



A guide and tools for  
maternal mortality programme  
assessment

**MODULE 4, Tool 5**

# Health Worker Incentives Survey (HWIS)

**Version 2.0**

## List of Acronyms

Askes	An Indonesian Civil Servant Health Insurance plan
CDC	Centers for Disease Control and Prevention
CHPS	Community-based Health Planning and Services
DHS	Demographic and Health Survey
Epi Info	epidemiology data entry and analysis software
HWIS	Health Worker Incentives Survey
MCH	Maternal Child Health
PKPS-BBM	Compensation Program for Oil Fuel Subsidy Reduce (a program funded by the Asian Development Bank)
PNS	A female public servant in Indonesia
PTT	A type of midwife contract which does not require district funding
SPSS	Statistical Package for the Social Sciences
TBA	traditional birth attendant
WHO	World Health Organization

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## INTRODUCTION

One of the most important components of maternal health services is adequate, skilled human resources (Campbell and Graham, 2006; WHO, 2006). Paying and motivating this key resource is just as important as ensuring that enough workers are in place to provide the service. At the same time, health financing policy implementation especially in low-income countries requires hard decisions about priorities for channelling limited resources, and the use of staff incentives may come into competition with other claims for resource prioritization (Ensor and Ronoh, 2005). It is important, therefore, to be able to produce evidence for the desirability and expected efficacy of offering financial incentives to staff.

A methodology to assess the incentives to deliver maternal health services was developed out of three Impact evaluations of maternal health care interventions in Ghana, Indonesia and Burkina Faso. Although in each of the initial Impact evaluations (see Module 2 and Module 3 for more information) the effect on human resources was considered important, the initial development of this tool was undertaken during a project in Cambodia which examined the restructuring of the medical workforce in a context of very low public spending on wages. A key question in that study was to determine how great a financial incentive is required to ensure that public sector health workers remain in their posts rather than spending part of their working hours in private practice, leaving the public sector entirely, or engaging other activities to boost their income – alternative opportunities that often motivate public health workers in many, if not most, low- and middle-income countries.

Impact's experience showed also that financial incentives are particularly useful when scaling up a public health policy intervention, when there is a need to attract skilled staff to less popular areas of work (for instance in remoter locations) in order to be able to implement the policy comprehensively and effectively.

### 4(5).1 What is a HWIS?

A Health Worker Incentives Survey (HWIS) is a tool designed to determine the impact of a public health intervention on health workers, in terms of any changes to their income, workload, working conditions, motivation, and/or their willingness to change the terms of their work. It consists of a structured questionnaire administered by a researcher through interviews. The questionnaire focuses on three main areas:

1. Current levels of income earned by health workers conducting delivery;
2. Work practices, including shares of time spent by the worker in the public and private sectors and the cost of increasing the proportion of time spent on public activities;
3. Willingness to work in unpopular areas and the cost of increasing coverage in these areas.

The survey instrument, which is presented in section 4(5).7, is divided into six main modules:

- Module 1:** Personal characteristics and household economy. Questions in this module elicit general information on the characteristics of health workers and their households, including gender, age, size of household, dependants, household income, and assets.
- Module 2:** Current employment and workload – characteristics and practice of main (public sector) employment including qualifications, years of work, regular workload (numbers of patients and hours of work), training.
- Module 3:** Public service/main income – details of income earned from government job or main job as an employee if not employed in the government sector. Includes income from all sources including main salary and allowances, per diems and gifts.
- Module 4:** Private/additional income – income from sources other than the government or the main employment, including private clinical practice where applicable.

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**Module 5:** Motivating and demotivating factors – availability of resources and perceptions of health workers, including their reasons for accepting their job and for remaining in the public sector (e.g. provision of pensions and other benefits).

**Module 6:** Recruitment, retention, relocation and contract issues – an examination of workers' willingness to accept new contract terms based on a series of scenarios: (1) exclusive public sector work; (2) a guaranteed number of hours of work in the public sector; (3) relocation to another town or village; and (4) relocation to a more remote workplace.

The HWIS is not so much a tool for assessing function as a method that can be used to build up a context-specific tool. A technical paper describing Impact's experience of using HWIS in the context of the evaluation question in Ghana is included in the toolkit at the end of this module. This document presents the use of a health systems approach through which the implementation of a health financing policy change can be investigated as part of an evaluation.

## 4(5).2 Why use a HWIS?

Incentives for health workers are crucial to the delivery of effective, sustainable and accessible maternal health programmes. If incentives are insufficient, workers will react by leaving their posts or attempting to earn additional income from private practice or other sources. These reactions could seriously affect the overall productivity of the programme or the objectives of equitable access if private payments are required to ensure effective service.

Health worker incentive surveys can offer clues to the likelihood of being able to obtain and retain staff – and especially more experienced staff – by eliciting staff motivations for entering, and staying in, their current jobs. Incentive surveys can also help to shed light on whether, and by what means, staff can be attracted into new contracts – especially in less popular work areas or geographical locations – resulting from efforts to scale up or intensify policy implementation.

In financial terms, incentive surveys make it possible to gauge the size and scope of the incentives that might be necessary in specific situations. Careful tailoring of questions is necessary for this purpose (see [Step 3](#)).

## 4(5).3 Limitations of HWIS

Developing generic tools to evaluate aspects of health system functioning can only ever be partially successful. There is no such thing as a generic health system and all tools must be adapted to the system context. While this is true to some extent of any questionnaire-based method, health system functioning is so specific that almost all questions must be built from scratch. Nevertheless, while systems are specific, aspects of those systems that contribute to poor or good functionality can be described as generic. Incentives are a generic feature of all systems, and have the potential to make or break a system.

Impact's experience of using health worker incentive surveys in its three focus countries threw up a number of constraints that might be expected to occur in other country contexts. These include:

- Obtaining accurate information on the potential sample (the number of relevant staff in each area).
- Locating the sample, especially where many health workers are operating informally or even on the margins of legality, for example traditional birth attendants (TBAs).
- Respondents' inability or unwillingness to answer questions about household income. Since many of the respondents are women they may not have control or knowledge of the family finances if there is a male head of household. There is also a tendency to under-report income from private practice and informal sources.

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- Biases of various kinds, including under-reporting of (private) income, exaggeration of (public) workload, and simple inaccuracy of recall, especially when dealing with the reporting of change.
- Difficulty in attributing changes to the policy (workload, salary, etc.) – changes may be due to other factors, not the policy, or not exclusively the policy.
- Need for careful interpretation of responses to questions on motivation, as respondents often like to portray themselves as altruistic and the responses in any case are subjective.

#### 4(5).4 Using HWIS

The Health Worker Incentive Survey can be implemented in a number of ways. If the survey will be part of a wider evaluation that incorporates other assessments of provider functioning, it may be appropriate to incorporate the incentive questions into a broader instrument. In Indonesia, Impact included some of the questions in a costing survey after piloting showed that many of the questions, particularly those relating to income sources and scenarios, were too complicated for self-administration. In Burkina Faso, the incentives questionnaire was integrated into a larger instrument looking at the functioning of facilities; while the facility functioning and incentives questions were asked of all clinic heads, other staff were asked the incentive questions only.

The implementation of HWIS as a free-standing instrument consists of the following five steps. It should always be preceded, however, by a thorough investigation of the context (the national, socio-economic and cultural setting as well as the specific policy intervention involved), so as to enable the appropriate adaptation to be made. More detail on adaptation is given in Step 1.

##### Step 1: Design the survey

###### *Selecting the survey modules according to the evaluation question*

The first issue to address is to ask what the main questions are that need to be answered by the survey. This will influence both the selection of modules and the types of questions asked by the scenarios outlined in module 6 (see questionnaire in section 4(5).7). Impact found that the use of modules varied across the three focus countries, both in terms of the modules that were selected as well as the way in which the questions were asked (see table 4(5).1 below).

**Table 4(5).1: Selection of modules across the three Impact focus countries**

<i>Module</i>	<i>Ghana</i>	<i>Burkina Faso</i>	<i>Indonesia</i>
1. <b>Personal characteristics and household economy</b> Elicits general information on characteristics of health workers including gender.	Yes	Yes	Yes: as part of general survey of midwives
2. <b>Current employment and workload</b> Characteristics and practice of main (public sector) employment including qualifications.	Yes: to understand working practices in different groups and how these have changed over the period of implementation of the policy.	Yes	Yes: as part of costing study
3. <b>Public service/main income</b> Details of income earned from government job or main job as an employee if not employed in the	Yes	Yes	Yes

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government sector. Includes income from all sources including main salary and allowances.			
4. <b>Private/additional income</b> Income from sources other than the government/main employment.	Yes	Yes	Yes
5. <b>Motivation, availability of resources and perceptions of auxiliary/rural midwives</b> Examines main motivating and demotivating factors that are important to rural health workers in providing good quality services.	Yes: partly. We asked about general motivation but focused on collecting their views, in a structured and also open way, on how the policy of free deliveries had affected both them personally and the services which they provide.	Yes	Yes
6. <b>Recruitment, retention, relocation and contract issues</b> Examination of staff willingness to accept new contract terms based on a series of scenarios.	No: this was not directly relevant to the evaluation question, though it is an important issue more widely in Ghana.	Yes: focus was on location and hours of work	Yes: focus was on geographic location

In Ghana, for example, the primary motivation for the study was to examine how health workers' earnings and workloads might have changed as a result of the delivery fee exemption policy. As a result, the scenarios in module 6 were not used at all, whereas questions on how incomes had changed over the last year were added to modules 3 and 4.

Ideally, it would be preferable to repeat the survey before and after policy implementation and then measure the change, but this is not always possible.

### Adapting the modules

All the modules will need some adaptation to the specific country context as well as the evaluation question. All modules have dimensions that are specific to the health system and culture of the country. The first, general, module is probably the easiest to adapt as many of the questions are reasonably generic; yet even here the questions on schooling and definitions of household and family may need to be adjusted. We would recommend that the list of assets reflects those assets used by other local surveys such as household expenditure survey and the demographic and health survey (DHS).

Other modules will need to be extensively adapted. The types of public income and benefits listed in module 2 are highly dependent on local salary conventions. Similarly, the types of private sector income listed in module 5 will need to be adapted to the working patterns specific to the country.

More information on adaptation of research tools is contained in Technical Annex C in Module 5 of this toolkit.

### Sample size

One way to arrive at a suitable sample size is to base calculations on the estimated total numbers of workers in the various professional categories directly involved in deliveries. This was tried by Impact in Ghana, where, as some of these groups were small, the aim was to capture virtually all the members of smaller groups (doctors), approximately 50% of midwives and nurses, and 10% of TBAs. Within these groups, sampling was both random and convenient. In Indonesia, we stratified midwives on the basis of assignment and distance to the district centre and sampled approximately a third of all midwives in the two study districts. In Burkina Faso, the nurse in charge of each health centre was interviewed as well as the person in charge of maternity services. Where more than one worker was involved in maternity services, a minimum of two were interviewed.

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## Step 2: Obtain permissions

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The requisite permissions should be sought from the collaborating institutions' ethics committees, from the regional health administrations in-country, and from the participating hospitals and health centres. For general information on more ethical issues see Module 5, Technical Annex B.

## Step 3: Pre-test questionnaire

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Pre-testing the questionnaire is important to ensure the questions are understandable and relevant. In Impact studies, an early version of the instrument was tested on around 10 health workers and questions adjusted. In Indonesia, a self-completed version was also tested as part of the early version of the Midwifery Questionnaire but this proved not to be successful. After pre-testing, the main changes made were to questions on motivations (module 5) and the scenarios (module 6).

If the scenarios in module 6 are used, it is worth while experimenting with different methods for collecting information relating to individual willingness to accept a contract. There is no doubt that asking how much a person would require to accept a new contract is liable to inflationary expectations. An unattractive option can easily lead to extremely high demands. Whether this behaviour would occur in practice is extremely hard to judge. Rural health workers tend to be local, or at least become local as community and familial relationships develop. Methods that could be used include low to high bidding, high to low and open bidding. Rather than ask whether a person would accept or reject the new terms and conditions, and then ask them for the monetary amount that they would require, it is likely to be more successful if the questions are bound together. In this way, respondents would be asked whether they would accept the new contract at the current level of salary and then re-ask the question based on hypothetical incremental increases or reductions in salary (say 10% of initial salary). Although answers to hypothetical scenarios of this sort can be hard to answer precisely, the monetary amount suggested should give some indication of the opportunity cost to staff of a suggested change in contract terms

## Step 4: Conduct the survey

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If all six modules listed in table 4(5).1 are used, the questionnaire should take around one and a half to two hours to complete. Some of the modules are relatively straightforward, but questions on productivity, types of earnings and scenarios require considerable thinking and explanation. Since some of the questions, particularly those related to income sources, are potentially sensitive, the interviewers selected should be seen as neutral. It would, therefore, probably be inappropriate to recruit senior medical staff as interviewers.

The interview itself should be conducted in a neutral environment. This is likely to mean taking respondents away from their place of work. Consideration should also be given to the time when the interview is conducted, avoiding busy working hours of the day where possible, but also taking into consideration the household responsibilities of female staff.

## Step 5: Data analysis

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A suitable package for data entry is Epi Info, which can be downloaded free from the website of the Centers for Disease Control and Prevention (CDC). ([www.cdc.gov/epiinfo/](http://www.cdc.gov/epiinfo/)). The older version (Epi 6) is downloadable via a link from the same web page and can be run on even a very basic PC.

A regime for regular (e.g. weekly) data transfer from the field sites to a central location (e.g. the coordinating office) should be planned. Entering and checking at least some of the data during the first week of the survey can help to identify mistakes in field procedures.

Ideally data should be entered, checked for consistency and cleaned (i.e. internal inconsistencies identified and checked) as the study progresses. We have found double entry (two people independently entering the data

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then a comparison of the two data files) to be the most efficient way to eliminate data entry errors. Epi Info includes routines to facilitate this process.

Once cleaned (i.e. internal inconsistencies identified and checked), the data should be transferred to data analysis software such as SPSS 14 to be analysed.

### Step 6: Disseminate findings and recommendations

Finally, the findings of the survey are interpreted and disseminated using appropriate local dissemination mechanisms. These may include local and regional workshops, policy briefs, and other forms of publication. Potential end users of the findings should be identified when dissemination is being planned, and interested parties should be consulted and possibly involved in the planning.

If HWIS is being conducted as part of a broader evaluation on the quality of maternal health care, the findings from this arm of the evaluation should be integrated with other study results.

More information on dissemination of results and integration of research findings is contained in Step 9 of Module 3.

## 4(5).5 Budget implications of using the HWIS

The following table shows recurrent costs associated with a HWIS. The table shows resources required for a survey of 400 health workers in two regions.

**Table 4(5).2: HWIS resource implications**

	<i>Quantity</i>	<i>Time</i>
<b>Supplies</b>	Copying of survey forms and consent forms. Pens for data collectors to use	Not applicable
<b>Personnel</b>	2 experienced supervisors (one per region)	2 weeks' supervision
	Team of 4 data collectors per region (locally recruited)	8 hours' training and orientation 2 weeks per region to survey 400 in total (depending on travel time)
	Data entry clerks and supervisor	2–4 weeks for data entry and cleaning
<b>Travel and communication</b>	2 vehicles to travel to interview sites and to health facilities Per diems for 10 persons for 2 weeks Phone calls to arrange visits to districts and facilities	Not applicable
<b>Building operation and maintenance</b>	Shared premises with other research	2 months for data entry and cleaning, analysis and writing up
<b>Others</b>	Access to computers (Epi Info; SPSS) Printing of documents	

## 4(5).6 HWIS country case studies

It should be clear from the preceding sections that, while incentives themselves are generic to all health systems, and the issues an incentive survey addresses are relevant in many countries, any incentives survey must be designed to be context-specific. We give here some examples to show the variety of experience Impact has encountered in the use of this tool. It has been used differently in each country, and it is of key importance that researchers seeking to carry out a HWIS should take the methodology to each country and adapt it according to the conditions and priorities they find in the field.

### ***Ghana: assessing the impact of delivery care fee exemption***

In Ghana, the core issue being evaluated was how the exemption of delivery care fees affected providers' remuneration, working hours and workload, and job satisfaction (Witter, Kusi and Aikins, 2006). It was seen that abolishing formal user charges for delivery care would have a neutral impact on practitioners only if the additional funding from the scheme allocated to health workers plus any satisfaction from providing a 'free service' outweighed the loss in income from fees and any increase in workload. Impact's focus in Ghana was therefore on exploring the attitudes of health workers and the changes in their income, motivation and working patterns resulting from the reform.

### ***Indonesia and Burkina Faso: motivating midwives***

In Indonesia and Burkina Faso a crucial issue is encouraging experienced midwives to work in areas where maternal outcomes are poor (Ensor, Chapman and Barro, 2006; Ensor, Najib, Suahya and Quayyum, 2006). For that reason module 6, on willingness to accept a new contract based on change of location and contracted hours, was key. Impact has been collecting information on midwives' views of facilitators, and barriers to delivering good service, and has been asking them to quantify the financial and other benefits provided to them. The scenario section of the questionnaire is aiming to arrive at an estimate of the level of compensation that might be required to shift midwives to less popular, more remote areas.

### ***Free-standing and integrated use of the HWIS***

In Ghana, the health worker questionnaire is also currently being implemented as a separate tool with a sample of doctors, nurses, midwives and TBAs. In Indonesia, the tool has been integrated with a costing questionnaire called the Measurement of Facility Functionality (see table 1.2 in Module 1) to obviate the need to interview midwives more than once (Quayyum, Ensor, and Nadjib, 2005). In Burkina Faso, health worker incentive responses are being collected at the same time as the functional assessment of services provided at each health centre.

### ***Health workers' skills and qualifications as determinants of earnings***

In Burkina Faso and Indonesia, a separate knowledge test was carried out to assess the skills of health workers. This provided a different measure of health worker competence supplementing information on the formal qualifications of health workers – both were found to be important determinants of private earnings, whereas public sector earnings were largely determined by qualifications alone. There was a strong association between private earnings and the use of private and public services and the knowledge score, suggesting that users are able to seek out better performing practitioners.

## 4(5).7 HWIS data collection instruments

This section contains two examples of context-specific HWIS instruments:

1. [HWIS questionnaire from Ghana \(with 5 modules\)](#);
2. [HWIS modules from Indonesia](#).

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## 1. Health Worker Incentive Survey (HWIS) from Ghana

Respondent code (Interviewer number, followed by number according to sequence of interviewing)	<input type="text"/> <input type="text"/> <input type="text"/>
Region 1=Central; 2=Volta	<input type="text"/>
District CR: 1=Mfant; 2=Agona; 3=Gomoa; 4=AES; 5=CC ; 6=AAK VR: 1=Nkwanta ; 2=Jasikan; 3=Kpando ; 4=Ho; 5=N-Tongu; 6=Keta	<input type="text"/> <input type="text"/> <input type="text"/>
Date of interview (DDMMYYYY)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Time interview started (HHMM 24 hour clock)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

1. Respondent details: I would like to start by asking some general questions about you and your family.	
1.1	What is your name?
1.2	Are you male or female? 1=male; 2=female <input type="text"/>
1.3	What is your marital status? 1=single; 2=co-habiting; 3=married with children; 4=married without children; 5=divorced; 6=widowed <input type="text"/>
1.4	How old are you? 88=don't know <input type="text"/> <input type="text"/>
1.5	What is the last grade of formal education you completed? 01=certificate in nursing/midwifery; 02=diploma in nursing/midwifery; 03=degree in nursing; 04=MB, CHB; 05=post graduate (specify) <input type="text"/> <input type="text"/>
1.6	How many people are there in your household (include all those sleeping in the dwelling for at least three of the last 12 months, including children and adults)? <input type="text"/> <input type="text"/>

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1.7	How important is your overall income to the total household income? <i>1=it is the only income; 2=largest part of the household income; 3=it makes a substantial contribution (more or less as much as other household income sources); 4=helps to increase total household income as an add-on to other income sources; 8=don't know</i>	<input type="checkbox"/>
1.8	For how many people in your household is your income the main source of livelihood? (By that I mean how many people are dependent on your income.) <i>88=don't know</i>	<input type="text" value=""/> <input type="text" value=""/>
1.9	For how many people in your extended family (apart from your household) is your income the main source of livelihood? <i>88=don't know</i>	<input type="text" value=""/> <input type="text" value=""/>
1.10	How much did your household spend on food consumption in the last month? <i>Write amount in Cedis; 8888=don't know;</i>	¢ <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> ,000
1.11	How much did your household spend on non-food consumption in the last month (clothing, cooling, domestic rents, education fees, health costs, leisure etc)? <i>Write amount in Cedis; 8888=don't know</i>	¢ <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> ,000
1.12	How much did your household spend in total last month? <i>Write amount in Cedis; 8888=don't know</i>	¢ <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> ,000
1.13	What was the household's total income last month? <i>Write amount in Cedis; 8888=don't know</i>	¢ <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> ,000
1.14	Did the household make any savings last month? <i>1=yes; 2=no; 8=don't know; <b>If no go to q. 1.16</b></i>	<input type="checkbox"/>
1.15	If yes, how much was saved? <i>Write amount in Cedis; 8888=don't know</i>	¢ <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> ,000
1.16	Did the household have to borrow money last month? <i>1=yes; 2= no; 8=don't know; <b>If no go to q. 1.18</b></i>	<input type="checkbox"/>
1.17	If yes, how much was borrowed? <i>Write amount in Cedis; 8888=don't know</i>	¢ <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> ,000
1.18	Does your household have any of the following (still functioning)? <i>1=yes; 2=no; 8=don't know</i>	
1.18a	Electricity	<input type="checkbox"/>
1.18b	Television	<input type="checkbox"/>
1.18c	Radio	<input type="checkbox"/>
1.18d	Video	<input type="checkbox"/>
1.18e	Refrigerator	<input type="checkbox"/>
1.18f	Telephone	<input type="checkbox"/>
1.18g	Running water	<input type="checkbox"/>

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<b>2. Current employment and workload</b>		
2.1	Where do you work? 01=training hospital; 02=regional hospital; 03=district hospital; 04=health centre; 05=health post; 06=government clinic; 07=MCH; 08=CHPS; 09=mission hospital; 10=mission clinic; 11=private hospital; 12=private clinic; 13=private maternity home; 14=at home; 15=other (specify)	<input type="text"/> <input type="text"/>
2.2	What is your professional title? 01=Obstetrician; 02= GP/Medical Officer; 03=Medical Assistant; 04=Midwife; 05=Nurse; 06=Community Nurse; 07=TBA (trained); 08=TBA (untrained); 09=other (specify); 88=don't know	<input type="text"/> <input type="text"/>
2.3a	How many years in total have you been working in the health care sector? Fill in number of years.	<input type="text"/> <input type="text"/>
2.3b	How long have you been working for your current employer? (Current place of work) Fill in number of years.	<input type="text"/> <input type="text"/>
2.4	Will you – or do you expect to – receive a pension from your employer when you retire? 1=yes; 2=no; 8=don't know; <b>if no go to q. 2.6</b>	<input type="checkbox"/>
2.5	If so, how much pension per month will you get upon retirement from your employer? Write amount in Cedis; don't know=8888	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
2.6a	How many hours do you work each week on average in your official job? Fill in number of hours; 888=don't know;	<input type="text"/> <input type="text"/> <input type="text"/>
2.6b	Has this changed over the past two years? 1=yes; 2=no; 8=don't know; <b>if no go to q. 2.7</b>	<input type="checkbox"/>
2.6c	If yes, how? State increase or decrease in average number of hours worked (e.g. +5; -5)	<input type="text"/> <input type="text"/>
2.7a	Do you have any private practice in addition to your official job? 1=yes; 2=no; 8=don't know; <b>if no go to q. 2.8</b>	<input type="checkbox"/>
2.7b	If so, how many hours do you work on average in your private practice each week? Fill in number of hours.	<input type="text"/> <input type="text"/> <input type="text"/>
2.7c	Has this changed over the past two years? 1=yes; 2=no; 8=don't know; <b>if no go to q. 2.8</b>	<input type="checkbox"/>
2.7d	If yes, how? State increase or decrease in average number of hours worked (e.g. +5; -5)	<input type="text"/> <input type="text"/>

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2.8a	Do you carry out any other activities to generate income? (e.g. non-medical activities, such as trading or farming) <i>1=yes; 2=no; 8=don't know; if no go to q. 2.9</i>	<input type="text"/>
2.8b	If so, how many hours do you work on average in your private income generation each week? <i>Fill in number of hours.</i>	<input type="text"/>
2.8c	Has this changed over the past two years? <i>yes=1; no=2; don't know =88; if no go to q. 2.9;</i>	<input type="text"/>
2.8d	If yes, how? <i>State increase or decrease in average number of hours worked (e.g. +5; -5)</i>	<input type="text"/>
2.9a	How many patients do you see on average in a week in your official job? <i>Fill in number of patients.</i>	<input type="text"/>
2.9b	Has this changed over the past two years? <i>1=yes; 2=no; 8=don't know; if no go to q 2.10</i>	<input type="text"/>
2.9c	If yes, how? <i>State increase or decrease in average number of patients seen (e.g. +5; -5)</i>	<input type="text"/>
2.10a	How many deliveries do you undertake in a week on average, in your official job? <i>Fill in number of deliveries. 888=Don't know</i>	<input type="text"/>
2.10b	Has this changed over the past two years? <i>1=yes; 2=no; 8=don't know; if no go to q. 2.11</i>	<input type="text"/>
2.10c	If yes, how? <i>State increase or decrease in average number of deliveries (e.g. +5; -5)</i>	<input type="text"/>
2.11a	How many deliveries do you undertake in a week on average, in your private practice? <i>Fill in number of deliveries (put 000, if they don't have private patients).</i>	<input type="text"/>
2.11b	Has this changed over the past two years? <i>1=yes; 2=no; 8=don't know; if no go to q. 3.1</i>	<input type="text"/>
2.11c	If yes, how? <i>State increase or decrease in average number of deliveries (e.g. +5; -5)</i>	<input type="text"/>

3. Official/main income		
3.1a	How much do you earn each month in basic net salary from your main or official job? <i>Fill in amount in Cedis; 8888=don't know</i>	¢ <input type="text"/> ,000
3.1b	Do you receive that income regularly? <i>1 =yes; 2=no; 8=don't know</i>	<input type="text"/>
3.2a	Has that income changed over the past two years? <i>1 =yes; 2=no; 8=don't know; if no, go to question 3.3</i>	<input type="text"/>

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3.2b	If so, how has it changed? <i>Fill in amount in Cedis (positive or negative, depending on increase or decrease in salary)</i>	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.3a	Do you receive additional financial allowances or incentives? <i>1=yes; 2=no; 8=don't know; if no/don't know, skip to 3.5</i>	<input type="checkbox"/>
3.3b	If yes, how much on average do these allowances amount to each month? <i>Fill in amount in Cedis (or put 0000 if this type of allowance is not received)</i>	
3.3b (i)	Deprived area allowance?	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.3b (ii)	Extra duty allowance?	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.3b (iii)	Exemption incentives	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.3b (iv)	Any other? (e.g. income from sales of items to patients) Specify:	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.3c	Are these allowances or incentives fixed amounts per month? Or do they depend on the work that you do? <i>1=fixed; 2=workload-related; 8=don't know</i>	
3.3c (i)	Deprived area allowance?	<input type="checkbox"/>
3.3c (ii)	Extra duty allowance?	<input type="checkbox"/>
3.3c (iii)	Exemption incentives?	<input type="checkbox"/>
3.3c (iv)	Any other? (e.g. income from sales of items to patients) Specify:	<input type="checkbox"/>
3.3d	Do you receive these allowances regularly? <i>1=yes; 2=no; 8=don't know</i>	
3.3d (i)	Deprived area allowance?	<input type="checkbox"/>
3.3d (ii)	Extra duty allowance?	<input type="checkbox"/>
3.3d (iii)	Exemption incentives?	<input type="checkbox"/>
3.3d (iv)	Any other? (e.g. income from sales of items to patients) Specify:	<input type="checkbox"/>
3.4a	Have these allowances changed over the previous two years? <i>1=yes; 2=no; 8=don't know; if no/don't know, go to q 3.5.</i>	<input type="checkbox"/>
3.4b	If so, how? <i>1=it is a new allowance: did not previously exist; 2=existed but has increased; 3=existed but has decreased; 8=don't know</i>	
3.4b (i)	Deprived area allowance?	<input type="checkbox"/>

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3.4b (ii)	Extra duty allowance?	<input type="checkbox"/>
3.4b (iii)	Exemption incentives?	<input type="checkbox"/>
3.4b (iv)	Any other? (e.g. sales of items) Specify.	<input type="checkbox"/>
3.4c	If it has increased or decreased, by how much? <i>Fill in amount of increase/decrease in Cedis; 8888=don't know</i>	
3.4c (i)	Deprived area allowance?	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.4c (ii)	Extra duty allowance?	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.4c (iii)	Exemption incentives?	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.4c (iv)	Any other? Specify	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.5	Do you receive any of the following benefits in kind? <i>1=yes; 2=no; 8=don't know</i>	
3.5a	Housing	<input type="checkbox"/>
3.5b	Food	<input type="checkbox"/>
3.5c	Health care	<input type="checkbox"/>
3.5d	Car	<input type="checkbox"/>
3.5e	Other (list)	<input type="checkbox"/>
3.6a	If you are employed, do you receive any payments from the 'internally generated funds' (in government facilities), or the user fees (in private facilities)? <i>1=yes; 2=no; 8=don't know; if no or don't know, skip to 3.7a</i>	<input type="checkbox"/>
3.6b	If so, how much do you receive, on average, per month? <i>Fill in amount in Cedis; 8888=don't know</i>	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.6c	Has that level of income changed over the past two years? <i>1=yes; 2=no; 8=don't know</i>	
3.6d	If so, how much? <i>Fill in amount in Cedis (use plus for increases; minus for decreases); 8888=don't know</i>	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
3.7a	Do you receive any per diems (e.g. for workshops, training or other travel)? <i>1=yes; 2=no; 8=don't know; if no or don't know, skip to 4.1</i>	<input type="checkbox"/>
3.7b	If yes, how much is the per diem that you are usually paid? <i>Fill in amount in Cedis; 8888=don't know</i>	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000

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3.7c	How many days per month, on average, would you receive this per diem? <i>Fill in number of days; 88=don't know;</i>	<input type="text"/> <input type="text"/>
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4. Private/additional income		
4.1	Do you have a private income from working in a private practice (outside your main job, if you are salaried)? <i>1=yes; 2=no; 7=not applicable (If no, go to section 5)</i>	<input type="checkbox"/>
4.2	Which of these options best describes where this private clinical practice is located? <i>1=same building as my public employment; 2=at my home; 3=at the home of a colleague; 4=rented premises; 5=go to the patient/client's home; 6=other (please specify); 8=don't know</i>	<input type="checkbox"/>
4.3	Who owns the private practice? <i>1=I own it; 2=I share ownership of it; 3=someone else owns it; 8=don't know; 4=other (specify)</i>	<input type="text"/> <input type="text"/>
4.4a	How much money do you earn per month from this private practice? <i>Fill in amount in Cedis; 8888=don't know</i>	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000
4.4b	Has this level of income changed over the past two years? <i>1=yes; 2=no; 8=don't know</i>	<input type="checkbox"/>
4.4c	If so, how much? <i>Fill in amount in Cedis (use plus for increases; minus for decreases); 8888=don't know</i>	¢ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000

5. Motivation and perceptions of the exemptions policy		
5.1	1 What are the main factors that motivate you to stay in your job? (Please rank in order of importance.) <i>Put number showing importance. 01=most important; 10=least; please put 00 by factor that is not at all important</i>	
5.1a	Salary/pay	<input type="text"/> <input type="text"/>
5.1b	Additional allowances	<input type="text"/> <input type="text"/>
5.1c	Good working conditions	<input type="text"/> <input type="text"/>
5.1d	Opportunities for training	<input type="text"/> <input type="text"/>
5.1e	To help increase the number of patients for private work	<input type="text"/> <input type="text"/>
5.1f	Social status	<input type="text"/> <input type="text"/>
5.1g	Pension rights	<input type="text"/> <input type="text"/>
5.1h	Opportunity to serve the community	<input type="text"/> <input type="text"/>
5.1i	No better options are available elsewhere	<input type="text"/> <input type="text"/>

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5.1j	Other (please specify)	
5.2a	Are you aware that there is a national free deliveries policy? 1=yes; 2=no; 8=don't know; if no, skip rest of section	<input type="checkbox"/>
5.2b	How did you hear about it? (Summarize main source)	
5.3	What is your opinion of the free delivery care policy? <i>Open question: note key phrases from respondent's answer</i>	
5.4	What effect do you think the delivery exemptions policy has had on the service? Please give your views on the following questions: <i>1=yes; 2=no; 8=don't know</i>	
5.4.1	Are more women now delivering with skilled assistance, compared to before?	<input type="checkbox"/>

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5.4.2	Have the poor benefited from the policy?	<input type="checkbox"/>
5.4.3	Are there enough drugs and supplies in the facility to deal with the number of women coming to deliver?	<input type="checkbox"/>
5.4.4	Are there enough staff to deal with the number of women coming to deliver?	<input type="checkbox"/>
5.5	Are you now more or less likely to refer complicated cases? <i>1=more likely; 2=less likely; 3=no change; 7=not applicable; 8=don't know</i>	<input type="checkbox"/>
5.6a	What effect do you think the exemptions policy has had on your situation in general? <i>1=improve; 2=worsen; 3=no change; 8=don't know</i>	<input type="checkbox"/>
5.6b	How has it affected your workload? <i>1=increase; 2=decrease; 3=no change; 8=don't know</i>	<input type="checkbox"/>
5.6c	How has it affected your income? <i>1=increase; 2=decrease; 3=no change; 8=don't know</i>	<input type="checkbox"/>
5.6d	How has it affected your job satisfaction? <i>1=improve; 2=worsen; 3=no change; 8=don't know</i>	<input type="checkbox"/>
5.6e	6e How has it affected your working conditions? <i>1=improve; 2=worsen; 3=no change; 8=don't know</i>	<input type="checkbox"/>
5.6f	Any other effect? (please specify)	

5.7	Please give your recommendations on ways of improving working of the exemptions scheme:				
<b>6. End of interview</b>					
<i>THANK RESPONDENT FOR HIS/HER TIME AND END THE INTERVIEW</i>					
6.1	Time interview ended ( <i>HHMM, 24 hour clock</i> )				
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>					
Interviewer name:	Interviewer signature:				

## 2. HWIS Survey from Indonesia (modules from costing questionnaire)

These HWIS modules were extracted from a larger costing survey questionnaire. General information usually collected as part of modules 1 and 2 of HWIS was integrated into an earlier (census) survey of midwives and so was not collected again here.

### Modules 3 and 4: Direct and indirect income, and household expenditures of *Bidan*

1.	What was your gross salary from government as a <i>Bidan</i> two years ago?		
2.	In a typical month how much do you receive in reimbursement for poor patients from ASKES or PKPS-BBM?		
3.	In an average month how much income do you receive from payments (user charges) from your private practice including selling drugs, etc., deliveries of babies and treating patients?		
4.	In an average month, approximately how much do you spend on drugs, equipment and services that you spend on your private practice (maybe you buy certain things every three months or every year – so please give an average)?		
5.	Do you usually receive gifts from patients? This may be food, clothes, animals, etc.	Yes	
		No	Skip to Q 7
6.	Please list any gifts received during the previous month.		
7.	How much do you earn as a proportion of the total income of your household?		
8.	How much did your household spend on food consumption in the last month?		
9.	How much did your household spend on non-food consumption in the last month (including clothing, cooking fuels, house rents, education fees, health care expenses, leisure etc.)?		
10.	What was total household expenditure in the last month?		
11.	If you attend a workshop or course at the request of your employer, are you paid a per diem allowance?	Yes .....	1
		No .....	2
		No response .....	99
12.	How much is the per diem that you are usually paid?	.....Rupiah	
13.	How many per diems would you usually receive during the course of a month or year on average, would you receive this per diem? (Fill in number of days per month or per year stating pm or pa)?	.....pm	
		.....pa	
14.	Will you – or do you expect to – receive a pension from your employer when you retire?	Yes .....	1
		No .....	2
		Don't know .....	98
15.	Do you carry out any other activities to generate income (e.g. non-medical activities, such as trading or farming)?	Yes .....	1
		No .....	2
		Don't know .....	98

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		Activity 1	Activity 2	Activity 3	Activity 4
16.	Type of activity (e.g. subsistence farming, running a shop, handicrafts, cooking for other people, domestic work).				
17.	How much do you earn from this activity: In a typical week?	Per week .....	Per week .....	Per week .....	Per week .....
	In a typical month?	Per month .....	Per month .....	Per month .....	Per month .....

**Module 5: Present contract and incentives and willingness to accept changes in responsibility /or contract**

THIS SECTION IS ONLY FOR MIDWIVES WITH PNS/PTT CONTRACTS.

SECTION 10. RECRUITMENT, RETENTION, RELOCATION AND CONTRACT ISSUES

PART 1. THESE QUESTIONS ARE ABOUT WHY YOU CHOSE TO DO THE WORK THAT YOU ARE DOING TODAY.

18.	What attracted you to working as a <i>Bidan</i> (tick as many as apply)									
	Salary	<input type="checkbox"/>	Potential to serve a needy community	<input type="checkbox"/>	Prospect of securing a government position	<input type="checkbox"/>				
	No choice	<input type="checkbox"/>	Working environment	<input type="checkbox"/>	Good management	<input type="checkbox"/>	Supportive community	<input type="checkbox"/>		
	Other (please specify) .....									
19.	What attracted you to working in this post from a family perspective (tick as many as apply)									
	Close to family home	<input type="checkbox"/>	Close to community facilities	<input type="checkbox"/>	Close to children's school	<input type="checkbox"/>	Close to husband's workplace	<input type="checkbox"/>		
	No choice	<input type="checkbox"/>	Other (please specify) .....							
20.	Which were the three most important factors	1								
		2								
		3								
21.	What are the main factors that make you retain your public sector contract as opposed to working exclusively in the private sector? You may tick as many as apply.									
	Salary	<input type="checkbox"/>	Pension rights	<input type="checkbox"/>	Status in community	<input type="checkbox"/>	Training opportunities	<input type="checkbox"/>	Opportunity to serve the community	<input type="checkbox"/>
	Opportunity to live with husband	<input type="checkbox"/>	Proximity to schools	<input type="checkbox"/>	Proximity to home	<input type="checkbox"/>	Opportunity for promotion after this job	<input type="checkbox"/>	Opportunity for further training after this job	<input type="checkbox"/>
	Enhances my private practice	<input type="checkbox"/>	Security of working in public sector	<input type="checkbox"/>	To be close to my husband's work	<input type="checkbox"/>	No opportunity to develop private practice	<input type="checkbox"/>	Other (specify) .....	<input type="checkbox"/>
22.	Which were the three most important factors?	1								
		2								
		3								

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**Module 6: Willingness to accept new contract**

We would now like to discuss some theoretical options for employment contracts. Please remember there are no right or wrong answers and it is your opinion that matters

**Scenario 1.**

Please imagine the government wants to contract you as a *Bidan di Desa* in a different village. The new village is one hour away, by motorbike, from your current place of work.

*You will be expected to spend 8 hours of your working day looking after public patients.*

*You will be expected to live in the village.*

*You will not be permitted to accept any additional payments or gifts from public patients.*

*However, you will be permitted to undertake private clinical practice outside of your public contracted hours.*

*Of course if you had an emergency with a public patient after hours and you were with a less urgent private patient you would have to attend to the patient in most need?*

*You would be given time off from your government work to compensate for time you had to spend after hours with public patients.*

1.	Would you be prepared to accept this contract and move to such an area?	Yes .....1 No .....2 Don't know .....98	→	5 8
2.	Why not?	..... .....		
3.	What monthly salary/contract payment from government would you expect in order to accept this contract on a fixed 3 year PTT basis?	.....Rupiahs		
4.	What monthly salary/contract payment from government would you expect in order to accept this contract as civil servant (PNS)?	.....Rupiahs	→	8
5.	Why would you be prepared to accept the contract?	..... .....		
6.	What monthly salary/contract payment from government would you expect in order to accept this contract on a fixed 3 year PTT basis?	.....Rupiahs		
7.	What monthly salary/contract payment from government would you expect in order to accept this contract as civil servant (PNS)?	.....Rupiahs		

**Scenario 2:**

Now imagine the government wants to contract you as a *Bidan di Desa* in a village 5 hours away from the district hospital in the south of Pandeglang.

*You will be expected to spend 8 hours of your working day looking after public patients.*

*You will be expected to live in the village.*

*You will not be permitted to accept any additional payments or gifts from public patients.*

*However, you will be permitted to undertake private clinical practice outside of your public contracted hours.*

*Of course if you had an emergency with a public patient after hours and you were with a less urgent private patient you would have to attend to the patient in most need?*

*You would be given time off from your government work to compensate for time you had to spend after hours with public patients.*

8.	Would you be prepared to accept this contract and move to such a place?	Yes .....1 No .....2	→	12
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9.	Why not?	..... .....		
10.	What monthly salary/contract payment from government would you expect in order to accept this contract on a fixed 3 year PTT basis?	.....Rupiahs		
11.	What monthly salary/contract payment from government would you expect in order to accept this contract as civil servant (PNS)?	.....Rupiahs	→	15
12.	Why would you be prepared to accept the contract?	..... ..... .....		
13.	What monthly salary/contract payment from government would you expect in order to accept this contract on a fixed 3 year PTT basis?	.....Rupiahs		
14.	What monthly salary/contract payment from government would you expect in order to accept this contract as civil servant (PNS)?	.....Rupiahs		

<b>Scenario 3.</b>				
Now imagine the same contract – in a very remote village, 5 hours' travel from a district hospital in the south of Pandeglang. However, this time the government will reimburse all the costs of travelling to and from the homes of women when providing delivery and other maternal care, and to and from meetings..				
15.	Would you now be prepared to accept this contract and move to such a place?	Yes .....1 No .....2  Don't know .....98	→ 19	Thank you for your time
16.	Why not?	..... .....		
17.	What monthly salary/contract payment from government would you expect in order to accept this contract on a fixed 3 year PTT basis?	.....Rupiahs		
18.	What monthly salary/contract payment from government would you expect in order to accept this contract as civil servant (PNS)?	.....Rupiahs		Thank you for your time
19.	Why would you be prepared to accept the contract?	..... .....		
20.	What monthly salary/contract payment from government would you expect in order to accept this contract on a fixed 3 year PTT basis?	.....Rupiahs		
21.	What monthly salary/contract payment from government would you expect in order to accept this contract as civil servant (PNS)?	.....Rupiahs		Thank you for your time



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