaborative approach that improves existing mechanisms and enables decision-makers to develop public health policies and interventions tailored to communities."

Mali:

"The Sample Registration System in Mali aims to deliver high-quality, timely, and actionable all-cause and cause-specific mortality data for all ages at national and subnational levels by 2030. Designed to be digital, interoperable, and linked with the CRVS and other national health systems, the SRS will be locally owned and resilient, enabling early detection of public health threats and informing effective policy and planning. The target users of the SRS system in Mali include government entities, particularly the Ministry of Health and Social Development, including national and local health authorities, policy makers, planners, and other relevant stakeholders. Data generated by the SRS will drive evidence-based interventions to reduce mortality and improve the health and welfare of all Malians."

Tanzania:

"Timely and accurate data on births, deaths, and causes of death information in alignment with the 2030 vision of having 100% birth and death registration contributing to the Tanzania Development Vision 2050."

Pakistan:

"Establish a strong, nationally representative SRS that delivers timely and accurate data on births, deaths, and causes of death to guide policy, and promote inclusive development across Pakistan.

We envision an equitable, sustainable, and interoperable SRS – expanding population coverage and fully linked with CRVS, health systems, and local governments – to track progress toward the SDGs over next 5 years."

2. Unpacking Situational Assessment Findings to Inform Country SRS Program Design

This session helped country teams to identify how their situational assessment findings can inform the design of their SRS. They identified most important findings from their SAs, existing systems, gaps, and opportunities, design implications and enablers and risks. Below are reviewed situational assessments highlighting all the factors mentioned above and including lessons learned (if any) and next steps.

Ghana

Dr. Ayaga Bawah presented Ghana's situational assessment, beginning with a brief overview of the country's context. Ghana, a lower-middle-income country with a population of approximately 32 million, has a civil registration system that captures only 39% of deaths, highlighting a significant gap in mortality data. The rationale for establishing a Sample Registration System (SRS) was grounded in the critical need for timely and accurate mortality data to support public health action, evaluate disease control programs, and guide resource allocation. Ghana's vision is to build a nationally representative SRS that generates reliable data on all-cause and cause-specific mortality across age groups, supported by accurate demographic denominators by 2030.

The situational analysis aimed to assess the current mortality data landscape, identify system gaps, and provide recommendations for SRS implementation. A mixed-methods approach was used, including a desk review, stakeholder interviews, and scoping reviews. The study also included a SWOT analysis and a funding landscape assessment. The legal framework for mortality reporting exists under the Registration of Births and Deaths Act (2020), but enforcement is hampered by cultural, religious, and logistical challenges, including a shortage of trained personnel to issue Medical Certificates of Cause of Death.

Ghana identified a wide array of stakeholders, including the Ghana Health Service, Ghana Statistical Service, academic institutions, and non-traditional actors such as police, religious leaders, funeral homes, and community leaders. A stakeholder power-interest matrix was developed to assess influence and engagement levels, which informed strategies for stakeholder management. The assessment revealed a fragmented system with limited integration, characterized by parallel data sources, paper-based processes, and incomplete reporting. Deaths are captured through health facilities, demographic surveillance systems, and surveys, but many community-level deaths remain unrecorded due to a lack of functional notification mechanisms.

System design considerations led Ghana to adopt a linkage model rather than full integration with the CRVS system, citing cost and legal barriers. Enumeration Areas (EAs) from the population census will serve as the sampling frame. The plan includes leveraging community health officers for data collection and verbal autopsy interviews, with pilot implementation starting in the six northern regions and Western North before national scale-up. Routine completeness assessments and phased implementation were also recommended. A governance structure aligned with ACDC guidelines was proposed, including a national steering committee and technical working group. Ghana concluded that while the country faces logistical and cultural challenges, it possesses the institutional capacity, political will, and donor interest to implement a successful SRS.

Kenya

Kenya's situational assessment was delivered by Mercy Cheptoo who started with a general overview of the country's demographic and administrative structure. Kenya's civil registration services operate across all counties with 167 active sub-county registration offices. While birth registration completeness is relatively high at 77%, death registration lags significantly at 45%, with notable regional disparities. The assessment highlighted the country's fragmented mortality data landscape, characterized by parallel systems and weak integration, which limits the utility and timeliness of mortality statistics for public health action.

Kenya's health service delivery operates across four tiers, from community-based care up to national referral services. Multiple systems collect mortality-related data, including the Kenya Health Information System (KHIS), Integrated Disease Surveillance and Response (IDSR), and the electronic Community Health Information System (e-CHIS), which supports community health promoters (CHPs) in household registration, death tracking, and follow-up. The CRVS system is in the process of digitalization. The birth certification module has been completed and linked with the National Registration Bureau and Integrated Population Registration System (IPRS), while the death registration module is still under development.

The situational assessment methodology combined desk reviews, stakeholder consultations, and field visits across nine counties, representing various population contexts. KOBO Collect was used for data capture, and key forms were catalogued through photographs. Kenya's legal framework for mortality surveillance, while present, suffers from weak enforcement. For community deaths, the process begins with the family reporting to an Assistant Chief, who serves as a registration assistant. Lay reporting and form D2 submission follow. For facility deaths, the process involves a medical officer and health records staff completing documentation and submitting it to CRVS.

An information network analysis conducted during the assessment revealed dense interaction at the local level but limited upward data flow. A case study in Turkana County, home to a large refugee population, illustrated the challenges of social and cultural resistance to registration, particularly in contexts where death registration is not perceived as offering benefits. The analysis also showed that routine data from facilities and community systems remain siloed, with few opportunities for cross-linkage or real-time integration.

The presentation concluded by identifying key challenges, including system fragmentation, parallel data flows, under-reporting—especially in arid and semi-arid (ASAL) regions—and a lack of cause-of-death data due to limited use of verbal autopsy and poor quality of MCCD. The assessment underscored the need for a government-led approach to strengthen ownership and ensure sustainability. Governance structures specific to SRS must be clearly defined, and integration with existing systems prioritized. Moving forward, Kenya plans to continue refining governance arrangements, leverage digital health infrastructure, and develop a coherent mortality surveillance strategy to support SRS implementation.

Mali

Mali's presentation, delivered by Jason Bailey, offered a reflective and experience-driven overview of their ongoing SRS planning process. Rather than following a rigid technical structure, Mali emphasized lessons learned, practical insights, and unexpected findings that emerged through in-country engagement. The country's approach was notable for its commitment to comprehensive stakeholder mapping, iterative learning, and contextual adaptation, especially in a setting with limited prior integration between mortality data systems.

At the outset, Mali's team conducted an extensive mapping exercise to identify all potential partners and actors involved in mortality data collection and management. They intentionally cast a wide net — not only reviewing organizational charts and policy documents but actively reaching out to individuals working within the system. This participatory approach helped them distinguish between those listed on paper and those actually driving the work on the ground. A critical lesson emerged: face-to-face engagement often reveals more operational truths than desk reviews.

Through interviews and process mapping, Mali was able to visualize the actual flow of mortality data, revealing gaps where information either disappeared or failed to reach national systems. Survey data, hospital records, and community-based reporting mechanisms often functioned in isolation, with little to no interoperability. Ownership and data security were also flagged as concerns — with stakeholders unclear about who controls access, storage, or decision-making authority over mortality data.

Mali's vision for the SRS is bold: to develop a digital, interoperable, locally owned system that produces high-quality, timely, and actionable mortality data at both national and subnational levels by 2030. This SRS is envisioned as being tightly linked to the CRVS and broader health information systems, while remaining resilient and adaptive to local realities. An ongoing country-wide enumeration study has provided Mali with a valuable opportunity: access to a fresh sampling frame, which can support the design of a representative SRS.

Integration process mapping was used to highlight how data should ideally flow between the SRS and CRVS. Based on these findings, the team proposed concrete next steps: duplicating key SRS forms for use within CRVS, convening a high-level stakeholder meeting to secure buy-in, and calculating the actual workload required across Mali's 604 remuneration areas using existing CHW data. The team also plans to host an in-person meeting in Bamako to review and finalize the proposed SRS protocol.

Mali's experience underscored the value of iterative planning, field engagement, and flexibility. Despite significant gaps, they have positioned themselves to design an inclusive and practical SRS, grounded in local realities and informed by direct engagement with frontline actors.

Pakistan

Dr. Faiza Bashir presented Pakistan's situational assessment, highlighting the urgency and complexity of establishing a functional SRS in one of the world's most populous countries. With a population exceeding 240 million, Pakistan faces serious limitations in mortality surveillance. A major concern is that most deaths occur outside health facilities, and only about 10% of deaths are officially recorded, with minimal cause-of-death data captured. Dr. Bashir underscored that the current systems do not support timely or representative mortality monitoring, and public understanding of the value of death registration remains low.

The assessment revealed a highly fragmented data landscape. Multiple digital platforms exist across provinces and sectors, but they operate in silos with little to no coordination. Stakeholder consultations and desk reviews showed that while there is trained human resource capacity and scattered data hubs, these remain disconnected and underutilized. The team observed that even when data is collected, it often "lies dormant" within various institutional silos, never contributing to national health intelligence or policy planning.

One of the most significant barriers identified was the outdated and ambiguous legal framework. In fact, none of the current laws mandate the registration of births or deaths, rendering the entire process voluntary. This legal vacuum means that even families willing to register deaths often face no institutional requirement or incentive to do so—unless they need a death certificate for inheritance or property claims. This cultural disinterest in registration was particularly noted for deaths related to stigmatized illnesses such as HIV.

To further understand institutional dynamics, the Pakistan team conducted a network analysis, which revealed that families are the single hinge point in death notification, but no system exists to compile and escalate data across levels. The team also conducted a power-interest grid analysis, which highlighted key actors such as local government authorities, police, and municipal services—groups with high power but low interest in mortality surveillance. These actors will require deliberate engagement strategies to ensure buy-in.

A SWOT analysis identified severe weaknesses in system enforcement, coordination, and awareness, but also noted strategic opportunities such as graveyard recordkeeping and disease surveillance units at the provincial level, which could feed into SRS. The funding landscape was another major area of concern. Pakistan's path toward a sustainable SRS will require diversified financing, combining domestic resources from federal and provincial governments with bilateral

and multilateral support. Key funding gaps were noted in infrastructure, operations, training, and logistics for verbal autopsies.

Despite these constraints, the vision is ambitious: to establish a strong, nationally representative, and equitable SRS fully linked with CRVS and health systems, capable of delivering timely and accurate mortality data for inclusive development. The SRS is also envisioned as a tool to track progress toward SDGs over the next five years. Moving forward, the team emphasized the need for a legal overhaul, data system integration, targeted stakeholder engagement, and sustainable financing to make this vision a reality.

Senegal

Senegal's situational assessment was presented by Tidiane Gadiaga. The presentation was framed around Senegal's forward-looking vision to establish a secure, continuous, and real-time national digital surveillance system for vital events by 2050. This vision, aligned with the country's broader national development agenda, emphasizes the integration of SRS into existing systems to support community-informed public health policy and decision-making.

The assessment was based on a national survey conducted from April 14 to May 20, 2025, using both quantitative and qualitative methods. The team engaged 211 facility-based health leaders and 543 community-level stakeholders, including cemetery workers, CHWs, and local authorities. The aim was to capture a wide range of perspectives on how deaths are currently recorded and reported in Senegal, and to map the strengths and limitations of the existing mortality data systems.

Four key findings stood out. First, Senegal already has multiple platforms for collecting vital event data—including DHIS2, RGEC, and LGEC—but their usage varies. Second, while deaths, births, and causes of death are routinely collected, there is no unified platform integrating all this data in real time. Third, different methods are used to determine cause of death, including autopsies, neonatal audits, and community input, with practices varying widely by region and institution. Fourth, analysis of mortality trends revealed **an** increase in deaths during the COVID-19 pandemic, underscoring the importance of having real-time data to respond to public health emergencies.

Senegal recognized that setting up an SRS is a gradual, complementary process, not a replacement for existing systems. The country is exploring different integration models between the SRS and CRVS, rather than adopting a one-size-fits-all approach. The assessment noted several challenges, including incomplete reporting of vital data, limited digitalization, lack of community worker involvement, and the absence of a clear chain of responsibility for data verification and clearance.

However, the assessment also identified significant opportunities. These include the potential for SRS to improve completeness, bridge data gaps in existing systems, and enhance the role of traditional community actors—such as village chiefs and imams—in death notification. Furthermore, the SRS could serve as a catalyst for digitizing paper-based procedures and strengthening institutional capacity at all levels.

Senegal's next steps include finalizing the situational analysis report based on stakeholder inputs gathered during the conference, organizing a national validation workshop, and preparing a national implementation plan for SRS rollout. Once validated, implementation will proceed from October 2025 through September 2029 in a phased manner. The team emphasized that sustained engagement with all actors—from community members to national officials—will be key to ensuring the system's success and long-term impact.

Tanzania

Gisbert Msigwa presented Tanzania's situational assessment, which was completed just weeks before the conference. The assessment focused on evaluating the current mortality data systems, identifying challenges, and exploring opportunities to design a national Sample Registration System (SRS) that could support routine mortality surveillance and feed into broader health and development planning.

The assessment was conducted in five regions, with both urban and rural districts included. A combination of document review, stakeholder interviews, and field visits was used. Participants included actors at the national, regional, district, facility, and community levels. A key objective was to map every stakeholder involved in mortality data production, from community health workers to national statistical and civil registration agencies.

The study identified eight different systems involved in mortality data collection, many of which collect overlapping information. While some of these systems are moving toward integration, none currently exchange data routinely, and most are still using hybrid methods—paper forms at the point of data collection, with subsequent digital entry and transmission. The lack of data harmonization and interoperability was noted as a critical bottleneck. For instance, 20 different data capture forms related to mortality were identified across various institutions.

A major finding was that the denominators used to calculate mortality rates are currently based on national projections by the National Bureau of Statistics (NBS), which may not reflect real-time population changes. The assessment recommended that the SRS use active enumeration to provide accurate and up-to-date denominators. The cadre of actors involved in mortality reporting includes health facility staff, mortuary attendants, police, community health workers, and local leaders, each operating under different mandates and using different tools.

A significant opportunity lies in Tanzania's national strategy to expand the use of community health workers**.** These CHWs are now formal government employees, and their training curriculum includes data collection. The assessment recommended digitizing data collection tools and leveraging CHWs to collect data on deaths, births, and pregnancy outcomes, including completing notification forms and conducting verbal autopsies. The system would also enable follow-up interviews and special surveys, such as maternal and child health or immunization studies.

Tanzania's vision is to establish a functioning and efficient vital events registration system aligned with its broader development goals, including the Tanzania Development Vision 2050 and RITA's five-year plan. The country plans to use data systems integration to link SRS with CRVS, DHIS2, EMR systems, and eIDSR, enabling improved surveillance, timely reporting, and better data use at national and subnational levels. Regional-level data will support district-level interventions and international reporting obligations such as SDG tracking.

As a next step, Tanzania plans to finalize the assessment report, agree on a sampling strategy, and begin costing the SRS implementation. Coordination will remain under the Ministry of Health, with Ifakara Health Institute (IHI) providing technical leadership. The country aims to build an integrated, phased, and sustainable system that produces quality mortality data for use in policy, planning, and program implementation.

3. Design options for an SRS

In this group exercise, country teams referred to the presentation by Kingsley, particularly looking at the eight design decisions that they need to make. Below are highlights of their presentations.

Kenya

1: System integration process based on vision and objectives:

- **MoH**
  - Birth and Death reporting
  - KHIS tracker
  - Taifa Care

    Facility data collection and reporting
  - ECHIS
  - M-Dharura

    Community data collection and reporting
- **CRS**
  - Birth and Death registration
  - Civil Registration and Vital Statistics System, birth and death registration module. Currently, data is captured manually, with entries into Excel at the subcounty civil registration office, transmitted to statistics for further analysis.
  - Statistics office – Data is availed nationally. Each is assigned a unique number, tracking from birth to death.
- **KNBS**
  - **Census and surveys:** Household census. Use this data to estimate level of completeness of information.

2: Proposed level of integration

Linkage – MoH digital tools are ready and available. We will also leverage on Community Health Promoters who generate an SMS alert shared with registration assistants for initiation of registration process.

Partial Integration – Existing systems will support plugging in of the digital CRS platform

Full Integration – This will be the eventual goal when all systems are digitized and matured

Justification

- Health system is digitized at the moment, CRS is in the process of digitization, therefore, linkage is initially preferred, and in a stepwise process, proceed to integration
- There is goodwill from the institutions

3: Geographical units to sample

- Sampling frame is available based on 2019 census
- Each cluster consists of 50-149 households
- Available for all counties, and with this structures, this will support national estimates
- Lowest administration area is the sub-location. The cluster is much smaller than the sub-location
- Sub-locations are existing governance structures that serve national governments

4: Relevant Statistical Domains

Sampling: Representative of the country, subnational and national, taking into account different geographical and population characteristics, which may include age or sex strata, urban vs. rural populations, etc.

5: Minimum Data for SRS

- Population projections and enumerations
- Cause-specific data: all-cause mortality, aggregated by Cause of Death
- Births (including stillbirths and their causes)
- Maternal and Perinatal Death Audits
- MCCOD vs. VACCOD data
- Birth and Death Registration

6: Data Collection Strategy

- Death report filled by the CHP on e-CHIS
- SMS from e-CHIS to Assistant Chief triggers notification (Plan and budget for this interface between CHP and Assistant Chief)
- Interview for VACCOD
- Optimal Physician assigned MCCOD, MITS-MCCOD, CDA-MCCOD, MPDSR and other mortality audits

Note: All these events are continuously reported

7: Assessing completeness of event reporting

- Compare actual events reported to the expected deaths
- Capture – Recapture
    - To be used for quality assessment (where there are discrepancies, and for a minimum threshold convention is 10%,or as guided by KNBS)

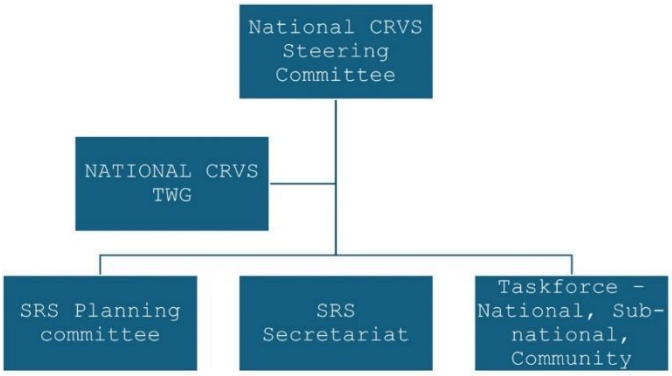
8: Phased Implementation

1. Calculate representative sample size.
2. From the sample size, start maximum feasible number based on available resources, then incrementally increase to the target

Step 1: Select sites based on existing structures, with regional representation, and other practical considerations (e.g. Strong Community Health Structures, CHAMPS, HDSS sites, special populations, etc.)

Step 2: Scale up gradually

Governance Structure to Manage the SRS



Ghana

1: System integration process based on vision and objectives:

- To start with a linkage option and build on to finally achieve full integration
- The Cost and time constraints in stakeholder engagements and processes
- Establishment of required Governance and legislation challenges
- Existing legislation for data sharing which will be leveraged on

2: Geographical units to sample

1. Existence of a geographic unit which is the enumeration area
2. The EA is used for both census and other surveys in the country
3. There is experience and skill in using the EA
4. Use of a two level stratification at national and regional to give estimates at these levels

3: Relevant Statistical Domains

- The statistical domain or unit of analysis will be national and the regions
- We will sample clusters (EAs) at the regional levels
- Allows for political commitment and appreciation of problems and information disseminated
- Taking action is mostly administered through administrative structures and this allows ease of implementation

4: Minimum Data for SRS

- Births or pregnancies
- Deaths by age
- Cause of death
- Population by age and sex

5: Data Collection Strategy

1. Leverage on existing community health nurses and volunteers working in enumeration areas (low hanging fruits) for notification and registration
2. Use CHO/CHN to conduct VA interviews
3. Enumeration areas fit into districts where these nurses and volunteers live and this offers the monitoring and administrative oversight
4. This allows to facilitate active search of deaths and verbal autopsies

Baseline to be done as retrospective survey (previous year)

a. CHO/CHV to be used to undertake this activity

6: Assessment of completeness of event reporting

- To undertake surveys every two years
- To compare data with HDSS site

Phased Implementation

1. Due to operational and cost implications the phased approach has been recommended to learn lessons for expansion to include all regions
2. Initial pilot to test protocol, tools, and digital platforms
3. Phase 1 implemented in 6 northern regions and western north (USAID survey clusters)
4. Phase 2 nationwide scale-up

Governance Structure to Manage the SRS

- Governance structure to consider the Adoption of ACDC mortality surveillance governance recommended structure
    - Steering committee at national level to offer oversight(relevant stakeholders)
    - Technical working group to offer technical assistance
    - Administrative governance levels from district to national

Next Steps

- Meeting to brief relevant stakeholders
- Identify stakeholders for the governance structure setup(steering committee, administrative structure set up)
- Hold TWG meetings to develop working plans for the development of design protocols
- Development of design protocols
- Stakeholder meeting to review developed design protocol

Pakistan

1: System integration process based on vision and objectives:

- Linkage with CRVS (Direct reporting to CRVS and indirect through Health facility to SRS and CRVS)

2: Geographical units to sample

1. We use census EA called blocks (250 HH) as a sampling unit and information is available with PBS. Sampling frame is set for the whole country but it will be a phased approach using representation at Provincial level. At the second level selected districts will be identified and at the local level the cluster comprises of 4 EA serviced by one LHW area.
2. This ratio might be different for different areas. Limitation is that these blocks are not administrative blocks overlapping with LHW covered areas.
3. Once we select our clusters we will establish the mapping to the UCs. In-order for our SRS to report to CRVS.

3: Relevant Statistical Domains

- National initially with a phased approach to make at least Provincially representative by 2027

4: Minimum Data for SRS: Demographic characteristics, Fertility indicators, Stillbirths, and mortality COD

5: Data Collection Strategy

1. Ensure that all events identified by LHWs are recorded to SRS Coordinator and then transferred to CRVS
2. Where LHWs are not available alternate healthcare workforce like vaccinators or SRS representative will be employed
3. Within each cluster, a complete list of graveyards will be developed and instructions and SOPs for graveyard attendant regarding SRS form before burial and this information will be shared in SRS module and onwards sharing with CRVS.
4. Additional information on local deaths will be obtained through key informants like religious hubs and Police and will be matched with SRS team data. Upon reconciliation it will be entered into the main data system.
5. Facility deaths from the blocks happening outside will depend on periodic reconciliation.

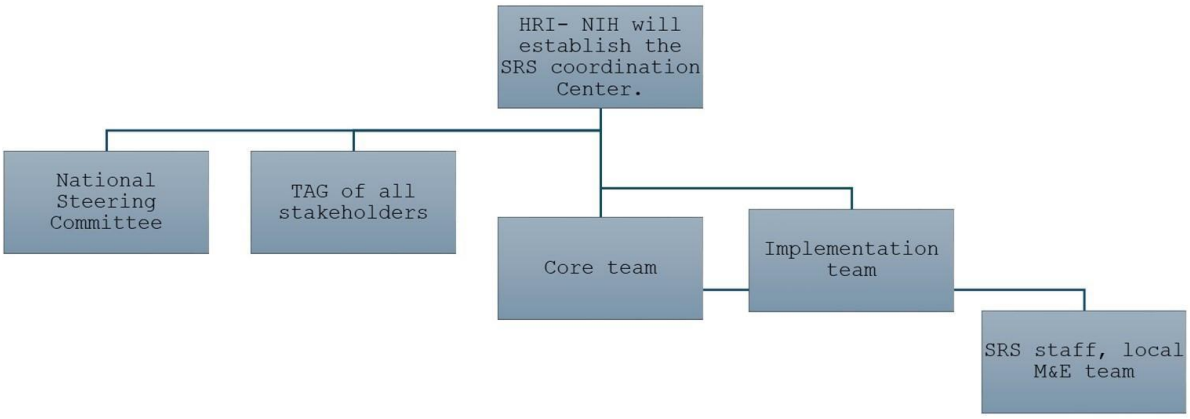
6: Assessment of completeness of event reporting

1. Embedded completeness survey.
2. Comparison with external using Census CDR CBR

7: Phased Implementation

1. Initially provincial capitals with satellite rural areas representation 2 years
2. phasing to district level representation after 3-5 years

Governance Structure to Manage the SRS



Senegal

1: System integration process based on vision and objectives:

SRS Totally parallel to CRVS (model 3):

Justification:

- Easy to install
- Legal limits on the implementation of other models (ANEC Santé protocol not yet finalized)
- Provides rapid evidence

2: Geographical units to sample

- Availability of an up-to-date sampling frame (from the 2023 RGPH5 with ANSD): Availability of census districts
- Explanation of choice: National coverage, non-involvement of community players such as neighborhood delegates and village chiefs, who will require training and follow-up.

3: Relevant Statistical Domains

Sub-national, i.e. by region, which will give us statistics by pole and at national level.

4: Minimum Data for SRS

Numbers

- Disaggregated birth, sex, place of residence, place of birth, and region
- Deaths disaggregated by age, gender, place of residence, place of death, region
- Causes of death disaggregated by age, gender, place of residence and region
- Stillbirths, by place of residence, by region

Denominators

- Large expected
- Population by age, gender, place of residence
- Morbidity

5: Data Collection Strategy: Capacity-building and monitoring of community players in each district (monitoring of vital events by community players) in conjunction with health and civil registry staff.

6: Assessment of completeness of event reporting
Data comparison with external sources
Reasons:

- Easy to implement
- Availability of external sources (RGPH, EDSc, DHIS2, etc.)

7: Phased Implementation

Phase 1: Limited number of 1/14 regions (year 1)
Phase 2: Enrolment of 6 other regions (from year 2)
Phase 3: Scaling up to 14 regions (from year 4)

Governance Structure to Manage the SRS

- Portage by MSAS
- Set up 2 committees: a multi-sector committee and a technical committee
- Periodic follow-up meetings (every 3 months)

Tanzania

1: System integration process based on vision and objectives:

- We will use the linkage approach-Phase1.
- We will include what is missing under SRS.

2: Geographical units to sample: Hamlet/Street will be our geographical clusters. Go with the second option under slide No. 8 while re-visiting the existing sample under VA implementation.
3: Relevant Statistical Domains: The region will be our sub-national level.

4: Minimum Data for SRS

- Births and deaths by age
- Causes of death identified through VA
- Population
- Births and death registration

5: Data Collection Strategy

1. Justify based on the mortality assessment findings
2. We may need to carry out formative research for community reporting
3. We will use community health workers for data collection.

6: Assessment of completeness of event reporting
The choice will depend on the data collection strategy
We will use some experts who will advise on how to calculate

7: Phased Implementation: We will use a phased approach and take some lessons from each phase

Governance Structure to Manage the SRS
IHI would lead the technical implementation, coordination of CRVS and mortality surveillance will be led by MoH, RITA, PoRALG and NBS based on specific interventions. There will be specific desk officers from each of the institutions.

4. Five Additional Questions to address when developing SRS Proposals

Kenya

Formative research to inform data collection, reporting process, and linkage/integration with CRVS

***Yes, formative research is needed. To provide social, cultural, beliefs, human factors among professionals that influence SRS activities; this may be achieved through mapping of existing systems, their challenges. Data may be available within HDSS.
The scope will focus on data aggregation, meta-analyses. This will inform audience analysis, change management, and appropriate messaging.

Human resources: SRS management and implementation team

- Assistant chiefs
- Community Health Promoters
- Community Health Assistants
- Sub county Civil Registrars
- Facility and sub county HRIOs
- Sub county surveillance officers
- Pathologists
- Police

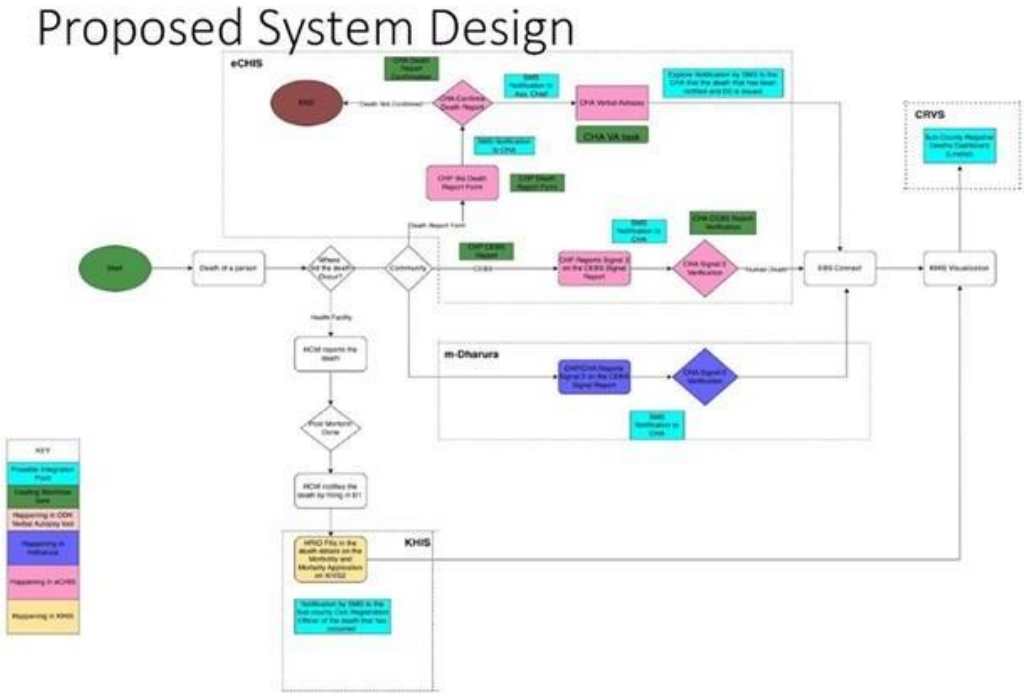
Data Tools

- Verbal Autopsy questionnaire
- Forms D1 (MCCoD), D2, Death report form in eCHIS,
- Standard MPDSR forms
- MITS data forms where applied **
- Cause of Death Assistant (CODA), an AI-guided tool, where applied **
- ANACODE, DORIS, VMAN***

Data system, digital solution and data flow

  - Data systems: e-CHIS, KHIS, CRVSS, and M-dharura

- Digital solutions
  - Cause of Death Assistant (CODA)
  - Digital Death Report forms
  - EBS connect



Pakistan

Formative research to inform data collection, reporting process, and linkage/integration with CRVS

Yes, it is an essential component to help understand barriers, facilitators, community perspectives, governance systems, feasibility, CRVS integration, challenges, reporting mechanism, testing of tools, and training materials. All this is built in our Proof of Concept,

Human resources: SRS management and implementation team

- Government infrastructures
- Field in LHWs uncovered areas
- Monitoring and evaluations
- Completeness assessments
- IT Leads

Data tools

- WHO VA tools, CRVS Birth and death notification tools

Data system, digital solution and data flow

Ethical clearance

- Already obtained as per our national requirements

Tanzania

Formative research to inform data collection, reporting process, and linkage/integration with CRVS

Data collection: CHWs will be the data collectors. We will adopt and adapt tools for data collection like the WHO Questionnaire, VA Manager, etc.

Scope of formative research:

- Check the feasibility of the tools in different phases (both IT and processes)
- Continuous learning from different phases.
- Consider the qualitative investigation, designing the sensitization package to align together different understandings of people in the community on what information is needed.

Human resources: SRS Management and Implementation Team

- Use the existing staff to enhance sustainability, make sure that the SRS responsibilities are under their job descriptions.
- Identify the staff and describe the specific roles and responsibilities under SRS and CRVS implementation
- Identify deaths and household listing – think of which cadre could efficiently bridge the existing gaps either by maintaining the former one or coming up with the new option.
- How the management of funds will be treated (funding floors)

Data tools

Tools that will be used to collect various types of data are as detailed below:

Type of Data	Tool	Purpose
Routine household visits	ODK (Open Data Kit)	Used by enumerators to continuously record births, deaths, and migrations.
Verbal autopsy	ODK with WHO 2016 VA questionnaire	Used to collect information on deaths.
Data Management and Storage	ODK Aggregate / Central / Ona / Kobo Toolbox	Stores data from field devices.
Data Analysis	SmartVA or InterVA / R / STATA	Processes VA data and analyzes mortality trends.
Monitoring & Feedback	Dashboards (DHIS2 / custom)	Tracks progress and ensure data quality.
SRS baseline census	Household listing tool	To collect baseline demographic and social economic information of the households and individuals in the household.
Pregnancy outcomes	Pregnancy tracking tool	To follow up all pregnant women during the pregnancy until outcome of pregnancy and condition of the woman

Data system, digital solution, data privacy, data access and data flow

Data system: This will be part of data governance including access, data domains and other data security issues.
Digital solution: An IT solution will be developed to capture accurate denominators at each level and for each type of data

Ethical clearance: Consideration for waiver will be done, otherwise, will look for ethical clearance whenever publication is needed.

5. Funding Landscape Mapping & Scenario-based Planning

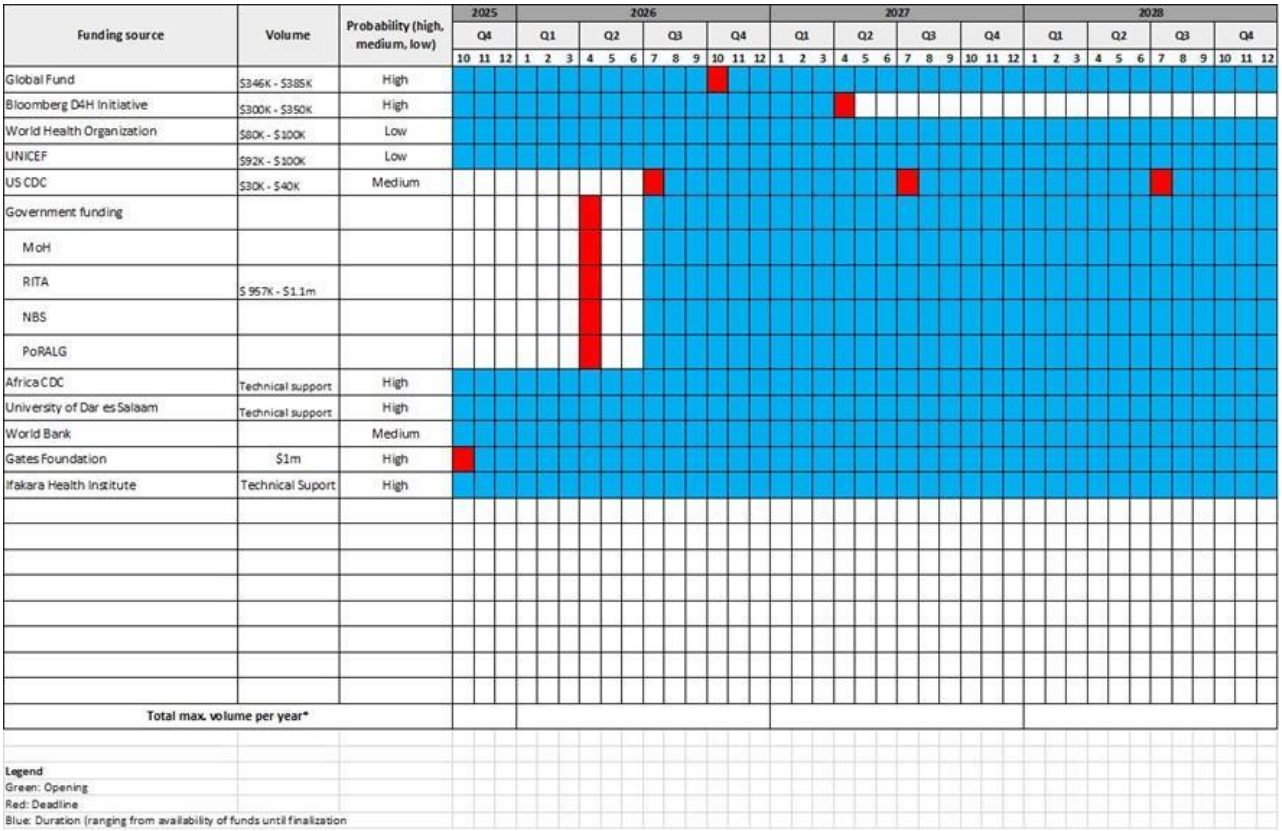
Funding Landscape Mapping

In this activity, countries revisited their situational assessments to map funding sources more explicitly for SRS, identifying timelines, likelihood of success, and the volume of funding. Daniel introduced a Gantt Chart as a tool to help teams visualize funding cycles and application deadlines, as well as aligning SRS implementation phases with donor availability.

Scenario-Based Planning

For this activity, teams defined minimum viable SRS requirements and developing multiple implementation scenarios—from worst-case to best-case. This exercise was designed to help countries remain flexible while maintaining momentum, even under constrained financial conditions.

Below is a Gantt Chart developed by the Tanzania country team.



Funding source	Volume	Probability (high, medium, low)
Global Fund	$346K - $385K	High
Bloomberg D4H Initiative	$300K - $350K	High
World Health Organization	$80K - $100K	Low
UNICEF	$92K - $100K	Low
US CDC	$30K - $40K	Medium
Government funding		
MoH		
RITA	$ 957K - $1.1m	
NBS		
PoRALG		
Africa CDC	Technical support	High
University of Dar es Salaam	Technical support	High
World Bank		Medium
Gates Foundation	$1m	High
Ifakara Health Institute	Technical Suport	High
Total max. volume per year*		

Final Panel Discussion and Q&A

Sustainability beyond funding: Lessons from the field

The conference concluded with a dynamic and reflective panel discussion that zeroed in on sustainability—both in terms of financial viability and the institutional arrangements needed to keep Sample Registration Systems (SRS) running with high fidelity. Moderated by Dr. Phillip Setel of Vital Strategies, the panel brought together voices from countries already implementing SRS (Zambia, Sierra Leone, Mozambique, Kenya) and those still in the planning phase (Pakistan), creating a rich tapestry of perspectives.

Phillip set the tone by emphasizing that sustainability isn't just about finding money—it's also about building systems that work. He challenged the panelists to reflect not only on resource mobilization but on the institutional ecosystems that make or break SRS implementation. Questions were directed both to individual panelists based on their national contexts and experiences, as well as to the full panel to invite broader reflections and cross-country insights.

Below is the set of questions posed by Phillip and their responses.

What are the building Blocks of Institutional Sustainability?

Stephen Chanda (Zambia) shared that in their case, a legal review became a game changer. Though not highly detailed, the process helped align stakeholders and clarify mandates. Ministries brought existing laws and regulations to the table, opening up important conversations about who collects what data, under what authority, and for what purpose. This exercise grounded SRS within Zambia's legal framework, providing a strong foundation. The Zambia National Public Health Institute (ZNPHI), with its surveillance and research mandate, emerged as the "natural home" for SRS—legally aligned and institutionally positioned to lead long term.

Rashid Ansumana (Sierra Leone) echoed the importance of institutional anchoring, noting that they were transitioning their SRS to the country's newly established National Public Health Agency. Sustainability, he argued, requires visibility in the government budget—not just as a line item, but as a priority. "Sometimes SRS doesn't make the top of the list, not because it isn't important," he remarked, "but because it's invisible when the big decisions are made." Anchoring it within a legitimate agency creates a voice at the table—one that can advocate for continued support.

Celso Monjane (Mozambique) stressed the need for broad stakeholder engagement. Their SRS journey began by mapping out all relevant players—a painstaking process, but one that paid off. "Today, they're all part of us," he said proudly. More than just data users, stakeholders became allies. He added that aligning salary structures and payments with national civil service schemes is vital for long-term sustainability, cautioning that SRS is not inherently cheap. "We need to find a way to make it affordable—and that starts by embedding it in the system."

How should Planning Countries prepare for sustainability?

Celso advised planning countries to engage early, clarify stakeholder roles, and make the results matter. "*If people can see the value of the data, they will fight for the system*."

Niloufer Jahangir (Pakistan) shared that their strategy hinges on formalizing multisectoral governance. They aim to embed SRS into Pakistan's statistical ecosystem by tying it to the Public Sector Development Programme and Medium-Term Development Framework. Their steering body will be the linchpin, ensuring alignment and driving long-term support. Asked whether the shared considerations about sustainability might affect Pakistan's system design and protocol, she confidently responded, "*They won't affect our system design, they will* augment *it*."

Lucy Munyeki (Kenya) spoke to the power of collaboration. Kenya has already engaged key institutions—Ministry of Health, CRVS, and the National Bureau of Statistics—and is planning to broaden the circle even further. This clearly suggests that sustainability needs high-level buy-in and that planning countries need to bring in everyone, from policymakers to population agencies and refugee populations, to ensure SRS remains relevant and supported.

<u>Moderator's reflections on key takeaways from the Panelists:</u>

- The legal foundations that give authorization for different stakeholders to play their roles in the system is one component of institutional sustainability.
- In addition to the legal review, countries need to make sure that the SRS as a program is included in budgetary considerations as well as sector plans.
- There is a minimum viable system that government should support and the affordability of that system has to calibrate with the minimum viable system being designed.

Audience Q&A

Questions from the audience were around funding realities, legal lessons, and what implementing countries would have done differently.

One audience member asked Sierra Leone and Pakistan how much funding should come from governments versus donors. Rashid responded candidly: "It depends." But one thing is certain—government funding needs to be codified in national budgets passed by legislatures. Without political buy-in and legislative backing, sustainability remains elusive. Niloufer emphasized that embedding SRS into parliamentary processes is central to Pakistan's strategy.

Asked what they would do differently if starting over, Mozambique said they've learned everything on the job—adapting, fixing, and refining as they go. Celso emphasized the need to be honest about the challenges by keeping everyone at the table. Zambia urged countries to anticipate risks early because stakeholders come with their own institutional challenges. It is also important to anticipate the possibility of funds drying up by having a Plan B.

Sierra Leone offered reassurance to planning countries by reminding them that they are lucky as they get to learn from implementing country's mistakes. He reiterated the need to start with a legal review, right from the get-go.

Another question focused on the two faces of sustainability—technical and managerial. Kenya noted they are leveraging existing structures: community health workers, registration officers, and existing policies. They are also building in plans for gradually reducing technical assistance while building local capacity. Lucy advised that countries map what skills they have and strengthen the areas that need boosting.

Zambia emphasized the importance of identifying the right institutional anchor early on. Senegal described how they're using community workers trained in surveillance, engaging ministries of health and finance, and advocating for cabinet-level understanding to foster a culture of ownership. They're even exploring integration with private sector actors like insurance companies—a creative move to reduce reliance on foreign funding.

In a final round, participants were asked: *If donor funding ends, how long should the incubation period be?* In a nutshell the collective response was: long enough to gain political buy-in and integrate SRS into national systems, but short enough to remain urgent. Countries need to rally development partners who are already supporting national priorities to pick up pieces of the SRS puzzle and ensure continuity.

In closing, Kenya reminded the audience that sustainability isn't just about money—it's also about partnerships. "*It's a good opportunity to leverage academia*," Lucy said, suggesting that universities could offer courses to train the next generation of SRS practitioners.

Final reflection

The message that echoed through the final panel was that sustainability isn't something you build at the end — it's something you embed from the start. Whether through legal frameworks, budget lines, stakeholder alignment, or sheer determination, countries are proving that resilient SRS systems are possible when they are locally owned, strategically designed, and openly co-created. And even though the road ahead may be complex, with clear purpose, shared learning, and committed partnerships, countries are well on their way to transforming mortality data systems for good.

Closing Session

The closing session featured key reflections and forward-looking insights from partners and organizers involved in the SRS planning conference.

Gates Foundation

Samantha expressed her appreciation for the ongoing efforts by participating countries, particularly in how they are linking the funding landscape to sustainability planning. She acknowledged that while the Gates Foundation has played a catalytic role, it does not intend to be a long-term funder. Instead, their strategy emphasizes providing planning grants and start-up support to help countries lay the groundwork for sustainable SRS programs.

She emphasized that sustainability must be planned for from the outset, especially in light of shifts in global funding dynamics, such as the U.S. government's withdrawal from certain health initiatives. Samantha noted that the Foundation has learned from past mistakes and is actively adapting its approach by, for example, offering financial management training to partners to strengthen internal systems. She reiterated the importance of two-way learning, where the Foundation not only funds but also listens to partners to better understand how to improve the efficient use of limited resources. She did a quick poll to check which countries need more support. Mali, Ghana, and Senegal stated that they needed more time to finalize their protocols.

Looking ahead, Sam informed the audience the following:

- The Foundation will not be funding full-scale SRS programs but will continue to play a catalytic role.
- Larger-scale funding is anticipated around 2026.
- The monthly SRS webinars were discussed, with questions raised on their usefulness and how they might be improved.
- There was strong interest in convening again next year, with participants unanimously supporting the idea.
- IT personnel were identified as a key stakeholder group to involve in future gatherings.
- Some countries, such as Mali and Ghana, expressed interest in integrating migration tracking into their SRS efforts.

She ended by expressing deep appreciation, calling the SRS work "some of the most valuable and impactful" the Foundation is involved in.

Africa CDC

Emily emphasized the central role of the Africa CDC in supporting and advancing SRS implementation across the continent. She noted that SRS is now part of ongoing, continuous efforts, and highlighted the importance of ensuring that country-level SRS programs are aligned with national priorities to enhance sustainability.

Africa CDC's role has included:

- Supporting policy frameworks and country stakeholder engagement.
- Playing an advocacy role at both the continental and national levels.
- Ensuring that SRS becomes an integral part of country health systems.

Emily also underscored the need to strengthen data use in the next phase of SRS implementation. Moving forward, Africa CDC will focus on: Promoting the routine use of surveillance data**;** **e**nsuring data systems capture denominator information to enhance decision-making; and collaborating with countries to improve data quality and application.

She also expressed a desire for lessons from current SRS countries to benefit others that are not yet involved in the initiative.

Vital Statistics

Phillip who had led the final wrap-up with energy and enthusiasm, started with a rousing "SRS Oyee!" that was met with applause.

He extended heartfelt thanks to:

- All participating country teams for their hard work, attention, commitment, and deep engagement throughout the week.
- The organizing committee, including the IHI events team, for their excellent preparation and support.
- The language translation team for their great work.
- The Gates Foundation for its continued partnership and support of SRS efforts.

Phillip shared a personal reflection, noting the encouraging increase in women's participation in SRS-related work—a promising sign for the future of the field.

Those remarks marked the end of the Multi-country SRS Planning and Experience-Sharing Conference.

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111.	Director of Legal Rights Protection	RITA	

112.	Dr. Robart Malima	Ministry of Home Affairs - Forensic Pathologist	
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122.	UNICEF Country Officer	UNICEF Country Officer	
123.	WB Country Office	WB Country Office	
124.	AMREF	AMREF	
125.	Global Fund	Global Fund - Country Office.	

Annex B: Conference Agenda

Day 1: Developing a Vision and Investment Case for an SRS

Time	Activity
10:30 – 11:00 am	Tea break + Group Picture
11:00 – 11:30 am	Opening Remarks from ACDC Overview of Regional Framework and Progress
11:40 – 1:00 pm	Topic 1: SRS Vision – Articulating a vision for SRS and building an Investment Case
1:00 – 2:00 pm	Lunch Break
2:00 – 2:30 pm	Presentation on India's SRS – with focus on design and system priorities
2:30 – 3:00 pm	Presentation on Bangladesh's SVRS- with focus on vision for SVRS and its modular approach
3:00 -3:30 pm	Presentation from Mozambique's SIS-COVE- with focus on vision for the system as part of an integrated platform
3:30 – 4:00 pm	Tea Break
4:00 – 4:30 pm	Presentation on Sierra Leone's Heal-SL – with focus on design and sustainability considerations
4:30 – 5:00 pm	Presentation from Zambia's SRS- with focus on developing IT system requirements to fulfill system integration
5:00 – 5:30 pm	Panel session for discussion and Q&A with all presenters
5:30 pm	Closing and preparation for Day 2

Day 2: Articulating SRS Design and Core Requirements

Time	Activity
9:00 – 1:00 pm	▪ Topics 2 + 3 ▪ Reviewing situational assessment results and implications for SRS design ▪ Introduction to VIVA website and SRS Technical Package ▪ Designing an SRS
1:00 – 2:00 pm	Lunch Break
2:00 – 3:30 pm	Topic 4: Collaborative Requirements for SRS and Systems Integration with walk through
3:30 – 4:00 pm	Tea Beak
4:00 – 5:00 pm	How can SRS help fill DHS gaps?
5:00 pm	Closing the day
5:00 -6:00 pm	Optional Session: Software and IT system considerations and discussion
6:15 pm	Social and network event at local restaurant including dinner

Day 3: How to develop an SRS Design and Outings

Time	Activity
8:30 – 9:00 am	Optional Session: In-depth discussion of VIVA digital solutions for Data Managers and IT Teams
9:00 – 10:30 pm	Topic 5: Developing a plan for defining SRS design – what comes next? Revisiting situational assessment, design and implementation plan; decide what activities are needed to complete SRS design
10:30 – 11:00 am	Tea Break
11:00 – 12:00 pm	Situational assessment presentations and report out on learnings – 3 countries + Q&A
12:00 – 1:00 pm	Situational assessment presentations and report out on learnings – remaining 3 countries + Q&A
1:00 – 2:00 pm	Lunch Break
2:00 -6:00 pm	Optional outings: ▪ Ifakara Health Institute Field Visit in Bagamoyo ▪ Gift shopping for traditional crafts in Dar es Salaam

Day 4: Resource Mobilization and Closing

Time	Activity
9:00 – 10:30 am	Topic 6: Introduce resource mobilization best practices – Emily Workshop: Scenario-based planning using funder landscape tool – Daniel
10:30 – 11:00 am	Tea Break
11:00 – 12:00 am	Panel Discussion and Q&A with countries on building sustainable programs - Phillip
12:00 – 12:30 pm	Closing Remarks –Sam & Phillip