

VERBAL AUTOPSY SUPERVISOR'S MANUAL

SAVVY

Sample Vital Registration with Verbal Autopsy



MEASURE Evaluation
U.S. Census Bureau

Verbal Autopsy Supervisor's Manual

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Sample Vital Registration with Verbal Autopsy



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This manual was made possible by support from the U.S. Agency for International Development (USAID) under the terms of Cooperative Agreement GPO-A-00-03-00003-00 and from the Office of the Global AIDS Coordinator (OGAC). The opinions expressed are those of the authors and do not necessarily reflect the views of USAID, OGAC, or the United States government.

August 2007

MS-07-26-VAS



Printed on Recycled Paper

ACKNOWLEDGMENTS

This manual is one of a series of instructional guides for the Sample Vital Registration with Verbal Autopsy (SAVVY) system prepared by the MEASURE Evaluation project, based at the University of North Carolina at Chapel Hill, NC, USA, and by the International Programs Center, Population Division, U.S. Census Bureau, Washington, DC, USA.

This manual was written by David Whiting, Dan Williams, Robert Mswia, Yusuf Hemed, and Philip Setel of MEASURE Evaluation.

Series editors: Philip Setel, Victoria Velkoff, and Loraine West.

The authors wish to express appreciation for review and comment by numerous colleagues including Chalapati Rao of the University of Queensland School of Population Health, Kenji Shibuya of the World Health Organization, Daniel Chandramohan of the London School of Hygiene and Tropical Medicine, and Luong Y. Nguyen of MEASURE Evaluation. Copy editing and layout were handled by Nash Herndon and Samhita Brown of MEASURE Evaluation.

Cover

The cover shows a wood carving by Colombian artist Juan de la Cruz Saavedra from a photograph by Alex Trembl of Durham, NC, USA, and is reproduced with permission from Family Health International of Research Triangle Park, NC, USA.

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LIST OF ACRONYMS

AA	assignment area
AIDS	acquired immunodeficiency syndrome
ANC	antenatal care
CSC	census supervisor coordinator
CSPro	Census and Survey Processing System (software)
DSS	demographic surveillance system
HIV	human immunodeficiency virus
ICD, ICD-10	<i>International Statistical Classification of Diseases and Related Health Problems</i> , second edition, 10th revision
ID	identification
KI	key informant
MCH	maternal-child health
MSS	mortality surveillance system
OJT	on-the-job training
QA	quality assurance
SA	supervisory area
SAVVY	Sample Vital Registration with Verbal Autopsy
SBS	SAVVY budget spreadsheet
TB	tuberculosis
TBA	traditional birth attendant
TT	tetanus toxoid
USAID	U.S. Agency for International Development
VA	verbal autopsy
VAI	verbal autopsy interviewer
WHO	World Health Organization

This series of SAVVY mortality surveillance system manuals, guides, and other documents is available at the MEASURE Evaluation Web site at:

<http://www.cpc.unc.edu/measure/leadership/savvy.html>

*Sample Vital Registration with Verbal Autopsy
(SAVVY): An Overview*

Central office manuals:

Data Processing Manager's Manual, including
SAVVY Data System software
SAVVY Budget Manual, including SAVVY
Budget Template software
Verbal Autopsy Certifier and Coder's Manual

Field office manuals:

Field Office Manager's Manual
Census Interviewer's Manual
Census Supervisor Coordinator's Manual
Census Supervisor's Manual
Census Update Interviewer's Manual
Key Informant's Manual
Verbal Autopsy Interviewer's Manual
Verbal Autopsy Supervisor's Manual

Training guides and materials:

Census Interviewer Training Guide
Census Interviewer's Workbook
Census Supervisor Training Guide
Census Update Interviewer Training Guide
Census Update Interviewer's Workbook
Key Informant Training Guide
Verbal Autopsy Interviewer Training Guide
Verbal Autopsy Supervisor Training Guide

SAVVY methods for verbal autopsy (including forms, certification, and cause of death assignment and coding) have been developed in collaboration with the World Health Organization (WHO). The WHO publication *Verbal Autopsy Standards: Ascertaining and Attributing Cause of Death* is an essential resource for the application of SAVVY methods.

SAVVY stands for “**S**Ample **V**ital registration with **V**erbal autops**Y**.” SAVVY is a library of best practice methods for improving the quality of vital statistics where high coverage of civil registration and/or good cause of death data are not available. SAVVY is not a substitute for universal civil registration. Its components can, however, fill short- to medium-term needs for critical information on births, deaths, and cause of death at the population level.

SAVVY can be implemented in many ways. It is not always necessary to implement SAVVY as a complete system. There are many circumstances in which various SAVVY methods might be effectively implemented. One option is to adapt specific modules and manuals in order to attain rapid cause-specific mortality estimates as part of a stand-alone data collection exercise, such as a survey. Another potential use of SAVVY methodologies is to augment existing facility-based or administrative data sources. SAVVY methods are integrated into the Health Metrics Network’s vision of “stepping stones” to better vital events monitoring, and are entirely harmonized to the World Health Organization (WHO) International Classification of Diseases (ICD).

The remainder of this chapter will describe the structure of a complete SAVVY system, as part of a long-term strategy to attain universal vital registration and the proper medical certification of deaths. When implemented as a complete system, SAVVY can serve to provide nationally representative information about levels and causes of death, as well as generate many other socio-demographic indicators.

SAVVY includes resources to implement the following:

- ❖ **Demographic surveillance system (DSS)** — DSS is a complete and continuous enumeration of births, deaths, and migration in a geographically defined population.
- ❖ **Mortality surveillance system (MSS)** — MSS consists of the active reporting of deaths in a geographically defined population. Verbal autopsy (VA) interviews are used to determine

the probable causes of death.

- ✧ **Death certification and ICD coding** — Death certification and ICD coding involves application of the tenth revision of ICD and WHO-approved procedures to certify deaths from verbal autopsy interviews and assign a probable cause of death
- ✧ **Nested surveys** — Nested surveys consist of focused sets of questions and are included in the census update rounds. Examples include surveys on poverty monitoring, reproductive health, health service coverage, and environmental and behavioral risk factors.

In establishing a full SAVVY system, the first step is to select and define representative sample areas. Then a complete baseline census is conducted of all households and residents in those areas. The census information on the residents of each sample area is updated annually.

Following the baseline census and continuously thereafter, a local key informant (KI) notifies a verbal autopsy interviewer (VAI) of all deaths occurring in the KI's assigned area. The VAI then conducts a verbal autopsy interview at the household where that death occurred. This information is used later to determine the most likely cause of death.

The SAVVY system field operational structure will depend on the sample selection, as well as the availability of local resources and logistical support. The diagram on page 5 provides a general outline of the field operations in a prototypical SAVVY system.

Most of the people who work to implement SAVVY are selected with community input and participation. Ensuring the success and sustainability of SAVVY, and the use of the information it generates, depends upon fostering participation and ownership from the community to the national levels.

DEMOGRAPHIC SURVEILLANCE

Demographic surveillance is designed to collect accurate demographic data for the SAVVY system. The initial step is to conduct a baseline census for the areas within the SAVVY system. During the census, information is collected on age, sex, marital status, and educational attainment for people living within the SAVVY area. Information is also collected about family structures and other socioeconomic characteristics. Typically, interviewers who live within

the community collect the census data and the data are updated annually.

The data collected in the SAVVY censuses are used to calculate many indicators. The census data provide accurate population denominators for calculating rates (e.g., mortality rates). The census data also provide a sampling frame for supplementary surveys that are nested within the system.

Mortality surveillance is designed to produce accurate community-based information on the levels and causes of death. Mortality surveillance involves continuously and actively identifying all deaths that take place in sample areas soon after they happen. Verbal autopsy interviewers visit households where deaths have occurred and interview relatives or caregivers using the SAVVY VA forms. Once completed, these forms are used to determine probable causes of death.

The data collected by SAVVY mortality surveillance techniques are used to calculate many indicators. Among the most important are mortality by age, sex, and specific causes of death. This information can be used at many levels of the health system for planning, reporting, monitoring, evaluating, and priority setting.

The information collected through SAVVY is generally not available from any other source or on an annual basis. Complete coverage and participation by all communities and the individuals residing in sample areas is extremely important.

Verbal autopsy, or VA, is a questionnaire administered to caregivers or family members of deceased persons to elicit signs and symptoms and their durations, and other pertinent information about the decedent in the period before death. SAVVY uses international standards for verbal autopsy forms, death certification and ICD coding procedures developed in collaboration with WHO, the Health Metrics Network, and other stakeholders. Separate verbal autopsy forms are used for the following age groups:

- ❖ perinatal and neonatal mortality (death of a child under 4 weeks)
- ❖ post-neonatal child mortality (age 4 weeks to 14 years)
- ❖ adult mortality (age 15 years and over).

MORTALITY SURVEILLANCE WITH VERBAL AUTOPSY

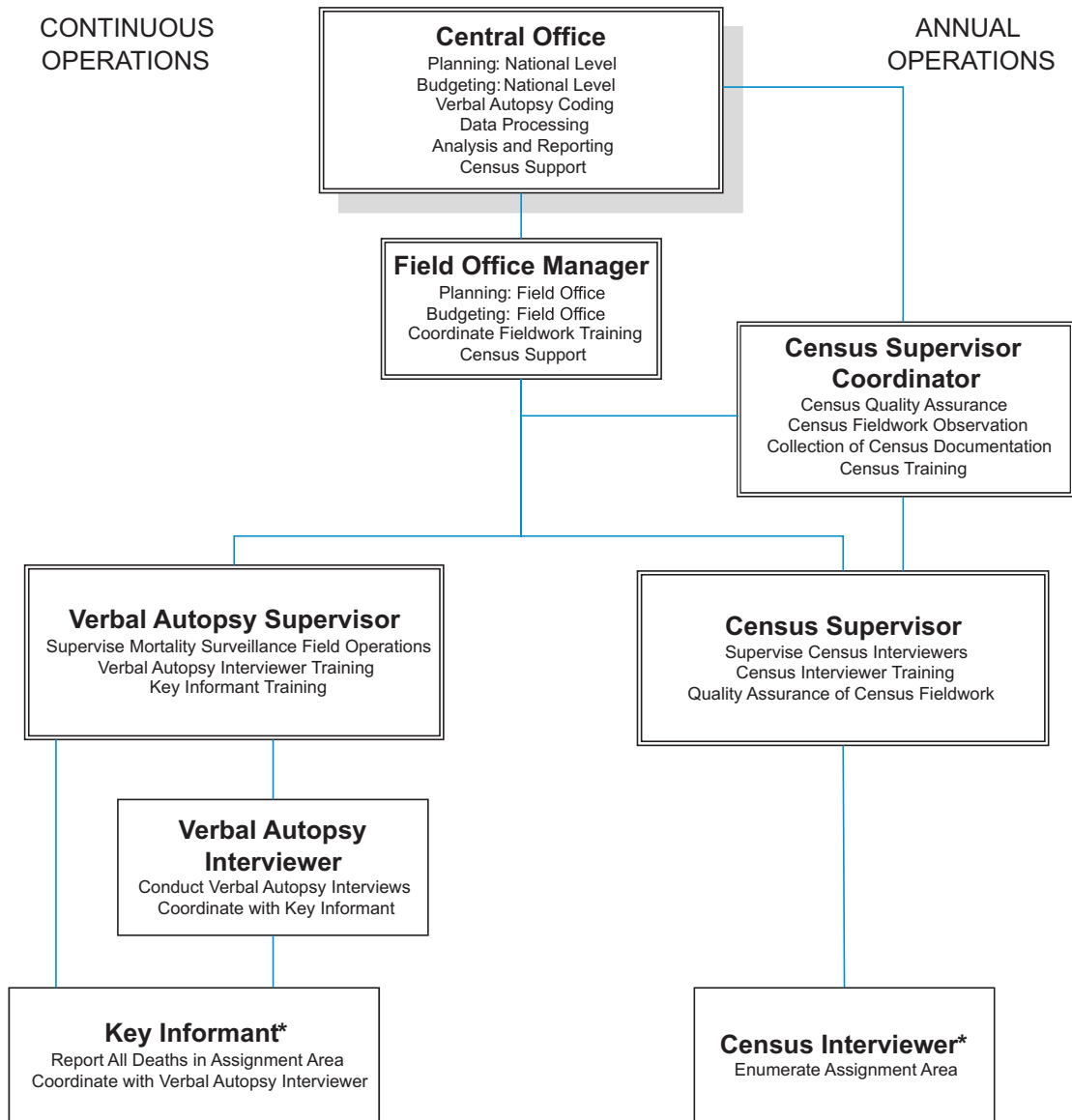
WHAT IS VERBAL AUTOPSY?

All forms used to conduct these interviews include an open narrative section and a structured symptom duration checklist. There are also questions about the health and status of mothers (in the case of perinatal, neonatal, and child deaths), and questions that specifically relate to all women (15 years of age or older). Additional information is collected about previously diagnosed conditions, medications used, health services used, place of death, and behavioral and environmental risk factors. After the administration of the VA interview, a panel of physicians reviews the forms and assigns a probable cause of death using a method that conforms to international convention.

The purpose of VA is to describe the cause structure of mortality at the community or population level where no better alternative sources exist. VA is not intended to diagnose cause of death at the individual level. While VA has some serious limitations, the shortcomings of the tool are known and quantifiable. These deficiencies, however, should not prevent countries requiring information on causes of death from benefiting from the use of VA when no practical alternative for obtaining these data exist.

The SAVVY Resource Kit has been completely harmonized with WHO recommended tools and procedures. It is understood that there will be a need to carry out a small degree of local adaptation to these materials in each country setting in which they are applied.

Certain applications of verbal autopsy may benefit from a shortened or condensed version of the standard WHO VA forms, for example to reduce the amount of paper required. An alternative layout, containing the same questions and content as the standard WHO VA forms, has been designed. Each of these forms fits onto 4 sides of A4 paper. These forms are available upon request.



*If possible, these roles should be filled by a single individual.

ABOUT THIS MANUAL

This manual describes the roles and responsibilities of the VA supervisor in the SAVVY mortality surveillance system. The manual specifies the procedures and criteria to be used during selection and training of various cadres; it also highlights the supervisory and administrative arrangements that need to be made and implemented before, during, and after completion of data collection.

There are separate manuals for key informants and verbal autopsy interviewers, used for training and reference during the course of data collection. This manual is relevant for district officials who will function as SAVVY VA supervisors. A VA supervisor may refer to this manual as a guide for day-to-day operation of the death-reporting system and verbal autopsy data collection activities, and should also be very familiar with the manuals of the other cadres.

Roles and Responsibilities of the SAVVY Verbal Autopsy Supervisor

OVERVIEW

The implementation of the mortality reporting system in SAVVY sample areas requires coordination of activities and adequate training of all personnel involved, in both the field and the central office. Field operations are carried out and managed by a team that includes the key informants (KIs), the verbal autopsy interviewers (VAIs), the verbal autopsy (VA) supervisor, and the field office manager. The mortality reporting fieldwork operations are organized and coordinated as illustrated in the personnel organizational diagram found in Chapter 1. The number of VAIs and VA supervisors will depend on factors such as the size of the population under surveillance, the mortality rate within the population, and the topography of the surveillance site. It will also depend on how activities are assigned to personnel; for example a single person working exclusively on SAVVY can perform the supervision and coordination tasks of a site of 100,000 people with a mortality rate of 20 per 1,000. If, however, this person is assigned to VA supervision work for only two days per week, then additional personnel will be required to assist with the supervision or coordination tasks.

The roles and responsibilities of the KIs, VAIs, VA supervisor, and field office manager occupy separate but linked positions in the SAVVY data collection system. Therefore, the success of the system depends on the quality of the work done by each KI and VAI, as well as the supervision and management skills of the VA supervisors and field office managers. It may be necessary to hire temporary SAVVY census interviewers during census rounds. It is desirable (particularly in the rural areas) that the SAVVY census interviewer should also assume the role of a KI in his or her assignment area (AA). This helps to ensure continued participation and encourages a higher sense of ownership, responsibilities, coordination, and depth of knowledge of the system and the AA.

A VA supervisor is responsible for supervising and coordinating the day-to-day field operations of the mortality surveillance system in his or her area (which may be a subset of the SAVVY site if the SAVVY site is large). This person requires a reliable means

of transport as he or she visits the assignment areas frequently, in order to support the work of key informants and verbal autopsy interviewers.

RESPONSIBILITIES

The main responsibilities of the VA supervisor are to:

- ✦ know the contents of this manual, as well as the VAI and KI manuals, in detail;
- ✦ have a thorough knowledge of design and use of the KI mortality registers, VAI reporting log book, all three types of VA questionnaires, and the corresponding training manuals and job aids;
- ✦ know the assignment areas, their boundaries, and to have good relations with the VAIs and KIs for each and every assignment area;
- ✦ ensure that each person he or she supervises performs his or her duties according to guidelines and instructions;
- ✦ make sure that the necessary materials for fieldwork activities (such as VA forms and instructional manuals) are available to the appropriate field-workers;
- ✦ participate in or manage the selections and training of VAIs and KIs;
- ✦ manage, supervise, and support all data collection activities;
- ✦ remain available to, and in contact with, the fieldworkers and help the KIs and VAIs resolve whatever problems they may come across during fieldwork;
- ✦ perform quality assurance activities of both the VAIs and KIs;
- ✦ provide the field office manager with the necessary administrative, logistical, and budget planning support for all SAVVY operations in the area;
- ✦ complete the relevant control forms upon receipt of fieldwork materials; and

- ☒ meet regularly (at least once a month) with the field office manager to discuss all SAVVY activities in their area, including the progress of verbal autopsy data collection.

WHAT VA SUPERVISORS DO: ACTIVITIES AND TASKS

Below is an overview of the main routine tasks VA supervisors need to perform. These tasks are conducted at different time intervals. For more detailed information about how to conduct these tasks, refer to the relevant chapters of this manual.

During SAVVY establishment, VA supervisors:

- ✦ assist the field office manager in organizing and undertaking advocacy campaigns to sensitize the community in the area on the importance of the SAVVY system, how the community members can help in achieving the system's objectives, and the benefits of participation; and
- ✦ archive updated versions of assignment area maps.

After each SAVVY census, VA supervisors:

- ✦ ensure that the VAIs are provided with a list of deaths reported to the census for comparison with the KI's records;
- ✦ evaluate the comparison of the KIs' records with the list of deaths from the census; and
- ✦ obtain an updated estimate of the number of deaths expected each month in each assignment area from the data center.

Each field visit, VA supervisors:

- ✦ carry additional materials to distribute to the field-workers who might need more materials (VA forms, for example);
- ✦ keep a list of all materials distributed, for office records; and
- ✦ meet with local leaders to discuss the community perceptions of mortality surveillance and to ensure that there are no problems with the VAI or KI.

Each year, VA supervisors:

- ✦ plan and implement re-training of all key informants and VA interviewers; and

- ✘ assist the SAVVY field office manager with budgeting for SAVVY activities.

Each month, VA supervisors:

- ✘ perform quality assurance VA reinterviews (with and without the VAI present) aiming for 10% each month;
- ✘ review all VAs completed during the month;
- ✘ log and send completed VAs to the central office for data entry;
- ✘ meet with the field office manager to discuss all SAVVY activities, especially the progress of verbal autopsy data collection; and
- ✘ confirm with VA interviewers that they have at least a 3-month supply of forms.

Each week, VA supervisors visit at least one KI and perform quality assurance (aim to visit each KI at least once every month).

It is ESSENTIAL that the information you obtain remains strictly CONFIDENTIAL. You are not permitted to discuss, gossip about, or show your records or completed forms to anyone who is not an authorized officer in the SAVVY system. On no account should any unauthorized persons be permitted to fill in any section of a form. Do not leave your forms in an unsecured location where unauthorized persons may have access to them.

Your job will not always be easy. There may be times when your progress is not going well, even though you want to do a good job and keep on schedule. However, you must not take any “shortcuts” in reviewing or completing VA forms, or under any circumstances submit falsified work to the central office. Fake data are of no value. Worse still, if you falsify data you also weaken accurate data collected by others.

SAVVY is a community-based system and cannot be successful without the cooperation of the communities in which the field operations take place. One way in which SAVVY tries to foster community participation is by providing KIs with tools or equipment that can be borrowed by bereaved families to help them with the burial

CONFIDENTIALITY

HONESTY

SAVVY AND THE COMMUNITY

or funeral. These are *community* assets and the KI is responsible for looking after them.

If they perform their work well, KIs and VAs gain status in their communities as a result of their work. With this status comes a responsibility to respect the feelings of bereaved families and treat all information they are given as confidential. Failure to do so will lead to resistance from members of the community in reporting vital events and to a lack of participation in SAVVY activities.

Experience has shown that building a good relationship with the community leads to a change in behavior. Members of the community learn that once a death occurs, it should be reported. This makes the work of the KIs and VAs easier and may help to create an environment for the establishment of universal vital registration in the future. One measure of how well the SAVVY system is being managed and operated is the extent to which the community becomes proactive in reporting deaths to the KIs (as opposed to the KIs actively seeking reports of deaths). If the VA supervisor is managing the SAVVY team well, in time deaths will be reported by the community in a routine manner.

Verbal Autopsy Supervisor Materials

The verbal autopsy (VA) supervisor is provided with the materials listed below in order to perform his or her duties. To prevent loss, damage, or any unauthorized person from seeing information that is recorded on the VA forms, the supervisor is required to keep these materials with him or her at all times while working in the field, and in a safe place in the office when not working with them.

The following is a list of materials that a VA supervisor is required to have:

- ✠ VA supervisor identification card (be sure to wear it where it can be seen)
- ✠ this manual, and the manuals for key informants (KIs) and verbal autopsy interviewers (VAIs) and training guides
- ✠ assignment area (AA) map and map pouch
- ✠ VA forms (found in the Forms section of the *Verbal Autopsy Interviewer's Manual*)
- ✠ list of estimated number of deaths expected each month in each AA
- ✠ pencils or pens for writing, and erasers
- ✠ a bag for carrying forms and other materials.

The AA map is used as a guide to locate the assignment areas, and to note the location and number of households in your area.

How to Identify, Select, and Train People to Perform the Roles in SAVVY

4

The exact mechanisms for selection and hiring people will depend on local conditions. This section provides some guidance on the type of people who have been found to be appropriate in other settings for SAVVY roles, and an overview of the training that will be needed.

Selection — A verbal autopsy (VA) supervisor should be someone who is respected by local authorities and community members, and able to communicate effectively with them. This will often mean selecting an employee in a senior position within the local government staffing structure. He or she must possess good administrative and communication skills, be thorough in his or her work, and be innovative, particularly when confronted with challenges. A senior member of the health management team (or local equivalent) would be an ideal person to select for this position.

Since the VA supervisor will also be responsible for the training of verbal autopsy interviewers (VAIs) and key informants (KIs), it is important that he or she be a good trainer, as well as a good administrator. In addition, it is desirable for a VA supervisor to have data management skills or survey experience. VA supervisors will probably be recruited at the district level. The actual process for advertising and selecting candidates for this role will depend on local norms and regulations.

Training — Being senior technical supervisors of the SAVVY system in each area, VA supervisors receive all appropriate training needed for fieldwork and office activities. The training is in the form of short courses, seminars, and workshops given prior to the implementation of the SAVVY system in the district, and followup training during the implementation. The training focuses on field supervision, data management and monitoring, planning, management of finances, and survey management.

Selection — The process of selection and training of highly qualified VAIs is tailored to meet the data quality requirements of the SAVVY system and the need to establish and maintain community rapport. There is a range of opinion about whether medical training

VERBAL AUTOPSY SUPERVISOR

VERBAL AUTOPSY INTERVIEWERS

should be a preferred qualification for VAIs, or whether educated but non-medically trained persons are more suitable. Local experience will determine the optimal solution. A VAI should be selected with a reasonable degree of community consultation, to ensure the acceptability of that individual to members of the community.

Training — Formal training for new VAIs and annual retraining for existing VAIs is provided to ensure that standard practices are used and proper procedures are followed. The training for new VAIs takes about four days and includes theory, practice (in class), and fieldwork experience (in which actual VA interviews are conducted in the field, under the close supervision of trainers). Longer periods of training involve accompanying experienced VAIs from other SAVVY sites or from research demographic surveillance sites (if present in country) as they carry out their routine verbal autopsies. This can provide an excellent opportunity for new VAIs to see the whole cycle of VA work.

For detailed information on the training of the interviewers, refer to the *Verbal Autopsy Interviewer's Manual* and the corresponding training guide.

KEY INFORMANTS

Selection — In most cases, KIs are recruited locally and are selected with significant input by community members. Generally, the VA supervisor asks leaders of the assignment areas, with input from other community members, to recommend an adult who meets the criteria listed in the *Key Informant's Manual*. KIs must be literate, diligent, and have a reputation for showing concern for all ethnic, religious, or political groups in the community. KIs may also be expected to perform the function of SAVVY census interviewers during baseline and update rounds.

Training — Once selected, KIs attend a training session that includes both classroom and field work exercises. For new KIs, the two-day training program covers the necessary methods, materials, and responsibilities that a KI needs in order to become familiar with and to perform his or her duties. In addition, KIs undergo an annual refresher course (a one-day training session).

At the KI training sessions, emphasis is placed on the importance of collecting reliable information, ensuring that the boundaries of the AAs are known, methods for approaching a household where a death has occurred, and procedures during visits to the bereaved families. During the course of the training, each KI is given tools that enable him or her to perform the position's responsibilities (such as a copy of the *Key Informant's Manual*, a mortality register, and other

job aids). Each KI is also assigned a geographic area for which he or she will be responsible for reporting all deaths. They are also given tools or equipment that may be borrowed by bereaved families to assist with the burial or funeral. The type of tools or equipment depends on local conditions and norms for burial and funerals.

Detailed information on the recruitment and training of KIs is contained in the *Key Informant's Manual* and the corresponding training guide.

How to Review Verbal Autopsy Interviewer and Key Informant Work

5

The verbal autopsy (VA) supervisor monitors, reviews, and evaluates the work of the verbal autopsy interviewers (VAIs) and organizes quality assurance activities in each assignment area (AA), sometimes with and sometimes without the knowledge of VAIs.

When a VAI first begins work, the VA supervisor accompanies him or her regularly during VA interviews in the households where a death has occurred. After the VAI has gained experience, the VA supervisor accompanies the VAI only when necessary. During the accompanied interviews, the VA supervisor observes the VAI while he or she conducts interviews, and assesses the performance of the interviewer. After completion of each VA interview, the VA supervisor discusses the interviewer's performance and notes areas in need of improvement that were observed during the interview.

SUPPORTIVE
SUPERVISION
DURING FIELDWORK

The VA supervisor conducts quality assurance in the field by reinterviewing 10% of verbal autopsy respondents. Each month, the VA supervisor randomly selects households where a VA interview has already been completed and revisits the household to verify the information recorded in the VA forms. During these quality assurance visits, the VA supervisor needs to be very respectful of the bereaved household, as they have already been previously visited by a VAI. Assure the family that the visit is a routine followup, only to verify information collected previously, and thank them again for their time and patience.

UNACCOMPANIED
SUPERVISION IN THE
SAMPLE AREAS

The VAI is not necessarily informed of these visits to the field for this verification exercise. Details on how to conduct a VA interview are found in the *Verbal Autopsy Interviewer's Manual*. In addition, the VA supervisor makes random unannounced visits to each area to confirm the VAI's presence when the VAI is supposed to be there conducting interviews. The VA supervisor also asks community members in each area about the conduct of the VAI, and inquires to make sure that no deaths have been missed.

At the end of each month, the VAI and VA supervisor meet to

AFTER RECEIVING
VERBAL AUTOPSY
FORMS

review progress. These meetings take place in a central location and all VAIs attend. During these meetings, the VAI gives the VA supervisor completed VA forms. The VA supervisor reviews these forms to ensure that they have been completed fully and do not contain obvious errors. If the VA supervisor detects errors, he or she informs the VAI. In some cases, it may be necessary for the VAI to return to the bereaved family to correct errors. Returning to bereaved families for more information is a difficult task, and VAIs who repeatedly submit forms that are incomplete should be referred to the field office manager for action and possible replacement.

HOW TO REVIEW KEY INFORMANT WORK

The *Verbal Autopsy Interviewer's Manual* provides details of how the VAIs review the work of KIs. The VA supervisors perform the same KI review procedures as VAIs, but do so less frequently. The VA supervisor aims to meet with each KI once every two months, *independently* of the VAI. This is to encourage the KI to speak more freely about the progress of VA interviews, and to be more candid in case problems are emerging between the KI and a VAI.

How to Verify Mortality Ascertainment and Manage Verbal Autopsy Forms

6

Monitoring everyone's workload is an important aspect of verbal autopsy (VA) data collection and processing. The VA supervisor compares the VA interviewer (VAI) log book to his records and to that of the key informant's (KI's) mortality register to assess completeness and discrepancies in the records. In this way, the VA supervisor is able to know if there are discrepancies between the numbers reported by the KI and the VAI and if the VAI is able to complete all of the VA interviews in a timely manner.

The VA supervisor also has an estimate of the expected number of deaths in each age group for each assignment area (AA), based on local data obtained after each census update round. Using this list, the VA supervisor is able to detect areas for which reporting is either very low or very high, and therefore areas that may require investigation.

The VA supervisor keeps a stock of blank VA forms in his office. To avoid running out of forms, the VA supervisor maintains at least a three-month supply, based on the expected number of deaths in the AAs. The VA supervisor also checks with the VAI each month to make sure that the VAI also has a three-month supply.

Each month, the VAI submits completed VA forms to the VA supervisor. To ensure that the reporting is correct, the VA supervisor checks each one thoroughly for quality, internal consistency, and completeness. The VA supervisor signs each form that passes inspection and logs it into his or her record keeping system. Each month, the VA supervisor reports progress to the SAVVY field office manager. The VA supervisor then arranges for the dispatch of completed VA forms to the central office for coding, further quality assurance processes, data entry, and storage.

The VA supervisor signs each form that passes inspection and logs it into his or her record keeping system. Each month, the VA supervisor reports progress to the SAVVY field office manager. The VA supervisor then arranges for the dispatch of completed VA forms

HOW TO VERIFY
MORTALITY
ASCERTAINMENT

HOW TO MANAGE
VERBAL AUTOPSY
FORMS

to the central office for coding, further quality assurance processes, data entry, and storage.

Address — The physical location of a building or living quarters. May be comprised of a building number and street name (e.g., 123 Anywhere Street). See “location description” in this glossary.

Address listing book — Used to record the addresses or location descriptions of all known buildings and living quarters in an assignment area. This book is prepared during each census round and is given to the key informant upon completion.

Assignment area (AA) — A geographic area established for data collection purposes. An assignment area usually represents the average workload for one census interviewer or one key informant.

Assignment area map — Shows the boundaries, features, and landmarks of an assignment area is an “assignment area map.” This map is prepared during each census round and given to the key informant upon completion.

Assignment area number — Identifies a specific assignment area on SAVVY maps and forms.

Callback — A return visit to an address to complete the required information.

Canvassing — Systematically traveling all streets, roads, paths, etc., of each block in an assignment area to identify every place where people live or could live.

Census — An official, periodic count.

Census interviewer — Responsible for conducting baseline census interviews or update census interviews. He or she is attached to the SAVVY area and is knowledgeable about that assigned area. The census interviewer is also responsible for identifying the boundaries of the assignment area and canvassing the entire assignment area to determine the location of each building, housing unit, and household.

Confidentiality — A guarantee that the information respondents provide to a SAVVY employee and SAVVY office will not be

revealed to others.

Duration — For all signs or symptoms that were not associated with a previously diagnosed condition, nor related to an injury, “duration” is defined as the period starting from the *appearance* of that particular sign or symptom to the cessation of that symptom, regardless of the presence of that sign or symptom at the time of death, and irrespective of whether the sign or symptom appeared intermittently. For example, if a woman began to have fever 10 days before death, but she ceased having fever two days before death, the duration of her fever would be eight days, even if she did not have fever for each and every one of those eight days.

Head of household — See “reference person” in this glossary.

Household — This is an arrangement in which one or more persons make common provisions for their own food or other essentials for living. These people may have a common budget, be related or unrelated, or a combination. There may be more than one household in a housing unit. In short, a household is defined as a group of people who “eat from the same pot.”

Household number — This is a number assigned by a SAVVY census interviewer to each household within a housing unit. The household identification number must be unique within the housing unit.

Housing Unit – A housing unit is a separate and independent place of abode intended for habitation by a single household, or one not intended for habitation but occupied as living quarters by a household at the time of the census.

Key informant (KI) — A person who lives in the SAVVY assignment area and is responsible for reporting any deaths that occur in her or his assignment area to the verbal autopsy interviewer. The key informant is also responsible for arranging the date and time of the verbal autopsy interview with each bereaved family.

Location description — A description of the physical location of a living quarters that tells anyone unfamiliar with the assignment area how to find that living quarters, so the living quarters can be located by another SAVVY employee. This may be an address, if one is available.

Reference person — The person who makes decisions for the household on a daily basis and who is a permanent resident of the household (spends the night at least six months out of the year

at the house) is the “reference person.” If the household reports someone who spends the majority of his or her time away from home, then make that person’s spouse the reference person. If there is no spouse, then make the eldest family member the reference person, as long as he or she is at least 15 years of age or older. If there is no family member 15 years of age or older, then make the eldest nonfamily member the reference person as long as he or she is 15 years of age or older. If there is no permanent household member who is at least 15 years old, then make the eldest relative or resident the reference person.

Resident — See “usual residence” in this glossary.

Respondent — There are two types of respondents in the SAVVY system, the **census respondent** and **verbal autopsy respondent**.

Census respondent is the person supplying census information about a household and all of its members. The respondent should be a responsible family member of the household. Possible respondents are listed in order of preference:

- ☒ reference person
- ☒ spouse of reference person
- ☒ eldest family member available, at least 15 years of age or older
- ☒ nonfamily member at least 15 years of age or older
- ☒ family member less than 15 years of age
- ☒ nonfamily member less than 15 years of age
- ☒ neighboring reference person or spouse of neighboring reference person
- ☒ local knowledgeable informant

Verbal autopsy respondent is the adult being interviewed, who is typically a resident in the household. The respondent must be someone who is able to give reliable and accurate information regarding the members of the household. In the case of a death in the family, the respondent will be able to give information about the circumstances leading to the death.

Ideally, the verbal autopsy respondent for the verbal autopsy interview would be the one who cared for the deceased during the period of illness. Possible verbal autopsy respondents are listed in order of preference:

- ☒ main care-giver of the deceased in the period before death
- ☒ reference person
- ☒ spouse of reference person
- ☒ parents, particularly if the deceased was a child
- ☒ eldest family member available, at least 15 years of age or older
- ☒ nonfamily member at least 15 years of age or older
- ☒ family member less than 15 years of age
- ☒ nonfamily member less than 15 years of age
- ☒ neighboring reference person or spouse of reference person

Sample area — The geographic area selected for the SAVVY system.

Stillbirth — A baby that shows no signs of life when born. Stillbirths may be due to injuries, illness, infections, or catastrophic events happening to the mother or to the child while in the womb or during birth. In order to distinguish from abortion or miscarriage (for which verbal autopsy is not conducted), the SAVVY verbal autopsy system only includes births that occur after 28 weeks of pregnancy.

Usual residence — The place where the person lives and sleeps most of the time. This place is not necessarily the same as a person's legal residence. Also, noncitizens are included if this is their usual residence. Following are some common examples of usual residences:

- ☒ For people temporarily away on vacation or a business trip, their usual residence is the place where they live and sleep most of the time.

- ✦ The usual residence for commuter workers living away part of the week while working is the residence where they stay most of the week.
- ✦ For children in joint custody, usual residence is where they live most of the time. If time is equally divided, they are counted where they are staying during the interview period.
- ✦ Usual residence for people who own more than one residence is the residence where they live most of the time.
- ✦ Usual residence for college students living away from home while attending college is where they are living at college, if they are in a household. College students living in dormitories are not counted in the SAVVY census.
- ✦ For college students living at their parental home while attending college, usual residence is their parental home.
- ✦ The usual residence for a live-in nanny or other live-in house worker is where that person lives most of the week.
- ✦ For foster children, usual residence is where they are living during the interview period.
- ✦ Usual residence for renters or boarders is where they are living during the interview period.
- ✦ Usual residence for housemates or roommates is where they are living during the interview period.
- ✦ For people in the military who are residing off-base in the country, their usual residence is the place where they live and sleep most of the time. Military people on-base are not counted in the SAVVY census unless they are in residential style housing.
- ✦ Usual residence for staff members living in hospitals, nursing homes, prisons, or other institutions is where they report that they live and sleep most of the time; otherwise it is the living quarters that they inhabit at the institution.

- ✦ For students living in school dormitories but who are not enrolled in college, the usual residence is their parental home.
- ✦ Usual residence for citizens of foreign countries who have established a household or are part of an established household in the country while working or studying, including family members who are with them, is the household where they are residing (spending the majority of their time while in-country).

Verbal autopsy (VA) — Verbal autopsy is a process used to collect information (using a specially-designed form) from relatives or 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 by medical personnel to assign a probable cause of death for each reported death.

Verbal autopsy form — This is a form used to collect information on the history of illness of the deceased and presence of signs and symptoms. The form is to be completed by the interviewer during verbal autopsy interviews. There are three types of verbal autopsy forms used by the SAVVY system:

- ✦ International Verbal Autopsy Questionnaire 1: Death of Child under 4 Weeks
- ✦ International Verbal Autopsy Questionnaire 2: Death of a Child Aged 4 Weeks to 14 Years
- ✦ International Verbal Autopsy Questionnaire 3: Death of a Person Aged 15 Years and Above

Verbal autopsy interviewer (VAI) — The verbal autopsy interviewer is the person responsible for conducting VA interviews with the bereaved family members in the household. He or she is attached to the SAVVY area and is knowledgeable about that assigned area. The verbal autopsy interviewer must be accepted by the community in which he or she works. Some requirements of the verbal autopsy interviewer include having attained the highest primary level of the national education system (at minimum) and the ability to speak the dialect of the area to which he or she is assigned.

MEASURE Evaluation
Carolina Population Center
University of North Carolina at Chapel Hill
CB 8120, 123 W. Franklin St.
Chapel Hill, NC 27516 USA
www.cpc.unc.edu/measure

International Programs Center
Population Division
U.S. Census Bureau
Washington, DC 20233
www.census.gov

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