



# **IMPROVING CAUSE OF DEATH INFORMATION** Smart VA: Interviewer's manual

Resources and Tools 5 November 2016

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#### Acknowledgements

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#### **Important information**

The information contained in this manual provides generic information to intended VA interviewers on how to conduct interviews systematically. It has been developed for implementation as part of a broader package of resources and tools. As such, countries are strongly recommended to adapt the manual to meet their local needs and context. This should be done in consultation with their D4H Country Implementation team, prior to any VA activities taking place.

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+61 3 9035 6560 CRVS-info@unimelb.edu.au mspgh.unimelb.edu.au/dataforhealth The information contained in this manual provides generic information to intended VA interviewers on how to conduct interviews systematically. It has been developed for implementation as part of a broader package of resources and tools. As such, countries are strongly recommended to adapt the manual to meet their local needs and context. This should be done in consultation with their D4H Country Implementation Team prior to any VA activities taking place.

Version: June 2016

## Background

#### **About this manual**

This manual is intended to provide **verbal autopsy** (VA)<sup>1</sup> interviewers with the information needed to conduct interviews systematically, to ensure the information collected is reliable and valid. It provides a complete description of the roles and responsibilities of the interviewers for conducting VAs in routine surveillance. This manual is also designed to show how to conduct an interview with SmartVA using the electronic version of the PHMRC VA Shortened Questionnaire on tablets and the Open Data Kit (ODK) Collect software. This manual can be used in conjunction with the VA Technical User Guide which provides further information on the technical aspects of using the tablet to collect and transfer information.

#### How to use this manual

The manual is to be used as a training and reference guide during an interviewer's course of work within **assignment areas**. The manual provides guidelines for working with reporting systems to identify deaths, and procedures to follow when conducting VA interviews with bereaved families. This manual also serves as a reference for those who work with and supervise interviewers, including supervisors, and those responsible for coordinating VA activities. It should also be used as a resource by those responsible for training **VA interviewers**. The VA interviewer should review this manual carefully during their training and refer back to it as needed during their interviews.

#### Verbal autopsy

Verbal autopsy is the most practical option for countries to use to diagnose 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. VA is a method for collecting information about an individual's signs and symptoms prior to death from the family and interpreting these to diagnose the likely or most probable cause of death. The process consists of three basic steps: 1) setting-up a verbal autopsy interview by a trained VA staff member at the **household** level (or other appropriate place); 2) conducting an interview and collecting information on signs and symptoms of illnesses/events that the deceased

<sup>&</sup>lt;sup>1</sup> Definitions of words in bold are found in Appendix 1: Glossary

suffered before death; and 3) interpreting the interview data to diagnose the most likely cause of death.

## **Overview of PHMRC Shortened Verbal Autopsy Questionnaire**

#### **Electronic Shortened VA questionnaire**

The PHMRC shortened Questionnaire is a VA instrument developed by the Population Health Metrics Research Consortium (PHMRC) research group,<sup>2</sup> based on World Health Organization (WHO) standards. The questionnaire, and ability to collect information electronically and analyse without the need of a physician, provides an innovative, easy to use, and scientifically sound method for producing cause of death information for deaths occurring outside of health facilities. The questionnaire consists of four modules:

- 1. A general information module to be applied for all decedents;
- 2. Age-specific module for neonate (0-28 days) deaths, including stillbirths;
- 3. Age-specific module for child (29 days 11 years) deaths;
- 4. Age-specific module for adolescent and adult (12 years or more) deaths.

The PHMRC VA questionnaire includes questions to collect information about the symptoms of the deceased, health care seeking/experience, demographic characteristics, possible risk factors (such as tobacco use), and other potentially contributing characteristics.

#### What Is Smart VA?

Smart VA is a package that includes the PHMRC shortened questionnaire, the Open Data Kit (ODK) suite for data collection, and the SmartVA-Analyze for computer certification of VA. SmartVA takes verbal autopsy interview data (data collected electronically using the PHMRC instrument on the Open Data Kit Collect system on Android devices) and produces cause of death estimates at the individual and population levels. The IHME Tariff 2.0 Verbal Autopsy cause of death assignment system is designed and validated with the Population Health Metrics Research Consortium (PHMRC) Gold Standard VA database collected as part of the PHMRC Gold Standard VA Validation Study.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> For more information, see <u>http://www.healthdata.org/population-health-metrics-research-</u> <u>consortium-phmrc</u>

<sup>&</sup>lt;sup>3</sup> For more information, see <u>http://pophealthmetrics.biomedcentral.com/articles/10.1186/1478-7954-9-27</u>

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## **1** Roles and responsibilities of the VA interviewer

## 1.1 Overview of activities and tasks

As an interviewer for verbal autopsy, you will represent your country/city to members of the households in your assignment area. You will be conducting VA interviews with bereaved families. As an interviewer, you will:

- Meet with your supervisor to receive a report on the deaths that have occurred in your assigned areas
- Visit the bereaved families to plan dates for conducting interviews
- Conduct VA interviews with members of the bereaved families on appointed dates and complete appropriate VA forms accurately
- Report your progress and send your completed work to your supervisor.

## 1.2 Ethical training

You will be completing an ethical training module during your training. This will review basic concepts in data collection such as confidentiality, informed consent, and falsification of data. This is to ensure that you are aware of the sensitivity of this issue and the importance of confidentiality and **informed consent**. This is extremely important. Before starting any interviews, you must read the consent form to the participant and obtain their informed consent. A model/standard of consent form is given in the tablet.

## **1.3 Confidentiality**

It is very important that the VA information you obtain remains strictly **confidential**. You are not permitted to discuss it, gossip about it, or show your records to anyone who is not an authorized officer in the surveillance system.

## 1.4 Falsification of data

Your job will not always be easy. There may be times when your progress is not going well, even though you want to do a good job and keep on schedule. However, you must not submit falsified work to your supervisor under any circumstances. The data will be of no value if they are not accurate. For that reason, there will be numerous quality assurance checks on data. If any work you submit has been falsified, you will be reported to your authority for starting official and/or legal process. This action may also affect your chances for future employment.

## **1.5** Sensitivity training

Material in the VA Interview can be very sensitive so it is important that you are sensitive to the family member you will be interviewing.

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## 2 Administrative issues and general instructions

## 2.1 Materials you will need

Interviewers are provided the materials listed below in order to help perform their duties. You are required to keep these materials with you at all times when you are working in the field. Completed verbal autopsy forms should always be returned to the study office by the interviewer.

Check and make sure you have the following list of materials. All VA interviewers are required to have:

- VA interviewer self-assessment checklist
- VA general information/locator information
- Informed consent letter or information sheet
- Tablet with installed ODK Collect and PHMRC shortened VA questionnaire (fully charged and working)
- Tablet accessories
- VA modules (paper version both in English and the local language)
  - General module
  - Neonate module
  - Child module
  - o Adult and adolescent VA module
- A historic calendar of events specific to the country involved
- Pencils or pens for writing, and erasers
- Bag for carrying forms and other materials.

Check these materials when you receive them. If anything is missing or defective, notify your supervisor immediately.

### 2.2 How are VA cases selected?

VA cases will be selected from the surveillance system, health facilities, or other sources as appropriate to your assignment area. Your supervisor will tell you the names and families of the deceased and you will administer the VA interviews to the families of these people.

## 2.3 Responding to questions regarding benefits or payment

Remember, there is no payment for participating in a VA interview. This is also explained in the consent form. You can explain that information obtained from this interview can help identify causes of death for public health use for designing better care policy for the country. This information can be used to help prevent deaths like this from occurring in the future.

## 2.4 Supervisor review of your work

Your supervisor will review your self-assessment checklist with you to check your work.

## **3** Selecting respondents

#### 3.1 Gaining the trust and cooperation of households

In order to have the cooperation of the household and obtain complete and accurate data, you must first gain the trust and confidence of the household. You can do this by making a good impression, by being professional and conducting yourself in a professional, but also friendly manner. Your appearance is very important.

#### **Be professional**

Remember you are a professional and a part of the national activities/projects. You should be wellgroomed and your clothes should be neat, clean, and appropriate for conducting a professional interview. In addition, you should address **respondents** in a friendly but professional manner.

#### **Understand your role**

If you are knowledgeable about your responsibilities then your supervisor will be more likely to trust you. You should be able to answer any questions that household respondents may ask about the purpose of the verbal autopsy, or you should be able to refer people to a supervisor. You should be able to explain why the verbal autopsy interview is conducted in their area. You must assure participants that their responses will be held in high confidence and that no information will be released to any person outside the project.

#### 3.2 How to select the best respondent

The respondent is the main person who will provide information about the deceased. He or she should be the one who was with the deceased during their illness. Usually, the household head or the spouse of the head of household is preferred to be your respondent. For deaths of infants and children, the mother is almost always the best respondent. If these people are unavailable when you first visit the household, try to make an appointment to return when they will be at home. If they are away from the area or will not be available for some time, then you should ask to speak to the eldest family member or relative that is at home (they should be at least 18 years of age). If this is not possible, then you should ask for the eldest non-relative that is a permanent member of the household (18 years of age or older).

Acceptable respondents, in order of preference, are as follows:

- 1. Head of the household or that person's spouse
- 2. Either parent (preferably the mother) in case of a child's death

- 3. Eldest family member or close relative of the deceased (at least 18 years of age)
- 4. Eldest non-relative permanent resident of the deceased person's household (at least 18 years of age).

#### 3.3 How to approach the respondent

Always have a positive approach. Do not use such phrases as: "Are you too busy?" or "Would you spare 15 to 30 minutes?" Such questions invite refusal before you start. Instead, begin by restating sympathy or condolences for the death and say to the respondent: "I would like to ask you a few questions" or "I would like to talk with you for a few minutes." However, if a respondent insists that she or he does not wish to talk to you, do not argue. Instead, if there is no one else available in that household who can talk to you, ask the person for another day or time when she or he would be available to participate in the interview. Answer any questions from the respondent may ask questions about the survey and why they should participate. Be direct and clear when you respond.

#### 3.4 Selecting an environment for the interview

It is best to conduct the interview in a private location where you and the respondent can be alone. However, it is expected that you will encounter other family members who will be present during the interview. In cases where complete privacy is not possible, try to limit the number of other people present.

#### 3.5 How to handle difficult respondents

There may be times when a respondent does not want to participate or may get angry during the interview. When necessary, stress the confidentiality of responses. If a respondent hesitates to cooperate because of confidentiality concerns, you should provide appropriate assurances and a complete explanation. For example, explain that no individual names will be used for any purpose and that the information from all interviews will be combined with all those collected. If the respondent is still upset then you can:

- Take a moment and talk to the respondent and try to answer any questions that might be upsetting
- Reschedule a time to come back and finish the interview.

## 3.6 How to handle multiple respondents

There will be instances where you may encounter more than one respondent. For example the husband of a household might not let the mother of the child talk to you alone. Or, a mother-in-law might request to be present. Or, in some instances, having a visitor at the household can attract many other unwanted people to observe the interview.

In these cases it is important to stress to the main respondent the importance of confidentiality and privacy of the interview. You can:

- Try suggesting moving to a different location
- Ask some of the other people to leave and come back once the interview is finished
- Reschedule a time to come back and finish the interview.

# 3.7 What to do if all potential respondents cannot be found or refuse to be interviewed

If an acceptable respondent as defined above cannot be found, you may ask other members at the house or a neighbor when you might be able to find other family members at home. Then leave a message at the home saying that you plan to return at another other time, when an appropriate person is likely to be at home. Make note of this return date in your notebook or mortality register.

You are required to make at least three **callback** attempts at every household where you failed to get an appropriate respondent. Always inform your supervisor when you have problems to conduct an interview. If after three attempts you still have not been able to locate an acceptable respondent at the house, then you should leave the household without conducting a verbal autopsy interview. Partially completed verbal autopsies are not acceptable. Inappropriate respondents are not acceptable.

### 3.8 A respondent says a VA has already been done

If a VA has already been done, you should ask the respondent some questions to find out who conducted the interview. If the interview was conducted and completed as part of routine VA activities then you do not have to conduct the interview again. If the interview was conducted as part of another project, you should check with your supervisor before asking the respondent to participate.

#### 3.9 Frequently asked questions and complaints

Below are some common questions that may be asked. Suggested answers are below each question but VA interviewers are encouraged to adapt these to the circumstances.

#### Q. Who will benefit from this interview?

**A.** The data that are collected on households and the deaths that occur in these households, time can be used by governments and other organizations for planning, policymaking, and healthcare purposes. Nongovernmental organizations, academic institutions, and research institutions can also use the results to guide programs and policies for the population.

#### Q. This program is a waste of time and money

**A.** The program is being conducted with the most cost-effective measures possible in order to get the maximum return in terms of data quality. Without this information, policymakers cannot plan and adopt appropriate policies that will benefit their citizens. This data will be used to calculate death rates by cause of death, sex, and age. Researchers will use the data to calculate more accurate and timely mortality data, and it is only with the cooperation of individuals like you that the interview will be effective.

#### Q. I don't have time to do this

**A.** The verbal autopsy interview is comprised of only a few questions on the circumstances leading to the death of your family member. Every effort has been made to minimize the time and information required and to reduce any inconvenience. Your responses and participation are crucial in collection of accurate information about death rates and causes of death.

#### Q. How do I know that the information that I give will be confidential?

**A.** As a VA interviewer, I am forbidden to share any information that is collected, and all employees of the central office are required to store all information that is provided to them in confidence. Your information will be added to the information from all the other areas, and data will only be released based on the country as a whole, in order to protect the information about the deceased and the identity of the bereaved household members.

## 4 Administering the questionnaire

#### 4.1 Introducing yourself

The introduction is very important. This is a very sensitive time for the family so it is important that the interviewer is polite and sensitive when making the first introduction. See the example below on how to introduce yourself:

My name is [your name]. I am an interviewer with the [name of your organization]. I have been informed that a death has occurred in your household. I am very sorry to hear that a member of your household has passed away. Please accept my sympathies. For the purpose of improving health care, we are collecting information on all recent deaths in this area. I would like to talk to you and ask you some questions about the events and any symptoms that [the deceased's name] had during her/his illness before death.

#### 4.2 Building a relationship with respondents

This is a difficult time for the respondent and the family so it is important that you try to build a relationship with her or him before you discuss the case of the deceased. For example, if culturally appropriate, you may ask the respondent what work she or he does, or inquire about the respondent's family. Then explain the purpose of your visit and try to answer any questions that the respondent may have about the program or interview.

#### **Maintaining eye contact**

Always look at the respondent when administering the interview. Remember, this is a difficult time for the respondent and they must feel comfortable with you in order to complete the interview.

#### 4.3 How to read questions

Read each question fully and exactly how it is written on the instrument. It is important that you read the question slowly and clearly so that the respondent understands. For multiple choice questions, read each answer choice slowly and carefully.

#### 4.4 How to get adequate answers

Allow the respondent to answer the question as best as he/she can. Most of the questions are closed-ended which means there is usually only one answer that can be given. There are some questions where the respondent may give multiple responses. For these questions, before you

record the answer, allow the respondent to hear all the answer choices and think about the question before recording their answer.

#### **Probing**

If the respondent doesn't know the answer to a question or looks uncomfortable with the question, you can try "probing" to get an answer. This means asking other questions similar to the subject material to try and help the respondent remember certain events. For example, if the respondent cannot remember who delivered the baby in the home, you might try "probing" by asking "who was in the room at the time of delivery". Use your judgement when probing. Remember, this is a very sensitive time for the respondent and we do not want to upset them further.

### 4.5 Skip patterns and special sections

There are many skip patterns throughout the questionnaire, and tablet will skip to the relevant section/question automatically. For example, the Adult Module has a special section on Women's Health for female deaths only.

#### 4.6 General instructions for completing VA questionnaires

- 1. Read all questions exactly as they are written. This will help ensure that all respondents are asked questions in the same way.
- Some questions include several words in brackets, for example "...[his/her]..." or "[Do you/Does <NAME's > mother]..." Read either the words before or after the slash, depending on which words fit best for the current interview.
- Some questions allow more than one answer. These responses are preceded by check boxes (check boxes (□) are rectangular in shape and allow multiple boxes to be checked).
   Touching/clicking on the check box will mark the box with X or √. Follow the instructions with each question that tell you whether or not to read the choices to the respondent. Instructions in the questionnaire appear in italics.
- 4. Most questions require you to record only one response. This response is preceded by a radio button (radio button (O) is a circular hollow symbol which gets filled up on touching/clicking the button and allow only one response).
- 5. Record dates in the spaces provided:
  - a. dd = day of the month (if less than "10", then the first digit is "0")

- b. mm = month of the year (January=1, February=2, March=3, April=4, May=05, June=06, July=07, August=08, September=09, October=10, November=11 and December=12)
- c. yyyy = the year (for example, "yyyy" for 2006 is "2006").
- 6. Record Months, Days, Hours, and Minutes, using the following:
  - a. 1 Month = 28 Days
  - b. 1 Day = 24 Hours
  - c. <24 hours = 00
- Some answers request more specific information (for example, "other (specify) \_\_\_\_\_".
   Record the respondent's answer (for example, "health center" or "brother").

\*Note that respondents may tend to give answers that they think will please the interviewer. It is therefore very important that you remain absolutely neutral towards the subject matter of the interview. Do not show any surprise, approval, or disapproval of the respondent's answer by the tone of your voice or facial expression.

## 4.7 General instructions on tablet use

#### **General instructions**

- The SmartVA Questionnaire consists of a general module followed by age-specific modules either for neonate (0-28 days), child (29 days- 11 years), or an adolescent/adult (>=12 years) death
- The questionnaires include filter questions with automatic skips to an appropriate question
- The response categories include options for a mix of Text Field, Radio Button, Check Box and Date Field for different questions
- The response categories of many questions are a mix of yes, no, refused to answer, and don't know, and these categories/responses by preceded by a radio button (a circular symbol which only allows selection of one category from the list (Figure 1).

#### Figure 1 Example of yes/no question in ODK

		° 97%	3:47 PM
ODK Collect > PHMRC_Shortened_Instrum	nent_8.	[6	) %
Neonatal and Child Module > Background Section			
Did the baby ever cry?			

- Yes
  No
  Refused to answer
- $\bigcirc$  Don't know
- Some questions allow multiple response categories to select, and these categories are preceded by a check box. These check boxes are rectangular in shape and allow checking one or multiple categories on touching the boxes (Figure 2).

#### Figure 2 Example of multiple response question in ODK

🖵 🖬 🏟 🖾 🙀 🙀 🖓 🥵 🖬 3:47 PM
ODK Collect > PHMRC_Shortened_Instrument_8
Neonatal and Child Module > Background Section > Maternal History Section
Was the late part of the pregnancy (defined as the last 3 months), labor, or delivery complicated by any of the following problems? Read "the mother" if the mother is not the respondent.
You (the mother) had convulsions
$\Box$ You (the mother) had high blood pressure
You (the mother) had severe anemia
You (the mother) had diabetes
Child delivered not head first
Cord first
Cord around child's neck
Excessive bleeding
Fever during labor
No complications
Refused to answer
Don't know

- Swipe the screen of the tablet either right-to-left or left-to-right for continuing data entry (next page), or checking entered data (previous page)
- Generally the tablet will require marking a radio or check box, or entering text to navigate the screen or move from question to question
  - If you try to move to the next question without selecting an option you will see a message on the screen "Sorry, this response is required"
  - A limited number of questions, however, will allow to proceed without making any responses
- Sometimes checking boxes/filling the radio button will provide space in next page to enter or write the appropriate response answer
  - o Touching the space will provide a temporary keyboard to enter the answers
- The tablet has in-built instructions, so will select questions/ VA modules automatically (based on previous answers)

#### **Step-by-step instructions**

- 1. Start the tablet (Tab) by pressing the start button (Top-Right). After about a minute the tab will turn on
- 2. Press the home button of the Tab and go to the home screen/ touch the application button
- 3. Touch the "ODK collect" icon from the Tab home screen (Figure 3)
  - On pressing the icon, the Tab will show a screen with five options (Fill Blank Form, Edit Saved Form, Send Finalized Form, Get Blank Form, and Delete Saved Form)

#### Figure 3 ODK VAQ collection menu

🖂 🕂 🖃 🎆 🔲 📖	📶 100% 🕱 8:21 AM
ODK Collect > Main Menu	
ODK Collect 1.4.5 (1048) Data collection made easier	
Fill Blank Form	
Edit Saved Form	
Send Finalized Form	
Get Blank Form	
Delete Saved Form	

- 4. Touch the "Fill Blank Form" button from ODK Collect software to open the form
- 5. Touch the XML form named "SmartVA\_Month\_yyyy"<sup>4</sup> to start a VA interview
  - **a.** Read the on-screen information about the questions before beginning to fill up questions
- 6. Swipe the screen right-to-left and continue the interview as per instruction
- 7. When the respondent agrees to continue the interview, read the screen instruction carefully on the Tab and follow the instructions (more information is provided in the interviewer manual on learning to fill up the interview process on structured questions). At the end of each age specific module, a screen will appear for filling a pre-selected keywords checklist while asking and hearing the open narrative section from the respondent.

#### **Completing open-ended responses**

The PHMRC shortened VA Questionnaire includes an open-ended question, in which the informant can explain, in his/her own words, the sequence of events that led to the death. In this section, the interviewer needs to listen carefully to the informant, and register if he/she mentions some specific words or categories. When entering the open-ended question, the following instructions will appear:

Say to the respondent: "Thank you for the patient responses to this exhaustive set of questions. Could you please summarize, or tell us in your own words, any additional information about the illness and/or death of your loved one?" To the interviewer: Listen to what the respondent tells you in his/her own words. Do not prompt except for asking whether there was anything else after the respondent finishes. If the respondent mentions any of the following words, mark "mentioned". Tell the respondent to stop and start again if they mention a word of interest, so you have time to mark it down. Follow the interactive screen message and ask the respondent to answer each question as appropriate.

#### **General points:**

- The open-ended response file contain a list of pre-fixed categories preceded by check boxes and these allow multiple answers
- Discuss with local people and health professionals and make a dictionary of synonyms (locally used) of these categories for training local VA interview staff
- Select the categories by touching the boxes (a tick will appear)
- At the end, a screen will pop up asking for a file name
- Save and exit the screen to finish the work or start a new VA interview.

<sup>&</sup>lt;sup>4</sup> The version may change. The latest version is June 2016

• When you get to the end of interview you will need to save the VA form completed for that death

#### Saving the work and editing a VA

Editing can be made if anything was wrongly entered, by going back to the previous page (swiping right to left). After the form has been completed, edits can be made on VA form by clicking the "Edit Saved Form".

- At the end of each interview, a screen like below will pop-up (Figure 4).
  - By default the tablet will show the form name "SmartVA\_Questionnaire\_ Month\_yyyy" in the "Name this form" field
  - Touch the button "Save and Exit Form" and finish the interview.

#### Figure 4 Save and exit screen at the end of ODK VAQ

You are at the end of SmartVA_June_2016_v2.	Ensure you touch the 'Save
Name this form	Form and Exit' button to
SmartVA_June_2016_v2	properly save the completed
Mark form as finalized	questionnaire
Save Form and Exit	

#### **Data editing**

You can see and edit the completed VA by touching the "Edit Saved Form" button from the main menu in the ODK Collect software (See Figure 5).

#### Figure 5 Edit saved forms

N 🕂 🖬 🍓 🗉 🎆	100% 🕱 8:21 AM
ODK Collect > Main Menu	
<b>ODK Collect 1.4.5 (1048)</b> Data collection made easier	
Fill Blank Form	
Edit Saved Form	
Send Finalized Form	
Get Blank Form	
Delete Saved Form	

- Step-1: After touching the "Edit Saved Form" button you will see list of VA form names
  - Touch one form and open it to see the data
  - You can see the entire questionnaire by scrolling up/down
- Step-2: For editing, touch the desired question to open the question in a full screen, then correct the answer and press the save icon at the top-right corner in the Tab
  - It will save the changed data and you can come back to the entire questionnaire by touching the down-arrow icon at the top-right corner of the Tab.
- You can edit multiple questions by swiping left/right and finally touch the save icon in the Tab or when you reach the last question and touch he button "Save and Exit Form".

#### Data saving step by step

Options are available to save the VA form either after entirely doing the VA or after completing any question by clicking "Save Changes" from the dialog box.

- For a new interview you can save the form by touching the button "Save and Exit Form" at the last section of the questionnaire
- To save individual questions you can touch the save icon at the top-right corner of the Tab
- After completing any question from the VA questionnaire you can press the back button and touch "Save Changes" from the dialog box

#### Submitting interview data

Save the data and exit the screen by touching the screen button. Data are automatically saved under folder "Instances" in .xml format.

#### Starting a new interview

Go to the ODK icon from home screen and click the "fill the blank form" to start a new interview.

#### Data transfer and uploading

Once the VAs have been collected, it is necessary to upload the information in a database for further analysis in the SmartVA desktop application<sup>5</sup>.

There are two methods of data transfer, online (through the wi-fi or cell network) or offline (by uploading data to a computer). The VA Interview needs to be told the method of data transfer in advance.

<sup>&</sup>lt;sup>5</sup> The following instructions relate to the role of the VA Interviewer. The technical instructions for data transfer using online and offline methods and data management is included in the SmartVA Technical Manual.

**If using online methods**, once the VA Interview is completed and saved, the VA Interviewer should select the interview on the tablet and press the 'Send Finalised Form'. (See Figure 6). The relevant VA Interviews can be selected and sent to a remote central server ready for analysis.

Figure 6 Send Finalised forms	
💌 😲 🗖 🍇 🗉 🏨	100% 혼 8:21 AM
ODK Collect > Main Menu	
ODK Collect 1.4.5 (1048)	
Data collection made easier	
Fill Blank Form	
Edit Saved Form	
Send Finalized Form	
Get Blank Form	
Delete Saved Form	

**If using off-line methods,** the VA Interviewer needs to take the tablet to relevant centre. By connecting the tablet to a computer by USB cable, the VA information can be saved to computer ready for analysis.

## 5 Instructions for the general information module

This General Information Module will be completed for all verbal autopsy interviews. The general module includes questions on:

- The deceased's address
- Consent
- The deceased
- The notification of death.

Some of the questions on the deceased can be obtained from surveillance data or the local reporting system and may be completed before going into the field to conduct the interview. Once the general information module is completed the tablet will automatically skip to the appropriate age group specific VA module.

#### 5.1 Interview begins

*Instructions to interviewer:* Introduce yourself and explain the purpose of your visit. Ask to speak to the mother or to another adult who was the deceased's main caretaker during the illness that led to death. If this is not possible, arrange a time to revisit the household when the caretaker will be home. Below is an example of an introduction:

"My name is [your name]. I am an interviewer with the [name of your organization]. I have been informed that a death has occurred in your household. I am very sorry to hear that a member of your household has passed away. Please accept my sympathies. For the purpose of improving health care, we are collecting information on all recent deaths in this area. I would like to talk to you and ask you some questions about the events and any symptoms that [the deceased's name] had during her/his illness before death."

#### Section 1: Questions on the Deceased<sup>6</sup>

#### **Study ID number**

At the beginning of interview, assign an identification number for the deceased using local standards. Touch on the space provided to type the ID number.

<sup>&</sup>lt;sup>6</sup> In the description of all questions, the numbers in the left of the text indicate the number of the question in the questionnaire, and the numbers below indicate the variable name in the database.

1.1	Address of/directions to household
-----	------------------------------------

*Touching the space provided, a pop-up screen of a keyboard will appear. Type the address using the keyboard.* 

#### **Section 2: Consent**

*Instructions to the interviewer:* Read the consent form to the respondent. Ask the respondent if he or she has any questions. Once any questions are answered, ask the respondent if he or she is willing to take part in the interview.

A screen will appear giving you an option to record a video of the respondent acknowledging the consent. There are two buttons in the screen:

#### **Record video**

#### Choose video

Push the record video button to start recording the video of the consent taking process and again push the button to finish the recording (video is optional).

2.1	Did respondent give consent?
2.1	Did respondent give consent?

Ask if she/he is willing to take part in the study, and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No

If answer is "Yes": tablet skips automatically to question 3.1.

If answer is "No" then a screen appears instructing the interviewer to thank the respondent for their time and end the interview.

#### Section 3: Questions on the deceased

*Instructions to interviewer:* You may have information for many of these questions but you should ask to ensure that the information is accurate.

3.1	What was the name of the deceased?

Touch the space provided and a keyboard will appear on the screen. Type the name of the deceased using this keyboard. In some instances, like an infant less than 1 month old, a name might not have been assigned. In this instance you may keep it blank.

3.2	What year was the deceased born?

Touch the space provided and a keyboard will appear. Enter 9999 if unknown. Year must be between 1880 and this year.

Year\_\_\_\_\_

If date of birth is not known, but age is known, you should calculate the year by subtracting their age from the date of death and fill up the year in the space provided.

If the deceased's date of birth or age is not known, you can ask the respondent if she or he can remember any historical event ( in the village, district, region, nation, world) that can be related to the year the deceased was born. Use the historical calendar of events to guide you on the approximate date of birth for the deceased person

3.3	What month was the deceased born?
-----	-----------------------------------

Touch the space provided and a keyboard will appear. Enter 99 if unknown. Month must be between 1 and 12.

Month\_\_\_\_\_

3.4	What day of the month was the deceased born?

*Touch the space provided and a keyboard will appear. Enter 99 if unknown. Day must be between 1 and 31.* 

Day: \_\_\_\_\_

3.5	What was the sex of the deceased?

Sex should be carefully recorded. Touch/click the radio button to MARK ONLY ONE OPTION for the answer that corresponds to deceased sex categories. For example, touch radio button of "Male" if the deceased was a boy or man. Similarly touch of "Female" if the deceased was a girl or woman.

- O Male
- O Female
- Don't Know
- O Refused to answer

3.6	What year did the deceased die?

Touch the space and a keyboard will appear and type the year. For example, if a respondent tells you that the deceased died on July 21, 2015. Write this year as "2015" in the space. Enter 999 if unknown.

Year\_\_\_\_\_

*Instructions to interviewer:* If less than 24 hours enter 00 days. Enter age in days up to 27 days. Enter 28 days as 1 month. From 1-11 months, enter age in months. Enter 12 months as 1 year. From 1 year, enter age in years.

If "Refused to answer" or "Don't know": go to question gen\_5\_4d.

Touch the space and a keyboard will appear and type the month. Month must be between 1 and 12 month. For example, if a respondent tells you that the deceased died on July 21, 2015. Write this month as "7" in the space. Enter 99 if unknown.

Month: \_\_\_\_\_

3.8	What day of the month did the deceased die?

Touch the space and a keyboard will appear and type the day. Day must be between 1 and 31. For example, if a respondent tells you that the deceased died on July 21, 2015. Write this day as "21" in the space. Enter 99 if unknown.

Day: \_\_\_\_\_

3.9	What was the last known age of the deceased?
-----	--

Ask this question and mark only one radio button. Marking the years, months, or days button will provide a space in next page to enter the years (four digits) or month (1-12) or days (1-31). If the deceased was younger than 12 months, you must calculate the number of days. One month equals 28 days. If the deceased was 3 months old, then 3 months X 28 days per month equals 84 days. Record "00" days if the deceased was less than 1 day old. The reason we use 28 days is because 28 days is the neonatal period. For unknown enter 99.

- Years (enter on next page)
- Months (enter on next page)
- Days ( enter on next page)
- O Refused to answer
- Don't know

Years – if one year or older: \_\_\_\_\_\_ Months – if less than one year: \_\_\_\_\_\_ Days – if less than one month: \_\_\_\_\_\_

## If button for "refused to answer" or "don't know" is touched/clicked, the tablet will skip automatically to 3.10 (gen\_5\_4d).

3.10 What age group does the deceased's last known age fall into?

If you are unsure, please review the question 3.9 (gen\_5\_4) and click/touch the radio button below to record the deceased age category.

- O Less than 28 days old
- 28 days 11 years
- O Older than 12 years old
- O Refused to answer
- O Don't know

## If the radio button for age and age group are clicked/touched for both "Don't know" and "Refused to answer", a pop up screen will appear asking the interviewer to thank the respondent for their time and end the interview.

3.11	Where did the deceased die?	

Mark the appropriate box that corresponds with the place where the death occurred. This is the place where it was first noted that the person was dead (not moving, not breathing). Differentiate between death at a "hospital" (i.e. health institution with in-patient facilities) versus "other health facility" (dispensaries, health centers or private clinics where patients are seen on out-patient basis). MARK ONLY ONE BUTTON. Marking the button on: "other" will provide space in next page to write place of death using a pop-up keyboard.

- Hospital
- o Other health facility
- On route to the hospital or other health facility
- $\circ$  Home
- Other (specify)
- o Refuse to answer
- Don't Know

#### Section 4: Questions on the notification of death

4.1 Has this death been registered?	
-------------------------------------	--

Ask the respondent where the details of the deceased have been registered to the local registry office and MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't know

#### If "No", "Refused to answer" or "Don't know": tablet will skip to 4.4 (gen\_6\_4).

4.2 Record the date of registration	4.2	Record the date of registration
-------------------------------------	-----	---------------------------------

*If yes to 4.1, follow the tab instruction and enter the year, month, days.* 

Year:	(Enter four digit years. Enter 9999 if unknown)
Month:	_ (Enter month ( January=1, Enter 99 if unknown)
Day of the month:	_(Enter day between1-31. Enter 99 if unknown)

4.3	Record the registration number

Touch the space and enter the number using the pop-up keyboard.

4.4	Has this death been notified?
-----	-------------------------------

If the death is not registered, did you (the interviewer) notify the death to the local registry? Mark only one radio button as appropriate.

o Yes

- 0 **No**
- o Don't know

If "No", "Refused to answer" or "Don't know": tablet will skip to 4.6 (gen\_6\_6).

4.5	Record notification number
-----	----------------------------

If answer is yes (notified), please record the notification number in the space provided.

4.6	Did the decedent have a National ID number?

Ask the respondent whether the deceased had a national ID card or number. Mark only one radio button.

- o Yes
- o No
- Too young for a National ID number
- o Not relevant
- Refused to answer
- o Don't know

#### *If too young for a national ID number, the tablet will skip to* 4.8 (gen\_6\_8).

If "No", "Refused to answer" or "Don't know", the tablet will go to specific age group VA module.

4.7	Record the National ID number
-----	-------------------------------

If the deceased had a National ID number, please enter the ID number in the space provided.

4.8	Does one of the parents have a National ID number?

Ask the respondent whether any of parents of deceased have a nation ID card. Mark one radio button only.

o Yes

- o No
- o Refused to answer
- o Don't know

If "No", "Refused to answer" or "Don't know", tablet will go to specific age group VA module.

4.9	
gen_6_9	Which parent will we record?

If either of the parents have an ID card, ask which parents' card will be used for recording the ID number.

- o Mother
- o Father

4.10	
gen_6_10	Record the parent's National ID number

Please see the ID card and record the ID number.

If deceased was less than 28 days, tablet will skip automatically to Neonate module If deceased was 29 days to 11 years old, tablet will skip automatically to Child VA module If deceased was 12 years or older, tablet will skip to Adolescent and Adult VA module

## END OF GENERAL MODULE

## **MOVE TO AGE-SPECIFIC MODULE**

## 6 Instructions for the neonatal and stillbirth age-specific module

**Note to Interviewer**: this neonatal module is for still birth and decedent who were in the age bracket of 0-28 day's age at the time of death. The questions in this module include:

- Background
- Maternal history
- Neonatal death
- Health Records
- Open Response (7 keywords checklist).

The tablet will automatically select this module when age of decedent fall in this category. The tablet will also skip sections of questions or individual questions automatically when it is logically required.

#### Section 1: Background

1.1	Is the mother still alive?

*If the mother is not present at the interview, ask if the mother of the deceased child is still alive. MARK ONLY ONE RADIO BUTTON.* 

- o Yes
- 0 **No**

1.2	What was the weight of the deceased at birth?

Low birth weight is an important factor associated with increased risk for neonatal death. If the birth weight of the deceased baby is available/ known, please record and mark ONLY ONE BUTTON. Marking either button for "grams" or "kilograms" will provide space in next to enter the birth weight. Enter 9999 for grams or 999 for kilograms if unknown.

- Grams (enter on next page). Enter 9999 if unknown
- Kilograms (enter on next page). Enter 999 if unknown
- o Refused to answer
- o Don't know

If weight of the deceased at birth known, tablet will go to 1.4. If "Refused to answer" or "Don't know" tablet will go to 1.3.

1.3At the time of the delivery what was the size of the deceased	
--	--

Read the first part of the question and then slowly read the first 4 choices. Demonstrate the photos (shown on screen) to the respondent so that they can understand and remember the size of the baby at birth. Respondent should hear all four choices before giving her answer. We want to know if the infant was small or large because both of these can cause problems. MARK ONLY ONE RADIO BUTTON.

- Very small
- Smaller than usual
- About average
- Larger than usual
- Refused to answer
- Don't know

1.4	Was the baby born alive or dead?
-----	----------------------------------

Ask this question and MARK ONLY ONE RADIO BUTTON.

- o Alive
- o Dead
- o Refused to answer
- o Don't know

1.5	Did the baby ever cry?
-----	------------------------

This question will help us understand if the infant was stillborn. MARK ONLY ONE BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

1.6	Did the baby ever move?

This question will help us understand if the infant was stillborn. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

E		
	1.7	Did the baby ever breathe?

This question will help us understand if the infant was stillborn. MARK ONLY ONE RADIO BUTTON.

- o Yes
- 0 **No**
- o Refused to answer
- Don't know

**Instructions for interviewer**: The tablet will review answers to questions 1.5, 1.6 and 1.7. If all three responses are "yes", a screen will appear in the next page, which says "Because the baby was too old" or "because the baby either cried, moved, breathed, this was not a still birth". If all three responses are "No" then a screen will appear in next the page as because the baby never cried, moved or breather, this was a stillbirth.

#### For a stillbirth, the tablet will then go to 1.9.

For live birth, tablet will go to 1.13.

1.9	Were there any bruises or signs of injury on the baby's body at birth?
-----	--

Birth injury means an injury that occurred during birth, such as a large bruise or broken bone. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

"Pulpy" (or macerated) means the skin was very soft and might even come off when touched. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- Refused to answer
- o Don't know

1.11	Was any part of the baby physically abnormal at time of delivery? (for
	example: body part too large or too small, additional growth on body)

This means that one or more body parts were not shaped normally; for example, the back or lip was open, or a limb was not shaped normally. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

If "No", "Refused to answer", or "Don't Know", then go to Section 2: Maternal History.

1.12	What were the abnormalities?

We ask this to try and identify why the baby might have gotten sick. Read choices slowly one by one. And demonstrate the photos on screen so that they can understand and recognize the abnormalities. MARK ALL THAT APPLY (Multiple choices possible). Marking the button for "Other" will provide space in next page for writing the type of anomalies if it is not already listed.

- □ Head size very small at time of birth
- $\hfill\square$  Head size very large at time of birth
- □ Mass defect on the back of head or
- Other (Specify\_\_\_\_\_)
- Refused to answer
- Do not know

#### After completing question 1.12 for stillbirth, tablet will go to Section 2: Maternal history.

1.13	How old was the baby/child when the fatal illness started?
	(Less than 24 hours = 00 days. Enter age in days up to 27 days

Ask this question and MARK ONLY ONE RADIO BUTTON. Marking the button for "Days" or "Months" will prove space in next page for writing age in days or months. Record if the baby was less than 1 month old (0-27 completed days). RECORD THE NUMBER OF DAYS or for age less than 24 hours, record 00.

- Days (enter on next page). *Enter 99 if unknown*
- Months (enter on next page). *Enter 99 if unknown*
- o Refused to answer
- Don't know

1.14	How long did the illness last?
------	--------------------------------

Ask this question and mark ONLY ONE RADIO BUTTON. Record how long the illness lasted. Marking button on "Days" or "Months" will provide space in next page to write the **duration** using a pop-up keyboard. Record 00 if less than 24 hours or enter numbers of days if duration is less than 28 days.

- Days (enter on next page). *Enter 99 if unknown*
- Months (enter on next page). Enter 99 if unknown
- Refused to answer
- Don't know

1.15
------

#### Mark the baby's age at the time of death

Ask this question and mark ONLY ONE RADIO BUTTON.

- o Less than 28 days old
- $\circ$  28 days 11 years

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### **Section 2: Maternal history**

2.1	Was the late part of the pregnancy (defined as the last 3 months), labor, or
	delivery complicated by any of the following problems?

We ask this because if any of these (pregnancy, labor or delivery) were complicated, this would be a risk factor that may have contributed to the stillbirth or neonatal death. Read each complication and MARK ALL THAT APPLY (Multiple Choices Possible). If answer is yes, mark check box – otherwise keep blank. Read 'the mother' if the mother is not the respondent.

- □ You (the mother) had convulsions
- □ You (the mother) had high blood
- You (the mother) had severe anemia
- □ You (the mother) had diabetes
- □ Child delivered not head first
- □ Cord delivered first

- Cord around child's neck
- Excessive bleeding
- □ Fever during labor
- No complications
- Refused to answer
- Don't know

2.2	Was the baby moving in the last few days before the birth?

Ask the question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- No 0
- Refused to answer
- Don't know

2.3	What was the colour of the liquid when the water broke?

This question addresses whether the baby was under stress in utero, resulting in the release of its feces into the amniotic fluid prior to birth. Ask this question and MARK ONLY ONE RADIO BUTTON. Marking button "Other" will give space in next page for other color if not listed here.

- Green or brown
- Clear (normal)
- Other (specify \_\_\_\_\_)
- Refused to answer
- Don't know 0

2.4	How much time did the labor and delivery take?

Ask this question and MARK ONLY ONE BUTTON. Marking button "Hours" will provide space to enter the duration of labor. Record how long the labor and delivery took. Note: Labor begins when contractions are no more than 10 minutes apart. Use 1 day=24 hours to calculate number of hours. If less than one hour, mark "00".

- Hours (enter on next page). Enter 99 if unknown
- o Refused to answer
- Don't know

2.5	Who delivered the baby?

Mark the appropriate box that corresponds with the person who was primarily responsible for delivering the baby. Self would indicate that no attendant was present to assist with the delivery. MARK ONLY ONE RADIO BUTTON. Marking button "Other" will provide in next page for entering other people who are listed here.

0	Doctor	0	Tradition birth attendant
0	Nurse/midwife	0	Other (specify)
0	Relative	0	Refused to answer
0	Self (the mother)	0	Don't know

Read the choices and mark the appropriate button that corresponds with the most accurate description of procedures that were conducted during the delivery. Vaginal means a vaginal delivery. "C-section" means the woman had a surgical C-section performed. MARK ONLY ONE RADIO BUTTON.

- Vaginal with forceps
- Vaginal w/out forceps
- Vaginal Don't know if forceps or not
- $\circ$  Section
- $\circ \quad \text{Refused to answer} \\$
- Don't know

#### STOP

Refer back to question 1.8 (stillbirth). If you answered "Yes" the tablet will go to Section 4: Health records.

If you answered "No," (live birth) and the child is less 28 days old, the tablet will continue to Section 3: Neonatal deaths.

#### **Section 3: Neonatal Deaths**

3.1	Was any part of the baby physically abnormal at time of delivery? (for example:
	body part too large or too small, additional growth on body)

Demonstrate the photos on screen and ask the question so that they can understand and recognize the anomalies. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

### If "No" or "Don't know" or "Refused to answer" go to question 3.3

3.2 What were the abnormalities? (Show photos)	
--	--

We ask this to try and identify why the baby might have gotten sick. Read choices slowly one by one. And demonstrate the photos on screen so that they can understand and recognize the abnormalities. MARK ALL THAT APPLY (Multiple choices possible). Marking button for "Other" will provide space in next page for writing the type of anomalies if it is not already listed.

- □ Head size very small at time of birth
- □ Head size very large at time of birth
- $\Box$  Mass defect on the back of head or
- □ Other (Specify\_\_\_\_\_)
- Refused to answer
- Do not know

3.3	Did the baby breathe immediately after birth?
-----	---

Normal breathing does not include gasps or weak efforts to breathe. Ask this question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- Refused to answer
- o Don't know

### If "No", go to question 3.5.

3.4	Did the baby have difficulty breathing?

"Difficult breathing" means that the infant was working harder than normal to breathe Ask this question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

3.5	Was anything done to try to help the baby breathe at birth?
-----	---

Ask where any methods/strategies used or applied to help the baby breath at birth. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

3.6	Did the baby cry immediately after birth?

"After birth" means immediately after birth. Healthy babies cry after birth, so we want to know if the infant could cry. Ask the question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

#### If "Yes": go to question 3.8.

3.7	How long after birth did the baby first cry?

We want to know how long it took the infant to cry. Ask the question and MARK ONLY ONE RADIO

#### BUTTON.

- $\circ$  Within 5 minutes
- o Within 6-30 minutes
- o More than 30 minutes
- o Never
- o Refused to answer
- Don't know

#### *If "Never":* go to question 3.9.

3.8	Did the baby stop being able to cry?

"Stop crying" means that the infant was not able to cry. We ask this because stopping crying might indicate a severe illness. Ask the question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

	3.9	Was the baby able to suckle in a normal way during the first day of life?
--	-----	---

Ask the question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- Refused to answer
- Don't know

#### *If "Yes": go to question 3.11.*

3.10	Did the baby ever suckle in a normal way?
------	---

We want to know if the baby ever suckled in a normal way even if it was not in the first day of life. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- $\circ \quad \text{Don't know} \\$

"Difficulty breathing" means that the infant was working harder than normal to breathe. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- $\circ \quad \text{Refused to answer} \quad$
- o Don't know

If "No" or "Don't know" or "Refused to answer": go to question 3.13.

3.12	For how many days did the difficult breathing last?	

We ask this because it helps us know whether this problem was part of the illness that led to death. MARK ONLY ONE RADIO BUTTON. Marking button "Days" will prove space in next page to enter the duration of difficult breathing. RECORD THE NUMBER OF DAYS or 00 if less than one day.

- Days (enter on next page). Enter 99 if unknown
- o Refused to answer
- o Don't know

3.13	During the illness that led to death, did the baby have fast breathing?

We ask this because it helps us know whether this problem was part of the illness that led to death. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

#### If "No" or "Don't know" or "Refused to answer": go to question 3.15.

3.14 For how many days did the fast breathing last?	
---	--

We ask this because it helps us know whether this problem was part of the illness that led to death. MARK ONLY ONE RADIO BUTTON. Marking button "Days" will provide space in next page to enter the duration of fast breathing. RECORD THE NUMBER OF DAYS or write 00 if less than one day.

- Days (enter on next page). Enter 99 if unknown
- o Refused to answer
- $\circ \quad \text{Don't know} \\$

3.15	During the illness that led to death, did the baby have drawing-in of the
	chest?

"Drawing-in of the chest" means lower part of chest wall get depressed when baby takes respiration. This is a sign of respiratory distress and indicates a severe state of respiratory illness. We ask this because it helps us know whether this problem was part of the illness that led to death. Demonstrate the photos and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- $\circ \quad \text{Don't know} \\$

3.16	During the illness that led to death, did the baby become cold to touch?

Body becoming cold to touch is a sign of severity of baby's illness. We ask this because it helps us know whether this problem was part of the illness that led to death. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- $\circ$  Refused to answer
- Don't know

#### If "No" or "Don't know" or "Refused to answer": go to question 3.18.

3.17	At what age did the baby start feeling cold to touch?

We ask this because the age at which the baby started to feel cold can help us know how serious it was and also what may have led to the illness. MARK ONLY ONE RADIO BUTTON. Marking the button "Days" will provide space on next page to write the age of starting coldness. Record the age in the NUMBER OF DAYS or "00" if age is less than one day.

- Days (enter on next page). Enter 99 if unknown
- o Refused to answer
- Don't know

3.18	During the illness that led to death, did the baby become lethargic, after a
	period of normal activity?

Lethargic means baby looks sleepy but respond to stimuli. This is a sign of severity of baby's illness. We ask this because it helps us know whether this problem was part of the illness that led to death. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

3.19	During the illness that led to death, did the baby become unresponsive or
	unconscious?

"Unresponsive or unconscious" means the infant was unable to respond to any stimuli such as light, sounds or touch. We ask about this because it is a serious problem that might help us determines the cause of the illness. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

3.20	During the illness that led to death, did the baby have pus drainage from the
	umbilical cord stump?

"Pus" is thick, creamy or yellowish liquid. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

	3.21	During the illness that led to death, did the baby have an area(s) of skin with
	5.21	redness and swelling?

"Swelling" means the area was raised more than normal. Redness and swelling can indicate a serious infection of the area. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

3.22	During the illness that led to death, did he/she have yellow skin?

Yellowness of the skin signifies jaundice which is a serious condition that can lead to death. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- Refused to answer
- o Don't know

3.23	Did the infant appear to be healthy and then just die suddenly?
------	---

It is rare but sometimes an infant will seem to be healthy and then die suddenly. It is important to know this information. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

#### **Section 4: Health Records**

4.1Did a health care worker tell you the cause of death?
--

Ask this question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- 0 **No**
- $\circ \quad \text{Refused to answer} \quad$
- Don't know

If "No" or "Don't know" or "Refused to answer": tablet will automatically go to question 4.3.

4.2	What did the health care worker say?

Ask this question and touch the space and write the cause of death on the space using the pop-up keyboard.

4.3	Was care sought outside the home while the deceased had this illness?

It is important to learn if outside care was sought deceased at the time of the illness. Ask this question and MARK ONLY ONE RADIO BUTTON.

- $\circ$  Yes
- $\circ$  No
- Refused to answer
- $\circ$  Don't know

If "No" or "Don't know" or "Refused to answer" box is checked, tablet will automatically go to question 4.12.

4.4	Where or from whom did you seek care?

Read out the choices/lists slowly and one by one and MARK ALL THE CHECK BOXES (Multiple Choices Possible) THAT APPLY (mark only when respondent answers "yes". Otherwise leave blank).

- Traditional Healer
- □ Homeopath
- Religious leader
- □ Government Hospital
- □ Governmental health center or clinic
- Private Hospital
- □ Community-based practitioner associated with health system
- □ Trained birth attendant
- Private physician
- □ Pharmacy, drug seller, store, market
- □ Other provider
- □ Relative, friend (outside household)
- Refused to answer
- Don't know

4.5	Record the name and address of the hospital, health center or clinic where the
	care was sought

Please ask this question and touch the space and write the name and address in the space using the pop-up keyboard.

4.6	Do you have any health records that belonged to the deceased?
-----	---

It is important to know whether the child had health records as more information concerning her/his illness can be extracted from the documents. MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer

o Don't know

#### If "No" or "Don't know" or "Refused to answer": go to question 4.12.

4.7	Can I see the health records?

It is important to see the health record. Ask the question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- Don't know

#### If "No" or "Refused to answer": go to question 4.12.

#### If "Yes", and respondent allows you to see the records, transcribe all the entries.

A screen with the question "Are the dates known for the most recent visits and the last note?" with the information below on one page.

- □ Most recent visit date available
- □ Second most recent visit date available
- Date of the last note available
- Don't know

Please read the records and mark all boxes that apply, and pages with space for entering the information from the records would be appear sequentially.

Checking/ticking recent visit boxes would be followed by pages with option to write the dates and weight of the child.

4.8	Record the dates of most recent visits from the health record

Year:	Enter four digit years. Enter 9999 if unknown
Month:	_Enter Month (January =1). Enter 99 if unknown
Day of the month:	_ Enter Day between 1 and 31. Enter 99 if unknown

4.9	Record the weight on the most recent visit from the health records
-----	--

Any change in weight would be an important indicator of child's health status prior to death. RECORD THE WEIGHT.

- Grams (enter on next pages)
- Kilograms (enter on next pages)
- O Refused to answer
- O Don't know

4.10	Record the dates of the second most recent visits from the health record

Year: \_\_\_\_\_\_ Enter four digit years. Enter 9999 if unknown

Month: \_\_\_\_\_Enter Month (January =1). Enter 99 if unknown

Day of the month: \_\_\_\_\_\_ Enter Day between 1 and 31. Enter 99 if unknown

4.11	Record the weight on second most recent visit dates from the health record

Any change in weight would be an important indicator of child's health status prior to death. RECORD THE WEIGHT.

- Grams (enter on next pages)
- Kilograms ( enter on next pages)
- O Refused to answer
- Don't know

4.12	Record the date of the last note

The date would reveal when the child was treated in the health facility.

Year:	Enter four digit years. Enter 9999 if unknown
Month:	_Enter Month (January =1). Enter 99 if unknown
Day of the month:	_ Enter Day between 1 and 31. Enter 99 if unknown

4.13	Transcribe the note

Touch the space below the transcribe note, and write down the exact note as it appears on the medical record using the pop-up keyboard.

4.14	Was a death certificate issued?

It is important to learn whether a death certificate was issued because we can abstract the cause of death from this record. Ask the question and mark the only one radio button that applies

- o Yes
- o No
- Refused to answer
- Don't know

If "No" or "Don't know" or "Refuse to answer": go to Section 5: Open Response.

4.13	Can I see the death certificate?

It is important that you see the document if you are to extract the right information.

o Yes

- 0 **No**
- o Refused to answer
- o Don't know

If "No" or "Don't know" or "Refuse to answer": go to Section 5: Open Response.

#### If "Yes", and respondent allows you to see the death certificate, transcribe all the entries.

If answers to question 4.12 and 4.13 are "yes", a screen will come with the following:

- □ Immediate cause of death
- □ First underlying cause of death
- □ Second underlying cause of death
- □ Third underlying cause of death
- □ Contributing cause of death
- Don't know

Please read the death certificate and mark all the boxes that apply (Multiple responses). For each checking box ticked, spaces would be provided in subsequent pages to enter the corresponding causes of death. If there is only one cause of death in certificate, just check the 1<sup>st</sup> box and write the cause of death accordingly

4.16 Record the immediate cause	of death from the certificate
---------------------------------	-------------------------------

This is the first in the list of causes of death on the certificate. Enter the first cause of death in the corresponding space provided. If there is only one cause of death, then check the first box and enter the cause of death here.

4.17 Record the first underlying cause of death from the certificate	
--	--

This follows the immediate cause of death in the list of causes of death on the certificate. Enter the first underlying cause of death in the corresponding space provided.

4.18	Record the second underlying cause of death from the certificate

This follows the first underlying cause of death in the list of causes of death on the certificate. Enter the second underlying cause of death in the corresponding space provided.

4.19	Record the third underlying cause of death from the certificate.	

This follows the second underlying cause of death in the list of causes of death on the certificate. Enter the third underlying cause of death in the corresponding space provided.

4.20	Record the contributing cause(s) of death from the certificate.

This follows the third underlying cause of death in the list of causes of death on the certificate and is written under part II. Enter the contributing cause(s) of death in the corresponding space provided.

## END OF HEALTH RECORDS SECTION GO TO SECTION 5

#### Section 5: Open ended response and interviewer comments/observations

**Instructions to interviewer**: Section 5 is for recording open narrative. This information contributes to the process of diagnosing a most likely cause of death. As the tasks of writing and translation of narratives in tablet is time consuming, SmartVA includes a checklist of 6 keywords (such as Asphyxia (lack of oxygen), Incubator etc.) to use in open narrative rather than having interviewers record an entire conversion. This checklist comprises a list of words which has to be endorsed by the interviewer when mentioned by the respondent in describing the circumstances surrounding the death.

Instruction is given below how to ask additional information and how to endorse the key words before staring the open narrative section.

There is no need to record the full narrative.

*Instructions to the interviewer*: Say to the respondent: "Thank you for your responses to this set of questions. Could you please summarize, or tell us in your own words, any additional information about the illness and/or death of your loved one?"

**To the interviewer**: Listen to what the respondent tells you in his/her own words. Do not prompt except for asking whether there was anything else after the respondent finishes. If the respondent mentions any of the following words, mark "mentioned". Tell the respondent to stop and start again if they mention a word of interest, so you have time to mark it down. MARK ALL CHECK BOXES THAT APPLY (MULTIPLE ANSWERS POSSIBLE).

	Key words	Mentioned
	Asphyxia (lack of oxygen)	?
F 4	Incubator	?
5.1 neonate_6_1 to 6_6	Lung Problems	2
	Pneumonia	?
	Preterm Delivery	?
	Respiratory Distress	2

5.2	Confirm that no words of interest were used during the open response

If there is no box checked, a screen will appear to be sure that no word was checked. Mark the box as appropriate.

- No word was mentioned
- o Don't know

### **END OF INTERVIEW**

#### THANK PARTICIPANT FOR THEIR PARTICIPATION

### 7 Instructions for child age-specific module

**Note to Interviewer**: the tablet will move to this module after completing the general module if age of the decedent is in the age bracket of 29 days to 11 years. The questions in this module include:

- Child Injuries and Accidents
- Background
- Infant and Child Deaths
- Health Records
- Open ended response (10 Keyword Checklist).

#### Section 1: Child injuries and accidents

1.1	Did suffer an injury or accident that led to death?

An "injury" means the person was hurt by something outside the body, such as physical blow or fall or poisoning or bite. This includes accidental and intentional injuries. Please ask the question and mark only ONE radio button.

- o Yes
- o No
- o Refused to answer
- o Don't know

*If "No" "Don't know" or "Refused to answer" is checked, Tablet will automatically skip to Section 2: Background.* 

1.2	What kind of injury or accident did	suffer from?

Ask the respondent each question in sequence and record all check boxes by touching/clicking to which the respondent indicated "Yes." Checking "other" will provide a space in next page to record the type of injury. Only click or touch for check boxes for refused to answer or don't know when none of the listed options are possible. Checking "other" box would provide space to specify/write the type of injury.

Road traffic crash/ injury

Fall

Drowning
Poisoning
Bite or sting by venomous animal
Burn/Fire
Violence (suicide, homicide, abuse)
Other injury, specify ()
Refused to answer
Don't know

1.3	Was the injury or accident intentionally inflicted by someone else?	
-----	---	--

We want to know if the injury or accident may have been caused by someone else. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

Tablet will skip to Section 4: Health Records.

#### Section 2: Background

2.1 Is the mother still alive?	
--------------------------------	--

*If the mother is not present at the interview, ask if the mother of the deceased child is still alive. MARK ONLY ONE RADIO BUTTON.* 

- o Yes
- o No

#### If the mother is alive, tablet will skip to Question 2.4.

2.2	Did the mother die during or after the delivery?	

If the mother is not alive, ask: Did the mother die during or after the delivery? MARK ONLY ONE Radio Button.

- o During
- o After
- o Refused to answer
- o Don't know

#### If the mother died during delivery, tablet will skip to Question 2.4.

2.3	How long after the delivery did the mother die?

Ask this question and record the answer in number of days or months. MARK only ONE RADIO BUTTON. Touching months or days button, tablet will give a page/space to enter the duration using pop up key board. If the mother died less than 24 hours after delivery, record 00 days. Use 1 month=28 days to determine the number of months.

- Months (enter on next page)
- Days (enter on next page)
- o Refused to answer
- o Don't know

2.4	Where was the deceased born?

Mark the appropriate box that corresponds with the place where the delivery occurred. Differentiate between "hospital" births (i.e. health institutions with in-patient facilities) from "other health facility" (dispensaries, health centers or private clinics where patients are seen on out-patient basis). MARK ONLY ONE Button. Marking other will provide space to write/specify place.

- Hospital
- o Other health facility
- o On route to hospital or other health facility
- o Home
- Other (specify \_\_\_\_\_)

- o Refused to answer
- Don't know

2.5	At the time of the delivery what was the size of the deceased:

Read the first part of the question, and then slowly read the four choices. The respondent should hear all the choices before giving her answer (tablet will display/show photos). We want to know if the infant was small or large because both of these can cause problems. Respondent should hear all four choices and then respond.

- o Very small
- o Smaller than usual
- About average
- Larger than usual
- Refused to answer
- Don't know

2.6	How old was the baby/child when the fatal illness started?
-----	--

Ask this question and record the answer in number of years or months or days. MARK only ONE RADIO BUTTON. By touching on years, months, or day's button, the tablet will give a page/space to enter the age using pop up keyboard. (Less than 24 hrs=00, use 1month=28 days to determine the number of months).

- Years (enter on next page)
- Months (enter on next page)
- Days (enter on next page)
- o Refused to answer
- o Don't know

2.7	How long did the illness last?
-----	--------------------------------

Record how long the illness lasted. Mark only one radio button, and touching days or months will provide page for writing durations. If the illness lasted less than 24 hours, record 00. Use 1 month=28 days to determine the number of months. Enter 99 if unknown.

• Days (enter on next page)

- Months (enter on next page)
- Refused to answer
- Don't know

2.8	How old was the deceased at the time of death?

Ask this question and record the answer in number of years or months or days. MARK only ONE RADIO BUTTON. By touching on years, months, or day's button, the tablet will give a page/space to enter the age using pop up key board. Use 1 month = 28 days to determine the number of months.

- Years (enter on next page)
- Months (enter on next page)
- Days (enter on next page)
- o Refused to answer
- o Don't know

#### Section 3: Infant and child death

3.1 During the illness that led to d	did have a fever?
--------------------------------------	-------------------

"Fever" means the infant felt hot to the touch, or the temperature was abnormally high as measured with a thermometer.

- o Yes
- o No
- o Refused to answer
- o Don't know

#### If "No" or "Don't know" or "Refused to answer" tablet will skip to to 3.5.

We ask this because the duration of the fever can help us know how serious it was. MARK ONLY ONE BUTTON. Marking 1 day or more will provide space to write the duration in days. Enter 9999 if unknown.

• Less than 24 hours

- 1 day or more (specify)
- o Refused to answer
- Don't know

3.3 Did the fever continue until death?

We want to know if the fever may have contributed to the cause of death. MARK ONLY ONE RADIO BUTTON.

o Yes

- o No
- o Refused to answer
- Don't know

If "No" or "Don't know" or "Refused to answer" go to 3.5.

3.4	How severe was the fever?

"Severity" of fever means how high the child's fever was. MARK ONLY ONE RADIO BUTTON.

- $\circ \quad \text{Mild}$
- o Moderate
- o Severe
- o Refused to answer
- o Don't know

3.5	During the illness that led to death, did _	have more frequent
	loose or liquid stools than usual?	

Ask the question and MARK ONLY ONE RADIO BUTTON.

- o Yes
- o No
- o Refused to answer
- o Don't know

#### If "No" or "Don't know" or "Refused to answer" tablet will skip to to 3.8.

3.6	How many stools did	have on the day that loose or liquid stools
	were most frequent?	

We ask this because the frequency of diarrhea can help us know how serious it was. Mark only one radio button. Marking "specify number of stools" button will provide space for entering number of stools (enter 99 if unknown).

- Specify number of stools (enter on next page)
- O Refused to answer
- O Don't know

3.7	Did the frequent loose or liquid stools continue until death?
-----	---

*We ask this because it helps us know whether this problem was part of the illness that led to death. MARK ONLY ONE BUTTON.* 

- O Yes
- O No
- O Refused to answer
- O Don't know

3.8	During the illness that led to death, did the child have a cough?

Ask this question and MARK ONLY ONE BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

If "No" or "Don't know" or "Refused to answer" tablet will skip to 3.11.

3.9	For how many days did the cough last?

We ask this because the duration of the cough can help us know how serious it was. Mark only one button. Marking on "Days" button will provide space for entering durations in days. Enter 99 if unknown.

- Days (enter on next page)
- Refused to answer
- o Don't know

3.10 Was the cough very severe?	
---------------------------------	--

"Severity" of cough means how harsh or bad the cough was for the child. Knowing this might help us understand what type of illness the child had. MARK ONLY ONE BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

3.11	During the illness that led to death, did have difficulty
	breathing?

Difficult breathing" means that the infant was working harder than normal to breathe. MARK ONLY ONE BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refused to answer" go to 3.13.

3.12	For how many days did the difficult breathing last?
------	---

We ask this because the duration of the difficult breathing can help us know how serious it was. Mark only one button. Marking on "Days" button will provide space for entering durations in days using pop-up keyboard. Enter 9999 if unknown.

- Days (enter on next page)
- o Refused to answer
- Don't know

	3.13 Du	uring the illness that led to death, did	_have fast breathing?
--	---------	--	-----------------------

We ask this because it helps us know whether this problem was part of the illness that led to death. MARK ONLY ONE BUTTON.

- o Yes
- o No
- $\circ$  Refused to answer
- $\circ \quad \text{Don't know} \\$

#### If "No" or "Don't know" or "Refused to answer" tablet will skip to 3.15.

3.14	For how many days did the fast breathing last?

Duration of the fast breathing can help understand how severe the illness was. MARK ONLY ONE

RADIO BUTTON. Marking "Days" button will provide space to enter duration of fast breathing. Please enter 99 if unknown.

- Days (enter on next page)
- o Refused to answer
- o Don't know

Note to Interviewer: If BOTH 3.11 and 3.13 are "No" tablet will skip to 3.17.

3.15	During the illness that led to death, did he/she have in drawing of the chest?

"In drawing of the chest" means lower part of check wall gets depressed during respiration, and it indicates the seriousness of the diseases. Ask the question helps us know whether this problem was part of the illness that led to death (show the photo). MARK ONLY ONE BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't know

3.16 During the illness that led to death, did his/her breathin	g sound like grunting?
---	------------------------

"Grunting" is characterized by difficulty breathing when breathing OUT. It is indicative of respiratory illnesses such as pneumonia. Demonstrate the sound by clicking the little icon on the screen and MARK ONLY ONE BUTTON.

O Yes

O No

O Refused to answer

O Don't know

3.17	Did experience any generalized convulsions or fits during the
	illness that led to death?

"Fits" or "convulsions" are abnormal violent and involuntary movements which may occur either at rest or during voluntary movement. Fits may involve the whole body or part of the body. A convulsion is uncontrollable jerking and stiffening of the arms and legs, sometimes with loss of urine and stool. We ask this because it can help us determine the cause of the illness that led to death. MARK ONLY ONE BUTTON.

- O Yes
- O No
- O Refused to answer

#### O Don't know

3.18	Was	unconscious during the illness that led to death?
------	-----	---

"Unconscious" means the infant was unable to respond to any stimuli such as light, sounds or touch. We ask about this because it is a serious problem that might help us determines the cause of the illness. MARK ONLY ONE BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refused to answer" tablet will skip to 3.20.

3.19	How long before death did unconsciousness start?
------	--

This will help determine duration of unconsciousness. This will help us know whether this problem was part of the illness that led to death. MARK ONLY ONE BUTTON.

O Less than 6 hours

O 6-23 hours

- O 24 hours or more
- O Refused to answer
- O Don't know

3.20	Did have a stiff neck during the illness that led to death?

"Stiff neck" means the infant was unable to move his/her neck in a normal way. We ask about this because it is a serious problem that might help us determines the cause of the illness. Demonstrate this stiff neck sign by showing the photo. MARK ONLY ONE BOX.

O Yes

O No

- O Refused to answer
- O Don't know

3.21	Did have a bulging fontanelle during the illness that led to
	death?

"Fontanelle" is the soft spot toward the front of an infant's head. "Bulging" means that it was pushed out and tense when the infant was in a sitting position, and is a manifestation of certain serious diseases of infant and child. Generally fontanelle closes around 18 months of age, and could not be manifested after that age. Please show the photo on the screen to remember the bulge fontanelle. MARK ONLY ONE BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't know

3.22	During the month before he/she died, did	have a skin rash?
------	--	-------------------

"Rash" is any skin abnormality that is not a cut or bruise. It usually appears as a collection of red spots on the skin or sometimes as a red blotch or a patch on the skin. We ask about this because it is a serious problem that might help us determines the cause of the illness. MARK ONLY ONE BUTTON.

O Yes

O No

- O Refused to answer
- O Don't know

If "No" or "Don't know" or "Refused to answer" tablet will skip to 3.24.

3.23	How many days did the rash last?

The duration of the rash will help us understand the severity and also whether this problem was part of the illness that led to death. MARK ONLY ON RADIO BUTTON. Marking "Days" button will provide space to enter duration of rash using pop-up key. Please enter 99 if unknown.

- Days (enter on next page)
- o Refused to answer
- Don't know

3.24	During the illness that led to death, did _	's skin flake off in patches?

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

3.25       Did's hair change in color to a reddish or yellowish color?
--

Ask this question and MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't know

3.26	Did have a protruding belly?
------	------------------------------

A protruding belly is when the size of the belly increases significantly. The increase in size is significant in some cases and easily recognized. MARK ONLY ONE BUTTON.

O Yes

O No

O Refused to answer

O Don't know

3.27	During the illness that led to death, did _	suffer from "lack of
	blood" or "pallor"?	

"Pallor" means the child has no color, especially in the face. MARK ONLY ONE RADIO BUTTON.

O Yes

O No

O Refused to answer

O Don't know

3.28	During the illness that led to death, did have swelling in the	e
	armpits?	

"Swelling" means the area was raised more than normal. MARK ONLY ONE RADIO BUTTON.

O Yes

O No

O Refused to answer

O Don't know

3.29	During the illness that led to death, did bleed from anywhere?

*We ask this because spontaneous bleeding can be a serious health problem. MARK ONLY ONE RADIO BUTTON.* 

O Yes

O No

O Refused to answer

#### O Don't know

3.30	During the illness that led to death, did he/she have areas of the skin that
	turned black?

We ask this because it might indicate the child had bleeding into the skin, which could be due to an infection that caused the death. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### **Section 4: Health records**

4.1	Did a health care worker tell you the cause of death?
-----	---

Ask this question and touch one radio button that applies to mark the answer.

- O Yes
- O No
- O Refused to answer
- O Don't know

# If "No" or "Don't know" or "Refused to answer" box is checked, tablet will automatically skip to question 4.3.

4.2	What did the health care worker say?

Ask this question and touch the space and write the cause of death on the space using the pop-up keyboard.

4.3	Was care sought outside the home while the deceased had this illness?

It is important to learn if outside care was sought deceased at the time of the illness. Please ask this question and mark only one radio button by touching the appropriate radio button.

O Yes

- O No
- O Refused to answer
- O Don't know

# If "No" or "Don't know" or "Refused to answer" box is checked, tablet will automatically skip to question 4.12.

4.4	Where or from whom did you seek care?

Read out the choices/lists slowly and one by one and MARK ALL THE CHECK BOXES (Multiple Choices Possible) THAT APPLY (mark only when the respondent answers "yes". Otherwise leave blank).

- Traditional Healer
- □ Homeopath
- □ Religious leader
- □ Government Hospital
- □ Governmental health center or clinic
- Private Hospital
- □ Community-based practitioner associated with health system
- □ Trained birth attendant
- Private physician
- □ Pharmacy, drug seller, store, market
- Other provider
- □ Relative, friend (outside household)
- Refused to answer
- Don't know

4.5	Record the name and address of the hospital, health center or clinic where the
	care was sought

Please ask this question and touch the space and write the name and address in the space using the pop-up keyboard.

4.6 Do you have any health records that belonged to the deceased?
---

It is important to know whether the child had health records as more information concerning her/his illness can be extracted from the documents. MARK ONLY ONE Radio Button.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refused to answer" tablet will skip to question 4.12.

4.7	Can I see the health records?
-----	-------------------------------

It is important to see the health record. Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Refused to answer" tablet will skip to question 4.12.

*If "Yes", and respondent allows you to see the records, transcribe all the entries. If "Yes", there will be an option to take a picture of the health records, and a second option to take a second picture if necessary. Tablet screen will show two buttons:* 

- 1. Take a picture see the records through the camera button and fix/adjust them before pushing the camera button to take a photo. Push 'ok' to complete the process
- 2. Choose image.

*Instruction to interviewer*: After the picture taking option, a screen with the question, "Are the dates known for the most recent visits and the last note?" with the information below on one page.

- □ Most recent visit date available
- □ Second most recent visit date available
- Date of the last note available
- Don't know

Please read the records and mark all boxes that apply, and pages with space for entering the information from the records would be appear sequentially.

*Checking/ticking recent visit boxes would be followed by pages with option to write the dates and weight of the child.* 

4.8	Record the dates of most recent visits from the health record
Year:	Enter four digit years. Enter 9999 if unknown
Month:	Enter Month (January =1). Enter 99 if unknown
Day of the month: _	Enter Day between 1 and 31. Enter 99 if unknown

4.9	Record the weight on the most recent visit from the health records
-----	--

- Grams (enter on next pages)
- Kilograms ( enter on next pages)
- O Refused to answer
- O Don't know

4.8	Record the dates of the second most recent visits from the health record

Year: \_\_\_\_\_\_ Enter four digit years. Enter 9999 if unknown

Month: \_\_\_\_\_\_Enter Month (January =1). Enter 99 if unknown

Day of the month: \_\_\_\_\_\_ Enter Day between 1 and 31. Enter 99 if unknown

4.9	Record the weight on second most recent visit dates from the health record

Any change in weight would be an important indicator of child's health status prior to death. RECORD THE WEIGHT.

- Grams (enter on next pages)
- Kilograms (enter on next pages)
- O Refused to answer
- O Don't know

4.10	Record the date of the last note
------	----------------------------------

The date would reveal when the child was treated in the health facility.

- Year: \_\_\_\_\_\_ Enter four digit years. Enter 9999 if unknown
- Month: \_\_\_\_\_Enter Month (January =1). Enter 99 if unknown

Day of the month: \_\_\_\_\_ Enter Day between 1 and 31. Enter 99 if unknown

4.11 Transcribe	the note
-----------------	----------

Touch the space below the transcribe the note, and write down the exact note as it appears on the medical record using the pop-up keyboard.

4.12	Was a death certificate issued?
------	---------------------------------

It is important to learn whether a death certificate was issued because we can abstract the cause of death from this record. Ask the question and mark only one radio button that applies.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refuse to answer" tablet will skip to question 4.19.

4.13	Can I see the death certificate?
------	----------------------------------

It is important that you see the document if you are to extract the right information.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refuse to answer" tablet will skip to question 4.19.

*If "Yes", and respondent allows you to see the death certificate, transcribe all the entries. If "Yes", there will be an option to take a picture of the health records, and a second option to take a second picture if necessary. Tablet screen will show two buttons:* 

- 1. Take a picture see the records through the camera button and fix/adjust them before pushing the camera button to take a photo. Push 'ok' to complete the process
- 2. Choose image.

If answer to question 4.13 is "yes", a screen will come with the following.

- □ Immediate cause of death
- □ First underlying cause of death
- □ Second underlying cause of death
- □ Third underlying cause of death
- □ Contributing cause of death
- Don't know

Please read the death certificate and mark all the boxes that apply (Multiple responses). For each checking box ticked, spaces would be provided in subsequent pages to enter the corresponding causes of death. If there is only one cause of death in certificate, just check the 1<sup>st</sup> box and write the cause of death accordingly

4.14	Record the immediate cause of death from the certificate	

This is the first in the list of causes of death on the certificate. Enter the first cause of death in the corresponding space provided. If there is only one cause of death, then check the first box and enter the cause of death here.

4.15	Record the first underlying cause of death from the certificate
------	---

This follows the immediate cause of death in the list of causes of death on the certificate. Enter the first underlying cause of death in the corresponding space provided.

4.16	Record the second underlying cause of death from the certificate.
------	---

This follows the first underlying e cause of death in the list of causes of death on the certificate. Enter the second underlying cause of death in the corresponding space provided.

4.17	Record the third underlying cause of death from the certificate.	

This follows the second underlying cause of death in the list of causes of death on the certificate. Enter the third underlying cause of death in the corresponding space provided.

4.18	Record the contributing cause(s) of death from the certificate.	
4.10		

This follows the third underlying cause of death in the list of causes of death on the certificate and recorded under part II. Enter the contributing cause(s) of death in the corresponding space provided.

4.19	Has the deceased's (biological) mother ever been tested for "HIV"?
------	--

We want to know if the mother had ever been tested for HIV. It is understandable that this question is very sensitive so be extra sensitive when asking these questions. MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer

#### O Don't know

#### If "No" or "Don't know" or "Refuse to answer", tablet will skip to question 4.21.

4.20	Was the "HIV" test ever positive?
Ask this question c	nd MARK ONLY ONE RADIO BUTTON.
O Yes	
O No	
O Refused to	answer
O Don't know	N

4.21	Has the deceased's (biological) mother ever been told she had "AIDS" by a
	health worker?

We want to know if the mother was ever diagnosed with AIDS. This is different than testing positive for HIV, the virus that causes AIDS. MARK ONLY ONE RADIO BUTTON.

O Yes

O No

O Refused to answer

O Don't know

## END OF HEALTH RECORDS SECTION GO TO SECTION 5: OPEN ENDED RESPONSE

#### Section 5: Open ended response and interviewer comments/observations

**Note to Interviewer**: Section 5 is for recording open narrative for adding additional information, and this information contributes to in the process of diagnosing a most likely cause of death. As the tasks of writing and translation of narratives in tablet is time consuming, SmartVA includes a checklist of

10 keywords (such as abdomen, cancer etc.) to use in open narrative rather than having interviewers record an entire conversion. This checklist comprises a list of words which has to be endorsed by the interviewer when mentioned by the respondent in describing the circumstances surrounding the death.

There is no need to record the whole narrative.

Instruction is given below how to ask additional information and how to endorse the key words before staring the open narrative section.

*Instructions to the interviewer*: Say to the respondent: "Thank you for your responses to this set of questions. Could you please summarize, or tell us in your own words, any additional information about the illness and/or death of your loved one?"

**To the interviewer**: Listen to what the respondent tells you in his/her own words. Do not prompt except for asking whether there was anything else after the respondent finishes. If the respondent mentions any of the following words, mark "mentioned". Tell the respondent to stop and start again if they mention a word of interest, so you have time to mark it down. MARK ALL CHECK BOXES THAT APPLY (MULTIPLE ANSWERS POSSIBLE).

	Key words	Mentioned
	Abdomen	?
	Cancer	?
	Dehydration	?
5.1	Dengue fever	?
	Diarrhea	?
	Fever	?
	Heart Problems	?
	Jaundice (yellow skin or eyes)	?
	Pneumonia	?
	Rash	?

5.2	Confirm that no words of interest were used during the open response

If there is no box checked, a screen would appear to be sure that no word was checked. Mark the box as appropriate.

- No word was mentioned
- Don't know

#### **END OF INTERVIEW**

#### THANK PARTICIPANT FOR THEIR PARTICIPATION

### 8 Instructions for adolescent and adult age-specific module

**Note to interviewer:** This module will be applied for deceased persons who were 12 years or older at the time of death. The tablet will automatically move (after completing the general information module) to this module when the age category of deceased falls within this age bracket. The main sections of questions of this module are:

- Injuries and Accidents
- History of Chronic Conditions of the Deceased
- Symptom Checklist
- Questions on Women
- Tobacco Use
- Health Records
- Open Ended Response (11 Keyword Checklist).

#### **Section 1: Injuries and accidents**

1.1	Did suffer from an injury or accident that led to his/her death?
adult_5_1	

An "injury" means the person was hurt by something outside the body, such as physical blow or fall or poisoning or bite. This includes accidental and intentional injuries. Ask this question and click/touch only one radio button to record the response.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No", "refused to answer" or "don't know" is checked, tablet will skip to Section 2.

1.2	What kind of injury or accident did	suffer from?	

Ask the respondent each question in sequence and record all check boxes by touching/clicking those the respondent indicated "Yes." Checking "other" provides a space in the next page to record the

type of injury. Only click or touch for check boxes for "refused to answer" or "don't know" when none of the listed options are possible.

- □ Road traffic crash/injury
- 🗌 Fall
- Drowning
- Poisoning
- □ Bite or sting by venomous animal
- □ Burn/fire
- □ Violence (suicide, homicide, abuse)
- □ Other injury, specify\_\_\_\_\_
- □ Refused to answer
- Don't know

1.3	Was the injury or accident self-inflicted?
-----	--

We want to know whether the deceased committed the injury or accident. Ask the question and click/touch radio button to record the appropriate response category. Only one option is possible.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### 1.4 Was the injury or accident intentionally inflicted by someone else?

We want to know if injury or accidents have been caused by someone else. Ask the question and record the response by clicking/touching the appropriate radio button.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### Tablet will skip automatically to Section 6: HEALTH RECORDS.

#### Section 2: History of chronic conditions of the deceased

2.1	Was	_ ever told by a health professional that he or she ever suffered from one of
	the followin	g?

"Health professional" means any professional who have formal medical training to work legally as part of the health workforce (such as MBBS doctors, nurses, paramedical staff, etc.) in the country. Ask this question for each of the disease conditions listed.

|--|

Ask the respondent whether any health professional told the deceased that he/she has been suffering from asthma, and record the response category by clicking/touching the radio button that corresponds to the response category.

- O Yes
- O No
- O Refused to answer
- O Don't know

2.3	Cancer
-----	--------

Ask the respondent whether any health professional told the deceased that he/she has been suffering from cancer, and record the response category by clicking/touching the corresponding radio button.

O Yes

- O No
- O Refused to answer
- O Don't know

2.4	COPD (Chronic Obstructive Pulmonary Disease)	
-----	--	--

Ask the respondent whether any health professional told the deceased that he/she has been suffering from COPD, and record the response category by clicking/touching the corresponding radio button.

O Yes

- O No
- O Refused to answer
- O Don't know

2.5	Diabetes

Ask the respondent whether any health professional told the deceased that he/she has been suffering from diabetes, and record the response category by clicking/touching the corresponding radio button.

O Yes

- O No
- O Refused to answer
- O Don't know

2.6	Epilepsy
-----	----------

Ask the respondent whether any health professional told the deceased that he/she has been suffering from epilepsy, and record the response category by clicking/touching the corresponding radio button.

- O Yes
- O No
- O Refused to answer
- O Don't know

2.7 Heart Disease	
-------------------	--

Ask the respondent whether any health professional told the deceased that he/she has been suffering from heart disease, and record the response category by clicking/touching the corresponding radio button.

- O Yes
- O No
- O Refused to answer

#### O Don't know

2.8	Tuberculosis

Ask the respondent whether any health professional told the deceased that he/she has been suffering from Tuberculosis, and record the response category by clicking/touching the corresponding radio button.

- O Yes
- O No
- O Refused to answer
- O Don't know

2.9	Stroke
-----	--------

Ask the respondent whether any health professional told the deceased that he/she had been

suffering from stroke, and record the response category by clicking/touching the corresponding radio button.

- O Yes
- O No
- O Refused to answer
- O Don't know

2.10	AIDS		
------	------	--	--

Ask the respondent whether any health professional told the deceased that he/she has been suffering from AIDS, and record the response category by clicking/touching the corresponding radio button.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### Section 3: Symptom checklist

3.1	Did	_have a fever?
-----	-----	----------------

"Fever" means the individual felt hot to the touch, or the temperature was abnormally high as measured with a thermometer. We ask this because fever is a sign of infection. Ask this question and record the response category by clicking/touching the radio button that corresponds to the appropriate category.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refused to answer" is clicked, tablet will skip to 3.4.

3.2	How severe was the fever?
-----	---------------------------

Severity of fever means how harsh or bad the fever was for the deceased, indicated by the intensity of the fever perceived by the deceased's relatives. Record the severity category by clicking/touching the radio button that corresponds to the appropriate response category.

O Mild

O Moderate

- O Severe
- O Refused to answer
- O Don't know

# 3.3 What was the pattern of the fever?

"Pattern" of fever means how frequent and often the fever presented. This helps differentiate between infectious diseases that have a characteristic pattern of fever. Record the respondent response by clicking/touching radio button that corresponds to appropriate category. Only one response category is possible.

O Continuous

O On and off
O Only at night
O Refused to answer
O Don't know

3.4	Did	_have a rash?

"Rash" is any skin abnormality that is not a cut or bruise. It usually appears as a collection of red spots on the skin or sometimes as a red blotch or a patch on the skin. We ask about this because it is a serious problem that might help us determine the cause of the illness. Ask this question and record the respondent's response by clicking/touching the appropriate radio button. Only one response is possible.

- O Yes
- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refused to answer" is clicked, the tablet will skip to 3.6.

3.5	Where was the rash located?

It is important to know where the rash may be located on the body. This is because the location of the rash is characteristic for certain conditions, and could assist in diagnosing them. Also this will help us know whether this problem was part of the illness that led to death. Record the response category (only one option possible).

- O Face
- O Trunk
- O Extremities
- O Everywhere
- O Refused to answer
- O Don't know

3.6	Did have sores?

Sores are chronic (ongoing) ulcers that are very slow to heal, and persist over a long time. They are usually caused by constant pressure, such as those produced on the back as a result of being in a bedridden state for a long time. Click/touch the radio button to record the appropriate response (only one response is possible).

O Yes

- O No
- O Refused to answer
- O Don't know

#### If "No" or "Don't know" or "Refused to answer", the tablet will skip automatically to 3.8.

3.7	Did the sores have clear fluid or pus?
-----	--

Sores sometimes appear initially as tiny bubbles on the skin, called blisters. "Blisters" are raised skin that contains fluid. Often, the clear fluid changes into pus. "Pus" is thick, creamy, or yellowish liquid. This will help us know whether this problem was part of the illness that led to death. Click/touch the radio button to record the appropriate response (only one response is possible).

- O Yes
- O No
- O Refused to answer
- O Don't know

3.8	Did have an ulcer (pit) on the foot?

In certain conditions, particularly among the elderly, chronic, non-healing ulcers appear on the foot. Presence of such ulcers is a vital clue in the diagnosis of these conditions. Click/touch the radio button to record the appropriate response (only one response possible).

O Yes

- O No
- O Refused to answer

#### O Don't know

#### If "No" or "Don't know" or "Refused to answer" is clicked, tablet will skip automatically to 3.11.

3.9	Did the ulcer ooze pus?

"Pus" is thick, creamy, or yellowish liquid. As described above, the presence of pus in the ulcer is an important clinical diagnostic sign. MARK ONLY ONE RADIO BUTTON:

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Don't know" or "Refused to answer" is marked, tablet will skip to 3.11.

3.10	For how many days did the ulcer ooze pus?

Ask the question and mark one radio button by clicking. Clicking on Days will bring a keyboard and space to record/type the number of days.

- O Days (enter on next page)
- O Refused to answer
- O Don't know

3.11 Did have yellow discoloration of the eyes?	ellow discoloration of the eyes?
---	----------------------------------

We ask this to determine the presence of jaundice, to help diagnose the cause of death. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- Don't Know

#### If "No" or "Don't know" or "Refused to answer" tablet will go to 3.13.

3.12	For how long did	_ have the yellow discoloration?

If yellow discoloration of the eyes exists, it is important to determine the duration. This will help assess whether this may have led to the death. Ask this question and click the appropriate radio button. Clicking on months or days would bring a keyboard and page to record/enter the number of months or days.

- O Months (enter on next page)
- O Days (enter on next page)
- O Refused to answer
- O Don't Know

3.13	Did	have puffiness of the face?

The accumulation of fluid in the loose tissue spaces around the eyes/eyelids is also characteristic of disturbances in water regulation, and could appear in the absence of ankle swelling, so asking for presence of this sign helps in identifying such problems. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If "No" or "Don't know" or "Refused to answer" tablet will automatically skip to 3.15.

3.14	For how long did	have puffiness of the face?
------	------------------	-----------------------------

"Puffiness" refers to general and consistent puffiness or slight swelling in the face. This "puffiness" referred to here is more persistent than puffiness that might occur in the morning or after extensive sleeping. This question helps to determine fluid retention. MARK ONLY ON RADIO BUTTON. If you click months or days button a keyboard and a page will appear to type the number of months or days.

- O Months (enter on next page)
- O Days (enter on next page)
- O Refused to answer
- O Don't Know

3.15	Did have general puffiness all over his/her body?

This question helps to ascertain fluid accumulation in all the possible sites in the body, in case the respondent does not accurately recall the origin of the puffiness, and the spread. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.16	Did	have a lump in the neck?

Lump(s) on either side of the neck are suggestive of swelling of the lymph glands. These lumps are usually painless. MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

3.17	Did have a lump in the armpit?	
------	--------------------------------	--

#### Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.18	Did	_have a lump in the groin?

"Swelling" (lump) means the area was raised more than normal. The groin is the area between the legs around the inner thigh and lower abdomen. MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

3.19	Did have a cough?	
------	-------------------	--

It is important to know if the person had a cough, and the duration and severity of the cough. Cough is a common symptom to many conditions, and therefore this question should be asked carefully. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If "No" or "Don't know" or "Refused to answer" tablet will skip automatically to 3.22.

3.20	Did the cough produce sputum?

Frequently, a bout of coughing ends with spitting out some secretions (called sputum) produced in the breathing tubes in the chest. The sputum could be clear fluid and may contain pus or even blood (see next question). Production of sputum can help determine the severity of the cough and identify the illness. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer

#### O Don't Know

|--|

Presence of blood in the sputum is a readily recognized sign, and something that respondents are very likely to remember, as told to them by the deceased or witnessed by them. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.22	Did	_ have difficulty breathing?

"Difficulty" in breathing is a dramatic sign, and almost invariably manifests in the period immediately preceding death. Difficulty is manifested by the need for extra effort in breathing, a heaving chest, usually noisy, and sometimes accompanied by cough. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.23	Did experience pain in the chest in the month preceding death?

Chest pain has many possible causes that fall into two major categories: cardiac and non-cardiac causes. Location of the pain in the chest is associated with the type of problem, as well as duration of pain and aggravating or relieving factors. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Don't know" or "Refused to answer" tablet will skip to 3.25.

3.24 How long did the pain last?
----------------------------------

This question is asked if the deceased reported having chest pains. Sometimes, the bout of chest pain leads to unconsciousness and death. MARK ONLY ONE RADIO BUTTON.

- O Less than 30 minutes
- O 30 minutes to 24 hours
- O More than 24 hours
- O Refused to answer
- O Don't know

3.25	Did	have more frequent loose or liquid stools than usual?

"Diarrhea" is the frequent passage of loose or watery stools, with or without blood. The community members may use a local term to describe it. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

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3	•	Z	D

Was there blood in the stool?

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If "No" or "Refused to answer" or "Don't know" tablet will skip 3.28.

3.27	Was there blood in the stool up until death?

Ask this question and MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

3.28	Did stop urinating?

We ask this question because stoppage of urination can be a symptom of obstruction to the canal that carries urine from the bladder out of the body. In other cases, disorders of the kidney can result in the stoppage of urine. It is important that this stoppage of urine should have been for at least 24 hours prior to death. Clarify with the respondent and note accordingly. CHECK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.29	Did vomit in the week preceding the death?
------	--

It is important to record the deceased's history of vomiting in the period leading to death. MARK ONLY ONE radio button.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If "No" or "Refused to answer" or "Don't know" tablet will skip 3.32.

3.30	Was there blood in the vomit?
------	-------------------------------

This question is asked if the deceased reported vomiting during the illness. Fresh blood in the vomit is easily recognized and creates immediate awareness and concern about the illness. It is important to try and distinguish vomiting blood from 'coughing up' blood. Clarify with the respondent and note the response accordingly. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.31	Was the vomit black?

This question is asked if the deceased reported vomiting during the illness. In certain conditions, blood in the vomit does not appear as bright red, fresh blood, but instead, as a blackish, semisolid substance. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.32	Did	have difficulty swallowing?

Difficulty when swallowing is the sensation that food is stuck in the throat or upper abdomen. This may be felt high in the neck or lower down, behind the breastbone (sternum). MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Don't know" or "Refused to answer" tablet will go to 3.35.

3.33	For how long before death did	have difficulty swallowing?
------	-------------------------------	-----------------------------

This question is asked if the deceased reported difficulty swallowing during the illness preceding death. MARK ONLY ONE RADIO BUTTON. Click on radio button either for month or days will bring a keyboard to type/record the NUMBER OF MONTHS, or DAYS.

- O Months (enter on next page)
- O Days (enter on next page)
- O Refused to answer
- O Don't know

3.34	Was the difficulty with swallowing with solids, liquids, or both?
------	---

This question is asked if the deceased reported difficulty swallowing during the illness. Initially, there may be difficulty only in swallowing solids, and later on, difficulty in swallowing anything. Accurate recording of this symptom assists in making diagnoses. MARK ONLY ONE RADIO BUTTON.

- O Solids
- O Both solids and liquids
- O Both
- O Refused to answer
- O Don't Know

3.35	Did	have pain upon swallowing?
------	-----	----------------------------

We ask this question because a strong feeling of burning, squeezing pain while swallowing (felt high in the neck or lower down, behind the breastbone) may be a symptom of a serious disorder. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer

#### O Don't Know

3.36	Did have belly pain?
------	----------------------

It is important to know whether the deceased complained of belly pain during his or her illness, and the site of pain. The belly is part of the body below the rib cage and above the pelvic bones. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Don't know" or "Refused to answer" tablet will skip automatically to 3.39.

|--|

This question is asked if the deceased reported belly pain during the illness. Mark only one radio button. Click on button for months or days or hours would bring a key board to type/record the number of MONTHS or DAYS or HOURS.

- O Months (enter on next page)
- O Days (enter on next page)
- O Hours (enter on next page)
- O Refused to answer
- O Don't know

3.38	Was the pain in the upper or lower belly?
------	---

This question is asked if the deceased reported belly pain during the illness, to record the location of the pain. This is important to identify certain causes which manifest as pain in either the upper or lower part of the belly. "Upper belly" is above the navel. "Lower belly" is below the navel. MARK ONLY ONE RADIO BUTTON.

- O Upper Belly
- O Lower Belly
- O Refused to answer
- O Don't know

3.39 Did have a more than usual protruding belly?
---

Protruding belly is when the size of the belly increases significantly. The increase in size is significant in some cases, and readily recognized. MARK ONLY ONE Radio Button.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Don't know" or "Refused to answer" tablet would skip to 3.42

3.40	
adult_2_65	For how long before death did have a protruding belly?

This question is asked if the deceased reported more than usual protruding belly during the illness preceding death. Usually, the distended belly causes difficulty in breathing, and severely limits the mobility of the affected individual for the entire duration from time of its appearance till death. Use these associated circumstances to help the respondent ascertain the duration of abdominal distention before death and record the response accordingly. Mark only one radio button. Click on months or days radio button would take you to a new page and touch on the space would bring a key board to type/record THE NUMBER OF MONTHS or DAYS.

- O Months (enter on next page)
- O Days (enter on next page)
- O Refused to answer
- O Don't know

3.	41	How rapidly did	develop the protruding belly?	

This question is asked if the deceased reported more than usual protruding belly during the illness. Again, the pace in progression of distension is specific to different conditions, and an accurate response to this question could help identify the probable cause. MARK ONLY ONE RADIO BUTTON.

- O Rapidly
- O Slowly
- O Refused to answer
- O Don't Know

3.42	Did have any mass in the belly?
adult_2_67	

An abdominal mass in the belly is a localized swelling or enlargement in one area of the abdomen. This may not be seen visibly by respondents, and could only be reported by the deceased to his relatives. However, an accurate response is useful in identifying certain conditions. MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If "No" or "Refused to answer" or "Don't know", tablet will skip to question 3.44.

3.43	For how long before death did have a mass in the belly?
adult_2_68	

This question is asked if the deceased reported having a mass in the belly during the illness. Mark only one radio button. Clicking on months or days' button would take you in next page, and then touching on the space provided would bring a key board to type/RECORD THE NUMBER OF MONTHS or DAYS.

- O Months (enter on next page)
- O Days (enter on next page)

- O Refused to answer
- O Don't know

3.44	Did have a stiff neck?
adult_2_72	

It is important to know whether the person's neck became stiff before death. MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Refused to answer" or "Don't know" tablet will skip to question 3.46.

3.45	
adult_2_73	For how long before death did have stiff neck

Ask the question and mark only one radio button. Clicking on Months or Days radio button would take you to a new page and then clicking on the space would bring you a key board to type/RECORD THE NUMBER OF MONTHS or DAYS.

- O Months (enter on next page)
- O Days (enter on next page)
- O Refused to answer
- O Don't Know

3.46	Did experience a period of loss of consciousness?

Death due to any illness is usually preceded by a period of loss of consciousness. Unconsciousness means the complete inability to arouse the individual with no movement except for breathing. MARK ONLY ONE Radio Button.

O Yes

- O No
- O Refused to answer
- O Don't Know

# If "No" or "Refused to answer" or "Don't know" tablet will skip automatically to question3.49 (adult\_2\_82).

3.47	Did the period of loss of consciousness start suddenly or slowly?

The pattern of onset of unconsciousness is specific to certain conditions, being dramatic in some cases and a gradual loss in others. If the unconsciousness develops over a period of 4-6 hours or more, then it is considered as slow onset. MARK ONLY ONE RADIO BUTTON.

- O Suddenly
- O Slowly
- O Refused to answer
- O Don't Know

3.48	Did it continue until death?
------	------------------------------

Ask this question and MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

3.49	Did have convulsions? (Demonstrate)

Convulsions are rapid twitching movements of parts of the limbs or sometimes entire limbs, which frequently subside with the loss of consciousness. Appearance of such fits is indicative of certain illnesses. MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Refused to answer" or "Don't know" tablet will skip automatically to question 3.52

3.50	For how long before death did the convulsions last?
------	---

Ask the question and MARK ONLY ONE RADIO BUTTON. Clicking on Minutes or Hours radio button would take you to a new page and then clicking on the space provided would bring a key board to type/RECORD THE NUMBER OF MINUTES or HOURS.

- O Minutes
- O Hours
- O Refused to answer
- O Don't Know

3.51	Did the person become unconscious immediately after the convulsions?

Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

3.52	Was	in any way paralyzed?	
5.52	vvas		

Paralysis implies the loss of strength or power in certain parts of the body. MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Refused to answer" or "Don't know":

- If the deceased was female, tablet will skip automatically to section 4: Questions for women
- If the deceased was male, tablet will skip automatically to section 5: Tobacco use.

3.53	Which were the limbs or body parts paralyzed?
adult_2_87	

*Read through the list in sequence and MARK ALL THE CHECK BOXES (Multiple Choices possible) THAT APPLY.* 

- □ Right side (arm and leg)
- □ Left side (arm and leg)
- □ Lower part of the body
- Upper part of the body
- One leg only
- □ One arm only
- Other
- Refused to answer
- Don't know

#### **Section 4: Questions for women**

4.1 Did have any swelling or lump in the breast?	
--	--

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

4.2	Did have any ulcers (pits) in the breast?
	Show photo

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If the decedent is under 18 years old, tablet will skip automatically to question 4.3

#### If the decedent is 18-39 years old, tablet will skip to question 4.6

If the decedent is over 40 years old, tablet will skip to question 4.4

4.3	Did	_ ever have a period or menstruate?
-----	-----	-------------------------------------

*Check the age group to confirm that women in the under 18 years age group. Ask this question and MARK ONLY ONE RADIO BUTTON.* 

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "Yes" "Don't know" or "Refused to answer" tablet will skip to question 4.6

#### If "No" tablet will skip to Section 5: Tobacco Use

4.4	Had's periods stopped naturally because of menopause?
-----	---

*Check the age group to confirm that women in the over 22-44 year's age group, and ask the question and MARK ONLY ONE RADIO BUTTON.* 

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" tablet will skip to 4.6

4.5	Did have vaginal bleeding after cessation of menstruation? (post-
	menopausal)

Check the age group to confirm that women in the over 40 year's age group, and ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" Tablet will skip to Section 5: Tobacco Use

# 4.6 Did \_\_\_\_\_ have vaginal bleeding other than her period? (intermenstrual)

Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

4.7	Was there excessive vaginal bleeding in the week prior to death?

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

4.8 At the time of death was her period overdue?	4.8	At the time of death was her period overdue?
--	-----	--

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Refused to answer" or "Don't know" tablet will skip to question 4.10

4.9	For how many weeks was her period overdue?

This includes an overdue period for the current cycle (during the month of death) or periods prior. Ask this question and MARK ONLY ONE RADIO BUTTON THAT APPLY. CLICKING on WEEKS"S button would take you to a new page and clicking on space provided would bring a key board to RECORD THE NUMBER OF WEEKS.

- O Weeks (enter on next page)
- O Refused to answer
- O Don't Know

4.10	Did she have a sharp pain in the belly shortly before death?

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

4.11	Was she pregnant at the time of death?
------	--

During the early phase of pregnancy, this may be known only to other female members of the family, notably sisters. Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Refused to answer" or "Don't know", tablet will skip to question 4.18

4.12	For how many months was she pregnant?
------	---------------------------------------

Ask this question and MARK ONLY ONE RADIO BUTTON. Clicking on month's button would take you to a new page and clicking on space provided would bring a key board to RECORD THE NUMBER OF MONTHS.

- O Months (enter on next page)
- O Refused to answer
- O Don't know

4.13	Did die during an abortion?

Abortion is the termination of the pregnancy by spontaneous or induced expulsion of the products of conception within the first 28 weeks of pregnancy. A history of abortion is useful in identifying the probable cause of death. Ask this question and MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

#### *If "Yes", tablet will skip to 4.20.*

4.14	Did bleeding occur while she was pregnant?
------	--

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

4.15	Did she have excessive bleeding during labor or delivery?
------	---

Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

4.16	Did she die during labor or delivery?

*Labor is the period of time by which contractions are less than 10 minutes apart*. Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

4.17	For how many hours was she in labor?
------	--------------------------------------

Ask this question and MARK ONLY ONE RADIO BUTTON. Clicking on hours' button would take you to a new page and clicking on space provided would bring a key board to RECORD THE NUMBER OF HOURS.

- O Hours (enter on next page)
- O Refused to answer
- O Don't know

#### If answer to 4.16 is "Yes", tablet will skip to next section

4.18	Did she die within 6 weeks of having an abortion?
------	---

## Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "Yes", tablet will skip to section 4.20

4.19	Did she die within 6 weeks of childbirth?
------	---

#### Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No

- O Refused to answer
- O Don't Know

If "No" or "Refused to answer" or "Don't know", tablet will skip to next Section 5: Tobacco Use.

4.20	Did she have excessive bleeding after delivery or abortion?

#### Ask this question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### **Section 5: Tobacco use**

5.1	Did use tobacco?

Ask this question and MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Refused to answer" or "Don't know" tablet will skip to Section 6: Health Records.

5.2	What kind of tobacco did	use?
-----	--------------------------	------

Ask this question and MARK ALL THE CHECK BOXES (Multiple Choices Possible) THAT APPLY.

- □ Cigarettes
- Pipe
- □ Chewing Tobacco

- $\Box$  Local form of tobacco
- Other
- □ Refused to answer
- Don't know

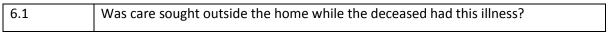
## *If "Yes" to cigarettes, continue to question 5.3. If "No" to cigarettes, tablet would skip to Section 6: Health Records*

5.3	How many cigarettes did smoke daily?

Ask the question and MARK ONLY ONE RADIO BUTTON. Clicking on Cigarettes per day button would take you to a new page, and touching on the space provided would bring a key board to record/type the number of cigarettes per day.

- O Cigarettes per day (enter on next page)
- O Refused to answer
- O Don't know

#### **Section 6: Health records**



It is important to learn if outside care was sought deceased at the time of the illness. Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If "No" or "Don't know" or "Refused to answer", go to question 6.6 (adult\_6\_4).

6.2	Where or from whom did you seek care?

Read out the choices/lists slowly and one by one and MARK ALL THE CHECK BOXES (Multiple Choices Possible) THAT APPLY (mark only when respondent answer "yes" to 6.1. Otherwise leave blank). Please mark "refused to answer" or "don't know" only if no boxes are checked.

	Traditional Healer
	Homeopath
	Religious Leader
	Govt. Hospital
	Govt. Health Centre or Clinic
	Private Hospital
	Community-based Practitioner Associated with Health System
	Traditional Birth Attendant
	Private Physician
	Pharmacy, Drug Seller, Store, Market
	Relatives, Friend (outside household)
	Refused to answer
	Don't know

6.3	Record the name and address of the hospital, health center or clinic where the
	care was sought

Touching/clicking the space provided will bring a keyboard to type and record the name and address of the health facilities.

6.4	Did a health care worker tell you the cause of death?

Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

## If "No" or "Don't know" or "Refused to answer", tablet will skip to question 6.6.

6.5	What did the health care worker say?

Touching/clicking the space provided will bring a keyboard to type and record the response.

	6.6	Do you have any health records that belonged to the deceased?	
--	-----	---	--

Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Don't know" or "Refused to answer", go to question 6.11.

ſ	6.7	Can I see the health records?

Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No
- O Refused to answer
- O Don't Know

If "No" or "Don't know" or "Refused to answer" tablet will skip to question 6.11.

*If "Yes", and respondent allows you to see the records, transcribe all the entries*. There will be an option to take a picture of the health records, and a second option to take a second picture if necessary. Tablet screen will show two buttons:

- 1. Take a picture see the records through the camera button and fix/adjust them before pushing the camera button to take a photo. Push 'ok' to complete the process
- 2. Choose image.

If yes to question 6.7, after the picture taking option, a screen with the question "Are the dates known for the most recent visits and the last note?" will appear with the below information on one page.

6.8	Record the dates of the two most recent visits from the health record
	If not listed, mark 9999

Please read the records and mark all boxes that apply, and pages with space for entering the information from the records would be appear sequentially.

- □ Most recent visit date available
- □ Second most recent visit date available
- Date of the last note available
- Don't know

Checking/ticking recent visit boxes would be followed by pages with option to write the dates for two recent visits.

 Year:
 \_\_\_\_\_\_ Enter four digit years. Enter 9999 if unknown

 Month:
 \_\_\_\_\_\_ Enter Month (January =1). Enter 99 if unknown

Day of the month: \_\_\_\_\_\_ Enter Day between 1 and 31. Enter 99 if unknown

Second most recent visit

Year: \_\_\_\_\_\_ Enter four digit years. Enter 9999 if unknown

Month: \_\_\_\_\_Enter Month (January =1). Enter 99 if unknown

Day of the month: \_\_\_\_\_\_ Enter Day between 1 and 31. Enter 99 if unknown

If you tick the date of last note available, a screen/page would come with option to enter the date and write/transcribe the note. Just touch the space, a keyboard will appear to enter and write the information.

6.9	Record the date of the last note
	Enter 9999 if unknown

The date of the last note

Year:	_ Enter four digit years. Enter 9999 if unknown
Month:	_Enter Month (January =1). Enter 99 if unknown
Day of the month:	_ Enter Day between 1 and 31. Enter 99 if unknown

6.10 Transcribe the note:	
---------------------------	--

Transcribe the note\_\_\_\_\_

-		
	6.11	Was a death certificate issued?

Ask the question and MARK ONLY ONE RADIO BUTTON.

O Yes

- O No
- O Refused to answer
- O Don't Know

#### If "No" or "Don't know" or "Refused to answer" tablet will skip to Section 7: Open ended response.

6.12	Can I see the death certificate?

Ask the question and MARK ONLY ONE RADIO BUTTON.

- O Yes
- O No

O Refused to answer

#### If "No" or refused to answer, tablet will skip Section 7: Open ended response.

*If "Yes", there will be an option to take a picture of the death certificate,* and a second option to take a second picture if necessary. Tablet screen will show two buttons:

- 1. Take a picture see the records through the camera button and fix/adjust them before pushing the camera button to take a photo. Push 'ok' to complete the process
- 2. Choose image.

#### If answer to question 6.12 (adult\_6\_10) is "yes", a screen would come with the following:

- □ Immediate cause of death
- □ First underlying cause of death
- □ Second underlying cause of death
- □ Third underlying cause of death
- □ Contributing cause of death
- Don't know

Please read the death certificate and mark all the boxes that apply (Multiple responses). For each checking box ticked, spaces would be provided in subsequent pages to enter the corresponding causes of death. If there is only one cause of death in certificate, just check the 1<sup>st</sup> box and write the cause of death accordingly.

6.13	Record the immediate cause of death from the certificate.

This is the first in the list of causes of death on the certificate. Enter the first cause of death in the corresponding space provided. If there is only one cause of death, then check the first box and enter the cause of death here .

6.14	Record the first underlying cause of death from the certificate.
------	--

This follows the immediate cause of death in the list of causes of death on the certificate. Enter the first underlying cause of death in the corresponding space provided.

6.15	Record the second underlying cause of death from the certificate.

This follows the first underlying cause of death in the list of causes of death on the certificate. Enter the second underlying cause of death in the corresponding space provided.

6.16	Record the third underlying cause of death from the certificate.	

This follows the second underlying cause of death in the list of causes of death on the certificate. Enter the third underlying cause of death in the corresponding space provided.

6.17 Record the contributing cause(s) of death from the certificate.
--

This follows the all the underlying causes of death in the list of causes of death on the certificate and recorded under part II. Enter the contributing cause, separating each with a coma in the corresponding space provided.

## END OF HEALTH RECORDS SECTION GO TO SECTION 7

#### Section 7: Open ended response and interviewer comments/observations

**Note to Interviewer**: Section 7 is for recording open narrative for adding additional information, and this information contributes to the process of diagnosing a most likely cause of death. As the tasks of writing and translation of narratives in tablet is time consuming, SmartVA includes a checklist of 11 keywords (such as chronic kidney disease, dialysis etc.) to use in open narrative rather than having interviewers record an entire conversion. This checklist comprises a list of words which has to be endorsed by the interviewer when mentioned by the respondent in describing the circumstances surrounding the death. Instruction is given below on how to ask additional information and how to endorse the key words before staring the open narrative section.

*Instructions to the interviewer*: Say to the respondent: "Thank you for your responses to this set of questions. Could you please summarize, or tell me in your own words, any additional information about the illness and/or death of your loved one?"

**To the interviewer**: Listen to what the respondent tells you in his/her own words. Do not prompt except for asking whether there was anything else after the respondent finishes. If the respondent mentions any of the following words (local terms also apply), mark "mentioned". Tell the respondent to stop and start again if they mention a word of interest, so you have time to mark it down. MARK ALL CHECK BOXES THAT APPLY (MULTIPLE ANSWERS POSSIBLE).

	Key words	Mentioned
	Chronic Kidney Disease	?
	Dialysis	?
	Fever	?
	Heart Attack (AMI)	?
7.1	Heart Problems	?
	Jaundice	?
	Liver Failure	?
	Malaria	?
	Pneumonia	?
	Renal (Kidney) Failure	?
	Suicide	?

If there is no box checked, a screen would appear to be sure that no word was checked. Mark the box as appropriate.

- $\circ$  No word was mentioned
- Don't know

## **END OF INTERVIEW**

#### THANK PARTICIPANT FOR THEIR PARTICIPATION

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# Appendix 1: Glossary of terms

Assignment area (AA)	This is your assigned area. An AA usually represents the average	
	workload for one verbal autopsy interviewer; an interviewer should	
	be able to complete VA interviews with minimum travel from area to	
	area.	
Callback	A "callback" is a second or third interview attempt by the interviewer	
	to a household in order to conduct a verbal autopsy interview with	
	an appropriate respondent.	
Confidentiality	Confidentiality is a guarantee that the information respondents	
	provide to the staff /interviewer will not be revealed to others.	
Duration	For all signs or symptoms that were not associated with a previously-	
	diagnosed condition, nor related to an injury, "duration" is defined as	
	the period starting from the <i>appearance</i> of that particular	
	sign/symptom to the <i>cessation</i> of that symptom, regardless of the	
	presence of that sign/symptom at the time of death, and irrespective	
	of whether the sign/symptom appeared intermittently.	
	For example, if a woman began to have fever 10 days before death,	
	but she ceased having fever two days before death, the <i>duration</i> of	
	her fever would be eight days, even if she did not have fever for each	
	and every one of those eight days.	
Household	A "household" is any arrangement in which one or more persons	
	make common provisions for their own food or other essentials for	
	living. The persons may have a common budget, be related or	
	unrelated, or a combination. There may be more than one household	
	in a housing unit.	
Informed consent	It refers to agreeing to participate in a project after achieving a full	
	understanding of the project, an explanation of the purposes of	
	project activities and the expected duration of the subject's	
	participation and a description of the procedures to be followed.	
Verbal autopsy (VA)	Verbal autopsy is a process used to collect information (using a	
	specially-designed form) from relatives/caregivers of a deceased	
	person. The process involves interviewing relatives or caregivers of	
	the deceased regarding their knowledge of the symptoms, signs, and	
	circumstances leading to death. The information that is collected is	
	used to assign a probable cause of death for each reported death.	
VA interviewer	This is the person responsible for conducting VA interviews with the	
VAIIIterviewei	bereaved family members in the household. He or she should be	
	knowledgeable of the area in which he or she is assigned. The verbal	
	autopsy interviewer must be accepted by the community in which he	
	or she will be working. Although requirements may be site-specific,	
	some requirements of verbal autopsy interviewer include: at least	
	having 12 years of the national education system and the ability to	
	speak the dialect of the area to which he or she is assigned.	
	There is a range of opinion about whether medical training should be	
	preferred qualification for a VA interviewer or whether educated but	
	non-medically trained persons are more suitable. Local experience	
	will determine the optimal solution.	

VA Interviewer Manual	Contains information on what the VA interviewer needs to do his/her	
	job.	
VA respondent	This is the adult being interviewed, who is typically a resident in the	
	household. The respondent must be someone who is able to give	
	reliable and accurate information regarding the members of the	
	household. In the case of a death in the family, the respondent will	
	be able to give information about the circumstances leading to the	
	death. Ideally, the VA respondent for the VA interview would be the	
	one who cared for the deceased during the period of illness.	
VA questionnaire	This is a form that is used to collect information on the history of	
	illness of the deceased and presence of signs and symptoms. The	
	form is to be completed by the interviewer during VA interviews.	
	There are four modules used in the PHMRC project.	





Australian Government

Department of Foreign Affairs and Trade

The program partners on this initiative include: The University of Melbourne, Australia; CDC Foundation, USA; Vital Strategies, USA; Johns Hopkins Bloomberg School of Public Health, USA; World Health Organization, Switzerland.

Civil Registration and Vital Statistics partners:





Helping CDC Do More, Faster



The University of Melbourne recognises the Institute of Health Metrics and Evaluation (IHME), University of Washington, for their contribution.

# For more information, contact: E: CRVS-info@unimelb.edu.au W: mspgh.unimelb.edu.au/dataforhealth

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