# CRVS best-practice and advocacy
## Intervention: automated verbal autopsy

When people die at home or in areas without doctors, it is difficult to know what they died from. Verbal autopsy provides a systematic way of collecting information from close friends or family on the signs and symptoms of someone before they died to determine a probable cause of death.

### The challenge

Of the estimated 55 million deaths each year, some 65 per cent go unreported or lack a cause of death. When people die at home or in areas without doctors, it is difficult to know what they died of. However, **cause of death information is critical** for governments to know for effective policy, planning and resource allocation. Gaps in mortality data create major obstacles towards understanding and addressing public health concerns. This burden of poor quality and missing data is of particular concern in low- and middle-income countries, with 140 countries (or 80% of the world's population) lacking reliable cause of death information.

Accurate and timely information on who dies (age, sex), what they die from (cause of death), and where the death occurs is important for monitoring disease and injury trends; evaluating the effectiveness of programs and policies; identifying emerging challenges to health; providing insights into emerging or neglected health problems; and monitoring progress of national health goals and strategies.

Ideally, this information would be provided by a well-functioning civil registration and vital statistics (CRVS) system, where every death is registered and given a medically certified cause by a medical practitioner. In many countries, however, the majority of deaths occur away from hospitals, or in health facilities with limited diagnostic capacity, and as such, don't have a medically certified cause, even if they are registered.

Despite the lack of good-quality information, decision makers today need to make critical decisions about the allocation of limited resources. To help them with this, an approach is needed that provides reliable information on cause of death at low cost that is accurate, feasible, quick and standardised across different countries.

### Our approach

As part of the Bloomberg Philanthropies Data for Health (D4H) Initiative, a comprehensive training and support package will be offered to countries wishing to implement automated verbal autopsy (VA).

VA is a method for determining the most likely cause of death based on information collected from care-givers or family members about the signs and symptoms experienced by the deceased in the period before she or he died. The VA process consists of three basic steps:

1. Setting-up an interview by a trained VA staff member at the household level (or other appropriate place)
2. Conducting a structured interview to collect information on signs and symptoms of illnesses/events that the deceased suffered before death; and
3. Interpreting the interview data to diagnose the most likely cause of death.

Advances in questionnaire design, data capture on mobile devices, and the use of computer algorithms (automated methods) for determining and coding probable cause of death make automated VA a convenient method for the collection of routine data on cause of death. Automated methods are as reliable as doctors in diagnosing causes of death from VA interviews, are largely costless, can easily recognise symptom patterns in the data and correctly associate them with the most probable underlying cause of death. Moreover, automated methods analyse the VA interviews in exactly the same way, ensuring comparability.

As part of the Initiative, countries will be provided with:

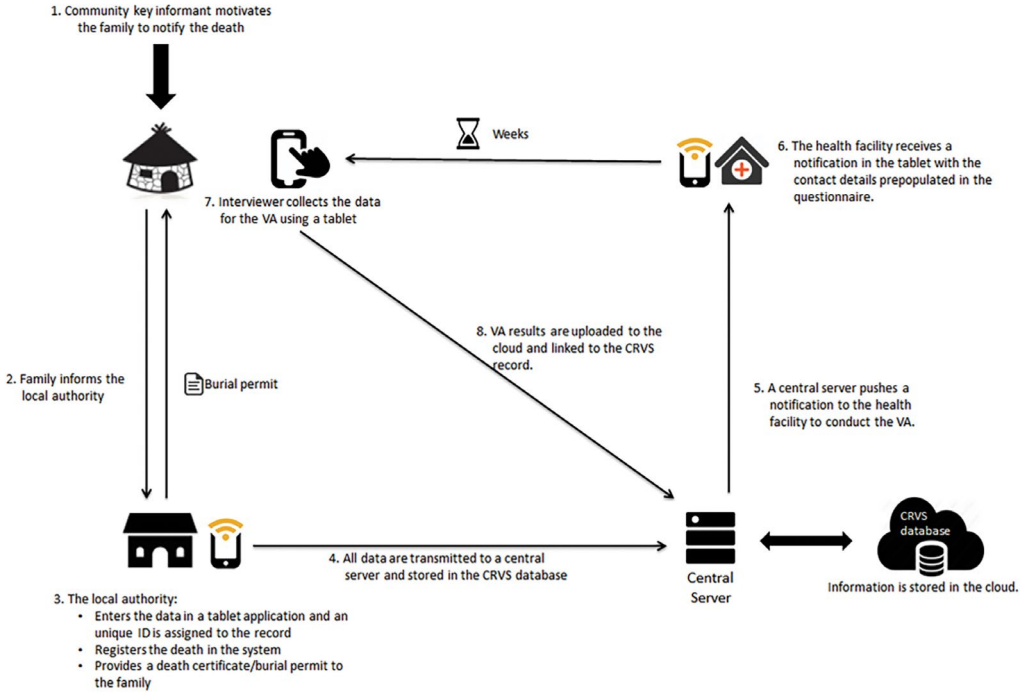
- Resources to understand the broad systems issues and pre-requisites for VA implementation
- Documentation and training materials for implementing automated VA
- Support to integrate VA cause of death data into routine CRVS systems
- Skills development to analyze and interpret results
- Program evaluation materials and guidance.

## Expected benefits

Verbal autopsy is the most practical option for countries to use to establish probable causes of death when deaths occur outside hospitals or in health care facilities where it is not possible to assign cause of death, either due to limited diagnostic capabilities or because the patient arrived shortly before or after death.

By introducing automated verbal autopsy policy-makers will, often for the first time, have access to reliable information on patterns of mortality and cause of death for rural, remote and community deaths.

Figure 1: Integrating VA data into a CRVS system, example flow diagram.

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