



A guide and tools for
maternal mortality programme assessment

MODULE 4, Tool 6

Productivity Costs Survey

Version 2.0

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

List of Acronyms

SPSS	Statistical Package for the Social Sciences
Stata	data analysis and statistical software
TBA	traditional birth attendant
VAS	visual analogue scale
WHO	World Health Organization

Module 4, Tool 6 – Productivity Costs Survey: Table of Contents

Introduction	1
4(6).1 What is the Productivity Costs tool?	1
4(6).2 Why use the Productivity Costs tool?	3
4(6).3 Limitations of the Productivity Costs tool	3
4(6).4 Using the Productivity Costs tool	3
Step 1: Design your study	3
Step 2: Obtain permissions	5
Step 3: Data collection	5
Step 4: Data analysis.....	5
Step 5: Disseminate findings and recommendations	5
4(6).5 Budget implications of using the Productivity Costs tool.....	5
4(6).6 Productivity Costs data collection instruments	6
1. Informed Consent Form (example from Ghana)	7
2. Productivity Costs Questionnaire (example from Ghana).....	8
3. Interviewers’ Manual for the Productivity Costs Questionnaire (example from Ghana).....	25
References	37

INTRODUCTION

The economic evaluation of health interventions is an important means to support policy-makers in decision-making. Impact aims to promote evidence-based safe motherhood strategies, and economic evaluation plays an important part in the establishment of the cost effectiveness of such strategies. The costs of interventions not only include direct costs – such as the costs of medical treatment and transport to health facilities – but also the ‘productivity costs’ of lost, or less productive, working time of the patient due to illness (Mukuria and Newlands, 2004; Russell, 2004). In the case of maternal health, the illness may not only be of the woman herself but also of her baby.

There is little evidence on how best to measure and value production time lost due to ill health (Pritchard and Sculpher, 2000). Although existing methods have been tested in developed countries with some success, these are not directly transferable to maternal health or to developing country contexts. Study design issues are also important. The developed country studies that have collected information on productivity have often relied on self-reported data that is verified against employer records. The prevalence of informal and household work makes verification difficult in a developing country context. There have been a handful of studies that attempt to measure productivity costs in developing countries, but they have focused on endemic diseases – mainly malaria and schistosomiasis, and more recently HIV/AIDS.

Households employ ‘coping strategies’ to manage both direct and productivity costs, by altering roles within the household and by drawing upon the support of other households such as relatives and friends (Sauerborn et al, 1996). Health expenditure and productivity losses arising from illness may both be significantly reduced by such inter-household income transfers, and inter- and intra-household labour re-allocations.

However, while coping strategies may allow production to be maintained, this may be at the expense of the future welfare of the household and community. Among the more important longer-term impacts is the withdrawal of children from school, either because their labour is required or because the family cannot afford school fees. The effect is a reduced investment in the human capital of the children concerned which is likely to result in lower productivity over their entire lifetime. Other long-term effects arise when coping strategies lead to reduced food security in the form of lower food consumption or a switch to cheaper but less nutritious foods. The consequences include the stunted growth of children, the greater vulnerability of all family members to illness, and the reduced inability to perform physically demanding activities.

Coping strategies also mean that there is a difference between the immediate and the broader economic impacts of illness. The immediate effects in terms of lost production are reduced – or may occasionally be almost cancelled out – by coping strategies.

While the Productivity Costs tool is a freestanding survey, it could also be conducted alongside the Household Costs Survey tool (see Tool 7 in this module). If this is the case, certain sections of the two surveys could be combined: the household roster; housing and asset ownership; and household expenditure.

4(6).1 What is the Productivity Costs tool?

The Productivity Costs tool is a survey instrument for collecting data that can be used to estimate productivity costs arising from maternal ill health (Chikwama et al, 2006). It was tested in a survey conducted in the Central Region of Ghana in 2005.

The primary data collection instrument used for this study was a questionnaire that was administered to women in households falling into our sampling frame. The questionnaire was designed to collect data on women’s work activities and labour productivity outcomes during pregnancy and the puerperium, the period of up to 42 days after delivery. For the most recent episode of maternal-related illness, the questionnaire aims to derive measures of days of employment lost due to ill health. Slightly different versions of a questionnaire can be administered to pregnant women and to recently delivered women. As behavioural responses and consequences of ill health are

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

dependent on other household characteristics, the questionnaire also collected data on various socio-economic aspects of the household.

Table 4(6).1 summarizes the main parts of the questionnaire. Modules 1–3 and 6–8 are administered to all women. Modules 4 and 5 are mutually exclusive and their administration depends on a woman's maternal status, whether she is pregnant or has a pregnancy that terminated recently.

The questionnaire covers productivity losses which occur when individuals are absent from work – absenteeism – and as a result of reduced efficiency due to illness while still at work – presenteeism. Most studies have measured the production losses occurring as a result of absence from work for ill individuals. Far fewer have attempted to measure productivity losses while at work (Brouwer et al, 1999).

The concept of presenteeism may be particularly important in the context of maternal morbidity. Women are often involved in a variety of tasks in developing countries and maternal morbidity may reduce their efficiency while they are still at work. This is likely to be more pronounced in poor or small families which have no alternative sources of labour or where some types of work can only be done by the woman.

Table 4(6).1: Description of questionnaire modules

Module number	Module name	Level of data collection	Data
1	Background	Household	Household location information.
2	Household roster	Individual	Demographic and socio-economic data.
3	Woman's work activities	Individual	Women's work activities and time allocations.
4	Productivity costs: pregnant women	Individual	Health outcomes during pregnancy, time lost to ill health, efficiency losses and household coping strategies.
5	Productivity costs: women with recent births	Individual	Health outcomes after delivery, time lost to ill health, efficiency losses and household coping strategies.
6	Household economic activities	Household/individual	Farm production, fishing and non-farm enterprises, wage employment activities and earnings.
7	Household asset ownership	Household	Household property and productive assets.
8	Household expenditure	Household	Food and non-food expenditures.

There are two aspects that need to be considered when measuring productivity losses at work: (1) the length of the period during which losses are experienced; and (2) the extent of the production loss. The latter was assessed by use of a visual analogue scale (VAS) in which respondents were asked to estimate their average efficiency on days when they were ill on a scale of 0 ('illness did not permit me to work') to 5 ('illness did not affect my work').

The Productivity Costs tool first focuses on the ill individual and seeks to measure the time she loses due to illness. It then recognizes that, through intra- and inter-household labour reallocation, many of the adverse effects of ill health on economic production can be alleviated. The tool seeks to measure the time that is recovered through these labour substitutions. Another VAS was used for this. Respondents were asked to estimate how much of their normal work was done by others on a scale of 0 ('no one assisted me') to 5 ('assistance fully covered all my activities').

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

4(6).2 Why use the Productivity Costs tool?

The Productivity Costs tool could be used if the evaluation team is interested in capturing all the important economic consequences of maternal ill health. In particular, the value of averted production losses, or productivity cost savings, constitutes an important outcome of health interventions. By reducing work time lost to poor maternal health, safe motherhood interventions lead to important cost savings. These cost savings represent additional benefits to society of improving maternal health outcomes. Estimating their magnitude should make up an integral component of any economic evaluation.

Having a clear understanding of the size and distribution of productivity costs is also important as it contributes towards explaining the link between poverty and health. Moreover, the fact that maternal ill health is gender specific has important implications. A number of studies have shown that women are more likely than men to spend their income on children, while in addition, children are often withdrawn from school and drafted into activities that their mothers are not able to attend to because of illness.

4(6).3 Limitations of the Productivity Costs tool

An ideal assessment of productivity costs would follow women from the time of conception through to childbirth and the end of the puerperium. However, this is impractical and Impact only interviewed women at a single point in time by focusing on the last episode of identified maternal illness for women who are still pregnant and those who have recently delivered.

Some studies have treated all illness occurring during pregnancy, childbirth and the puerperium as maternal. Clearly, however, not all such illness is due to maternal causes. Since it is not feasible to conduct a clinical diagnosis of ill health during a survey, this tool relies on self-assessment to identify if maternal illness has occurred. It leaves it to the discretion of the women being interviewed to determine whether their condition was due to pregnancy, childbirth or the puerperium. Of course, the extent to which this possible misclassification of conditions leading to ill health is seen as a problem depends on the focus of interest. If the focus is on the health needs of mothers, it may not matter.

Another limitation is that monetary measures of productivity costs are not derived. The traditional approach is to value time lost due to ill health using the wage rate as reflective of the value of labour in production. The use of average wage rates for the main economic activity in the region concerned is the most common option. Any official minimum wage rate is an alternative. However, this assumes that markets function competitively but, in most developing countries, wages will often overstate the value of labour in production. Therefore an accurate assessment of productivity costs should in theory attempt to estimate shadow wages for most household economic activities.

Finally, coping strategies are not adequately captured by the tool. However, qualitative work can supplement data collected using household surveys. For example, focus group discussions, involving women of reproductive age, can be used to establish community perceptions on illness during pregnancy, inability to work during pregnancy, coping strategies and other aspects of women's work during the term of their pregnancy. More information on qualitative methods is contained in Technical Annex B of Module 5.

4(6).4 Using the Productivity Costs tool

Step 1: Design your study

In terms of study design, a longitudinal study has the advantage of permitting the identification of dynamic patterns of behaviour but such studies are expensive and, by definition, lengthy. Hence, most productivity cost studies employ one-off surveys.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

There are several important definitional issues that will affect the study design:

- **Defining 'maternal ill health'.** We took the productivity costs of maternal ill health as referring to the value of women's time that is adversely affected by conditions linked to pregnancy, childbirth or the puerperium, whether the illness is of the woman herself or her baby.
- **Defining 'household'.** The concept of a 'household' may not be homogenous. It is therefore necessary to define what a household is and how it is organized in the region of study. This is relevant because, while maternal ill health most directly affects women, most women's activities are organized at household level, and thus the basic sampling unit should be the household. However, as there are cases when economic behaviour, even in low income countries, makes it difficult to treat households as units, the individual members of households will be the smallest units for which some of the data will be collected.
- **Identifying the main respondent(s).** The main income earner will often be a male head of household and most health decisions that are made reflects the importance of this individual. In the case of maternal mortality, other household members will have to be consulted for information on productivity costs that have been incurred, especially where intra-household transfers or extended households are common. However, the best respondent as far as costs are concerned will usually be the head of household.
- **Defining the 'economically active'.** This affects the information to be gathered from respondents. Most studies identify a minimum age and anyone above this age up to a given retirement age is considered economically active. However, the use of official retirement ages may underestimate lost productivity. Older people may be the main source of help for households that experience maternal mortality and morbidity although, since their levels of efficiency may be lower, a weighting system may be necessary.
- **Defining activities.** Employing a household perspective also raises issues as to which activities to include when valuing productivity costs. Some studies explicitly include housework as a productive or economic activity while other studies focus on a main productive activity such as farming.

Once these issues have been discussed and addressed, the study sample can be determined. In most low income countries, pregnancies and their outcomes are generally not notifiable events. Since it is not possible to obtain a complete listing of women in our sampling frame, women cannot be identified for the survey using standard random sampling techniques. As an alternative, one could use population surveys to interview all households in the chosen communities to identify households with women who are pregnant and women who have recently delivered. While this may yield a representative sample for all the communities covered, it can be a very resource intensive approach. A further possibility, therefore, is to use traditional birth attendants (TBAs), community health nurses or community informants to identify women in their community who are pregnant or who have recently delivered. For women who have delivered, it might be possible to use immunization points as was done in the Household Costs Survey (see Tool 7).

The main consideration when choosing sample sizes in quantitative studies is to achieve reliable estimation of parameters. Thus sample size calculations require specification of some desired level of precision of estimates as well as variance across observations. In many cases, both of these are hard to find. Additionally, logistical, time and financial constraints also mean that the feasible sample size is much lower than the ideal one. A review of the literature on similar studies suggested 300 as an appropriate sample size for each of the sub-samples (pregnant women and recently delivered women). It proved more difficult to identify recently delivered women and the final sample consisted of 416 pregnant women and 234 women who had recently delivered. More information on sample size calculation is contained in Technical Annex A of Module 5.

Cultural awareness and sensitivity helps in the study design phase in providing information as to how questions should be phrased, who to ask and sensitive issues within cultures. This reduces the number of non-responses. It will also identify practices such as the accompaniment of female patients to hospital, social obligations and other social constructs that would impact on the level of time and productivity loss encountered due to maternal

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

mortality and morbidity. This is useful in data analysis in interpreting the findings. More information on cultural adaptation and translation of survey instruments is contained in Technical Annex C of Module 5.

Step 2: Obtain permissions

Seek permissions from the ethics committees of collaborating institutions, from the regional health administrations in-country, and from the participating hospitals and health centres.

Step 3: Data collection

The primary data collection instrument is a questionnaire that will be administered to women in households falling into the sampling frame. The different modules of the questionnaire are outlined in table 4(6).1, while section 4(6).6 contains an example of the [questionnaire used in Ghana](#). The questionnaire focuses on collecting information on women's work activities and labour productivity outcomes during pregnancy and the puerperium. As behavioural responses and consequences of ill health are dependent on households' socio-economic backgrounds, the questionnaire also collects data covering different socio-economic aspects of households.

A recurring issue with regard to collection of data is the recall period. The accuracy of information in self-reported data can be verified by checks against employer records for formal work. The use of other household members to assist the respondent in recalling details of absenteeism may help reduce recall errors.

In very conservative cultures, or where women have low status, it may be difficult to acquire a suitable sample. It may be important to gain consent from male household heads in order for women to participate. The use of focus groups can reduce any response biases that may arise due to gender or cultural sensitivity. The use of researchers who are from the region, are locally known or of the same ethnic background improves access and cooperation and the interpretation of respondents' answers. Our questionnaire was administered by a small team of interviewers from the Central Region of Ghana where the survey was conducted.

Step 4: Data analysis

Data analysis should establish mean productivity costs both before and after adjustment for intra- and inter-household coping strategies. It can then be extended into the consideration of whether there are significant differences across women in different demographic and socio-economic groups.

Our data analysis was conducted using Stata but this is not essential. Most other statistical packages, such as SPSS, could have been used instead.

Step 5: Disseminate findings and recommendations

The main audience for results from this study consists of analysts seeking to compile a comprehensive measure of the benefits of safe motherhood strategies but policy-makers should also be familiarized with the findings. Reducing maternal ill health leads to increased productivity which is a secondary and less visible benefit but may nevertheless be an important outcome. Inclusion of productivity costs illustrates the value of the economist's 'societal perspective', which seeks to capture all the benefits and costs of an intervention regardless of who enjoys the benefits or bears the costs.

4(6).5 Budget implications of using the Productivity Costs tool

Table 4(6).2 shows the estimated recurrent costs which would be incurred in use of the Productivity Costs tool. No capital costs are included. The table shows the resources required for a survey of around 600 women.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

Table 4(6).2: Productivity costs resource implications

	Quantity	Time
Supplies	Requisite copies of the questionnaire	Not applicable
	Sufficient copies of the interviewer's manual for one per interviewer/supervisor	
Personnel	Team of interviewers (possibly 6)	3 days training (including 1 day pre-testing) 8 weeks interview time
	Supervisor (one per 6–8 interviewers)	8 weeks interview time
	Data entry staff (possibly 2)	6 weeks
	Drivers	Depends on organization of survey
Travel and communication	Vehicle to make preliminary visits to set up the survey	1–2 weeks
	Vehicle to travel to interview sites	8 weeks
	Travel and subsistence costs for survey staff, supervisor(s) and drivers	
	Phone calls	
Building operation and maintenance	Date entry facility	Not applicable

4(6).6 Productivity Costs data collection instruments

This section contains the following instruments:

1. Informed consent form;
2. Productivity costs questionnaire;
3. Interviewers' manual for the productivity costs questionnaire;
4. Coding manual.

1. Informed Consent Form (example from Ghana)

A. Region								0	1
B. District									
C. Community									
D. Date [ddmmyyyy]									

RESPONDENTS ARE WOMEN AGED 15–49 YEARS WHO ARE PREGNANT OR WHO DELIVERED IN THE 4 MONTHS PRIOR TO THE SURVEY AND HAVE BEEN HOME FOR AT LEAST FOUR WEEKS.

PLEASE **DO NOT** ADMINISTER THE QUESTIONNAIRE IF A WOMAN DOES NOT MEET THE ABOVE CRITERIA

E. RESPONDENT'S INFORMED CONSENT
[SEEK RESPONDENT'S AGREEMENT TO BE INTERVIEWED BY READING THE STATEMENT BELOW]

My name is _____. I am from the Noguchi Memorial Institute for Medical Research. We would like to talk to you about yourself and your family. Your answers are very important to us and will help to find better ways to deliver health services in Ghana. All the information you give us will be treated in the strictest confidence. You are free not to take part in this study or to discontinue the interview at any time. You will not be penalized for not taking part in the study. The interview will not last more than 40 minutes. Are you willing to take part in this study?

[IF RESPONDENT IS WILLING TO PARTICIPATE, COMPLETE THE CONSENT TO PARTICIPATE SECTION BELOW]

F. CONSENT TO PARTICIPATE IN SURVEY

I freely volunteer to be interviewed

Respondent's name

Respondent's signature

2. Productivity Costs Questionnaire (example from Ghana)

Note: [An interviewers' manual](#) with guidance on the use of this questionnaire is contained in this section.

Questionnaire I.D.				
--------------------	--	--	--	--

1. BACKGROUND												
1.1	Region (RR) Coding manual										0	1
1.2	District (DD) Coding manual											
1.3	Community (CC) Coding manual											
1.4	Interviewer's code (SS) Coding manual											
1.5	Household ID (RRDDCCSS---)											
1.6	Date of interview (ddmmyyyy)											
1.7	Time of start of interview										am	pm
2. HOUSEHOLD ROSTER												
<i>We would like you to list names of all members of your household who usually sleep and eat with you.</i>												
2.1 ID	Name	2.2 Age at last birthday (yrs)	2.3 Relationship with respondent (woman who delivered or who is pregnant) (Code a)	2.4 Main economic activity (Over 15yrs) (Code b)	2.5 Sex 1=male 2=female	2.6 Level of educational attainment (completed) (Over 5 yrs) (Code c)	2.7 Marital status (Code d)					
01			01									
02												
03												
04												
05												
06												
07												
08												
09												
10												
11												
12												
13												

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

14							
15							
16							
17							
18							
19							

Code a: Relationship with respondent		Code b: Main activity or type of employment		Code c: Educational attainment		Code d: Marital status	
Self	01	Skilled wage employment	01	None	01	Never married	01
Spouse (husband)	02	Unskilled wage employment	02	Primary	02	Married/co-habiting	02
Own child	03	Skilled self-employment	03	Middle/JSS	03	Widowed	03
Parent	04	Unskilled self-employment	04	Secondary	04	Divorced/separated	04
Grandparent	05	Student	05	Post-secondary	05		
Sister/brother	06	Unemployed	06	Tertiary	06		
Co-wife	07	Other	96	Koranic education	07		
Other relative	08	Not applicable	99	Other	96		
Servant/worker	09			Not applicable	99		
Other	96						

2.8	Does the head of the household reside with you? 1=yes (→2.9), 2=no (→3.1)	
-----	--	--

2.9	If yes to 2.8, who is the head of the household? [ENTER ID FROM 2.1]	
-----	--	--

3. WOMAN'S WORK ACTIVITIES

3.1	At what time would you normally wake up on a typical working day (HHMM)? (→3.2)					am
						pm

3.2	At what time would you normally go to sleep on a typical working day (HHMM)? (→3.3)					am
						pm

3.3 Beginning from the time you wake up, please tell us about activities that you do on a normal working day. (Use Time Guide to help respondent keep track of time)

	Activity	A. Code	B. How much time do you spend on each activity?	
			Hours	Minutes
1				
2				
3				
4				
5				
6				
7				
8				
9				

10				
11				
12				
13				
14				
15				
16				
17				
18				

Activity Codes				
Domestic work		Walk to/from farm	15	Non-work activities
Processing food (pounding fufu, etc)	01	Other (specify)	17	Attending religious ceremony 41
Cooking food	02	Other work		Visiting friends/relatives 42
Cleaning house/dishes	03	Agriculture wage labour	21	Attending school 43
Fetching water	04	Non-farm wage labour	22	Bathing 44
Gathering firewood	05	Helping friend	23	Resting/taking a nap 45
Household repairs	06	Helping family	24	Other social events 46
Washing clothes	07	Trading/crafts	25	
Buying at the market	08	Preparing food for sale	26	
Other (specify)	09	Travel to/from work	27	
Agricultural Work		Other work (specify)	30	
Work on own farm	10	Child care		
Work on spouse's farm	11	Feeding children	31	
Work on joint farm	12	Bathing/dressing children	32	
Work on other farm	13	Playing/watching children	33	
Tend livestock	14	Other childcare activities	34	

3.4	What is the current status of the respondent? 1=pregnant (→ Section 4), 2=delivered (→ Section 5)	
------------	---	--

4. PRODUCTIVITY COSTS – PREGNANT WOMEN

4.1	When did you first know that you were pregnant? (→ 4.2)	Month			Year				
4.2	When are you expecting to deliver? (→ 4.3)	Month			Year				
4.3	From the time you first knew you were pregnant, have you been ill? 1=yes (→ 4.4), 2=no (→4.8)								
4.4	How many times have you been ill during this pregnancy? (→ 4.5)								
4.5	What were the main symptoms of the last episode of illness? (→ 4.6) 1=nausea and vomiting, 2=heartburn, 3=backache, 4=pain in pelvic area, 5=vaginal bleeding, 6=shortness of breath, 7=tiredness, 8=swollen legs, 9=raised blood pressure, 10=headache, 11=fever, 12=dizziness, 96=other.....	A.			B.			C.	
4.6	Do you think the illness was a result of your current pregnancy? (→4.7) 1=yes, 2=no								

Household Costs	Household Costs	Household Costs	Household Costs	Household Costs
-----------------	-----------------	-----------------	-----------------	-----------------

4.7	Because of this illness , have you been able to attend to your normal daily activities (i.e. domestic work and/or income generating activities)? 1=yes (→ 4.10), 2=no (→ 4.9)																												
4.8	Has this pregnancy had any effect on your ability to attend to your daily work activities? 1=yes (→ 6.1), 2=no (→ 6.1)																												
4.9	For how long were you completely unable to attend to your normal daily activities? (→ 4.10)	Months <input type="text"/> <input type="text"/> <input type="text"/> Weeks <input type="text"/> <input type="text"/> <input type="text"/> Days <input type="text"/> <input type="text"/> <input type="text"/>																											
4.10	For how long have you worked in a state of poor health? (→ 4.11)	Months <input type="text"/> <input type="text"/> <input type="text"/> Weeks <input type="text"/> <input type="text"/> <input type="text"/> Days <input type="text"/> <input type="text"/> <input type="text"/>																											
4.11	If these blocks [present 5 blocks] represent the work you normally did in a state of good health, can you pick the number that represents the amount of work you managed to do when you were ill? (Enter number of blocks picked) (→ 4.12)																												
	<table border="1"> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Illness did not permit me to work</td> <td></td> <td></td> <td></td> <td></td> <td>Illness did not affect my work</td> </tr> </table>	0	1	2	3	4	5	Illness did not permit me to work					Illness did not affect my work																
0	1	2	3	4	5																								
Illness did not permit me to work					Illness did not affect my work																								
4.12	During the time you were ill did anyone assist you with the daily activities you mentioned in QN 3.3? 1=yes (→ 4.13), 2=no (→ 6.1)																												
4.13	Who assisted you with your normal activities during the time you were ill? 1=other household members (→ 4.14), 2=relatives/friends (→ 4.16), 3=neighbours (→ 4.16), 4=hired someone (→ 4.15), 96=other (specify)(→ 4.16)	<table border="1"> <tr> <td>a.</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>b.</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>c.</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </table>	a.	<input type="text"/>	<input type="text"/>	b.	<input type="text"/>	<input type="text"/>	c.	<input type="text"/>	<input type="text"/>																		
a.	<input type="text"/>	<input type="text"/>																											
b.	<input type="text"/>	<input type="text"/>																											
c.	<input type="text"/>	<input type="text"/>																											
4.14	If the persons who assisted you are members of your household, please name them? [ENTER ID, FROM QN 2.1 IN HOUSEHOLD ROSTER] (→ 4.16)	<table border="1"> <tr> <td>1. Person 1</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>2. Person 2</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>3. Person 3</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>4. Person 4</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </table>	1. Person 1	<input type="text"/>	<input type="text"/>	2. Person 2	<input type="text"/>	<input type="text"/>	3. Person 3	<input type="text"/>	<input type="text"/>	4. Person 4	<input type="text"/>	<input type="text"/>															
1. Person 1	<input type="text"/>	<input type="text"/>																											
2. Person 2	<input type="text"/>	<input type="text"/>																											
3. Person 3	<input type="text"/>	<input type="text"/>																											
4. Person 4	<input type="text"/>	<input type="text"/>																											
4.15	If you hired someone to assist you during the period you were ill, how much did you pay them? (If payment was in kind ask for value, and only fill the applicable) (→ 4.16)	<table border="1"> <tr> <td>1. Daily</td> <td>¢</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>,000</td> </tr> <tr> <td>2. Weekly</td> <td>¢</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>,000</td> </tr> <tr> <td>3. Monthly</td> <td>¢</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>,000</td> </tr> </table>	1. Daily	¢	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	,000	2. Weekly	¢	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	,000	3. Monthly	¢	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	,000
1. Daily	¢	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	,000																					
2. Weekly	¢	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	,000																					
3. Monthly	¢	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	,000																					
4.16	For how long were you assisted with your work during the time you were ill? (→ 4.17)	Months <input type="text"/> <input type="text"/> <input type="text"/> Weeks <input type="text"/> <input type="text"/> <input type="text"/> Days <input type="text"/> <input type="text"/> <input type="text"/>																											

4.17	<p>If these blocks [present 5 blocks] represent the work that you normally do in a state of good health, can you pick the number that represents the amount of work done by the persons who assisted you? (Enter number of blocks picked) (→ 6.1)</p>						
		0	1	2	3	4	5
	<p>No one assisted me</p>					Assistance fully covered all my activities	
5. PRODUCTIVITY COSTS – WOMEN WITH RECENT BIRTHS							
5.1	<p>When did you deliver? [If woman cannot remember ask for baby card] (ddmmyyyy) (→ 5.2)</p>						
5.2	<p>Where did you deliver? 1=public hospital (→ 5.3); 2=mission hospital (→ 5.3); 3=private hospital (→ 5.3); 4=health centre (→ 5.3); 5=health post/clinic (→ 5.3); 6=maternity home (→ 5.3); 7=at home (→ 5.5); 8=TBA's compound/home (→ 5.5); 96=other (specify)</p>						
5.3	<p>If you delivered at a health facility please name it. [Coding manual, page 15] (→ 5.4)</p>						
5.4	<p>If you delivered at a health facility, was this where you first sought care after you went into labour? 1=yes; 2=no (was referred) (→ 5.6)</p>						
5.5	<p>If you did not deliver at a health facility, please give main reason why. 1=no money; 2=health facility too far; 3=no one to escort me; 4=no one to leave child(ren) with; 5=bad weather; 6=husband decided; 7=did not see the need; 8=poor quality of facility service; 9=it was at night; 10=unexpected delivery; 96=other (specify)(→ 5.6)</p>						
5.6	<p>Who attended to you while you delivered? 1=medical doctor; 2=facility midwife/nurse; 3=private midwife; 4=health (ward) assistant; 5=TBA; 6=mother-in-law/mother; 7=village health worker; 8=friend/neighbour; 96=other (specify)(→ 5.7)</p>						
5.7	<p>How did you deliver your baby? 1=unassisted; 2=assisted manually (by hand); 3=assisted with equipment (vacuum); 4=by operation (Caesarean section); 96=other (specify)(→ 5.8)</p>						
5.8	<p>A week after you delivered did you experience any health problem? 1=yes (→ 5.9); 2=no (→ 5.11)</p>						

Household Costs Household Costs Household Costs Household Costs Household Costs

5.9	What were the main symptoms of the health problem? 1=nausea and vomiting, 2=heartburn, 3=backache, 4=pain in pelvic area, 5=vaginal bleeding, 6=shortness of breath, 7=tiredness, 8=swollen legs, 9=raised blood pressure, 10=headache, 11=fever, 12=operation wound, 13=dizziness, 96=other(→ 5.10)	A.								
		B.								
		C.								
5.10	Do you think that the illness was related to your last pregnancy or child birth? 1=yes, 2=no (→ 5.11)									
5.11	A week after you delivered, did your baby experience any health problems? 1=yes (→ 5.12); 2=no (→ 5.13)									
5.12	What were the main symptoms of your baby's illness? 1=failure to feed; 2=breathlessness; 3=skin condition; 4=baby born prematurely; 5=coughing; 6=seizures; 7=rapid respiratory rate; 8=diarrhoea; 9=umbilical infection; 96=other; 99=not applicable (→ 5.13)	A.								
		B.								
		C.								
5.13	Since the time you delivered have you been able to <u>attend fully</u> to your normal daily activities (i.e. domestic work and/or income generating activities)? 1=yes (→ 5.15), 2=no (→ 5.14)									
5.14	For how long have you not been able to attend to your normal daily activities? (→ 5.15)	Months			Weeks			Days		
5.15	For how long did you work while either you or your baby were in a state of poor health? (→ 5.16)	Months			Weeks			Days		
5.16	If these blocks [present 5 blocks] represent the work that you normally do in a state of good health, can you pick the number that represent the <u>work you were able to do during the time you were ill?</u> (Enter number of blocks picked) (→ 5.17)									
		0	1	2	3	4	5			
		Illness did not permit me to work						Illness did not affect my work		
5.17	Did anyone assist you with your normal work activities during the time you or your baby were ill? 1=yes (→ 5.18), 2=no (→ 6.1)									
5.18	Who assisted you with your normal activities during the time you were ill? 1=other household member(s) (→ 5.19), 2=relative/friend (→ 5.21), 3=neighbours (→ 5.21), 4=hired someone (→ 5.20), 96=other (specify)(→ 5.21)	a.								
		b.								
		c.								

Household Costs Household Costs Household Costs Household Costs Household Costs

5.19	If the persons who assisted you were members of your household, please name them. (Enter ID, from Household Roster) (→ 5.21)	1. Person 1							
		2. Person 2							
		3. Person 3							
		4. Person 4							
5.20	If you hired someone to assist you during the period you were ill, how much did you pay them? (If payment was in kind ask for value and only fill the applicable) (→ 5.21)	1. Daily	¢					,000	
		2. Weekly	¢					,000	
		3. Monthly	¢					,000	
5.21	For how long were you assisted with your normal daily activities during the time you or your baby were ill? (→ 5.22)	Months			Weeks			Days	
5.22	If these blocks [present 5 blocks] represent the work that you normally do in a state of good health, can you pick the number that represents the amount of work done by the persons who assisted you? (Enter number of blocks picked) (→ 6.1)								
		0	1	2	3	4	5		
	No one assisted me						Assistance fully covered all my activities		
6.	HOUSEHOLD ECONOMIC ACTIVITIES								
6.1	What activities are members of your household involved in? 1=farming (→ 6A); 2=non-farming (→ 6B); 3=paid employment (→ 6C); 4=none of the above (→ Section 7);								

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

6A. HOUSEHOLD FARMING ACTIVITIES (continued)

We would like you to tell us about all field and garden crops that your household has grown in the past 12 months. Start with respondent.									
6.2	6.3	6.4		6.5	6.6	6.7	6.8	6.9	6.10
List all crops grown by your household. (→ 6.3) (Code a)	Who is responsible for this crop? (→ 6.4) Enter ID	How much area is sown/planted with this crop? (→ 6.5) Unit 1=Hectare 2=Acres 3=Poles 4=Ropes		Does the household own this land? 1=YES (→ 6.8) 2=NO (→ 6.6)	If no, how much was paid to rent it over the last year? ¢ (→ 6.7)	If sharecropping, what proportion of output goes to the landlord? % (→ 6.8)	How many household members worked on this crop? (State number) (→ 6.9)	Did [...] hire any non-family labour to grow this crop? 1=YES (→ 6.10) 2=NO (→ 6.12)	How many people were hired? (→ 6.11)
		No	Unit						

Code a: Crop

- | | | | | | |
|----------|-----------|--------------|-----------|-----------|-----------|
| Cocoa | 01 | Millet | 08 | Pineapple | 16 |
| Coffee | 02 | Sorghum | 09 | Other | 96 |
| Coconut | 03 | Maize | 10 | | |
| Oil Palm | 04 | Sweet potato | 11 | | |
| Plantain | 05 | Potato | 13 | | |
| Cassava | 06 | Tomato | 14 | | |



Groundnut **07** Vegetable **15****6A. HOUSEHOLD FARMING ACTIVITIES (continued)**

We would like you to tell us about all field and garden crops that your household has grown in the last year. Start with respondent.									
List crop code from 6.2	6.11	6.12			6.13			6.14	
	How much in total was paid for hired labour? (State amount) ¢ (→ 6.12)	How much fertilizer did you use for this crop? (→ 6.13)			Which other inputs did you use in producing this crop? (→ 6.14)			Quantity of total output. (→ 6.15)	
		A. Quantity	B. Quantity Code (Code e)	C. Type (Code c)	A. Quantity	B. Quantity Code (Code e)	C. Type of input (Code d)	A. State quantity (no)	B. Quantity code (Code e)

Code c: Fertilizers

NPK 15-15-15	01	Karate	01
NPK 23-15-5	02	Acellic	02
NPKMg 11-5-27-5	03	Dusban	03
Ammonia	04	Cymbush	04
Urea	05	Cymethoate	05
Lobi 44 (Urea)	06	Sumithion	06
Grofol (NPK)	07	Furadan	07
K Fol (Potash)	08	Diazinon	08
Wuxal	09	Biobit	09
Other	96	Dipel	10

Code d: Other inputs

Of-nak	11
Atrazine	12
Hynar X	13
Diuron	14
Gramoxone	15
Fusilade super	16
Roundup	17
Cocide	18
Champion	19
Topsin	20

Code e: Quantity Code

Bavistin	21	Pounds	01	Litre	11
Aliete	22	Kilogram	02	Gallon	12
Other	96	Ton	03	Beer bottle	13
Don't know	98	Minibag	04	Bunch	14
Not applicable	99	Maxibag	05	Margarine tin	15
		Basket	06	Other	96
		Bowl	07		
		American tin	08		
		Bundle	09		
		Barrel	10		

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

6B. FISHING & NON-FARM ENTERPRISES (continued)

We would like to ask you about income earning activities, such as fishing, fish processing, crafts, trading or other business, carried out by you or other members of your household. **Start with respondent.**

6.15	6.16	6.17	6.18	6.19	6.20	6.21
What business activities are members of your household involved in? (→ 6.16) (Business Code)	Which member of your household is responsible for this activity (→ 6.17) (State ID)	For how long has this activity been operating in the last year? (→ 6.18) (State Months)	How many other people work on this activity? (→ 6.19) (State number)	How many of these people are members of your h/hold (→ 6.20) (State number)	How much money has the household spent in the <u>last year</u> on items bought for this activity? (→ 6.21) (State amount) ¢	How many days per week do members of the household work on this activity? (aggregate) (→ 6.22) (State number)

Code a: Business Code

Construction (building, etc.)	01	Retail business	09
Carpentry	02	Mechanic (vehicle repair)	10
Metalwork (welding, etc.)	03	Fishing	11
Craft making	04	Fish processing	12
Tailoring/knitting	05	Communication centres	13
Vegetable/fruit vending	06	Services (tailoring, hairdressing, etc.)	14
Transport/vehicle hire	07	Other	96
Food trader	08		

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

6B. FISHING & NON-FARM ENTERPRISES (continued)

We would like to ask you about income earning activities, such as fishing, fish processing, crafts, trading or other business, carried out by you or other member of the household. **Start with respondent.**

List business activity code from 6.15	List person responsible	6.22	6.23				
		On average, how many hours per day does [...] work on this activity? (→ 6.23) Hrs	How much has [...] earned from this business activity in the last month. (→ 6.24)				
			A. In cash State amount ¢	B. Item given in kind	C. Number of items given in kind	D. Units of items given in kind (Code c)	E. If [...] sold the quantity they earned in kind, how much would they receive? ¢

Code c: Units

Pounds	01	American tin	08	Margarine tin	15
Kilogram	02	Bundle	09	Other	96
Ton	03	Barrel	10		
Minibag	04	Litre	11		
Maxibag	05	Gallon	12		
Basket	06	Beer bottle	13		
Bowl	07	Bunch	14		

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

6C. PAID EMPLOYMENT FOR HOUSEHOLD MEMBERS (continued)

We would like you to tell us about the jobs (not business activities) that household members have had over the past year? Start with respondent.								
6.24	6.25	6.26	6.27		6.28		6.29	6.30
Which members of your household worked in wage employment last year? State ID (→ 6.25)	Is [...]’s employment in the formal or informal sector? 1=formal 2=informal (→ 6.26)	Is [...]’s employment temporary or permanent? 1=permanent 2=temporary (→ 6.27)	If temporary, how long has [...] been in this job? (→ 6.28)		If [...] duration is less than 1 year give start time (→ 6.29)		What kind of work does [...] do? (Work Code) (→ 6.30)	On an average week, how many days does [...] work? (State number of days) (→ 6.31)
			Months	Years	Month	Year		

Code a: Work Code

- | | | | |
|---|-----------|---------------------------------------|-----------|
| Technical (electrician, mechanic, etc.) | 01 | Handlers | 08 |
| Administrative/managerial | 02 | Labourers | 09 |
| Sales (retail, vending, etc.) | 03 | Security (police, guard, soldier) | 10 |
| Clerical (administrative support) | 04 | Civil Service | 11 |
| Craft | 05 | Teacher | 12 |
| Machine operators | 06 | Medical (nurse, lab technician, etc.) | 13 |
| Transportation | 07 | Other | 96 |

6C. PAID EMPLOYMENT FOR HOUSEHOLD MEMBERS

We would like you to tell us about the jobs (not business activities) that household members have had over the past year. Start with respondent.							
Which members of your household have had wage employment in the last year? State ID	6.31	6.32		6.33			
	For how long does [...] work on a typical day?	How much did [...] earn from this job? (→ 6.33)		If [...]’s payment was in kind, give: (→ 7.1)			
	(State number of hours) (→ 6.32)	A. State amount 98=don’t know ¢	B. Frequency of payment. 1=daily 2=weekly 3=monthly 4=other	A. Quantity (State number)	B. State Items	C. Quantity Code (where applicable) (Code b)	D. How much cash would you receive if you sold the [...] today ¢

Code b: Quantity Code

Pounds	01	American tin	08	Margarine tin	15
Kilogram	02	Bundle	09	Other	96
Ton	03	Barrel	10		
Minibag	04	Litre	11		
Maxibag	05	Gallon	12		
Basket	06	Beer bottle	13		

Household Costs	Household Costs	Household Costs	Household Costs	Household Costs
-----------------	-----------------	-----------------	-----------------	-----------------

Bowl

07 Bunch

14

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

7. HOUSING AND ASSET OWNERSHIP							
7.1	Does your <u>household</u> own the house that you are staying in? 1=yes, 2=no (→ 7.2)						
7.2	How many rooms does the house have (exclude bathroom or kitchen) (→ 7.3)						
7.3	What is the <u>main</u> source of drinking water for members of your household? 1= piped water, 2=open well, 3=covered well/borehole, 4=surface water, 5=rainwater, 6=tanker/truck, 7=bottled water, 8=sachet water, 96=other (specify) (→ 7.4)						
7.4	What type of fuel does your household mainly use for cooking? 1=electricity, 2=LPG/natural gas, 3=biogas, 4=kerosene, 5=charcoal, 6=firewood/straw, 7=dung, 96=other (specify) (→ 7.5)						
7.5	What type of toilet do you use? 1=flush toilet, 2=pit latrine, 3=pan/bucket 4=KVIP 5=no toilet (bush/beach) 96=other (specify) (→ 7.7)						
7.6	What material is used to build the walls of your house? 1=wood/bamboo, 2=mud bricks, 3=concrete bricks, 4=stone, 5=metal sheets, 96=other (specify) (→ 7.8)						
7.7	What main material is used to construct the roof of your house? 1=wood/bamboo, 2=mud bricks, 3=concrete, 4=brick tiles, 5=metal sheet, 6=thatch, 7=asbestos sheets (slate), 96=other (specify) (→ 7.8)						
7.8	What is the main material used for the floor of your house? 1=earth/sand/mud, 2=mud and dung, 3=wood planks, 4=polished wood, 5=ceramic tile, 6=cement, 96=other (specify) (→ 7.9)						
7.9	What is the main source of lighting for the household? 1=electricity, 2=lantern, 3=candle, 4=LPG/natural gas, 5=torch light, 6=bobo, 96=other (specify) (→ 7.10)						
7.10	Does your household own any of the following: 1=yes, 2=no (→ Section 8)			b.	Radio		
				c.	Television		
				d.	Video deck		
				e.	Telephone		
				f.	Refrigerator		

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

8. HOUSEHOLD EXPENDITURE (MONTHLY AVERAGE)

We would like you to tell us how much you spent last month on the following:

EXPENDITURE ITEM	AMOUNT SPENT ¢
8.1 Food expenditure (actual)	
8.2 Food expenditure (imputed – consumption from own farm)	
8.3 Expenditure on housing (actual and imputed)	
8.4 Non-food expenditure	
8.4.1 Education	
8.4.2 Health	
8.4.3 Water	
8.4.4 Lighting	
8.4.5 Garbage/refuse collection	
8.4.6 Toilet facility	
8.4.7 Transport	
8.4.8 Toiletries (soap, toilet paper, etc.)	
8.4.8 Funeral donations/gifts	
8.4.9 Other non-food expenditure – payments (as wages, etc.)	
8.4.9 Other non-food expenditure (specify) 1.....	
8.4.9 Other non-food expenditure (specify) 2.....	
8.5 Remittances sent out	
8.6 Total	

THANK YOU!!!

Time interview ended																					am	pm

Interviewers' name

Supervisor's name

3. Interviewers' Manual for the Productivity Costs Questionnaire (example from Ghana)

1. INTRODUCTION

BACKGROUND

The Impact (Initiative for Maternal Mortality Programme Assessment) project is a global research initiative whose ultimate aim is to improve maternal health and survival in developing countries by providing rigorous evidence on the effectiveness and cost-effectiveness of safe motherhood strategies. The programme is organized into programmes of work, one of which relates to economic outcomes (Economic Outcomes Work Programme, EOWP). One of Impact's concerns is the identification and measurement of economic outcomes of safe motherhood strategies. Impact is now undertaking research in Ghana to provide information on how best to measure losses in production arising from maternal ill health.

OBJECTIVE OF SURVEY

The following are the objectives of the survey:

1. To adapt methods that have been used in typical industrialized country contexts to measure and value production losses due to maternal ill health in Ghana.
2. To identify strategies that households use to minimize production losses arising from maternal ill health.
3. To estimate productivity costs due to maternal ill health using the household production function approach, which indirectly allows for coping strategies that households use to minimize production losses due to ill health.
4. To compare productivity cost estimates derived from methods currently tested in developed countries with estimates derived from the household production function approach.
5. To assess the distribution of productivity costs due to maternal ill health across populations of population sub-groups defined socially, economically and geographically.

In order to achieve the above objectives, data on the following needs to be collected:

- households' demographic characteristics;
- women's daily work activities;
- women's time lost due to ill health during pregnancy;
- women's time lost due to ill health in the puerperium stage;
- households' economic activities;
- households' asset ownership; and
- households' expenditure.

1. YOUR ROLE AS INTERVIEWER

As an interviewer you contribute immensely to the above. The quality of your work will determine the quality of the data collected, which will guide this important work. It is therefore important that you work closely with your supervisors in order to ensure that our work will be of best possible quality.

We encourage you to work closely with your supervisors, informing them of any problems that you encounter during the fieldwork exercise and to suggest ways of how we can improve the work. Additionally, you are encouraged to closely follow all instructions contained in this manual.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

CHECKING COMPLETED QUESTIONNAIRES

When you have completed each interview, you must check to ensure that all relevant sections of the questionnaire are filled correctly and legibly before leaving the household.

Never make any changes to answers given to any question before asking respondents the same question again.

At the end of each day, you should submit all completed questionnaires to your supervisor.

THE SUPERVISOR

The role of the supervisor will be as follows:

- To examine in detail all questionnaires completed by you to ensure that each interview was conducted properly.
- To advise you on changes you need to make in order to improve the quality of your work.

If not satisfied that an interview was correctly conducted, the supervisor may ask you to do the interview again. We should all endeavour to prevent this from happening.

2. INTERVIEWING PROCEDURE

CONTACTING RESPONDENTS

It is a requirement that we should first inform all respondents identified for the survey about the purpose of our work. After the respondents have understood what we are doing we should ask if they are happy to participate in the survey. In order to insure that this is done correctly an 'INFORMED CONSENT FORM' has been prepared and attached to each questionnaire. This form must be completed before any questionnaire is administered.

COMPLETING THE 'INFORMED CONSENT FORM'

The following are the steps you should follow when completing the 'INFORMED CONSENT FORM':

- A. Enter the Region Code, which will be 11 for Central Region.
- B. Enter District Code, see [Coding manual](#)
- C. Enter the Community Code, see [Coding manual](#)
- D. Enter date in eight digit format (ddmmyyyy)
- E. Read out Section E to inform the respondent about the aim of the survey as well as to ask them if they are willing to be interviewed.
- F. If the respondent is willing to be interviewed take their name in the space provided. Additionally, ask them to sign the 'INFORMED CONSENT FORM'.

You should only proceed to administer the questionnaire after you have completed the 'INFORMED CONSENT FORM'.

THE INTERVIEW

Because respondents may not be aware of everything that happened during the time they were ill or may not have information about other issues we are asking about, you should try by all means to conduct the interview in the presence of their spouse or other key adult members of the household.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

It is important that you closely follow the instructions contained in this manual and you must interpret questions as outlined. All relevant parts of the questionnaire must be filled in during the interview (**NEVER SHOULD ANY INFORMATION BE RECORDED ANYWHERE OTHER THAN ON THE QUESTIONNAIRE**).

It is important that you maintain the tempo of the interview and avoid dwelling on issues that are not in the questionnaire. Should you feel the respondent is drifting away from the interview, you should politely try to draw them to the questions that you are asking.

At the end of the interview and after you have checked that all sections of the questionnaire have been completed, you must thank all members of the household who took part in the interview.

CONDUCT OF THE INTERVIEW

It is important to observe the following:

- Be courteous towards everyone (respondent and her household and other members of community). Their attitude towards the survey will be influenced enormously by your behaviour, therefore, do not disturb or upset anyone by your behaviour.
- You must exercise patience and tact during interviews. At all times avoid being antagonistic to the respondent or any members of her household.

3. FILLING OUT THE QUESTIONNAIRE

Most questions in the questionnaire ask for numeric responses (e.g. work days lost due to ill health, amount of hours spent on daily work activities, etc.). Where questions do not ask for numeric answers, all responses have been assigned numeric codes.

QUESTIONS WITH NUMERIC RESPONSES

Answers to questions with numeric responses must be written in **figures** (that is numerals not words) in the spaces provided in the questionnaire.

Example 1: You ask a respondent how long she was not able to attend to her normal activities due to illness. If they reply 1 week and 2 days, you must fill in the questionnaire as follows:

4.8	For how long were you not able to attend to your normal daily activities?	Months	0	0	Weeks	0	1	Days	0	2

Example 2: You ask a respondent how much money they paid the person who assisted with their daily activities when they were ill. If they paid ₡20,000 per day, you must fill in the questionnaire as follows:

4.14	If you hired someone to assist you during the period you were ill, how much did you pay for it? (If payment was in kind ask for value, and only fill the applicable)	1. Daily	₡			2	0	,000
		2. Weekly	₡					,000
		3. Monthly	₡					,000

You must write down all monetary responses in thousands. If ₡20,000 was paid per day, you must enter **2 0** as shown in the example above.

Household Costs	Household Costs	Household Costs	Household Costs	Household Costs
-----------------	-----------------	-----------------	-----------------	-----------------

QUESTIONS WITH PRE-CODED ANSWERS

Most questions with pre-coded answers have a single (one) response. Only a few questions have multiple (more than one) responses.

Example 3: You ask a respondent who assisted them with their daily activities during the time they were ill. If they answer that they were assisted by a relative or friend, you must complete the questionnaire as follows:

4.12	Who assisted you with your normal activities during the time you were ill? 1=other household members (→ 4.13), 2=relative/friend (→ 4.13), 3=neighbours (→ 4.13), 4=hired someone (→ 4.14), 96=other (specify) (→ 4.13)	0	2

SECTION 2: HOUSEHOLD ROSTER (ALL RESPONDENTS)

PURPOSE

The time lost by households due to maternal ill health is a result of multitudes of behavioural responses that are often influenced by households’ demographic and socio-economic background. The purpose of the Household Roster is thus to collect household demographic data (age, sex and marital status) and other household socio-economic characteristics (economic activities and educational attainment), which can be used to explain productivity cost outcomes.

RESPONDENT

The respondents for the Household Roster are women who have been identified for the survey. However, if other members of the household are present, you may ask them to help by providing details for questions concerning them.

DEFINITIONS

HOUSEHOLD

This study assumes a standard operational definition of a household, that is, a group of people who have usually slept at the same dwelling and taken their meals together for at least nine of the 12 months leading to the interview. This may include a man, his wife, children and other relatives (father/mother, nephew etc).

Persons who have been away for more than three months in the period leading to the survey should not be included as members of the household except if they are newly born children or students living at school/college.

TENANTS

Please note that tenants or other people staying on the same homestead as the respondent but who do not sleep in same dwellings or eat together with her must not be included as household members.

COMPLETING THE HOUSEHOLD ROSTER

- Starting with the respondent, fill in the names of all members of the household in the column labelled 'Name'.
- Then for each of the named members of the household, ask questions 2.2 through to 2.7. Use codes at the bottom of the page for all the questions with non-numeric responses.

Question 2.1: The codes are already on the Household Roster; you do not need to do anything.

Question 2.2: Ask for the age of each member of the household at last their birthday.

Question 2.3: Ask how each of the named household members is related to the woman respondent.

Question 2.4: The main economic activity is the most important source of income or livelihood strategy for each of the household members. If any member of the household is not economically active for any reason, enter the appropriate code.

Question 2.5: Ask whether each household member is male or female.

Question 2.6: Ask for the highest level of education attained by each member of the household. You must classify the different levels of education as follows:

None	NONE, pre-school, kindergarten
Primary	P1, P2, P3, P4, P5, P6
Middle/JSS	M1, M2, M3, M4
Secondary	S1, S2, S3, S4, S5
Post secondary	PS1, PS2, PS3, A1, A2
Tertiary	Polytechnic, teacher training, university education

Question 2.7: Ask for the marital status of all members of the household above 15 years of age.

Question 2.8: Ask if the key decision-maker in the household resides with the woman respondent.

Question 2.9: If from 2.8 the key decision-maker in the household resides with the woman respondent, ask for their name. From the Household Roster (Question 2.1), identify his/her ID number and write it in the space provided.

4. SECTION 3: WOMAN'S WORK ACTIVITY (ALL RESPONDENTS)

Question 3.1: Ask the woman what time she normally wakes up on a typical day and enter the time in the space provided.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

- Question 3.2:** Ask the woman what time she normally goes to sleep on a typical day and enter the time in the space provided.
- Question 3.3:** First ask the women to list all activities they normally do from the time they wake up to the time they go to sleep (codes for work activities are provided at the bottom of the page). For each activity listed ask the respondent how much time she normally takes to complete it – enter hours and minutes in separate columns.
- Question 3.4:** Write down the current status of the respondent, i.e., whether she is pregnant or whether she has delivered at least three months prior to the survey. Depending on respondent's status, you may move to either Section 4 or Section 5.

5. SECTION 4: PRODUCTIVITY COSTS – PREGNANT WOMEN

- Question 4.1:** Ask the woman for the month and year when she first realized that she was pregnant. Enter the month and year in the space provided.
- Question 4.2:** Ask the woman when she expects to deliver.
- Question 4.3:** Ask the woman if she has ever been ill since the time she realized she was pregnant.
- Question 4.4:** If the woman has been ill, ask her how many episodes of illness she has experienced.
- Question 4.5:** Ask the woman for the main symptoms of the last condition. It is important to emphasize that you are only referring to the last episode of illness.
- Question 4.6:** Ask the woman if she thinks the illness was a result of her pregnancy.
- Question 4.7:** Ask the woman if she was able to attend to her normal activities during the time she was ill. Normal activities refer to domestic work and income generating activities.
- Question 4.8:** Ask the woman if the pregnancy has affected her ability to attend to her daily work activities.
- Question 4.9:** Ask the woman how long she was completely unable to attend to her daily activities.
- Question 4.10:** If the woman had to work in a state of poor health, ask how long she did so.
- Question 4.11:** Present woman with 5 blocks of wood and ask her to assume that they represent the amount of work she normally does in a state of good health. Ask her to pick the number of blocks that represents the amount of work that she managed to do during the time she worked in a state of poor health. Apply the visual analogue scale to make the question clearer.
- Question 4.12:** Ask the woman if anyone assisted with her daily activities during the time that she was ill.
- Question 4.13:** If the respondent was assisted during the time she was ill, ask who provided her with assistance.
- Question 4.14:** If person(s) who assisted the woman are members of her household, ask for their name(s). Look up ID codes from the Household Roster and enter code in the space provided.
- Question 4.15:** If the woman hired persons to assist her while she was ill ask how much she paid them. From the spaces provided enter the amount paid.
- Question 4.16:** Ask the woman for how long she received assistance with her work during the time she was as unable to work due to conditions related to her pregnancy.
- Question 4.17:** Present the woman with 5 blocks and ask her to assume that the blocks represent the amount of work she would normally do in a state of good health. Ask her to pick the number of blocks that represent the amount of work that was done by the persons who assisted her when she was ill.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

6. SECTION 5: PRODUCTIVITY COSTS – WOMEN WHO DELIVERED

- Question 5.1:** Ask the woman when they delivered (date, month and year). If the woman cannot remember ask for the baby's birth records.
- Question 5.2:** Ask the woman which type of facility she used for her delivery.
- Question 5.3:** If the woman delivered at a health facility, ask her to name it. In the [Coding manual](#) you will find codes of all health facilities in Central Region that offer delivery services. In the space provided, write down the code of the facility named.
- Question 5.4:** If the woman delivered at a health facility (or institution), ask if this is where she first sought delivery care when she went into labour.
- Question 5.5:** If the woman did not deliver at a health facility (or institution), ask for the main reason.
- Question 5.6:** Ask the woman who attended to her while she delivered.
- Question 5.7:** Ask the woman how she delivered her baby: (1) whether she did not require assistance, (2) whether someone assisted manually to deliver the child, (3) whether any equipment was used to deliver the child or (4) whether she had a Caesarean section.
- Question 5.8:** Ask the woman if she experienced any health problems at least a week after she delivered.
- Question 5.9:** If from 5.8 the woman experienced any health problems ask her the main symptoms of the illness.
- Question 5.10:** Ask the woman if she thinks that the illness was a result of her recent pregnancy or delivery.
- Question 5.11:** Ask the woman if at least a week after she delivered, her baby experienced any health problems.
- Question 5.12:** If from 5.10 the baby experienced health problems ask her the main symptoms.
- Question 5.13:** Ask the woman if she has been able to attend fully to her main activities since the time she delivered.
- Question 5.14:** If at any time the woman could not attend to her normal daily activities during the time she was ill, ask for how long she was unable to do so.
- Question 5.15:** If the woman was able to attend to her normal daily activities during the time she or her baby was ill, ask her how long she did so.
- Question 5.16:** Present the woman with 5 blocks of wood and ask her to assume that these represent the amount of work she would normally do in a state of poor health. Then ask her to pick the number of blocks that represent amount of work that her managed to do during the time she was ill. Also use the visual analogue scale to make the question clearer.
- Question 5.17:** Ask the woman if anyone assisted her during the time that she was ill.
- Question 5.18:** Ask for the person(s) who assisted the woman with her normal activities during the time that she was ill.
- Question 5.19:** If person(s) who assisted the woman are members of her household, ask for their name(s). Look up ID codes from the Household Roster and enter them in the space provided.
- Question 5.20:** If the woman hired person(s) to assist her when she was ill, ask how much she paid. From the spaces provided enter the amount paid.
- Question 5.21:** Ask the woman how long she received assistance with her work during the time she was ill.
- Question 5.22:** Present the woman with 5 blocks. Ask her to assume that the blocks represent the amount of work she would normally do in a state of good health. Then ask her to pick the number of blocks that represent the amount of work that was done by the persons who assisted her.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

7. SECTION 6: HOUSEHOLD ECONOMIC ACTIVITIES

Question 6.1: Ask the woman to state the economic activities that members of her household are engaged in.

The administration of Questions 6.2 to 6.33 requires you to be very careful. It is really essential that you closely follow the following instructions. You may have to consult other members of the household to complete this section.

SECTION 6A: HOUSEHOLD FARMING ACTIVITIES

Question 6.2: Ask the woman to list all crops grown by her household. Start with the crops which the woman is responsible for. In the column provided only write down the corresponding codes (see bottom of the table), then for each crop proceed to ask questions 6.3 through to 6.14.

Question 6.3: Ask the respondent who in her household is responsible for each of the listed crops. From the Household Roster enter the ID number for the members responsible against each of the crops. Immediately proceed to the next page and enter the ID codes in the first column following the same order as in this question.

Question 6.4: Ask the respondent to give the amount of land that is planted with each of the crops listed.

Question 6.5: Ask the respondent if the household owns the land on which each of the crops is being grown.

Question 6.6: If the household is renting the land, ask how much money is paid each year for the land on which each of the crops is grown.

Question 6.7: If household is on a sharecropping arrangement, ask what share of the output goes to the landlord as rent payment.

Question 6.8: Ask the woman how many other members of her household are involved in growing each of the crops.

Question 6.9: Ask the woman if any non-family labour was hired for the production of each of the crops.

Question 6.10: If some labour was hired, ask the respondent how many people were hired for each of the crops.

Question 6.11: If some labour was hired, ask the respondent how much in total was paid for the labour hired for each of the crops.

Question 6.12: Ask how much fertilizer was used for each of the crops. First ask for the quantity in kilograms (kg) and enter in the column labelled A. Then, ask for the quantity code (kg, maxibag, etc.) in the column labelled B. In column labelled C ask for type of fertilizer. All codes are at the bottom of the page.

Question 6.13: Ask which other inputs (not labour or fertilizer) were used in growing each of the crops. Enter quantity of input in the column labelled A. Enter the quantity code in the column labelled B, and the type of input in column labelled B. All codes are provided at the bottom of the table.

Question 6.14: For each of the crops ask for the total output harvested. Enter quantity in column labelled A. Enter code for quantity in column labelled B.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

SECTION 6B: FISHING AND NON-FARM ENTERPRISES

- Question 6.15:** Ask the respondent to list all small enterprises (e.g. fishing, fish processing, craft work, etc.) that members of her household are involved in. Starting with activities that the woman is responsible for, list all activities in the column labelled 6.15. Then for each activity proceed to ask questions 6.16 through to 6.23.
- Question 6.16:** Ask the respondent to name members of her household who are responsible for each of the activities. From the Household Roster enter the ID number for the members responsible against each of the crops. Immediately proceed to the next page and enter the ID codes in the first column, following the same order as in this question.
- Question 6.17:** Ask how many months each of the activities have been operating in the last year.
- Question 6.18:** Ask how many other people work on each of the activities.
- Question 6.19:** Of the people working on each of the activities, ask how many are members of the woman's household.
- Question 6.20:** Ask how much money the household has invested on each of the activities in the last year.
- Question 6.21:** Ask the woman how many days a week members of her household work on this activity.
- Question 6.22:** Ask the woman the average number of hours that members of her household spend on each of the activities each day.
- Question 6.23:** Ask respondent how much her household has earned from each of the activities in the last month. Enter amount earned in cash in the column labelled A. Enter type of items received in kind in column labelled B. Enter the number of item(s) received in kind in column labelled C. Enter the unit for items received in kind in column labelled D (see the bottom of the page for codes). In Column labelled D ask the respondent how much she would earn if she sold the item(s) received in kind.

SECTION 6C: HOUSEHOLD FARMING ACTIVITIES

- Question 6.24:** Ask the respondent to list all members of her household who have worked in wage employment in the last year. From the Household Roster enter the ID numbers of the members starting with the woman. Immediately proceed to the next page and enter the ID codes in the first column following the same order as in this question.
- Question 6.25:** Ask if each of the household members with wage employment worked in the formal or informal sector. To determine whether people work in the formal or informal sector, ask if they make tax or pension contributions from their earnings. If they make tax or pension contributions from their earnings record it as formal, otherwise enter it as informal.
- Question 6.26:** Ask if each of the household members with wage employment have a permanent or temporary contract. To determine whether it is permanent or temporary employment, ask respondent if each of the members can continue to work on the job for as long as they want. If yes, classify employment as permanent, otherwise classify as temporary.
- Question 6.27:** If a household member is in temporary employment, ask for how long he/she has been in the same job. Enter the months in column labelled A, and enter the years in column labelled B.
- Question 6.28:** If from question 6.27 the duration of employment is less than one year, ask for when the respective members of the household started working. Enter month in column labelled A and year in column labelled B.
- Question 6.29:** Ask what type of work each of the listed members do. Use codes provided at the bottom of the page.
- Question 6.30:** Ask how many days each of the household members work on an average week.

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

- Question 6.31:** Ask how many hours each of the listed household members work on a typical day.
- Question 6.32:** Ask how much each of the listed members earned from their employment. Enter amount earned in column labelled A, and frequency of payment in column labelled B. Use the codes provided for frequency of payment.
- Question 6.33:** If persons working received payment in kind ask the quantity received and enter it in column labelled A. Ask respondent to state the item earned and write it in column labelled B. Ask respondent for quantity code and enter it in the column labelled C (use quantity codes at the bottom of the page). Lastly, ask respondent how much she would receive if she sold the items received in kind and enter amount in column labelled D.

8. SECTION 7: HOUSEHOLD ASSET OWNERSHIP

- Question 7.1:** Ask the woman if any member of her household owns the house they are staying in.
- Question 7.2:** Ask the respondent how many rooms her household have for sleeping.
- Question 7.3:** Ask the respondent what the main source of drinking water is for members of her household.
- Question 7.4:** Ask the respondent what the main type of fuel used by her household for cooking is.
- Question 7.5:** Ask the respondent what type of toilet is used by members of her household.
- Question 7.6:** Ask the respondent what material is used to build the walls of her house.
- Question 7.7:** Ask the respondent what material is used to build the roof of her house.
- Question 7.8:** Ask the respondent what material is used for the floor of her house.
- Question 7.9:** Ask the woman if any member of her household owns any of the assets listed.

9. SECTION 8: HOUSEHOLD EXPENDITURE

- Question 8.1:** Ask the respondent how much her household has spent on the items listed in the last month.

4. Coding Manual (example from Ghana)

District Code (DD)

<i>District</i>	<i>Code</i>
Awutu-Efutu Senya	10
Mfantseman	20
Twifo Hemang Lower Denkyira	30

Sub-district Code (CC)

<i>Community</i>	<i>Code</i>
Awutu-Efutu Senya	
Winneba	11
Awutu – Breku	12
Awutu	13
Bontrase	14
Bawjiase	15
Senya Breku	16
Kasoa	17
Mfantseman	
Saltpond	21
Mankessim	22
Abeadze kyeakor	23
Essuahyia	24
Otuam	25
Dominase	26
Anomabu	27
Biriwa	28
Nanbeng	29
Twifo Hemang Lower Denkyira	
Twifu Praso	31
Twifo Hemang	32
Twifo Mokwa	33
Jukwa	34
Frami	35

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

Health Facility Code

Health Facility	Code
Awutu Efutu Senya	
District hospital	111
Otoo Memorial Hospital	112
Bethel Clinic & Maternity Home	113
Margo Maternity Home	114
Awutu Health Centre	121
Christy Maternity Home	131
Bontrase Health Centre	141
Adom Arakwa Maternity Home	151
Fausty's Maternity Home	152
Bawjiase Health Centre	153
Senya Breku Health Center	161
Central Kasoa Clinic	171
Jarzza Clinic	172
St. Jude Medical Centre	173
Mercy Maternity Home	174
Holy Family Maternity Home	175
Connie's Maternity	176
Justab Clinic and Maternity	177
Kasoa Health Centre	178
Mfantseman	
Government hospital	211
Fynba Hospital	221
Prince Charles Hospital	222
St. Anthony Maternity Home	223
El-Shaddai Mat. Home	231
Essuehyia Health Centre	241
Otuam Health Centre	251
Dominase Health Centre	261
Anomabu Health Centre	271
Biriwa Community Clinic	281
Ekumf Nanabeng CHPS zone	291
Twifo Hemang Lower Denkyira	
Twifo Praso Hospital	311
St. Florence Mem. Clinic/ Maternity Home	312
Twifo Hemang Health Centre	321
T/Mokwa Health Centre	331
The Church of Pentecost Comm Clinic	332
Jukwa Comm. Clinic	341
Frami Clinic	351

Household Costs

Household Costs

Household Costs

Household Costs

Household Costs

REFERENCES

Brouwer WBF, Koopmanschap MA and Rutten FFH (1999) Productivity losses without absence: measurement validation and empirical evidence, *Health Policy*, 48, pp.13–27.

Chikwama C, Asante FA, Daniels A and Newlands D (2006) *Assessment of Methods for Measuring and Valuing Productivity Costs of Maternal Ill Health in Ghana*, Final Report, Impact, University of Aberdeen.

Mukuria C and Newlands D (2005) *A Review of the Productivity Costs of Maternal Ill Health in Developing Countries*, Impact, University of Aberdeen.

Pritchard C and Sculpher M (2000) *Productivity Costs: Principles and Practice in Economic Evaluation*, London: Office of Health Economics.

Russell S (2004) The economic burden of illness for households in developing countries, *American Journal of Tropical Medicine and Hygiene*, 7, Supplement 2, pp. 147–55.

Sauerborn R, Adams A and Hien M (1996) Household strategies to cope with the economic costs of illness, *Social Science and Medicine*, 43 (3), pp. 291–301.