

**A VERBAL/SOCIAL AUTOPSY STUDY
TO IMPROVE ESTIMATES OF THE CAUSES AND
DETERMINANTS OF NEONATAL AND CHILD
MORTALITY
IN MALAWI**

Government of Malawi



**National Statistical Office
Malawi**

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EXECUTIVE SUMMARY

Background

Through a new grant to the U.S. Fund for UNICEF on behalf of the WHO/UNICEF-supported Child Health Epidemiology Reference Group (CHERG), the Bill and Melinda Gates Foundation is supporting a set of 14 activities to provide improved global estimates and measures of the causes and determinants of maternal, neonatal and child morbidity and mortality, of intervention coverage, and of the effectiveness of health interventions. Many of these new activities entail gathering and reviewing existing data and building models to develop estimates; while two new activities partly involve gathering new verbal and social autopsy (VASA) data to directly measure neonatal and child mortality and its determinants in several high priority countries. This document represents the final report of the VASA project in Malawi, which is preliminary until country stakeholders have had the opportunity to review it.

Aim and Objectives of the VASA Project in Malawi

1. Estimate the cause distributions of death, separately for neonates (0-27 days old) and young children (1-59 months old), in Balaka and Salima districts, Malawi;
2. Estimate the proportions of deaths, by cause, of neonates and young children that occur in hospital in Balaka and Salima districts, Malawi; and
3. Estimate the prevalences of social factors contributing to deaths of neonates and young children in Balaka and Salima districts, Malawi.

VASA Method

Sample size and sampling

The Verbal Autopsy and Social Autopsy study (VASA) was based on a platform of the 24,000 household Rapid Mortality Monitoring (RMM) Survey undertaken by the National Statistics Office and Johns Hopkins Bloomberg School of Public Health (JHU) from October 2011 to February 2012 in the districts of Balaka and Salima. The reference household survey with a full birth history was aimed at providing data to measure annual neonatal, infant and under-five mortality in the sampled districts. The reference study was conducted as part of JHU's evaluation of the impact of the Catalytic Initiative Rapid Scale-Up of Maternal, Newborn and Child Health (MNCH) interventions in Malawi. A total sample of 1289 under-five deaths in the 4-years prior to the RMM survey, including 470 neonates and 819 post-neonates, were identified for a VASA follow-up interview.

Questionnaire

A two-component questionnaire was developed for the survey based on the GC-13 VA questionnaire and integrated with an updated Pathway Analysis SA questionnaire. Mothers aged 15 years and older and other caregivers of deceased neonates and young children were included for interview in the study. The reference survey collected individual and household identifiers for all deceased children and these identifiers were used to help locate the households where a death occurred and that needed to be followed-up for a VASA interview. The questionnaire was translated into the local language, Chichewa, which is spoken by most persons in the study area. A local anthropologist was recruited to do the translation and another team of two experienced staff at NSO independently back-translated the Chichewa questionnaire and compared this to the original English questionnaire. The discrepancies were then scrutinized to determine the source of the errors and these were ably corrected through consultations between the anthropologist and the back translators.

Main Results

- There was low coverage of key interventions along the continuum of care for pregnant women (4+ quality ANC visits), neonates (thermal care, kangaroo care for preterms) and young children (full immunization).
- One-third of women who recognized they had a pregnancy or labor and delivery complication at home did not seek formal health care
- One-half of caregivers of deceased newborns did not seek care for the fatal illness
- There was delayed care seeking for child illnesses after recognition of a possibly severe or severe symptom
- Inaccessibility to health facilities due to distance, lack of transportation and cost, emerged as the main constraints to formal health care seeking for mothers and children
- Three-fourths of peri-neonatal deaths were of stillbirths and neonates in the first 6 days after birth
- Newborns died mainly of preventable maternal conditions and neonatal illnesses
- 40 percent of newborns were born and died at a health facility without going home
- Children are less likely to be fully immunized against polio by age one (22 percent of children age 12-23 months)

Recommendations

- Accelerate progress in extending the coverage of interventions and service delivery channels Encourage and promote good recognition and early care seeking for maternal complications
- Increase OPV coverage
- Encourage and promote good recognition and early health care seeking for newborn and child illnesses
- The MOH should review the distance and cost issues that may be limiting access to fixed health facilities

- Improve the early detection and management of pregnancy, labor and delivery complications at health facilities
- Improve quality management of newborn illnesses at health facilities
- Improve quality management of under-five infectious illnesses at the health facility

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ABBREVIATIONS

ADC	Area Development Committee
ANC	Antenatal Care
ARIs	Acute Respiratory Infections
BMGF	Bill and Melinda Gates Foundation
CHERG	Child Health Epidemiology Reference Group
CIDA	Canadian International Development Agency
CPR	Contraceptive Prevalence Rate
DHMT	District Management Health Team
DHS	Demographic and Health Survey
DPT	Diphtheria, Pertussis, Tetanus
EHP	Essential Health Package
EmOC	Emergency Obstetric Care
GDP	Gross Domestic Product
HSA	Health Surveillance Agent
HTC	HIV testing and counselling
IIP	Institute for International Programs
IMCI	Integrated Management of Childhood Illnesses
IMR	Infant Mortality Rate
IPT	Intermittent Preventive Treatment
IRS	Insecticide Residual Spraying
ITN	Insecticide Treated Nets
JHU	Johns Hopkins University
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
MoH	Ministry of Health
MPs	Members of Parliament
NSO	National Statistic Office
OPV	Oral Polio Vaccine
PMTCT	Prevention of Mother to Child Transmission
PoW	Program of Work
RMM	Rapid Mortality Monitoring
SWAp	Sector Wide Approach
TA	Traditional Authorities
TFR	Total Fertility Rate
UNICEF	United Nations Children's Fund
VASA	Verbal Autopsy/ Social Autopsy
VDC	Village Development Committee
WHO	World Health Organization

SECTION 1- INTRODUCTION

1.1 Background

Malawi is receiving support from the Canadian International Development Agency (CIDA) through UNICEF and the Bill and Melinda Gates Foundation (BMGF) through WHO to implement a Rapid Scale-Up of Maternal, Newborn and Child Health programs with the broad objective of demonstrating that proven high impact interventions can be scaled up rapidly to reduce maternal, newborn and child mortality.

To ensure national and global learning of results of the program, the Institute for International Programs at Johns Hopkins Bloomberg School of Public Health (IIP-JHU) in close collaboration with the National Statistical Office (NSO) conducted an independent evaluation of the impact of the Rapid Scale-Up in Malawi. The evaluation included a household survey with full birth history to measure annual mortality in the two Rapid Mortality Monitoring (RMM) districts of Salima and Balaka.

In an effort to improve country-specific and global estimates and measures of the causes and determinants of neonatal and child mortality, the U.S. Fund for UNICEF on behalf of the WHO/UNICEF supported Child Health Epidemiology Reference Group (CHERG) through a grant from the BMGF supported a Verbal and Social Autopsy (VASA) study. The CHERG worked with the NSO to conduct a VASA study by revisiting households with a recent death identified by the RMM Survey to conduct a VASA interview. The VASA study provides estimates of the proportions of deaths due to important causes for neonates such as birth asphyxia, preterm birth and sepsis, and for 1-59 month olds such as malaria, pneumonia and diarrhea; and estimates the percentage of deaths lacking key preventive actions and affected by behavioral and social factors such as problematic care seeking and inadequate care given by formal health care providers, as well as examines the reasons for these problems.

1.2 Objectives of the VASA Study

Policy planners need information on causes of death to identify service priorities, effectively allocate scarce resources and evaluate the impact of health care programs. In Malawi, with a weak civil registration system, a number of deaths and their causes remain neither registered nor certified as to the cause of death. As such the VASA study aimed to shed light on the causes of deaths and assesses the perception of the illness and care-seeking carried out by the caregiver of the deceased child. Specifically the objectives of the study were:

1. To estimate the cause distributions of death, separately for neonates (0-27 days old) and young children (1-59 months old), in Balaka and Salima districts.
2. To estimate the proportions of deaths, by cause, of neonates and young children that occur in hospital in Balaka and Salima districts.

3. To Estimate the prevalence of social factors contributing to deaths of neonates and young children in Balaka and Salima districts

1.3 Country

1.3.1 Geography and administrative system

Malawi is a small, narrow, landlocked country that shares boundaries with Zambia in the west, Mozambique in the east, south and southwest, and Tanzania in the north. Malawi has an area of 118,484 km² of which 94,276 km² is landlocked. The country is divided into three administrative regions, namely the northern, central and southern regions. Malawi has 28 districts, which are further divided into traditional authorities (TAs) ruled by chiefs. The village is the smallest administrative unit and each village is under a TA. A Group Village Headman (GVH) oversees several villages. There is a Village Development Committee (VDC) at GVH level which is responsible for development activities. Development activities at TA level are coordinated by the Area Development Committee (ADC). Politically, each district is further divided into constituencies which are represented by Members of Parliament (MPs) and in some cases these constituencies can combine more than one TA.

1.3.2 Population

In 2011 Malawi's population was estimated at 14.4 million¹. Since the population stood at eight million in 1987, this means that it has almost doubled over a 20-year period. At this growth rate it is projected that by 2016, the population will be at 16.3 million. The proportion of Malawi's population residing in urban areas is estimated at 15.3%. Malawi is one of the most densely populated countries in Africa with 139 persons per km² in 2008 and the Southern Region having the highest population density at 184 persons per km². Malawi's population growth rate is estimated at 2.3%, predominantly due to the high total fertility rate (TFR), which is now estimated at 5.7, and the low contraceptive prevalence rate (CPR) of 35% among all women using any method⁶. Almost half of the population is under 15 years of age and the dependency ratio rose from 0.92 in 1966 to 1.04 in 2008. About 7% of the population are infants aged less than 1 year, 22% are children under five years of age and about 46% are aged 18 years and above. Malawi is predominantly a Christian country (83%), while 13% are Muslim, 2% of other religions and 2% of no religion.

1.3.3 Economy

Malawi is predominantly an agricultural country: this sector accounts for 35% of the GDP and more than 80% of export earnings (primarily from tobacco sales) and it supports more than 85% of the population². The DHS 2010³ found that 58% of women and 49% of men work in agriculture. The sources of revenue for funding public services are taxes on personal income and company profits, trade taxes and grants from donors. In the event of insufficient revenue to

cover the budgeted expenditure, the financing of the deficit is met either from domestic bank and non-bank sources, or from foreign financing in the form of loans from donor and overseas banks. In such a scenario, the financing of public services in Malawi is inextricably linked to the aggregate of each of these revenue sources. For instance, in the 2008/09 financial year, the major public sector sources of finance contributed in the following proportions: domestic taxes had a share of 77.9% and trade taxes had a share of 10.1%, while non-tax revenue was 12.0%. These revenues represented 24.5% of GDP. In terms of recurrent expenditures, health was the third at 10.2% after General Administration (33.9%), Agriculture (18.9%) and Education (13.7%)⁴.

1.3.4 Health

In 2004 the Ministry of Health (MoH) in conjunction with other government ministries, the private sector, Civil Society Organizations (CSOs) and HDPs developed the Sector Wide Approach (SWAp) Program of Work for the period 2004-2010 to guide the implementation of interventions in the health sector. The PoW was completed in 2010 but was extended to June 2011 to allow for the final evaluation of the Program. Substantial progress was made during the implementation of the PoW as demonstrated in improved health indicators, such as the maternal mortality ratio (MMR), infant mortality rate (IMR) and contraceptive prevalence rate (CPR)⁴.

An Essential Health Package (EHP) was agreed upon, covering diseases and conditions affecting the majority of the population and especially the poor. This package has been delivered free of charge to Malawians and most of the interventions for EHP conditions have been cost effective. The conditions in this package are: vaccine preventable diseases; acute respiratory infections (ARIs); malaria; tuberculosis; sexually transmitted infections (STIs) including HIV/AIDS; diarrhoeal diseases; Schistosomiasis; malnutrition; ear, nose and skin infections; perinatal conditions; and common injuries. The section below describes the progress that has been made so far in the fight against these conditions/diseases including progress in attaining the health-related Millennium Development Goals (MDGs)^{5,6}.

- Vaccine preventable conditions

Malawi has had a robust and enviable immunization program for many years and recent high coverage is confirmed in the 2010 DHS report which shows that 81% of children aged 12-23 months were fully immunized. This is an increase in coverage of 26% since the 2004 DHS. However, in 2010 the country experienced an outbreak of measles with an estimated 43,000 children requiring treatment.

High coverage, particularly of measles is required to maintain herd immunity and additional resources will therefore be required to sustain a vaccine coverage of 90 per cent and above for all antigens.

- Acute respiratory infections

Acute respiratory infection is one of the most significant causes of morbidity and mortality amongst children worldwide. In Malawi, between 2004 and 2010 the proportion of children with ARIs taken to a health facility for treatment increased from 19.6% to 70.3%. Also, there was a reduction of pneumonia case fatality from 18.7% in 2000 to 5.7% in 2008.

Evidence has shown that populations, especially children, that are heavily exposed to wood smoke from cooking are at much higher risk from severe pneumonia and higher risk of mortality⁶.

Prevention through hand-washing, immunisation with pneumococcal vaccine, early diagnosis and treatment with antibiotics are all highly effective. Along with malaria treatment and oral rehydration of diarrhoeal disease ARI is addressed through an Integrated Management of Childhood Illnesses (IMCI) approach. The successful implementation of pneumonia interventions in the PoW is likely to have contributed to the dramatic fall in infant and child mortality. Continuation of these interventions will help to achieve the two MDG targets dealing with child mortality by 2015.

- Malaria

Malaria is endemic throughout Malawi and continues to be a major public health problem with an estimated 6 million cases occurring annually. The use of Insecticide Treated Nets (ITN) when sleeping is the primary control strategy for preventing malaria. The Malawi National Malaria Indicator Survey 2010-17 showed a parasite prevalence rate by slide microscopy of 43.3% nationally, and severe anaemia prevalence (HB concentration >8g/dl) was 12.3% among children under five.

Malaria parasite prevalence increased with age whilst severe anaemia showed the opposite trend; both malaria parasite and severe anaemia prevalence rates were higher among children who did not sleep under an ITN the previous night. The prevalence of severe anaemia in children under two years of age who did not sleep under an ITN the night before (25.7%) compared to a rate of 13.6% among those who did sleep under a net the previous night. This was found to be higher in the poorer wealth quintiles.

At present 60.4% of pregnant women are reported to have taken two or more doses of the recommended intermittent preventive treatment (IPT) as compared to 48% in 2006.

Currently coverage of Insecticide Residual Spraying (IRS) is low, with poor diagnostic capacity, abuse of ITNs, low coverage of second dose of SP in pregnancy, unavailability of quality ACT in the private sector, and poor adherence to treatment guidelines and policies all affecting the implementation of malaria interventions.

- Acute Diarrhoeal Diseases

Dehydration from diarrhoea is one of the major causes of death in young children worldwide. The prevalence of diarrhoea overall in Malawi is estimated at 17.5 % with 38 % in children 6-12 months. The 2010 DHS shows a higher percentage of reported cases without access to improved drinking water and sanitation. In 60% of cases treatment was sought from a formal health provider, and 24.2% of children under six months reportedly did not receive any treatment at all¹⁸. The BoD assessment calculates that the number of episodes of acute diarrhoea in children under five years of age is over 13 million per year, and yet the health service treated only 324,000 in 2010.

- Malnutrition

Although there has been some reduction, malnutrition remains high, with 47% of children under five stunted and 20% severely stunted. The prevalence of diarrhoea and disease outbreaks such as measles have a significant influence on nutritional status, particularly acute malnutrition, and have to be taken into account when interpreting nutrition surveillance results. Despite the expectation that the MDG target related to nutrition will be reached, high levels of underweight persist. Thirteen per cent of children under five are underweight and 3% are severely underweight (DHS 2010).

Investments in child survival interventions such as vaccines for various diseases, effective treatment of pneumonia at community level, and effective prevention and treatment of malaria and diarrhoeal diseases have contributed significantly to the remarkable decline in infant and under five mortality rates.

Malawi has registered progress in child survival during the implementation of the Accelerated Child Survival and Development Strategic plan 2008 -2012. According to DHS and Count down data, the infant mortality rate has declined from 76 per 1000 in 2004; 66/1000 in 2010 to 53 in 2012. In the same period the under-five mortality has moved down from 133/1000 to 112/1000 to 83/1000 and neonatal mortality reduced from 36/1,000, to 31/1000 and 27/1000. The maternal mortality rate reduced from 984/100,000 in 2004 to 675/100,000 in 2010 and to 460/100,000 in 2012. Health facility delivery increased from 57.2% in 2004 to 73% in 2010. There has also been a reduction in pneumonia case fatality from 18.7% in 2000 to 5.7% in 2008 and an increase in the proportion of children with acute respiratory infections taken to health facilities for treatment from 19.6% in 2004 to 70.3% in 2010. Immunization coverage is high: 81% of the children aged 12-23 months old were fully immunised in 2010.

Since the last MICS 2006⁷, where 10 districts had mortality rate of over 140, there has been varying degrees of achievements by districts. According to the 2006 MICS mortality rate of 140 was considered to be very high. Six of the high mortality districts had mortality rate of less than 140 per 1000 live births while four remained above 140. The rest of the districts either stagnated or achieved minimal reduction levels.

- Maternity and Neonatal Care

The maternal mortality rate decreased from 984 per 100,000 live births in 2004 to 675 per 100,000 in 2010, with an increase in women delivering at health centres from 57.2% in 2004 to 73% in 2010.

According to the zonal reports, data from district maternal death audits shows that sepsis and post-partum haemorrhage are the most likely causes of death in the majority of mortality cases based at health facilities. Unlike the MDGs relating to child health, the maternity MDG targets are unlikely to be met without significant additional investment to increase access to Emergency Obstetric Care (EmOC) for many more pregnant women, and a similar investment in family planning to reduce the total fertility rate. Using data from the 2010 EmOC survey, it is estimated that only half of the births requiring emergency care are receiving such care.

Currently, the neonatal mortality rate (NMR) is estimated at 33 deaths per 1,000 live births and it is higher in rural areas (34/1,000) compared to urban areas (30/1,000). It is also higher among male children (38/1,000) compared to female children (30/1,000)²⁰. About 69 per cent of women were protected against tetanus at their last birth.

- Major Communicable Diseases

Apart from malaria, the major communicable diseases are tuberculosis, HIV/AIDS and STIs.

Tuberculosis

With regard to tuberculosis, the effort to collaborate and support the HIV/AIDS programme is paying off. More cases of tuberculosis are being detected and treatment failure is diminishing. There is some success in reaching the MDG targets for tuberculosis.

Sexually Transmitted Infections including HIV/AIDS

This component of the EHP consumes the greatest resources with direct costs in the order of an estimated 16% of the direct costs for the first year of the EHP programme. Moreover, this is expected to increase as the country moves towards universal coverage for the new ART regime. As part of the HIV prevention strategy, the health sector provides 25 million male and 1 million female condoms each year. HIV testing and counselling (HTC) is an integral part of the HIV prevention strategy and approximately 1.8 million people were counselled and tested for HIV in 2009/2010, representing 28% of the sexually active population. HIV testing among couples is limited, and the high level of HIV discordant couples has prompted the inclusion in the HSSP of strategies to promote couple testing. Another key prevention component is Prevention of Mother to Child Transmission (PMTCT). In 2009/10, 37% of HIV positive mothers received appropriate drugs and counselling. The HSSP provides strategies for increasing this by 10% annually over the five year period.

Testing and treatment of other STIs is an important HIV prevention activity. About half the number of cases estimated in the BoD study was treated in 2010.

SECTION 2- METHODOLOGY

2.1 Salima and Balaka Districts

The Verbal Autopsy and Social Autopsy study (VASA) was based on a platform of a 24,000 household survey with a full birth history, the Rapid Mortality Monitoring (RMM) Survey undertaken by the National Statistics Office and Johns Hopkins Bloomberg School of Public Health (JHU) from October 2011 to February 2012 in the districts of Balaka and Salima. The VASA study returned to households that had reported an under-five death in the previous four years.

Two of the 28 districts in Malawi were selected for RMM based on the criteria of high under-five mortality, high fertility, easy access for the study team, full coverage of HSAs deployed, and average population size based on the distribution of district population size across the country.

These districts conducted the Gold-Standard mortality survey which formed the basis for the VASA study. Table 2.1 shows selected demographic characteristics of the two districts.



Figure 2.1 Map of Malawi showing the two districts selected for the RMM and VASA projects

Table 2.1 Selected demographic characteristics of RMM districts in Malawi

District	Population	Under-five mortality rate (U5MR)		Total fertility rate (TFR)		Region
		2006 MICS	2010 DHS	2006 MICS	2010 DHS	
Balaka	316,748	160	125	6.3	6.0	South
Salima	340,327	144	150	7.1	6.6	Central

2.2 Ethical clearances

Ethical clearance for the VASA study was obtained from the Johns Hopkins School of Public Health's Institutional Review Board and the Malawi National Health and Science Research Committee.

2.3 Project personnel

VASA in-country project personnel include staff of the NSO, which provides overall project leadership. The project was implemented under the local leadership of the Commissioner and Deputy Commissioner of Statistics at NSO. A Principal Investigator coordinated the management and technical activities of the project, assisted by a co-investigator and one data manager,

2.4 Stakeholder involvement

A number of key stakeholders were involved in the survey processes such as protocol development, survey instruments, training of data collectors, supervision, report writing and dissemination. More importantly, the stakeholder involvement was aimed at seeking the potential use of the key findings as a key element in program implementation in the health sector. The key partners were the United Nations Children's Fund (UNICEF), World Health Organization (WHO), the Ministry of Health's Reproductive Health Unit and Integrated Management of Childhood Illness (IMCI) Unit, the Salima District Health Management Team and the Balaka District Health Management Team.

2.5 Sample size and sampling

The Verbal Autopsy and Social Autopsy study (VASA) was based on a platform of a 24,000 household survey, Rapid Mortality Monitoring (RMM) Survey undertaken by the National Statistics Office and Johns Hopkins Bloomberg School of Public Health (JHU) from October 2011 to February 2012 in the districts of Balaka and Salima. The reference household survey with a full birth history was aimed at providing data to measure annual neonatal, infant and under-five mortality in the sampled districts. The reference study was conducted as part of JHU's evaluation of the impact of the Catalytic Initiative Rapid Scale-Up of Maternal, Newborn and Child Health (MNCH) interventions in Malawi.

Table 2.2 shows the sample size of deaths required by the VASA study, and table 2.3 shows the estimated number of deaths that can be detected with particular recall periods in a survey of 24,000 households in Balaka and Salima districts, Malawi.

Table 2.2: Sample size of neonatal (NN) or 1-59 month old deaths required for various levels of precision and corresponding required study reference periods

Parameters	Sample size for different precision levels		
	0.5	0.5	0.5
P	0.05	0.05	0.05
Alpha	1.96	1.96	1.96
Z-alpha	0.05	0.07	0.10
Precision	1.4	1.4	1.4
Design effect	0.1	0.1	0.1
Non-response	598	305	149
Number of deaths			

Table 2.3: Recall period required to detect N deaths in a 24,000 households survey in Malawi: CBR=0.044*, NNMR=0.027*, U5MR=0.092*, and Average HH size=4.3 (Salima 77,531 HHs with avg. size 4.4, Balaka 75,656 HHs with avg. size 4.2)**

Recall period	NN	1-59 mo
1-year	123	295
2-year	245	590
3-year	368	885

*UNICEF State of the World's Children (2010); **NSO, Malawi 2008 census, preliminary report.

The RMM survey identified about 1300 under-five deaths within a 4-year recall period, among whom about 450 were neonatal deaths and 900 were post-neonatal deaths. This number of deaths is sufficient to estimate causes of death among neonatal and post-neonatal deaths with precision of about +/-5-7% for neonates and +/-5% for post-neonates.

A total sample of 1289 under-five deaths were identified on a 4 year recall period (the time from death until interview) from the RMM survey where 470 were neonatal deaths and 819 were post neonatal deaths.

2.6 Questionnaires

The VASA questionnaire blends the Population Health Metrics Research Consortium (PHMRC) verbal autopsy questionnaire with the Child Health Epidemiology Reference Group social autopsy questionnaire. The first part of the VASA questionnaire was a general information module for deceased neonates and young children. It included sections on backgrounds of the deceased and the interviews, consent, and information of about other people present during the interview.

The second component focuses on the actual verbal and social autopsy questions. For both neonates and children 1-59 months old it includes sections on confirming the child's age at death, signs and symptoms of the illness, the caregiver's perception of the illness, actions taken and constraints to formal health careseeking, care provided by formal facilities and providers, health records, and the family's social situation and access to social capital. In addition, for neonatal deaths, the interview asks about the maternal history, including the mother's careseeking for her obstetric complications, and about normal newborn care prior to the baby's illness; while for children, the interview also asks about preventive care given to the child before onset of the fatal illness.

Mothers aged 15 years and older and other caregivers of deceased neonates and young children were included for interview in the study. The reference survey collected individual and household identifiers for all respondents and these identifiers were used to help locate the households where a death occurred and that needed to be followed-up for a VASA interview. All identifiers collected by the reference household survey were kept confidential, secure and available only to study team and local investigators.

The questionnaire was translated into the local language, Chichewa, which is spoken by most persons in the study area. A local anthropologist was recruited to do the translation and another team of two experienced staff at NSO independently back-translated and compared the original English questionnaire. The discrepancies were then scrutinized to determine the source of the errors and these were ably corrected through consultations between the anthropologist and the back translators.

2.7 Recruitment, training, pilot testing and fieldwork

The survey was entirely implemented by the National Statistical Office from recruitment, training to fieldwork logistics. Data collectors were recruited based on prior experience in conducting structured interview mortality surveys, prior experience in utilizing a personal or netbook computer or Personal Digital Assistant (PDA) and any other experience in the use electronic devices, such as smart phones for data collection. The study preferred female as opposed to male data collectors due to the cultural aspects of the topics, and to a lesser extent religious beliefs in the study areas where topics related to pregnancy, care giving, still births and child deaths are openly discussed among the women folks.

A three-week training session was conducted from 18th February to 8th March 2013, at Chilema Ecumenical Training Centre in Zomba. The trainers consisted of senior statisticians from NSO who had benefitted from a week long VASA training of trainer's workshop done in November 2012 under the guidance of investigators from JHU. Ministry of health officials also facilitated in the training of data collectors with a focus on signs and symptoms of the common causes of

illnesses prevalent in Malawi with particular attention to the study areas. The training focused on both technical aspects as well as ethical issues in matters of sensitivity, confidentiality, and prescribed assistance to bereaved respondents. It also included three-day visits to the field for practice during which the fieldworkers familiarized themselves with the questionnaire and the use of netbook computers in conducting interviews.

Four teams of four interviews and one team leader were constituted for the fieldwork and two field coordinators were also recruited to conduct additional quality control of data collected and liaise the fieldwork to the study headquarters at NSO.

The first round of data collection started on 12th March and was completed on 27th of April, 2013. A second round was necessary to correct some of important discrepancies between some personal identifiers (age at death, age at death category [stillbirth, neonatal, child], birth date, date of death, and sex) as determined by the RMM survey and the VASA interviews. It concerned 63 households (46 in Salima and 17 in Balaka) and was conducted in August-September 2013.

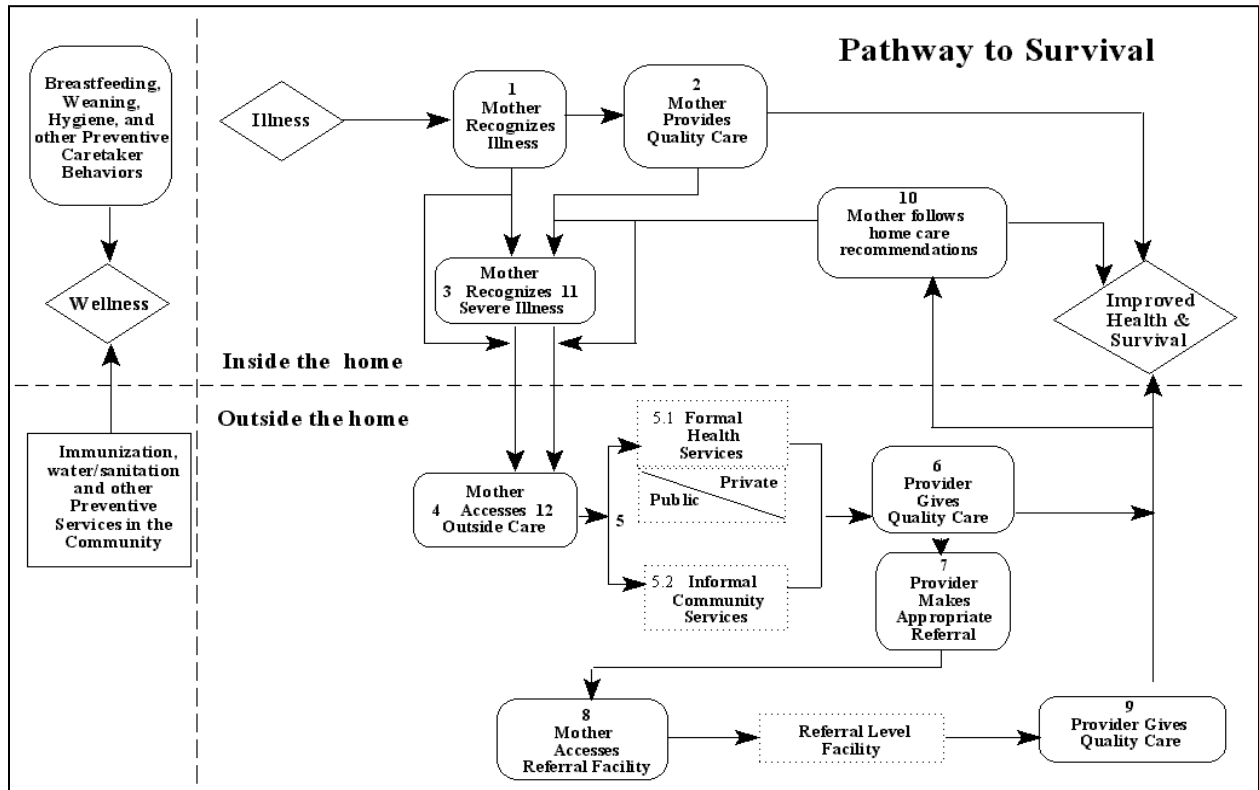
2.8 Analyses

There are several possible ways to analyze VA data to determine the cause distribution of deaths. In this study we analyzed the data using: 1) physician review, conducted by a physician consultant to the NSO, 2) computer-applied expert sign/symptom algorithms, and 3) statistical methods being developed by the Gates Grand Challenge 13 (GC-13) project. The results of the methods will be compared to each other.

An experienced in-country pediatrician reviewed the data for each VASA interview and classified the biological cause of death. “Classify” means to determine the cause of death, such as pneumonia or birth asphyxia. Some deaths may have direct and underlying causes, as well as contributing causes. CHERG-JHSPH provided NSO with guidelines for the physician coding of cause of death based on VA data, and trained the pediatrician in following these guidelines (ANNEX B4).

Analysis of the SA data is based on the Pathway to Survival conceptual framework (Figure 2.2), which traces the steps that must be taken in order to return a sick child to health and survival. By studying where children “fell off” the Pathway, we can identify caregiver behaviors, social constraints and health system factors that must be modified to decrease child mortality. The recently updated CHERG SA instrument adds recognition and care-seeking for the maternal pregnancy and labor and delivery complications that contribute to neonatal deaths; as well as normal newborn care and preventive care of children. The basic analysis will tabulate the data for all variables in the SA sections of the VASA questionnaire. In addition to the physician VA review/analysis, we conducted basic tabular and cross-tabular analyses of the SA data, including the basic Pathway to Survival indicators, and included these in the final report of the VASA study. CHERG-JHSPH will conduct further analyses, and will work together with NSO investigators to analyze the VASA data for publication.

Figure 2.2 – The Pathway to Survival



SECTION 3- RESULTS

3.1 Final interview result

Of the 1,289 households sampled from the 2012 RMM Mortality survey, 14 cases were dropped after data collection because the children's ages were out-of-range for the study.

Table 3.1 presents information on the final results for each interview. Of the 1275 cases, 1,090 (85.5 percent) had a completed VASA interview. Of the remaining households, 97 (7.6 percent) were vacant, destroyed or not found, especially in Salima, mainly because of the higher mobility of the fishing households that migrate frequently depending on fishing season. Another 58 households (4.6 percent) did not have an eligible individual present to respond to the questionnaire at the time of the VASA survey.

Of the 1,090 completed interviews, 79 were stillbirths, 320 neonatal (0-27 days) deaths and 691 young child (1-59 months) deaths.

Table 3.2 presents the recall period which is the difference between the dates of the VASA interview and date at death of the child. For neonatal deaths, the mean recall period was 2.3 years, which was not different from the young child recall period of 2.5 years. In both groups of deaths, the mother of the deceased child was the respondent to the VASA questionnaire in nine-tenths of the cases (table 3.3).

Table 3.1 Final Interview result

Interview result	Frequency	Percent
Completed	1,090	85.5
No Eligible respondent at home at time	4	0.3
Eligible respondent refused interview	3	0.2
No eligible respondent lives in household	58	4.6
No household member at home	1	0.1
Dwelling vacant /destroyed / not found	97	7.6
Child reported dead in birth history is actually alive	21	1.7
Duplicate report of death--interview already conducted	1	0.1
Total	1,275	100

Table 3.2 VASA recall periods N, mean, median, range

	Neonate death (0-27 days)	Young Child death (1-59 months)
VASA recall periods	N=317	N=681
Mean (years)	2.3	2.5
Median (years)	2	2
Range (years)	0 to 4	0 to 4

Note: Recall period is calculated from vasa interview dates

Table 3.3 Respondent's relationship with the deceased child

Relationship	Stillbirths and Neonates (0-27 days) deaths		Young child (1-59 months) deaths	
	Frequency	Percent	Frequency	Percent
1. Mother	357	89.5	601	87.0
2. Grandmother	21	5.3	44	6.4
3. Aunt	13	3.3	23	3.3
4. Father	5	1.3	13	1.9
5. Others	3	0.8	10	1.4

3.2 Characteristics of stillbirths and deceased newborns (0-27 days)

Table 3.4 presents the distribution of the deceased children by age, characteristics of the mother and father and the household.

Seventy-nine children, mostly neonates' deaths in the platform survey, reverted to stillbirths in the VASA interview.

For neonatal deaths, the mean age at death was 5.1 days. The majority of newborns (70 percent) died during the first 6 days of life. The masculinity ratio was at 134, suggesting a vulnerability of boys over girls during the neonatal period. The highest proportion of neonate deaths (63.5 percent) occurred to mothers aged more than 25 years old.

The average age of the mothers at first union of 18.2 years suggests that mothers of the deceased babies entered into marriage at a relatively young age.

And the majority of the parents of deceased children in this group had some primary level of education. In more than one-third of the households in which the death occurred, the breadwinners had agricultural occupation. Only 14 percent of the households used piped water. And it took on average 2 hours to reach the nearest health facility to the household.

3.3 Characteristics of deceased young children (1-59 months)

For young child deaths, the mean age at death was 14 months. The majority of young children (1-59 months) died before their second birthday. In this group, girls appeared to be more vulnerable to death than boys. Here as well, the highest proportion (78.6 percent) of young child deaths occurred to mothers aged more than 25 years.

The average age of the mothers at first union of 18.4 years suggests that, just as with the mothers of deceased neonates, the mothers of the group of deceased children also entered into marriage at a relatively young age.

Most of the parents (more than 70 percent) of deceased children in this group also had completed some years of primary education. In about 40 percent of the households in which the death occurred, the breadwinner was a farmer. Only 11 percent of the households of this group of deaths used piped water. And it took on average 2 hours to reach the nearest health facility from the household.

Table 3.4 Demographic characteristics of the deceased child

Characteristics	Stillbirths and Neonates (0-27 days) deaths		Young child (1-59 months) deaths	
	Frequency	Percent	Frequency	Percent
Characteristics of the deceased child				
Groups ages in days				
Stillbirths	79	19.8	na	na
0-6 days	224	56.1	na	na
7-13 days	54	13.5	na	na
14-20 days	22	5.5	na	na
21-27 days	20	5.0	na	na
Total	399	100.0	na	na
Mean age (in days) [neonates deaths]	5.1 days		na	na
Groups ages in months				
1-3 months	na	na	102	14.8
4-6 months	na	na	82	11.9
7-11 months	na	na	151	21.9
12-23 months	na	na	170	24.6
24-59 months	na	na	185	26.8
Total	na	na	691	100.0
Mean age (in months)	na	na	13.6 months	
Sex				
Male	183	57.2	326	47.2
Female	137	42.8	365	52.8
Masculinity ratio	134		89	
Maternal Characteristics				
Maternal age				
<20 years	17	4.3	8	1.2
20-24 years	126	32.1	135	20.2
25-29 years	109	27.8	174	26.1
>=30 years	140	35.7	351	52.5
Mean age (in years)	28.3		30.2	
Maternal education				
None	61	15.3	154	22.4
Primary	301	75.6	489	71.2
Secondary+	36	9.1	44	6.4
Mean years of schooling	4.5		3.7	
Mean age when first married (years)	18.2		18.4	
Paternal Characteristics				
Paternal education				
None	34	9.9	68	11.2
Primary	230	67.3	425	70.0
Secondary+	78	22.8	114	18.8
Mean years of schooling	6.2		5.8	
Household Characteristics				
Main breadwinner's occupation				
Agriculture	143	35.8	273	39.5
Unskilled labor	96	24.1	168	24.3
Business owner	99	28.8	145	21.0
Mean time at current residence (in years)	13.2		14.6	
Mean household density (persons/rooms)	2.7		2.8	
In-house water supply [Piped water outside the house]	56	14.0	74	10.7
Mean travel time to nearest health facility (hours)	1.8		1.9	

3.4 Verbal autopsy

Figure 3.1 shows the underlying causes of death of the 320 neonates and table 3.5 shows the maternal underlying causes identified for 108 of the neonates, grouped by the underlying child causes of death to which they contributed. Pneumonia was the leading cause of neonatal death. Combined with sepsis and meningitis, these serious neonatal infections were responsible for 57.5 percent of the neonatal deaths. Preterm delivery and birth asphyxia were the other main causes of the neonatal deaths, each contributing 17-18 percent of the deaths. In table 3.5 we see that maternal sepsis and premature rupture of the membranes were important contributors to the neonatal deaths due to infectious causes and to preterm delivery.

Figure 3.1 Physician-coded VA underlying causes of death 320 Neonatal (0-27 days) Deaths in Malawi, 2008-2011

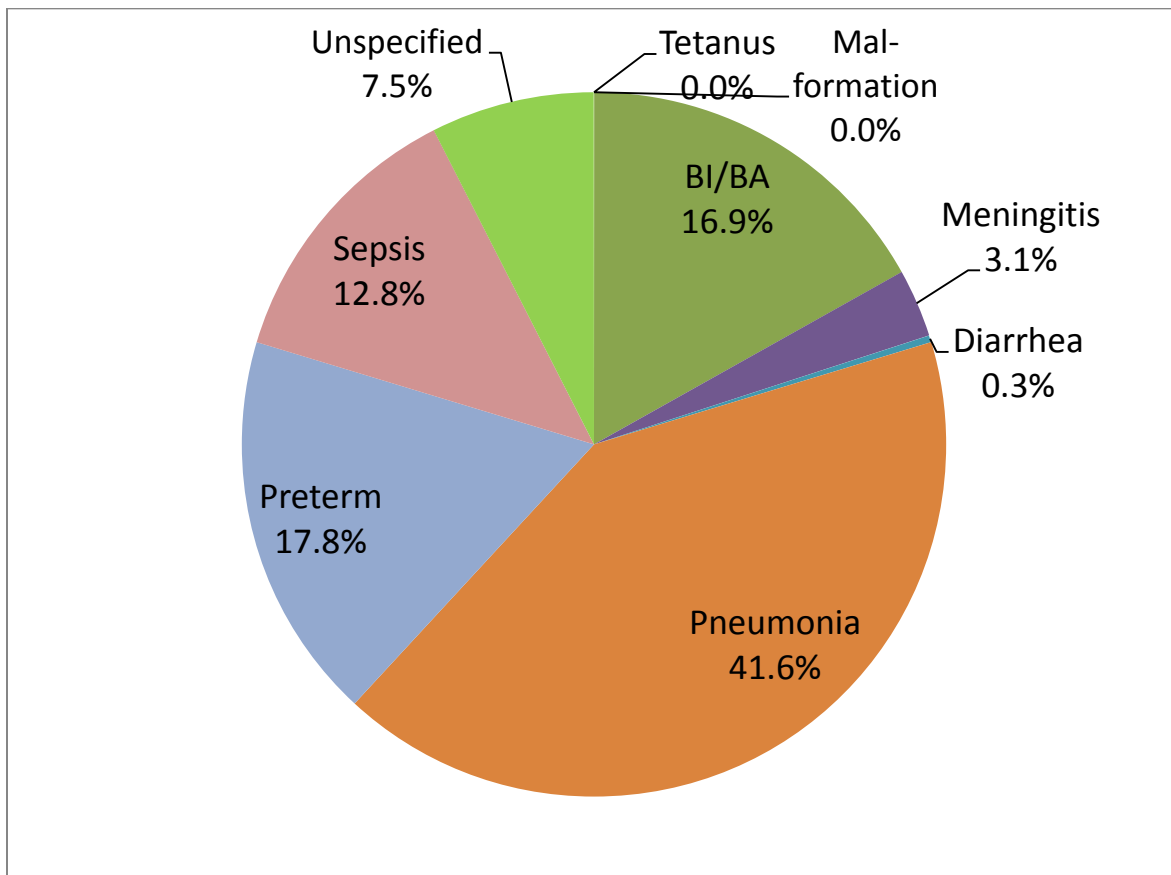


Table 3.5 Physician-coded VA underlying causes of death and underlying maternal causes

Physician-coded VA underlying cause of death (OB [§] factors)	Frequency	Percent
Birth asphyxia (3 obstructed labor)	54	16.9
Meningitis (5 maternal sepsis)	10	3.1
Diarrhea	1	0.3
Pneumonia (29 maternal sepsis, 24 PROM ^{§§})	133	41.6
Sepsis (5 maternal sepsis, 7 PROM)	41	12.8
Preterm (12 maternal sepsis, 7 anemia, 1 hypertension, 16 PPROM ^{§§§})	57	17.8
Unspecified	24	7.5

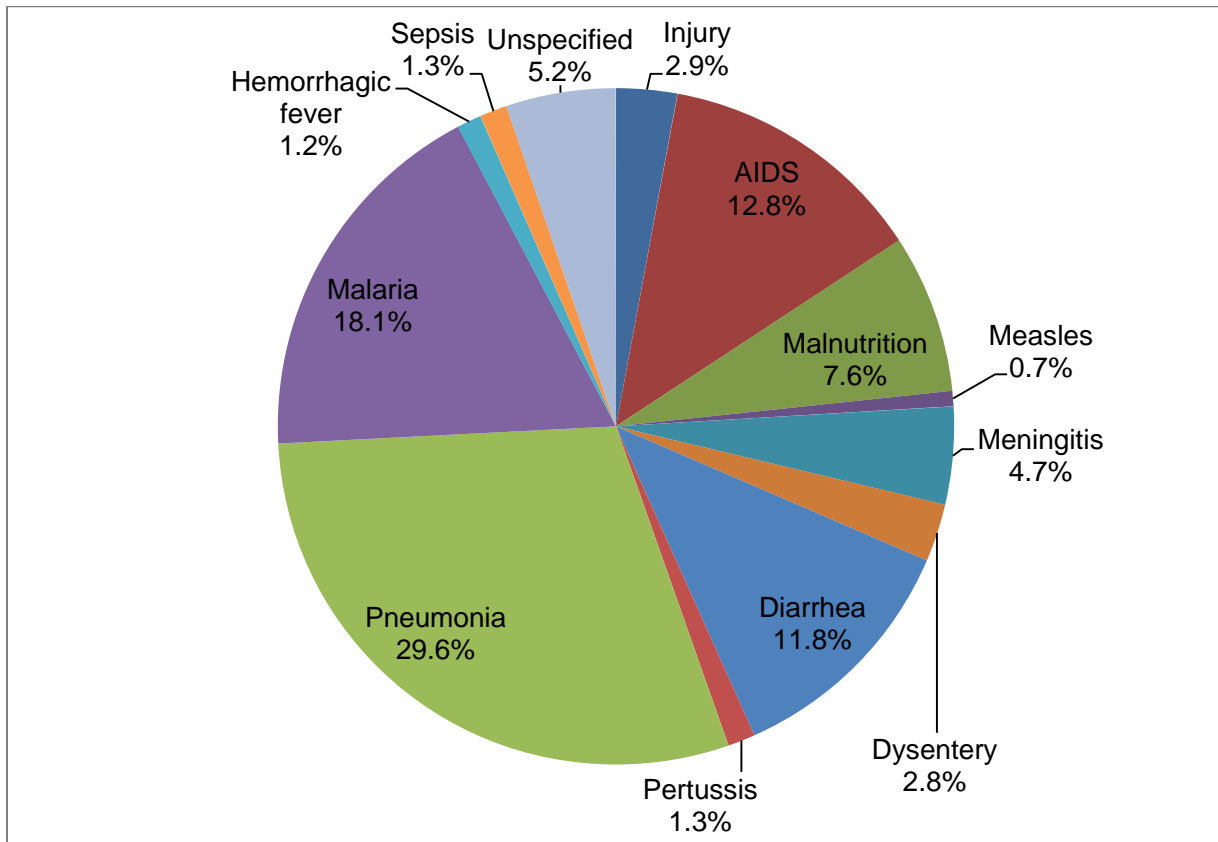
[§] OB: Obstetric

^{§§} PROM = premature rupture of the membranes

^{§§§} PPROM=preterm premature rupture of the membranes

Figure 3.2 shows the underlying causes of death of the 691 young children included in the VASA study. As with the neonates, pneumonia was the leading cause of death, being responsible for 29.6 percent of the deaths; and other infections were the next leading causes, including malaria (18.1 percent), AIDS (12.8 percent), diarrhea and dysentery (11.8 percent and 2.8 percent) and meningitis (4.7 percent). Malnutrition was the underlying cause of 7.6 percent (52) of the deaths, and contributed to an additional 9.1 percent (63) of the deaths. Injuries caused nearly 3 percent of the deaths. The most common injuries were burns and road traffic injuries (5 deaths each) and drowning (4 deaths).

Figure 3.2 Physician-coded VA underlying causes of death 691 Young Child (1-59 months) Deaths in Malawi, 2008-2011



3.5 Social capital

Social capital refers to institutions, relations and norms which shape the quality and quantity of social interactions inside the community. It is proven that social cohesion is necessary for communities to economically prosper and for development to last. As part of the VASA survey, in order to capture the degree of solidarity (social capital) of the Malawian communities which experienced an under-five death, the respondent or the mother (more often as the respondent) had to answer questions dealing with the themes that the respondent's community had worked on together over the last three years prior to the survey; whether the respondent or the mother had requested help from any group or any organization within the community during the pregnancy or during the fatal illness of the child, and to whom he/she turned to ask for this help; and finally, whether any particular community service had ever been refused to her/him.

Thus, almost of the respondents reported that the community they were living in had worked together on at least one of the topics such as schools, health, jobs, credit, roads, public transport, water, sanitation, etc. In contrast, almost one-third of the mothers were not able to turn to any persons or community for help during the pregnancy of the deceased child or the index child's fatal illness. Lastly, almost all of the respondents acknowledged that they had never been denied any of the community services including community services: education, health service, jobs, credit, transport, etc.

Table 3.6 Social capital

VARIABLES	Stillbirths and Neonates (0-27 days) deaths	Young child (1-59 months) deaths
In last 3 years, <u>community worked together</u> on at least 1 of the following: schools, health, jobs, credit, roads, public transport, water, sanitation, agriculture, justice, security, mosque/church	395 (99.0%)	688 (99.6%)
Mother was <u>able to turn</u> to any persons or community groups or organizations for help during the pregnancy or child's fatal illness	268 (67.2%)	482 (69.8%)
Mother and her family have <u>never been denied</u> any of the following community services: education, health service, jobs, credit, transport, water, sanitation, agriculture, justice, security	385 (96.5%)	655 (94.8%)

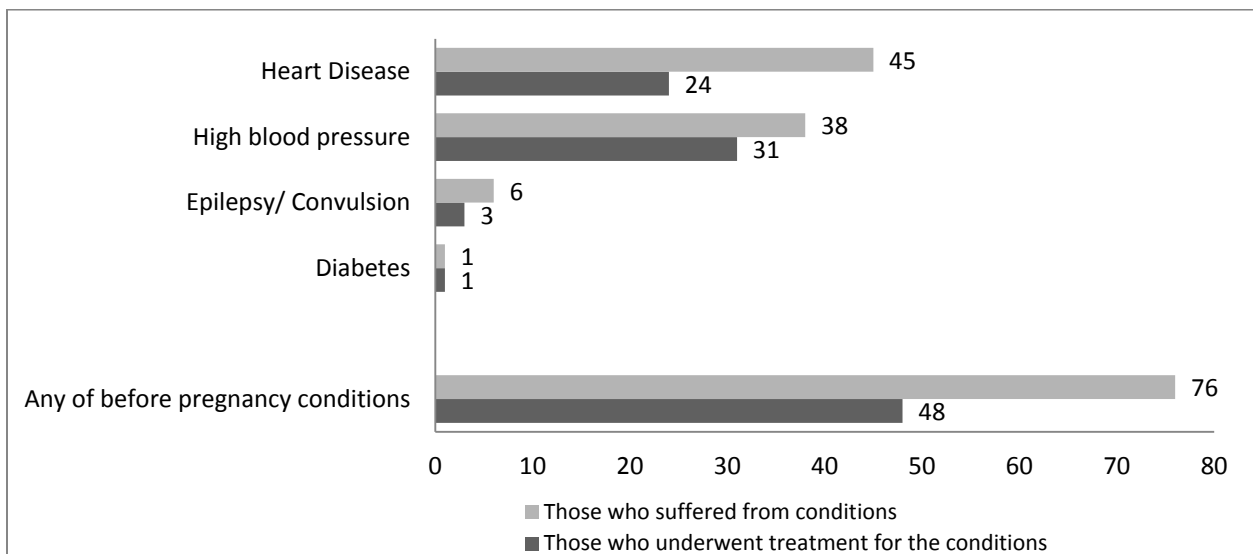
3.6 Maternal health before pregnancy, during pregnancy, and during labor and or delivery

The questions related to the maternal conditions were asked for all stillbirths and newborn deaths (N=399).

3.6.1 Maternal health before the pregnancy

The VASA collected information on the health condition of the mother before the indexed pregnancy. Figure 3.1 below shows that 38 mothers reported suffering from High Blood Pressure and 31 of them underwent treatment for that condition. Of the 45 mothers who reported suffering with a Heart Disease, 24 were treated. Overall, 76 (or 19 percent) of mothers of stillbirths or neonatal deaths had any of the conditions (epilepsy/convulsion, diabetes, heart disease, or high blood pressure) before the pregnancy. Among the latter, 48 (63 percent) sought treatment for any of those conditions.

Figure 3.3 The conditions the mother suffered from before pregnancy



3.6.2 Maternal health during the pregnancy

During the pregnancy, more than 94 percent of the mothers of stillbirths and deceased newborns had at least one ANC visit. Yet, only 41 percent benefited from the at least 4 ANC visits (table 3.7).

Table 3.7 Maternal health during pregnancy- Number of Antenatal visits

Number of ANC visits	Frequency	Percent
0	22	5.5
1	13	3.3
2	56	14.0
3	137	34.3
4 and more	163	40.9
Don't know/Missing	8	2.0
Total	399	100

Table 3.8 presents the distribution of type of providers seen during an ANC visit. Hence, of the 375 who received at least 1 ANC, 99.2 percent went at least to a health care provider.

Table 3.8 Maternal health during pregnancy: Providers seen during ANC visits (N=375)

Providers seen during ANC visits	Frequency	Percent
Health care provider	372	99.2
TBA/Religious healer	8	2.0
Relative/neighbor/friend	1	0.3
Other	1	0.3

Table 3.9 shows the ANC's components for the mothers who went to a health care provider for an ANC visit.

Thus, during the ANC visits to a health provider, the majority of pregnant women had their blood pressure measured, blood tested, received nutritional counseling and counseling about danger signs, i.e. signs to watch for and where to seek care when they occur. Yet very few of the women (18.0 percent) had their urine tested, which is important to help detect preeclampsia.

Table 39 Maternal health during pregnancy: ANC components (among those who received at least one ANC by a health care provider)

ANC components	Frequency	Percent
Provider measured the blood pressure	307	82.5
The woman gave a urine sample	67	18.0
The woman gave a blood sample	315	84.7
Provider told her to eat more high energy foods like and high protein foods like than when not pregnant	293	78.8
Provider told about the danger signs during pregnancy and where to go if she had any danger signs	324	87.1

Before labor, 61 mothers had no symptoms or complications (Figure 3.2). Three hundred thirty-eight women had at least one complication during the last 3 months of pregnancy or during labor and delivery. Of these 338 women, 260 had at least one pregnancy complication that started before labor; and of those 260, 69 (27 percent) did not seek care and 191 (73 percent) did.

Table 3.10 presents information on maternal complications/syndromes during the pregnancy before the labor and or the delivery. The syndromes were derived from the symptoms as reported by the mothers and the codes notes are provided below the table 3.10. Twelve percent of the mothers were classified as having had ante-partum hemorrhage, followed by about 11 percent with maternal sepsis. And when the syndromes were present, the majority (173/260, 66 percent) of mothers did seek any formal care as shown in figure 3.3. However, this left one-third of the mothers with a pregnancy complication without any formal health care for their complication.

Figure 3.4 Maternal symptoms during of pregnancy

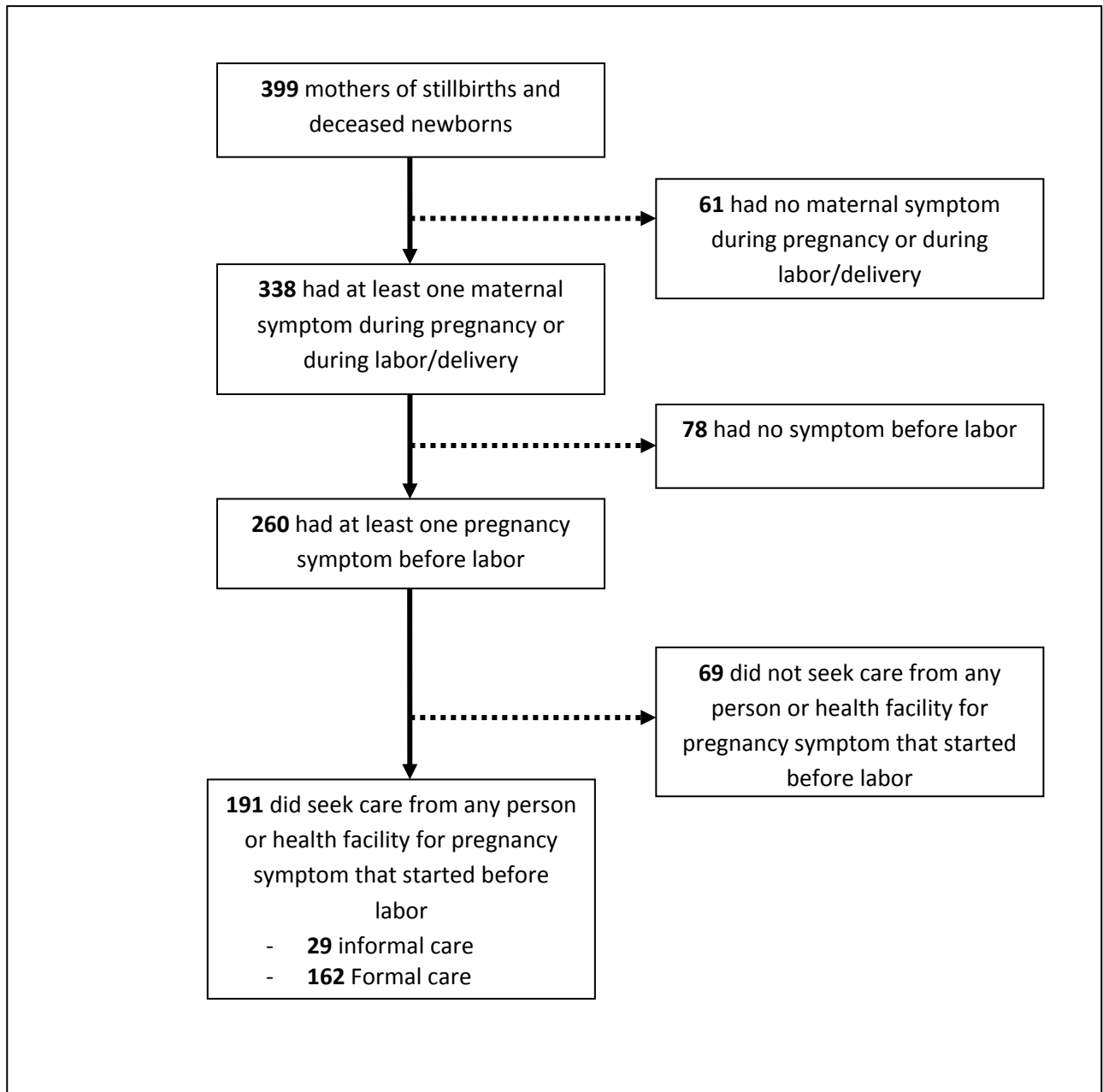
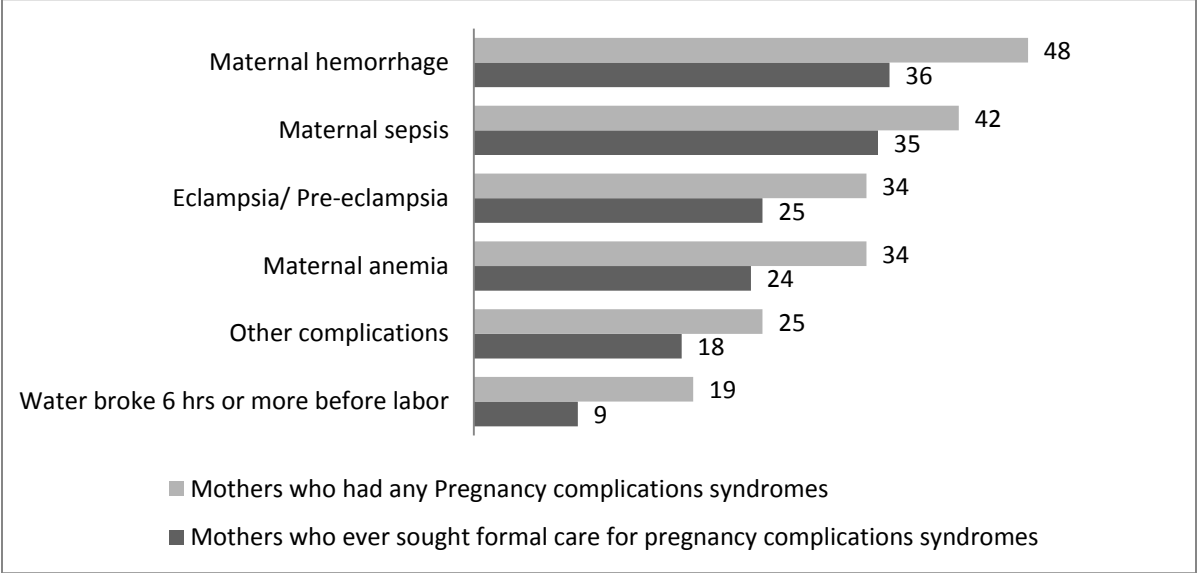


Table 3.10 Maternal health: Maternal complications symptoms and syndromes during pregnancy and before labor (N=399)

	Frequency	Percent
Maternal sepsis	42	10.5
Fever	67	16.8
Severe abdominal pain	98	24.6
Smelly vaginal discharge	34	8.5
Eclampsia/ Pre-eclampsia	34	8.5
Severe headache	77	19.3
Blurred vision	90	22.6
Puffy face	42	10.5
Convulsions	7	1.8
High blood pressure	46	11.5
Maternal anemia	34	8.5
Too weak to get out of bed	102	25.6
Fast or difficult breathing	40	10.0
Severe anemia or pallor and shortness of breath	53	13.3
Maternal hemorrhage	48	12.0
Water broke 6 hours or more before labor	19	4.8
Diabetes	0	0.0
Other complications	25	6.3

Notes: Maternal sepsis = Fever + (Severe abdominal pain OR Smelly vaginal discharge) ; Eclampsia/ Pre-eclampsia = Severe headache + (Blurred vision OR Puffy face OR Convulsions OR High blood pressure) ; Maternal anemia = Severe anemia or pallor and shortness of breath +(Too weak to get out of bed OR Fast or difficult breathing) ; Maternal hemorrhage = Any vaginal bleeding before labor

Figure 3.5 Number of mothers who had a pregnancy complication syndrome and those who ever sought formal care (before labor)



Among those who sought care for any pregnancy symptom that started before labor, 74 percent of the mothers said they had no concerns or problems to go to health provider. More than half of the mothers (59 percent) who did not seek any formal care had reported on some concerns or problems in reaching the health facility. Of the total of 49 who had some concerns in reaching the health provider, the majority complained about the distance, the absence of transportation and the cost associated with the health facility visit (table 3.11).

Table 3.11 Formal Care-seeking constraints among those who sought any care for any pregnancy symptoms that started before labor (N=191)

	Did not go to a health provider (N=29)		Did go to health provider (N=162)		Total (N=191)	
	Frequency	Percent*	Frequency	Percent*	Frequency	Percent*
Had had concerns or problems to go to a health provider	17	58.6	32	19.8	49	25.7
Did not think was sick enough to need health care	4	13.8	6	3.7	10	5.2
No one available to go with her	0	0.0	0	0.0	0	0.0
Too much time from her regular duties	0	0.0	0	0.0	0	0.0
Someone else had to decide	0	0.0	0	0.0	0	0.0
Too far to travel	10	34.5	24	14.8	34	17.8
No transportation available	8	27.6	16	9.9	24	12.6
Cost (transport, health care, other)	7	24.1	9	5.6	16	8.4
Not satisfied with available health care	3	10.3	0	0.0	3	1.6
Symptom(s) required traditional care	1	3.4	2	1.2	3	1.6
Thought she was too sick to travel	4	13.8	2	1.2	6	3.1
Thought she/baby will die despite care	0	0.0	0	0.0	0	0.0
Fears exposure to male health provider	1	3.4	0	0.0	1	0.5
Other (specify)	1	3.4	1	0.6	2	1.0
Don't know	0	0.0	0	0.0	0	0.0
Had no concerns or problems to go to health provider	12	41.4	130	80.3	142	74.4

Note: *: Column percentages

3.6.3 Maternal health during Labor and delivery

Table 3.12 shows that the majority of women (56.7 percent) delivered in a health facility (38.1 percent in hospital and 29 percent at a lower-level health facility). Four percent delivered en-route to a health facility. And a quarter of the mothers gave birth at home.

A key component for health outcomes is the ability for women to make their own choices concerning their health. The VASA collected information on who decided on the place for delivery. And the majority of women (73.2 percent) decided for themselves. For nine percent and eight percent of pregnant women it was their mother or another person.

Almost two-thirds of the mothers were assisted in their delivery by a skilled birth attendant, i.e. either a doctor or a nurse/midwife. Traditional birth attendants assisted in 11 percent of the deliveries and 7 percent of pregnant women delivered by their own.

Over half (53 percent) of pregnant mothers reported that labor lasted 0-6hours. Less than 1 percent of pregnant mothers reported a labor lasting more than 49 hours.

Two-hundred and fifty women had at least one complication that started at home with or during labor (Figure 3.5). The majority of them (160/250, 64 percent) sought some formal care.

Table 3.12 shows that during labor/delivery the majority of mothers suffered from preterm labor, premature rupture of the membranes, intrapartum-hemorrhage, and prolonged labor. Figure 3.6 shows that about two-thirds of the women sought formal care for each of these complications, i.e., there were no major differences in the careseeking pattern for the different complications.

Table 3.12 Maternal health during labor and delivery: Labor and delivery conditions

Delivery place	Frequency	Percent
Hospital	152	38.1
Other health provider or facility	114	28.6
On route to a health provider or facility	16	4.0
Home	98	24.6
Other/ Don't know	19	4.8
Who decided that this was the right place to deliver the baby		
The woman, herself	292	73.2
Her husband	19	4.8
Her mother	37	9.4
Her mother-in-law	17	4.3
Her father-in-law	0	0.0
Other	35	8.0
Don't know/ Missing	2	0.5
Person who delivered the baby		
Doctor	71	17.8
Nurse/midwife	190	47.6
Relative/neighbor/friend	64	16.0
Self (the mother)	26	6.5
Traditional birth attendant	44	11.0
Other	2	0.5
Don't know	2	0.5
How much time did the labor and delivery take		
0- 6 hours	211	52.9
7- 12 hours	107	26.8
13- 24 hours	57	14.3
25- 48 hours	13	3.3
49- 72 hours	3	0.8
Missing	8	2.0

Figure 3.6 Maternal symptoms during labor and delivery

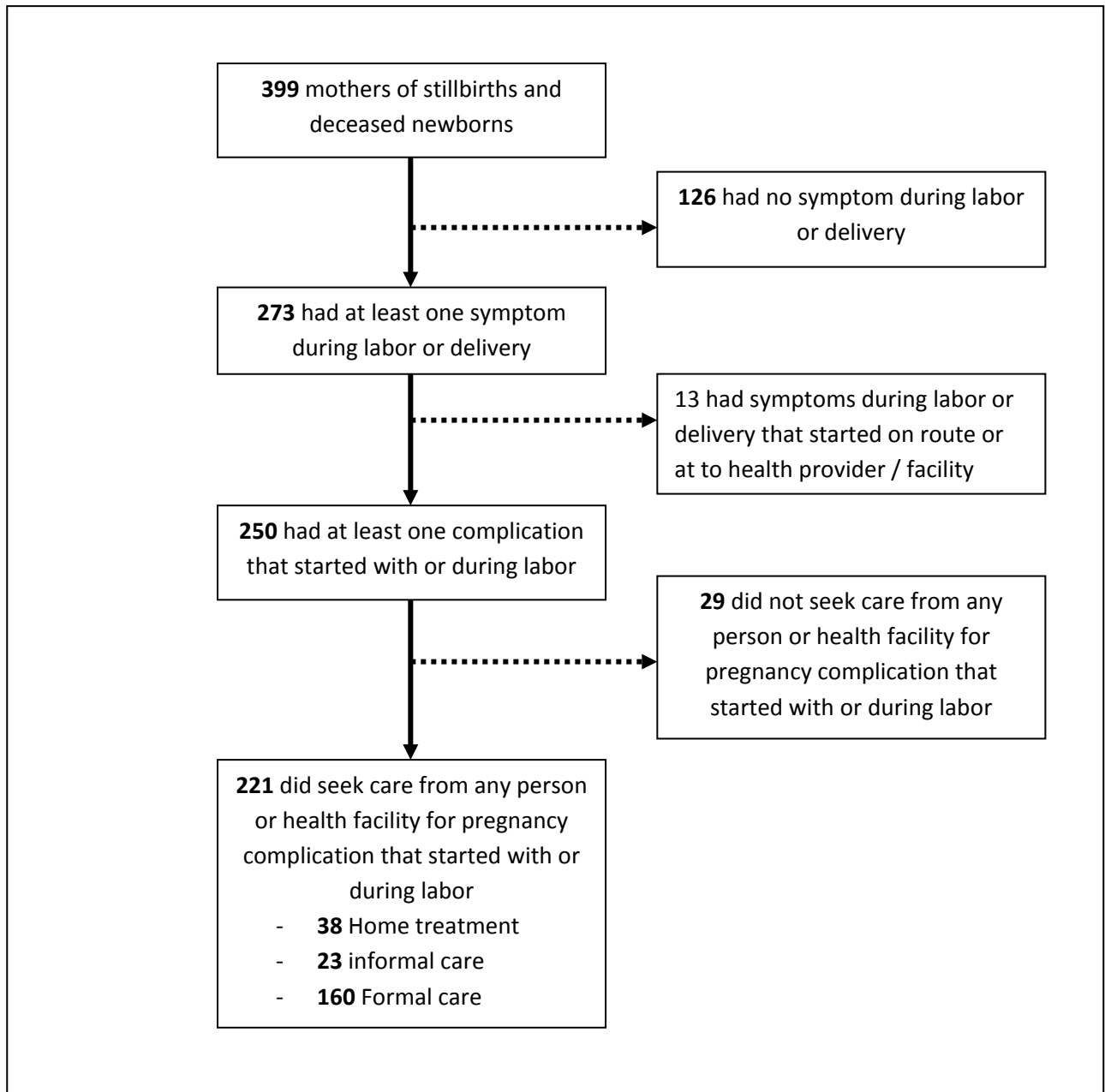
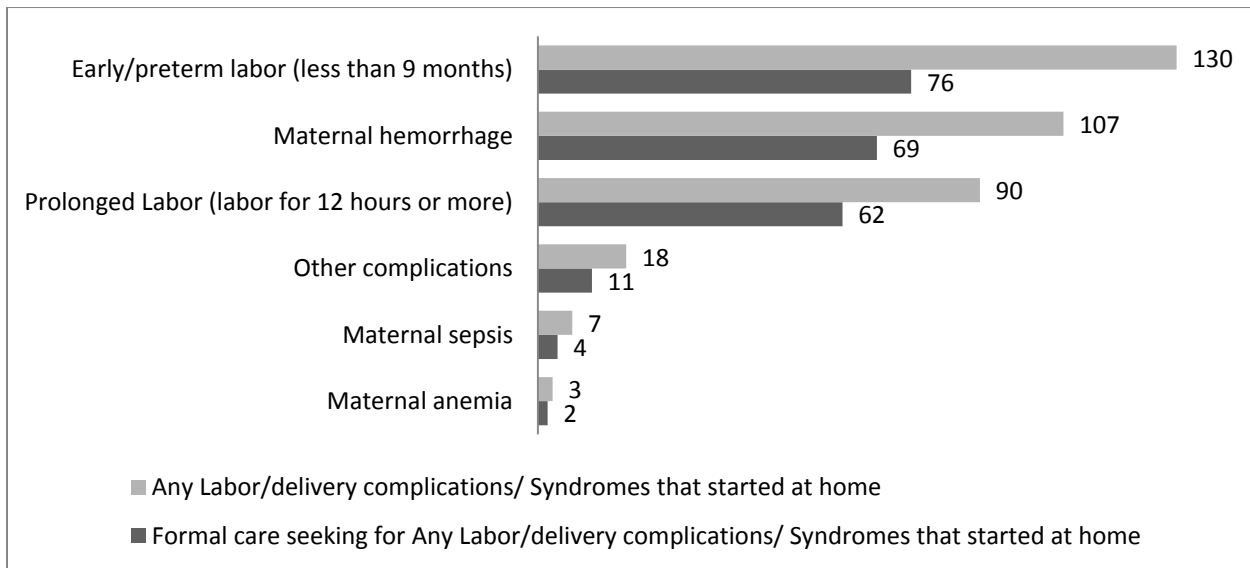


Table 3.13 Maternal health: Maternal complications symptoms and syndromes that started with or during labor (N=399)

	Any Labor/delivery complications/ Syndromes		Any Labor/delivery complications/ Syndromes that started at home	
	Frequency	Percent	Frequency	Percent
Maternal sepsis	8	2.0	7	1.8
Fever	13	3.2	12	3.0
Severe abdominal pain	25	6.3	23	5.8
Smelly vaginal discharge	11	2.8	10	2.5
Eclampsia/ Pre-eclampsia	1	0.3	0	0.0
Severe headache	6	1.5	6	1.5
Blurred vision	4	1.0	4	1.0
Puffy face	2	0.5	2	0.5
Convulsions	2	0.5	1	0.3
High blood pressure	9	2.3	9	2.3
Maternal anemia	3	0.8	3	0.8
Too weak to get out of bed	11	2.8	11	2.8
Fast or difficult breathing	2	0.5	2	0.5
Severe anemia or pallor and shortness of breath	8	2.0	8	2.0
Maternal hemorrhage	122	30.6	107	26.8
Early/preterm labor (less than 9 months)	138	34.6	130	32.6
Prolonged Labor (labor for 12 hours or more)	92	23.1	90	22.6
Other complications	21	5.3	18	4.5

Notes: Maternal sepsis = Fever + (Severe abdominal pain OR Smelly vaginal discharge) ; Eclampsia/ Pre-eclampsia = Severe headache + (Blurred vision OR Puffy face OR Convulsions OR High blood pressure) ; Maternal anemia = Severe anemia or pallor and shortness of breath +(Too weak to get out of bed OR Fast or difficult breathing) ; Maternal hemorrhage = Excessive bleeding during labor or delivery

Figure 3.7 Number of mothers who had a labor/delivery complication syndrome and those who ever sought formal care for symptoms and syndromes that started with or during labor



Among those who sought any care with any labor/ delivery symptom that started at home, more than two-third (67 percent) of the mothers said they had no concerns or problems to go to health provider. Six-one mothers did go to any health provider, and the majority (67 percent) reported on concerns or problems to do so. Of the 72 who had some concerns in reaching the health provider, the majority complained about the distance, the absence of transportation and the cost associated with the health facility visit (Table 3.14).

Table 3.14 Formal Care-seeking constraints among those who sought any care with any labor/ Delivery symptom that started at home (N=221)

	Sought home or informal care (N=61)		Sought some formal care (N=160)		Total (N=221)	
	Frequency	Percent*	Frequency	Percent*	Frequency	Percent*
Had had concerns or problems to go to a health provider	41	67.2	31	19.4	72	32.6
Did not think was sick enough to need health care	8	13.1	0	0.0	8	3.6
No one available to go with her	4	6.6	1	0.6	5	2.3
Too much time from her regular duties	1	1.6	0	0.0	1	0.5
Someone else had to decide	1	1.6	0	0.0	1	0.5
Too far to travel	23	37.7	22	13.8	45	20.4
No transportation available	24	39.3	19	11.9	43	19.5
Cost (transport, health care, other)	14	23.0	16	10.0	30	13.6
Not satisfied with available health care	0	0.0	1	0.6	1	0.5
Symptom(s) required traditional care	0	0.0	3	1.9	3	1.4
Thought she was too sick to travel	10	16.4	2	1.3	12	5.4
Thought she/baby will die despite care	12	19.7	4	2.5	16	7.2
Fears exposure to male health provider	1	1.6	0	0.0	0	0.0
Other	3	4.9	0	0.0	3	1.4
Don't know	0	0.0	0	0.0		0.0
Had no concerns or problems to go to health provider	20	32.8	129	80.6	149	67.4

Note: *: Column percentages

3.7 Neonatal (0-27 days) care

3.7.1 Preventive care

The VASA data offers information on key postnatal interventions such as cord care, timing of bathing, breastfeeding and kangaroo care for preterm birth. The results are presented in Table 3.15.

The umbilical cord or ligation requires sustained attention, because neonatal tetanus and cord infections continue to be an important cause of neonatal morbidity and mortality in developing countries. Our study shows that in 63 percent of cases of neonatal deaths, the equipment used for cutting the umbilical cord came from a sterilized delivery kit, i.e. new/from delivery kit/boiled razor blade. After the umbilical cord was cut, 57 percent of newborns had their cords tied with a clean piece of string, and 30 percent had the cord tied with a cord clamp. Seventy-five percent of respondents stated that nothing was applied to the umbilical cord stump; nine percent reported that they did not know if anything was applied and seven percent stated that an antibiotic was applied to the stump.

Regarding the first bath after birth, more of half of the babies were either not bathed at all or were bathed after the first day of life.

About half of the babies were breastfed immediately (within 1 hour) after birth and of the 52 preterm births, only 14 percent benefited from the kangaroo care.

Table 3.15 Neonatal deaths: Preventive care to newborn after birth (N=320)

	Frequency	Percent
Tool used for cutting the cord		
New/from delivery kit/boiled razor blade	201	62.8
Old razor blade	11	3.4
Scissors	91	28.4
Other	4	1.3
Don't know	13	4.1
Material used for tying the cord		
Clean/from delivery kit/boiled piece of thread	181	56.6
Unclean piece of thread	27	8.4
Cord clamp	94	29.4
Other	9	2.8
Don't know	9	2.8
What was applied to the umbilical cord stump after birth		
Alcohol/other antiseptic	17	5.3
Antibiotic ointment/cream/powder	24	7.5
Mustard oil or ghee	0	0
Animal dung or dirt/mud	3	0.9
Other	5	1.6
Don't know what is was	1	0.3
Don't know whether something was applied	28	8.8
Nothing was applied	242	75.6
How long after birth was the baby first bathed		
Less than 1 hour	71	22.2
1-23 hours	76	23.8
24-72 hours (1-3 days)	25	7.8
More than 72 hours (3 days)	3	0.9
Not bathed	141	44.1
Don't know	4	1.3
Breastfeeding immediately after birth	159	49.7
Kangaroo care of preterm births (N=52)	7	13.5

3.7.2 Curative care

For analysis of the curative care seeking after the onset of the fatal illness, we excluded those who were born and died in the same health facility without leaving (n =135). We also excluded 5 other cases whose illness started at the delivery facility but no information on care-seeking was available. Overall, the Pathway to survival analysis includes a sample of 180 newborns born at home or born and left the health facility alive (Figure 3.8).

Of the 180 fatally ill newborns, the caretakers of 98 percent reported that their child had a severe or possibly severe symptom. However, no care was given or sought for 36 newborns (20 percent) and a similar proportion (21 percent) were said to have “died immediately.”

Of 106 babies who received, sought or tried to seek care, 86 first went for care outside of the home whereas 20 received home care first, 4 of whom were later taken for outside care. In total, 90 babies sought or tried to seek any outside care, on average 1.3 days after the illness started. Eighty in total sought or tried to seek some formal care. Of those who sought both formal and informal care, the delay in seeking formal care was prolonged to an average of 2.3 days. Yet, 65 could reach the facility and the other 15 died while setting out or en-route to the health facility. Of those who reached the health facility, only 39 left the facility alive and the other 21 newborns died at the health facility.

In response to the question whether the mother had had concerns or problems that kept her from bringing the newborn to a health provider, overall 51 (36 percent) responded affirmatively (Table 3.16). Among those newborns who were not taken to a health provider (N=62), 52 percent of caregivers reported on concerns or problems to go to the health facility. And here as well, the main constraints were related to accessibility of the health facility (the long distance, no transportation available and cost).

Figure 3.8 Pathway Analysis (adapted) –Curative Care for 180 Newborn Deaths (born at home or left delivery facility alive)

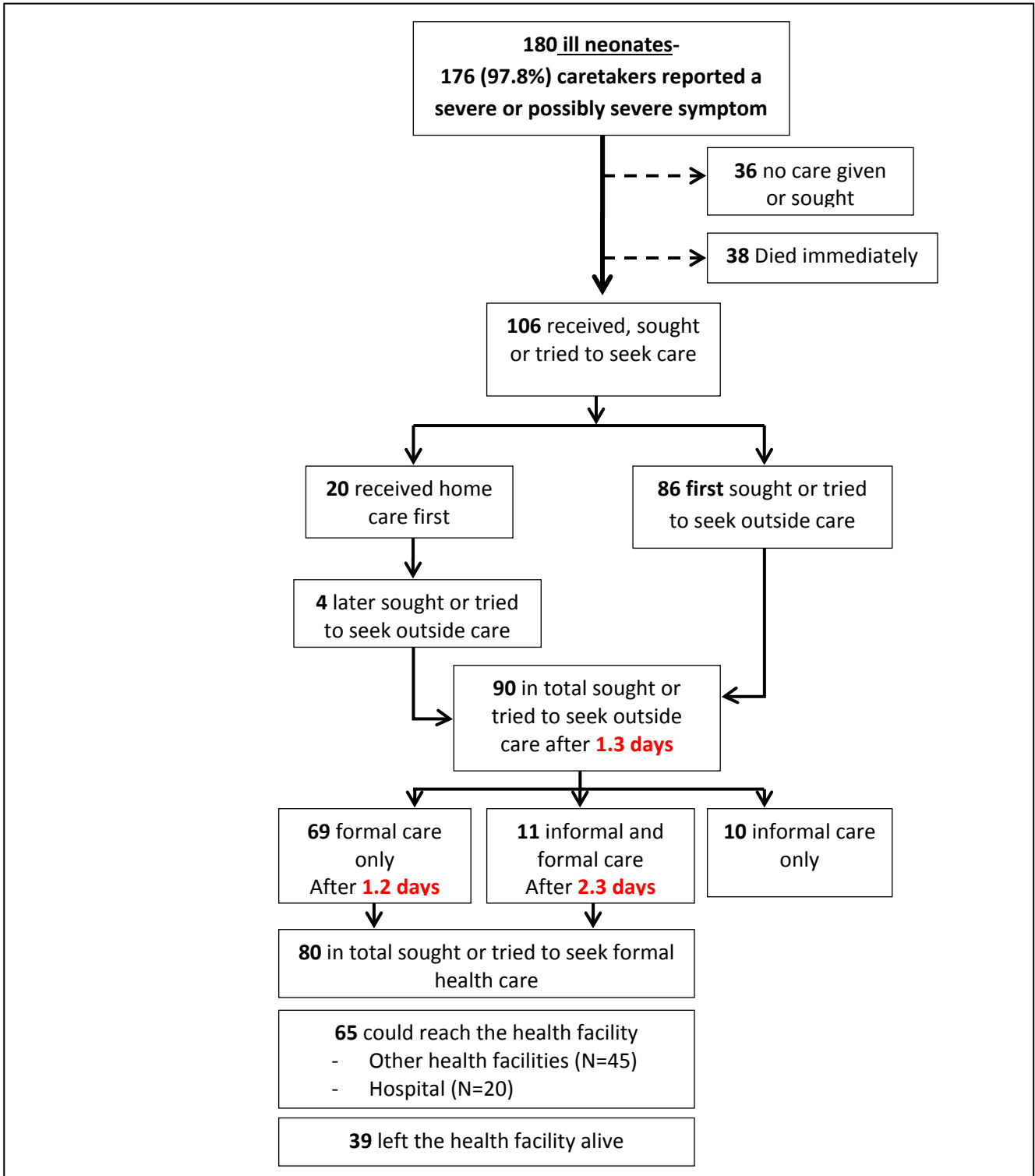


Table 3.16 Formal Care-seeking constraints for neonates illness among those who sought or tried to seek care or were never taken to a health provider (N=142)

	Newborn was not taken to a health provider (N=62)		Newborn was taken to a health provider (N=80)		Total (N=142)	
	Frequency	Percent*	Frequency	Percent*	Frequency	Percent*
Caregiver had concerns or problems to go to a health provider	32	51.6	19	23.8	51	35.9
Did not think was sick enough to need health care	2	3.2	0	0.0	2	1.4
No one available to go with caregiver	0	0.0	0	0.0	0	0.0
Too much time from her regular duties	0	0.0	0	0.0	0	0.0
Someone else had to decide	0	0.0	0	0.0	0	0.0
Too far to travel	11	17.7	15	18.8	26	18.3
No transportation available	12	19.4	13	16.3	25	17.6
Cost (transport, health care, other)	7	11.3	14	17.5	21	14.8
Not satisfied with available health care	1	1.6	0	0.0	1	0.7
Symptom(s) required traditional care	5	8.1	0	0.0	5	3.5
Thought baby was too sick to travel	2	3.2	0	0.0	2	1.4
Thought baby will die despite care	5	8.1	0	0.0	5	3.5
Was late at night (transportation or provider not available)	2	3.2	3	3.8	5	3.5
Other	2	3.2	0	0.0	2	1.4
Don't know	0	0.0	0	0.0	0	0.0
Caregiver had no concerns or problems to go to health provider	30	48.4	61	76.3	91	64.1

Note: *: Column percentages

3.8 Young child (1-59 months) care

3.8.1 Preventive Care

Table 3.17 presents key preventive practices at home before the fatal illness of the young children (N=691).

Thus, 52 mothers reported cooking inside the home and 54 percent of these said their child was usually nearby, thereby exposing their child to the indoor pollution that constitutes a risk factor for childhood pneumonia. More than 73 percent of the deceased children regularly slept under an insecticide treated bed net. Almost all of the deceased children had ever been breastfed. Only 30 percent of the deceased children were eating dairy products or fresh foods or eggs every day when the fatal illness occurred.

Table 3.17 Preventive care at home for deceased children (before death), N=691

Indicators	Frequency	Percent
Mother cooked inside (N=52) and child usually nearby	28	53.8
Child always slept under insecticide treated bed net	508	73.5
Child ever breastfed	676	97.8
Ate dairy products or fresh foods or eggs every day	206	29.8

Table 3.18 presents the preventive care outside-of-home for the deceased children (before death). During the VASA survey, immunization data was collected from two sources: the vaccination record of children and statements from the mother when the book was not available or did not exist.

Hence, 92 percent of children received BCG. The proportion of children who received OPV and DPT1 was also high at 89 and 86 percent, respectively.

Table 3.18 also shows the percentage of children age 12-23 months who had received vaccinations against the six major preventable childhood diseases by one year of age, i.e, a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus; an OPV birth dose (a zero dose) followed by a primary series of 3 OPV; and a measles vaccination. Overall, 18 percent of deceased children ages 12-23 months were fully immunized against these diseases before they reached their first birthday. According to the immunization results in DHS 2010, and in general, children (alive or dead) in the central and southern region were less likely to be fully immunized by age one. The current study reports on only deceased children population in Salima (in Central region) and Balaka (in Southern region), suggesting more investigation to understand the reasons why the deceased children are less likely to be fully immunized compare to alive children.

The highest coverage this study was for BCG, OPV birth dose, DPT 1, and Measles, ranging from 88 to 93 percent. Children are least likely to be fully immunized against polio by age one (22 percent of children age 12-23 months have had all four doses).

Eighty-nine percent of children age 12-23 months received measles vaccine.

Approximately 94 percent of children aged 6-59 months received at least one dose of vitamin A.

Table 3.18 Preventive care outside-of-home for deceased children (before death), N=691

Indicators	Frequency	Percent
Received:		
BCG	633	91.6
Polio 0	612	88.6
DPT1	594	86.0
Received measles or MMR: (just for those 9 months and older): (N=443)	378	85.3
Correctly immunized (Child 12-23 months) (N=170)	31	18.2
BCG (12-23 months)	158	92.9
OPV birth dose (12-23 months)	155	91.2
OPV1 (12-23 months)	55	32.4
OPV2 (12-23 months)	51	30.0
OPV3 (12-23 months)	40	23.5
DPT1 (12-23 months)	158	92.9
DPT2 (12-23 months)	147	86.5
DPT3 (12-23 months)	114	67.1
Measles (12-23 months)	151	88.8
Received vitamin A dose (6-59 months) (N=541)	507	93.7

3.8.2 Curative care

The Pathway to survival was examined on a sample of 691 children from 1 – 59 months (Figure 3.9). The caretakers recognized signs of severe or possibly severe illness for most (95.2 percent). About 4 percent (N=26) of the fatally ill children did not receive or seek care, and 6 percent died “immediately.”

Of the 622 who received, sought, or tried to seek care, 543 first sought care outside the home; 76 received care inside the home first and 67 of these 76 later sought outside care. In total 610 sought or tried to seek outside care, on average 1.3 days after the illness started. 404 sought or tried to seek formal care only with a delay of 1.3 days and 192 who sought or tried to seek some formal and informal care delayed formal care-seeking by 2.5 days (to reach the health provider); 14 sought or tried to seek informal care only.

Of the 596 who sought or tried to seek formal health care, 53 died while setting out or en-route to the facility, 43 reached the health facility and 64 percent of these latter left the facility alive. The other 36 percent (197 children) died at the health facility.

Of the 648 caregivers who sought care or not (not including those who died “immediately”), 52 did not take their children to a health provider, of which 60 percent said they had had problems or concerns in doing so (Table 3.19). And here as well, the main constraints were related to accessibility of the health facility (the long distance, no transportation available and cost).

Figure 3.9 Pathway Analysis (adapted) - Curative Care for 691 Young Child Deaths

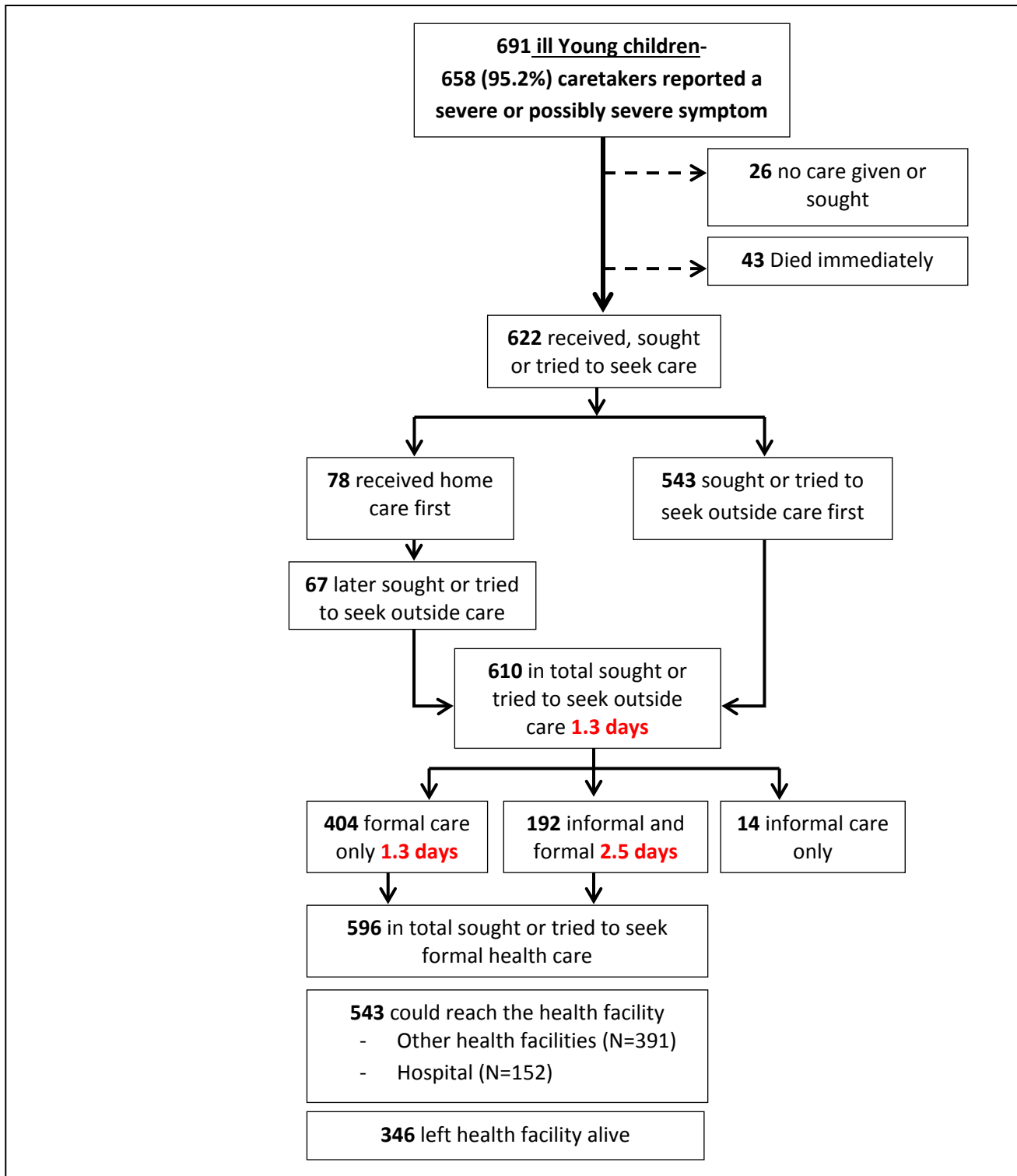


Table 3.19 Formal Care-seeking constraints for Young children with a fatal illness among those who sought or tried to seek care or never taken to a health provider (N=648)

	child was not taken to a health provider (N=52)		child was taken to a health provider (N=596)		Total (N=648)	
	Frequency	Percent*	Frequency	Percent*	Frequency	Percent*
Caregiver had concerns or problems to go to a health provider	31	59.6	210	35.2	241	37.2
Did not think was sick enough to need health care	12	23.1	30	5.0	42	6.5
No one available to go with caregiver	1	1.9	3	0.5	4	0.6
Too much time from her regular duties	2	3.8	0	0.0	2	0.3
Someone else had to decide	1	1.9	2	0.3	3	0.5
Too far to travel	10	19.2	118	19.8	128	19.8
No transportation available	8	15.4	100	16.8	108	16.7
Cost (transport, health care, other)	12	23.1	121	20.3	133	20.5
Not satisfied with available health care	5	9.6	6	1.0	11	1.7
Symptom(s) required traditional care	3	5.8	4	0.7	7	1.1
Thought child was too sick to travel	1	1.9	2	0.3	3	0.5
Thought child will die despite care	3	5.8	2	0.3	5	0.8
Was late at night (transportation or provider not available)	10	19.2	37	6.2	47	7.3
Other	5	9.6	2	0.3	7	1.1
Don't know	0	0.0	0	0.0	0	0.0
Caregiver had no concerns or problems to go to health provider	21	40.4	386	64.8	407	62.8

Note: *: Column percentages

SECTION 4: CONCLUSIONS AND RECOMMENDATIONS

The main findings of the VASA study can be summarized as below:

- More than half of the mothers of the deceased newborns did not complete 4 or more ANC visits
- 82 percent of ANC providers did not check the urine sample of the mother during her pregnancy
- About a quarter of mothers delivered at home.
- More than one-third of mothers were assisted by unskilled birth attendants during their delivery
- Ante-partum hemorrhage and maternal sepsis represented the major complications / syndromes that started before labor
- During labor/delivery the majority of mothers suffered from preterm labor, premature rupture of the membranes, intrapartum-hemorrhage, and prolonged labor.
- One-third of women who recognized they had a pregnancy or labor and delivery complication at home did not seek formal health care
- Inaccessibility to health facilities due to distance, lack of transportation and cost, emerged as the main constraints to formal health care seeking for mothers
- The deceased children lived in households with difficult socio-demographics conditions
- Three-fourths of peri-neonatal deaths were of stillbirths and neonates in the first 6 days after birth
- Newborns died mainly of preventable maternal conditions and neonatal illnesses
- 40 percent of newborns were born and died at a health facility without going home
- Pneumonia and other infectious diseases were the leading cause of the neonatal deaths. Preterm delivery and birth asphyxia were the second and third leading causes. Maternal sepsis and premature rupture of the membranes were important contributors to the neonatal deaths, underlying 98 (40.7 percent) of the 241 deaths due to infectious causes and preterm delivery.
- Pneumonia and other infectious diseases also were the leading causes of the young child deaths. Malnutrition caused or contributed to nearly 17% of the deaths. Injuries were found to cause nearly 3% of the child deaths.
- Half of the deceased newborns were not breastfed immediately after birth
- More than 30 percent of the newborns and young children who reached the health facility for care died at that facility
- Formal health care was sought for only 44% of newborns with an opportunity for care seeking for their fatal illness; while formal care was sought for 86% of the young children

- Nearly all of the newborns' and young children's caretakers reported a possibly severe or severe illness sign at the outset of the illness, yet careseeking was absent for many and delayed for many others
- Children are least likely to be fully immunized against polio by age one (22 percent of children age 12-23 months have had all four doses)
- Seeking informal care appears to have contributed to the delays in seeking formal care
- Inaccessibility to health facilities due to distance, lack of transportation and cost, emerged as the main constraints to formal health careseeking for mothers and children
- One-half of caregivers of deceased newborns did not seek care for the fatal illness
- There was delayed care seeking for child illnesses after recognition of a possibly severe or severe symptom

Some recommendations to address and improve factors that are associated with causes of neonatal and child deaths are presented below.

- Accelerate progress in extending the coverage of interventions and service delivery channels
- Increase OPV coverage
- Encourage and promote good recognition and early care seeking for maternal complications
- Encourage and promote good recognition and early health care seeking for newborn and child illnesses
- The MOH should review the distance and cost issues that may be limiting access to fixed health facilities
- Improve the early detection and management of pregnancy, labor and delivery complications at health facilities
- Improve quality management of newborn illnesses at health facilities
- Improve quality management of under-five infectious illnesses at the health facility

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ANNEXES

ANNEX B1: QUESTIONNAIRES

ANNEX B2 : ORAL CONSENT SCRIPT

ANNEX B3: RECRUITMENT SCRIPTS

ANNEX B4: PHYSICIAN CODING

ANNEX B1: Questionnaires

VERBAL/SOCIAL AUTOPSY GENERAL INFORMATION (FOR SBs, NN & CHILD DEATHS 0—59 MONTHS OLD)

Section 1: Background about the deceased

Interviewer: Before going to the field to do the interview, fill in this section from the survey or surveillance record for the deceased.

G1.1	Address of the household <i>[Copy the household address]</i>	District _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																	
		T.A. _____	<input type="checkbox"/> <input type="checkbox"/>																																	
		Cluster _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																	
	Village/Place _____																																			
	Directions to the household <i>[Copy the directions to the household]</i>																																			
	Sketch a map if needed																																			
G1.2	Name of the deceased (if known) <i>[Copy the name of the deceased]</i>																																			
G1.3	Sex of deceased <i>[Copy the sex of the deceased]</i>	1. Male 2. Female	<input type="checkbox"/>																																	
G1.4	Date of birth of the deceased <i>[Copy the day, month and year of birth of the deceased]</i>	<table style="width: 100%; text-align: center;"> <tr> <td>—</td><td>—</td><td>/</td><td>—</td><td>/</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td> </tr> <tr> <td>D</td><td>D</td><td></td><td>M</td><td>M</td><td>Y</td><td>Y</td><td>Y</td><td>Y</td><td></td><td></td> </tr> <tr> <td colspan="11"><i>(DK = 99/99/9999)</i></td> </tr> </table>		—	—	/	—	/	—	—	—	—	—	—	D	D		M	M	Y	Y	Y	Y			<i>(DK = 99/99/9999)</i>										
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D	D		M	M	Y	Y	Y	Y																												
<i>(DK = 99/99/9999)</i>																																				

G1.5	Date of death of the deceased <i>[Copy the day, month and year of death of the deceased]</i>	____/____/____ (DK = 99/99/9999)	
G1.6	Last known age of the deceased <i>[Copy the last known age of the deceased: Record days if less than 28 days—if less than 24 hours, record “00” days; Record months if 28 days-11 months; Record years if 1 year or older.]</i>	____ Days: 1 or more → GQ1.7 (DK = 99)	
		____ Months → GQ1.7 (DK = 99)	
		____ Years → GQ1.7 (DK = 99)	
G1.6.1	Was this a stillbirth or neonatal death? <i>[Copy this information from the record]</i>	1. Stillbirth 2. Neonatal death 9. Not known from the record	<input type="checkbox"/>
G1.7	Name of mother <i>[Copy the name of the mother]</i>		
G1.8	Name of father <i>[Copy the name of the father]</i>		
Section 2: Background about the interview			
<i>Interviewer: Before and after the interview, fill in this section. These questions should not be asked of the respondent.</i>			
G2.1	Language of the interview		
G2.2	Interviewer name and ID number	_____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
G2.3	Dates of attempted and successful interviews	DATE	RESULT OF THE INTERVIEW
G2.3.1	Date of first interview attempt	____/____/____ D D M M Y Y Y Y	Interim result: <input type="checkbox"/>
G2.3.2	Date of second interview attempt	____/____/____ D D M M Y Y Y Y	Interim result: <input type="checkbox"/>
G2.3.3	Date of third interview attempt	____/____/____ D D M M Y Y Y Y	Interim result: <input type="checkbox"/>
G2.4	Date interview started <i>[Equals date of the last attempt]</i>	____/____/____ D D M M Y Y Y Y	

G2.5	Time interview started [Record hour 1-24 / minutes 1-60]	<u> </u> / <u> </u> <u> </u> H R M M	
G2.6	Date interview finished [Equals date started or a later date]	<u> </u> / <u> </u> / <u> </u> <u> </u> <u> </u> <u> </u> D D M M Y Y Y Y	Final result: <input type="checkbox"/>
G2.7	Time interview finished [Record hour 1-24 / minutes 1-60]	<u> </u> / <u> </u> <u> </u> H R M M	
Interview result codes: 1. Completed (Final result code) 2. Partially completed (Final result code) 3. Eligible respondent postponed interview 4. No eligible respondent at home at time of visit 5. Eligible respondent refused interview		6. No eligible respondent lives in household 7. No household member at home 8. Dwelling vacant / destroyed / not found 9. In progress (Interim result code) 10. Child reported dead in birth history is actually alive 11. Duplicate report of death – interview already conducted	
G2.8	Date form checked by supervisor	<u> </u> / <u> </u> / <u> </u> <u> </u> <u> </u> <u> </u> D D M M Y Y Y Y	
G2.9	Date entered in computer	<u> </u> / <u> </u> / <u> </u> <u> </u> <u> </u> <u> </u> D D M M Y Y Y Y	
<u>INTERVIEW BEGINS</u> <i>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 caregiver during the illness that led to death. If this is not possible, arrange a time to revisit the household when the caregiver will be home. Introduce yourself to the adult who opens the door as follows:</i> “My name is <YOUR NAME>. I am coming from the National Statistics Office. For the purpose of improving health care, we are collecting information on child health in this area. I would like to talk to <MOTHER's NAME>. Is she around?”			
<u>Section 3: Consent</u> 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 study.			
G3.1	INTERVIEWER: Did respondent give consent?	1. Yes 2. No	<input type="checkbox"/> 2 → Thank respondent for their time and end the interview.
<u>Section 4: Information about the respondent</u> Read: I would now like to ask you some general questions about yourself.			
G4.1	What is your (the respondent's) name?		
G4.2	INTERVIEWER: What is the sex of the respondent?	1. Male 2. Female	<input type="checkbox"/>

G4.3	What is your relationship to the deceased child?	1. Mother 2. Father 3. Grandmother 4. Grandfather 5. Aunt 6. Uncle 7. Brother 8. Sister 9. Birth attendant (<i>specify type</i>) 10. Other male (<i>specify</i>) 11. Other female (<i>specify</i>)	<input type="checkbox"/> <input type="checkbox"/>
G4.4	How old are you?		____ ____ Years (DK = 99)
G4.5	How many years of school did you complete? [<i>Do not include repeated years.</i>]		____ ____ Years >6 years (<i><1 = 00; DK = 99</i>) GQ4.6
G4.5.1	Now I would like you to read this sentence to me. (<i>Show card to respondent</i>) <i>If she cannot read the whole sentence, probe: Can you read any part of the sentence to me?</i>	1. Cannot read at all 2. Able to read only part of sentence 3. Able to read whole sentence 4. No card available to show mother	<input type="checkbox"/>
<p><i>Read: I would now like to ask you some questions about (your / the family's) household. Please remember that all information will be kept confidential.</i></p> <p><i>[Read "...the family's household." if you are not conducting the interview at the household where the death was identified.]</i></p>			
G4.6	How many people live at (this / that) household? <i>[Read "...at that household?" if you are speaking of "the family's household."]</i>		____ ____ People (DK = 99)
G4.7	How many sleeping rooms are in the household?		____ ____ Rooms (DK = 99)
G4.8	Does the household have a separate room for cooking?	1. Yes 2. No 9. Don't know	<input type="checkbox"/>

G5.9	<i>INTERVIEWER: Mark the respondent in the below table and whether s/he was present during the child's illness and/or death. For each other person present at the interview, ask the respondent their relationship to the deceased and whether they were present during the child's illness and/or at the death. For stillbirths and neonatal deaths, also ask if each person (other than the mother) was present during the mother's pregnancy and delivery.</i>					
	Relationship of person to the deceased child	Mark (X) if present at the interview	Stillbirths and neonatal deaths only		Neonatal & older child deaths only	
			Present during the pregnancy: 1. Yes / 2. No	Present at the delivery: 1. Yes / 2. No	Present during child's illness: 1. Yes / 2. No	Present at the child's death: 1. Yes / 2. No
.1	Mother	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
.2	Father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.3	Grandmother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.4	Grandfather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.5	Aunt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.6	Uncle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.7	Brother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.8	Sister	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.9	Traditional birth attendant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.10	Other male (specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.11	Other female (specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VA Section 1: Background (FOR STILLBIRTHS, NEONATAL & CHILD DEATHS 0—59 MONTHS OLD)

V1.1	<p>Was the deceased a singleton or multiple births?</p> <p>Kodi malemuwo anabadwa okha kapena mapasa?</p> <p>[If two or more children are born at the same time, it is counted as a multiple birth, even if one or more of the babies are born dead.]</p>	<p>1. Singleton okha 2. Multiple mapasa 9. Don't know sindikudziwa</p>	<p><input type="checkbox"/> 1 or 9 → VQ1.3</p>
V1.2	<p>Was this the first, or second, or the third in the birth order?</p> <p>Was this delivery the first, second or later in the birth order?</p> <p>Kodi uchembere uwu unali oyamba wachiwiri, kapena wachitatu?</p>	<p>1. First woyamba 2. Second wachiwiri 3. Third or more wachitatu kupitilirapo 9. Don't know sindikudziwa</p>	<p><input type="checkbox"/></p>
V1.3	<p>If the mother is present, mark "Yes" and do not ask this question.</p> <p>Is the mother still alive?</p> <p>Kodi amai ali moyo?</p>	<p>1. Yes Inde 2. No Ayi</p>	<p><input type="checkbox"/> 1 → VQ1.6</p>
V1.4	<p>Did the mother die during or after the delivery?</p> <p>Kodi amai anamwalira pobereka kapena atangobereka?</p>	<p>1. During Nthawi yobereka 2. After Atabereka 9. Don't know sindikudziwa</p>	<p><input type="checkbox"/> 1 or 9 → VQ1.6</p>

V1.5	How long after the delivery did the mother die? Kodi atabereka maiwa, anakhala nthawi yaitali bwanji asanamwalire? [Record days if less than 28 days—if less than 24 hours, record “00” days; Record months if 28 days or more]		___ Days masiku (DK = 99)
			___ Months miyezi (DK = 99)
V1.6	Where was the deceased child born? Kodi malemuwo (mwanayo) anabadwira kuti?	1. Hospital ku chipatala 2. Other health provider or facility malo ena a za umoyo 3. On route to a health provider or facility mnjira 4. Home pakhomo 5. Other kwina (specify)..... 9. Don't know sindikudziwa	<input type="checkbox"/>
V1.7	At the time of the delivery was the deceased child: Kodi nthawi imene malemu amabadwa anali: [Read the question and slowly read the first four choices. Respondent should hear all four choices & then respond.] [Show photos] (awonetseni zithunzi)	1. Very small wochepetseta 2. Smaller than usual wochepetsetsa kupitilira muyeso 3. About average wabwino bwino 4. Larger than usual wamkulu kwambiri 9. Don't know sindikudziwa	<input type="checkbox"/>
V1.8	What was the weight of the deceased child at birth? Kodi pobadwa malemuwa analemera bwanji pa sikelo?		_____ Grams (DK = 9999)
V1.9	What was the sex of the deceased? Kodi mwanayo anali wani?	1. Male wamamuna 2. Female wamkazi 9. Don't know sindikudziwa	<input type="checkbox"/>
V1.10	When did the deceased child born? Kodi anabadwa liti? Compare the delivery date just stated by the respondent to the birth date from the prior record (GQ1.4). Discuss any inconsistency with the respondent to confirm or correct the stated delivery date. You cannot change the prior record's date.		___ / ___ / ___ - ___ - ___ Y Y Y (DK = 99/99/9999)
V1.11	Was it a live or a still birth? Kodi mwanayo anabadwa wamoyo, kapena wakufa?	1. Alive wamoyo 2. Dead wakufa 9. Don't know sindikudziwa	<input type="checkbox"/>
V1.12	Did the baby ever cry? Kodi mwanayo analirako?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V1.13	Did the baby ever move? Kodi mwanayo anayendapo?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

V1.14	Did the baby ever breathe? Kodi mwanayo anapumako?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V1.15	Refer to VQ1.11–1.14. If “Dead” & no crying, movement or breathing, mark “Stillbirth.” If “Alive” & VQ1.12–1.14 = “No,” or if “Dead” and VQ1.12, 1.13 or 1.14 = “Yes,” then discuss & correct.	1. Stillbirth Nthayo 2. Live birth wamoyo	<input type="checkbox"/> 2 → VQ1.20
Stillbirths			
V1.16	Did the baby’s body have any kind of bruises or signs of injury at birth? Kodi panthawi yomwe mwanayo amabadwa, panali kukalika, kapena zizindikiro zakuvulala pa thupi lake?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V1.17	Was the baby’s body (skin and tissue) pulpy? Kodi thupi (khungu ndi minyewa) la mwanayo linali lofewa kwambiri?	1. Yes Inde 2. No Ayi 9. Don't know sindikudziwa	<input type="checkbox"/>
V1.18	Did the baby have any physical abnormalities at the time of delivery? (for example: body part too large or too small, additional growth on body) Kodi mwanayo anabadwa ndi chilema chirichonse? (mwa chitsanzo: chiwalo china chachikulu kwambiri, kapenanso chaching’ono kwambiri , kapena kukula koonjezera kwa thupi)	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ3.1
V1.19	What were the physical abnormalities? Kodi zinali ziilema zANJI? Ask for the following abnormalities [Mark all that apply – Show photos]	1. Was the head size very small at the time of birth mutu wang’ono 2. Was the head size very large at the time of birth mutu waukulu 3. Was there a mass defect on the back of head or spine msana wolumala 4. Was there any other abnormality (If “Yes,” then specify) kwina kulikonse	<u>Yes</u> <u>No</u> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 1. <input type="checkbox"/> 2. <input type="checkbox"/> _____
Inst_1: STOP. After completing VQ1.19 → SQ3.1 (Maternal history)			
Live births			
V1.20	How old was the child when the illness started? Kodi mwanayo anali ndi zaka zingati pamene anayamba kudwala? [Record days if less than 28 days—if less than 24 hours, record “00” days; Record months if 28 days-11 months; Record years if 1 year or older.]		___ Days (DK = 99) ___ Months (DK = 99) ___ Years (DK = 99)

V1.21	<p>How long did the child [NAME] suffer from the illness?</p> <p>Kodi anadwala nthawi yaitali bwanji?</p> <p>[Record days if less than 28 days—if less than 24 hours, record “00” days; Record months if 28 days or more.]</p>	<p>___ Days (DK = 99)</p> <hr/> <p>___ Months (DK = 99)</p>	
V1.22	<p>Where did the deceased child [NAME] die?</p> <p>Kodi mwanayo anamwalilira kuti?</p>	<ol style="list-style-type: none"> 1. Hospital ku chipatala 2. Other health provider or facility kapena ku malo ena a za umoyo 3. On route to a health provider or facility mnjira 4. Home pakhomo 5. Other kwina (specify)..... 9. Don't know sindikudziwa 	<input type="checkbox"/> <hr/>
V1.24	<p>When did the deceased child die?</p> <p>Kodi anamwalira liti?</p> <p>Compare the date of death just stated by the respondent to the date of death from the prior record (GQ1.5). Discuss any inconsistency with the respondent to confirm or correct the stated date. You cannot change the prior record's date.</p>	<p>___ / ___ / ___</p> <p>D D M M Y Y Y Y</p> <p>(DK = 99/99/9999)</p>	

V1.25	<p>AGE AT DEATH</p> <p>Record only the calculated age <u>OR</u> the stated age. First try to calculate the age. If this is not possible, then ask the respondent for the child's age at death.</p> <p>CALCULATE THE AGE AT DEATH</p> <p>Record the delivery date from VQ1.10: $\frac{_}{D} \frac{_}{D} \frac{_}{M} \frac{_}{M} \frac{_}{Y} \frac{_}{Y} \frac{_}{Y} \frac{_}{Y}$ (Don't Know = 99/99/9999)</p> <p>Record the date of death from VQ1.24: $\frac{_}{D} \frac{_}{D} \frac{_}{M} \frac{_}{M} \frac{_}{Y} \frac{_}{Y} \frac{_}{Y} \frac{_}{Y}$ (Don't Know = 99/99/9999)</p> <p>Now, if possible, calculate the age at death (VQ1.24 – VQ1.10). If only the month and year are known, you may still be able to calculate the approximate age in months or years. Discuss the calculated age with the respondent: I have calculated that the child was (about) <CALCULATED AGE> at death. Is this correct?</p> <p>If the respondent does not agree with the calculated age, then again discuss the delivery date and date of death to make sure that these are correct. If the calculated age at death cannot be resolved, then go below to the "STATED AGE" box.</p> <p>Once the age at death is calculated, check VQ1.20 and VQ1.21 to make sure that the age at illness onset and the illness duration are consistent with the age at death. For example, the age at onset + duration cannot be greater than the age at death.</p> <p>[Record days if less than 28 days—if less than 24 hours, record "00" days; Record months if 28 days-11 months; Record years if 1 year or older.]</p> <p>After recording the calculated age → VQ1.26</p> <p>STATED AGE AT DEATH (Ask only if the calculated age cannot be determined)</p> <p>How old was the deceased child at the time of death?</p> <p>Kodi malemuwo (mwanayo) anali ndi zaka zingati pamene amamwalira</p> <p>Compare the age at death just stated by the respondent to the child's last known age from the prior record (GQ1.6). Discuss any inconsistency with the respondent to confirm or correct the stated age. You cannot change the prior record's age. Partly known delivery and death dates might help resolve the stated age. For example, if the child was born and died in the same month, then this is likely a neonatal death.</p> <p>Once the age at death is determined, check VQ1.20 and VQ1.21 to make sure that the age at illness onset and the illness duration are consistent with the age at death. For example, the age at onset + duration cannot be greater than the age at death.</p> <p>[Record days if less than 28 days—if less than 24 hours, record "00" days; Record months if 28 days-11 months; Record years if 1 year or older.]</p>
	<p>___ Days (if < 28 days) (osakwana masiku 28) (DK = 99)</p>
	<p>___ Months (if 1-11 months) (Ngati ali pakati pa mwezi umodzi ndi miyezi khumu ndi umodzi) (DK = 99)</p>
	<p>___ Years (if 1 year or older) (Chaka chimodzi kapena kupitilira) (DK = 99)</p>
	<p>___ Days (if < 28 days) (osakwana masiku 28) (DK = 99)</p>
	<p>___ Months (if 1-11 months) (if 1-11 months) (Mwezi umodzi ndi miyezi khumu ndi umodzi) (DK = 99)</p>
	<p>___ Years (if 1 year or older) (Chaka chimodzi kapena kupitilira) (DK = 99)</p>

V1.26	<p>Mark the baby's age at the time of death.</p> <p>[Use the calculated age (VQ1.24 – VQ1.10) if known, or the stated age (VQ1.25). If both the calculated and stated ages are unknown, then use your best judgment to mark the child's age at death.]</p>	<p>1. Less than 28 days old 2. 1-59 months old</p>	<input type="checkbox"/> 2 → SQ5b.1
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SA Module 3 and VA Section 2: Maternal history (FOR STILLBIRTHS AND NN DEATHS < 28 DAYS OLD)

Read: Now, I would like to ask you some questions about (your / the mother's) health and (your / her) pregnancy with <NAME>.

Tsopano ndikufunsani zina zokhudzana ndi thanzi lanu (mai) komanso pakati pa (dzina la mwana)

Here and in the following questions, read "...the mother...", "...her..." and "...she..." if the mother is not the respondent.

S3.1	<p><u>Before</u> the pregnancy with <NAME>, did (you / the mother) suffer from any of the following known conditions:</p> <p>Musanaime pakati pa (Name) munayamba (mai) mwadwalapo matenda monga awa:</p> <p>[Read out all options and check "Yes," "No" or "Don't know" for each.]</p> <p>If "Yes," then ask:</p> <p>Did (you / she) undergo treatment for this condition during the pregnancy?</p> <p>Kodi munakalandira chithandizo cha matendawa pamene munali oyembekezera?</p>	<p>1. High blood pressure kuthamanga kwa magazi</p> <p>2. Heart disease matenda a mtima</p> <p>3. Diabetes matenda a suga</p> <p>4. Epilepsy/convulsion khunyu</p> <p>5. Other ena</p> <p>(specify other)</p>	<table border="1"> <thead> <tr> <th colspan="3">Suffered from</th> <th colspan="3">Treatment</th> </tr> <tr> <th>Yes</th> <th>No</th> <th>DK</th> <th>Yes</th> <th>No</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>	Suffered from			Treatment			Yes	No	DK	Yes	No	DK	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>
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S3.2	<p><u>During</u> pregnancy, did (you / the mother) see anyone for antenatal care?</p> <p>Panthawi yomwe munali oyembekezera, kodii munapezako winaaliyense kuti akuthandizeni ndi chithandizo cha amai oyembekezera? (kusikelo)</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/> 2 or 9 → SQ3.3																																				
S3.2.1	<p>Whom did (you / mother) see for antenatal care?</p> <p>Is there anyone else?</p> <p>Ndi ndani amene (mai) anakuthandizanii? Palinso wina?</p> <p>[Probe, and record all persons seen.]</p>	<p>1. Health care provider wopereka chisamaliro cha za umoyo</p> <p>2. TBA/Religious healer Mzamba/Wachipembezo</p> <p>3. Relative/neighbor/friend wachibale</p> <p>4. Other ena (specify)</p> <p>()</p> <p>9. Don't know</p>	<p>1. <input type="checkbox"/></p> <p>2. <input type="checkbox"/></p> <p>3. <input type="checkbox"/></p> <p>4. <input type="checkbox"/></p> <p>9. <input type="checkbox"/></p> <p>→ SQ3.3</p>																																				

S3.2.2	<p>How many times did (you / the mother) receive antenatal care from a health care provider during this pregnancy?</p> <p>Kodi panthawi yomwe munali ndi pakati, munalandirako kangati chithandizo cha amai oyembekezera kuchokera kwa azaumoyo?</p>	<p>___ ___ Times (Kangati) (DK = 99)</p>	
S3.2.3	<p>During which month of the pregnancy did (you / the mother) <u>last</u> receive antenatal care from a health care provider?</p>	<p>___ ___ Month (Mwezi) (DK = 99)</p>	
S3.2.4	<p>During this pregnancy, did the provider do any of the following for (you / the mother) at least once?</p> <p>Kodi pamene munali oyembekezera ogwira ntchito za umoyo (amayi ake) anachita zina mwa izi:</p> <p>[Read out all options and check “Yes,” “No” or “Don’t know” for each.]</p> <p>[LOCAL ADAPTATION: Additional high energy and high protein foods to mention If the respondent asks]</p>	<p>1. Did the provider measure (your / her) blood pressure kuthamanga kwa magari?</p> <p>2. Did (you / she) give a urine sample munapereka mkodzo?</p> <p>3. Did (you / she) give a blood sample munapereka magari?</p> <p>4. Did the provider tell (you / her) to eat more high energy foods like <HIGH ENERGY FOODS> and high protein foods like <HIGH PROTEIN FOODS> than when not pregnant zopatsa mphamvu ndi zomanga thupi?</p> <p>5. Did the provider tell (you / her) about the danger signs during pregnancy anakuwuzani zizindikiro zowopsya kwa mayi wa mimba?</p> <p>6. Did the provider tell (you / her) where to go if (you / she) had any danger signs anakuwuzani kopit mukakhala ndi zizindikiro zowopsya za mimba?</p>	<p><u>Yes</u> <u>No</u> <u>DK</u></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p>
S3.3	<p>Please tell me the danger signs during pregnancy or labor and delivery that you should seek care for <u>immediately</u>.</p> <p>Mungandiuze zizindikiro zowopsya pa nthawi imene mayi ali woyembekezera kapena matenda ayamba ndi pobereka zimene zingakupangitseni kufuna chithandizo mwamsanga.</p> <p><i>Probe:</i> Would you tell me some of the danger that you can remember.</p> <p>Ndiuzeni zowopsyezo zimene mungathe kukumbukira.</p> <p><i>Probe:</i> Would you tell me other dangers? Pali zinanso?</p> <p>[Check each danger sign mentioned.]</p>	<p>1. Vaginal bleeding kutaya magari kunjira yoberekera</p> <p>2. Convulsions/fits kukomoka/kugwa</p> <p>3. Severe headache with blurred vision mutu wachin’galang’ala</p> <p>4. Fever and too weak to get out of bed kutentha kwa thupi ndi kufooka podzuka mmamawa</p> <p>5. Severe abdominal pain kupweteka mmimba</p> <p>6. Fast or difficult breathing kupuma mwa befu kapena mobanika</p> <p>7. Painful contractions every 20 minutes or less for 12 hours or more kugunda kwambiri kwa mmimba kapena kukokana</p> <p>8. Broken water for 12 hours or more kutaya madzi</p> <p>9. Bloody, sticky discharge 12 hrs or more chikazi kapena chizindikiro cha mimba</p> <p>10.No immediate danger sign mentioned palibe chiopsyezo</p>	<p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/></p> <p>→ Mentioned</p>

S3.4	During this pregnancy, (were you / was the mother) given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth? Pamene munali oyembekezere (amayi ake) analandira katemera wa Kafumbata, wokutetezani ku Kalongolongo ndi kukomoka?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ3.5
S3.4.1	During this pregnancy, how many times did (you / mother) get this injection? Kodi pamene munali oyembekezera munalandila kangati katemera ameneyi?		___ Times (Kangati) (DK = 9)
S3.5	At any time before this pregnancy, did (you / the mother) receive any tetanus injection, either to protect yourself or another baby? Kodi musanachembeze mimba imeneyi (amayi ake) munalandila katemera wa Kafumbata woteteza inu (amayi ake) kapena mwana wina?)	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ3.6
S3.5.1	Before this pregnancy, how many other times did (you / mother) receive a tetanus injection? Musanakhale ndi mimba imeneyi, ndi kangati kamene munalandila katemera wa Kafumbata (a mayi ake)? [[If 7 or more time, record "7."]]		___ Times (Kangati) (DK = 9)
S3.6	Skip SQ3.6-3.7.1 in areas wo/malaria. During this pregnancy, did (you / the mother) sleep under an insecticide treated bednet or mosquito net? Kodi pamene munali oyembekezera (amayi ake) munagona mmasikito a chitetezo neti?	1. Yes, usually or always (inde nthawi zonse) 2. Yes, sometimes (Inde, nthawi zina) 3. Never (Ayi) 9. Don't know (sindikudziwa)	<input type="checkbox"/>
S3.7	During this pregnancy, did (you / the mother) take any drug to prevent (you / the mother) from getting malaria? Kodi pamene munali oyembekezera (amayi ake) munalandila chithandizo cha mankhwala a Malungo?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ2.1
S3.7.1	During this pregnancy, how many times did (you / mother) take this drug? Kodi pamene munali oyembekezera (amayi ake) munalandila kangati mankhwala amenewa?		___ ___ Times (DK = 99)

V2.2	How many months long was the pregnancy? Kodi mimba imeneyi inali ya miyezi ingati?		___ Months ≠ 99 → VQ2.4 (DK = 99)
V2.3	Did the pregnancy end early, on time, or late? Kodi mimba imeneyi munachila nthawi isanakwane, m'nthawi yake, kapena nthawi inapitilira?	1. Early kuchira nthawi isanakwane 2. On time nthawi yake 3. Late kupitilira masiku 9. Don't know sindikudziwa	<input type="checkbox"/>
V2.4	Was the baby moving in the last few days before birth? Kodi mwana amatakataka mmimba patangosala masiku ochepa kuti abadwe?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V2.5	When did (you / the mother) last feel the baby move? Kodi munamumva kutakataka kwa mwana mmimba, kotsiliza patasala nthawi yaitali bwanji kuti abadwe? [Read "...the mother..." if the mother is not the respondent.] [Record hours if less than 24 hours; Record days if 1 day or more.]		___ Hours before delivery patasala maola asanachire (DK = 99) ___ Days before delivery patasala masiku asanachile (DK = 99)
V2.6	Did the water break before labor or during labor? Kodi chiberekero chinasweka matenda asanayambe kapena atayamba? [Note: Labor begins when contractions are no more than 20 minutes apart.]	1. Before sanayambe 2. During atayamba 9. Don't know sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ2.8
V2.7	How much time before labor did the water break? Kodi panapita nthawi yaitali bwanji matenda asanayambe kuti chiberekero chisweke? [Record "24" if 1 day or more.]		___ Hours (DK = 99)
V2.8	What was the color of the liquor when the water broke? Kodi chiberekero chitasweka madzi anali amtundu wANJI?	1. Green or brown (obiriwira) 2. Clear (normal) zowonekera 3. Other zina (specify)..... 9. Don't know sindikudziwa	<input type="checkbox"/> _____
V2.9	Did the liquor foul smell? Kodi fungo la madziwo linali lonunkha?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

V2.10	How much time did the labor and delivery take? Kodi matenda ndi kubadwa kwa mwana kunatenga nthawi yaitali bwanji? [Record "00" if less than 1 hour.]	____ Hours (DK = 99)	
S3.8	Where did the delivery occur? Kodi munachilira kuti?	<ol style="list-style-type: none"> 1. Hospital (kuchipatala) 2. Other health provider or facility 3. On route to a health provider or facility (panjira) 4. Home (panyumba) 5. Other (specify _____) 9. Don't know (sindikudziwa) 	<input type="checkbox"/> 1-3 = Health provider 9 → SQ3.11
S3.9	Who decided that this was the right place to deliver the baby? Kodi ndani amene anakulondolerani kuti mukachilire ku malo amenewa? [Record the one main decision maker.]	<ol style="list-style-type: none"> 1. The woman, herself mwini wake mayiyo 2. Her husband amuna ake 3. Her mother mayi ake 4. Her mother-in-law apongozi ake a akazi 5. Her father-in-law apongozi ake a amuna 6. Other ena (specify)..... 9. Don't know sindikudziwa 	<input type="checkbox"/>
S3.10	If she did <u>not</u> go to a health provider or facility (SQ3.8 = 4-5) for the delivery, ask: Did (you / the mother) have any concerns or problems that kept (you / her) from going to a health provider or facility for the delivery? Kodi inu (amayi ake) munali ndi nkhawa kapena mavuto omwe anakulepheretsani kupita ku chipatala cha amayi oyembekezera kuti mukachire? If she <u>went</u> or <u>was on route</u> to a health provider or facility (SQ3.8 = 1-3) for the delivery, ask: Did (you / the mother) have to overcome any concerns or problems to go to health provider or facility for the delivery? Kodi inu (amayi ake) munalimbana ndi nkhawa kapena mavuto omwe analipo kuti mupite ku chipatala cha amayi oyembekezera kuti mukachire?	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/> 2 or 9 → SQ3.11

<p>S3.10. 1</p>	<p>What concerns or problems did (you / she) have?</p> <p>Kodi nkhwawa zanu ndi mavuto anu (amayi ake) otani?</p> <p><i>Prompt: Was there any other concern or problem other than the ones aforementioned?</i></p> <p>Kodi panali chinanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<ol style="list-style-type: none"> 1. Did not think she was sick enough to need health care amaganiza kuti matenda sanayamba 2. No one available to go with her panalibe wondipelekeza 3. Too much time from her regular duties kutanganidwa ndi ntchito za pakhomo 4. Someone else had to decide (specify) wina wapadera apereke maganizo 5. Too far to travel mtunda ndi wautali 6. No transportation available mayendedwe panalibe 7. Cost (transport, health care, other) ndalama panalibe zolipilira transport chipatala ndi zina 8. Not satisfied with available health care kusakhutisidwa ndi chisamaliro cha za umoyo chimene chilipo 9. Symptom(s) required traditional care zizindikiro zimafunika a zamba 10. Thought she was too sick to travel amaganiza kuti wadwalika kuti sangayende 11. Thought she/baby will die despite care amaganiza kuti mwana akhoza kumwalira ngakhale panali chisamaliro 12. Was late at night (transportation or provider not available) unali usiku kwambiri 13. Fears exposure to male health provider amawopa kuwoneredwa ndi anamwino achimuna 14. Other zina (specify) 99. Don't know sindikudziwa 	<ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> _____ 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> 14. <input type="checkbox"/> _____ 99. <input type="checkbox"/>
<p>S3.11</p>	<p>Who (at the facility) delivered the baby?</p> <p>Kodi ndi ndani anakuthandizani kuchira?</p> <p><i>[Read "...at the facility..." if she delivered at a health facility.]</i></p>	<ol style="list-style-type: none"> 1. Doctor dotolo 2. Nurse/midwife namwino 3. Relative/neighbor/friend anansi 4. Self (the mother) yekha 5. Traditional birth attendant azamba 6. Other zina (specify) 9. Don't know sindikudziwa 	<p><input type="checkbox"/></p> <p>_____</p>
<p>S3.12</p>	<p>How soon after labor started did the <BIRTH ATTENDANT> first attend the mother?</p> <p>Kodi matenda atayamba panapita nthawi yaitali bwanji kuti mzamba akuthandizeni?</p> <p><i>[Discuss that labor starts with painful contractions every 20 minutes or less.]</i></p> <p><i>[Mark days &/or hours as needed: e.g. 00 day, 06 hours]</i></p>	<p>___ Days (DK = 99)</p> <hr/> <p>___ Hours (DK = 99)</p>	

S3.13	<p>Did the birth attendant use a pictorial graph to follow the progress of (your / the mother's) labor?</p> <p>Kodi mzamba anagwiritsa ntchito pepala la mizele-mizele kutstira mmene matenda anu (amayi ake) amayendela?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>
S3.14	<p>Did the birth attendant wash her hands with soap and water or wear surgical gloves before assisting with the birth?</p> <p>Kodi mzamba anasamba mmanja ndi soap kapena kuvala magolovesi asanayambe kukuthandizani?</p>	<p>1. Yes, washed with soap and water inde anasamba ndi sopo 2. Yes, wore surgical gloves Inde anamvala magolovesi 3. No ayi 9. Don't know sindikudziwa</p>	<input type="checkbox"/>
S3.15	<p>On what surface did (you / the mother) deliver?</p> <p>Kodi munachilira pa malo otani?</p>	<p>1. Labor bed bed lachipatala 2. Solid floor with mackintosh/cover povalidwa chipepala 3. Solid washed floor pansi pokolopedwa 4. Solid unwashed floor pansi posakolopedwa 5. Dirt/soil/mud/straw floor pa udzu 6. Other ena (specify) 9. Don't know sindikudziwa</p>	<input type="checkbox"/>
V2.17	<p>Was the delivery or what was the type of delivery? [Read the choices and mark ONE.]</p> <p>Kodi munachila.....?</p>	<p>1. Vaginal with forceps zitsulo zokanulira 2. Vaginal without forceps popanda zitsulo 3. Vaginal (don't know) sakudziwa 4. C-section opareshoni 9. Don't know sindikudziwa</p>	<input type="checkbox"/>
V2.18	<p>During labor but before delivery, did (you / the mother) receive any kind of injection?</p> <p>Kodi matenda atayamba koma musanchile munalandilapo (amayi ake) jakisoni wina aliyense?</p> <p>[Read "...the mother..." if the mother is not the respondent.]</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>

SA Module 4: Careseeking for maternal complications (FOR STILLBIRTHS AND NN DEATHS < 28 DAYS OLD)

Read: Now, I would like to ask you some questions about (your / the mother's) careseeking during the pregnancy with <NAME>.
Read: **Tsopano ndifuna ndikufunsemi mafunso okhuzana ndi chisamaliro chimene mumafuna muli oyembekezera (Name).**

S4.2.1	<p>Where did (you / she) seek this care from?</p> <p>Kodi inu (amayi ake) chithandizo chimenechi munakachifuna kuti?</p> <p><i>Prompt: Was there anywhere else? Panalinso kwina?</i></p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Hospital</p> <p>2. NGO or government clinic.....</p> <p>3. Private doctor/clinic.....</p> <p>4. Community nurse or midwife.....</p> <p>5. TBA/village doctor/quack/other non-formal or traditional provider</p> <p>6. Relative, neighbor or friend</p> <p>7. Other (<i>specify</i>)</p> <p>(_____)</p> <p>99. Don't know</p>	<p>1. <input type="checkbox"/> </p> <p>2. <input type="checkbox"/> </p> <p>3. <input type="checkbox"/> </p> <p>4. <input type="checkbox"/> </p> <p>5. <input type="checkbox"/> </p> <p>6. <input type="checkbox"/> </p> <p>7. <input type="checkbox"/> </p> <p>9. <input type="checkbox"/> → <i>Inst_2</i></p> <p>→ = Health provider</p> <p>→ SQ4.4</p>
S4.3	<p><i>If more than one symptom started before labor <u>and</u> she sought care from a health provider (SQ4.2.1 = 1-4), ask: For which symptom or symptoms that started <u>before</u> labor did (you / she) seek care from a health provider or facility?</i></p> <p>Kodi mwa zizindikilo zimene zinakuchitikilani matenda asanayambike ndi ziti zomwe munafuna chisamaliro cha ku chipatala?</p>	<p>1. Convulsions <input type="checkbox"/></p> <p>2. High blood pressure <input type="checkbox"/></p> <p>3. Severe anemia or (pallor <u>and</u> SOB) <input type="checkbox"/></p> <p>4. Diabetes..... <input type="checkbox"/></p> <p>5. Severe headache..... <input type="checkbox"/></p> <p>6. Blurred vision <input type="checkbox"/></p> <p>7. Too weak to get out of bed..... <input type="checkbox"/></p> <p>8. Severe abdominal (not labor) pain <input type="checkbox"/></p> <p>9. Fast or difficult breathing..... <input type="checkbox"/></p>	<p>10. Puffy face..... <input type="checkbox"/></p> <p>11. <u>Any</u> bleeding before labor <input type="checkbox"/></p> <p>12. – blank –</p> <p>13. Fever <input type="checkbox"/></p> <p>14. Smelly vaginal discharge <input type="checkbox"/></p> <p>15. – blank –</p> <p>16. Water broke ≥ 6 hrs bfr. labor <input type="checkbox"/></p> <p>17. – blank –</p> <p>18. Other (<i>specified in SQ4.1</i>) <input type="checkbox"/></p>
S4.4	<p><i>If she <u>never</u> went to a health provider (SQ4.2 = 2 <u>or</u> SQ4.2.1 \neq 1-4) for any of the pregnancy symptoms, ask: Did (you / the mother) have any concerns or problems that kept (you / her) from going to a health provider or facility for the symptom(s) that started <u>before</u> labor?</i></p> <p>Kodi inu (amayi ake) munali ndi nkhawa kapena mavuto amene anakulepheretsani kupita kuchipatala chifukwa cha zizindikiro zimene zimakuchitikilani matenda asanayambe?</p> <p><i>If she <u>went</u> to health provider (SQ4.2.1 = 1-4) for any pregnancy symptom(s), ask: Did (you / the mother) have to overcome any concerns or problems to go to a health provider or facility for the symptom(s) that started <u>before</u> labor?</i></p> <p>Kodi inu (amayi ake) munalimbana ndi nkhawa kapena mavuto ena kuti mupite kuchipatala chifukwa cha zizindikiro zimene zimakuchitikilani matenda asanayambe?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → <i>Inst_1</i></p>

S4.4.1	<p>What concerns or problems did (you / she) have?</p> <p>Kodi inu (amayi ake) munali ndi nkhawa kapena mavuto otani?</p> <p><i>Prompt: Was there anything else?</i></p> <p>Panali zinanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<ol style="list-style-type: none"> 1. Did not think was sick enough to need health care-Amaona ngati kudwala kwake kunali kosafuna chithandizo cha kuchipatala 2. No one available to go with her-Panalibe munthu woti apite naye kuchipatala 3. Too much time from her regular duties-Anali wotanganidwa ndi ntchito zapakhomo 4. Someone else (<i>specify</i>) had to decide-Amayembekezela kuti achite kuuzidwa 5. Too far to travel-ndi kutali kuyenda pansi 6. No transportation available-kayendwe kanali kobvuta 7. Cost (transport, health care, other) – ndalama zolipilira 8. Not satisfied with available health care-samakhutitsidwa ndi chihtandizo chimene amalandila kuchipatala 9. Symptom(s) required traditional care – zizindikilo zake zimafunika chithandizo cha kumuzi..... 10. Thought she was too sick to travel – amaganiza kuti anali wodwala kwambiri ndipo sangathe kuyenda 11. Thought she/baby will die despite care-amaganiza kuti mai/mwana amwalirabe ngakhale pakhale chithandizo 12. Fears exposure to male health provider-amaopa adotolo/anamwino/azamba amuna 13. Other (<i>specify</i>)- china 99. Don't know-sindikuziwa 	<ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> _____ 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> _____ 99. <input type="checkbox"/>
Inst_1: If SQ4.2 = 2 or SQ4.2.1 ≠ 1-4 (Never went to a health provider for any pregnancy symptoms) → Inst_2			
S4.5	<p>Did any health provider or facility refer (you / her) to another health provider or facility for (any of) the symptom(s) that started <u>before</u> labor?</p> <p>Kodi achipatala (amayi ake) anakutumizani ku chipatala china chifukwa cha zizindikilo zomwe zimakuchitikilani matenda asanayambe?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/> 2 or 9 → SQ.6
S4.5.1	<p>Did (you / she) go to the provider or facility to which (you were / she was) referred to?</p> <p>Kodi (amayi ake) munapita ku chipatala komwe anakutumizani?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/>

S4.6	How many different health providers or facilities did (you / the mother) see for the pregnancy symptom(s) that started <u>before</u> labor? Kodi munaonana ndi okuthandizani angati kapena ku zipatala zingati pa zizindikiro zomwe mumamva matenda asanayambe?		___ ___ Health providers/facilities (DK = 99)
S4.7	(Were you / Was the mother) admitted to hospital for (any of) the symptom(s) that started <u>before</u> labor? Kodi munagonekedwa kuchipatala chifukwa cha zizindikiro zomwe mumamva matenda asanayambe?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
S4.8	Please tell me everything that the provider(s) suggested that (<u>you</u> / <u>the mother</u>) do for the pregnancy symptom(s) at home? Chonde ndiuzeni zonse zomwe okuthandizani anakulangizani (amayi ake) kuti mukachite pa zizindikilo zomwe mumamva muli oyembekezera pamene muli ku nyumba kwanu. <i>Prompt: Was there anything else?</i> Panalinso china? <i>[Multiple answers allowed.]</i>	1. Take antibiotic by mouth- kumwa mankhwala okupha tizilombo tosaoneka ndi maso toyambisa matenda 2. Take antimalarial by mouth- kumwa mankhwala ochiritsa malungo 3. Take BP medicine by mouth- kumwa mankhwala ochiritsa matenda a mtima 4. Take other medicine by mouth- kumwa mankhwala ena 5. Rest / bed rest / decrease work- kupuma/kuchepesa kagwiridwe ka ntchito 6. Return for follow-up visit(s)- kubwereranso kuchipatala pakapita nthawi 7. Return or referred if worse- kubwereranso kuchipatala matenda akakula 8. Other (<i>specify</i>)- china 9. Nothing- palibe 99. Don't know- sindiziwa	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> _____ 9. <input type="checkbox"/> → <i>Inst_2</i> 99. <input type="checkbox"/> → <i>Inst_2</i>
S4.9	(Were you / Was the mother) able to follow <u>all</u> this advice? Kodi munakwanitsa kutsata malangizo onsewa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 9 → <i>Inst_2</i>

S4.10	<p><i>If <u>not</u> able to follow <u>all</u> the advice, ask:</i> Did (you / she) have any concerns or problems that kept (you / her) from following the advice?</p> <p>Kodi panali zovuta zina zomwe zinakulepheretsani kutsatila malangizo?</p> <p><i>If <u>able</u> to follow <u>all</u> the advice, ask:</i> Did (you / she) have to overcome any concerns or problems to follow the advice?</p> <p>Kodi munalimbana ndi mavuto ena kuti musatile malangizowa?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → <i>Inst_2</i></p>
S4.10.1	<p>What concerns or problems did (you / the mother) have?</p> <p>Kodi ndi zovuta zANJI zomwe munali (amai ake anali) nazo?</p> <p><i>Prompt:</i> Was there anything else?</p> <p>Panalinso china?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Did not understand instructions- Malangizo sindimamvesa</p> <p>2. Too much time from her regular duties- nthawi yambiri imathara ntchito za nthawi zonse</p> <p>3. Someone else (<i>specify</i>) decided- maganizo anachokera kwa munthu wina</p> <p>4. Cost too much-ntengo wolipira ndi waukulu.....</p> <p>5. Problem required traditional care- zizindikilo zake zimafunika chithandizo cha kumuzi.....</p> <p>6. Advised care not needed or helpful Analagizidwa kuti chisamaliro chosafunika</p> <p>7. Advised care might harm unborn child chisamaliro chita kumupweteka</p> <p>8. Thought she/baby will die despite care- amaganiza kuti mai/mwana amwalirabe ngakhale pakhale chithandizo</p> <p>9. Other (<i>specify</i>)-China</p> <p>99. Don't know-sindiziwa</p>	<p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> _____ 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> _____ 99. <input type="checkbox"/></p>
<p><i>Inst_2: Refer to SQ4.1: If no labor or delivery symptoms → Inst_8</i></p>			

S4.11	<p>Now let's talk about the labor and delivery symptom(s). You said earlier that the symptom(s) that started <u>with or during</u> labor or delivery (was / were) <SYMPTOM(S)>.</p> <p>Tsopano tiyeni tikambe za matenda akayambika ndi zizindikiro za nthawi yochila. Munanena kuti zizindikiro zimene zimakuchitikilani matenda asanayambe zinali zizindikiro izi:</p> <p><i>[Read and mark the SQ4.1 symptom(s) confirmed by the respondent. Correct the SQ4.1 responses if necessary.]</i></p>	<ol style="list-style-type: none"> 1. Convulsions <input type="checkbox"/> 2. High blood pressure <input type="checkbox"/> 3. Severe anemia or (pallor <u>and</u> SOB) <input type="checkbox"/> 4. – blank – palibe 5. Severe headache <input type="checkbox"/> 6. Blurred vision <input type="checkbox"/> 7. Too weak to get out of bed..... <input type="checkbox"/> 8. Severe abdominal (not labor) pain <input type="checkbox"/> 9. Fast or difficult breathing <input type="checkbox"/> 	<ol style="list-style-type: none"> 10. Puffy face <input type="checkbox"/> 11. <u>Any</u> bleeding before labor <input type="checkbox"/> 12. Excess bleed during L or D <input type="checkbox"/> 13. Fever <input type="checkbox"/> 14. Smelly vaginal discharge <input type="checkbox"/> 15. Early/preterm labor (<9 mnth) ... <input type="checkbox"/> 16. Water broke \geq6 hrs bfr. labor <input type="checkbox"/> 17. Labor for 12 hours or more <input type="checkbox"/> 18. Other (<i>specified in SQ4.1</i>) <input type="checkbox"/>
S4.12	<p>Where (were you / was the mother) when (this / the first) symptom began?</p> <p>Kodi chizindikilo choyamba cha matenda chinayamba (amayi ake ali) muli kuti?</p> <p><i>[Read "...the first..." if she had more than one labor or delivery symptom.]</i></p>	<ol style="list-style-type: none"> 1. Home 2. On route to a health provider or facility 3. At the health provider or facility where she went for normal labor 4. Other (<i>specify</i>) 9. Don't know 	<p><input type="checkbox"/> 3 → SQ4.17</p> <hr/>
S4.13	<p>Did (you / she) <u>receive, seek or try to seek</u> any care or treatment for (<u>any</u> of) the labor or delivery symptom(s)?</p> <p>Kodi munalandira (amayi ake) kapena kufuna chithandizo cha mankhwala pa zizindikilo zilizonse za matenda kapena kuchila?</p> <p><i>[Read "...any of the symptoms" if she had more than one symptom.]</i></p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<p><input type="checkbox"/> 2 or 9 → SQ4.17</p>
S4.13.1	<p>What was the <u>first</u> thing (you / the mother) did when you first saw the symptom(s)?</p> <p>Kodi chinthu choyamba chimene munachita (amayi ake) ndi chiyani mutaona zizindikilozi?</p> <p><i>Mark <u>only</u> the <u>first</u> action taken.]</i></p>	<ol style="list-style-type: none"> 1. Home treatment (at her own home, or by a relative, neighbor, or friend) pakhomo Sought or tried to seek care from a: 2. Hospital kucipatala 3. NGO or government clinic cha boma kapena mabungwe 4. Private doctor/clinic cha pulaiveti 5. Community nurse or midwife namwino adera 6. Pharmacist or drug seller ogulitsa mankhwala 7. TBA/village doctor/quack/other non-formal or traditional provider Azamba 8. Other ena (<i>specify</i>) 99. Don't know sindikudziwa 	<p><input type="checkbox"/> 99 → SQ4.16</p> <hr/>

S4.14	<p>Who decided that this was the right thing to do at that time?</p> <p>Kodi ndi ndani anaganiza kuti zomwe munachita pa nthayi imeneyo zinali zolondola?</p> <p><i>[Only one response allowed. Record the main decision maker.]</i></p>	<ol style="list-style-type: none"> 1. The woman, herself 2. Her husband 3. Her mother 4. Her mother-in-law 5. Her father-in-law 6. Other (<i>specify</i>)..... 9. Don't know 	<input type="checkbox"/> <hr/>
S4.15	<p><i>If she did <u>not</u> go to a health provider (SQ4.13.1 = 1 or 6-8), ask: Did (you / the mother) have any concerns or problems that kept (you / her) from going to a health provider at that time?</i></p> <p>Kodi panali zifukwa kapena zovuta zimene zinakulepheretsani (amayi ake) kupita ku chipatala pa nthawi imeneyo?</p> <p><i>If she <u>went</u> to a health provider (SQ4.13.1 = 2-5), ask: Did (you / the mother) have to overcome any concerns or problems to go to the <HEALTH CARE PROVIDER> at that time?</i></p> <p>Kodi munalimbana (amayi ake) ndi zifukwa kapena zobvuta zina kuti mupite ku chipatala pa nthawi imeneyo?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/> 2 or 9 → Inst_3
S4.15.1	<p>What concerns or problems did (you / the mother) have?</p> <p>Kodi ndi zovuta zANJI zomwe munali (amai ake anali) nazo?</p> <p><i>Prompt: Was there anything else?</i></p> <p>Palinso china?</p> <p><i>[Multiple answers allowed.]</i></p>	<ol style="list-style-type: none"> 1. Did not think she was sick enough to need health care 2. No one available to go with her 3. Too much time from her regular duties .. 4. Someone else had to decide (<i>specify</i>) ... 5. Too far to travel 6. No transportation available 7. Cost (transport, health care, other) 8. Not satisfied with available health care .. 9. Symptom(s) required traditional care 10. Thought she was too sick to travel 11. Thought she/baby will die despite care 12. Was late at night (transportation or provider not available) 13. Fears exposure to male health provider 14. Other (<i>specify</i>)..... 99. Don't know 	<ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> _____ 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> 14. <input type="checkbox"/> _____ 99. <input type="checkbox"/>
Inst_3: If SQ4.13.1 = 2-5 (First <u>went</u> to a health provider or facility) → SQ4.16.1			

S4.16	<p>Did (you / she) <u>ever seek or try to seek</u> care from a health provider or facility for (any of) the labor or delivery symptom(s)?</p> <p>Kodi munayeserapo (amayi ake) kufuna chithandizo ku chipatala pamene chimodzi mwa zizindikilo za matenda kapena kuchila zinakuchitikilani?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → SQ4.17</p>
S4.16.1	<p>Please tell me all the types of health providers and facilities where (you / she) <u>sought or tried to seek</u> care for (any of) the labor or delivery symptom(s).</p> <p>Mungandiuze konse kumene munapita (amayi ake) kukapeza chithandizo pamene chimodzi mwa zizindikilo za matenda kapena kuchila zinakuchitikilani?</p> <p><i>Prompt: Anywhere else?</i> Pali kwinanso</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Hospital 2. NGO or government clinic..... 3. Private doctor/clinic..... 4. Community nurse or midwife..... 9. Don't know</p>	<p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 9. <input type="checkbox"/></p>
S4.17	<p><i>Refer to SQ3.8 to determine the delivery place. Discuss with respondent to confirm or correct the delivery place.</i></p> <p><i>Discuss & resolve inconsistencies, for example, if SQ4.13 or 4.16 = "No," but the mother delivered in a health facility.</i></p>	<p>1. Hospital 2. Other health provider or facility 3. On route to a health provider or facility 4. Home 5. Other (specify) 9. Don't know</p>	<p><input type="checkbox"/> 1-3 = Health provider</p> <p>_____</p>
S4.18	<p>So, including where (you / the mother) <u>went or tried to go</u> for the labor or delivery symptom(s) <u>and</u> for the delivery, how many health providers or facilities did (you / she) go to?</p> <p>Kodi tikawonkhetsa konse kumene munapita kukapeza chithandizo (amayi ake) kukwana kangati?</p> <p><i>[If SQ4.16 = 2 and SQ4.17 = 4 or 5 → record '00' health providers/facilities]</i> <i>[If SQ4.16 = 2 and SQ4.17 = 1-3 → record '01' health provider/facility]</i> <i>[If SQ4.16 = 2 and SQ4.17 = 9 → record '99' health providers/facilities]</i> <i>[If SQ4.16 = 9 → record '99' health providers/facilities]</i></p>		<p>___ Health providers/facilities</p>
<p>Inst_4: If SQ4.12 = 3 (Symptoms began at the health care provider where she went for normal labor) → SQ4.22</p>			
<p>Inst_5: If SQ4.16 = 2 or 9 & SQ4.17 = 4-9 (No health care provider seen/sought for the symptoms/delivery) → Inst_8</p>			
<p>Inst_5.5: If SQ4.1 = only 1 labor or delivery symptom <u>OR</u> If SQ4.16 = 2 or 9 → SQ4.21</p>			

S4.19	<p>Was there any particular symptom or symptoms for which (you / the mother) went to the (first) health provider?</p> <p>Kodi panali chizindikilo kapena zizindikilo zina zapadera zomwe zinakupangitsani (amayi ake) kupita ku chipatala kapena za umoyo?</p> <p><i>[Read "...the first health provider?" if she went to more than one provider.]</i></p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → SQ4.21</p>
S4.20	<p>For which symptom(s) did (you / the mother) go for maternal care?</p> <p>Kodi zizindikilo zake zinali zotani zomwe inu (amayi ake) munapitila ku chipatala?</p>	<p>1. Convulsions <input type="checkbox"/> 2. High blood pressure <input type="checkbox"/> 3. Severe anemia or (pallor <u>and</u> SOB) <input type="checkbox"/> 4. – blank – 5. Severe headache <input type="checkbox"/> 6. Blurred vision <input type="checkbox"/> 7. Too weak to get out of bed..... <input type="checkbox"/> 8. Severe abdominal (not labor) pain <input type="checkbox"/> 9. Fast or difficult breathing..... <input type="checkbox"/></p>	<p>10. Puffy face..... <input type="checkbox"/> 11. <u>Any</u> bleeding before labor <input type="checkbox"/> 12. Excess bleed during L or D..... <input type="checkbox"/> 13. Fever <input type="checkbox"/> 14. Smelly vaginal discharge <input type="checkbox"/> 15. Early/preterm labor (<9 mth) ... <input type="checkbox"/> 16. Water broke ≥6 hrs bfr. labor <input type="checkbox"/> 17. Labor for 12 hours or more <input type="checkbox"/> 18. Other (specified in SQ4.1) <input type="checkbox"/></p>
S4.21	<p>How long after the labor or delivery symptom(s) began, did you/mother decide to go to or see the (first) health provider?</p> <p>Kodi panapita nthawi yaitali bwanji zizindikilo za matenda kapena za kuchila zitayamba kuti mupite kukapeza chithandizo ku chipatala kwa nthawi yoyamba cha mimba imeneyi?</p> <p><i>[Read "...to the first..." if she went or tried to go to more than one health provider.]</i></p> <p><i>[Mark days, hours &/or minutes as needed: e.g. 00 day, 02 hours, 10 minutes]</i></p>	<p>___ ___ Days (DK = 99)</p>	<p>___ ___ Hours (DK = 99)</p>
<p>Labor and delivery matrix instructions: Ask the following questions for the <i>first</i> and <i>last</i> health providers where she sought/tried to seek care for the labor and delivery symptoms. If she delivered at a health provider/facility or at home or on route while trying to go to a health provider/facility, then that should be the first health provider (if she went to only one) or the last health provider. Ask all the questions for the first provider before going on to the last.</p> <p><i>Before asking about the first health provider, read:</i></p> <p>Now I would like to ask about (your / the mother's) visit to the (first) health provider.</p> <p>Now we would like to talk more about your visit to the first health care provider</p> <p><i>[Read "first" if she went or tried to go to more than one provider.]</i></p> <p><i>Before asking about the last health provider, read:</i></p> <p>Now I would like to ask about (your / the mother's) visit to the last health provider.</p> <p>Now we would like to talk more about your visit to the last health care provider</p>			
<p align="center">– LABOR AND DELIVERY MATRIX QUESTIONS –</p>		<p align="center">FIRST HEALTH PROVIDER</p>	<p align="center">LAST HEALTH PROVIDER</p>

<p>What was the name of the (first / last) health care provider or facility where (you / the mother) (sought care for the labor or delivery symptom(s) / delivered the baby / tried to deliver the baby)?</p> <p><i>Probe to identify the type of provider.</i></p>	<ol style="list-style-type: none"> 1. Hospital (Government) chipatala cha boma 2. Hospital (NGO) chipatala cha bungwe 3. Hospital (Private) chipatala cha pulaiveti 4. Health center (Government) chipatala cha ching'ono cha boma 5. Health center (NGO) chipatala cha ching'ono cha bungwe 6. Health post (Government) chipatala choyendera boma 7. Health post (NGO) chipatala choyendera bungwe 8. Private doctor/clinic (Formal) dokotala wovomerezedwa 9. Private doctor/clinic (Informal) Dokotala wosalolezedwa 10.Trained community nurse/midwife namwina wadera 99. Don't know sindikudziwa 	<p>S4.22 <input type="checkbox"/><input type="checkbox"/></p> <p>_____ (Name of Provider/Facility)</p>	<p>S4.32 <input type="checkbox"/><input type="checkbox"/></p> <p>_____ (Name of Provider/Facility)</p>
<p>After (deciding to seek care / being referred), how much time passed before going to the <FIRST/LAST HEALTH PROVIDER>?</p> <p>Kodi panapita nthawi yaitali bwanji kuti mupite ku chipatala choyamba musanakafike ku chipatala choyamba ndi chosiliza?</p> <p><i>[Discuss that this might include the time needed to arrange for transportation and money to go to the provider/facility, or to provide home care or go to a traditional provider before going to the health provider.]</i></p> <p><i>[If she delivered at home, record the time from decision/referral to delivery.]</i></p> <p><i>[Mark days, hours &/or minutes as needed: e.g. 00 days, 02 hours, 10 minutes]</i></p>		<p>S4.23</p> <p>__ __ Days (DK = 99)</p> <p>__ __ Hours (DK = 99)</p> <p>__ __ Minutes (DK = 99)</p>	<p>S4.33</p> <p>__ __ Days (DK = 99)</p> <p>__ __ Hours (DK = 99)</p> <p>__ __ Minutes (DK = 99)</p>
<p>Was there any cost to travel to the <FIRST/LAST HEALTH PROVIDER> or pay for (your / the mother's) care there?</p> <p>Kodi panali kulipila mayendedwe popita ku chipatala choyamba ndi chomaliza kapena kulipila chithandizocho inu (amayi ake)?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<p>S4.24 <input type="checkbox"/> 2 or 9 → SQ4.25</p>	<p>S4.34 <input type="checkbox"/> 2 or 9 → SQ4.35</p>
<p>How did (you / the mother) arrange for the money for these expenses?</p> <p>Kodi ndalama zolipilira munazipeza bwanji?</p> <p><i>[Multiple answers allowed.]</i></p>	<ol style="list-style-type: none"> 1. Had available anasungira 2. Borrowed kungongola 3. Sold assets anagulitsa katundu .. 4. Help from kin/relatives anathandizidwa ndi achibale 5. Community fund ndalama zosonkha za mdera 6. Govt. scheme ndalama za boma . 7. Other zina 9. Don't know sindikudziwa 	<p>S4.24.1</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 9. <input type="checkbox"/> 	<p>S4.34.1</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 9. <input type="checkbox"/>

<p>What mode of transport did you/mother use to go there?</p> <p>Kodi munagwiritsa ntchito mayendedwe otani kuti mukafike kumeneko?</p> <p><i>[Multiple answers allowed.]</i></p>	<ol style="list-style-type: none"> 1. Walk anagoyenda 2. Rickshaw/cart boat bwato 3. Bus basi..... 4. Taxi/auto/treckertakisi 5. Ambulance ambulansi 6. Other zina 7. Could not arrange transportsindinathe kupeza mayendedwe..... 9. Don't know sindikudziwa..... 	<p>S4.25</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> If <i>only</i> walk 2. <input type="checkbox"/> → SQ4.26.1 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> → SQ4.26.1 9. <input type="checkbox"/> 	<p>S4.35</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> If <i>only</i> walk 2. <input type="checkbox"/> → SQ4.36.1 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> → SQ4.36.1 9. <input type="checkbox"/>
<p>How much did the transport cost?</p> <p>Kodi mayendedwe anakwana ndalama zingati?</p>	<p>S4.26</p> <p>___ ___ ___ unit (DK = 9999)</p>	<p>S4.36</p> <p>___ ___ ___ unit (DK = 9999)</p>	
<p>Did (you / the mother) reach the <FIRST/LAST HEALTH PROVIDER> before delivering the baby?</p> <p>Kodi munafika (amayi ake) ku chipatala musanachile?</p> <p><i>If "No," discuss with respondent to reach correct response: 2, 3 or 4.]</i></p>	<ol style="list-style-type: none"> 1. Yes, reached before delivering Inde, ndinakafika ndisanachire 2. No, delivered before setting out Ayi, ndinachira ndisanapite ku chipatala 3. No, delivered on route to provider Ayi, ndinachilira mjira 4. No, could not reach this provider – did not set out/returned home/took other action Ayi, sindinapite kapena ndinabwerera, ndinagwiritsa njira zina 9. Don't know sindikudziwa 	<p>S4.26.1</p> <p><input type="checkbox"/> 2, 3 → Inst_8 4, 9 → Inst_7</p>	<p>S4.36.1</p> <p><input type="checkbox"/> 2-9 → Inst_8</p>
<p>How long did it take to travel to the <FIRST/LAST HEALTH PROVIDER>?</p> <p>Kodi zinakutengerani nthawi yaitali bwanji kuti mukafike ku chipatala choyamba kapena chomaliza?</p> <p><i>[Mark hours &/or minutes as needed: e.g. 05 hours, 30 minutes]</i></p>	<p>S4.27</p> <p>___ ___ Hours (DK = 99)</p> <p>___ ___ Minutes (DK = 99)</p>	<p>S4.37</p> <p>___ ___ Hours (DK = 99)</p> <p>___ ___ Minutes (DK = 99)</p>	

<p>What did the <FIRST/LAST HEALTH PROVIDER> do for (your / the mother's) (labor or delivery symptom(s) / delivery)?</p> <p>Kodi ku chipatala choyamba kapena chomaliza kupita anakuthandizani (amayi ake) bwanji pa zizindikiro za matenda kapena pochira?</p> <p><i>Prompt: Was there anything else?</i></p> <p>Panali chinanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<ol style="list-style-type: none"> 1. Gave oxygen for the baby anawonjezedwa mpweya wina mthupi 2. Gave antibiotics by mouth Anapatsidwa mankhwala (penisilini, amoxiciline cotrim 3. Gave ant malarial by mouth Anapatsidwa mankhwala a Malungo..... 4. Gave BP medicine by mouth Anapatsidwa mankhwala othamanga magazi 5. Other medicine by mouth anapatsidwa mankhwala ena (specify)..... 6. Gave medicine to stop bleeding anapatsidwa mankhwala oletsa kutaika kwa magadzi..... 7. Gave medicine to stop convulsions mankhwala oletsa kukomoka 8. Gave medicine to strengthen labor Mankhwala owonjezera mphamvu pochira 9. Gave medicine to stop labor mankhwala oletsa zizindikiro zobereka..... 10. Gave medicine for baby's lungs mankhwala othandizira kufutukula mapapu 11. Gave IM medicine Mankhwala obaya pathupi/jakisoni..... 12. Gave IV fluids or medicine mankhwala a mdzia oyenda mumsempha 13. Blood transfusion anamuwonjezera magazi 14. Advised to buy outside medicine kukagula mankhwala kwina..... 15. Uterine massage anandithandizira chiberekero 16. Did a C-section anandipanga opareshoni 17. Did another operation anagwiritsa njira zina (specify) 18. Admitted to hospital anakugonekani mchipatala..... 19. Other zina (specify)..... 20. Nothing palibe 99. Don't know sindikudziwa 	<p>S4.28</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> _____ 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> 14. <input type="checkbox"/> 15. <input type="checkbox"/> 16. <input type="checkbox"/> 17. <input type="checkbox"/> _____ 18. <input type="checkbox"/> stayed ___ days 19. <input type="checkbox"/> _____ 20. <input type="checkbox"/> → SQ4.30 99. <input type="checkbox"/> → SQ4.30 	<p>S4.38</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> _____ 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> 14. <input type="checkbox"/> 15. <input type="checkbox"/> 16. <input type="checkbox"/> 17. <input type="checkbox"/> _____ 18. <input type="checkbox"/> stayed ___ days 19. <input type="checkbox"/> _____ 20. <input type="checkbox"/> → SQ4.40 99. <input type="checkbox"/> → SQ4.40
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<p>How much did (you / the mother) pay for these treatments and other costs related to the health care, including any admission fee, consultation, lab tests, equipment, and room and food for guardians?</p> <p>Kodi munalipila (amayi ake) ndalama zingati pa chithandizo cha mankhwala, kukugonekani, kuonanana ndi dotolo, kupimidwa, zipangizo, pogona ndi zakudya za okuperekezani?</p>	<p>S4.29 _____ unit (DK = 99999)</p>	<p>S4.39 _____ unit (DK = 99999)</p>	
<p>Did the <FIRST/LAST HEALTH PROVIDER> refer (you / the mother) to another health provider or facility?</p> <p>Kodi okuthandizani woyamba kapena womalizayu anakutumizandinso (amayi ake) ku chipatala china kuti mukalandile chithandizo?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p>S4.30 <input type="checkbox"/> 2 or 9 → SQ4.30.2</p>	<p>4.40 <input type="checkbox"/> 2 or 9 → SQ4.40.2</p>
<p>Why (were you / was the mother) referred?</p> <p>Kodi ndi chifukwa chiyani munatumizidwa (amayi ake) kwina kuti mukalandile chithandizo?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. The provider was not capable of managing the problem wothandizayo vutolo linamukanika..... 2. Required supplies (e.g., drugs, IV, oxygen, blood) not available mankhwala kunalibe 3. Required equipment (e.g., ultrasound) not available zipangizo kunalibe..... 4. Required facility (e.g., operation room) not available malo ofunikira kugwirira ntchitoyo kunalibe..... 9. Don't know sindikudziwa</p>	<p>S4.30.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 9. <input type="checkbox"/></p>	<p>S4.40.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 9. <input type="checkbox"/></p>
<p>Was the baby delivered at the <FIRST/LAST HEALTH PROVIDER>?</p> <p>Kodi mwana anabadwira ku chipatala choyamba kapena chomaliza?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p>S4.30.2 <input type="checkbox"/> 1 → Inst_8</p>	<p>S4.40.2 <input type="checkbox"/> 1 → Inst_8</p>
<p>Inst_6: Check SQ4.18 to determine if she went to another health provider</p>			

<p><i>If did <u>not</u> go to another health provider, ask: Did (you / the mother) have any concerns or problems that kept (you / her) from going to another provider?</i></p> <p>Kodi munali (amayi ake) ndi nkhawa kapena mabvuto ena amene anakulepheretsani kupita ku chipatala?</p> <p><i>If went to another health provider, ask: Did (you / the mother) have to overcome any concerns or problems to go to another provider?</i></p> <p>Kodi munalimbana (amayi ake) ndi zifukwa kapena zobvuta zina kuti mupite mukapeze chithandizo kwina?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p>S4.31 <input type="checkbox"/> 2 or 9 → <i>Inst_7</i></p>	<p>S4.41 <input type="checkbox"/> 2 or 9 → <i>Inst_8</i></p>
<p>What concerns or problems did (you / the mother) have?</p> <p>Kodi ndi zokhumudwitsa kapena mabvuto anji amene munaliawo (amayi ake)?</p> <p><i>Prompt: Was there anything else?</i></p> <p>Panali chinanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Thought no more care needed mumaganiza chithandizo ndi chosafunikiranso</p> <p>2. No one available to go with her panalibe okuperekezani</p> <p>3. Too much time from regular duties ntchito zina ndi zina zinakuchulukirani</p> <p>4. Someone else (<i>specify</i>) decided ena ake anakupangirani maganizo</p> <p>5. Too far to travel kunakutalikirani ..</p> <p>6. No transportation available munalibe mayendedwe</p> <p>7. Cost (transport, health care, other) Ndinalibe ndalama zolipilira etc</p> <p>8. Not satisfied with available care simunakhutisidwe ndi chisamaliro ..</p> <p>9. Problem required traditional care Vutolo limafunikira kuchikuda</p> <p>10. Thought too sick to travel amaganiza kuti munadwalika kwambiri kuti muyende</p> <p>11. Thought she/baby will die anyway munmaganiza kuti mwana afabe</p> <p>12. Was late at night ndinachedwa unali usiku kwambiri</p> <p>13. She delivered before going munachira musanapite kuchipatala</p> <p>14. Other zina (specify)</p> <p>99. Don't know simukudziwa</p>	<p>S4.31.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> _____ 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> → <i>Inst_8</i> 14. <input type="checkbox"/> _____ 99. <input type="checkbox"/></p>	<p>S4.41.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> _____ 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> 14. <input type="checkbox"/> _____ 99. <input type="checkbox"/></p>
<p><i>Inst_7: Check SQ4.18 → If she went to another health provider</i></p>		<p><i>...go to SQ4.32 (LAST HEALTH PROVIDER)</i></p>	

Inst_8: STOP – If VQ1.15 = 1 (Stillbirth) → VQ5.4 (Section 5: Health records)

SA Module 5a: Care of the newborn; and VA Section 3: Neonatal deaths (FOR NN DEATHS <28 DAYS OLD)talk

Read: Now I would like to ask you about the care of the newborn child. Tsopano ndifuna ndikufunsemi zokhuzana ndi chisamaliro cha mwana wongobadwa kumene.

S5a.1	<p>What tool was used for cutting the cord?</p> <p>Kodi ndichipangizo chanji chimene anagwilitsa ntchito kudulira mchombo?</p>	<p>1. New/from delivery kit/boiled razor blade lumo latsopano</p> <p>2. Old razor blade lumo logwiritsidwa ntchito kale</p> <p>3. Scissors sisesi</p> <p>4. Other zina (<i>specify</i>)</p> <p>9. Don't know sindikudziwa</p>	<input type="checkbox"/> <hr/>
S5a.2	<p>What material was used for tying the cord?</p> <p>Kodi anagwiritsa ntchito chani pomangila mchombo?</p>	<p>1. Clean/from delivery kit/boiled piece of thread ulusi woyera</p> <p>2. Unclean piece of thread ulusi wosayera</p> <p>3. Cord clamp zomangira mchombo</p> <p>4. Other zina (<i>specify</i>)</p> <p>9. Don't know sindikudziwa</p>	<input type="checkbox"/> <hr/>
S5a.3	<p>Was anything applied to the umbilical cord stump after birth?</p> <p>Kodi panapakidwa chilichonse pa mchombo wa mwana?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<input type="checkbox"/> 2 or 9 → VQ3.1
S5a.3.1	<p>What was it?</p> <p>Kodi chinali chiyani?</p>	<p>1. Alcohol/other antiseptic madzi a mchere opukutira mchombo</p> <p>2. Antibiotic ointment/cream/powder mafuta opaka/pauda wopaka</p> <p>3. Mustard oil or ghee mafuta osungunulidwa kuchokera ku mkaka</p> <p>4. Animal dung or dirt/mud ndowe kapena matope</p> <p>5. Other zina (<i>specify</i>)</p> <p>9. Don't know sindikudziwa</p>	<input type="checkbox"/> <hr/>
V3.1	<p>Were there any bruises or signs of injury on the baby's body at birth?</p> <p>Kodi pobadwa mwanayo pathupi pake panasupuka kapena kuonetsa zizindikilo zobvulala?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<input type="checkbox"/>
V3.2	<p>Was any part of the baby physically abnormal at the time of delivery? (for example: body part too large or too small, additional growth on body)</p> <p>Kodi pa nthawi yobadwa mwanayu thupi kapena ziwalo zake zinaoneka zodabwitsa kapena kulumala?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<input type="checkbox"/> 2 or 9 → VQ3.4

V3.3	<p>What were the abnormalities?</p> <p>Kodi maonekedwe achilendo pa thupi lake anali othani?</p> <p><i>Ask for the following abnormalities: [Mark all that apply – Show photos]</i></p>	<p>1. Was the head size very small at the time of birth?</p> <p>2. Was the head size very large at the time of birth?</p> <p>3. Was there a mass defect on the back of head or spine?</p> <p>4. Was there any other abnormality?</p> <p><i>(If “Yes,” then specify)</i></p>	<p><u>Yes</u> <u>No</u></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/></p> <p>_____</p>
V3.4	<p>Did the baby breathe immediately after birth?</p> <p>Kodi mwanayu anapuma atangobadwa kumene?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 → VQ3.6</p>
V3.5	<p>Did the baby have difficulty breathing?</p> <p>Kodi mwanayu ankabanika popuma?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/></p>
V3.6	<p>Was anything done to try to help the baby breathe at birth?</p> <p>Kodi mwanayu anathandizidwa kuti apuma atangobadwa?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikidziwa</p>	<p><input type="checkbox"/></p>
V3.7	<p>Did the baby cry immediately after birth?</p> <p>Kodi mwanayu analira atangobadwa kumene?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 1 → VQ3.9</p>
V3.8	<p>How long after birth did the baby first cry?</p> <p>Kodi mwanayu atangobadwa panapita nthawi yaitali bwanji kuti ayambe kulira?</p> <p><i>[Mark ONE response]</i></p>	<p>1. Within 5 minutes</p> <p>2. Within 6-30 minutes</p> <p>3. More than 30 minutes</p> <p>4. Never</p> <p>9. Don't know</p>	<p><input type="checkbox"/> 4 → SQ5a.4</p>
V3.9	<p>Did the baby stop being able to cry?</p> <p>Kodi mwanayi anasiya kulira?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → SQ5a.4</p>
V3.10	<p>How long before the baby died did the baby stop crying?</p> <p>Kodi mwanayu asanamwalire panapita nthawi yaitali bwanji atasiya kulira?</p>	<p>1. Less than one day</p> <p>2. One day or more</p> <p>9. Don't know</p>	<p><input type="checkbox"/></p>
S5a.4	<p>How long after birth was the baby first bathed?</p> <p>Kodi panapita nthawi yaitali bwanji kuti mwanayu asambisidwe kwa nthawi yoyamba?</p>	<p>1. Less than 1 hour</p> <p>2. 1-23 hours</p> <p>3. 24-72 hours (1-3 days)</p> <p>4. More than 72 hours (3 days)</p> <p>5. Not bathed</p> <p>9. Don't know</p>	<p><input type="checkbox"/></p>

	Was anything done to keep the baby warm on the first day after birth? Kodi munachitapo kanthu kuti mwanayu azimva kufunda atangobadwa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ5a.6																																									
S5a.5. 1	What was done? Kodi munachita chiyani? <i>[Multiple answers allowed.]</i> <i>For each mentioned, ask:</i> How soon after birth was this done? Kodi atangobadwa panapita nthawi yaitali bwanji kuti zimenezi zichitika?	1. Dried/wiped anampukuta 2. Wrapped in a blanket anakutira mbulangeti 3. Skin-to-skin contact anamukhumbatira 4. Incubator munamuyika ku magesi 5. Other zina <i>(specify other)</i>	<table border="1"> <thead> <tr> <th rowspan="2">Done</th> <th colspan="5">How soon after birth</th> </tr> <tr> <th><1hr</th> <th><6</th> <th>6-24</th> <th>>24</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>4. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>2. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>4. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>3. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>4. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>4. <input type="checkbox"/></td> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>4. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>5. <input type="checkbox"/></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Done	How soon after birth					<1hr	<6	6-24	>24	DK	1. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	9. <input type="checkbox"/>	2. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	9. <input type="checkbox"/>	3. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	9. <input type="checkbox"/>	4. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	9. <input type="checkbox"/>	5. <input type="checkbox"/>					
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S5a.6	Did (you / the mother) or a wet nurse ever breastfeed the baby? Kodi inu (amayi ake) kapena anamwino anayamwitsa mwanayu?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ5a.7																																									
S5a.6. 1	How long after birth was the baby first put to the breast? Kodi mwanayu atangobadwa panapita nthawi yaitali bwanji kuti mumuyamwitse bele? <i>[If immediately or less than 1 hour, record '00' hours.]</i> <i>[If less than 24 hours, record hours; otherwise record days.]</i>		____ Hours (DK = 99)																																									
S5a.6. 2	Was the baby being breastfed at the time when the fatal illness began? Kodi mwanayu amayamwa bele pamene matenda anayambika?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>																																									
S5a.7	At the time the fatal illness began, was the baby being given any other liquid, including non-human milk or formula, fruit juice, tea or water, or any semisolid or soft foods such as cereal? Kodi pa nthawi imene matendawa amayambika kodi mwanayu ankapatsidwa zakumwa kuphatikizapo mkaka osati wammawere, madzi azipatso, tii, madzi zakudya za phalaphala kapena zofewa monga cerelac ndi zina? <i>[Multiple answers allowed. Probe, and record all liquids and foods given.]</i>	1. Non-human milk or pre-mixed formula mkaka wogula 2. Powdered formula mixed with a liquid mkaka wa ufa wosungunula 3. Juice, water and/or water-based drinks juwisi, madzi azipatso 4. ORS thanzi 5. Drops or syrups (vitamins, medicines) mankhwala a mmaso 6. Semi-solid or soft foods zakudya za madzi madzi 7. Nothing else, <i>only</i> given breast milk anagompatsa mkaka wa mmawere basi 9. Don't know sindikudziwa	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 9. <input type="checkbox"/>																																									

V3.11	Was the baby able to suckle in a normal way during the first day of life? Kodi mwanayu anakwanitsa kuyamwa bwino tsiku limene anabadwa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 1 → VQ3.13
V3.12	Did the baby ever suckle in a normal way? Kodi mwanayu anayamwako bwino?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ3.17
V3.13	Did the baby stop suckling in a normal way? Kodi mwanayu anasiya kuyamwa bwinobwino?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ3.17
V3.14	How long after birth did the baby stop suckling? Kodi atangobadwa mwanayu panapita nthawi yaitali bwanji kuti asiye kuyamwa? <i>[Less than 24 hours = "00" days]</i>		___ Days (DK = 99)
V3.15	How long before s/he died did the baby stop suckling? Kodi atasiya kuyamwa mwanayu panapita nthawi yaitali bwanji kuti amwalire?	1. Less than one day 2. One day or more 9. Don't know	<input type="checkbox"/>
V3.16	Was the baby able to open her/his mouth at the time s/he stopped suckling? Kodi atasiya kuyamwa mwanayu ankatha kutsekula pakamwa pake?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V3.17	During the illness that led to death, did the baby have any difficulties in breathing? Kodi nthawi imene mwanayu amadwala ankabanika popuma?	1. Yes Inde 2. No Ayi 9. Don't know sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ3.20

V3.18	At what age did the difficulty in breathing start? Kodi kupuma kobanikaku kunayambika mwanayi ali ndi msinkhu wotani? <i>[Less than 24 hours = "00" days]</i>	___ ___ Days (DK = 99)
V3.19	For how many days did the difficulty in breathing last? Kodi kupuma mobanikaku kunakhala masiku angati? <i>[Less than 24 hours = "00" days]</i>	___ ___ Days (DK = 99)
V3.20	During the illness that led to death, did the baby have fast breathing? Kodi nthawi imene mwanayu amadwala ankapuma mofulumila asanamwalire?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa <input type="checkbox"/> 2 or 9 → VQ3.23
V3.21	At what age did the fast breathing start? Kodi kupuma mofulumilaku kunayambika ali ndi msinkhu wanji? <i>[Less than 24 hours = "00" days]</i>	___ ___ Days (DK = 99)
V3.22	For how many days did the fast breathing last? Kodi kupuma mofulumilaku kunakhala masiku angati? <i>[Less than 24 hours = "00" days]</i>	___ ___ Days (DK = 99)
V3.23	During the illness that led to death, did the baby have indrawing of the chest? Kodi nthawi imene mwanayu amadwala matenda omwe anamwalira nawo chidali chake chinalowa mkati? <i>[Show photo]</i>	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa <input type="checkbox"/>
V3.24	During the illness that led to death, did the baby have grunting? Kodi nthawi imene mwanayu amadwala matenda omwe anamwalira nawo ankabula? <i>[Demonstrate grunting]</i>	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa <input type="checkbox"/>
V3.25	During the illness that led to death, did the baby have spasms or convulsions? Kodi nthawi imene mwanayu amadwala matenda omwe anamwalira nawo ankakomokakomoka?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa <input type="checkbox"/>

V3.26	During the illness that led to death, did the baby have fever? Kodi nthawi imene mwanayu amadwala matenda omwe anamwalira nawo ankatentha thupi?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ3.29
V3.27	At what age did the fever start? Kodi kutentha thupi kunayamba ali ndi nsinkhu wanji? <i>[Less than 24 hours = "00" days]</i>		___ ___ Days (DK = 99)
V3.28	How many days did the fever last? Kodi kutentha thupiku kunatha patapita masiku angati? <i>[Less than 24 hours = "00" days]</i>		___ ___ Days (DK = 99)
V3.29	During the illness that led to death, did the baby become cold to touch? Nthawi imene mwanayu amadwala matenda omwe anamwalira nawo, kodi thupi lake linkazizila poligwila?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ3.32
V3.30	At what age did the baby start feeling cold to touch? Kodi mwanayu anayamba kumveka kuzizila thupi ali ndi msinkhu wanji? <i>[Less than 24 hours = "00" days]</i>		___ ___ Days (DK = 99)
V3.31	How many days did the baby feel cold to touch? Kodi mwanayu anamveka kuzizila thupi kwa masiku angati? <i>[Less than 24 hours = "00" days]</i>		___ ___ Days (DK = 99)
V3.32	During the illness that led to death, did the baby become lethargic, after a period of normal activity? Nthawi imene mwanayu amadwala matenda omwe anamwalira nawo, kodi thupi lake linali lowuma kusiyana ndi nthawi yomwe anali bwino?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V3.33	During the illness that led to death, did the baby become unresponsive or unconscious? Kodi nthawi imene mwanayu amadwala matenda omwe anamwalira nawo anka kugwadera kapena kukomoka?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

V3.34	<p>During the illness that led to death, did the baby have a bulging fontanelle?</p> <p>Nthawi imene mwanayu amadwala matenda omwe anamwalira nawo, kodi liwombo lake linatupa?</p> <p><i>[Show photo]</i></p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>
V3.35	<p>During the illness that led to death, did the baby have pus drainage from the umbilical cord stump?</p> <p>Nthawi imene mwanayu amadwala matenda omwe anamwalira nawo, kodi pa mchombo pake pamatuluka mafinya?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>
V3.36	<p>During the illness that led to death, did the baby have redness of the umbilical cord stump?</p> <p>Nthawi imene mwanayu amadwala matenda omwe anamwalira nawo, kodi mchombo wake unali ofiirako?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/> 2 or 9 → VQ3.38
V3.37	<p>Did the redness of the umbilical cord stump extend onto the abdominal skin?</p> <p>Kodi kufiira kwa mchomboko kunafalikira mpaka chikopa cha pa mimba?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>
V3.38	<p>During the illness that led to death, did the baby have skin bumps containing pus or a single large area with pus?</p> <p>Nthawi imene amadwala matenda omwe anamwalira nawo, kodi khungu la mwanayo linali ndi zotupa ndi mafinya kapena malo amodzi achilonda cha mafinya?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>
V3.39	<p>During the illness that led to death, did the baby have ulcer(s) (pits)?</p> <p>Nthawi imene amadwala matenda omwe anamwalira nawo, kodi mwanayo anali ndi zithupsya kapena zilonda zakuya?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>
V3.40	<p>During the illness that led to death, did the baby have an area(s) of skin with redness and swelling?</p> <p>Nthawi imene mwanayu amadwala matenda omwe anamwalira nawo, kodi pa thupi lake panali khungu lofira ndi potupa?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<input type="checkbox"/>

V3.41	During the illness that led to death, did s/he have areas of the skin that turned black? Nthawi imene mwanayu amadwala matenda omwe anamwalira nawo, kodi panali mbali yina a thupi lake imene khungu linasanduka lakuda?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V3.42	During the illness that led to death, did the baby bleed from anywhere? Nthawi imene amadwala matenda omwe anamwalira nawo, kodi mwanayu ankatuluka magazi pena paliponse pa thupi lake?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ3.44
V3.43	Record from where did the baby bleed:		
V3.44	During the illness that led to death, did s/he have more frequent loose or liquid stools than usual? Nthawi imene amadwala matenda omwe anamwalira nawo, kodi anakachita chimbuzi chamadzimadzi kusiyana ndi masiku ena?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ3.46
V3.45	How many stools did the baby have on the day that diarrhea/loose liquid stools were most frequent? Kodi anakachita chimbuzi kangati patsiku limene anatsekula mmimba mowirikiza?		____ Stools (DK = 99)
V3.46	During the illness that led to death, did s/he vomit everything? Nthawi imene amadwala matenda omwe anamwalira nawo, kodi anasanza zonse?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V3.47	During the illness that led to death, did s/he have yellow skin? Nthawi imene amadwala matenda omwe anamwalira nawo, kodi khungu lake linachita chikasu?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
	During the illness that led to death, did the baby have yellow eyes? Nthawi imene amadwala matenda omwe anamwalira nawo, kodi maso ake anakachita chikasu?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

V3.49	Did the infant appear to be healthy and then just die suddenly? Kodi mwanayu ankaoneka wathanzi koma kenako anangomwalira mwadzidzi?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
S5a.8	<i>Check SQ4.17 to determine if the baby was born in a health facility (codes 1-2):</i>	1. Yes, born in a health facility Inde, anabawira ku chipatala 2. Not born in a health facility sanabadwire ku chipatala 9. Don't know sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ5a.10
S5a.8.1	Did the baby leave the delivery facility alive or did s/he die in the facility? Kodi mwanayu anatuluka mchipatala wamoyo kapena atamwalira?	1. Yes, left alive Inde anatuluka ali wa moyo 2. Died in the facility anamwalirira kuchipatala 9. Don't know sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ6.1
How soon after birth did the baby leave the facility? Kodi mwanayu atabadwa panapita nthawi yaitali bwanji kuti atulutsidwe mchipatala?			<div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: right; margin-right: 10px;"> ___ Days (DK = 99) </div> <div style="border: 1px solid black; padding: 2px 10px; margin: 0 10px;">OR</div> <div style="text-align: left; margin-left: 10px;"> ___ Hours (DK = 99) </div> </div>
Was the child examined by a health worker prior to discharge? Kodi mwanayu anapimidwa ndi wa za umoyo asanatulutsidwe mchipatala?		1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
S5a.9	Did (you / the mother) receive any counselling by a health worker prior to discharge? Kodi inu (amayi ake) munalandila uphungu kuchokera kwa za umoyo asanakutulutseni mchipatala?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ5a.10
S5a.9.1	What (were you / was she) counselled on? Kodi inu (amayi ake) munalandila uphunguwu wokhuzana ndi chiyani? <i>[Multiple answers allowed].</i> <i>Probe: Anything else?</i> Palinso china?	1. Breastfeeding kuyamwitsa 2. Immunization katemera 3. Post-natal care attendance kusikero 4. Danger signs of newborn illness zizindikiro za matenda a mwana 5. Other (specify) 9. Don't know sindikudziwa.....	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 9. <input type="checkbox"/>

S5a.10	<p>Was the baby ever seen by a health worker or nurse at home or in the community, or by a doctor or nurse at a health facility <u>before</u> the fatal illness began?</p> <p>Kodi mwanayu anaonedwapo ndi a za umoyo kapena a nurse a mdera lanu, kapena dokotala kapena nurse ku chipatala asanayambe kudwala?</p> <p><i>[Multiple answers allowed.]</i></p> <p><i>For each mentioned, ask:</i> How many times was the baby seen by a <PROVIDER TYPE at PLACE> before the fatal illness began?</p> <p>Anaonedwapo kangati?</p> <p><i>Then ask:</i> When was the baby first seen by (this / <u>any</u> of these) provider(s)?</p> <p>Kodi mwanayu koyamba anaonedwa liti ndi winaaliyense wa za umoyo?</p>	<ol style="list-style-type: none"> 1. CHW or nurse at home/in community namwino..... 2. Doctor or nurse at a health facility dotolo 3. Never seen sanawonedwe 9. Don't know sindikudziwa 	<p><u>Seen</u></p> <p>1. <input type="checkbox"/></p> <p>2. <input type="checkbox"/></p> <p>3. <input type="checkbox"/></p> <p>9. <input type="checkbox"/></p>	<p><u>Times</u></p> <p>.....</p> <p>.....</p>	<p><u>First visit</u></p> <p>.....</p> <p>Days old (<1 = 00; DK = 99)</p>																																																
S5a.11	<p>Before the fatal illness began, did <NAME> suffer from any of the following known conditions:</p> <p>Matenda asanayambe, kodi (Name) anadwalapo ena mwa matenda awa:</p> <p><i>[Read out all conditions and check "Yes," "No" or "Don't know" for each.]</i></p> <p><i>If "Yes," then ask: Was s/he provided any treatment for this condition?</i></p> <p>Kodi analandilapo chithandizo china chili chonse?</p> <p><i>If "Yes," then ask: Was s/he provided with any treatment for this condition?</i></p>	<ol style="list-style-type: none"> 1. Preterm birth anabadwa asanakwane masiku a. Was s/he given special nutrition anapasidwa zakudya zamagulu? b. Was s/he given "kangaroo care" kangaru? 2. Malformation (from the time of birth) anabadwa ndi chileme: a. Head, neck and/or back mutu, khosi kapena msana b. Mouth/palate kamwa kapena lilime c. Heart mtima..... d. Arms and/or legs mikono kapena miyendo 3. Other ena <p><i>(specify other).....</i></p>	<p><u>Suffered from</u></p> <table border="1"> <thead> <tr> <th><u>Yes</u></th> <th><u>No</u></th> <th><u>DK</u></th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>		<u>Yes</u>	<u>No</u>	<u>DK</u>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	<p><u>Treatment</u></p> <table border="1"> <thead> <tr> <th><u>Yes</u></th> <th><u>No</u></th> <th><u>DK</u></th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>	<u>Yes</u>	<u>No</u>	<u>DK</u>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>
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<p>Inst_1: STOP – If VQ1.26 = 1 (Neonatal death) → SQ6.1</p>																																																					
<p>SA Module 5b: Preventive care of post-neonates (FOR CHILD DEATHS 28 DAYS—59 MONTHS OLD)</p>																																																					
<p><i>Read:</i> Now let's talk about care of the child before the fatal illness began.</p>																																																					

S5b.1	Where (do you / does the mother) cook? Kodi inu (amayi ake) amaphikira malo otani?	1. Inside the house mnyumba 2. Outside the house panja pa nyumba 3. In a structure outside the house malo ena ali onse kunjwa kwa nyumba 9. Don't know sindikudziwa	<input type="checkbox"/>
S5b.2	When (you / the mother) cooked, was <NAME> usually beside or carried by (you / her)? Kodi inu (amayi ake) pophika (Name) mumakhala naye limodzi kapena mumakhala mutamunyamula?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
S5b.3	<i>Skip SQ5b.3 in areas wo/malaria.</i> Matenda asanayambike, kodi (Name) amagona mmasikito onyikidwa mu mbwezela chitetezo? Before (her / his) fatal illness began, did <NAME> sleep under an insecticide treated bednet or mosquito net?	1. Yes, usually or always 2. Yes, sometimes 3. Never 9. Don't know	<input type="checkbox"/>
S5b.4	Did (you / the mother) or a wet nurse ever breastfeed <NAME>? Kodi inu (amayi ake) kapena a namwino munamuyamwitsa (Name)?	3. Yes Inde 4. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ5b.5
S5b.4.1	Was <NAME> being breastfed at the time (her / his) fatal illness began? Kodi (Name) ankayamwabe pamene anayamba kudwala?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 1 or 9 → SQ5b.5
S5b.4.2	How old was <NAME> when s/he was last breastfed? Kodi (Name) anali atakwanitsa miyezi ingati pamene anayamwa komaliza?		__ __ Months (<1 = 00; DK = 99)
S5b.5	At the time the fatal illness began, was <NAME> being given any other liquid, including non-human milk or formula, fruit juice, tea or water, or any solid, semisolid, or soft foods? Or was <NAME> on complimentary feeding when this fatal illness begun? Pa nthawi imene matenda amayamba kodi (Name) amapatsidwa zakumwa za madzi kuphatikizapo mkaka wa mchitini, madzi azipatso, tea kapena madzi, zolimba pang'ono kapena zakudya zofewa? <i>[Multiple answers allowed. Probe, and record all liquids and foods given.]</i>	1. Non-human milk or pre-mixed formula.. 2. Powdered formula mixed with a liquid... 3. Juice, water and/or water-based drinks. 4. ORS 5. Drops or syrups (vitamins, medicines).. 6. Solid, semi-solid or soft foods 7. Nothing else, <u>only</u> given breast milk..... 9. Don't know	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 9. <input type="checkbox"/> SQ5b.6 SQ5b.6

S5b.5. 1	<p>On most days <u>before</u> the illness began, how many <u>times</u> did <NAME> eat solid, semisolid, or soft foods other than liquids during the day or night?</p> <p>Masiku ambiri matenda asanayambe (Name) ankadya kangati masana kapena usku zakudya zolimba, zolimbilako pang'ono, zofewa osati zamadzi?</p>	<p>___ Times (DK = 99)</p>																						
S5b.5. 2	<p>Which of the following food types/groups did <NAME> typically eat <u>every</u> day?</p> <p>Kodi pa mtundu wa zakudya izi (Name) amadya ndi ziti zimene amadya tsiku ndi tsiku?</p> <p><i>[Read out all options and check "Yes," "No" or "Don't know" for each.]</i></p>	<ol style="list-style-type: none"> 1. Grains, roots and tubers chakudya chopatsa mphamvu monga chimanga, mapira, chinangwa mbatata..... 2. Legumes and nuts monga nyemba nandolo mtedza 3. Dairy products (milk, yogurt, cheese) zochokera ku mkaka wa ng'ombe..... 4. Flesh foods (meat, fish, poultry, organs) monga nyama ,nsomba nkhuku..... 5. Eggs mazira 6. Vitamin-A rich fruits and vegetables zoteteza ku matenda monga mavitamini ndi ndiwo zamasamba.... 7. Other fruits and vegetables zipatso ndi masamba..... 	<table border="0"> <thead> <tr> <th><u>Yes</u></th> <th><u>No</u></th> <th><u>DK</u></th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>	<u>Yes</u>	<u>No</u>	<u>DK</u>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>
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S5b.6	<p>Did <NAME> drink any liquids or semi-solid foods from a bottle with a nipple or teat?</p> <p>Kodi (Name) anamwa madzi kapena zolimbilako pang'ono kupyolera mbotolo lokhala ndi nkhubu kapena kabere?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/>																					
S5b.7	<p>Now I would like to ask about the child's vaccinations. Do you have a card where <NAME>'s vaccinations are written down?</p> <p>Tsopano ndikufuna ndikufunsi za akatemera a mwanayu. Kodi muli ndi khadi la (Name) pamene panalembedwa za katemera?</p> <p><i>If "Yes," ask: May I see it please?</i></p> <p>Ndingaliwone?</p>	<ol style="list-style-type: none"> 1. Yes, seen Inde, munapawona 2. Yes, but not seen Inde simunapawone 3. No card panalibe khadi 	<input type="checkbox"/> 2 or 3 → SQ5b.8																					

<p>S5b.7. 1</p>	<p>Did <NAME> receive any vaccinations that are not included on this card, including vaccinations received in a national immunization day campaign?</p> <p>Kodi (Name) analandilapo akatamera ena amene palibe pa khadipa, kuphatikiza akatamera amene amaperekedwa pa kampeni yakatamera wa dziko muno?</p> <p><i>If "Yes," probe for vaccinations received but not recorded on the card.</i></p> <p><i>[Record 'Yes' only if BCG, Polio 0-3, DPT 1-3, Measles and/or Hepatitis B1-3 vaccine(s) mentioned.]</i></p>	<p>1. Yes (received BCG, Polio 0-3, DPT 1-3, Measles and/or Hep B1-3 vaccinations that are not recorded on the card) Inde analandila akatamera ena koma sanalembedwe pa khadi</p> <p>2. No Ayi</p> <p>9. Don't know sindikudziwa</p>	<p><input type="checkbox"/> 1 → Write '66' in the corresponding day column below for each vaccination received but not recorded on the card.</p>																																																				
	<p><i>Copy vaccination date for each vaccine from the card. Record "99" or "9999" for partially unknown dates.</i></p> <p><i>Write '88' in 'day' column if card shows that a vaccination was given, but no date is recorded.</i></p> <p><i>Do not leave any rows blank. Record "00" in the 'day' column for each vaccination that was not given.</i></p>	<p>BCG</p> <p>POLIO 0 (given at birth) ..</p> <p>POLIO 1</p> <p>POLIO 2</p> <p>POLIO 3</p> <p>DPT 1</p> <p>DPT 2</p> <p>DPT 3</p> <p>MEASLES</p> <p>HEPATITIS B1</p> <p>HEPATITIS B2</p> <p>HEPATITIS B3</p>	<table border="1"> <thead> <tr> <th>Day</th> <th>Month</th> <th>Year</th> <th></th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td>BCG</td></tr> <tr><td></td><td></td><td></td><td>P0</td></tr> <tr><td></td><td></td><td></td><td>P1</td></tr> <tr><td></td><td></td><td></td><td>P2</td></tr> <tr><td></td><td></td><td></td><td>P3</td></tr> <tr><td></td><td></td><td></td><td>DPT1</td></tr> <tr><td></td><td></td><td></td><td>DPT2</td></tr> <tr><td></td><td></td><td></td><td>DPT2</td></tr> <tr><td></td><td></td><td></td><td>MSL</td></tr> <tr><td></td><td></td><td></td><td>HEP1</td></tr> <tr><td></td><td></td><td></td><td>HEP2</td></tr> <tr><td></td><td></td><td></td><td>HEP3</td></tr> </tbody> </table>	Day	Month	Year					BCG				P0				P1				P2				P3				DPT1				DPT2				DPT2				MSL				HEP1				HEP2				HEP3
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<p>S5b.8</p>	<p>Did <NAME> ever receive any vaccinations to prevent her/him from getting diseases, including vaccinations received in a national immunization day campaign?</p> <p>Kodi (Name) analandilapo akatamera omuteteza ku matenda, kuphatikiza akatamera onse analandira nthawi ya kampeni ya katamera wa mdziko muno?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → SQ5b.10</p>																																																				
	<p>Please tell me if <NAME> received any of the following vaccinations:</p> <p>Ndiuzeni ngati (Name) analandirapo ena mwa akatamera awa</p>																																																						

.1	A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar? Katamera wa BCG woteteza kuchifuwa chachikulu amene mwana amabaidwa jakisoni pa nkono kapena paphewa ndipo pamachita chipsyera?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
.2	Did <NAME> receive polio vaccine that drops in the mouth? Polio amene amadonthetsera mkamwa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ5b.8.5
.3	When was the first polio vaccine received, just after birth or later? Kodi katamera woyamba wa polio analandila patapita nthawi yaitali bwanji atangobadwa?	1. Just after birth atangobadwa 2. Later patapita nthawi chibadwile 9. Don't know Sindikudziwa	<input type="checkbox"/>
.4	How many times was the polio vaccine received? Kodi analandila kangati katamera wa polio?		___ Times (DK = 99)
.5	A DPT vaccination, that is, an injection given in the thighs or buttocks, sometimes at the same time as polio drops? Katamera wa DPT, jakison amene amabaidwa pa nchafu kapena mmatako nthawi zina amalandila pamodzi ndi polio amene amamudonthetsera mkamwa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ5b.8.7
.6	How many times? Kodi analandila kangati?		___ Times (DK = 99)
.7	A measles or MMR injection, that is, a shot in the arm at the age of 9 months or older, to prevent measles? Katamera womuteteza ku chikuku, jakisoni amene amabaidwa pa nkono amene amaperekedwa mwana akakwanitsa miyezi 9 kapena kuposera?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

.8	<p>A Hap B vaccination, that is, an injection in the right thigh, sometimes given at the same time as DPT?</p> <p>Katememera wa Hep B, jakison amene amabaya pa nchafu ya kumanja amene nthawi zina amalandilira pamodzi ndi DPT?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → SQ5b.9</p>
.9	<p>How many times was a Hap B vaccination received? Katamera wa Hep B analandila kangati?</p>		<p>___ Times (DK = 99)</p>
S5b.9	<p>Were any of the vaccinations <NAME> received given as part of a national immunization day campaign? Kodi ena mwa akatemera amene (Name) analandila anali amodzi mwa a kampeni ya katamera wa mdziko muno?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → SQ5b.10</p>
S5b.9.1	<p>At which national immunization day campaigns did <NAME> receive vaccinations? Kodi ndi kampeni wa katamera wa dziko lonse ut amene (Name) analandila?</p> <p><i>[Record all campaigns mentioned.]</i></p>	<p>1. <CAMPAIGN 1> (TYPE/DATE) 2. <CAMPAIGN 1> (TYPE/DATE) 3. <CAMPAIGN 1> (TYPE/DATE) 4. <CAMPAIGN 1> (TYPE/DATE)</p>	<p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/></p>
S5b.10	<p>(Before / In the six months before) the fatal illness, did <NAME> receive one or more vitamin A doses like this? Asanadwale matenda omwe anamwalira nawo, kodi (Name) analandila vitamin A kamodzi kapena kupitilirapo monga uyu?</p> <p><i>[Read "Before..." if the child lived less than 6 months.]</i></p> <p><i>[Show ampoule/capsule/syrup]</i></p>	<p>1. Yes, 1 dose Inde, kamodzi kapena kupitilirapo 2. Yes, 2 or more doses Inde kawiri kapena kupitilirapo 3. No Ayi sanapatsidwe 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/></p>

S5b.11	<p>Before the fatal illness began, did <NAME> suffer from any of the following known conditions: Asanadwale matenda omwe anamwalira nawo, kodi (Name) anadwala ena mwa matenda monga awa:</p> <p><i>[Read out all conditions and check "Yes," "No" or "Don't know" for each.]</i></p> <p><i>If "Yes," then ask: Was s/he provided any treatment for this condition?</i></p> <p>Kodi analandira chithandizo cha matendawo? for this condition?</p>	<ol style="list-style-type: none"> 1. Low height or weight (malnutrition) anali wamfupi kapena wo pepuka kwampiri 2. Malformation (from the time of birth) kulumala: <ol style="list-style-type: none"> a. Head, neck and/or back b. Mouth/palate c. Heart d. Arms and/or legs 3. Asthma mphumu 4. Heart disease matenda a mtima 5. Tuberculosis chifuwa chachikulu 6. Epilepsy/convulsion khunyu 7. HIV/AIDS edzi 8. Other ena <p><i>(specify other).....</i></p>	<p>Suffered from</p> <p><u>Yes</u> <u>No</u> <u>DK</u></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p>			<p>Treatment</p> <p><u>Yes</u> <u>No</u> <u>DK</u></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p>		
			<p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 9. <input type="checkbox"/></p>					

VA Section 4: Infant and child deaths (FOR CHILD DEATHS 28 DAYS—59 MONTHS OLD)

Read: Now I would like to ask you about <NAME>'s illness.

Read: **Tsopano ndifuna ndikufunsi za kudwala kwa (Name).**

V4.1	<p>During the illness that led to death, did the <NAME> have fever? Pa nthawi imene amadwala matenda omwe anamwalira nawo kodi (Name) anantethapo thupi?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/> 2 or 9 → VQ4.6
V4.2	<p>How many days did the fever last? Kodi kutentha thupi kunatenga masiku angati?</p> <p><i>[Less than 24 hours = "00" days]</i></p>		<p>___ Days (DK = 99)</p>
V4.3	<p>Did the fever continue until the child's death? Kodi kutentha thupi kunapitilira mpaka tsiku lomwalira?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/> 2 or 9 → VQ4.6
V4.4	<p>How severe was the fever? Kodi thupi linatentha motani?</p>	<ol style="list-style-type: none"> 1. Mild mosadetsa nkhawa 2. Moderate mwa pakatikati 3. Severe modetsa nkhawa 9. Don't know sindikudziwa 	<input type="checkbox"/>
V4.5	<p>What was the pattern of the fever? Kodi kutentha thupiku kumachitika motani?</p>	<ol style="list-style-type: none"> 1. Continuous mopitilira 2. On and off mosakhazikika 3. Only at night usiku wokhawokha 9. Don't know sindikudziwa 	<input type="checkbox"/>

V4.7	How many stools did <NAME> have on the day that loose liquid stools were most frequent? Or when the <NAME> experienced severe diarrhea, how many times did <NAME> pass stools? Kodi (Name) anatekula mmimba kangati pa tsiku limene anatekula mmimba mowilikiza?		___ ___ Stools (DK = 99)
V4.8	How many days before death did the frequent loose or liquid stools start? Or how many days before <NAME> death, did severe diarrhea start? Kodi kutsekula mmimba kunayambika masiku angati (Name) asanamwalire? <i>[Less than 24 hours = "00" days]</i>		___ ___ Days (DK = 99)
V4.9	Did the frequent loose or liquid stools or severe diarrhea continue until <NAME> death? Kodi kutsekula mmimbaku kunapitilira mpaka nthawi yomwalira?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 1 or 9 → VQ4.11
V4.10	How many days before <NAME> death did the loose or liquid stools stop? Kodi kutsekula mmimbaku kunasiya patatsala masiku angati kuti amwalire? <i>[Less than 24 hours = "00" days]</i>		___ ___ Days (DK = 99)
V4.11	Was there visible blood in the loose or liquid stools? Kodi magari ankaoneka mmchimbuzi cha madzimadzicho?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.12	During the illness that led to death, did the child have a cough? Pa nthawi imene amadwala matenda omwe anamwalira nawo, kodi mwanayo anadwalapo chifuwa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ4.16
V4.13	For how many days did the cough last? Kodi chifuwa anadwala masiku angati? <i>[Less than 24 hours = "00" days]</i>		___ ___ Days (DK = 99)
V4.14	Was the cough very severe? Kodi chifuwacho anadwalika nacho kwambiri?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.15	Did the child vomit after s/he coughed? Kodi mwanayo ankasanza akatsokomola?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

V4.16	During the illness that led to the child's death, did <NAME> have difficulty in breathing? Pa nthawi imene amadwala matenda omwe anamwalira nawo, kodi (Name) ankapuma mobanika?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ4.18
V4.17	For how many days did the difficulty in breathing last? Kodi kupuma mobanikaku kunatenga masiku angati? <i>[Less than 24 hours = "00" days]</i>		__ __ Days (DK = 99)
V4.18	During the illness that led to the child's death, did <NAME> have fast breathing? Pa nthawi imene amadwala matenda omwe anamwalira nawo, kodi (Name) ankapuma mofulumila?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ4.20
Inst_1: If both VQ4.16 and VQ4.18 = 2 → VQ4.25			
V4.19	For how many days did the fast breathing last? Kodi kupuma mofulumilaku kunatenga masiku angati? <i>[Less than 24 hours = "00" days]</i>		__ __ Days (DK = 99)
V4.20	During the illness that led to the child's death, did s/he have indrawing of the chest? Pa nthawi imene amadwala matenda omwe anamwalira nawo, kodi chidali cha mwanayi chinalowa nkati?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.21	During the illness that led to the child's death, did her/his breathing sound like any of the following? Pa nthawi imene amadwala matenda omwe anamwalira nawo, kodi kupuma kwa mwanayi kumamveka motere? <i>[Demonstrate each sound]</i>		
V4.22	Stridor (Kubuula patalipatali mokoka mpweya)	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
	Grunting (Kubuula ngati kuchita nkonono)	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.24	Wheezing (kupuma motulusa mpweya mofulumila ngati kumina)	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

V4.25	Did <NAME> experience any generalized convulsions or fits during the illness that led to death? Kodi pamene ankadwala matenda omwe anamwalira nawo, kodi (Name) anakomoka kapena kuwuma ziwalo?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.26	Was <NAME> unconscious during the illness that led to his/her death? Kodi (Name) anali chikomokere pamene ankadwala matenda omwe anamwalira nawo?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ4.28
V4.27	How long before death did unconsciousness start? Kodi atakomoka panapita nthawi yaitali bwanji asanamwalire?	1. Less than 6 hours 2. 6-23 hours 3. 24 hours or more 9. Don't know	<input type="checkbox"/>
V4.28	Did <NAME> have a stiff neck during the illness that led to his/her death? Kodi (Name) anauma khosi pa nthawi imene amadwala matenda omwe anamwalira nawo? <i>[Demonstrate]</i>	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.29	Did <NAME> have a bulging fontanelle during the illness that led to his/her death? Kodi (Name) anatupa pa liwombo pa nthawi imene amadwala matenda omwe anamwalira nawo? <i>[Show photo]</i>	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.30	During the month before s/he died, did <NAME> have a skin rash? Mwezi umene anamwalira (Name) anali ndi nsungu pa thupi pake?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ4.35
V4.31	Where was the rash? Nsungu zinatuluka pati?	1. Face kumaso/kunkhope 2. Trunk/Abdomen pa mimba 3. Extremities malo obisika 4. Everywhere pena pali ponse 9. Don't know	<input type="checkbox"/>
V4.32	Where did the rash start? Kodi nsunguzi zinayambira mbali iti yathupi?	1. Face 2. Trunk/Abdomen 3. Extremities 4. Everywhere 9. Don't know	<input type="checkbox"/>

V4.33	How many days did the rash last? Kodi nsunguzi zinakhala masiku angati?		___ Days (DK = 99)
V4.34	Did the rash have blisters containing clear fluid? Kodi nsunguzi zimachita matuza amadzi owonekera?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.35	During the illness that led to the child's death, did <NAME>'s limbs (legs, arms) become very thin? Pa nthawi imene ankadwala matenda omwe anamwalira nawo, kodi (Name) miyendo ndi mikono ya zowonda zonyozoloka? <i>[Show photo]</i>	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.36	During the illness that led to death, did <NAME> have swollen legs or feet? Pa nthawi imene ankadwala matenda omwe anamwalira nawo, kodi (Name) miyendo ndi mapazi anali otupa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ4.38
V4.37	How long did the swelling last? Kodi inatupa kwa nthawi yaitali bwanji? <i>[Record days or weeks.]</i>		___ Days (DK = 99) ___ Weeks (DK = 99)
V4.38	During the illness that led to the child's death, did <NAME>'s skin flake off in patches? Pamene ankadwala matenda omwe anamwalira nawo, kodi (Name) khungu lake linkasendeka pena ndi pena?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.39	Did <NAME>'s hair change in color to a reddish or yellowish color? Kodi sitsi la (Name) linasintha maonekedwe kukhala lofiira kapena la chikasu?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>
V4.40	Did <NAME> have a protruding belly? Kodi (Name) anali ndi mimba yotupa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>

V4.41	During the illness that led to the child's death, did <NAME> suffer from "lack of blood" or "pallor"? Pamene ankadwala matenda omwe anamwalira nawo, kodi (Name) anapezeka ndi vuto losowa magazi?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>																								
V4.42	During the illness that led to death, did <NAME> have swelling in the armpits? Pamene ankadwala matenda omwe anamwalira nawo, kodi (Name) anali ndi zotupa mkhwapa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>																								
V4.43	During the illness that led to death, did <NAME> have a whitish rash inside the mouth or on the tongue? (Oral thrush) Pamene ankadwala matenda omwe anamwalira nawo, kodi (Name) mkamwa kapena pa lilime lake munatuluka nsungu zoyela?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/>																								
V4.44	During the illness that led to death, did <NAME> bleed from anywhere? Pamene ankadwala matenda omwe anamwalira nawo, kodi (Name) ankatuluka magazi?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → VQ4.46																								
V4.45	<i>Record from where s/he bled:</i>																										
V4.46	During the illness that led to death, did s/he have areas of the skin that turned black? Pamene ankadwala matenda omwe anamwalira nawo, kodi mbali zina za khungu lake linkasanduka lakuda?	1. Yes Inde 2. No Ayi 8. Don't know Sindikudziwa	<input type="checkbox"/>																								
V4.47	Did <NAME> suffer from an injury or accident such as...? Kodi (Name) anavulala kapena kuchita ngozi monga ...? <i>[Ask the respondent each in sequence and mark each as "Yes," "No" or "Don't know."]</i>	1. a road traffic crash/injury ngozi ya pa mseu/kuvulala? 2. a fall anagwa? 3. Drowning anamira mmadzi? 4. Poisoning mankhwala owopsya? <u>Did s/he suffer:</u> 5. a bite or sting by a venomous animal kulumidwa ndi chilombo cha ululu ngati njoka, galu? 6. a burn kuphsya? 7. from violence (homicide, abuse) nkhanza? 8. any other injury kuvulala kwina kuli konse? <i>(If "Yes," then specify)</i>	<table border="0"> <thead> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table> <p>All = 2 or 9 → SQ6.1</p>	Yes	No	DK	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>
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V4.48	Was the injury or accident intentionally inflicted by someone else? Kodi kuvulala kapena ngoziyi inachitika mwadala ndi munthu wina?	1. Yes Inde 2. No Ayi 8. Don't know Sindikudziwa	<input type="checkbox"/>
V4.49	How long did <NAME> survive after the injury or accident? Kodi (Name) anakhala moyo kwa nthawi yaitali bwanji atavulala kapena ngozi itachitika? <i>[Record hours if less than 24 hours—Less than 1 hour = "00" hours; Record days if 1 day or more.]</i>		___ ___ Hours (DK = 99) ___ ___ Days (DK = 99)

SA Module 6: Care-seeking for the child's fatal illness (FOR NN & CHILD DEATHS 0—59 MONTHS OLD)

Read: Now, I would like to ask you about <NAME>'s fatal illness and the care and treatments that s/he received.

Read: **Tsopano ndifuna ndikufunsemi zokhuzana ndi kudwala kwa (Nmae) ndi chithandizo chamankhwala chimene analandira.**

S6.1	Who first noticed that <NAME> was ill? Kodi anazindikira koyamba kuti (Name) akudwala ndani?	1. The respondent woyankha 2. Other relative, neighbor, friend achibale, anansi anzanu 3. CHW or nurse at home or in community namwino 4. Doctor or nurse at a health facility dotolo 5. Other ena (<i>specify</i>).....	<input type="checkbox"/> _____
S6.2	Earlier you said that <NAME> had <SYMPTOM(S)> during her/his illness. Poyamba munati (Name) anasonyeza zizindikilo nthawi imene amadwala? <i>[Read back all the child's symptoms from VA section 3 (for neonates) or VA section 4 (for children).]</i> How did <SQ6.1 PERSON> first know that <NAME> was ill? Which of these symptoms did s/he have at that time?	Symptoms in order of appearance	Illness day the symptom started
		1.	
		2.	
		3.	
		4.	
		5.	
6.			

	<p>Kodi <SQ6.1 PERSON> anazindikira bwanji koyamba kuti (Name) ankudwala? Kodi pa nthawi imeneyo anali ndi zizindikiro ziti?</p> <p>What symptoms did s/he have next? On what day of the illness did these symptoms start?</p> <p>Nanga kenako anali ndi zizindikiro zotani? Zizindikiro zinayamba tsiku lachingati atayamba kudwala?</p> <p><i>[Probe until all the symptoms are recorded in the order they appeared.]</i></p>	7.																	
S6.3	<p>When <SQ6.1 PERSON> first noticed that <NAME> was ill, was s/he...</p> <p>Pamene <SQ6.1 PERSON> anazindikira koyamba kuti (Name) akudwala, anali ...</p> <p><i>[Read the choices for each condition.]</i></p>	<p>1. Feeding normally, poorly, or not at all samadya kumene kapena mosakwanira.....</p> <p>2. Alert, drowsy, or unconscious anali maso amasinza kapena kukomokakomoka</p> <p>3. Normally active, less active than normal, or not moving amakhala wochangamuka, mosachangamuka kapena samatakataka</p>	<table border="1"> <thead> <tr> <th>Normal</th> <th>Medium</th> <th>Abnormal</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>	Normal	Medium	Abnormal	DK	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>
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1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>																
S6.4	<p>Did <NAME> receive, or did you <u>seek</u> or <u>try to seek</u>, any care or treatment for the fatal illness?</p> <p>Kodi (Name) analandila kapena kumufunira chithandizo cha mankhwala pa matendawo?</p>	<p>1. Yes Inde</p> <p>2. No—care not needed, given or sought Ayi, chithandizo sichimafunika, kuperekedwa kapena kufunidwa</p> <p>3. No— died immediately Ayi, anamwalira nthawi yomweyo</p> <p>9. Don't know sindikudziwa</p>	<p><input type="checkbox"/> 2 → SQ6.6 3 or 9 → VQ5.10</p>																
S6.5	<p>Please tell me everything you did for <NAME>'s fatal illness inside the home and all the places outside the home you <u>took</u> or <u>tried</u> to take (her / him) for health care. Start with the first care or treatment <NAME> received and then, in order, tell me all the other care and treatments s/he received. Also tell me when and for what symptoms you took each action.</p> <p>Ndiuzeni zonse zimene munamchitila (Name) pa matenda ake pakhomo pano ndi kwina konse komwe munapita naye pofunafuna chithandizo cha za umoyo. Muyambe ndi chisamaliro choyamba kapena mankhwala amene (Name) analandila mwa ndondomeko. Ndiuzeninso zomwe munachita pa chizindikilo chilichonse.</p> <p><i>[Include any provider <NAME> did not reach because s/he died before leaving home or on route.]</i></p> <p><i>(1) Check <u>one</u> other care <u>or</u> health provider box for each action row. (2) For neonatal deaths only: If the illness began at the health provider where the child was delivered, then mark that as Action 1 and check the "illness began at provider" box. (3) Record the illness day each action was taken. (4) Ensure no action was taken for a symptom before it started (in SQ6.2).</i></p>																		
Action #	(1) Other care	(1) Health Providers	(3) Illness day	(4) For what symptom(s) was															

	Home care (own, relative, neighbor, friend)	Traditional or non-formal provider	Pharmacist or drug seller	Trained CH Worker, nurse, or midwife	Private doctor (formal/unsure)	NGO or govt. clinic	Hospital	(2) Illness began at provider where child was delivered	the action was taken	the action taken?
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(DK = 99)	
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		(DK = 99)	
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		(DK = 99)	
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		(DK = 99)	
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		(DK = 99)	
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		(DK = 99)	
7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		(DK = 99)	

Inst_1: (For neonatal deaths only) If illness began at health care provider where child was delivered: And did not fill L&D matrix (module 4) → SQ6.10; And filled L&D matrix (module 4) → SQ6.16

S6.6	<p><i>If no care given or sought, ask: Who decided that <NAME> did not need any care or treatment for the illness?</i></p> <p>Ndani anaganiza kuti (Name) sanayenele kulandila chisamaliro cha mankhwala pamene amadwala?</p> <p><i>If any care given or sought, ask: Who decided that <ACTION 1> was the first thing to do for <NAME>'s illness?</i></p> <p>Ndani anaganiza kuti <CHOCHITIKA 1> chinali kumuchitira (Name) pamene amadwala?</p> <p><i>[Record the one main decision maker.]</i></p>	<p>1. Child's mother mayi ake omubereka</p> <p>2. Child's father bambo ake omubereka ..</p> <p>3. Child's aunt azkhali ake</p> <p>4. Child's uncle amalume ake</p> <p>5. Child's grandmother agogo ake</p> <p>6. Child's paternal grandfather agogo akuchimuna</p> <p>7. Child's maternal grandfather agogo akuchikazi</p> <p>8. Other ena (specify)</p> <p>9. Don't know sindikudziwa</p>	<p>1. <input type="checkbox"/></p> <p>2. <input type="checkbox"/></p> <p>3. <input type="checkbox"/></p> <p>4. <input type="checkbox"/></p> <p>5. <input type="checkbox"/></p> <p>6. <input type="checkbox"/></p> <p>7. <input type="checkbox"/></p> <p>8. <input type="checkbox"/> _____</p> <p>9. <input type="checkbox"/></p>
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S6.7	<p><i>If never taken to a health provider, ask:</i> Did you have any concerns or problems that kept you from taking <NAME> to a health provider during his/her illness?</p> <p>Kodi panali zifukwa kapena mavuto ena amene anakuchitisanani kuti musamutengere (Name) ku chipatala pamene amadwala?</p> <p><i>If taken to a health provider, ask:</i> Did you have to overcome any concerns or problems to take <NAME> to the (first) health provider?</p> <p>Kodi munalimbana ndi zovuta kuti mumutengere (Name) ku chipatala choyamba kumene munapita naye?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → Inst_2</p>
S6.7.1	<p>What concerns or problems did you have?</p> <p>Kodi munali ndi zovuta zanji?</p> <p><i>Prompt:</i> Was there anything else?</p> <p>Panali chinanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Did not think child was sick enough to need health care ndinmaganiza kuti mwana samadwala kwambiri koti nkufunika chithandizo cha mankhwala.....</p> <p>2. No one available to go with caregiver panalibe woti aperekeze wosamalira mwanayo.....</p> <p>3. Too much time from her regular duties ..</p> <p>4. Someone else (<i>specify</i>) had to decide ...</p> <p>5. Too far to travel</p> <p>6. No transportation available</p> <p>7. Cost (transport, health care, other)</p> <p>8. Not satisfied with available health care ..</p> <p>9. Problem required traditional care</p> <p>10. Thought child was too sick to travel.....</p> <p>11. Thought child will die no matter what ...</p> <p>12. Was late at night (transportation or provider not available)</p> <p>13. Other (<i>specify</i>)</p> <p>99. Don't know</p>	<p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> _____ 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> 12. <input type="checkbox"/> 13. <input type="checkbox"/> _____ 99. <input type="checkbox"/></p>
<p>Inst_2: If SQ6.4 = 2 (No care given) or If SQ6.5 ≠ "Health Provider" (Never took and never tried to take to a health provider) → SQ6.39</p>			
S6.8	<p><i>Refer to SQ6.5 for the first health provider and related symptoms:</i> You mentioned that you took <NAME> to the (first) health provider, I mean the <FIRST HEALTH PROVIDER> for <SYMPTOM(S)>. How long had <NAME> had (this / these) symptom(s) when it was decided to take him/her to the <FIRST</p>	<p>____ Days (DK = 99)</p> <hr/> <p>____ Hours (DK = 99)</p>	

<p>HEALTH PROVIDER>?</p> <p>Mwanena kuti poyamba munamutengera (Name) ku chipatala mutaona zizindikro zakuti akudwala, apa ndikunena kumene munapita naye kwa nthawi yoyamba. Kodi (Name) anali atakhala ndi zindikilozi kwa nthawi yaitali bwanji pamene mumaganiza zomutengera ku chipatala, apanso ndikunena kumene munapita naye koyamba?</p> <p><i>[Read "...to the first..." if took or tried to take to more than one health provider.]</i></p> <p><i>[Mark days, hours &/or minutes as needed: e.g. 00 day, 02 hours, 10 minutes]</i></p>	<p>___ Minutes (DK = 99)</p>
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Child illness matrix instructions: Ask the following questions for the first and last health providers where care was sought or tried to be sought for the fatal illness. Ask all the questions for the first provider before going on to the last.

Before asking about the first health provider, read:

Now I would like to ask you about your visit to the (first) health provider. *[Read "first" if went or tried to go to more than one provider.]*

Tsopano ndifuna ndikufunsi za ku chipatala kumene munapita nthawi yoyamba.

Before asking about the last health provider, read:

Now I would like to ask you about your visit to the last health provider, I mean the <LAST HEALTH PROVIDER>.

Tsopano ndifuna ndikufunsi za ku chipatala kumene munapita komalizira.

– CHILD ILLNESS MATRIX QUESTIONS –		FIRST HEALTH PROVIDER	LAST HEALTH PROVIDER																																
<p>At the time when it was decided to take <NAME> to the <FIRST/LAST HEALTH PROVIDER>, was s/he...</p> <p>Nthawi imene mumaganiza kumutengera (Name) ku chipatala koyamba ndi kotsiliza, kodi anali...?</p> <p><i>[Read the choices for each condition.]</i></p>	<ol style="list-style-type: none"> 1. Feeding normally, poorly, or not at all..... 2. Alert, drowsy, or unconscious 3. Normally active, less active than normal, or not moving..... 	<p>S6.9</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>Nrm</u></td> <td style="text-align: center;"><u>Med</u></td> <td style="text-align: center;"><u>Abnrm</u></td> <td style="text-align: center;"><u>DK</u></td> </tr> <tr> <td style="text-align: center;">1. <input type="checkbox"/></td> <td style="text-align: center;">2. <input type="checkbox"/></td> <td style="text-align: center;">3. <input type="checkbox"/></td> <td style="text-align: center;">9. <input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;">1. <input type="checkbox"/></td> <td style="text-align: center;">2. <input type="checkbox"/></td> <td style="text-align: center;">3. <input type="checkbox"/></td> <td style="text-align: center;">9. <input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;">1. <input type="checkbox"/></td> <td style="text-align: center;">2. <input type="checkbox"/></td> <td style="text-align: center;">3. <input type="checkbox"/></td> <td style="text-align: center;">9. <input type="checkbox"/></td> </tr> </table>	<u>Nrm</u>	<u>Med</u>	<u>Abnrm</u>	<u>DK</u>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	<p>S6.24</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>Nrm</u></td> <td style="text-align: center;"><u>Med</u></td> <td style="text-align: center;"><u>Abnrm</u></td> <td style="text-align: center;"><u>DK</u></td> </tr> <tr> <td style="text-align: center;">1. <input type="checkbox"/></td> <td style="text-align: center;">2. <input type="checkbox"/></td> <td style="text-align: center;">3. <input type="checkbox"/></td> <td style="text-align: center;">9. <input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;">1. <input type="checkbox"/></td> <td style="text-align: center;">2. <input type="checkbox"/></td> <td style="text-align: center;">3. <input type="checkbox"/></td> <td style="text-align: center;">9. <input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;">1. <input type="checkbox"/></td> <td style="text-align: center;">2. <input type="checkbox"/></td> <td style="text-align: center;">3. <input type="checkbox"/></td> <td style="text-align: center;">9. <input type="checkbox"/></td> </tr> </table>	<u>Nrm</u>	<u>Med</u>	<u>Abnrm</u>	<u>DK</u>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>
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<p>What was the name of the <FIRST/LAST HEALTH PROVIDER> where you took <NAME>?</p> <p>Kodi dzina la ku chipatala kumene munapita koyamba kapena komaliza ndi (Name) ndi lanji?</p> <p><i>Probe to identify the type of provider.</i></p>	<ol style="list-style-type: none"> 1. Hospital (Government) 2. Hospital (NGO) 3. Hospital (Private) 4. Health center (Government) 5. Health center (NGO) 6. Health post (Government) 7. Health post (NGO) 8. Private doctor/clinic (Formal) 9. Private doctor/clinic (?Formal?) 10. Trained community health worker, nurse, or midwife 99. Don't know 	<p>S6.10</p> <p><input type="checkbox"/> <input type="checkbox"/></p> <hr style="width: 80%; margin: 0 auto;"/> <p style="text-align: center;">(Name of Provider or Facility)</p>	<p>S6.25</p> <p><input type="checkbox"/> <input type="checkbox"/></p> <hr style="width: 80%; margin: 0 auto;"/> <p style="text-align: center;">(Name of Provider or Facility)</p>																																

<p>After (deciding to seek care / being referred), how much time passed before going to the <FIRST/LAST HEALTH PROVIDER>?</p> <p>Mutaganiza zopeza chithandizo cha mankhwala panapita nthawi yaitali bwanji musanapite ku chipatala koyamba kapena komaliza?</p> <p><i>[Discuss that this might include the time needed to arrange for transportation and money to go to the provider/facility, or to provide home care or go to a traditional provider before going to the health provider.]</i></p> <p><i>[If the child died at home, record the time from decision/referral to death.]</i></p> <p><i>[Mark days, hours &/or minutes as needed: e.g. 01 day, 05 hours, 30 minutes]</i></p>		<p>S6.11</p> <p>___ Days (DK = 99)</p>	<p>S6.26</p> <p>___ Days (DK = 99)</p>
		<p>___ Hours (DK = 99)</p>	<p>___ Hours (DK = 99)</p>
		<p>___ Minutes (DK = 99)</p>	<p>___ Minutes (DK = 99)</p>
<p>Was there any cost to travel to the <FIRST/LAST HEALTH PROVIDER> or pay for the child's care there? Kodi zinalipo ndalama zoyendera kupita ku chipatala kapena kulipila chisamaliro cha mwanayu?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p>S6.12</p> <p><input type="checkbox"/> 2 or 9 → SQ6.13</p>	<p>S6.27</p> <p><input type="checkbox"/> 2 or 9 → SQ6.28</p>
<p>How did you arrange for the money for these expenses? Kodi ndalama zomwe munagwilitsa ntchito munazipeza bwanji?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Had available 2. Borrowed..... 3. Sold assets..... 4. Help from kin/relatives..... 5. Community fund..... 6. Govt. scheme..... 7. Other..... 9. Don't know</p>	<p>S6.12.1</p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 9. <input type="checkbox"/></p>	<p>S6.27.1</p> <p>1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 9. <input type="checkbox"/></p>
<p>What mode of transport did you/mother use to go to see the FIRST/LAST HEALTH PROVIDER? Kodi munagwiritsa ntchito mayendedwe otani kuti mukawonane ndi chipatala?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Walk..... 2. Rickshaw/cart/ boat..... 3. Bus..... 4. Taxi/auto/trecker 5. Ambulance 6. Other 7. Could not arrange transport 9. Don't know</p>	<p>S6.13</p> <p>1. <input type="checkbox"/> If only walk 2. <input type="checkbox"/> → SQ6.14.1 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> → SQ6.14.1 9. <input type="checkbox"/></p>	<p>S6.28</p> <p>1. <input type="checkbox"/> If only walk 2. <input type="checkbox"/> → SQ6.29.1 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> → SQ6.29.1 9. <input type="checkbox"/></p>
<p>How much did the transport cost? Kodi mayendedwe munalipila ndalama zingati?</p>		<p>S6.14</p> <p>___ unit (DK=9999)</p>	<p>S6.29</p> <p>___ unit (DK = 9999)</p>
<p>Did the child reach the <FIRST/LAST HEALTH PROVIDER> before s/he died? Kodi mwanayu anafika ku chipatala asanamwalire?</p> <p><i>[If "No," discuss with respondent to determine correct response: 2, 3 or 4.]</i></p>	<p>1. Yes, reached before child died 2. No, died before setting out 3. No, died on route to this provider 4. No, could not reach this provider – did not set out/returned home/took other action 9. Don't know</p>	<p>S6.14.1</p> <p><input type="checkbox"/> 2, 3 → SQ6.39 4, 9 → Inst_4</p>	<p>S6.29.1</p> <p><input type="checkbox"/> 2-9 → SQ6.39</p>
<p>How long did it take to travel to the <FIRST/LAST HEALTH PROVIDER>? Kodi zinatenga nthawi yaitali bwanji kukafika ku chipatala koyamba</p>		<p>S6.15</p> <p>___ Hours (DK = 99)</p>	<p>S6.30</p> <p>___ Hours (DK = 99)</p>

kapena komaliza? <i>[Mark hours &/or minutes as needed: e.g. 02 hours, 10 minutes]</i>		___ Minutes (DK = 99)	___ Minutes (DK = 99)
What did the <FIRST/LAST HEALTH PROVIDER> do for <NAME>'s problem? Kodi wa za umoyo oyamba kapena omaliza anachita chiyani pa matenda amwanayu? <i>Prompt: Was there anything else?</i> Panali chinanso? <i>[Multiple answers allowed.]</i>	1. Gave oxygen 1. <input type="checkbox"/> 2. Helped breathe with bag or mask.. 2. <input type="checkbox"/> 3. Gave fluids by mouth 3. <input type="checkbox"/> 4. Gave antibiotics by mouth 4. <input type="checkbox"/> 5. Gave antimalarial by mouth 5. <input type="checkbox"/> 6. Gave ORS 6. <input type="checkbox"/> 7. Gave Vitamin A 7. <input type="checkbox"/> 8. Gave other medicine by mouth 8. <input type="checkbox"/> _____ 9. Gave IM medicine 9. <input type="checkbox"/> 10. Gave IV fluids or medicine 10. <input type="checkbox"/> 11. Advised to buy outside medicine... 11. <input type="checkbox"/> 12. Did an operation (<i>specify</i>) 12. <input type="checkbox"/> _____ 13. Admitted to hospital..... 13. <input type="checkbox"/> stayed ___ days 14. Other (<i>specify</i>)..... 14. <input type="checkbox"/> _____ 15. Nothing..... 15. <input type="checkbox"/> → SQ6.18 99. Don't know 99. <input type="checkbox"/> → SQ6.18	S6.16	S6.31
How much did you pay for these treatments and other costs related to the health care, including the admission fee, consultation, lab tests, equipment, and room and food for companions? Kodi munalipila ndalama zingati pa matenda amwanayi?	_____ unit (DK = 99999)	S6.17	S6.32
Did the <FIRST/LAST HEALTH CARE PROVIDER> refer <NAME> to another health care provider or facility? Kodi ku chipatala choyamba kapena chomaliza anamutumiza (Name) ku chipatala china?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	S6.18 <input type="checkbox"/> 2 or 9 → SQ6.19	S6.33 <input type="checkbox"/> 2 or 9 → SQ6.34
Why was <NAME> referred? Kodi ndi chifukwa chiani (Name) anamutumiza ku chipatala china? <i>[Multiple answers allowed.]</i>	1. The provider was not capable of managing the problem..... 1. <input type="checkbox"/> 2. Required supplies (e.g., drugs, IV, oxygen) not available 2. <input type="checkbox"/> 3. Required equipment (e.g., xray machine) not available..... 3. <input type="checkbox"/> 9. Don't know 9. <input type="checkbox"/>	S6.18.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 9. <input type="checkbox"/>	S6.33.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 9. <input type="checkbox"/>
Did <NAME> leave the <FIRST/LAST HEALTH PROVIDER> alive? Kodi (Name) anachoka ku chipatala ali wa moyo?	1. Yes, left alive 2. No, died at this provider	S6.19 <input type="checkbox"/> 2 → VQ5.4	S6.34 <input type="checkbox"/> 2 → VQ5.4

<p>Did the <FIRST/LAST HEALTH PROVIDER> suggest that you do anything for <NAME>'s illness after leaving?</p> <p>Kodi wa za umoyo woyamba kapena womaliza anapeleka malangizo oti muzikasatira pa matenda a (Name) pamene mumachoka ku chipatala?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p>S6.20 <input type="checkbox"/> 2 or 9 → Inst_3</p>	<p>S6.35 <input type="checkbox"/> 2 or 9 → SQ6.37</p>
<p>What did the <FIRST/LAST HEALTH PROVIDER> suggest that <u>you</u> do?</p> <p>Kodi anapereka malangizo anji kuti muchita?</p> <p><i>Prompt: Was there anything else?</i></p> <p>Pali chinanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Increase breastfeeding kuyamwitsa mwakathithi 2. Give extra fluids kumpatsa zakumwa zowonjezera 3. Continue feeding kupitiriza kudya 4. Give ORS kumpatsa thanzi 5. Give antibiotic by mouth 6. Give antimalarial by mouth 7. Give vitamin A by mouth 8. Return for follow-up visit kubwereranso kuchipatala 9. Return or referred if worse mukabwerenso ngati siziribwino 10. Complete the present referral osathawa ku chipatala akakugonekani 11. Other (<i>specify</i>) 99. Don't know</p>	<p>S6.20.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> _____ 99. <input type="checkbox"/> → Inst_3</p>	<p>S6.35.1 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> _____ 99. <input type="checkbox"/> → SQ6.37</p>
<p>Were you able to follow <u>all</u> the advice?</p> <p>Kodi munakwanitsa kutsatila malangizo onse?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p>S6.21 <input type="checkbox"/> 9 → Inst_3</p>	<p>S6.36 <input type="checkbox"/> 9 → SQ6.37</p>
<p><i>If <u>not</u> able to follow <u>all</u> the advice, ask:</i> Did you have any concerns or problems that kept you from following the advice?</p> <p>Kodi panali zifukwa kapena mavuto ena amene anakulepheretsani kutsatila malangizo?</p> <p><i>If <u>able</u> to follow <u>all</u> the advice, ask:</i> Did you have to overcome any concerns or problems to follow the advice?</p> <p>Kodi munalimbana ndi mavuto ena kuti mukwanitse kutsatila malangizo?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p>S6.21.1 <input type="checkbox"/> 2 or 9 → Inst_3</p>	<p>S6.36.1 <input type="checkbox"/> 2 or 9 → SQ6.37</p>

<p>What concerns or problems did you have?</p> <p>Kodi ndi zifukwa kapena mavuta ati omwe munali nawo?</p> <p><i>Prompt: Was there anything else?</i></p> <p>Panali enanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<ol style="list-style-type: none"> 1. Did not understand instructions sanamvetse malangizo 2. Too much time from regular duties. 3. Someone else (<i>specify</i>) decided 4. Cost too much 5. Problem required traditional care ... 6. Thought advised care not needed. 7. Thought care might harm the child. 8. Thought child will die despite care . 9. No time before go to next provider analibe nthawi yopitira kwa wothandiza wina..... 10. The child died too soon..... 11. Other (<i>specify</i>) 99. Don't know 	<p>S6.21.2</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> _____ 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> _____ 99. <input type="checkbox"/> 	<p>S6.36.2</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> _____ 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9. <input type="checkbox"/> 10. <input type="checkbox"/> 11. <input type="checkbox"/> _____ 99. <input type="checkbox"/> 																																
Inst_3: Check SQ6.5 → If taken to another health provider → SQ6.23																																			
<p><i>If <u>not taken</u> to another health provider, ask: After leaving the (<FIRST HEALTH PROVIDER> / <LAST HEALTH PROVIDER>), was <NAME>...</i></p> <p>Mutachoka ku chipatala choyamba kapena chomaliza kodi, (Name) anali ...</p> <p><i>[Read the choices for each condition.]</i></p>	<ol style="list-style-type: none"> 1. Feeding normally, poorly, or not at all..... 2. Alert, drowsy, or unconscious 3. Normally active, less active than normal, or not moving..... 	<p>S6.22</p> <table border="1"> <thead> <tr> <th>NrmI</th> <th>Med</th> <th>Abnrm</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>	NrmI	Med	Abnrm	DK	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	<p>S6.37</p> <table border="1"> <thead> <tr> <th>NrmI</th> <th>Med</th> <th>Abnrm</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>3. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>	NrmI	Med	Abnrm	DK	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	9. <input type="checkbox"/>
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<p><i>If <u>not taken</u> to another health provider, ask: Did you have any concerns or problems that kept you from taking <NAME> to another health provider?</i></p> <p>Kodi munali ndi nkhwawa kapena mavuto omwe anakupangitsani kuti mupite ku chipatala china?</p> <p><i>If <u>taken</u> to another health provider, ask: Did you have to overcome any concerns or problems to take <NAME> to another health provider?</i></p> <p>Kodi munalimbana ndi mavuto ena kuti mukwanitse kumutengera (Name) kuchipatala china?</p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<p>S6.23</p> <p><input type="checkbox"/> 2 or 9 → Inst_4</p>	<p>S6.38</p> <p><input type="checkbox"/> 2 or 9 → SQ6.39</p>																																

<p>What concerns or problems did you have?</p> <p>Kodi ndi nkhwawa kapena mavuto anji omwe munali nawo?</p> <p><i>Prompt: Was there anything else?</i></p> <p>Panali chinanso?</p> <p><i>[Multiple answers allowed.]</i></p>	<p>1. Thought no more care needed 1. <input type="checkbox"/></p> <p>2. No one available to go with her 2. <input type="checkbox"/></p> <p>3. Too much time from regular duties. 3. <input type="checkbox"/></p> <p>4. Someone else (<i>specify</i>) decided 4. <input type="checkbox"/> _____</p> <p>5. Too far to travel 5. <input type="checkbox"/></p> <p>6. No transportation available..... 6. <input type="checkbox"/></p> <p>7. Cost (transport, health care, other) 7. <input type="checkbox"/></p> <p>8. Not satisfied with available care 8. <input type="checkbox"/></p> <p>9. Problem required traditional care ... 9. <input type="checkbox"/></p> <p>10. Thought child too sick to travel 10. <input type="checkbox"/></p> <p>11. Thought child will die despite care 11. <input type="checkbox"/></p> <p>12. Was late at night 12. <input type="checkbox"/></p> <p>13. The child died before going..... 13. <input type="checkbox"/> → SQ6.39</p> <p>14. Other (<i>specify</i>) 14. <input type="checkbox"/> _____</p> <p>99. Don't know 99. <input type="checkbox"/></p>	<p>S6.23.1</p>	<p>S6.38.1</p> <p>1. <input type="checkbox"/></p> <p>2. <input type="checkbox"/></p> <p>3. <input type="checkbox"/></p> <p>4. <input type="checkbox"/> _____</p> <p>5. <input type="checkbox"/></p> <p>6. <input type="checkbox"/></p> <p>7. <input type="checkbox"/></p> <p>8. <input type="checkbox"/></p> <p>9. <input type="checkbox"/></p> <p>10. <input type="checkbox"/></p> <p>11. <input type="checkbox"/></p> <p>12. <input type="checkbox"/></p> <p>13. <input type="checkbox"/></p> <p>14. <input type="checkbox"/> _____</p> <p>99. <input type="checkbox"/></p>
<p>Inst_4: Check SQ6.5 → If taken to another health provider...</p>		<p>...go to SQ6.24 (LAST PROVIDER)</p>	
<p>S6.39</p>	<p>How many days after (first noticing the illness / <LAST ACTION SQ6.5> / leaving the first/last health provider) did <NAME> die?</p> <p>Kodi panapita masiku angati kuti (Name) amwalire mutatuluka ku chipatala choyamba ndi chomaliza?</p> <p><i>[If SQ6.4 = 2 (No care given), then read: "...first noticing the illness..."]</i></p>	<p>___ Days (<1 = 00; DK = 99)</p>	
<p>Inst_5: If SQ6.4 = 2 (No care given) or if SQ6.5 ≠ "Health Provider" (Never took and never tried to take to a health provider) → VQ5.10</p>			
<p>VA Section 5: Health records (FOR STILLBIRTHS, NEONATAL & CHILD DEATHS 0—59 MONTHS OLD)</p>			
<p>V5.4</p>	<p>Do you have any health records or health passport book that belonged to the deceased?</p> <p>Kodi muli ndi buku la zaumoyo kapena khadi la kuchipatala la malemuyu?</p>	<p>1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa</p>	<p><input type="checkbox"/> 2 or 9 → VQ5.10</p>
<p>V5.5</p>	<p>Can I see the health records or health passport book?</p> <p>Ndingaliwone bukhulo?</p>	<p>1. Yes Inde 2. No Ayi</p>	<p><input type="checkbox"/> 2 → VQ5.10</p>
<p>V5.6</p>	<p><i>Record the dates of the two most recent visits</i></p>		<p>___/___/___ D D M M Y Y Y Y (DK = 99/99/9999)</p> <p>___/___/___ D D M M Y Y Y Y (DK = 99/99/9999)</p>
<p>V5.7</p>	<p><i>Record the two most recent weights on those dates</i></p>		<p>___ Grams (DK = 9999)</p> <p>___ Grams (DK = 9999)</p>

V5.8	Record the date of the last note	<div style="text-align: center;"> / / D D M M Y Y Y Y (DK = 99/99/9999) </div>	
V5.9	Transcribe the note		
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>			
V5.10	Was a death certificate issued? Kodi chiphaso (certificate) cha imfa ya mwanayu chinaperekedwa?	1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa	<input type="checkbox"/> 2 or 9 → SQ1.1
V5.11	Can I see the death certificate? Ndingachiwone chiphasocho?	1. Yes Inde 2. No Ayi 3. Don't know sindikudziwa	<input type="checkbox"/> 2 → SQ1.1
V5.12	Record the immediate cause of death from the death certificate		
V5.13	Record the first underlying cause of death from the death certificate		
V5.14	Record the second underlying cause of death from the death certificate		
V5.15	Record the third underlying cause of death from the death certificate		
V5.16	Record the contributing cause of death from the death certificate		
SA Module 1: The mother and her household (FOR STILLBIRTHS, NN & CHILD DEATHS 0—59 MONTHS OLD) <i>Read:</i> Now I would like to ask you some other questions about (yourself / the child's mother). <i>Read:</i> Tsopano ndikufuna ndikufunsemi mafunso ena okhuzana ndi inu ndi amayi ake a mwana. <i>[Read "...the child's mother." If the respondent is not the mother.</i>			
Inst_1: If GQ4.3 = 1 (Respondent is the mother) → SQ1.4			

S1.2	How old (is the child's mother / was the child's mother when she died)? Kodi amayi ake amwanayu anali ndi zaka zingati pamene mwanayu amamwalira? <i>[Read "...was the child's mother..." if she died.]</i>	___ Years (DK = 99)	
S1.3	How many years of school did the mother complete? Kodi amayi amwanayu anamaliza zaka zingati akuphuzila sukulu?	___ Years (<1 = 00; DK = 99)	
S1.4	(Are you / Is/Was the child's mother) Kodi inu/amayi ake a mwanayu ndi/anali..... <i>[Read "...Is/Was the child's mother..." if the respondent is not the mother.]</i> <i>[Read the choices to the respondent.]</i>	<ol style="list-style-type: none"> 1. Married wokwatiwa? 2. Living with a man akukhala ndi mamuna? 3. Widowed amuna anu anamwalira? 4. Divorced, separated, or deserted ukwati unatha? 5. Single (never married/lived w/a man) simunakwatiwepo? 9. Don't know sindikudziwa 	<input type="checkbox"/> 5 or 9 → <i>Inst_2</i>
S1.4.1	How old (were you when you / was she when she) first married (or lived with a man)? Kodi munakwatiwa (amayi ake) muli ndi zaka zingati ukwati wanu woyamba? <i>[Read "...was she when she..." if the respondent is not the mother.]</i> <i>[Read "...married or lived with a man?" if SQ1.4 = "2. Living with a man"]</i>	___ Years (DK = 99)	
S1.4.2	How many years of school did (your / her) (husband / partner) complete? Kodi amuna anu (amunaawo) anaphuzila sukulu zaka zingati? <i>[Read "...her..." if the respondent is not the mother.]</i> <i>[Read "...partner..." if she is living with a man.]</i>	___ Years (<1 = 00; DK = 99)	
<p><i>Inst_2:</i> Read: Now I would like to ask you some questions about (your / the mother's) household. Please remember that all information will be kept confidential.</p> <p>Tsopano ndifuna ndikufunsemi mafunso okhuzana ndi pakhomo panu. Kumbukirani kuti zomwe tikukambilana zisungidwa mwa chinsisi.</p> <p><i>[SBs & NN deaths: If the respondent is not the mother, read "...the mother's..." and ask SQ1.5–1.11 about the mother's household.</i></p> <p><i>[Older deaths: Always read "...your..." and ask SQ1.5–1.11 about the respondent's household.]</i></p>			
S1.5	Who was the main breadwinner of (your / the mother's) family during the (last days of the pregnancy / child's fatal illness) Kodi ndi ndani amene amapeza zofunika pakhomopa pamene munali (amayi ake) kumapeto a mimba kapena nthawi imene mwanayu amadwala? <i>[SBs/NN deaths: Read "...last days..."; Older deaths: Read "...child's..."]</i>	<ol style="list-style-type: none"> 1. Child's father bambo ake omubereka 2. Child's mother mayi ake omubereka 3. Other ena 9. Don't know sindikudziwa 	<input type="checkbox"/> 9 → SQ1.7

S1.6	<p>At that time, what kind of work did the main breadwinner mostly do?</p> <p>Kodi pa nthawi imeneyi amene amapeza zosowa pakhomo pano amagwila ntchito yanji?</p>	<ol style="list-style-type: none"> 1. Farmer/agricultural worker mlimi 2. Poultry or cattle raising mlimi wa ziweto 3. Domestic servant wantchito wa pakhomo 4. Home-based manufacturing mmisiri 5. Unskilled laborer wogwira ntchito zawamba 6. Semi-skilled laborer/service provider wogwira ntchito zaluso 7. Factory worker, blue collar service wogwira ntchito za ku fakitale kapena zokonzakonza 8. Business owner ali ndi bizinesi 9. Professional/technician ophunzira bwino monga dotolo 10. Other zina (specify) 11. Overseas worker kugwira ntchito kunjira kwa dziko 99. Don't know Sindikudziwa 	<input type="checkbox"/> <input type="checkbox"/>
S1.7	<p>Is this the house (where we are now) where (you / the mother) stayed during the (last days of the pregnancy / child's fatal illness)?</p> <p>Kodi nyumba ino (pamene tilipano) ndi pamene inu (amayi ake) mumakhala muli kumapeto a mimba?</p> <p><i>[SBs/NN deaths: Read "...last days..." Older deaths: Read "...child's..."]</i></p> <p><i>[Read "...where we are now..." if needed to clarify which house you are talking about.]</i></p>	<ol style="list-style-type: none"> 1. Yes Inde 2. No Ayi 9. Don't know Sindikudziwa 	<input type="checkbox"/> 1 → SQ1.10 <input type="checkbox"/> 9 → VQ5.17
S1.8	<p>Where did (you / the mother) stay at that time?</p> <p>Kodi inu (amayi ake) mumakhala kuti nthawi imene mwana amadwala?</p> <p><i>Probe: Where did (you / the mother) stay during the illness events?</i></p> <p>Kodi inu (amayi ake) amakhala kuti pamene nthawi yonse ya matendawo?</p> <p><i>[Mark "1" only if her usual residence was not her in-laws or other relatives.]</i></p>	<ol style="list-style-type: none"> 1. Her own home at that time (other than with her in-laws) (<i>Interviewer: Use this code just if she moved after the death.</i>) pakhomo pawo 2. Her in-law's home ku chipongozi 3. Her parent's home kwa makolo 4. Her brother's home kwa achimwene ake 5. Other zina (specify) 9. Don't know Sindikudziwa 	<input type="checkbox"/> 9 → VQ5.17

S1.9	What is the address of the place where (you / she) stayed? Kodi munthu angakupezeni bwanji kumene inu (amayi ake) mumakhala?	Country _____ District _____ T. A. _____ Village _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
S1.10	At the time of the illness events, how long had (you / the mother / your <RELATIVES> / the mother's <RELATIVES>) been living continuously in (this / that) community? Kodi nthawi imene mwana amadwala munali mutakhala nthawi yaitali bwanji mosadukiza mdela lino/limenelo? <i>[Read "...<RELATIVES..." if SQ1.8 = 2-5 (s/he stayed with her/his relatives)].</i>	____ Years (<1 = 00; DK =99)	
S1.11	How long does it take to reach the health provider or facility where (you / the mother) normally (go (es) / went) from (this / that) place? Kodi zimakutengerani (amayi ake) nthawi yaitali bwanji kuti mukafike ku chipatala kuchokera kwanu kuno kumene mumapita nthawi ndi nthawi? <i>[Mark hours &/or minutes as needed: e.g. 01 hour, 30 minutes]</i>	____ Hours (DK = 99) ____ Minutes (DK = 99)	
Inst_3 → SQ2.1.1 (if including optional Module 2) or VQ5.17			
<p>SA Module 2: Social capital (OPTIONAL MODULE—FOR SBs, NN & CHILD DEATHS 0–59 MONTHS OLD)</p> <p><i>Read:</i> Now, I have some questions about (your / the mother's / your <RELATIVES'> / the mother's <RELATIVES'>) community.</p> <p><i>Read:</i> Tsopano ndifuna ndikufunsemi mafunso okhuzana ndi abale anu (a mayi ake) ndi mmudzi muno.</p> <p><i>[SBs and NN deaths:</i> If the respondent is not the mother, read "...the mother's..." or "...the mothers' <RELATIVES'>...", and ask SQ2.1.1–SQ2.3.1 about the mother and her community or her relatives' community.</p> <p><i>Older deaths:</i> Always read "...your..." or "...your <RELATIVES'>...", and ask SQ2.1.1–SQ2.3.1 about the respondent and her/his community or her/his relatives' community.</p> <p><i>All deaths:</i> Ask about the relatives' community if s/he stayed with her/his relatives during the illness events.]</p>			

S2.3.1	<p>(Have you or your / Has the mother or her) family ever been denied any of the following community services?</p> <p>Kodi inu (amayi ake) mayi kapena abanja lanu munakanizidwapo mdela lanu lino zinthu izi?</p> <p><i>Read all the options and mark ("X") Yes, No or DK for each; then enter the code.]</i></p>	<p>1. Education/schools.....</p> <p>2. Health services/clinics.....</p> <p>3. Paid job opportunities.....</p> <p>4. Credit/finance.....</p> <p>5. Transportation.....</p> <p>6. Water distribution.....</p> <p>7. Sanitation services.....</p> <p>8. Agricultural extension.....</p> <p>9. Justice/conflict resolution.....</p> <p>10. Security/police services.....</p> <p>11. Other.....</p> <p>(specify).....</p>	<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td>2. <input type="checkbox"/></td> <td>9. <input type="checkbox"/></td> </tr> </tbody> </table>	Yes	No	DK	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>	1. <input type="checkbox"/>	2. <input type="checkbox"/>	9. <input type="checkbox"/>
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V5.17	<p><i>Read:</i> Now I have three last questions about the child's mother.</p> <p>Tsopano ndiri ndi mafunso atatu omaliza okhuzana ndi mayi a mwanayu?</p> <p>Has the deceased's (biological) mother ever been tested for "HIV"?</p> <p>Kodi mayi a malemu anayezesapo magazi kuti aone ngati ali ndi kachilombo koyabitsa HIV ndi EDZI?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>8. Refused to answer wakana kuyankha</p> <p>9. Don't know sindikudziwa</p>	<input type="checkbox"/> 2-9 → VQ5.19																																				
V5.18	<p>Was the "HIV" test ever positive?</p> <p>Kodi maiwa anawapeza nako kachilombo HIV?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>8. Refused to answer Akana kuyankha</p> <p>9. Don't know Sakudziwa</p>	<input type="checkbox"/>																																				
V5.19	<p>Has the deceased's (biological) mother ever been told she had "AIDS" by a health worker?</p> <p>Kodi mayi ake omubereka mwanayu anauzidwapo kuti ali ndi EDZI ndi a za umoyo?</p>	<p>1. Yes Inde</p> <p>2. No Ayi</p> <p>8. Refused to answer Anakana kuyankha</p> <p>9. Don't know Sakudziwa</p>	<input type="checkbox"/>																																				

ANNEX B2 : ORAL CONSENT SCRIPT

PURPOSE

We invite you to take part in a research study. The purpose is to increase our knowledge of the causes of deaths of newborns and children. The study also examines how people know when their children need health care and any problems they have getting this care. You are being invited to participate because you had a (newborn / young child) that died (recently / some time ago).

PROCEDURES

For newborns read:

If you agree to participate, I will ask you some questions about (your / your relative's) pregnancy and delivery and the care sought for these. I will also ask about the illness of (your / your relative's) child and any care sought for the illness. You may refuse to answer any questions that you do not wish to answer.

For young children read:

If you agree to participate, I will ask you some questions about the illness of (your / your relative's) child and any care sought for the illness. You may refuse to answer any questions that you do not wish to answer.

RISKS/DISCOMFORTS

There are some risks to your participating in the study. Some questions could make you feel uncomfortable by reminding you of the child's illness and death. If you feel too upset at any time, I will stop the interview until you feel alright to continue. If the interview is too stressful, you are free to quit the study. The interview will take about one and a half hours to complete.

CONFIDENTIALITY

All research carries some risk that information about you may become known to people outside of the study. However, we will do all we can to protect the information you provide. Your responses to the interview will be entered in a computer, but your name will be hidden. The information will be used only for the research. Your responses will never be reported alone and your name will not be used in any way.

BENEFITS

There is no direct benefit to you from being in this study. Health care provided to women and children in your community may improve as a result of the information gathered in the study.

VOLUNTARY PARTICIPATION

You do not have to agree to be in this study, and you may change your mind at any

time. There will be no penalty if you decide to quit the study.

- If you have questions or complaints about this study, you may contact the local investigator, Benjamin Banda at the National Statistics Office, Phone: +251-999-360-542.
- If you have any questions about your rights as a research participant, or if you think you have not been treated fairly, you may contact the Malawi IRB at:

National Health and Science Research Committee
Executive Committee
P.O. Box 30377, Lilongwe 3, Malawi

Telephone: +265 1 789 400/414
Email: doccentre@malawi.net

PERMISSION TO PROCEED

Is it okay to proceed with the interview? Yes No

Participant's Agreement:

I have (read / understand) the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

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

Village/Cluster *HH*
Child

Study ID # of Research
Participant

Signature of Research Team Member Obtaining Consent

Date

Printed Name of Research Team Member Obtaining Consent

ANNEX B3: RECRUITMENT SCRIPTS

Address to Household head or other first adult contact at the household

“My name is <YOUR NAME>. I am coming from the National Statistics Office. For the purpose of improving health care, we are collecting information on child health in this area. I would like to talk to <MOTHER’S NAME>. Is she around?”

Interviewer: If the mother is available,

continue: Address to Mother

“My name is <YOUR NAME>. I am coming from the National Statistics Office. You informed us during our last visit that you had suffered a child death. I am very sorry to hear this. Please accept my sympathies. For the purpose of improving health care, we are collecting information on recent child deaths in this area. I want to ask you some questions about the events and any symptoms that <CHILD’S NAME> had during her/his illness before death.

For neonatal deaths, also read: I also want to ask about the events and any symptoms that you had during your pregnancy with <CHILD’S NAME>.”

Interviewer: If the mother is not available try to make an appointment to return when she will be there. If the mother will not be available, then continue:

Address to Household head or other first adult contact at the household

“Your household was selected because <MOTHER’S NAME> reported during our last visit that she had suffered a child death. I am very sorry to hear this. Please accept my sympathies. Because <MOTHER’S NAME> will not be available, is there someone else I can talk to who helped care for <CHILD’S NAME> during her/his illness before death?”

Interviewer: If another caregiver is available,

continue: Address to Other Caregiver

“My name is <YOUR NAME>. I am coming from the National Statistics Office. <MOTHER’S NAME> informed us during our last visit that she had suffered a child death. I am very sorry to hear this. Please accept my sympathies. For the purpose of improving health care, we are collecting information on recent child deaths in this area. I want to ask you some questions about the events and any symptoms that <CHILD’S NAME> had during her/his illness before death.

For neonatal deaths, also read: I also want to ask about the events and any symptoms that <MOTHER’S NAME> had during her pregnancy with <CHILD’S NAME>.”

Interviewer: If another caregiver is not available, try to make an appointment to return when the person who cared most closely for <CHILD’S NAME> during the illness will be there.

ANNEX B4: PHYSICIAN CODING

A National Study to Improve Estimates of the Causes of and Contributors to Neonatal and Child Mortality in Niger (Verbal/Social Autopsy Study)

Guidelines for Physician Cause of Death Coding of Verbal Autopsy Interviews

The following discussion is based, in part, on Section 3 of the WHO publication “Verbal autopsy standards: Ascertaining and attributing cause of death”, World Health Organization 2007. Section 3 of this manual can be downloaded in English) at:

http://www.who.int/healthinfo/statistics/verbal_autopsy_standards3.pdf and the full publication is available at: <http://www.who.int/healthinfo/statistics/verbalautopsystandards/en/index.html>. The printed manual, in English and French, can be ordered from the WHO website:

<http://apps.who.int/bookorders/anglais/detart1.jsp?sesslan=1&codlan=2&codcol=15&codcch=702>.

You will be provided a copy of the French version to use together with these guidelines.

Filling the international death certificate to determine the underlying cause of death

The objective of the verbal autopsy coding exercise is to determine the one underlying cause of death for each child. In order to do this you must complete an international death certificate for each child:

INTERNATIONAL FORM OF MEDICAL CERTIFICATE OF DEATH

Cause of death		Approximate interval between onset and death
I Disease or condition directly leading to death* Antecedent causes Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last.	a) _____ due to (or as a consequence of)	_____
	b) _____ due to (or as a consequence of)	_____
	c) _____ due to (or as a consequence of)	_____
	d) _____	_____
II		

Other significant conditions contributing to the death, but not related to the disease or conditions causing it		
<i>*This does not mean the mode of dying, e.g., heart failure, respiratory failure, it means the disease, injury, or complication that caused death.</i>		

You will determine the diagnosis (or diagnoses) to enter in the death certificate from evidence available in the verbal/social autopsy (VASA) interview. How to make the diagnoses from this information will be discussed below. First we will discuss how to complete the death certificate.

The death certificate consists of three parts: Part I, Part II, and 'Approximate interval between onset and death'.

Part I of the death certificate

Part I is where you enter the disease(s) or condition(s) that caused the death. The disease or condition that *led directly to death* goes on line 'a' at the top of the certificate. By 'led directly to death', we mean either: 1) the single cause of death or 2) the final cause in a chain of diseases and conditions that led to death. As stated at the bottom of the death certificate, this does not mean the mode of dying, such as heart or respiratory failure. Rather, it means the disease, injury or complication that caused death.

Many neonatal and young child deaths have only a single, direct cause of death. In such cases, the direct cause is classified as the underlying cause.

Some examples of neonatal causes of death that *might* be the single, direct cause are:

- Preterm delivery
- Birth asphyxia
- Pneumonia

Some examples of childhood causes of death that *might* be the single, direct cause are:

- Pneumonia
- Diarrhea
- Malaria

If a chain of morbid conditions (antecedent causes) led to the direct cause of death, list these on lines b, c and d below the direct cause. If there was only one condition that led to the direct cause, list this on line b; if there were two conditions, list these on lines b and c; and if there were three conditions, list these on lines b, c and d. List any disease(s) or condition(s) on lines b, c and d in the same order in which

they led to the direct cause. The most antecedent condition should always be listed last. This will be classified as the single, underlying cause of death that we are seeking. You can see that the underlying cause is always the disease or condition on the lowest line in Part 1 of the death certificate, whether this is on line a, b, c or d.

Here are some examples of causal chains that illustrate when a neonatal death might have both direct and antecedent causes:

1. Direct cause (a): Aspiration pneumonia (as a consequence of)
 Antecedent cause (b): Cleft palate

Cleft palate is classified as the underlying cause of death.

2. Direct cause (a): Birth asphyxia
 Antecedent cause (b): Obstructed labor

Newborn affected by complication of labor and delivery (obstructed labor) is classified as the underlying cause of death

3. Direct cause (a): Preterm delivery
 Antecedent cause (b): Premature rupture of membranes

Newborn affected by premature rupture of membranes is classified as the underlying cause of death.

Here are some examples of causal chains that illustrate when a childhood death might have both direct and antecedent causes:

1. Direct cause (a): Sepsis (as a consequence of)
 Antecedent cause (b): Osteomyelitis (as a consequence of)
 Antecedent cause (c): Severe injury (crushed leg)

Severe injury is classified as the underlying cause of death.

2. Direct cause (a): Pneumonia (as a consequence of)
 Antecedent cause (b): Malnutrition

Malnutrition is classified as the underlying cause of death since it is on the lowest line in part I of the death certificate.

In order to be considered an underlying cause of death, malnutrition must be known to have been present prior to the onset of the pneumonia. Otherwise, pneumonia could not have occurred as a result of the malnutrition. The malnutrition must also been severe. If the malnutrition does not meet these conditions, it might still be classified as a contributing condition, as discussed below (Part II of the death certificate).

Part II of the death certificate

Part II of the death certificate is where you enter other significant conditions that *contributed* to the death, but were *not related* to the disease(s) or condition(s) that caused the death. For example, a contributing condition might have worsened the ill effects of the main cause. There are two lines in Part II; if there were two contributing conditions, it does not matter in what order they are listed because these conditions were not in the causal chain of the death. Contributing conditions are never coded as the single, underlying cause of death. Nevertheless, they are of interest and all identified contributing conditions should be entered on the death certificate.

Here are some examples of conditions that contributed to neonatal deaths:

1. Direct cause (a): Birth asphyxia
Contributing condition: Congenital heart disease

Birth asphyxia is classified as the underlying cause of death since it is on the lowest line in part I of the death certificate.

Congenital heart disease worsened the ill effects of the birth asphyxia, but did not cause it.

2. Direct cause (a): Sepsis
Antecedent cause (b): Premature rupture of the membranes
Contributing condition: Preterm delivery

Newborn affected by premature rupture of the membranes is classified as the underlying cause of death since it is on the lowest line in part 1 of the death certificate.

Preterm delivery contributed to the death but did not cause it.

Here is an example of a condition that contributed to childhood deaths:

1. Direct cause (a): Pneumonia
Contributing condition: Malnutrition (not known to have existed prior to the pneumonia and/or the malnutrition was not severe)

Pneumonia is classified as the underlying cause of death.

Malnutrition worsened the ill effects of pneumonia by decreasing the child's immune response.

It is not known whether the malnutrition led to the onset of pneumonia since it is not known whether the child had malnutrition before the pneumonia started. Also, the malnutrition was not severe, which is required for it to be considered an underlying cause.

Approximate interval between onset and death

The third part of the death certificate is the column running along its right hand side. Use this space to record the timing of all the causes of death and contributing conditions. The interval recorded should be the time from the *onset* of the disease or condition, NOT from its diagnosis, until the time of death. Enter both the number and the unit of time, for example, 1 week or 2 months. The interval should be

estimated if it is not known, sometimes resulting in only the time unit being recorded. For example, write 'months' if the exact timing is not known but it is known that a cause or condition started more than 1 month ago.

The duration written on each line must never exceed the duration on the line immediately beneath. This is because each cause on a lower line gave rise to the cause immediately above it, and so its onset must have been earlier on. The underlying cause of death, on the lowest line, must have had the earliest onset. This information provides a check of the accuracy of the reported sequence of the morbid conditions.

The WHO Verbal Autopsy Standards manual includes an example on page 60 of a death with direct cause pneumonia and underlying cause malnutrition. It shows an interval between onset and death of 2 weeks for pneumonia and 'months' for malnutrition. Therefore, malnutrition meets the requirement for an underlying cause of death to have started before the direct cause. Its onset must have been at least 1.5 months (2 months – 2 weeks) before pneumonia began. If the interval column had been left blank, we would be less certain that malnutrition was the underlying cause of death.

Determining the verbal autopsy diagnoses to enter in the death certificate

Verbal autopsy is the most accurate method available for determining the cause of death in settings where many or most deaths occur outside of medical care and that lack a working death certification and vital registration system. However, verbal autopsy diagnoses are usually made without the physical exam, laboratory and imaging evidence often available to working physicians. Therefore, verbal autopsy diagnoses are generally less detailed than medical diagnoses; and one verbal autopsy diagnosis often corresponds to several, more detailed, medical diagnoses. This can be seen in the table of verbal autopsy diagnoses and their matching ICD-10 diagnoses in Section 3 of the WHO Verbal Autopsy Standards manual. For example, the verbal autopsy diagnosis "Meningitis" corresponds to three ICD-10 diagnoses: "Bacterial meningitis, unspecified," "Meningitis due to other and unspecified causes" and "Encephalitis, myelitis and encephalomyelitis, unspecified."

To determine the verbal autopsy cause of death, consider the information available in the sections of the VASA interview specified below for neonatal (0-27 days old) and young child (1-59 months old) deaths. The responses to the VASA questions will be provided to you for each death that is to be assessed.

Use all this information as you normally would as a clinician, considering the background in verbal autopsy section V1 as the context in which the child's illness occurred. For neonatal deaths, the mother's pregnancy and delivery history from verbal autopsy sections V2 and V3 are additional vital background elements. Verbal autopsy sections V3 for neonates and V4 for young children provide core data on the signs and symptoms of the illness leading to the death. If the family had any health records related to the child's fatal illness, including the death certificate, this information will be found in verbal autopsy section V5. For both age groups, the open history might provide further useful information, especially to determine the order in which the child's illness signs appeared and the illness events unfolded. Social autopsy section S6 might supplement this by identifying the day that each illness sign

and symptom started. This information can be particularly helpful in filling part III of the death certificate (approximate interval between onset and death).

In addition to using your clinical judgment, minimum guidelines are provided below for illness signs and symptoms that should be present before considering each verbal autopsy diagnosis. The purpose of these guidelines is to ensure that objective criteria are consistently applied in forming the verbal autopsy diagnoses. A lack of consistency and objectivity are serious criticisms that have been made of the verbal autopsy method. Using the minimum diagnostic guidelines will help overcome this criticism and ensure wider acceptance of our study findings. Using the guidelines together with your clinical judgment will combine the advantages of uniformity, objectivity and clinical knowledge and experience in reaching the verbal autopsy diagnoses.

Neonatal deaths (0-27 days old)

The most common causes of neonatal deaths in developing countries that can be diagnosed using the information available in the VASA questionnaire include:

- Birth asphyxia
- Congenital malformation
- Diarrhea
- Meningitis (part of “Serious Infection”)
- Neonatal tetanus
- Pneumonia (part of “Serious Infection”)
- Preterm delivery (with or without Respiratory Distress Syndrome)
- Sepsis (part of “Serious Infection”)
- Unspecified (Unknown)

The VASA interview sections and questions to consider for a neonatal death are as follows. The responses to these questions will be provided to you for each death that is to be assessed:

- V1 (Background information): V1.1–V1.15, V1.20–V1.26
- V2 and S3 (Pregnancy and delivery): V2.1, V2.3–2.10, V2.17–V2.18, S3.4–S3.5.1, S3.8, S3.11
- S4 (Maternal symptoms): S4.1
- V3 (Neonatal deaths): V3.1–V3.49
- S6 (Day of the illness that each sign/symptom started): S6.2B
- V5 (Health records): V5.4–V5.16
- V6 (Open history)

The minimum illness sign/symptom guidelines to follow for each verbal autopsy diagnosis are:

- Birth asphyxia
 - Did not breath immediately after birth (V3.4=2)
 - OR
 - Did not cry immediately after birth (V3.7=2)

- Birth trauma
 - Bruises or signs of injury at birth (V3.1=1)
- Congenital malformation
 - Physical abnormality at the time of delivery (V3.2=1)
- Diarrhea
 - More frequent loose or liquid stools than usual (V3.44=1)
- Meningitis (part of “Serious Infection”)
 - Bulging fontanelle (V3.34=1)
 - OR
 - Spasms or convulsions (V3.25=1)
- Neonatal tetanus
 - Stopped suckling normally more than 2 days after birth (V3.13=1 and V3.14 >2)
 - AND
 - Spasms or convulsions (V3.25=1)
- Pneumonia (part of “Serious Infection”)
 - Difficult breathing (V3.17=1) or Fast breathing (V3.20=1)
- Preterm delivery
 - Pregnancy duration less than 8 months (V2.2 <8)
 - OR
 - Pregnancy ended early (V2.3 = 1)
- Preterm delivery with respiratory distress syndrome
 - Pregnancy duration less than 9 months (V2.2 <9) or Pregnancy ended early (V2.3 = 1)
 - AND
 - Fast breathing (V3.20=1)
 - AND
 - No fever and no Cold to touch (V3.27=2 and V3.29=2)
- Sepsis (part of “Serious Infection”)
 - Fever or Cold to touch (V3.27=1 or V3.29=1)
 - AND
 - No diagnosis of pneumonia or meningitis
- Unspecified (Unknown)
 - Does not meet any of the above criteria
 - AND
 - No other specified diagnosis

Young child deaths (1-59 months old)

The most common causes of young child deaths in developing countries that can be diagnosed using the information available in the VASA questionnaire include:

- AIDS
- AIDS with tuberculosis
- Diarrhea
- Dysentery
- Hemorrhagic fever
- Malaria
- Malnutrition (severe)
- Measles
- Meningitis
- Pertussis
- Pneumonia
- Sepsis
- Tuberculosis
- Injury (Venomous, Drowning, Fall, Fire, Poisoning, Road traffic, Violent, Unspecified)
- Other childhood infectious disease (not specified above)
- Malignant neoplasm
- Unspecified (Unknown)

The VASA interview sections and questions to consider for a young child death are as follows. The responses to these questions will be provided to you for each death that is to be assessed:

- V1 (Background information): V1.1–V1.15, V1.20–V1.26
- V4 (Infant and child deaths): V4.1–V4.49
- S6 (Day of the illness that each sign/symptom started): S6.2B
- V5 (Health records): V5.4–V5.16
- V6 (Open history)

The minimum illness sign/symptom guidelines to follow for each verbal autopsy diagnosis are:

- AIDS
 - Place Holder
AND
Place Holder
- AIDS with tuberculosis
 - Place Holder
AND

Cough for more than 2 weeks (V4.12=1 and V4.13 >14)

- Diarrhea
 - More frequent loose or liquid stools than usual (V4.6=1)
- Dysentery
 - Visible blood in the loose or liquid stools (V4.11=1)
- Hemorrhagic fever
 - Bleeding from anywhere (V4.44=1)
OR
Skin turned black (V4.46=1)
- Malaria
 - Fever (V4.1=1)
- Malnutrition (severe)
 - Limbs became very thin (V4.35=1)
OR
Swollen legs or feet (V4.36=1)
OR
Protruding belly (V4.40=1)
- Measles
 - Fever (V4.1=1)
AND
Rash (V4.30=1)
- Meningitis
 - Stiff neck (V428=1)
OR
Bulging fontanelle (V4.29=1)
OR
Generalized convulsions or fits (V4.25=1)
- Pertussis
 - Severe cough (V4.14=1)
- Pneumonia
 - Difficult breathing (V4.16=1) or Fast breathing (V4.18=1)
- Sepsis
 - Fever (V4.1=1)
AND

No diagnosis of pneumonia or meningitis

- Tuberculosis
 - Cough for more than 2 weeks (V4.12=1 and V4.13 >14)
- Injury (Venomous, Drowning, Fall, Fire, Poisoning, Road traffic, Violent, Unspecified)
 - Suffered an injury or accident (V4.47.1-8=1)
- Other childhood infectious disease (not specified above)
 - Fever (V4.1=1)
AND
Infectious diagnosis not specified above
- Malignant neoplasm
 - Medical records information or death certificate diagnosis (V5)
- Unspecified (Unknown)
 - Does not meet any of the above criteria
AND
No other specified diagnosis