



Strengthening capacity in translating evidence to action:

Data mentoring and the journey to triple
elimination of HIV, syphilis, and hepatitis B



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Acknowledgements

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Cover photo: Maria, from Thyolo, Malawi, and her two children, Joyous (6) and Eliza (2), who were born HIV negative thanks to her accessing treatment. © UNICEF/UNI272920/Schermbrucker



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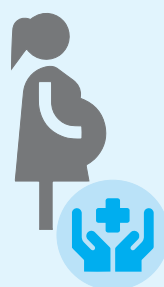
01. Background

Over the last two decades the global paediatric HIV epidemic has been transformed. Eastern and Southern Africa (ESA) is leading this transformation with more than 2.25 million new infections in children averted since 2010. The regional rate of vertical transmission of HIV has declined from 11% in 2015 to 7% in 2022. With 11 ESA countries reaching the global target of 95% treatment coverage for pregnant and breastfeeding women living with HIV, the goal of eliminating vertical transmission is within reach.^{1,2}

The global community has committed itself to the triple elimination of vertical transmission of HIV, syphilis, and hepatitis B virus as a public health priority contributing to Sustainable Development Goal 3 – “to ensure healthy lives and promote well-being for all at all ages”. The goal is to have 100 countries validated for elimination of vertical transmission of either HIV, syphilis or hepatitis B by 2030. To date, 17 countries have been validated for either vertical transmission elimination or on the path to elimination, including Botswana, as the first country in Africa to do so.

According to the World Health Organisation’s (WHO) recently published [Global health sector strategies on, respectively, HIV, viral Hepatitis, and sexually transmitted infections for the period 2022-2030](#), investing in capacity building for strengthened data collection, reporting, analysis and use is important to ensure quality data is used to drive actions at all levels.³ There is a growing emphasis on generating accurate, timely, and granular data for national strategic planning, resource allocation, people-centred health services, advocacy, and accountability. Aligning disease-specific information systems with broader health systems is required to strengthen universal health coverage and is especially applicable in the path to elimination of vertical transmission of HIV, syphilis and hepatitis B due to these diseases sharing modes of transmission and common interventions.

Despite these increasing demands for quality data and evidence, health information systems remain inadequate. According to WHO’s [Global Report on Health Data Systems and Capacity \(2020\)](#), only 42% of countries have strong capacity at a national level **(Figure 1)**, highlighting a critical need to 1) improve the institutional capacities of ministries of health to face complex health challenges, and 2) foster collaboration with private entities (universities, non-governmental organisations etc) to support countries’ capacity in data analysis and review. Countries also need to build a sustainable, enabling environment for data use.³



The regional rate of vertical transmission of HIV has declined from **11%** in 2015 to **7%** in 2022.

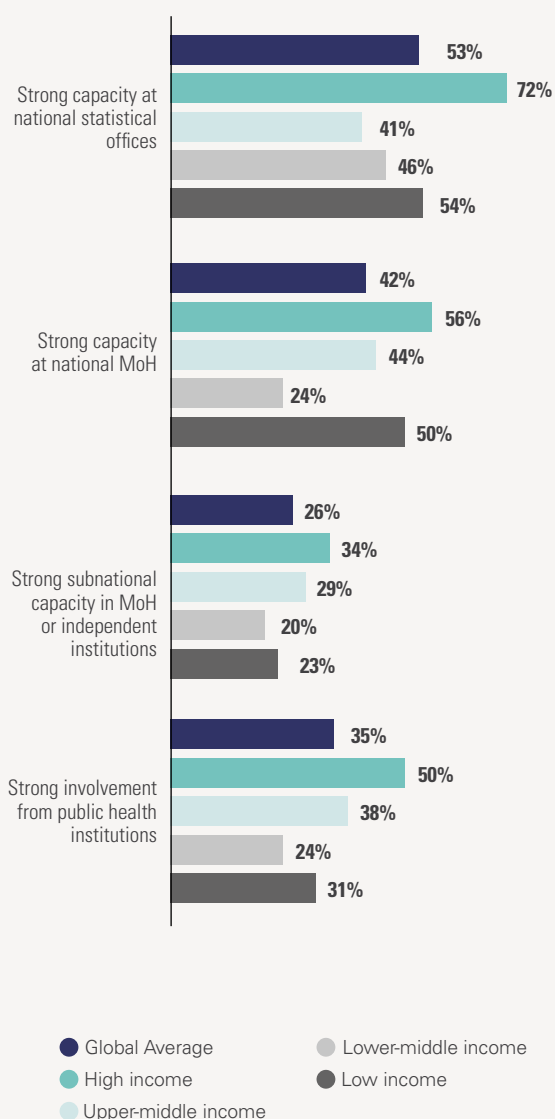
With 11 ESA countries reaching the global target of **95%** treatment coverage for pregnant and breastfeeding women living with HIV, the goal of eliminating vertical transmission is within reach.

1 Going the ‘Last Mile’ to EMTCT: A road map for ending paediatric HIV worldwide [EMTCT-brief_122019.pdf \(childrenandaids.org\)](#)

2 AIDSInfo Spectrum estimates published 2023 [AIDSinfo | UNAIDS](#)

3 SCORE for Health data Technical Package. Global report on health data systems and capacity, 2020 [9789240018709-eng.pdf \(who.int\)](#)

Figure 1. Percentage of countries with institutional capacity or involvement in data analysis, by country income group (N=133), from the Global report on health data systems and capacity, 2020.



Building Analytical Capacity Towards Elimination of Vertical Transmission

Validation of triple elimination requires country-led accountability, rigorous data analyses, intensive programme assessments and multilevel collaboration. In high burden settings, validation attests that a country has successfully met standard criteria for elimination, or for being at one of the three levels of achievement on the 'Path to Elimination' while delivering quality services for women, girls, and children, throughout their life-course, respecting human rights and ensuring gender equality and community engagement. According to WHO, to sustain elimination of a disease at such a level that it is no longer a public health problem, countries require a monitoring and surveillance system able to accurately assess intervention coverage and detect most cases of vertical transmission of HIV, syphilis, and hepatitis B in a timely manner.^{4,5}

Recognizing this need for more intensive and sustained data capacity building to meet validation requirements, UNICEF's Regional Office for ESA contracted IQVIA in collaboration with the University of Zambia in 2021 to develop a data mentorship programme for government strategic information officers and programme managers. The programme promotes an integrated standards-based approach to strengthening data related to triple elimination within national health management information systems and develops country data analysis reports and operational plans for countries on their Path to Elimination. This mentorship programme contributes to the sexual and reproductive health and rights (SRHR) agenda in the ESA region under the 2gether 4 SRHR programme, implemented by United Nations Population Fund (UNFPA), Joint United Nations Programme on HIV/AIDS (UNAIDS), World Health Organisation (WHO) and United Nations Children's Fund (UNICEF) in partnership with the Government of Sweden.

This document aims to share the findings and achievements of Phase 1 and 2 of the data mentorship programme with country and regional implementers and stakeholders working towards eliminating vertical transmission in ESA. The learnings highlighted in this document will contribute to the programme's scale-up, sustainability and its institutionalisation in local public health programmes.

4 New report from UNAIDS shows that AIDS can be ended by 2030 and outlines the path to get there. [Preventing mother to child transmission | UNAIDS](#)

5 Elimination of mother-to-child transmission of HIV, syphilis and hepatitis B. [Triple elimination initiative of mother-to-child transmission of HIV, syphilis and hepatitis B \(who.int\)](#)

02. Mentorship Programme

Overview

The data mentorship programme's primary goal is to build local capacity and strengthen national health management information systems to support countries in Africa with their Path to elimination validation processes. Specifically, the programme aims to improve data quality by building the analytical skills of government staff to identify and address key information gaps, analyze data, and use findings to better plan and sharpen programming for triple elimination.

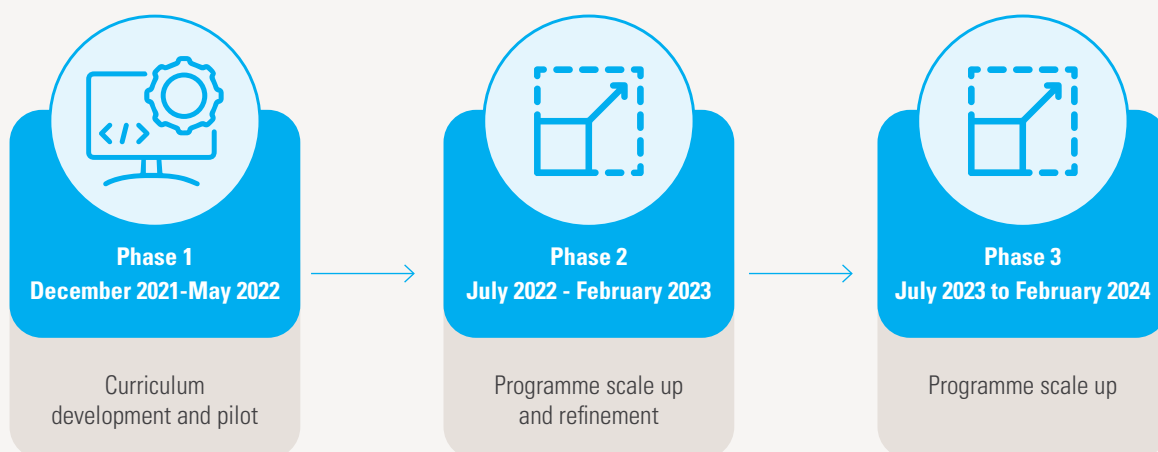
The main innovative elements of the programme include:

- Implementing a first-of-its-kind hybrid (virtual and in-person) data mentoring programme that builds and supports data analyses and utilisation.

- Institutionalising a unique partnership and collaboration of the UN with the private sector, academia, and government officials.
- Working with a regional academic institution to adopt the programme modules as part of their curriculum in a deliberate effort to expand and sustain capacity within the region.
- Employing a virtual South-South and triangular learning approach where mentees from different countries are supported to learn from the experiences of their colleagues and mentors from global north and south.

The learnings and promising practices from the initial phase served to enrich and refine the programme for subsequent phases. **Figure 2** below summarises the timeline and phases as the programme has been scaled up.

Figure 2. The three phases of the mentorship programme

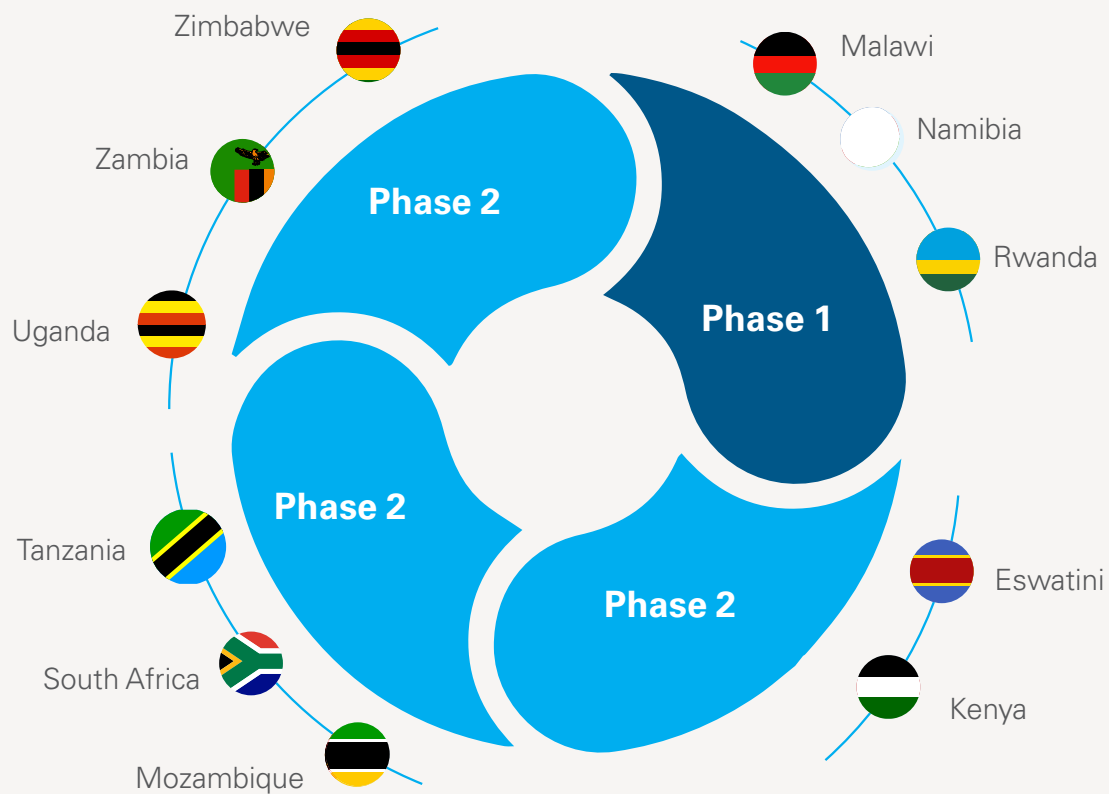


The participants nominated and enrolled into the programme, referred to as mentees, are government officials or representatives from partner organizations, all working in their respective capacities towards elimination of vertical transmission in their home country. The number of mentees grew from five representing three countries in Phase 1 to 28 mentees representing

eight countries in Phase 2 (**see figure 3**). Six countries have been identified and agreed for Phase 3.

This data mentorship programme builds on South-South collaboration principles, adult education experience and academic expertise to offer a unique learning experience to the mentees.

Figure 3. The 11 countries represented during phases 1 and 2 of the programme



Programme Features

The data mentorship programme offers a unique combination of modalities and platforms to maximise learning, namely.

- Virtual live sessions with mentors complementing the online modules.
- Online learning platform to access resources and complete the online modules and quizzes.
- Office hours in the form of one-on-one and country specific group sessions with mentors.
- Development of an operational plan for implementation in their work after course completion.
- South-South workshop to showcase operational plans and offer additional practical and learning sessions.

- Pre- and post-programme questionnaires.

- Certificate of completion for the 14-week programme.

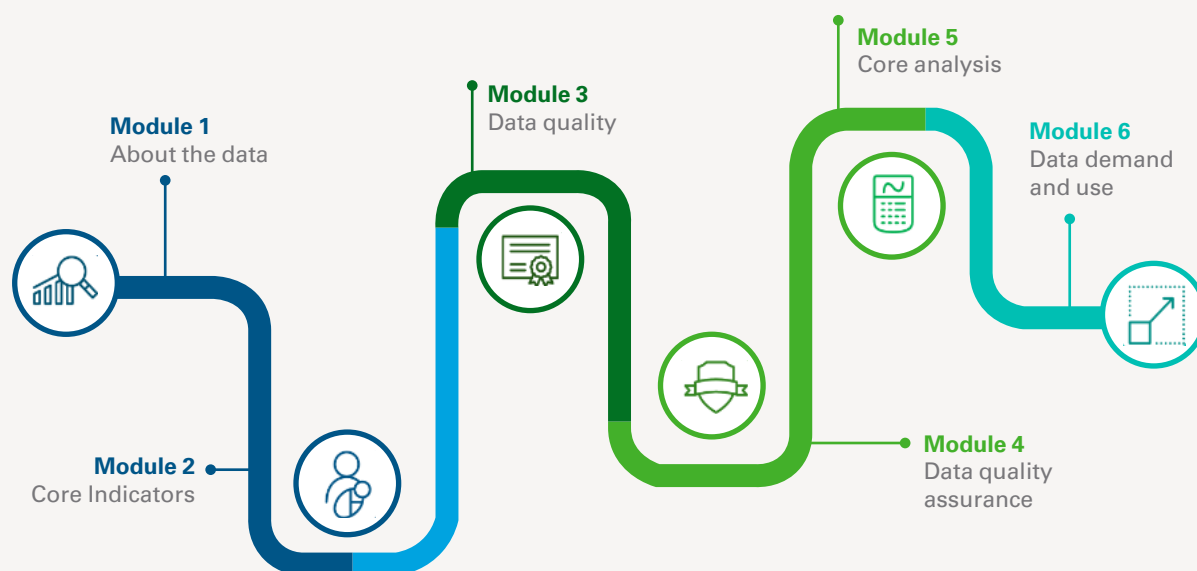
- 12-18 months post programme follow-up and mentorship linked to the implementation of operational plans.

Modular learning

The 14-week data mentorship programme comprises of six modules that were uniquely developed for this programme and were refined after Phase 1 based on learning and to enhance content quality. The six modules developed are illustrated in **Figure 4**.

Each module is pre-recorded with a voice over and availed to mentees through the Healthcare Providers Space Platform along with reading materials and a chat room to interact with peers and mentors.

Figure 4. The six modules included in the curriculum



Live group sessions

Virtual live group sessions offer an opportunity for mentees to engage with their mentors and peers around the concepts learned during the self-directed online sessions. Facilitated by mentors from the University of Zambia, the live sessions are a safe space to ask questions and share countries' experiences.

One-on-one mentorship sessions

Mentor-mentee sessions provide dedicated time to reflect on the challenges experienced by the national programme in the mentees' countries and to leverage the knowledge and skills gained through the data mentorship programme.

Country operational plan

Each mentee is asked to conduct specific programme related data analysis that is used to develop a country-specific operational plan with actionable recommendations to improve the elimination of vertical transmission in their country. These plans use current and country specific data to ensure they are relevant and useful for implementation in their country. The operational plans provide a framework that assists implementers in identifying decisions and programmatic questions faced in day-to-day work. **Figure 5** highlights the questions asked and addressed in the operational plans.

Figure 5. Four key questions guiding the development of the country operational plans



The operational plan drafted by each mentee - with guidance and inputs from mentors - are presented during a South-South workshop and with ministries of health. With support from supervisors of the mentees, the operational plans are integrated as a whole or in part into the ministry of health's elimination of vertical transmission programme workplans to be funded and implemented by the ministry of health.

South-South workshop

The South-South workshops, held towards the end of each phase bring all stakeholders together "under one roof" (face-to-face in Johannesburg, South Africa in Phase 1 and hybrid in phase 2). These workshops fulfil four main objectives:

- To understand what worked well and what did not.
- To review and discuss the mentees' operational plans.
- To conduct practical learning sessions for data analysis, reporting and recording of data.
- To provide inputs in the design of the next phases and discuss the way forward for the data mentorship programme

Alumni mentee engagements and opportunities

As part of Phase 2, Phase 1 mentees made themselves available for specific live sessions with the Phase 2 mentees. The alumni mentees offered insight into the programme, what commitments would be required and how it benefitted them and their work after completing the programme. Mentoring new mentees as alumni strengthened Phase 2 mentees' capacity to lead and empower their own country colleagues as supervisors, thereby contributing to the regions' triple elimination agenda. The alumni mentees from Phases 1 and 2 are encouraged to participate in Phase 3 as it provides continued opportunities for networking.

Mentees were also given opportunities to participate in regional / global activities around the Path To Elimination as they became more familiar with the validation processes and requirements.

03. Achievements

Early achievements by countries associated with the data mentorship programme are outlined below.



Malawi

From Phase 1, an Operational Plan from one of the Malawi mentees aimed to improve data quality in Early Infant Diagnosis (EID). The plan proposed improving EID data quality by looking at the dimensions of accuracy, timeliness, and completeness of subnational level data. Building on the national workplan and with support from ministry of health officials, the mentee was able to incorporate EID training activities for implementation in up to 10 facilities in each of the 29 districts in Malawi. To date 950 healthcare workers (data clerks, programme coordinators, pharmacy personnel, clinical officers etc.) have been trained on HIV data management processes, including EID tools, HIV programme M&E system, data access from DHIS2, data analysis, District Health and Management Information Systems and other themes.



Rwanda

In Rwanda, a phase 1 mentee helped train health care workers at 10 facilities in the Eastern Province. Data quality improvement committees were established at these facilities to oversee monitoring and ensure data quality when reporting. There are plans in place to expand the support and structures.



United Republic of Tanzania

Phase 2 mentees from Tanzania focused on addressing the low capacity in data analysis and data management among healthcare workers by training regional reproductive and maternal health coordinators, and subnational level programme officials. Since completion of the programme, the mentees have facilitated training of health workers in six regions on the use of the WHO Data Quality Assurance tool.



Namibia

Two mentees from Namibia were part of the core team involved in the recent national validation process for triple elimination validation in Namibia. One mentee each from Malawi and South Africa formed part of the regional data validation team.

One mentee established a quality improvement collaborative to improve HIV retesting among pregnant women. Now implemented with the Ministry of Health and Social Services, this initiative covers 37 sites across all the 14 regions. The quality improvement collaborative is highlighted in the Path to Elimination validation for Namibia.



South Africa

In South Africa, a Phase 2 mentee based at the National Department of Health has been assigned the convening role for the Path to Elimination process recently initiated in South Africa. She was included in the regional validation data team for Namibia and has since led the South Africa country team performing the country's self-assessment, the first step in the validation process.

04. Programme Assessment

The data mentorship programme follows a collaborative human-centric approach with multidisciplinary representation among mentees to foster in-depth discussions and collaborative learning. Throughout the programme, mentees are encouraged to share their views and learnings that could help refine the data mentorship programme.

Methods

To obtain mentees' self-appraisal of their understanding and appreciation of the content delivered through their training, pre and post programme questionnaires were administered. Qualitative interviews conducted to capture mentee, mentor, and supervisor voices and professional reflections from Phase 1 and Phase 2. A total of 20 mentees (10) and supervisors (10) were sent a questionnaire that was complemented with a virtual interview. The questionnaire and interview covered the following topics: Capacity building and knowledge transfer, empowerment and leadership, and professional growth. Of the 33 mentees enrolled during Phase 1 and 2, 11 were interviewed (33.3%) and five of the 19 mentee supervisors were interviewed (26%). The overall questionnaire response rate based on the planned target of 20 programme participants was 80% (16 responded out of 20 invited).

Capacity Building and Knowledge Transfer

Collectively, all the mentees and supervisors (100%) interviewed highlighted improvements in mentees' knowledge of vertical transmission of HIV, syphilis and hepatitis B concepts and broader data management processes, monitoring and analysis. They noted that the tangible tools, concepts and guidance on data analysis and presentation equipped mentees to better perform their daily tasks and implement their operational plans.

Group/individual capacity building sessions provided by mentors were seen to support mentees in understanding the importance of having appropriate programme indicators for monitoring and clearly identifying data management challenges in their own countries. Some of these were addressed through the mentees' operational plans.

The 11 mentees interviewed reported that their operational plans were integrated into Departmental / Ministry of Health annual workplans to varying extents, from partial integration with prioritized activities and action plans to expand the scope, to full integration.

During and after the data mentorship programme, mentees reported that they were able to transfer their newly gained knowledge on vertical transmission of HIV, syphilis, and hepatitis B to other stakeholders.

Empowerment and Leadership

Mentees reflected that the programme helped enhance their ability to take ownership and leadership in their areas of responsibility, including in their work relating to their operational plans.

"The data mentorship programme has provided me with valuable insights and knowledge. It served to reinforce my existing skill set and improve my ability to lead and collaborate effectively" - Rwanda Mentee.

All the mentees interviewed (100%) felt positive and confident about their involvement in country specific vertical transmission efforts after completing the data mentorship programme. This was further confirmed by 4 of 5 supervisors interviewed (80%).

"I think now she's in a better space to run with the programme" - Phase 2 Supervisor.

Collaboration and Networking

The opportunity provided to mentees for collaborating with fellow in-country and across countries colleagues contributes to creating a pool of experts within Africa who can lead on data validation requirements for triple elimination.

Professional Growth

“I think this had really brought very much insight to us, to understand the processes which were unfolding, where do we need to focus, as the programme came at the time where we have started with preparation for validation, and we could really understand where we need to focus” – Namibia Mentee.

“This has been an enormous learning process. I have learnt through mentees and have a broader understanding of the common EVT data related problems. The process has also sharpened my mentorship skills because of engagement with a diverse group” - Zambia Mentor.

One of the Phase 1 mentees from Malawi leveraged his experience of the data mentorship programme to secure a promotion for a new senior position in the Strategic Information Directorate where he currently works. He now leads the Path to Elimination validation and application process in the country.

A Phase 2 mentee from Kenya noted that her tasks and role have “been enhanced” with a better understanding of monitoring, data requirements, and overall programming.

“The mentorship really helped me in understanding the triple elimination and other aspects of the programme.” - Kenya Mentee.

05. Way Forward

The blended and mentee-centered approach of the data mentorship programme offers countries a unique opportunity to build the capacity of government officials as they move their countries' Path to Elimination agenda forward and ultimately achieve triple elimination.

Empowered mentees are taking up leadership roles that directly support national programmes and Path to Elimination validation processes. The geographical expansion of the programme and the continuous exposure of mentees to technical learning opportunities will further enhance each country's preparedness towards the Path to Elimination and validation.

The design, approach and delivery of this programme can be used as a blueprint for building national and regional capacity, skills building and mentorship. While this particular data mentorship programme focuses on vertical transmission and the Path to Elimination, the principles of data quality, data sources, collection and reporting, data visualisations, and data use remain consistent across healthcare programmes and can be applied more broadly to build data use capacity in maternal, newborn, child and adolescent health and sexual and reproductive health.

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