Immpact Toolkit

A guide and tools for
maternal mortality programme assessment

MODULE 4, Technical Paper

Evaluating a health financing policy change: framework and suggested approaches

Version 2.0

List of Acronyms

ASKES	Asuransi Kesehatan – Health Insurance Organization
EPIInfo	epidemiology data entry and analysis software
FFT	Financial Flows Tracking
GHS	Ghana Health Service
HWIS	Health Worker Incentive Survey
ICH	Institute of Child Health, University College London
KI	Key informant
KII	Key informant interviews
MOH	Ministry of Health
N-VIVO	Analysis software
NMIMR	Noguchi Memorial Institute for Medical Research, Ghana
PQOC	Perceptions of Quality of Care
RAPID	Rapid Ascertainment Process for Institutional Deaths
SPSS	Statistical Package for the Social Sciences
SSS	Sampling at Service Sites
TBAs	traditional birth attendants
TRACE	Inquiry to trace adverse and favourable events in pregnancy care
UNFPA	United Nations Fund for Population Activities

Table of Contents

Acknowledgements

This technical paper grew out of the experience of planning and undertaking an evaluation of a free delivery policy in Ghana in 2005-6. The inputs of Immpact colleagues in Ghana and internationally have been invaluable.

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INTRODUCTION

Immpact is a global research initiative which seeks to strengthen the evidence base for policy decision-makers on cost-effective intervention strategies to reduce maternal mortality. Immpact has been working in partnership with local stakeholders to identify and evaluate strategies with the potential for significantly reducing maternal and perinatal mortality.

In Ghana, one of the focus countries for the first phase , the government policy of providing free deliveries for all women was selected for evaluation through a consultative process. The aim of the overall Immpact evaluation was to assess how the free delivery policy had affected utilization, quality of services and health and non-health outcomes for households (NMIMR and Immpact, 2005). Tools were developed and fieldwork began in 2005, leading to an evaluation report in 2006 (Armar-Klemesu et al, 2006).

Although the evaluation focused on a specific policy and evaluated the policy from the point of view of maternal health, the approach used was one which is of wider relevance to any situation where the health financing burden is being changed. It was decided therefore that this technical paper should be produced, describing the evaluation framework and the specific tools and approaches used, together with the experience of using them. These tools are intended to assist researchers looking at related questions in future. All the tools require adaptation to different contexts, but the examples may at least serve as a starting point for other evaluations.

Within Immpact, the approach described in this document has already been adapted twice – once for an evaluation of a cost-sharing scheme for maternal health in Nepal (ICH, SSMP, & Immpact, 2006), and again for an evaluation of a free delivery and Caesarean policy in Senegal (MoH et al, 2006). Two of the approaches discussed in this paper were also used in relation to different evaluation questions in Indonesia and Burkina Faso, and these experiences will be reflected.

Designing the evaluation

A conceptual framework was drawn up for the evaluation in Ghana, for a specific intervention (removal of user fees), and a specific type of outcome (maternal health), but it can be simplified into a generic framework for evaluating any change to the way that health care is financed (see figure 1).

Most health financing reforms will have at least one of these three goals and will have the potential to affect each of the boxes in figure 1. An evaluation should therefore consider the need to measure change in each area (even if, for logistical reasons, the decision is reached to focus on particular priority questions).

Ideally, evaluations should aim to capture changes in all three types of measure – in the measure of implementation success, in intermediary outcomes measures and in ultimate outcomes. The former two types of measure are important to explain success or failure in achieving and maintaining ultimate outcomes. There is a dynamic relationship over time between most of these areas.

The current document focuses on the areas within the shaded box in figure 1– the approaches to measure supply-side factors which influence implementation – while providing links to the other relevant Immpact tools. Figure 2 links the tools to the conceptual areas.

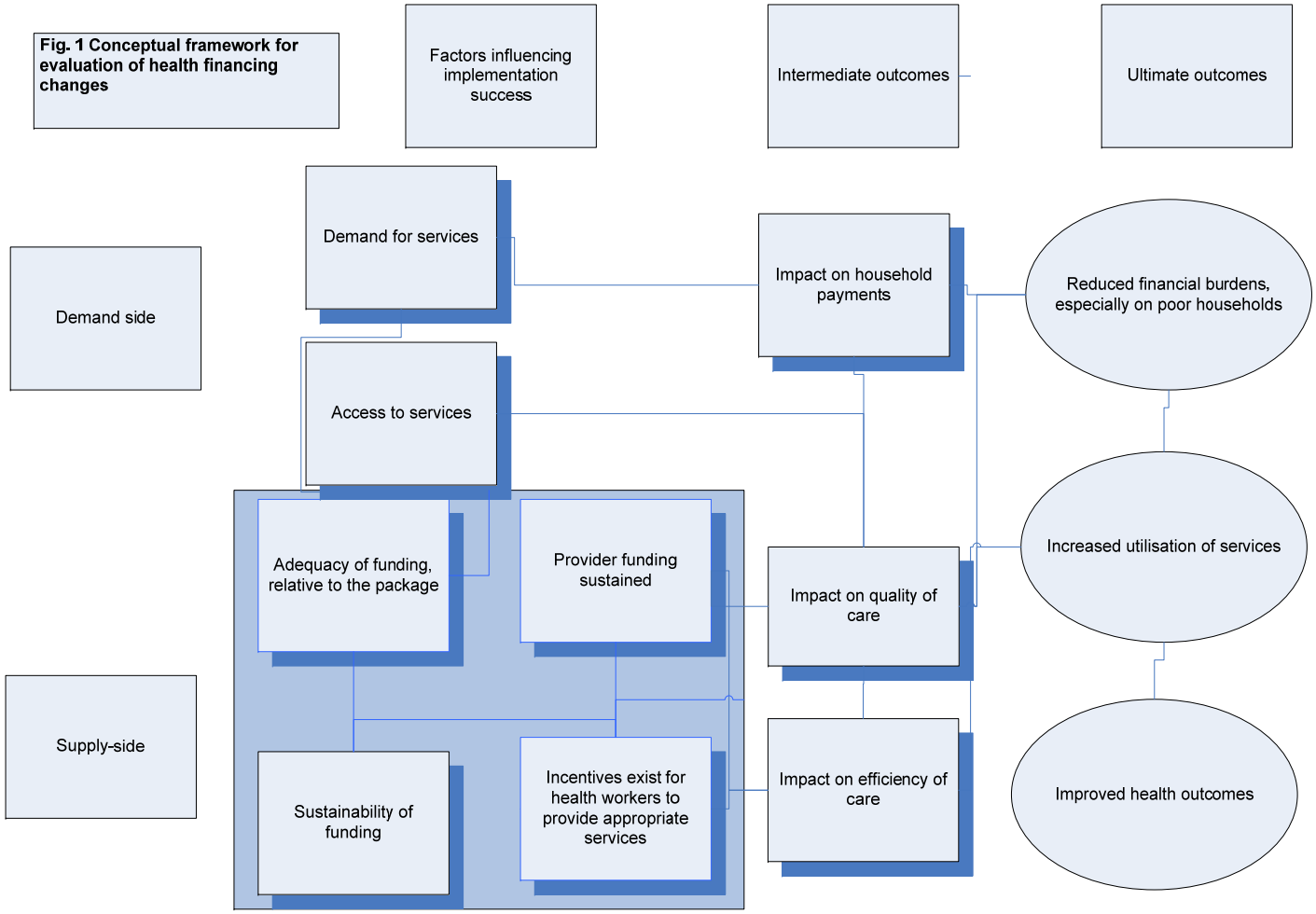

Figure 1: Conceptual framework for evaluation of health financing changes

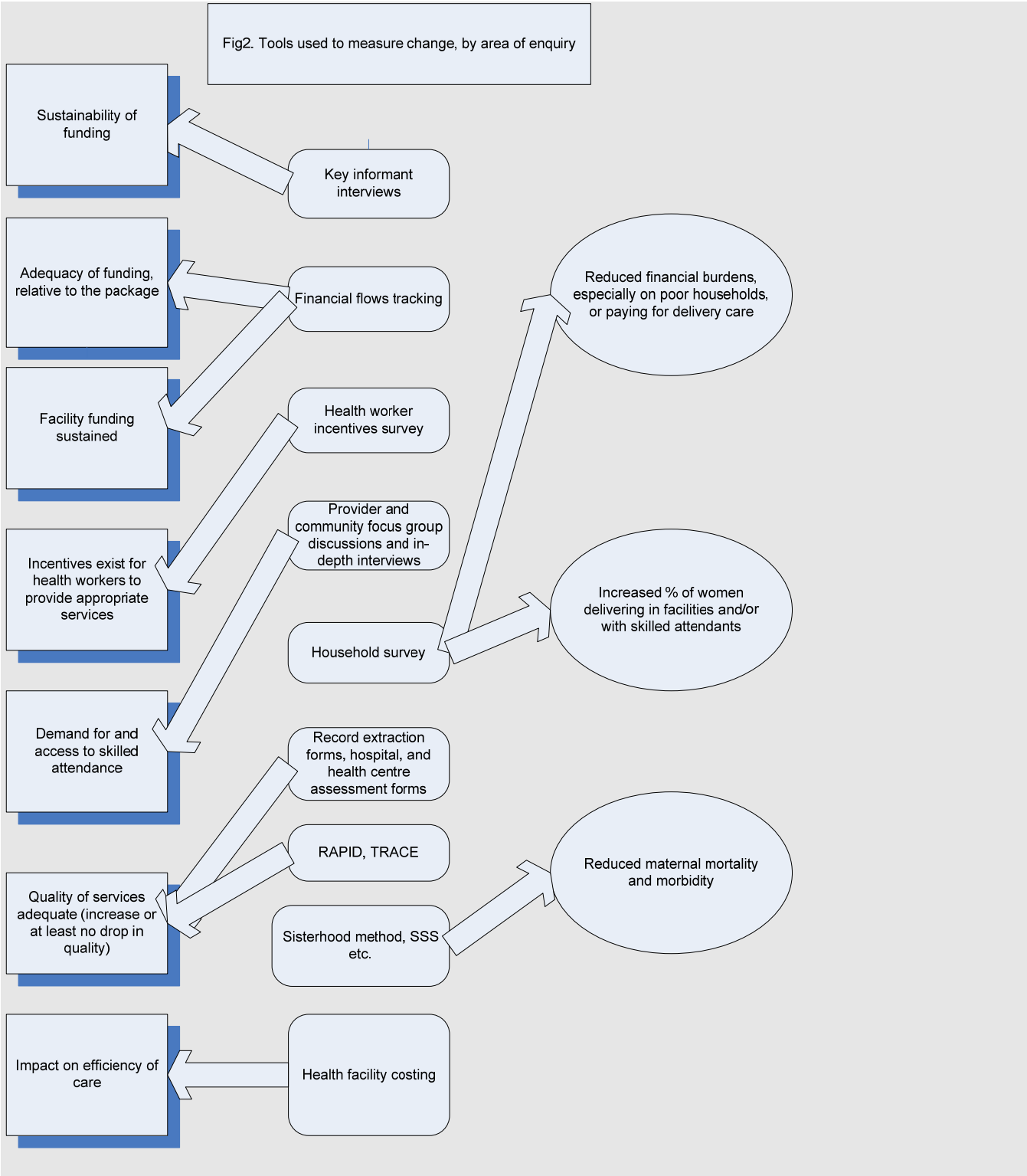

Figure 2: Tools used to measure change, by area of enquiry

Choice of tools and approaches for measuring implementation

Most evaluation is based on the input-throughput-output principle (see figure 3), in which inputs, such as additional money or staff are measured against the benefits, in terms of increased activities, such as more services delivered, or improved outcomes as in lives saved, or disability averted. What is generally omitted, because it is assumed to be proceeding smoothly, is the process by which policies or interventions are put into place – implementation, in other words, which we take to mean the transformation of inputs into throughputs. This is affected by supply-side issues, such as whether transfer mechanisms are well-managed, but also by supply-side issues, such as demand for a service.

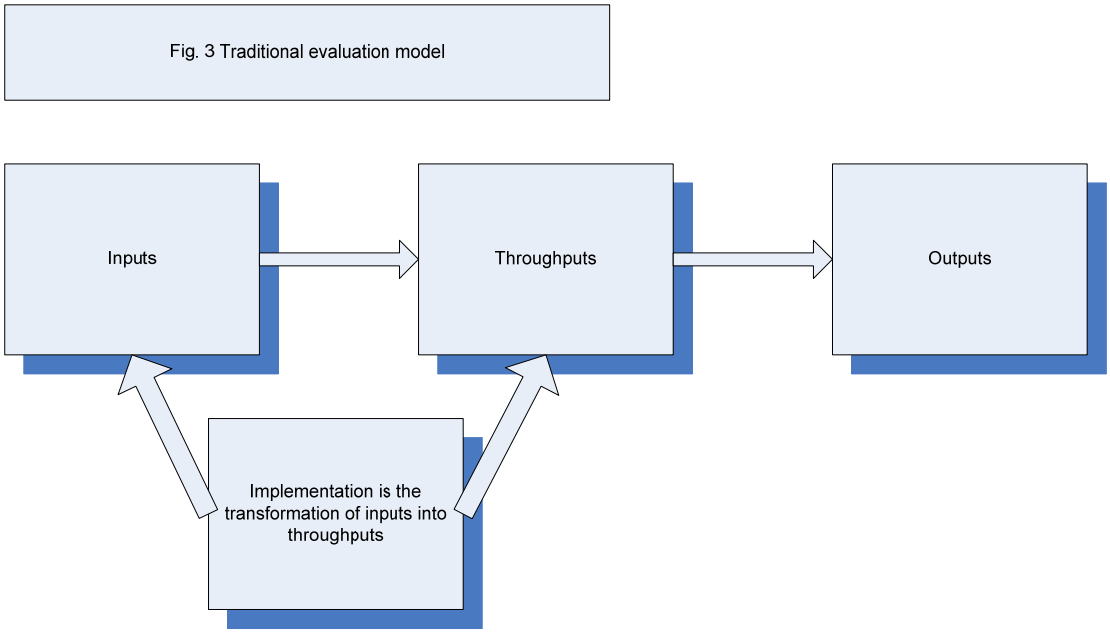

Figure 3: Traditional evaluation model

In all countries, but especially low-income countries, health financing policy implementation is fraught with difficulties such as realizing resources, channelling them, maintaining them, competing with other priorities and winning over stakeholders (Ensor & Ronoh, 2005). Implementation cannot be assumed then: it has to be ascertained in the course of the evaluation, to explain why outputs and outcomes are or are not achieved. However, as implementation is very contextual, it requires a blend of qualitative and quantitative methods to provide descriptive results.

For the Ghana evaluation, the investigation of implementation was broken into three main elements:

1. a qualitative assessment of the understanding of key political, administrative and technical stakeholders of the policy and their views on its implementation (key informant interviews)
2. tracking changes to health financing and the flows of funds to the scheme in particular (financial flows tracking)
3. assessment of how the scheme had changed health worker pay, workload and motivation (health worker incentive survey).

The health worker incentive survey (HWIS) has been presented within this Module of the Immpact toolkit in the form of a step-by-step tool. The key informant interviews and financial flows tracking are, however, not stand-alone tools. Together with the HWIS, they are presented as elements within a composite approach through which the implementation of a health financing policy change can be evaluated.

The approach outlined in this document is complemented by community-level focus group discussions and in-depth interviews with health staff. This approach provided a more detailed understanding of access to care, perceptions of the policy and how it had or had not alleviated key barriers (see the PQOC tool in this module).

The tools and approaches for assessing implementation

1. Key informant interviews (KII)

Aims

KII is an established technique for picking up stakeholder perceptions (Sofaer, 2002). However, as the key informants are chosen on the basis of their knowledge of the topic under investigation, these perceptions can be very powerful. In Ghana, they provided an early indication that there were problems with the adequacy of funding of the delivery exemption policy (Witter et al,, 2005). More importantly, they allowed for probing of different stakeholder perceptions about why these problems had arisen and what effect they were having.

Approach

The KII are structured around the key questions of interest, but are conducted as open conversations, allowing for probing of areas of particular concern to each individual. They can also be iterative, so that points raised by previous conversations are fed back into subsequent discussions.

Appendix 1 provides the topic guide for the Ghana KII. It covers the following broad areas:

- Awareness and interpretation of the policy at different levels of the health system
- Views on its successes and failures
- Financing and management procedures
- Sustainability of the scheme

These are specific to the evaluation and would have to be adapted for any other research.

Choice of key informants

There is no magic number for size of sample for key informants. The aim is to capture the main stakeholders and the focal areas where the evaluation is being conducted, but to limit overall numbers, as the interviews are in-depth and analysis is conducted manually. In Ghana, we interviewed 65 individuals (see Table 1); in Senegal 73 are planned; and in Nepal 110.

Table 1 Ghana Key Informants (KI)

Level	Category	Number
National level KI	Ministry of Health	3
	Ghana Health Service	3
	Donors	2
	Mission sector	1
	TOTAL	9
Regional KI	Regional directors of health services, deputies and Senior Medical Officers	4
	Regional hospital directors and administrators	2
	Regional accountants	1
	TOTAL	7
District KI	District Director of Health Services and senior public health staff	17
	District Assembly staff and accountants	16
	TOTAL	33
Facility KI	In-charges, matrons and senior facility staff	16
Total	Overall	65

Finding specific post-holders is not always easy and we adopted a pragmatic approach – for example, if we were seeking the director of health services for a district, and he or she was not in his office, then a suitable alternative, such as the deputy, was interviewed.

Data analysis

Analysis was conducted on responses to the main topics, to find agreement or disagreement between respondents from different backgrounds or representing different geographical areas. The results can be compared with quantitative findings from analysis of financial records or the results of other tools. In Ghana, we analyzed the results manually, but software such as N-VIVO can be used, particularly when there are many interviews and/or many interviewers.

Strengths and weaknesses of KII

The main strength of the KII is its ability to pick up information quickly on a wide range of issues. Stakeholders in the system generally know whether a policy is working or not, and why. They can be very frank, if given anonymity. The KII can therefore be particularly useful at the start of an evaluation, to guide the use of more specific evaluation tools.

The main weakness is that the information is perceptual, and therefore needs backing-up with quantitative methods, to have greater authority.

Granting full anonymity can sometimes be hard, if there are few stakeholders of certain types (e.g. regional directors for health). In this case, quotations can easily reveal the identity of the speaker. However, quotations can be very powerful. Care should therefore be taken to use them in a non-revelatory way.

2. Financial flows tracking (FFT)

Aims

The aim of FFT is to understand how funds are flowing (or not) to a scheme, and to place these in the context of the overall financing system.

Approach

Financial flows tracking relies on collection of financial information from secondary sources at national, regional, district and facility level. FFT data collection instruments are included in Appendix 2. Clearly, the information sought and available will depend on the question under evaluation and the capacity of the health and financial information systems in the country.

In Ghana, the forms sought a wide range of information, including:

- budgets and expenditure at all levels;
- timing of funds arriving and being expended, at all levels;
- allocation to different line items, regions and levels, and by different sources;
- expenditure on the delivery exemptions scheme and how it has been allocated;
- expenditure on other exemption categories;
- facility-level information on activities, staffing and other summary data;
- unit costs of scheme and how the funds have been distributed between public, private and mission sectors;
- facility revenues, from all sources, and how they have changed.

The time period for our evaluation was 2003–5, to include the year before the policy was introduced, the first year of operation (in the first five regions) and the year of operation nationally.

Sample

The sample depended on the focal regions and districts chosen for the evaluation as a whole. Within the districts, the choice of facilities depended on the nature of the policy under evaluation. The objective was to achieve a range of affected facilities across the study areas. The number depended on the range of facilities affected (public, private, mission; types of public sector facility included), the size of the study area, and the extent to which facilities of one type were likely to face similar financial conditions. In Ghana, we chose 11 facilities per region (roughly two per district), representing a range of different facility types.

The Indonesian evaluation covered a smaller administrative area (two districts). Data were collected from both districts from the public hospital and from the district health office which holds information on sub-district (health centre) allocation of funding. Information was also collected from ASKES (Asuransi Kesehatan – the Health Insurance Organization) which allocates funding for insurance for civil servants and other insured persons and, more recently, has been assigned the task of allocating public funding for those registered as poor.

Analysis

Analysis was carried out using Excel.

Strengths and weaknesses of FFT

The financial tracking forms rely on information that has already been collected through the routine financial and managerial monitoring systems. The information will therefore be as good as those systems are. The second main concern is how open accountants and other officials are, in terms of sharing their information with researchers. If information is available and officials are open, the financial flows tracking can tell the central story of how a financing scheme has been implemented and how it has affected the different levels of the health system.

In Ghana it was partially successful – much information is already collected by the health system, but there is a high turnover of accountants and accessing the information was not easy. Moreover, reporting was not consistent between facilities, making comparisons hard. We gained very useful snapshots of how the scheme had operated, though not the comprehensive information that we had hoped for. The absence of any monitoring at the national level meant that information was restricted to the two focal regions.

The experience of data collection in Indonesia demonstrated that it took substantial effort and many visits to obtain and reconcile the basic data required, even when carried out by researchers trained in finance and economics. This suggests that it is impractical to rely on self-administered instruments or even instruments administered by fieldworkers who do not have a background in finance.

Many officials are overloaded and do not respond well to what they perceive to be low-priority research activities. For this reason, it is desirable, if possible, to use information gained through standard processes, such as an annual sector review, if it exists, or national health accounting exercises. However, these will not usually yield all of the details needed, particularly in terms of programme-specific funding and funding dynamics at facility level. Additional collection will therefore be necessary but should be kept to a minimum.

Depending on the design of the forms and the information available, the FFT can provide both financing context and specific information on the policy under investigation. What is less easy is connecting the two, which can only ever be done suggestively. If, for example, more funds flow to the facilities via an exemptions scheme, but we find that during the same period, other central budget lines are reduced, we cannot know whether that reduction was linked to the exemptions scheme or resulted from other factors. The health financing context is complex and dynamic. However, the combination of information from the FFT and explanations from KII can create a plausible story of linkages, if they exist, and of the reasoning of decision-makers.

The reliability of information at facility level depends on how homogenous facilities of each type are. In Ghana, for example, we made the assumption that it is likely that district hospitals within each region face similar financial conditions, and we therefore visited one per region. This required a local judgement, balancing time and money against representativeness of sample. Figures such as attendance can give a rough and ready indication

of the comparability of different facilities.

3. Health worker incentive survey (HWIS)

This section contains a summary of the HWIS instrument. A full description of this tool is contained within the HWIS section of the toolkit.

Aims

The aim of HWIS is to establish the impact of a programme on health workers, in terms of any changes to their income, workload, working conditions and/or motivation.

Approach

In Ghana, a structured questionnaire was developed, divided into five sections:

- Personal characteristics and household economy – characteristics of health workers including gender, age, household income, dependants and assets
- Current employment and workload – details of main employment, including qualifications, years of work and workload (numbers of patients and hours of work)
- Public service / main income – income from government job, or main job if not employed in the government sector, including salary and allowances, *per diems* and other gifts
- Private / additional income – income from other sources, including private clinical practice, where applicable
- Motivation and perceptions of the exemptions policy

In Indonesia and Burkina Faso an additional module was inserted on willingness to accept a new contract based on change of location and contracted hours, as these questions were relevant to the intervention in those countries.

Clearly, the content has to be adapted to reflect the focus of the evaluation, as well as the target group. In Ghana, we focused on health staff directly involved in deliveries, but also traditional birth attendants (TBAs), who were formally excluded from the scheme, but whose business was likely to be affected (with potential knock-on effects for women). After pre-testing, a second, shorter questionnaire was developed for TBAs, as many of the questions in the original were not relevant for them. The complete questionnaire is included in this toolkit in the HWIS tool section of Module 4.

Sample

Sample size calculations in Ghana were based on estimated total numbers within various professional categories directly involved in deliveries. As some of these groups were small, the aim was to capture virtually all of the members of the smallest 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 the sample of midwives on the basis of assignment and distance to the district centre and sampled approximately one 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.

Analysis

Data processing was done in EpiInfo 6. The data was cleaned prior to being transferred into SPSS 14 for the analysis.

Constraints

One of the problems faced in Ghana was that of obtaining accurate information on staffing on the sampling form (the number of relevant staff in each area). Although general figures were available, these turned out to be

inaccurate when we reached the field. In addition, the type of staff who assisted with deliveries varied, and some of the facilities reported to be carrying out deliveries were no longer doing so, due to key staff shortages.

A further problem was locating our sample, especially untrained TBAs, given that their role is informal and now semi-legal. Private midwives tended to be elderly and many supposedly operating had actually retired. Specialists were few and often unavailable.

As a result of these different issues, only 73% of the expected health workers and 56% of the expected TBAs were interviewed. However, since much of the difference is attributed to the inaccurate sampling frame, the results are considered to be representative of those categories of staff, at least in those two regions.

Within the survey itself, the main area of difficulty related to household income questions, which many respondents were unable or unwilling to answer. In Ghana this section turned out to be the least useful during analysis. The section on private practice was also not very useful, due to low levels of reported private practice (which in other contexts might constitute a major source of income). In Ghana in general, the focus is more on the many different types of top-up income available within public services. Some degree of under-reporting would therefore be expected, particularly on income streams which are illegal or semi-legal, such as informal payments and sales to clients. In contrast, in the survey in Indonesia where private practice is ubiquitous, respondents responded freely on the range of private payments received for different services.

One main constraint with the tool is that data on income and workload is self-reported and therefore prone to various biases. Health workers may have an incentive to reduce their reported income and exaggerate their workload. One way of controlling for this is to compare results with other sources (such as facility records on utilization, for example). The exercise carried out in Ghana suggested that the estimates were within reasonable expectations. In contrast, in Burkina Faso information on activities and hours spent at the public facility appeared to be generally over-reported, although the proportionate allocation to different activities did appear to be more realistic.

A separate issue is accuracy of recall: we were asking about changes over a two year period (to tie in with the period of introduction of the policy). In the light of this, direction of change and rough magnitude is likely to be more reliable than actual figures.

Attribution of changes to the policy is also difficult, as described under the FFT above. If health worker income or workload is reported to have increased, to what extent can this be connected to the policy? Clearly, general income cannot be attributable, but specific questions on delivery incentive payments and on loss of income derived from user fee payments can tie in more closely with the policy.

Finally, the questions on motivation have to be carefully interpreted, as respondents like to portray themselves as altruistic. (Interestingly, in Indonesia younger workers appear to be less altruistic than their more senior colleagues.) In Ghana, the responses on general motivation were less useful than the specific comments on health worker views of the impact of the policy.

Experiences and reflections

The use of the approach described above results in a descriptive understanding of how a policy has or has not been implemented, and why. It should assist in interpretation of outcomes, by showing how different parts of the health care system have responded to (and often reinterpreted) the change of policy.

It does not generally support the development of an ‘implementation index’, which would permit us to say, for example, that in this region, the policy was 50% implemented. Implementation has too many dimensions. Responses to implementation will also vary. If, in the case of Ghana, we found the policy to be under-funded by at least 50% (Witter et al, 2006) and skilled delivery was found to have increased by 11% in the Central Region (Penfold et al, 2006), does that mean that a fully funded policy would have increased supervized delivery rates by twice that amount? Tempting though it would be to draw that conclusion, we cannot assume a linear relationship even with a simple variable such as funding.

Figure 4 lists some of the main preconditions for successful implementation of any policy. We have attempted to assess the direct preconditions in the Ghana evaluation, while recognizing that they are in turn influenced by wider, indirect determinants (Potter & Harries, 2006), as represented by the outer boxes in figure 4.

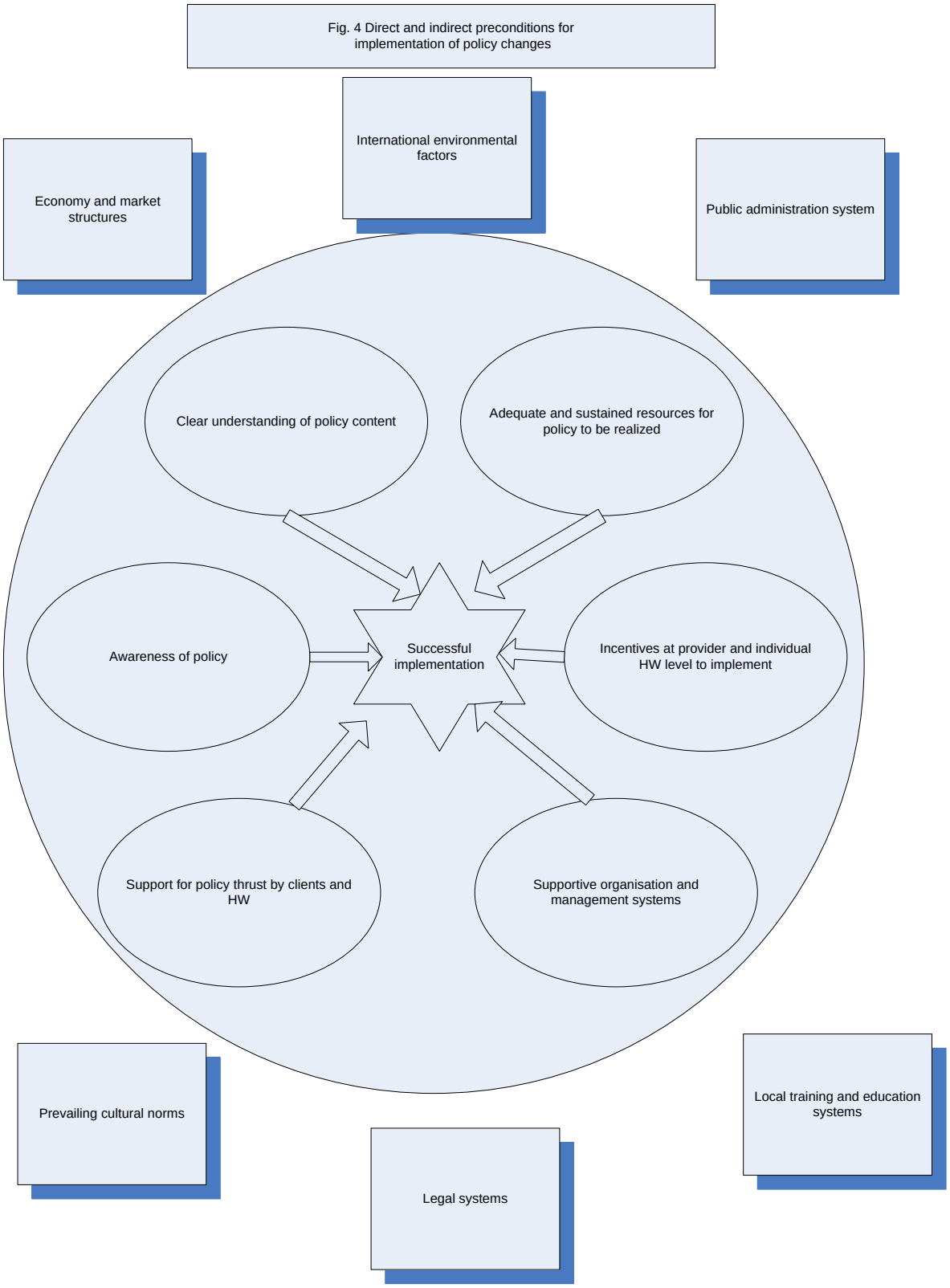

Figure 4: Direct and indirect preconditions for implementation of policy changes

Conclusions

This paper has presented a framework for evaluating a health financing policy change, based on Immpact experiences in Ghana. It has focussed on the experience of using a health systems approach to measure implementation of policy within the health system. Although this approach was developed for a policy focusing on maternal health, it is sufficiently generic to be adaptable to other contexts.

The approach can be complemented by other tools described in the Immpact toolkit, which cover the other evaluation framework questions, such as assessing demand, and measuring changes in household costs, quality of care, utilization and health outcomes.

Appendix 1: KI topics, Ghana evaluation

1. National level stakeholders

1. What is your perception of the delivery exemption policy?
2. What are the successes and failures, from your point of view?
3. What do you see as the main constraints to implementation of this policy (and ways of addressing those constraints)?
4. How are the funds for exemptions allocated?
5. What is the mechanism for paying them out? How well does it operate?
6. Is the scheme sustainable?
7. What is the future for delivery exemptions? How much of a national priority is it? How much funding will be provided for it, and from which sources?
8. How will the scheme interact with health insurance, in the future (or to date, if any experience exists of phasing one into the other)?
9. Do you see it as a priority for continuation or not? Why? (Probe: how far does it address an important need? Does it do so effectively? Does it do so in a cost-effective way?)

And, in addition, for NFP sector and professional associations:

10. What is the impact of this policy on your members?
11. How has it affected their attitudes; their incomes; their working practices and hours; their services to patients?
12. How easy has it been to get reimbursements?
13. Do you have suggestions about how the implementation of the policy could be improved?

2. Regional level

1. When did the delivery exemptions start in your region?
2. What was the process of setting up the scheme?
3. Is it working effectively now? (If not, why not?)
4. Who is exempted? (Any particular categories of women?)
5. What sorts of cases are free? Complications prior to delivery? Normal deliveries? CS? Assisted deliveries? Post-delivery complications?
6. Is antenatal care free?
7. Is postnatal care free?
8. Are the funds adequate?
9. How are the funds for exemptions allocated?
10. What is the mechanism for paying them out? How well does it operate?
11. Are the funds ring-fenced or does the region have the ability to reallocate money to or from other activities? Please give details.
12. What is your perception of the delivery exemption policy? Is it successful to date?
13. What do you see as the main constraints to implementation of this policy (and ways of addressing those constraints)?
14. Is it sustainable, in your opinion?
15. What is the future for delivery exemptions? How much funding will be available? From which sources?
16. How will the scheme interact with health insurance, in the future (or to date, if any experience exists of phasing one into the other)?
17. Has the scheme been well disseminated in the community, do you think?
18. How has it affected the quality of services?
19. What do you see as the overall impact of the exemptions scheme?
20. What suggestions would you make to improve the scheme?
21. Do you see it as a priority for continuation or not? Why? (Probe: how far does it address an important need? Does it do so effectively? Does it do so in a cost-effective way?)

3. District level

1. Are you receiving payments under the delivery exemptions scheme?
2. When did these start?
3. How did you hear about it?
4. Is it working effectively now? (If not, why not?)
5. Who is exempted? (Any particular categories of women?)
6. What sorts of cases are free? Complications prior to delivery? Normal deliveries? CS? Assisted deliveries? Post-delivery complications?
7. Is antenatal care free?
8. Is postnatal care free?
9. Are the funds adequate? Is there any limit on numbers of delivery patients that you can reimburse?
10. Do delivery patients make payments for anything (drugs, materials, etc.)? How much do they contribute?
11. What is the reimbursement tariff? For normal deliveries? CS? Assisted delivery? Other complications? Is there a fixed tariff, or does it vary by case?
12. What is the mechanism for getting the funds? Does it work well? How long does it take? Are funds adequate? How could it be improved?
13. Are the funds ring-fenced or does the district have the ability to reallocate money to or from other activities? Please give details.
14. Has the level of reimbursement tariff been set correctly in your opinion? Should it be increased/decreased for any categories? Why?
15. How has it affected the issue of defaulters in the district? What proportion used to default from paying their bills for deliveries? How was this handled?
16. What are the rules about sharing exemption reimbursement revenue within the facilities?
17. How has the scheme affected the quality of services, in your opinion?
18. Are the community aware of the exemptions? How has the policy been disseminated?
19. How much trouble is it for you to operate the exemptions scheme (time taken in admin etc.)?
20. Have there been any other changes in the district over the past two years which have affected delivery care for women? Please describe.
21. What suggestions would you make to improve the scheme?
22. Do you see it as a priority for continuation or not? Why? (Probe: how far does it address an important need? Does it do so effectively? Does it do so in a cost-effective way?)

4. Facility level

1. Are you receiving payments under the delivery exemptions scheme?
2. When did these start?
3. How did you hear about it?
4. Is it working effectively now? (If not, why not?)
5. Who is exempted? (Any particular categories of women?)
6. What sorts of cases are free? Complications prior to delivery? Normal deliveries? CS? Assisted deliveries? Post-delivery complications?
7. Is antenatal care free?
8. Is postnatal care free?
9. Is there any limit on numbers of delivery patients that you can see?
10. Do delivery patients make payments for anything (drugs, materials, etc.)? How much do they contribute?
11. How much do you get reimbursed? For normal deliveries? CS? Assisted delivery? Other complications? Is there a fixed tariff, or does it vary by case?
12. What is the mechanism for getting the funds? Does it work well? How long does it take? Are funds adequate? How could it be improved?
13. Does the reimbursement tariff cover your losses from user fees? Is it more or less than you used to get from the patients?
14. How has it affected the issue of defaulters? What proportion used to default from paying their bills for deliveries? How was this handled?
15. Do you share any of the funds with staff? How much? How is the money allocated? Who benefits? Was this a facility decision or a higher level guideline?
16. How has the scheme affected your facility? (probe: financially; in terms of staffing or working practices; quality of services etc.)
17. How has it affected referrals?
18. How are the private midwives and TBAs affected? Who keeps a record of their deliveries?

19. Are the community aware of the exemptions? How has the policy been disseminated?
20. How much trouble is it for you to operate the exemptions scheme (time taken in admin etc.)?
21. Have there been any other changes in the district over the past two years which have affected delivery care for women? Please describe.
22. What suggestions would you make to improve the scheme?
23. Do you see it as a priority for continuation or not? Why? (Probe: how far does it address an important need? Does it do so effectively? Does it provide value for money or are there better ways of doing the same thing?)

Appendix 2: Financial flows questionnaires from Ghana

Part A: health system macro-financing data collection

This instrument needs to be filled in with a member of the finance department of the Ministry of Health or Ghana Health Services. The purpose is to obtain information on the total volume of financing allocated through public channels to the health system by the national government. Where possible the figures should also include donor resources, and columns are included for these data.

Please attempt to get as much information as possible and, as indicated:

1. Where data are not available record “NA”. If the reported figures are zero write “zero” in the appropriate box. This will improve the accuracy of data entry.
2. If data are available but inaccessible please record “IA” and note the reason why data are not accessible.
3. If you receive information but believe that it is very inaccurate then please note this on the questionnaire.

Please provide as much detail as possible on government/donor health spending by line item, programme and level of expenditure for the financial years 2003–5. Feel free to change or add categories, where these are appropriate.

State **sources** in all cases and add footnotes to explain any calculations which have been made which may not be obvious to the reader.

Where expenditure per quarter is being logged, please record when actual payments were made (do not divide the annual expenditure by four).

Table 1: National health budgets and expenditure, by line item and source (2003, 2004, 2005)

Source(s): _____

Line items	GOG budget (cd bn)	GOG expenditure (¢ Bn)	% spent (GOG)	Financial credits budget (cd Bn)	Financial Credits expenditure (¢ Bn)	% spent (financial credits)	IGF (¢ Bn)	Health Fund budget (Cd bn)	Health Fund (¢ Bn)	% spent (Health Fund)	Earmarked funds budgeted	Earmarked Funds (¢ Bn)	% spent (Earmarked Funds)	HIPC budget	HIPC (¢ Bn)	% spent (HIPC)	Total (¢ Bn)	% of Total expenditure	Ratio of expenditure to budget
Personal emoluments																			
Administrative expenses																			
Service expenses																			
Investment expenditure																			
Total																			
% by source																			

Table 2: Total expenditure (GOG & DPF) by levels, 2003–2005

Source(s):_____

	2003 (¢ Bn)	2004 (¢ Bn)	2005 (¢ Bn)	Increase on 2003 (%)	Shares 2005 (%)	Share of Increase on 2003 (%)
MOH						
GHS						
Sum HQ						
THS-Teaching Hosp.						
THS-Psychiatric Hosp.						
Sum tertiary						
Reg. Health Service						
Dist. Health Service						
Subventions						
Total						
Earmarked unallocatable/other						
Total						

Table 3: Non-Wage Recurrent Expenditure by BMC Groups (Health Fund & GOG)

Source(s):_____

	Actual expenditure 2003		**Actual expenditure 2004**		**Actual expenditure 2005**	
Level	Amount ¢ Bn	**%**	**Amount**	**%**	**Amount**	**%**
MOH – HQ	34.62	13.28%				
GHS – HQ	25.65	9.84%				
Sum HQ	**60.27**	**23.12%**				
THs	23.95	9.19%				
Psych Hosp	19.28	7.40%				
Sum Tertiary	**43.23**	**16.58%**				
Regional Health Service	**64.99**	**24.93%**				
District Health Service	**92.189**	**35.36%**				
Total Non-Wage Recurrent	**260.679**	**100.00%**				

Table 4. Regional Patterns of Expenditure, 2003, 2004, 2005

Source(s):_____

Region	Central	Northern	Upper East	Upper West	Poor regions	Ashanti	BA	Eastern	GAR	Volta	Western	Total
GOG+HF												
Earmarked												
Sub-Total												
IGF												
Other												
Total Resources												
Per Capita Spending												

Table 5: Change in total regional health expenditure 2003-5

Source(s):_____

Region	Central	Northern	Upper East	Upper West	Poor regions	Ashanti	BA	Eastern	GAR	Volta	Western	Total
Change in per capita spending, 2003–5 (%)												

Table 6: Delivery exemptions budgets and expenditure, by regions, 2003–5

Source(s):_____

Region	Central	Northern	Upper East	Upper West	Poor regions	Ashanti	BA	Eastern	GAR	Volta	Western	Total
Budget for delivery exemptions, 2003												
Expenditure for exemptions, 2003												
% of budget spent												
Number of deliveries												
Cost per delivery exempted 2003												
Budget for delivery exemptions, 2004												
Expenditure for exemptions, 2004												
% of budget spent												
Number of deliveries												
Cost per delivery exempted 2004												
Budget for delivery exemptions, 2005												
Expenditure for exemptions, 2005												
% of budget spent												
Number of deliveries												
Cost per delivery exempted 2005												

Part B: financial flows from centre to regions; from regions to districts; and from districts (BMCs) to facilities

The intention of this section is to collect information on sources of funding and allocations within regions and districts included in the evaluation.

In the case of districts you are also asked to provide information on the cash flow by quarter. It is important that this is actual funding received during each quarter of the year. It is not sufficient simply to divide the annual allocation by four.

You will need to collect information from the regional and district accountant / finance officer. An approach should be made in the first instance to the regional/district director, after which you should request a meeting with the accountant. In some cases the director may give you the records personally or at least wish to sit in on the interview with the accountant.

In the case of districts and hospitals, the questionnaire requires you to fill in their names. This needs to be done prior to the interview. Please ensure that there are sufficient rows in each table to allow you to enter data on each district and facility.

The financial year in Ghana is the same as the calendar year.

Table 7: Regional health revenues, by item and quarter, 2003–5

Source(s):_____

	Funds received 2003					Funds received 2004					Funds received 2005					Increase/decrease in total over 2003–5
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
Donor Pooled Funds																
GoG - Admin																
GoG - Services																
ADHA																
IGF																
Other																
TOTAL																

Source(s):

Table 8: Regional budget and expenditure, by BMC, 2003–5

Source(s):_____

BMC	Budget	Expenditure 2003					Budget	Expenditure 2004					Budget	Expenditure 2005				
		Q1	Q2	Q3	Q4	Total		Q1	Q2	Q3	Q4	Total		Q1	Q2	Q3	Q4	Total
Regional HA																		
Regional PH																		
Regional Hospital																		
Other																		
Regional level total																		
District hospitals: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.																		

BMC	Budget	Expenditure 2003					Budget	Expenditure 2004					Budget	Expenditure 2005				
DHMTs: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.																		
District level total																		
Sub-districts: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.																		

BMC	Budget	Expenditure 2003					Budget	Expenditure 2004					Budget	Expenditure 2005				
Subvention to mission facilities																		
Sub-district total																		
TOTAL																		

Table 9: Summary of exemption reimbursements, by category, for region, districts or facilities (depending on availability: if possible, compare data from all three levels), 2003–5

Source(s):_____

Name of region/district/facility:_____

	Under 5s	Aged	ANC	TB cases	Health workers	Paupers	Deliveries	Total
Number of cases								
Drugs reimbursed								
Services reimbursed								
Total reimbursed								
Average cost per patient 2003								
Number of cases								
Drugs reimbursed								
Services reimbursed								
Total reimbursed								
Average cost per patient 2004								
Number of cases								
Drugs reimbursed								
Services reimbursed								
Total reimbursed								
Average cost per patient 2005								

Table 10: Activity summary by ownership, 2003–5 (for region or district, as available)

Source(s):_____

District/region name:

	Year (2003/2004/2005)					
Indicator	**Government Institutions**	**%**	**Mission Institutions**	**%**	**Private Institutions**	%
OPD attendance						
Admissions						
Bed Occupancy						
Bed Turnover						
OPD per capita						
Admission rate Number of deliveries						

Section 3. District data collection

Table 11: District revenues for health, 2003–5

Source(s):_____

Name of district and region:

	Funds received 2003					Funds received 2004					Funds received 2005					Increase/decrease in total over 2003–5
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
Donor Pooled Funds																
Donor Earmarked Funds																
GoG – Admin																
GoG – Services																
ADHA																
IGF																
Exemptions (ANC, under-5s etc.)																
Delivery exemptions																
Other																
TOTAL																

Table 12: District expenditure on health, 2003–5

Source(s):_____

Name of district and region:

BMC	Budget	Expenditure 2003					Budget	Expenditure 2004					Budget	Expenditure 2005				
		Q1	Q2	Q3	Q4	Total		Q1	Q2	Q3	Q4	Total		Q1	Q2	Q3	Q4	Total
District HMT																		
District PH																		
Other																		
District level total																		
Facilities: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.																		
Subvention to mission facilities																		
Facilities total																		
TOTAL																		

Table 13: Delivery exemptions: payments to and from district assemblies and DHMTs, 2003–5 (where applicable)
Source(s):_____

BMC	Expenditure 2003					Expenditure 2004					Expenditure 2005				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Arrival of funds from national level															
Arrival of delivery exemption funds from MoF (state amount)															
Disbursement to DHMT (if applicable)															
Payments to DHMT															
Disbursements from DA/DHMT to facilities															
Regional Hospital															
District Hospital															
Other															
Health facilities (public, private or PNFP): 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.															
Private midwives															
TBAs (where applicable)															
TOTAL															

Table 14: Delivery reimbursement, by type of delivery and facility

Source(s):_____

District and region:

BMC	Number of deliveries reimbursed 2003					Number of deliveries reimbursed 2004					Number of deliveries reimbursed 2005				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Fill in facility name, eg. Regional Hospital															
Normal deliveries															
Assisted deliveries															
C-sections															
Deliveries with complications															
District Hospital															
Normal deliveries															
Assisted deliveries															
C-sections															
Deliveries with complications															
Health Centres															
Normal Deliveries															
Private midwives															
Normal Deliveries															
Assisted Deliveries															
TOTAL															

Note: please expand this table to cover all facilities who received payments in table 13 (so we can attribute costs to activities)

Part C: Health system facility financial flows questionnaire

This instrument is to be used to collect financial and activity information from individual facilities. Information in this section is to be obtained from a sample of facilities offering maternity care. Facilities should include:

- The regional hospital
- The district hospital
- A sample of public health centres, mission facilities, private clinics and maternity homes

(TBAs and private midwives will be visited as part of the HWIS survey).

The information collected should be used in conjunction with the central and regional financial flows tool (part A).

Information obtained to complete the tables is likely to be provided by a number of sources within the health facility. Visits to the hospital director, chief accountant and statistical department are likely to be required. In some cases it may be convenient to gather relevant staff together to obtain the information. You should be prepared to give up to one week's notice to facilities of the types of questions you are asking.

Table 15: Facility revenue, 2003–5

Source(s):_____

Facility name/type/district/region:

	Funds received 2003					Funds received 2004					Funds received 2005					Increase/decrease in total over 2003–5
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
Donor Pooled Funds																
Donor Earmarked Funds																
GoG - Admin																
GoG - Services																
ADHA																
IGF (total)																
IGF from deliveries (if this information is available)																
Exemptions (ANC, under-5s etc.)																
Delivery exemptions																
Other e.g. drug sales or donations (specify)																
TOTAL																

Table 16: Any funds still owing / unpaid debts? (State amounts and category)

Facility name/type/district/region:

Source(s):_____

Category	2003	2004	2005	Remaining

Table 17: Balance in bank account (State amounts and category)

Facility name/type/district/region:

Source(s):_____

Category	2003	2004	2005	Remaining

Table 18 Facility expenditures

Source(s):_____

Name/type/district/region:

		Disbursements 2003/ 2004/ 2005				
Item	Budget for year	Qtr 1	Qtr2	Qtr 3	Qtr 4	Total expenditure
Administrative /utilities						
Medicines, supplies etc.						
Staff incentives for deliveries						
Other staff allowances (specify)						
Other (specify)_____						
TOTAL EXPENDITURE OF FACILITY						

Table 19. Charges for maternity care

Collect as much detail as possible on fixed or average charges levied by the facility from patients for the following categories (adapt as necessary).
Facility name/type/district/region:_____

Source(s):_____

Year: (2003/2004/2005)
[Note whether this is during the exemptions scheme or not]

	Admission	Consultation	Treatment	Food and accom-modation	Staff	Drugs/ supplies	Lab tests	X-ray	Blood transfusion	Other	Total	Notes (E=now exempt; F= fixed charge; A = average charge)
Antenatal visit												
Normal delivery												
Caesarean section												
Instrumental delivery												
Forceps												
Vacuum												
Complications of pregnancy [1]												
Antepartum haemorrhage												

	Admission	Consultation	Treatment	Food and accom-modation	Staff	Drugs/ supplies	Lab tests	X-ray	Blood transfusion	Other	Total	Notes (E=now exempt; F= fixed charge; A = average charge)
Postpartum haemorrhage												
Sepsis/infection												
Obstructed labour												
Eclampsia												
Retained products (placenta)												
Anaemia												
Pre-eclampsia												
Other specify)…….												
Post-natal visit												
Abortion complications												

Table 20 General facility activity and infrastructure data

Source(s):_____

The following activity data, as held by the facility

Facility name/type/district/region:

Record:
1. NAF - if not available in this facility
2. NA - if the procedure is available but no data are available
3. '0' - if available but no procedures were carried out during the period

Data required	2003	2004	2005
No. of outpatient visits (total)			
No. of inpatient admissions (total)			
Average length of stay			
ALOS (deliveries- if this information is available)			
Number of patient days			
No. of operations (total in hospital)			
No. of ANC visits			
No. STD/HIV/AIDS patients attending facility			
No. of deliveries (breakdown by type, where available)			
% of delivery patients defaulting on payments (or amounts lost)			
No of cases of abortion complications			
No. of beds (total)			
No. of beds (maternity – if possible to separate)			
No. of staff (total)			
No. of staff (directly involved in delivery care)			
No. of lab tests (total)			
No. of lab tests (maternity)			
No. of x-rays (total)			
No. of x-rays (maternity)			
No of blood transfusions (total)			
No of blood transfusions (maternity)			
Availability of forceps &/or vacuum			

Table 21 Delivery activity flow analysis 2003–5

Source(s):_____

During the last four quarters how many patients in each of the following categories were treated?

Facility name/type/district/region:

	2003/ 2004/ 2005					
Item	1st quarter	2nd quarter	3rd quarter	4th quarter	Total for year	Total revenue from these for facility
Number of deliveries						
Of which:						
Normal deliveries (not instrumental)						
Deliveries with forceps/vacuum (instrumental)						
C-sections						
Deliveries with complications						
Number of women admitted post-natally with complications						
Number of women admitted ante-natally with complications						

Is there a fixed tariff for delivery exemption reimbursements? Y/N

If so, please list the prices below (by category, as applicable):

If a woman presents with pregnancy-related complications before her delivery, is she eligible for exemptions?

If a woman presents with pregnancy-related complications after her delivery, is she eligible for exemptions?

Is there funding within the exemptions scheme for any other assistance (e.g. for transport)? Please specify

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