

**Bloomberg
Philanthropies**



**DATA FOR
HEALTH INITIATIVE**

Ghana CRVS Digitisation Project

CRVS Digitisation Potential Business Process Enhancements

1. CRVS Potential Business Process Enhancements

CRVS Vital Event	Potential Business Process	Brief description
Data sources for notification		
Birth Death	Health records	Health records from health facilities, community health workers, community health facilities, maternity homes, TBAs, private and public health facilities, can seamlessly be fed into CRVS system. Provides both proof and source of registration data which was previously collected on paper, Form A and B.
Birth Death	Mobile Registrar Assistant	Liaise with various community groups for collecting information for birth notification, which is entered directly into the system, and can be followed up by a Mobile Registrar.
Birth Death	Key Community Informants	Community leaders and key members such as chiefs, religious leaders as well as persons linked to burial sites and community centers can play an important role in notification. For example, a digitized Community Population Registration Program (CPRP) program will allow relevant information to be shared with BDR via Key Community Informants. If budget allows, automated alerts of persons with uncompleted registrations to these members can assist.
Death	Cause of death (COD) for death notification	COD will be required when notifying of a death however, it will be possible to provide a value of 'undetermined' or 'pending' in cases where COD is unknown or is awaiting some process to complete. For example, an autopsy.
Data sources for registration		
Birth Death	Walk in	BDR offices can manage walk-in registrations.
Birth Death	Mobile Registrar	Liaise with various community groups for collecting information for birth registration, which is entered directly into the system.
Death	Verbal autopsy	The system will generate cause of death for natural deaths with undetermined COD using verbal autopsy.
Uncompleted registrations		
Birth Death	Searching of existing notifications in BDR system	The system will actively be able to search for existing notifications. For example, if an informant walks into the BDR office, an existing notification of vital event can be searched, identified and completed immediately through BDR system.
Birth Death	BDR follow up	Uncompleted registrations can be followed up on through a BDR notification queue from which BDR Registrar Manager assigns Mobile Registrars or Volunteers to follow up on through active registration.
Birth Death	Mobile Registrars (Walk-out registration)	Mobile Registrars extend accessibility of CRVS system to citizens not able or willing to pursue registration at a BDR office. The Mobile Registrar should be able to track and follow up based on notifications. Authorized to issue birth certificates "on the spot" and has means for transportation e.g. a motorbike to travel around the communities.

Birth Death	Administrator/Supervisor for Mobile Registrars	An Administrator or Supervisor responsible for the Mobile Registrar team should be able to assign notifications to Mobile Registrars to follow up in a specific community.
Birth Death	Pre-filling out through phone call etc.	Mobile Registrars should be able to reach out to informants to confirm registration information prior to heading out to the community.
Birth Death	Triage functionality	The system should be able to prioritize notifications and alert according to for example color for unregistered notifications. The triage functionality will also allow performance management of Mobile Registrars.
Birth Death	Simple reporting by Mobile Registrar	The Mobile Registrar should be able to enter brief information about visits regarding uncompleted registrations which will be viewable by the Supervisor e.g. if the informant was not at home.
Birth Death	Reassign Mobile Registrars in other communities	The system should be able to reassign responsibility for follow up to a Mobile Registrar in another community. For example, a mother may go to deliver the child in her mother's home, but immediately or close after the birth return to her home.
Birth Death	Adjustable deadline for on-time registration	The system should be able to adjust the timeline considered on-time registration, as this may need to change with a more efficient CRVS system.
Birth Death	Flagging as late registration	The system should be able to automatically flag a notification as late.
Printing and delivery of certificates		
Birth Death	Printed certificates delivered to the communities	Once validated, registrations completed by Mobile Registrars or Mobile Registrar Assistants (volunteers), will trigger a notification for print at the BDR office. Once printed, the BDR Registrar manager can assign a Mobile Registrar or Mobile Registrar Assistants (volunteer) to bring the birth certificate back to the community on the next visit.
Birth Death	Pick-up/Delivery option	During the registration, the informant will be given opportunity to select delivery option (pick up or Mobile Registrar to deliver) of the certificate. These may change or other delivery options can be added as the system is implemented and becomes more efficient.
Birth Death	Delivery by Mobile Registrar or Mobile Registrar Assistant (Volunteer)	Once printed, the BDR Registrar manager can assign a Mobile Registrar to bring the birth certificate with them on their next visit to the relevant community, and the birth certificate is delivered to the informant in the convenience of their home. The Mobile Registrar should also be able to expect that if they submitted certificates for printing today, they will be ready within X day(s).
Birth Death Marriage Divorce	Standard Operating Procedures (SOP)	Clearly defined SOPs need to be built into the CRVS system such as sign-off mechanism.

Birth Death Marriage Divorce	Internet printing	The system should allow for civil registration staff with appropriate authority to print via internet to a district or other location. The system should allow a solid Access Control Level (ACL).
ID (Personal Identification Number)		
Birth Death Marriage Divorce	Validation of ID (PIN) via NIA during registration	During the civil event registration process, ID of informant will be validated via interoperable system with NIA.
Birth Death Marriage Divorce	PIN number of the deceased	After registration of the civil registration event, the ID of respective person will be validated and updated (e.g. married, divorced, deceased) via interoperable system with NIA system.
Birth	Automatic generation of PIN for newborns upon birth registration	Upon completing registration, a unique ID (PIN) will be issued by NIA through interoperability between BDR and NIA systems.
Payment		
Birth Death	Payment for late registrations	The system will generate an invoice with a random generated code, and the informant can choose a payment method (e.g. bank, mobile money). Will allow increased transparency, audit capabilities and compliance with standard operating procedures. Payment required prior to late registration. The system should only allow for payment for late registration via online or the district BDR office.
Marriage Divorce	Payment for registration	The system will generate an invoice with a random generated code, and the informant can choose a payment method (e.g. bank, mobile money). Will allow increased transparency, audit capabilities and compliance with standard operating procedures. Payment required prior to late registration. The system should only allow for payment via online or office walk-in.
Interoperability		
Birth Death Marriage Divorce	Single demographic person record	System will link multiple CRVS events to a single person identity.
Birth Death Marriage Divorce	Offline capabilities	Periodic data synchronization.
Birth Death Marriage Divorce	Sharing and viewing data	The system allows sharing and viewing data during application, registration, certification etc.
Reports and Vital Statistics		
Birth Death Marriage Divorce	On-demand generation of reports	Electronically captured reports can be generated internally as needed.

Birth Death Marriage Divorce	Vital statistics	Interoperability between the systems, allows entities to periodically share anonymized data with GSS through an automatic process.
eServices		
Birth	Validation of birth certificate	The system should allow outside users e.g. employers or schools to validate a birth certificate.
Birth Death	Interface	To ensure transparency in the service delivery process which will help reduce unofficial charges, Mobile Registrar and BDR office must have the same interface for validating data.
Birth Death Marriage Divorce	Verification services	The system should allow outside users e.g. employers or schools to validate certificates.
Audit regulations		
Birth Death Marriage Divorce	Sign-off mechanisms	Sign-off mechanisms should be introduced at multiple levels.