Integrating Mortality Surveillance (MS) Systems into CRVS: Rwanda’s Experience

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Background and Challenges

• CRVS Assessment (2015) and National Strategy (2018-2022)
  • Multi-stakeholder environment but no overall CRVS governance or coordination
  • Paper based system inefficient and low completeness
  • Outdated legal and regulatory framework
  • Need and demand for digitized and more functional and complete CRVS system, integrated with National ID.
Strategic Goals for Mortality Measurement

• To strengthen the completeness, quality, and timeliness of mortality measurement:
  • Build mortality surveillance primarily as a function of the CRVS system by addressing timeliness, completeness, and digitization of registration
  • Complement CRVS with measures of total mortality from eIDSR system
  • Amendment of CRVS Act to decentralize registration system closer to the citizens in the Health sector and lowest administration at Cell level.
Key Accomplishment since 2017

• Established CRVS governance and coordination structures from Central to sub-national level.
• Revised the CRVS legal framework with new Act in 2020
• Decentralized civil registration to the health sector and lower administrative level, increasing registration points from 446 to 3,220
• Digitalized the civil registration system (including interoperability with the ID system).
Death Registration in Health Facilities

- Integrated medical certification of cause of death (MCCD) into civil registration system in all Hospitals.
- Physicians are trained on certification of cause of death in the whole country.
- Integrated MCCD training content into medical school curricula for pre-service practitioners.
- Over 90% physicians completed MCCD eLearning course for in-service practitioners as mandatory required CPD credits to licensure ([http://elearning.moh.gov.rw](http://elearning.moh.gov.rw)) in 2021/2022.
- Operationalized registration SOPs to all Civil registrars in the health facilities.
- Regular quality control and support supervisions to improve mortality data.
Death Registration and Verbal Autopsy Data Systems

- Decentralized death registration at lowest administration level at Cell.
- Integrated routine VA into Civil registration system for all community deaths.
- 2,148 Cell Executive Officers were trained on CRVS and VA.
- Over 80% of registered community deaths are conducted VAs within the period of 3 months.
- Over 5,000 VAs were conducted by end April 2023.
- Institutionalized VA program into local government structures at Cell level.
Integrating Mortality Surveillance to eIDSR System

- Integrated electronic community-based surveillance (eCBS) into CRVS system to improve active notification & registration of community deaths.

- 16/30 Districts lookouts were trained to timely notify all notifiable events including community deaths in eIDSR in early 2023.
Progress in the Registration Completeness

- % of birth and death registered compared to expected numbers of birth and death in one year.
- 367,312 expected live births vs 341,122 registered live births in Rwanda in 2022.
- 82,242 expected deaths Vs 25,567 registered deaths in Rwanda in 2022.
- Increase in birth and death registration completeness following changes to the CRVS system.

Source: Government of Rwanda CRVS, 2022
Progress in Timeliness of Registration

- Percentage of registered birth and death within the legally prescribed time (30 days).
- Increase in timeliness of birth and death registration following changes to the CRVS system in Rwanda.

Source: Government of Rwanda CRVS, 2022
Summary

From then (2015-16) …

- Weak legal framework
- Few registration points for population
- Insufficient CRVS governance
- Death registration completeness 4%
- Long lag in mortality reporting
- Outdated business processes for paper-based system
- No ICD compliant death certification
- No mortality surveillance
- Little use of technology
- Little use of data

To now … (2022-23)

- New Births and Deaths Act
- Increased registration points 7 times.
- Complete buy-in and good governance and coordination
- Death registration completeness 31% (700% increase)
- 95% timely death registration (48% increase)
- High quality ICD data from all hospitals (20 % ill-defined or unusable causes)
- New, digitized business CRVS business processes
- Mortality surveillance as function of CRVS and eIDRS
- Significant uptake and use of data (Vital Statistics Report)
Conclusion

• Integration of MS systems with CRVS system provides real time data for epidemic preparedness and response, & policy decisions;

• Routine Mortality Surveillance is a pathway for active notification and registration of community deaths;

• Functional Governance and coordination structures were critical to provide oversight and buy-in.

• Mortality surveillance fostered by strong donor coordination to support CRVS strengthening as long-term system for surveillance outputs

• Step-wise approach to MS: not a one-time effort, start small, learn, and improve continuously.