



# Asia-Pacific CRVS Research Forum

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## A sustainable CRVS eLearning course to upskill competencies of practitioners in the registration of vital events: Experiences from Rwanda

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**Introduction:**

A well-functioning civil registration system provides universal access to civil registration services to individuals immediately after the occurrence of vital events such as a live birth or a death by providing legal proof of registration of the event through the issuance of a certificate. Civil registration records are useful for various legal and administrative reasons by government agencies, businesses, and individuals. The absence of a good civil registration system in the country to collect high-quality, accurate, complete, and timely vital event registration data jeopardizes access to information necessary to monitor and assess emerging public health threats such as an upsurge of deaths from unexpected causes of death. The CRVS system is critically important to measure progress toward the SDGs and non-health related SDGs indicators because it provides a timely and continuous source of data, at national and sub-national levels (1).

In 2008, the Government of Rwanda began a process to strengthen the CRVS system with the purpose of building a sustainable and continuous source of vital statistics. The Civil registration and vital statistics (CRVS) system was established, with civil registration functions coordinated by the Ministries of Justice, Local Government, the Ministry of Health, and the National Institute of Statistics of Rwanda (NISR) responsible for the compilation, analysis, and dissemination of vital statistics. The government thereafter started the amendment of the legal framework that governs the civil registration system in Rwanda.

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Before 2020, Rwanda had 446 registration sites in Sectors and abroad in the Embassies. The major barriers to registration services were the long distances to registration sites and an overly complex process that limited families to registering for vital events in a paper-based system. Therefore, the government decided to digitalize and integrate civil registration services into the health sector, and decentralize registration services closer to the citizens. This has led to a tremendous increase in civil registration sites to 3,220 civil registration service points in health facilities, in administrative offices at the Cell and Sector level (Rwanda is subdivided into 416 Sectors and further into 2,148 Cells), and in Embassies and high commissions abroad. To address the resulting increase in training needs, the anticipated ongoing need for the training of incoming personnel, and based on the results of the COVID-19 pandemic which proved that in-person trainings may not always be feasible, the government decided to develop a civil registration and vital statistics (CRVS) eLearning course to build the skills of CRVS practitioners in civil registration in the whole country.

This paper presents the experiences, lessons learned, and best practices from Rwanda in setting up a CRVS eLearning course as a practical and efficient approach to address the issue of the capacity building following the establishment of a CRVS system with strong collaboration with the health sector.

## **Methods:**

This was a mixed-method study design. We reviewed the CRVS reports during the development of a user-friendly CRVS eLearning course, which was locally developed, with the aid of an external expert with vast knowledge and skills in developing e-learning courses. A bilingual (English/Kinyarwanda), hands-on, and interactive micro-learning approach was used in the development of the course with 11 modules. The course was further developed using a participatory one-year co-creation approach between an eLearning expert and on-the-ground CRVS practitioners. This involved the development of national CRVS training content, graphic design, narration in the SCORM format, and a review cycle with local practitioners. The final product was uploaded to the Moodle LMS of the Ministry of Local Government at <http://e-learning.minaloc.gov.rw>, which is in charge of the civil registration system. Following the publication of the course, the Ministry of Local Government has issued a mandatory order to CRVS practitioners to take the course as part of their continuous capacity development.

## **Results:**

The paper presents the key drivers for the success of the CRVS eLearning course in Rwanda.

The regulatory environment in Rwanda before was hampering the CRVS improvement framework. However, in 2018, the GoR started the CRVS legal review process in line with desired business process mapping to resolve the identified bottlenecks and inefficiencies in the existing systems to improve civil registration systems. This has led to the digitalization of registration services for nine vital events as recommended by UN principles and recommendations of the vital statistics system (4), and the decentralization of registration services to the health sector and the lowest level of administration at the Cell level.

The government of Rwanda established functional CRVS coordination mechanisms that involve and coordinate all relevant CRVS stakeholders from government and nongovernment actors and ensures strong buy-in. The

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coordination committees facilitated the development and rollout of the CRVS eLearning course to respond to the burden of the huge number of CRVS practitioners who needed knowledge and skills in the civil registration of vital events after the decentralization of civil registration services closer to the citizens. The CRVS technical working group is one of the CRVS coordination committees involved in the development of the national CRVS training materials in English and translated into Kinyarwanda. The team also participated in the review of the CRVS training contents and course design for 11 modules in both English and Kinyarwanda. They also tested the course when uploaded to the website in the SCORM format prior to deployment to the learners. The CRVS steering committee reviewed and approved the course and requested the Ministry of local government to issue a ministerial instruction for the uptake of the course for all CRVS practitioners. The Minister of ICT and Innovation as the one in-charge of digitization launched the CRVS e-learning course during the celebration of CRVS African day on 10<sup>th</sup> August 2022 in the Eastern Province, Nyagatare District.

It is vital to conduct a quick assessment of the country's readiness to use the eLearning approach. The results indicated that Rwanda was ready to adopt an eLearning approach as an alternative to an in-person training approach. This readiness is attributed to the availability of ICT infrastructures such as internet services penetration of about 82.5%, the rate of mobile subscriptions at the national level in 2022 at 82.49%.. (2), and the 77% of cumulative electricity connectivity rate as of the end of the year 2022 at national level (3). Further, recent experience from an e-learning course on medical certification of cause of death showed that over 90% of practicing medical doctors completed the course as a requirement for licensure in the period of 2020/2021. The availability of necessary infrastructures facilitated the CRVS practitioners across the country to access the online CRVS self-paced course at any time and anywhere which is aligned with the government policy of reducing in-person trainings and where possible using the LMS platform. The commitment of partners in supporting and strengthening the CRVS system was critically important to support the development of the standard CRVS online courses and provided necessary resources for monitoring the uptake of the course.

## **Discussion:**

Globally, the civil registration and vital statistics system in many lower and middle-income countries need further strengthening to produce reliable and timely vital statistics to inform policy decisions. Most of the 194 UN member states are signatories to the United Nation's Sustainable Development Goals to improve the notification, and registration of births, deaths, and causes of death by 2030. 15 of the 17 Sustainable Development Goals (SDGs) and 72 of 232 SDGs' indicators rely on the information from the CRVS system (5). Countries from around the world have made commitments to establish fully functioning CRVS systems in order to respond to the SDGs indicators by 2030 and assist governments in tracking key demographic and health indicators, allocating resources, and providing measures for the population dynamics.

The decision to introduce the CRVS eLearning course is critically important to support universal registration and it is a key undertaking to realize global targets such as the SDGs or regional targets such as those of the Asia and Pacific CRVS Decade 20215-2024 (6). The countries of Asia and the Pacific have begun the process of integrating civil registration services into the health sector and decentralization of registration services closer to the population. This implies an increase in new civil registrars who will need knowledge and skills in civil registration of vital events. The face-to-face training approach involves multiple costs including transportation,

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training venue, refreshments, and accommodation fees for the participants. Whereas, the e-learning course involves costs necessary for the development and deployment of the course on the website. It is imperative to adopt the cost-effective approach of CRVS eLearning for new and re-retraining of existing civil registrars in the country as part of continuous capacity development, especially in large countries with high populations that expect to decentralize and digitalize civil registration services to obtain universal civil registration of key vital events by 2030.

The prerequisites for developing the CRVS eLearning course are to assess the country's readiness considering existing ICT infrastructures, electricity access, and computer literacy of target audiences to facilitate the implementation, the CRVS regulatory framework, National contextualized CRVS training materials and dedicated national CRVS technical teams to facilitate the development of CRVS eLearning course to ensure government buy-in and course alignment with national context. Countries can re-adjust course development processes considering the country's context and availability of necessary infrastructures to support the rollout plan of the CRVS eLearning course.

## **Conclusions:**

To set up a well-functioning CRVS system, countries devoted to integrating the civil registration system into the Health sector and decentralization of civil registration services close to the citizens to improve civil registration of vital events completeness and coverage at the national level. This will require huge financial resources necessary for the capacity building of new civil registrars in the case of bigger countries with larger population sizes when applying a face-to-face training approach across the country. The CRVS e-learning course is an alternative to the traditional face-to-face training method and a cost-effective approach for countries that need to improve their CRVS system.

The decision to introduce a CRVS eLearning course was a key undertaking to sustainably build the capacity of new civil registrars following the decentralization of services to lower administrative units and the health sector in Rwanda. Specifically, the course enables civil registrars to be efficiently and reliably (re-)trained on relevant rules and regulations as well as the standard operating procedures for civil registration. This approach can be replicated especially for countries with large sizes and populations that are undergoing decentralization or delegation of civil registration services to lower administrative units and/or the health sector.



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