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CRVS technical guide

SmartVA: Interviewer's Manual

March 2019





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Interactive and practical resources designed to influence and align CRVS processes with established international or best-practice standards. These resources, which are used extensively in the Initiative's training courses, aim to change practice and ensure countries benefit from such changes by developing critical CRVS capacity among technical officers and ministries.

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The information contained in this manual provides generic information to intended VA interviewers on how to conduct VA 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 BD4H Country Implementation Team prior to any VA activities taking place.

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Preface

About this manual

This manual is intended to provide **verbal autopsy** (VA)¹ 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 as part of routine surveillance. This manual also shows how to conduct an interview with SmartVA, using the electronic version of the Population Health Metrics Research Consortium (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 work within **assignment areas**. The manual provides guidelines 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 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 VA 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 suffered before death; and 3) interpreting the interview data to diagnose the most likely cause of death.

¹ Definitions of words in bold are found in Appendix 1: Glossary

Overview of PHMRC Shortened Verbal Autopsy questionnaire

Electronic shortened VA questionnaire

The PHMRC shortened (SmartVA) questionnaire is a VA instrument developed by PHMRC research group², based on World Health Organization standards. The questionnaire, and the 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. 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 to 11 years) deaths;
4. Age-specific module for adolescent and adult (12 years or more) deaths.

The SmartVA 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 (SmartVA) questionnaire, the ODK suite for data collection, and the SmartVA-Analyze software for computer certification of VA. SmartVA takes VA interview data (data collected electronically using the PHMRC instrument on the ODK Collect system on Android devices) and produces cause of death estimates at the individual and population levels. The IHME³ Tariff 2.0 Verbal Autopsy cause of death assignment system is designed and validated with the PHMRC Gold Standard VA database, which is collected as part of the PHMRC Gold Standard VA Validation Study.⁴

² For more information see <http://www.healthdata.org/population-health-metrics-research-consortium-phmrc>

³ Institute for Health Metrics and Evaluation

⁴ For more information see <http://pophealthmetrics.biomedcentral.com/articles/10.1186/1478-7954-9-27>

1 Roles and responsibilities of the VA interviewer

1.1 Overview of activities and tasks

As an interviewer for verbal autopsy (VA), you will represent your country/city/region 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 which 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
- Send or upload completed interviews for analysis
- Report your progress and any issues 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 interview, you must read the consent form to the participant and obtain his/her informed consent. A standard consent form is given in the tablet. In some countries, when conducting VA as part of routine data collection, formal consent may not be required. VA interviewers must still ensure that the respondent understands the purpose of the interview and agrees to it.

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 poor, 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 you are having difficulty

completing VAs for any reason, please discuss this with your supervisor. Falsification of VAs is considered a serious matter which might lead to dismissal or official/legal action.

1.5 Sensitivity training

Material in the VA Interview can be very sensitive, so it is important you are sensitive to the family members who you interview. This should be covered in the training you receive for VA.

2 Administrative issues and general instructions

2.1 Materials you will need

Interviewers are provided the materials listed below 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 VA forms should always be returned to the study office by the interviewer.

Check and make sure you have the following materials:

- VA interviewer self-assessment checklist
- VA general information/locator information (location of the family of the deceased)
- Informed consent letter or information sheet
- Tablet with installed Open Data Kit (ODK) Collect and Population Health Metrics Research Consortium (PHMRC) shortened (SmartVA) questionnaire (fully charged and working) or paper version of the questionnaire
- 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. You will discuss with your supervisor the VA interviews to be conducted and you will administer the VA interviews to the families of the deceased.

2.3 Responding to questions regarding benefits or payment

Remember, there is no payment for participating in a VA interview. This is explained in the consent form. You can explain that information obtained from this interview can help identify causes of death, and that this helps with improving public health and 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. There may be other methods of assessment as per country protocols.

3 Selecting respondents

3.1 Gaining the trust and cooperation of households

To obtain complete and accurate data, you need the cooperation of the household, and this requires gaining their trust and confidence. You can do this by making a good impression, and by conducting yourself in a professional yet friendly manner. Your appearance is very important.

Be professional

Remember, you are a professional, and a part of an important national program. You should be well-groomed and your clothes should be neat, clean, and appropriate for conducting a professional interview. In addition, you should address **VA respondents** in a friendly but professional manner.

Understand your role

You should be able to answer any questions that household respondents may ask about the purpose of the VA. If you cannot, refer people to a supervisor. You should be able to explain why the VA interview is being conducted in their area. You must assure participants that their responses will be highly confidential and that no information will be released to any person outside the program.

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 (and cared for) the deceased during their illness. The head of the household or their spouse is often the preferred 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 who is at home (he/she should be at least 18 years of age). If this is not possible, then you should ask for the eldest non-relative who is a permanent member of the household (again, 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 honestly and to the best of your knowledge. Before agreeing to be interviewed, the respondent may ask questions about the survey and why he/she 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. If the respondent is still upset, then you can:

- Take a moment to talk with the respondent and try to answer any questions that might be upsetting him/her
- Schedule a time to come back and finish the interview.

3.6 How to handle multiple respondents

In some cases, 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
- Schedule 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 neighbour, when you might be able to find other family members at home. 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. Note this return date in your notebook or mortality register.

You are strongly encouraged 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 conducting an interview. If, after three attempts, you have not been able to locate an acceptable respondent at the house, then you should leave the household without conducting a VA 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 which might 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 collected on households and the deaths which occur in these households 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 using 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. The 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 VA 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 are crucial in collection of accurate information about death rates and causes of death.

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

A. As a VA interviewer, I am forbidden to share any information that is collected. All employees of the central office are required to keep all information which is provided to them in confidence. Your information will be added to that from all the other areas, and data will only be released based on the country as a whole. This protects 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. Here is an example of 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 enquire 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

If culturally appropriate, and to establish a good rapport with the respondent, look at them when administering the interview, when you are not entering information on the tablet or paper form. Remember, this is a difficult time for the respondent and they must feel comfortable with you if they are to complete the interview.

4.3 How to read questions

Read each question in full 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 possible answer 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 possible answers and think about the question before recording their answer.

Probing

If the respondent does not 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 related to the subject material to try to 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. The tablet will skip to the relevant section/question automatically. For example, the Adolescent and Adult Age-Specific Module has a special section on women’s health, for female deaths only. If using a paper format, you will need to follow the instructions on the paper form in order to manually conduct these skips.

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.
2. 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 best suit the current interview.
3. Some questions allow more than one answer. These responses are preceded by check boxes (check boxes (☐) are rectangular, and multiple boxes may be checked). Touching on the check box will mark the box with ✕ or ✓. Follow the instructions with each question that tell you whether to read the possible answers 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 (a radio button (○) is a circular hollow symbol which gets filled up on being touched and allows only one response).
5. Record dates in the spaces provided.

Note: When using a tablet, the date of birth and date of death will be recorded using an interactive calendar.

- 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 = 5, June = 6, July = 7, August = 8, September = 9, 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
7. Some answers request more specific information (for example, “other (specify) _____”). Record the respondent’s answer (for example, “health centre” or “daughter”).

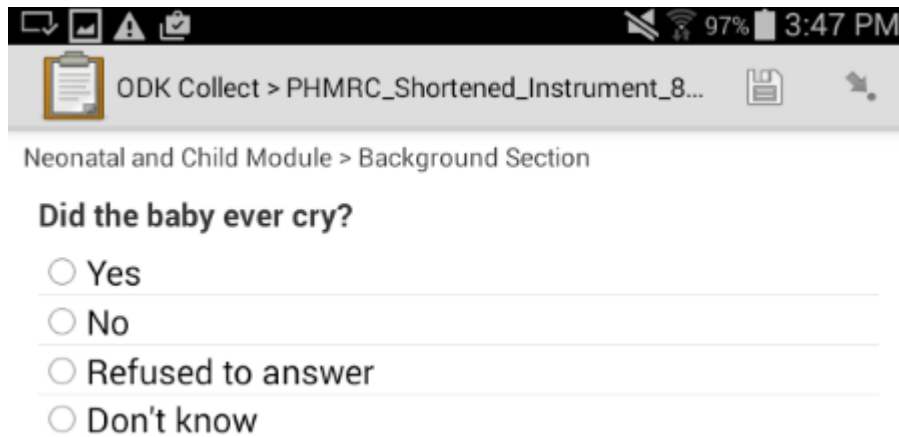
Respondents may tend to give answers that they think will please the interviewer. It is therefore very important that you remain absolutely neutral towards the responses during the interview. Do not allow the tone of your voice or your facial expression to show any surprise at, or approval or disapproval of, the respondent’s answers.

4.7 General instructions on tablet use

General instructions

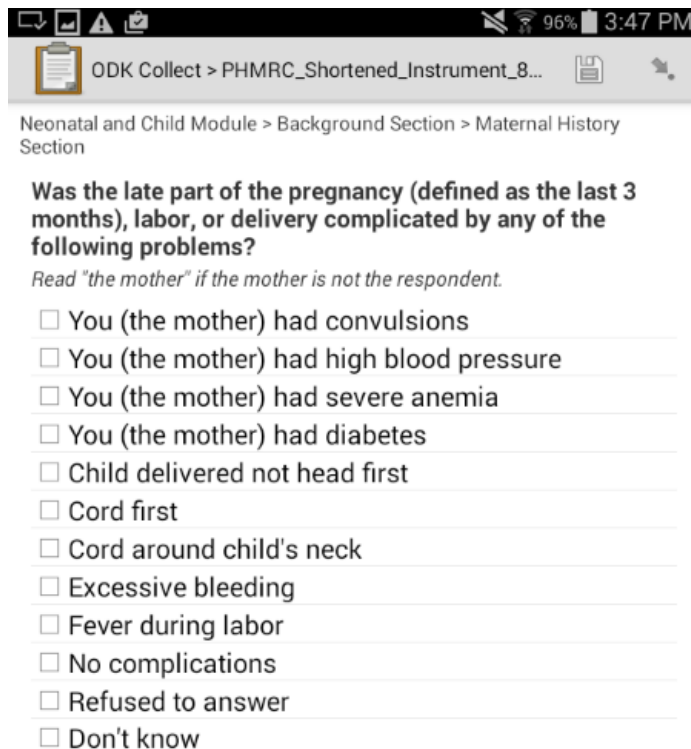
- The PHMRC Shortened (SmartVA) questionnaire consists of a general module followed by age-specific modules either for neonate (0–28 days), child (29 days to 11 years), or an adolescent/adult (≥12 years) death
- The questionnaire includes filter questions with automatic skips to an appropriate question
- A response to a question may consist of text fields, radio buttons, check boxes or date fields, or a combination of these
- The response categories of many questions are a mix of “Yes”, “No”, “Refused to answer”, and “Don’t know”. Each of these categories/responses is preceded by a radio button, a circular symbol that only allows selection of one category from the list (Figure 1).

Figure 1 Example of a yes/no question in ODK



- Some questions allow multiple response categories to be selected, and each of these categories is preceded by a check box. These check boxes are rectangular and allow checking one or more categories by touching the boxes (Figure 2).

Figure 2 Example of a multiple response question in ODK



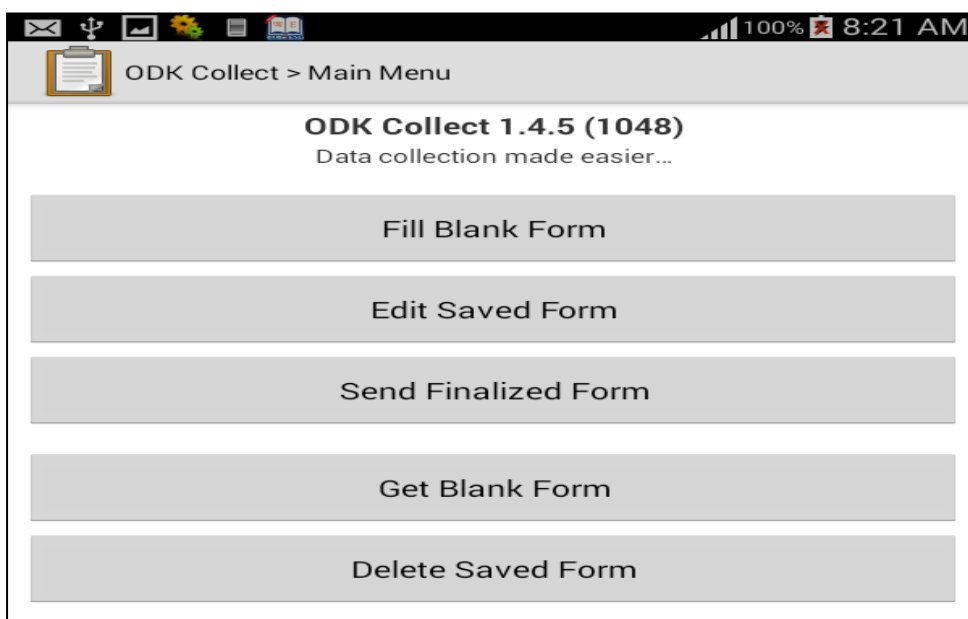
- Swipe the screen of the tablet right-to-left to continue data entry on the next page or left-to-right to check data entered on the previous page
- Most often, working with the questionnaire on the tablet will require marking a radio or check box, or entering text, to navigate the screen or move from 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”
- There are a few questions which will allow you to proceed without making any response
- Sometimes checking boxes/filling the radio button will create a space on the next page to enter or write the appropriate response
 - Touching the space will provide a temporary keyboard for entering 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. If necessary, press the home button of the Tab to go to the home screen. Touch the application button
3. Touch the “ODK Collect” icon on the Tab home screen (Figure 3). On touching 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



4. Touch the “Fill Blank Form” button on the ODK Collect software screen to open the form

5. Touch the form named “SmartVA_Month_YYYY”⁵ to start a VA interview. Read the on-screen information about the questions before beginning to enter responses
6. Swipe the screen right-to-left and continue the interview
7. When the respondent agrees to continue the interview, read and follow the screen instructions carefully. More information on filling out structured questions and open response questions is provided in the interviewer manual. At the end of each age-specific module, a screen will appear for checking off pre-selected keywords from a list while listening to the respondent’s open-ended responses.

Completing open-ended responses

The PHMRC shortened VA Questionnaire includes an open-ended question, in which the respondent 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 screen contains a list of pre-determined categories, each preceded by a check box, and these allow multiple answers
- Consult with local people and health professionals and make a dictionary of locally used synonyms 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
- When you get to the end of the interview, you will need to save the completed VA form for that death.

⁵ Different countries may have their own naming conventions and versions of the SmartVA questionnaire.

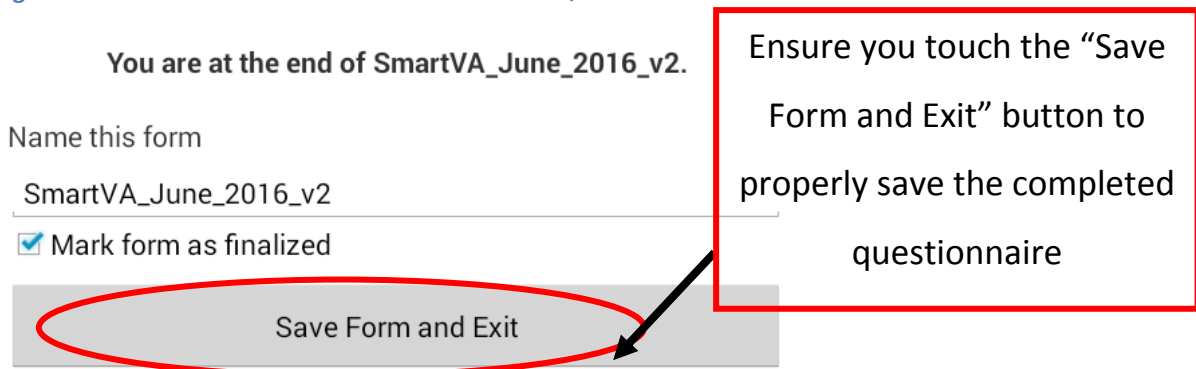
Saving the work and editing a VA

Incorrect entries can be edited by going back to the previous page (swiping left-to-right). After the form has been completed, edits can be made by clicking “Edit Saved Form”.

At the end of each interview, a screen like that shown in Figure 4 will pop up.

- By default, the tablet will show the relevant country SmartVA questionnaire form name.
- Touch the button “Save Form and Exit” to finish the interview.

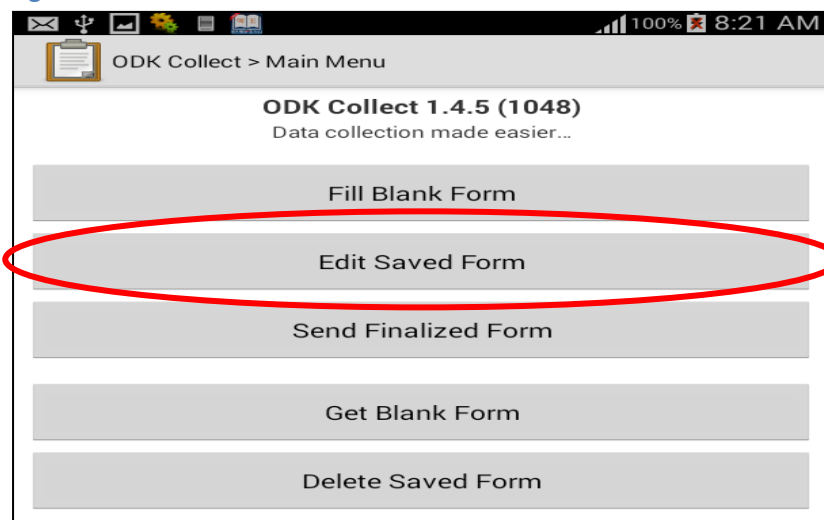
Figure 4 Save and exit screen at the end of ODK VAQ



Data editing

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

Figure 5 Edit saved forms



- Step 1: After touching the “Edit Saved Form” button you will see a 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.
- Step 3: When finished, touch the “Save” icon on the Tab. Alternatively, when you reach the last question you can touch the “Save Form and Exit” button.

Data saving step by step

It is possible to save the VA form either after completing the VA or after completing any question by clicking “Save Changes” in the dialog box.

- For a new interview, you can save the form by touching the button “Save Form and Exit” 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 select “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 in the folder “Instances”.

Starting a new interview

Go to the ODK icon from the home screen and click on “Fill Blank Form” to start a new interview.

Data transfer and uploading

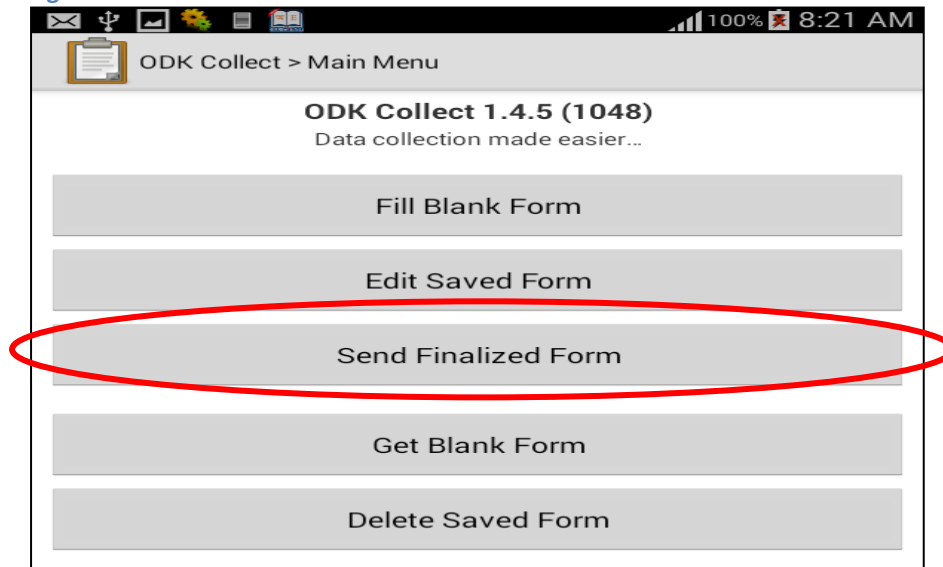
Once the VAs have been collected, it is necessary to upload the information to a database for further analysis using the SmartVA desktop application.⁶

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 interviewer needs to be told the method of data transfer in advance.

⁶ The instructions in this manual relate to the role of the VA interviewer. The technical instructions for data transfer using online and offline methods and data management are 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 “Send Finalized Form” (see Figure 6). The relevant VA interviews can be selected and sent to a remote central server.

Figure 6 Send Finalized forms



If using offline methods, the VA interviewer needs to take the tablet to the relevant centre. By connecting the tablet to a computer by USB cable, the VA information can be saved to the computer and then uploaded to the remote server (if internet available) or analysed locally.

5 Instructions for the General Information Module

The General Information Module, referred to as the General Module, will be completed for all VA interviews and collects administrative information on the deceased and the respondent. This section will be modified based on the administrative information needed by different countries. The General Module includes questions on:

- Consent (if required)
- Questions about the deceased
- Information about the respondent
- Questions on the notification and registration of death. (Sometimes these questions will be included in the other sections of the General Module).

Some of the questions about the deceased (for instance the address) can be obtained from surveillance data or the local reporting system. These questions may be completed before going into the field to conduct the interview and should be checked during the VA Interview. Once the General Module is completed, the tablet will automatically skip to the appropriate age group-specific VA module.

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 but you should follow the local protocol for this introduction to the family:*

"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: 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.*

Did respondent give consent?

Yes

No

Please note, this section may not be required in all countries. Instead the tablet will ask the question "Continue with Interview?"

If answer is "Yes", tablet skips to Section 2: Questions on the deceased.

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

Section 2: Questions on the deceased

A number of questions about the deceased will be asked. The exact ordering and values to be entered will vary according to the administrative requirements of the country. They include:

What is the VA ID number?

At the beginning of interview, assign an identification number for the deceased using local standards. You may be required to enter the ID into the tablet. In some cases, this ID is generated automatically from other data included in the General Module.

What was the name of the deceased?

Type the name of the deceased using the pop-up keyboard. There may be just one field or there may be space for a surname, first name and middle/other name. In some instances, like an infant less than one month old, a name might not have been assigned. In this case, you can record "Baby".

What was the location of the deceased?

Type the location of the deceased using the pop-up keyboard. There may be several fields to record the different administrative levels (for instance, village, district, province) according to the convention of the country.

What was the sex of the deceased?

Sex should be carefully recorded since different questions will be asked of women and men, and causes of death may also be different. This question refers to the sex of the individual as born, and not gender (for example, someone may choose to identify as a member of the opposite sex to which they were born or to a third category which is neither male nor female). Click the radio button to mark the answer that corresponds to the sex of the deceased. MARK ONLY ONE OPTION. For example, touch the radio button for “Male” if the deceased was born a boy. Similarly touch the button for “Female” if the deceased was born a girl.

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

Do you know the date of birth of the deceased?

Record if the respondent knows the date of birth of the deceased.

- Yes
- No

If yes, a pop-up calendar will appear to record the date of birth (day, month and year).

Do you know the date of death of the deceased?

- Yes
- No

If yes, a pop-up calendar will appear to record the date of death (day, month and year).

What was the last known age of the deceased?

This question will only be asked if the date of birth and/or the date of death is unknown, otherwise it will be automatically calculated.

If less than 24 hours, enter 00 days. Enter age in days up to 28 days. Enter 29 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.

For unknown enter 99.

- Years (enter on next page)

- Months (enter on next page)
- Days (enter on next page)
- 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 neither the deceased's date of birth nor age is 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 age of the deceased person.

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

This question will only be asked if the respondent does not know the date of birth and/or date of death and they do not know the age of the deceased. Mark the radio button below to record the deceased's age category.

- 28 days or less
- 29 days to 11 years
- 12 years and older
- Refused to answer
- Don't know

If the radio button for age and age group are both marked "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. Age of the deceased is required to direct the interviewer to the appropriate age-related module.

Where did the deceased die?

Mark the appropriate box that corresponds to 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” (that is, health institution with in-patient facilities) versus “other health facility” (dispensaries, health centres or private clinics, where patients are seen on out-patient basis).

Marking the button “other” will provide space on the next page to write place of death using a pop-up keyboard.

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

Section 3: Information on the respondent

Several questions will be asked about the respondent and these will vary by country. They may include:

What is your [the respondent's] name?

What is the sex of the respondent?

- Male
- Female

What is your [the respondent's] relationship to the deceased?

Mark the appropriate box that corresponds with the relationship of the respondent to the deceased.

- Mother
- Father
- Grandmother
- Grandfather
- Aunt
- Uncle
- Husband

- Wife
- Brother
- Sister
- Birth attendant (type _____)
- Other male (specify _____)
- Other female (specify _____)

Section 4: Questions on the registration and notification of death

This section asks questions about the registration and notification of death. **This section is not included for all countries.** The questions may vary and some may also be included in other sections of the General Module (for example, in Section 2: Questions on the deceased). In some countries, additional questions (like the name of the deceased's father or mother) may be asked.

Has this death been registered?

Ask the respondent where the details of the deceased have been registered with the local registry office. Please note, this question may not be applicable for all countries.

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

Record the date of registration

If yes to the above question, follow the Tab instruction and enter the year, month and 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 between 1 and 31. Enter 99 if unknown*

Record the registration number

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

Has this death been notified?

Please note, this question may not be applicable for all countries.

- Yes
- No
- Don't know

Record notification number

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

Did the decedent have a National ID number?

Please note, this question may not be applicable for all countries

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

If "Too young for a National ID number" is checked, tablet will skip to the question asking about parent's ID.

Record the National ID number

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

Does one of the parents have a National ID number?

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

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

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

Which parent will we record?

If either of the parents has an ID card, ask which parents' ID number will be recorded.

- Mother
- Father

Record the parent's National ID number

Please inspect the ID card and record the ID number.

If deceased was 28 days old or less, tablet will skip to Neonate VA Module

If deceased was 29 days to 11 years old, tablet will skip 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 stillbirths and decedents who were 0–28 days old at the time of death. The questions in this module include:

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

The tablet will automatically select this module when the age of the decedent falls in this category (0–28 days inclusive). The tablet will 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.

- Yes
- No

1.2	What was the weight of the deceased at birth?
-----	---

Low birth weight is an important factor associated with increased risk of neonatal death. If the birth weight of the deceased baby is available/known, please record, and mark ONLY ONE BUTTON.

Marking either the button for “grams” or “kilograms” will provide space on the next page to enter the birth weight.

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

If the weight of the deceased at birth is known, tablet will skip to question 1.4.

1.3	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 first four alternatives. 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 alternatives before giving her answer. We want to know if the infant was small or large because both can indicate problems.

- 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?
-----	----------------------------------

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

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

This question will help us understand if the infant was stillborn.

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

1.6	Did the baby ever move?
-----	-------------------------

This question will help us understand if the infant was stillborn.

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

1.7	Did the baby ever breathe?
-----	----------------------------

This question will help us understand if the infant was stillborn.

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

Instructions to the interviewer: *The tablet will review answers to questions 1.5, 1.6 and 1.7. If all three responses are “yes” or “Refused to answer” or “Don't know”, a screen will appear on the next page saying, “Because the baby was too old or because the baby either cried, moved, or breathed, this was not a still birth”.*

If all three responses are “No” and the age is “0” then a screen will appear on the next the page saying, “Because the baby never cried, moved or breathed, this was a stillbirth”.

If the answer to questions 1.5, 1.6 and 1.7 are “No” but the age of the child is greater than 0, a screen will appear on the next page saying ‘Ask the relative whether the baby survived for more than 24 hours’. If the answer is “Yes” a screen will appear on the next page saying “Because the baby was too old or because the baby either cried, moved, or breathed, this was not a still birth”. If the answer is “No” then a screen will appear on the next the page saying, “Because the baby never cried, moved or breathed, this was a stillbirth”. In this latter situation, the Interviewer should go back to the General Module and change the age to ‘00’.

For live birth, tablet will skip to question 1.12.

1.8	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 a broken bone.

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

1.9	Was the baby's body (skin and tissue) pulpy?
-----	--

"Pulpy" (or macerated) means the skin was very soft and might even come off when touched. This indicates that the baby has been dead inside the mother for some time.

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

1.10	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.

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

If "No" or "Refused to answer", or "Don't Know", tablet will skip to Section 4: Health Records.

1.11	What were the abnormalities?
------	------------------------------

We ask this to try to identify why the baby might have become sick. Read the possible answers slowly one by one. If appropriate, show the photos on screen so that they can understand and recognize the abnormalities. **MARK ALL THAT APPLY** (multiple selections possible). Marking the button for “Other” will provide a space on the next page for writing the types of abnormalities if they are not already listed.

- Head size very small at time of birth
- Head size very large at time of birth
- Mass defect on the back of head or spine
- Other (Specify _____)
- Refused to answer
- Do not know

After completing question 1.11 for stillbirth, tablet will skip to Section 4: Health Records.

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

Marking the button for “Days” will provide space on the next page for writing the age in days (up to 28 days). Note: Since this is a neonatal death you should not click on “Months”. For ages less than 24 hours, record 00.

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

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

Record how long the illness lasted. When you click on the “Days” button, a page will appear, with a keyboard to type the number of days. Record 00 if less than 24 hours or enter the numbers of days if **duration** is 28 days or less. Note: Since this is a neonatal death, do not use the “Months” button.

- Days (enter on next page). Enter 99 if unknown
- Months (enter on next page). Enter 99 if unknown
- Refused to answer

- Don't know

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 pregnancy, labour 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 selections possible). Read "the mother" if the mother is not the respondent.

- | | |
|---|---|
| <input type="checkbox"/> You (the mother) had convulsions
<input type="checkbox"/> You (the mother) had high blood pressure
<input type="checkbox"/> You (the mother) had severe anemia
<input type="checkbox"/> You (the mother) had diabetes
<input type="checkbox"/> Child delivered not head first
<input type="checkbox"/> Cord delivered first | <input type="checkbox"/> Cord around child's neck
<input type="checkbox"/> Excessive bleeding
<input type="checkbox"/> Fever during labor
<input type="checkbox"/> No complications
<input type="checkbox"/> Refused to answer
<input type="checkbox"/> Don't know |
|---|---|

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

Reduced movements followed by complete absence of movement, particularly in the days to hours before the delivery, may be a sign that death occurred prior to delivery. At a minimum, it is a warning sign that there may be a problem with the health of the fetus. Mothers are usually aware of such changes, and can recall and report this sign.

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

2.3	What was the color of the liquid when the water broke?
-----	--

This question addresses whether the baby was under stress whilst still inside the mother, resulting in the release of its feces into the amniotic fluid prior to birth. Marking the button "Other" will provide a space on the next page to note the other colour if not listed here.

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

2.4	How much time did the labor and delivery take?
-----	--

Marking the button "Hours" will provide space to enter the duration of labour. Record how long the labour and delivery took. Note: Labour 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
- Refused to answer
- Don't know

2.5	Who delivered the baby?
-----	-------------------------

Mark the appropriate box that corresponds to the person who was primarily responsible for delivering the baby. "Self" would indicate that no attendant was present to assist with the delivery. Marking button "Other" will provide space on the next page for entering other people who are not listed here.

- | | |
|---|---|
| <input type="radio"/> Doctor | <input type="radio"/> Traditional birth attendant |
| <input type="radio"/> Nurse/midwife | <input type="radio"/> Other (specify _____) |
| <input type="radio"/> Relative | <input type="radio"/> Refused to answer |
| <input type="radio"/> Self (the mother) | <input type="radio"/> Don't know |

2.6	Was the delivery...?
-----	----------------------

Read the possible answers and mark the appropriate button that corresponds to 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 (caesarean) performed.

- Vaginal with forceps
- Vaginal without forceps (‘Normal delivery’)
- Vaginal Don’t know if forceps or not
- C-section
- Refused to answer
- Don’t know

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)
-----	--

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.

- Yes
- No
- Refused to answer
- Don’t know

If “No” or “Don’t know” or “Refused to answer”, tablet will skip to question 3.3.

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

We ask this to try and identify why the baby might have become sick. Read the possible answers slowly one by one. If appropriate, show the photos on screen so that they can understand and recognize the abnormalities. **MARK ALL THAT APPLY** (multiple selections possible). Marking the button for “Other” will provide a space on the next page for writing the type of anomalies if they are not already listed.

- Head size very small at time of birth

- Head size very large at time of birth
- Mass defect on the back of head or neck
- 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.

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

If "No", tablet will skip to question 3.5.

3.4	Did the baby have difficulty breathing?
-----	---

"Difficult breathing" means that the baby was working harder than normal to breathe.

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

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

Ask whether any methods/strategies were used or applied to help the baby breathe at birth.

- Yes
- No
- Refused to answer

- Don't know

3.6	Did the baby cry immediately after birth?
-----	---

Healthy babies cry immediately after birth, so we want to know if the infant could cry at this time.

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

If "Yes", tablet will skip to question 3.8.

3.7	How long after birth did the baby first cry?
-----	--

If the baby did not cry immediately, we want to know how long it took the infant to cry.

- Within 5 minutes
- Within 6–30 minutes
- More than 30 minutes
- Never
- Refused to answer
- Don't know

If "Never", tablet will skip to question 3.9.

3.8	Did the baby stop being able to cry?
-----	--------------------------------------

"Stop crying" means that the infant became unable to cry. We ask this because stopping crying might indicate a severe illness.

- Yes
- No
- Refused to answer

- Don't know

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

This question is asked to enquire if there was a normal healthy effort at suckling, or if there was any weakness or lethargy in the suckling effort. If the baby could not suckle, the VA interviewer should clarify if it was because the baby was too sleepy.

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

If "Yes", tablet will skip 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 during the first day of life.

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

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

"Difficult breathing" means that the baby was working harder than normal to breathe. The interviewer should clarify to the respondent descriptions of difficulty (in the questions below), and take care to ensure that this symptom is not missed.

- Yes
- No
- Refused to answer

- Don't know

If "No" or "Don't know" or "Refused to answer", tablet will skip to question 3.13.

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

Marking the "Days" button will provide space on the next page for entering duration in days. Enter 00 if less than one day. Enter 9999 if unknown.

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

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

Ask the respondent if the baby was breathing rapidly. Was there a change in the speed of breathing? Was it faster than the previous day? We ask this because it helps us know whether this problem was part of the illness that led to death.

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

If "No" or "Don't know" or "Refused to answer", tablet will skip 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. Marking the "Days" button will provide space on the next page to enter the duration in days of the fast breathing. Enter 00 if less than one day. Enter 99 if unknown.

- Days (enter on next page).
- Refused to answer

- 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 the lower part of the chest wall gets depressed during breathing, and it indicates the seriousness of the disease. This is a sign of respiratory distress and indicates a severe respiratory illness. Show the illustration on the tablet.

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

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

The body becoming cold to the touch is a sign of severe illness. We are not talking about cold skin due to exposure to cold air. We are interested in whether the body becomes cold to the touch even if the baby is under blankets.

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

If “No” or “Don't know” or “Refused to answer”, tablet will skip to question 3.18.

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

Marking the button “Days” will provide a space on the next page to write the age the baby started feeling cold to touch. Record the age in days, or “00” if the age is less than one day.

- Days (enter on next page). Enter 99 if unknown
- 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 the baby looks sleepy but can be woken up.

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

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

"Unconscious" means the infant could not respond to any stimuli such as light, sounds or touch. It means that the baby could not be woken up.

- Yes
- No
- Refused to answer
- 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. This may be associated with redness around the stump.

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

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

“Swelling” means the area was raised more than normal. Redness and swelling that are painful to touch can indicate an infection at a specific site on the body.

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

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

Yellow skin is a sign of jaundice. If the baby has jaundice, the baby will also have yellow eyes. Mild jaundice is often present in neonates, but does not often cause yellow skin.

- Yes
- No
- Refused to answer
- 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.

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

Section 4: Health Records

It is important, when asking questions in the Health Records section, that the information is obtained from records or directly from a worker who is part of the health system of the country and

who is qualified to offer medical advice (for example, a doctor, nurse or paramedic). The workers in this category may vary by country.

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

“Health care worker” means any professional who has formal medical training to work legally as part of the health workforce in the country. Examples include MBBS doctors, nurses and paramedical staff.

- Yes
- No
- Refused to answer
- Don’t know

If “No” or “Don’t know” or “Refused to answer”, tablet will skip to question 4.3.

4.2	What did the health care worker say?
-----	--------------------------------------

Touching the space provided will bring up a keyboard to type and record the response.

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

This refers to a health centre, clinic or hospital. It also refers to health workers visiting the patient in their home.

- Yes
- No
- Refused to answer
- Don’t know

If “No” or “Don’t know” or “Refused to answer” box is checked, tablet will skip to question 4.14.

4.4	Where or from whom did you seek care?
-----	---------------------------------------

Read out the possible answers/lists slowly and one by one and MARK ALL THE CHECK BOXES THAT APPLY (multiple selections possible). Mark “Refused to answer” or “Don’t know” only if no other boxes can be checked.

- 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
-----	--

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, because more information concerning her/his illness can be extracted from the documents.

- Yes
- No
- Refused to answer
- 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?
-----	-------------------------------

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

If “No” or “Refused to answer”, tablet will skip to question 4.14.

If “Yes”, and respondent allows you to see the records, transcribe all the entries.

Instruction to the interviewer: *If “Yes” to question 4.7, a screen with the question, “Are the dates known for the most recent visits and the last note?” will appear on a new page, with the following check boxes.*

- 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. Pages with spaces for entering the information from the records will be appear sequentially.

Checking recent visit boxes results in pages with fields in which the dates and weight of the child can be entered.

4.8	Record the date 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 the child's health status prior to death.
RECORD THE WEIGHT in grams or kilograms.*

- Grams (enter on next pages)
- Kilograms (enter on next pages)
- Refused to answer
- 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 the child's health status prior to death.
RECORD THE WEIGHT in grams or kilograms.*

- Grams (enter on next pages)
- Kilograms (enter on next pages)
- 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
------	---------------------

Record the main diagnosis _____

4.14	Was a death certificate issued?
------	---------------------------------

It is important to learn whether a death certificate was issued, because we can extract the cause of death from this record.

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

If "No" or "Don't know" or "Refuse to answer", go to Section 5: Open-ended response.

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

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

- Yes
- No
- Refused to answer

**If “No” or “Don’t know” or “Refuse to answer”, go to Section 5: Open-ended response.
If “Yes”, and respondent allows you to see the death certificate, transcribe all the entries.**

If answers to question 4.14 and 4.15 are “yes”, a screen will appear with the following check boxes:

- 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 check box ticked, space to enter the corresponding cause of death will be provided on subsequent pages. If there is only one cause of death on the certificate, just check the first box and write the cause of death as appropriate. If the order of the causes of death is not clear, or there are multiple causes of death on one line, then enter one cause of death on each line.

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 there.

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

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 translating narratives on the tablet are time-consuming, SmartVA includes a checklist of six keywords (such as “asphyxia (lack of oxygen)” and “incubator”) to use in open narrative, rather than having interviewers record an entire conversion. This checklist comprises a list of words. Any of these words mentioned by the respondent in describing the circumstances surrounding the death should be selected by the interviewer. There is no need to record the whole narrative. Instruction is given below on how to ask for additional information and how to endorse the keywords before starting 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 (local terms also apply), check the box next to the word. Ask 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 selections possible).**

	Key words	Mentioned
5.1	Asphyxia (lack of oxygen)	<input type="checkbox"/>
	Incubator	<input type="checkbox"/>
	Lung Problems	<input type="checkbox"/>
	Pneumonia	<input type="checkbox"/>
	Preterm Delivery	<input type="checkbox"/>
	Respiratory Distress	<input type="checkbox"/>

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

If no box has been checked, a screen will appear to confirm that no word was mentioned. Mark the box as appropriate.

- No word was mentioned
- Don't know

END OF INTERVIEW
THANK PARTICIPANT FOR THEIR PARTICIPATION

7 Instructions for the Child Age-Specific Module

Note to Interviewer: The tablet will move to this module after completing the General Module if the age of the decedent is in the range 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

This section is specifically designed to enquire and record information and details if the death was caused by an injury. In general, deaths from injuries, whether accidental or intentional, are reported to the police, and subsequently follow a forensic/coronial process for determining the cause of death. The VA process using household enquiry may or may not be considered necessary or appropriate for ascertaining the cause, depending on the government directives on this subject. Nevertheless, a set of questions have been included in the questionnaire, and should be asked of respondents (following the sequence and skip patterns as below), as permitted by the government authorities.

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 a physical blow or fall, or poisoning or a bite. This includes accidental and intentional injuries. It is important for the VA interviewer to establish that the injury was a direct cause of death. It does not include injuries that have happened a long time in the past and that are not related to death of the decedent, or accidents that may result from other medical conditions.

- Yes
- No
- Refused to answer
- Don’t know

If “No” “Don’t know” or “Refused to answer” is checked, tablet will skip to Section 2: Background.

1.2	What kind of injury or accident did ____ suffer from?
-----	---

Ask the respondent each question in sequence and check all check boxes corresponding to items to which the respondent indicated “Yes”. Checking “Other injury” will provide a space on the next page to record 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. Note that, once this question is answered, the tablet will skip to the Health Records section. Please clarify whether the death was a direct result of the injury.

- Yes
- No
- Refused to answer
- 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.

- Yes
- No

If the mother is alive, tablet will skip to question 2.3.

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?

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

2.3	Where was the deceased born?
-----	------------------------------

Mark the appropriate box that corresponds to the place where the delivery occurred. Differentiate between births at "hospital" (that is, health institutions with in-patient facilities) and at "other health facilities" (dispensaries, health centres or private clinics, where patients are seen on out-patient basis). You can mark only one button. Marking "Other" will provide space to specify the place.

- Hospital
- Other health facility
- On route to hospital or other health facility
- Home
- Other (specify _____)
- Refused to answer
- Don't know

2.4	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 first four possible answers. Show 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 possible answers before giving her answer. We want to know if the infant was small or large because both can indicate problems.

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

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

Ask this question and record the answer as a number of years or months. You can mark only one button. When you click on the "Years" or "Months" button, a page will appear, with a keyboard to type the number of years or months. Note: Since this is a child death, you should not click on "Days". (Enter in months from 1–11 months. Enter 12 months as 1 year.)

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

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

Record how long the illness lasted. When you click on the "Days" or "Months" button, a page will appear, with a keyboard to type the number of days or months. If the illness lasted less than 24 hours, record 00. Enter 99 if unknown.

- Days (enter on next page)
- Months (enter on next page)
- Refused to answer

- Don't know

Section 3: Infant and child death

3.1	During the illness that led to death, did ___ have a fever?
-----	---

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

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

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

3.2	How many days did the fever last?
-----	-----------------------------------

The duration of the fever can help us know how serious it was. 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)
- 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.

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

If “No” or “Don’t know” or “Refused to answer”, tablet will skip to question 3.5.

3.4	How severe was the fever?
-----	---------------------------

“Severity” of fever means how high the fever was, as perceived by the deceased’s relatives.

- Mild
- Moderate
- Severe
- Refused to answer
- Don’t know

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

The frequent passage of loose or watery stools, with or without blood, is known as diarrhea. There may be local terms to describe it.

- Yes
- No
- Refused to answer
- Don’t know

If “No” or “Don’t know” or “Refused to answer”, tablet will skip 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. Ask the respondent to indicate the maximum number of times the deceased had diarrhea in the period immediately preceding death. Record this number in the space provided. Marking the “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)

- Refused to answer
- 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.

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

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

It is important to know if the person had a cough, and, if so, the duration and severity of the cough. Coughing is a symptom common to many conditions. Ask this question with care, and double check a negative response, as it leads to a skip of all other questions on cough. If there is a positive response for cough, care should be taken in following up closely with the subsequent questions characterizing the cough.

- Yes
- No
- Refused to answer
- 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?
-----	---------------------------------------

Marking on the "Days" button will provide a space for entering duration in days. Enter 99 if unknown.

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

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

“Severity” of cough means how harsh or bad the cough was for the child.

- Yes
- No
- Refused to answer
- Don’t know

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

“Difficult breathing” means that the infant or child was working harder than normal to breathe. The interviewer should clarify to the respondent descriptions of difficulty (in the questions below), and take care to ensure that this symptom is not missed.

- Yes
- No
- Refused to answer
- Don’t know

If “No” or “Don’t know” or “Refused to answer”, tablet will skip to question 3.13.

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

Marking the “Days” button will provide space for entering duration in days. Enter 9999 if unknown.

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

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

Ask the respondent if the baby was breathing rapidly. Was there a change in the speed of breathing? Was it faster than the previous day? We ask this because it helps us know whether this problem was part of the illness that led to death.

- Yes
- No
- Refused to answer
- 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?
------	--

We ask this because it helps us know whether this problem was part of the illness that led to death. Marking the "Days" button will provide a space on the next page to enter duration of fast breathing. Please enter 99 if unknown.

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

Note to the 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 the lower part of the chest wall gets depressed during breathing, and it indicates the seriousness of the disease. This is a sign of respiratory distress and indicates a severe respiratory illness. Show the illustration on the tablet.

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

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

“Grunting” relates to 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.

- Yes
- No
- Refused to answer
- 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 that may occur at rest or during voluntary movement. A convulsion is uncontrollable jerking and stiffening of the arms and legs, sometimes with loss of urine and stool. This question refers only to convulsions affecting the whole body, so clarify this aspect, and record the response accordingly.

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

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

“Unconscious” means the infant could not respond to any stimuli such as light, sounds or touch. It means that the baby/child could not be woken up.

- Yes
- No
- Refused to answer
- 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?
------	--

- Less than 6 hours
- 6–23 hours
- 24 hours or more
- Refused to answer
- Don't know

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

“Stiff neck” means the infant could not move his/her neck in a normal way. A stiff neck is generally identified by the inability to bend the neck forward to touch the chin to the chest. The mother may have noticed that the child was not moving its head normally and that the child’s neck was stiff, and remained stiff when the child was picked up.

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

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

The “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, the fontanelle closes around 18 months of age. Therefore, this question is not asked if a child is over the age of 18 months. Please show the photo on the screen to help the respondent recall the bulging fontanelle.

- Yes
- No
- Refused to answer

- Don't know

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

“Rash” is any skin abnormality that usually appears as a collection of red spots or pustules on the skin, or sometimes as red patches on the skin. It is not a cut or bruise.

- Yes
- No
- Refused to answer
- 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 whether this problem was part of the illness that led to death. Marking the “Days” button will provide space to enter the duration of the rash using the pop-up keyboard. Please enter 99 if unknown.

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

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

In children with long-standing malnutrition, the skin becomes extremely dry and tends to break away or peel off in patches. This is a readily recognized sign when present, and is useful diagnostically.

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

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

In children with black hair, a change in the hair colour to red, dull brown or yellow is indicative of moderate to advanced malnutrition. This may occur in conjunction with other symptoms such as thinness, wasting and infections.

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

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

A protruding belly is when the size of the belly increases significantly. This significant increase in size is easily recognized.

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

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

Long-term deficiency of haemoglobin, the red pigment in the blood, results in a pale, whitish appearance of the mouth, including the lips and tongue; the area loses its normal reddish appearance. Loss of colour can also be observed on the palms of the hands. Sometimes it is referred to as thinning of the blood.

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

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

“Swelling” means the area was raised more than normal.

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

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

This question refers to episodes of spontaneous abnormal bleeding (not associated with injury). The bleeding could be external (through the skin, gum, mouth, nose, anus) or under the skin.

- Yes
- No
- Refused to answer
- 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.

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

Section 4: Health Records

It is important, when asking questions in the Health Records section, that the information is obtained from records or directly from a worker who is part of the health system of the country and

who is qualified to offer medical advice (for example, a doctor, nurse or paramedic). The workers in this category may vary by country.

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

“Health care worker” means any professional who has formal medical training to work legally as part of the health workforce in the country. Examples include MBBS doctors, nurses and paramedical staff.

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

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

4.2	What did the health care worker say?
-----	--------------------------------------

Touching the space provided will bring up a keyboard to type and record the response.

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

This refers to a health centre, clinic or hospital. It also refers to health workers visiting the patient in their home.

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

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

4.4	Where or from whom did you seek care?
-----	---------------------------------------

Read out the possible answers/lists slowly and one by one and MARK ALL THE CHECK BOXES THAT APPLY (multiple selections possible). Mark "Refused to answer" or "Don't know" only if no other boxes can be checked.

- 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
-----	--

Ask this question and touch the space. 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.

- Yes

- No
- Refused to answer
- Don't know

If “No” or “Don’t know” or “Refused to answer”, tablet will skip to question 4.14.

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

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

If “No” or “Refused to answer”, tablet will skip to question 4.14.

Instruction to the interviewer: If “Yes” to question 4.7, a screen with the question, “Are the dates known for the most recent visits and the last note?” will appear on a new page, with the following check boxes:

- 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. Pages with spaces for entering the information from the records will be appear sequentially.

Checking recent visit boxes results in pages with fields in which the dates and weight of the child can be entered.

4.8	Record the dates of most recent visits from the health records
-----	--

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 the child's health status prior to death.

RECORD THE WEIGHT in grams or kilograms.

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

4.10	Record the date of the second most recent visit 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 in grams or kilograms.

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

4.12	Record the date of the last note
------	----------------------------------

The date will 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
------	---------------------

Record the main diagnosis _____

4.14	Was a death certificate issued?
------	---------------------------------

It is important to learn whether a death certificate was issued, because we can extract the cause of death from this record.

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

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

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

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

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

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

If answer to question 4.15 is "yes", a screen will appear 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 check box ticked, space to enter the corresponding cause of death will be provided on subsequent pages. If there is only one cause of death on the certificate, just check the first box and write the cause of death as appropriate. If the order of the causes of death is not clear, or there are multiple causes of death on one line, then enter one cause of death on each line.

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 there.

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 recorded under part II. Enter the contributing cause(s) of death in the corresponding space provided.

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

We want to know if the mother had ever been tested for HIV. This subject is very sensitive, so be extra sensitive when asking these questions. This question will not be asked if the child died due to an injury.

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

If "No" or "Don't know" or "Refuse to answer", tablet will skip to question 4.23.

4.22	Was the HIV test ever positive?
------	---------------------------------

This question will not be asked if the child died due to an injury.

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

4.23	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 from testing positive for HIV, the virus that causes AIDS. This question will not be asked if the child died due to an injury.

- Yes

- No
- Refused to answer
- Don't know

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

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

Section 5 is for recording open narrative and adding additional information. This information contributes to the process of diagnosing a most likely cause of death. As the tasks of writing and translation of narratives on the tablet are time-consuming, SmartVA includes a checklist of 10 keywords (such as “abdomen” and “cancer”) to use in open narrative, rather than having interviewers record an entire conversation. This checklist comprises a list of words. Any of these words mentioned by the respondent in describing the circumstances surrounding the death should be selected by the interviewer. There is no need to record the whole narrative. Instruction is given below on how to ask for additional information and how to endorse the keywords before starting 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 (local terms also apply), check the box next to the word. Ask 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 selections possible).

Key words	Mentioned
Abdomen	<input type="checkbox"/>
Cancer	<input type="checkbox"/>

5.1	Dehydration	<input type="checkbox"/>
	Dengue fever	<input type="checkbox"/>
	Diarrhea	<input type="checkbox"/>
	Fever	<input type="checkbox"/>
	Heart Problems	<input type="checkbox"/>
	Jaundice (yellow skin or eyes)	<input type="checkbox"/>
	Pneumonia	<input type="checkbox"/>
	Rash	<input type="checkbox"/>

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

If no box has been checked, a screen will appear to confirm that no word was mentioned. Mark the box as appropriate.

- No word was mentioned
- Don't know

END OF INTERVIEW
THANK PARTICIPANT FOR THEIR PARTICIPATION

8 Instructions for the Adolescent and Adult Age-Specific Module

This module will be applied to deceased persons who were 12 years of age or older at the time of death. After completing the General Module, the tablet will automatically move to this module if the age category of the deceased falls within this age bracket. The main sections 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

This section is specifically designed to enquire and record information and details if the death was caused by an injury. In general, deaths from injuries, whether accidental or intentional, are reported to the police, and subsequently follow a forensic/coronial process for determining the cause of death. The VA process using household enquiry may or may not be considered necessary or appropriate for ascertaining the cause, depending on the government directives on this subject. Nevertheless, a set of questions have been included in the questionnaire, and should be asked of respondents (following the sequence and skip patterns as below), as permitted by the government authorities.

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

An “injury” means the person was hurt by something outside the body, such as physical blow or a fall, or poisoning or a bite. This includes accidental and intentional injuries. It is important for the VA Interviewer to establish that the injury was a direct cause of death. It does not include injuries that have happened a long time in the past and that are not related to death of the decedent, or accidents that may result from other medical conditions. For example, someone may fall because they suffer a stroke, but in this instance the injury is a result of the stroke and “fall” is not the cause of death.

- Yes

- No
- Refused to answer
- Don't know

If “No” or “Refused to answer” or “Don’t know” is checked, tablet will skip to Section 2: History of chronic conditions of the deceased.

1.2	What kind of injury or accident did _____ suffer from?
-----	--

Ask the respondent each question in sequence and check all check boxes corresponding to items to which the respondent indicated “Yes”. Checking “Other injury” will provide a space on the next page to record the type of injury.

- Road traffic crash/injury
- Fall
- Drowning
- Poisoning

If the death was due to poisoning from pesticides, kerosene, or any other chemicals, record “Yes” by ticking in this box. Poisoning from snakebite or animal sting etc. is not to be included here.

- Bite or sting by venomous animal

Poisoning from snakebite or animal sting etc. should be included here.

- 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.

- Yes

- No
- Refused to answer
- Don't know

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

We want to know if the injury or accident was caused by someone else.

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

Tablet will skip to Section 6: Health Records.

Section 2: History of chronic conditions of the deceased

Questions in this section are asking about the diseases that were known to be present at the time of death. These questions are not about the previous histories of illnesses unrelated to the illness that lead to the death. For example, someone might have had malaria, dengue, or measles in the past, but none of these may be the cause of death. However, chronic conditions such as diabetes, tuberculosis, cancer, chronic obstructive lung disease, and so on, could have a bearing on the final diagnosis of the cause of death. Hence, proceed carefully through the entire list, and in the event of a positive response to any of the questions below, ask for any documentary evidence of the diagnosis in the form of a clinical note, laboratory or imaging report, prescription, hospital discharge card, and so on. It is important that the deceased was advised of these conditions by a qualified health worker (ideally a doctor, nurse or paramedic). Where possible, the VA interviewer should establish if a health worker actually told the decedent that they were suffering from a particular chronic condition. If there is uncertainty about certain disease conditions, the VA interviewer may need to prompt by asking if the deceased was treated for certain symptoms. Such prompting should be kept to a minimum and include only the major symptoms associated with the disease, as noted below.

2.1	Was _____ ever told by a health professional that he or she ever suffered from one of the following?
-----	--

“Health care worker” means any professional who has formal medical training to work legally as part of the health workforce in the country. Examples include MBBS or MD doctors, nurses and paramedical staff.

Ask this question for each of the disease conditions listed.

2.2	Asthma
-----	--------

Ask whether the diseased was diagnosed to have asthma by a physician or any other health worker. There may be a local term for asthma. If there is one, ensure that it is mentioned in the translated questionnaire, and use the local term to probe. If necessary, ask if the deceased was treated for recurrent breathlessness that included a wheeze that responded to medication.

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

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

Ask the respondent whether any health professional told the deceased that he/she was suffering from cancer.

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

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

Ask the respondent whether any health professional told the deceased that he/she was suffering from COPD. If necessary, ask if the deceased was treated for chronic cough and breathlessness on more than two occasions in a health facility.

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

2.5	Diabetes
-----	----------

Ask the respondent whether any health professional told the deceased that he/she was suffering from diabetes.

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

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

Ask the respondent whether any health professional told the deceased that he/she was suffering from epilepsy. If necessary, ask if the deceased was treated for episodic convulsions over many years.

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

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

Ask the respondent whether any health professional told the deceased that he/she was suffering from heart disease.

- Yes

- No
- Refused to answer
- Don't know

2.8	Tuberculosis
-----	--------------

Ask the respondent whether any health professional told the deceased that he/she was suffering from tuberculosis.

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

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

Ask whether the diseased was diagnosed as suffering stroke by a physician or any other health worker. There may be a local term for stroke. If there is a local term for stroke, ensure that it is mentioned in the translated questionnaire, and use the local term to probe. If necessary, ask if the deceased was treated for symptoms that included paralysis of one side of the body or face and loss of speech followed by unconsciousness.

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

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

Ask the respondent whether any health professional told the deceased that he/she was suffering from AIDS.

- Yes
- No

- Refused to answer
- Don't know

Section 3: Symptom checklist

3.1	Did _____ have a fever?
-----	-------------------------

“Fever” means the individual felt hot to touch, or their temperature was abnormally high as measured with a thermometer.

- Yes
- No
- Refused to answer
- 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 high the fever was as perceived by the deceased’s relatives.

- Mild
- Moderate
- Severe
- Refused to answer
- Don't know

3.3	What was the pattern of the fever?
-----	------------------------------------

“Pattern” of fever means how frequent and often the fever presented. Select only one response category.

- Continuous
- On and off
- Only at night

- Refused to answer
- Don't know

3.4	Did ____ have a rash?
-----	-----------------------

“Rash” is any skin abnormality that usually appears as a collection of red spots or pustules on the skin, or sometimes as red patches on the skin. It is not a cut or bruise.

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

If “No” or “Don't know” or “Refused to answer” is clicked, tablet will skip to 3.6.

3.5	Where was the rash located?
-----	-----------------------------

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

3.6	Did ____ have sores?
-----	----------------------

“Sores” are chronic (ongoing) ulcers that may be very slow to heal, and may persist over a long time. They are usually caused by constant pressure. For example, they may be produced on the back as a result of being bedridden for a long time.

- Yes
- No
- Refused to answer

- Don't know

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

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

If the sore contains fluid it may be clear or yellow ("pus"). Often, the clear fluid changes into pus. "Pus" is thick, creamy or yellowish liquid.

- Yes
- No
- Refused to answer
- 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.

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

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

3.9	Did the ulcer ooze pus?
-----	-------------------------

"Pus" is thick, creamy or yellowish liquid.

- Yes
- No
- Refused to answer
- 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?
------	---

Clicking on “Days” will bring up a keyboard and a space to record/type the number of days.

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

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

Yellow discoloration of the eyes is indicative of diseases of the liver, and is commonly known as jaundice. Jaundice is indicated by a change in eye colour during the terminal illness and should be easily recalled if present. There is often a local term used for this sign. Sometimes, in advanced stages, there is also yellow discoloration of palms or skin and, if observed, the urine is also yellow/brown. In dark-skinned people, the white part of the eyeball can appear “muddy”, which is due to exposure to sunlight; this should be distinguished from jaundice.

- Yes
- No
- Refused to answer
- Don’t Know

If “No” or “Don’t know” or “Refused to answer”, tablet will skip to 3.13.

3.12	For how long did _____ have the yellow discoloration?
------	---

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

3.13	Did _____ have puffiness of the face?
------	---------------------------------------

This symptom refers to painless swelling of the face, especially around the eyes (due to accumulation of fluid).

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

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

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

It is possible for puffiness to come and go during the day. This question refers to puffiness that is persistent. When you click on the "Months" or "Days" button, a page will appear, with a keyboard to type the number of months or days.

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

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

This question helps to ascertain fluid accumulation in other parts of the body, in case the respondent does not accurately recall where on the body the puffiness originated, and to where it spread.

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

3.16	Did _____ have a lump on the neck?
------	------------------------------------

Lumps are small, solid and painless swellings that are sometimes observed near the armpit, neck or groin. Unless the lumps are rather large, or the patient specifically mentions them, they may not be observed by the respondent.

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

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

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

3.18	Did _____ have a lump in the groin?
------	-------------------------------------

The groin is the area between the legs around the inner thigh and lower abdomen.

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

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

It is important to know if the person had a cough, and, if so, the duration and severity of the cough. Coughing is a symptom common to many conditions. Ask this question with care, and double check a negative response, as it leads to a skip of all other questions on cough. If there is a positive response for cough, care should be taken in following up closely with the subsequent questions characterizing the cough.

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

If “No” or “Don’t know” or “Refused to answer”, tablet will skip 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 important point is that the sputum comes from inside the chest. It may contain pus or even blood (see next question). This is different from spit from the mouth.

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

3.21	Did _____ cough blood?
------	------------------------

You need to probe whether the person coughed blood or vomited blood.

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

3.22	Did _____ have difficulty breathing?
------	--------------------------------------

“Difficulty” breathing is a dramatic sign. Difficulty is manifested by the need for extra effort in breathing, such as a heaving chest, which is sometimes noisy. Breathing difficulty must be distinguished from normal breathlessness after exercise.

- Yes

- No
- Refused to answer
- Don't Know

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

- Yes
- No
- Refused to answer
- 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?
------	-----------------------------

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

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

The frequent passage of loose or watery stools, with or without blood, is known as diarrhea. There may be local terms to describe it.

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

3.26	Was there blood in the stool?
------	-------------------------------

- Yes
- No
- Refused to answer
- 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?
------	--

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

3.28	Did _____ stop urinating?
------	---------------------------

We ask this question because stoppage of urination can be a symptom of obstruction of the canal that carries urine from the bladder out of the body. In other cases, disorders of the kidneys can result in the stoppage of urine. To be significant, this stoppage of urine should have been for at least 24 hours prior to death and the VA Interviewer should clarify this.

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

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

- Yes
- No

- Refused to answer
- 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 distinguish vomiting blood from "coughing up" blood. Clarify with the respondent and note the response accordingly.

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

3.31	Was the vomit black?
------	----------------------

The longer the blood has been in the stomach, the more it looks like coffee grounds (black).

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

3.32	Did _____ have difficulty swallowing?
------	---------------------------------------

Difficulty swallowing is the sensation that food is stuck in the throat or upper abdomen. This may be because a person is too weak to swallow food or drink from the mouth and they choke when they try to swallow (the food or drink goes down the airway). Or it may be experienced as an obstruction high in the neck or lower down, behind the breastbone (sternum), or near the entry into the belly. This is usually reported by patients (and recalled by relatives), especially when interfering with daily food

intake. This is an important symptom, so probe carefully and try to ensure there you do not miss any instances of this symptom.

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

If "No" or "Don't know" or "Refused to answer", tablet will skip to question 3.35.

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

When you click on the "Months" or "Days" button, a page will appear, with a keyboard to type the number of months or days.

- Months (enter on next page)
- Days (enter on next page)
- Refused to answer
- 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, difficulty in swallowing anything.

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

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

This refers to a strong feeling of a burning, squeezing pain while swallowing (felt high in the neck or lower down, behind the breastbone).

- Yes
- No
- Refused to answer
- 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 the pain. The belly is the part of the body below the rib cage and above the pelvic bones. This question (and the ones below relating to the belly) do not relate to symptoms caused by complications of pregnancy.

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

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

3.37	For how long before death did _____ have belly pain?
------	--

This question is asked if the deceased reported belly pain during the illness. When you click on the "Months" or "Days" button, a page will appear, with a keyboard to type the number of months or days.

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

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

If there is any doubt, ask the informant if they can point to the site of the pain. "Upper belly" is above the navel. "Lower belly" is below the navel.

- Upper belly
- Lower belly
- Refused to answer
- Don't know

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

We are interested in whether the protrusion of the deceased's belly increased before death, and not in a protruding belly due to the deceased being overweight. Certain diseases cause an accumulation of fluid in the abdomen, making the belly unusually prominent and protruding. This increase in size of the belly should be obvious to relatives of deceased.

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

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

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

The distended belly may cause difficulty in breathing, and limit the mobility of the affected individual. Use these associated circumstances to help the respondent ascertain the duration of abdominal distention before death. When you click on the "Months" or "Days" button, a page will appear, with a keyboard to type the number of months or days.

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

3.41	How rapidly did _____ develop the protruding belly?
------	---

Slow development of a protruding belly (over the course of a week or more) is a sign of chronic illness such as cirrhosis or cancer.

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

3.42	Did _____ have any mass in the belly?
------	---------------------------------------

An abdominal mass in the belly is a localized swelling or enlargement in one area of the abdomen. This may not be visible to respondents, but may have been reported by the deceased to his or her relatives.

- Yes
- No
- Refused to answer
- 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?
------	---

When you click on the "Months" or "Days" button, a page will appear, with a keyboard to type the number of months or days.

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

3.44	Did _____ have a stiff neck?
------	------------------------------

A stiff neck is generally identified by the inability to bend the neck forward to touch the chin to the chest. This sign may not be easily observed or recalled by the respondent. If required, clarify to the respondent the description as provided above.

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

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

3.45	For how long before death did _____ have stiff neck?
------	--

When you click on the "Months" or "Days" button, a page will appear, with a keyboard to type the number of months or days.

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

3.46	Did _____ experience a period of loss of consciousness?
------	---

"Unconsciousness" means loss of a person's awareness of themselves and of their environment. There is little or no movement except for breathing. The individual has minimal or no response to physical stimuli, including pain. Sometimes, there is some hesitation or uncertainty about this question because death from any cause may be preceded by a period of loss of consciousness. This series of questions is oriented toward identifying loss of consciousness as part of the illness leading to death.

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

If “No” or “Refused to answer” or “Don’t know”, tablet will skip to question 3.49.

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 gradual in others. If the unconsciousness develops over a period of 4–6 hours or more, then it is considered as slow onset.

- Suddenly
- Slowly
- Refused to answer
- Don’t Know

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

- Yes
- No
- Refused to answer
- Don’t Know

3.49	Did _____ have convulsions?
------	-----------------------------

“Fits” or “convulsions” are abnormal, violent and involuntary movements that may occur at rest or during voluntary movement. A convulsion is uncontrollable jerking and stiffening of the arms and legs, sometimes with loss of urine and stool. This question refers only to convulsions affecting the whole body, so clarify this aspect, and record the response accordingly.

- Yes
- No
- Refused to answer
- Don’t Know

If “No” or “Refused to answer” or “Don’t know”, tablet will skip to question 3.52.

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

When you click on the Minutes or Hours button, a page will appear, with a keyboard to type the number of minutes or hours.

- Minutes
- Hours
- Refused to answer
- Don’t Know

3.51	Did the person become unconscious immediately after the convulsions?
------	--

- Yes
- No
- Refused to answer
- Don’t Know

3.52	Was _____ in any way paralyzed?
------	---------------------------------

Paralysis implies the loss of strength or the inability to move certain parts of the body.

- Yes
- No
- Refused to answer
- Don’t Know

If “No” or “Refused to answer” or “Don’t know”:

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

3.53	Which were the limbs or body parts paralyzed?
------	---

Read through the list in sequence and MARK ALL THE CHECK BOXES THAT APPLY (multiple selections possible).

- 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

Questions for women need to be asked carefully. Which questions are asked depends on the age of the woman and whether she has not yet reached child-bearing years (as may be the case for women less than 18 years) or is past child-bearing years. For women 60 and over, it will be assumed that the woman is past child-bearing years and the tablet will skip to question 4.5. However for women aged 39-59 years the answer to 4.4 is critical because it determines whether the respondent is asked questions related to pregnancy.

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

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

4.2	Did _____ have any ulcers (pits) in the breast?
-----	---

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

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

If the decedent is 18–39 years old, tablet will skip to question 4.6.

If the decedent is 39-59 years old, tablet will skip to question 4.4.

If the decedent is 60 years and over, tablet will skip to question 4.5

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

This question will only be asked if the deceased was under 18 years of age when she died.

- Yes
- No
- Refused to answer
- 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?
-----	---

This question will be asked if the deceased was between 39-59 years of age. If the deceased was in an older age group (> 55), the VA interviewer should explain that this question is to find out if the woman is beyond child-bearing years. If this is the case, the answer to this question should be “Yes”.

Answering “No” will cause the questions on pregnancy to be asked.

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

If "No", tablet will skip to 4.6.

4.5	Did _____ have vaginal bleeding after cessation of menstruation?
-----	--

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

Tablet will skip to section 5: Tobacco use.

4.6	Did _____ have vaginal bleeding other than her period?(intermenstrual)
-----	--

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

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

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

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

- Yes
- No
- Refused to answer

- Don't Know

If "No" or "Refused to answer" or "Don't know", tablet will skip to question 4.11.

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. The deceased may have thought she was pregnant. When you click on the "Weeks" button, a page will appear, with a keyboard to type the number of weeks.

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

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

- Yes
- No
- Refused to answer
- 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.

- Yes
- No
- Refused to answer
- 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?
------	---------------------------------------

When you click on the “Months” button, a page will appear, with a keyboard to type the number of months.

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

4.13	Did _____ die during an abortion?
------	-----------------------------------

Abortion is the termination of the pregnancy by spontaneous (miscarriage) or induced expulsion of the products of conception within the first 28 weeks of pregnancy. The baby would have been too small to survive outside the mother even in a hospital setting.

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

If “Yes”, tablet will skip to 4.20.

4.14	Did bleeding occur while she was pregnant?
------	--

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

4.15	Did she have excessive bleeding during labor or delivery?
------	---

- Yes
- No

- Refused to answer
- Don't Know

4.16	Did she die during labor or delivery?
------	---------------------------------------

Labour begins when contractions are no more than 10 minutes apart.

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

4.17	For how many hours was she in labor?
------	--------------------------------------

When you click on the "Hours" button, a page will appear, with a keyboard to type the number of hours.

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

If answer to 4.16 is "Yes", tablet will skip to Section 5: Tobacco use.

4.18	Did she die within 6 weeks of having an abortion?
------	---

Abortion is the termination of the pregnancy by spontaneous (miscarriage) or induced expulsion of the products of conception within the first 28 weeks of pregnancy.

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

If "Yes", tablet will skip to question 4.20.

4.19	Did she die within 6 weeks of childbirth?
------	---

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

If "No" or "Refused to answer" or "Don't know", tablet will skip to Section 5: Tobacco use.

4.20	Did she have excessive bleeding after delivery or abortion?
------	---

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

Section 5: Tobacco use

5.1	Did _____ use tobacco?
-----	------------------------

- Yes
- No
- Refused to answer
- 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 THAT APPLY (multiple selections possible).

Cigarettes

- Pipe
- Chewing tobacco
- 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 will skip to Section 6: Health Records.

5.3	How many cigarettes did _____ smoke daily?
-----	--

Clicking on the "Cigarettes per day" button will bring up a new page and a key board to type the number of cigarettes per day.

- Cigarettes per day (enter on next page)
- Refused to answer
- Don't know

Section 6: Health Records

It is important, when asking questions in the Health Records section, that the information is obtained from records or directly from a worker who is part of the health system of the country and who is qualified to offer medical advice (for example, a doctor, nurse or paramedic). The workers in this category may vary by country.

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

This refers to a health centre, clinic or hospital. It also refers to health workers visiting the patient in their home.

- Yes
- No
- Refused to answer

Don't Know

If "No" or "Don't know" or "Refused to answer", tablet will skip to question 6.6.

6.2	Where or from whom did you seek care?
-----	---------------------------------------

Read out the possible answers/lists slowly and one by one, and MARK ALL THE CHECK BOXES THAT APPLY (multiple selections possible). Mark "Refused to answer" or "Don't know" only if no other boxes can be checked.

- Traditional Healer
- Homeopath
- Religious Leader
- Govt. Hospital
- Govt. Health Centre Center 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 the space provided will bring up a keyboard. Record the name and address of the health facility.

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

“Health care worker” means any professional who has formal medical training to work legally as part of the health workforce in the country. Examples include MBBS doctors, nurses and paramedical staff.

- Yes
- No
- Refused to answer
- 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 the space provided will bring up a keyboard. Record the response.

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

It is important to know whether the deceased had health records, as more information concerning her/his illness can be extracted from the documents.

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

If “No” or “Don't know” or “Refused to answer”, tablet will skip to question 6.11.

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

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

If “No” or “Don’t know” or “Refused to answer”, tablet will skip to question 6.11.

If “Yes” to question 6.7, a screen with the question, “Are the dates known for the most recent visits and the last note?” will appear on a new page, with the following check boxes:

6.8	Record the dates of the two most recent visits from the health record. If not listed, mark 9999
-----	--

- 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. Pages with space for entering the information from the records will be appear sequentially.

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 indicate that the date of last note is known, a page and keyboard will appear. Enter the date and transcribe the note.

6.9	Record the date of the last note. <i>Enter 9999 if unknown</i>
-----	---

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
------	---------------------

Record the main diagnosis _____

6.11	Was a death certificate issued?
------	---------------------------------

It is important to learn whether a death certificate was issued, because we can extract the cause of death from this record.

- Yes
- No
- Refused to answer
- 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?
------	----------------------------------

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

- Yes
- No
- Refused to answer

If "No" or "Refused to answer", tablet will skip Section 7: Open-ended response.

If answer to question 6.12 is "Yes", a screen will appear 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 check box ticked, space to enter the corresponding cause of death will be provided on subsequent pages. If there is only one cause of death on the certificate, just check the first box and write the cause of death as appropriate. If the order of the causes of death is not clear, or there are multiple causes of death on one line, then enter one cause of death on each line.

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 there.

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

Section 7 is for recording open narrative and adding additional information. This information contributes to the process of diagnosing a most likely cause of death. As the tasks of writing and translation of narratives on the tablet are time-consuming, SmartVA includes a checklist of 11 keywords (such as “chronic kidney disease” and “dialysis”) to use in open narrative, rather than having interviewers record an entire conversation. This checklist comprises a list of words. Any of these words mentioned by the respondent in describing the circumstances surrounding the death should be selected by the interviewer. There is no need to record the whole narrative. Instruction is given below on how to ask for additional information and how to endorse the keywords before starting 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), check the box next to the word. Ask 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 selections possible).*

Key words	Mentioned
-----------	-----------

7.1	Chronic Kidney Disease	<input type="checkbox"/>
	Dialysis	<input type="checkbox"/>
	Fever	<input type="checkbox"/>
	Heart Attack (AMI)	<input type="checkbox"/>
	Heart Problems	<input type="checkbox"/>
	Jaundice	<input type="checkbox"/>
	Liver Failure	<input type="checkbox"/>
	Malaria	<input type="checkbox"/>
	Pneumonia	<input type="checkbox"/>
	Renal (Kidney) Failure	<input type="checkbox"/>
	Suicide	<input type="checkbox"/>

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

If no box has been checked, a screen will appear to confirm that no word was mentioned. Mark the box as appropriate.

- No word was mentioned
- Don't know

END OF INTERVIEW

THANK PARTICIPANT FOR THEIR PARTICIPATION

Appendix 1: Glossary

Assignment area (AA)	This is your assigned area. An AA usually represents the average workload for one VA 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 VA 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	<p>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 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.</p> <p>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 every one of those eight days.</p>
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	This refers to agreeing to participate in the VA Interview after achieving a full understanding of the purpose of the questionnaire, and receiving an explanation of the activities involved in the interview, the expected duration of the interview, 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	<p>This is the person responsible for conducting VA interviews with the bereaved family members in the household. He or she should be knowledgeable about the area to which he or she is assigned. The VA interviewer must be accepted by the community in which he or she will be working. Although requirements may be site-specific, some requirements of VA interviewer include: having at least 12 years education in the national education system, and the ability to speak the dialect of the area to which he or she is assigned.</p> <p>There is a range of opinion about whether medical training should be preferred as a qualification for a VA interviewer, or whether</p>

	educated but non-medically trained persons are more suitable. Local experience will determine the optimal solution.
VA Interviewer Manual	Contains information about how the VA interviewer should go about his/her job.
VA respondent	This is the adult being interviewed, who is typically a resident in the household. The respondent must be 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 shortened questionnaire	This is a form that is used to collect information on the history of illness of the deceased and the 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 (SmartVA) questionnaire.

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:



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