Project no: **32289**

Project acronym: **SHIELD**

Project title: **Strategies for health insurance mechanisms to address health system inequities in Ghana, South Africa and Tanzania**

Instrument: Specific targeted project

Thematic Priority: Priority A.1.2 – Health care system, policy and management

Periodic activity report

Period covered: from 1 October 2009 to 30 September 2010 Date of preparation: 1 Nov 10

Start date of project: 1 October 2006 Duration: 48 months

Project coordinator name: Anne Mills & Di McIntyre
Project coordinator organisation name: LSHTM & HEU Revision: Final

Executive summary
Strategies for Health Insurance for Equity in Less Developed countries (SHIELD)

Objectives and focus of project

The SHIELD project aims to critically evaluate existing inequities in health care in Ghana, South Africa and Tanzania and the extent to which pre-payment mechanisms for funding health care could address equity challenges by:

1. evaluating the distribution of the current health care financing burden between socio-economic groups, distinguishing between public and private financing mechanisms, and the factors influencing this distribution
2. evaluating the distribution of health care benefits across socio-economic groups and health system related factors that influence this distribution of benefits
3. identifying and critically evaluating current experience, and options for the likely future development, of pre-payment mechanisms for funding health care in and between Ghana, South Africa and Tanzania in relation to their actual and/or potential equity impact and their feasibility and sustainability given attitudes of key stakeholders
4. developing strategies and policy recommendations on pre-payment funding mechanisms that will most appropriately address the identified health system equity challenges.

Until recently, international debates about financing and health care equity have primarily focused on mechanisms to promote equity in relation to very specific aspects of health systems: e.g. user fee exemption mechanisms; allocation of limited public sector resources through needs-based formulae; mechanisms for regulating private providers and improving effectiveness in contracting with private providers. However, in recent years there has been growing interest in considering these equity challenges from a more systemic perspective.

Health system equity evaluations often draw on financing and benefit incidence analyses. To date, most of the work on financing incidence analysis has been confined to high-income countries. Only recently have such approaches been applied in low- and middle-income countries, mainly through the EQUITAP project which was confined to Asian countries. No *comprehensive* financing incidence analyses exist for African countries. In relation to benefit incidence analyses, some work has been undertaken, but this has focused solely on quantifying who benefits from public subsidies for health services. The SHIELD project has greatly added to existing knowledge through not only undertaking the first set of comprehensive financing incidence analyses within African countries, but also through undertaking the first set of benefit incidence analyses that cover publicly funded health services *as well as* services funded through other financing mechanisms. In this way, it is the first study

to explore in detail income and risk cross-subsidies within the overall health system. SHIELD then went further to undertake a detailed evaluation of the factors contributing to the financing and benefit incidence patterns within each country. This then provided an excellent basis for considering alternative health care financing mechanisms that may address those factors contributing to inequitable financing and benefit incidence.

There is growing international attention on pre-payment funding mechanisms as a core instrument in promoting progress towards universal health care entitlements and explicitly addressing the socio-economic divisions that exist in many health systems. Pre-payment funding is seen as potentially being a mechanism for overcoming existing structural inequities and negotiating the entrenched interests that have influenced health sector reforms over the past few decades. There has not been much critical evaluation of African experience with increasing pre-payment funding for health care within the context of moving towards universal coverage. No primary level research has been undertaken to explore whether system-wide interventions, such as mandatory insurance (and associated reforms to ensure that insurance entitlements can be claimed), translate into overall health system equity gains. Further, previous research has placed a heavy emphasis on 'technical' solutions, with little or no attention paid to the policy context and process and to whether these technical solutions will be supported or opposed by influential stakeholders. As policy analysis in relation to health care financing reforms in low- and middle-income countries is a relatively new area of investigation, this project contributed to international understanding of health care financing and wider health system restructuring processes.

Work undertaken

The first phase of the SHIELD project, which comprised an extensive review of existing publications and available data, was completed in the first year of the project. A 'map' of the health system in each country was developed, identifying all the major sources of finance and financing mechanisms, key categories of health care providers and user groups. Particular emphasis was placed on documenting the type and scope of existing health insurance mechanisms as well as all proposals for future health care financing developments. Financial flows were mapped and a preliminary indication of their nature and extent provided. There was a focus on categorising financing, provision and user groups in relation to the public and private health sectors and identification of the nature and extent of interactions between the two sectors. An overview of the nature of the factors that influence financing and benefit incidence (e.g. structure of existing contribution mechanisms, coverage, benefit packages etc.) was provided. The existing policy and regulatory framework was also explored, in terms of how this may influence the current financing, provision and use patterns. This information was used to critically evaluate the equity of the current health system, and identify the key drivers of inequity in each country. Detailed reports on the findings in each country have been produced and are available on the SHIELD website. In addition, an article on the key issues arising from this phase of the research project was published in the WHO Bulletin.

The second year of the project focused mainly on gaining access to existing national household survey datasets and undertaking extensive primary data collection.

Existing household surveys are deficient as a basis for calculating financing and benefit incidence in a number of respects. In particular, these surveys tend to dramatically under-report health service utilisation (critical for benefit incidence analyses) and out-of-pocket (OOPs) payments and insurance contributions. Household survey respondents will not report on insurance contributions made on their behalf by employers unless specifically requested to, and are frequently unsure of the level of their own contributions which are often directly deducted from their salary. Utilisation and OOP payments are usually under-reported due to: inappropriate recall periods; the linking of utilisation and OOP expenditure to acute illness incidence questions – potentially omitting preventive care and care for chronic diseases; and restriction to only one service used when people may have used multiple services during an illness episode. For this reason, primary data collection involved conducting our own household surveys. A nationally representative survey of 4,800 households in all nine provinces was carried out in South Africa. In Tanzania and Ghana household surveys were conducted in 6 districts in each country with a sample of 2,234 and 2,960 households respectively. In addition, a range of case studies were undertaken to better understand the factors influencing these incidence patterns.

The third year was devoted to detailed analyses of financing incidence, which was completed in most countries during this period, and benefit incidence analysis, which was completed in one country during the third year. Analysis of the factors influencing financing and benefit incidence patterns were also initiated during this period. There has been intensive engagement with policy makers in each of the countries to feed results into policy discussions at as early a stage as possible. This has been particularly important in South Africa, which is currently developing policy proposals to introduce national health insurance (NHI), and in Tanzania, which is considering options for integrating the NHI for civil servants with community-based prepayment schemes (the Community Health Funds – CHFs).

During the fourth, or final, year, all financing and benefit incidence analyses were completed in all three countries. In addition, a range of country-specific scenarios of alternative future health care financing reforms were identified through engagement with key stakeholders and the resource requirements of each scenario modelled. The potential for generating revenue from various sources to meet these resource requirements was also modelled. A range of other useful analyses were undertaken using the data collated for SHIELD, such as the impact of insurance coverage on health service utilisation, the extent of financial protection offered by health insurance schemes, the willingness of the population to tolerate income and risk cross-subsidies within pre-payment funding systems, etc. A key activity during this final year was that of dissemination of the research findings, both in terms of engaging directly with health sector policy makers and other stakeholders as well as drafting a wide range of reports and articles for publication in peer-reviewed journals.

Key results

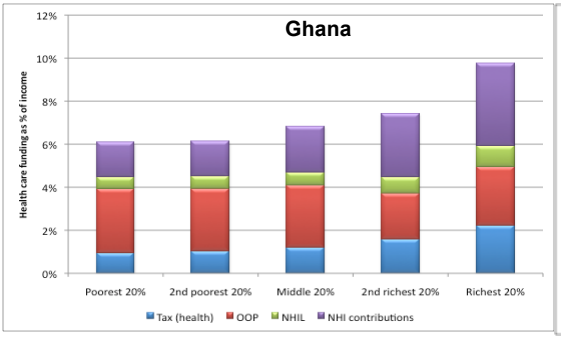
The three countries are very different in terms of their level of economic development and the current structure of their health systems. A key issue of interest relates to alternative health insurance mechanisms in the three countries. Ghana is particularly well known for its wide range of community-based Mutual Health Organisations (MHOs). In late 2002, it was estimated that there were over 159 MHOs in Ghana,

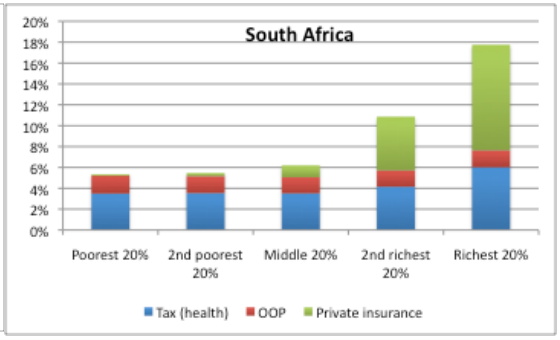
covering over 220,000 people. Tanzania also has growing experience of community-based pre-payment schemes and is known for its Community Health Fund (CHF) schemes, the first of which was introduced in 1996. In contrast, South Africa has no experience of community-based pre-payment schemes. Instead, it has substantial private voluntary insurance covering middle- and high-income formal sector workers. Such insurance schemes are almost non-existent in Ghana and Tanzania. In addition, all three countries are either planning or implementing some form of mandatory health insurance. South Africa has progressed the least, but is currently in the process of agreeing the policy framework for mandatory insurance. Tanzania introduced a social health insurance for civil servants and then introduced insurance cover for private formal sector workers who belong to the National Social Security Fund (NSSF). Although these schemes are not yet linked, integration of CHF with the mandatory civil servant scheme is soon to be initiated. Ghana has taken the boldest steps in relation to mandatory insurance by embarking on a national health insurance system within which district-wide community-based schemes are an integral component. Coverage by the NHI in Ghana has increased quite rapidly. South Africa has recently announced its intention to introduce a so-called 'NHI', which intends to introduce an integrated and universal health system that will be largely tax funded.

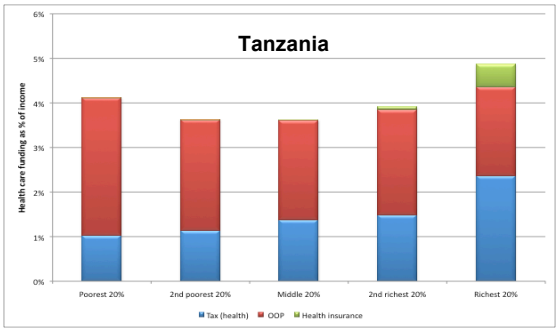
There were some commonalities and some differences in the key health care financing equity challenges identified in the three countries. An area of clear concern in all three countries, yet to different degrees, is the level of out-of-pocket payments. Using the international standard measure of catastrophic health care payments being 10% or more of total household consumption expenditure, over 5% of households in Ghana and nearly 2% of households in South Africa and Tanzania incur catastrophic out-of-pocket payments when using health services. When using the alternative threshold of 40% of non-food consumption expenditure, 2.4% of households in Ghana and 1.5% in Tanzania incur catastrophic payments, while very few do in South Africa.

The financing incidence analysis indicates that overall health care financing is progressive in all three countries, as shown in the figure below. In all countries, the poorest 20% of the population spend a smaller proportion of their household expenditure on contributing to health care funding than higher income groups.

Health care funding as percentage of household expenditure across socio-economic groups in Ghana, South Africa and Tanzania



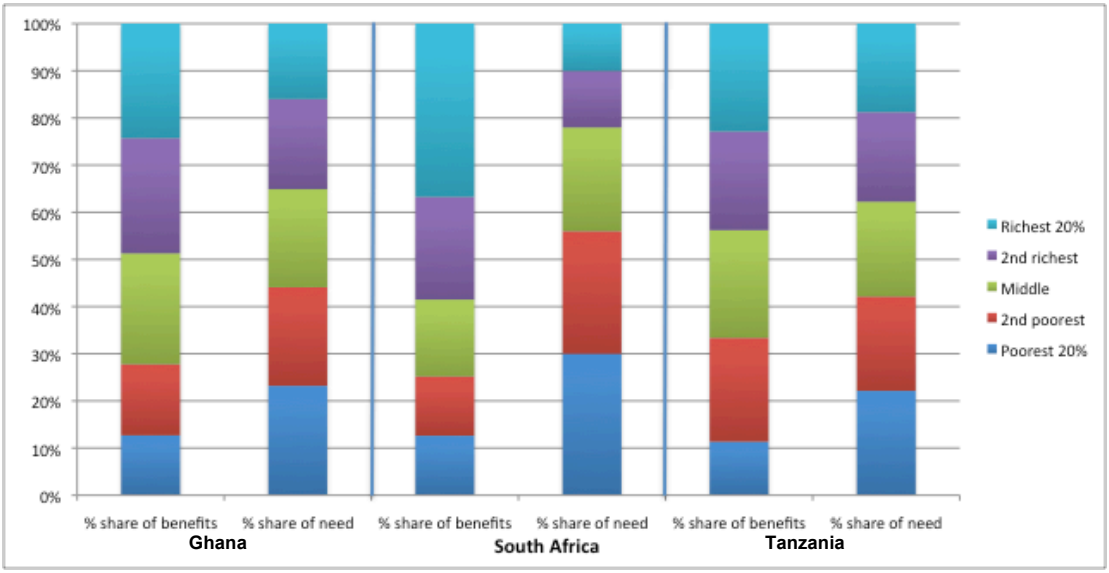




There are differences between countries in terms of the relative progressivity of different health care funding sources. Tax is an important source of funding in all countries, and the burden of overall tax payments is progressive in each country, largely due to very progressive personal income taxes. However, while VAT is regressive in South Africa, it is progressive in Ghana and Tanzania. Fuel levies were found to be regressive in both Ghana and South Africa. While import duties are a very small share of overall tax revenue in South Africa, they are more sizeable in Ghana and Tanzania, where they were found to be progressive. Out-of-pocket payments for health care were found to be regressive in all three countries. Health insurance contributions were found to be progressive in all three countries when these were evaluated across the entire population. However, in Ghana, contributions to the national health insurance by those outside the formal sector were found to be regressive. In addition, in South Africa the distribution of contributions to private health insurance schemes across those who are members of these schemes is regressive. This is largely due to the flat rate contributions in each case. These findings indicate that while overall health care financing is progressive, efforts should be made to reduce the levels of funding from out-of-pocket payments. It also highlights that in moving towards a greater reliance on pre-payment funding mechanisms, particularly health insurance, whether voluntary insurance as is currently the case in South Africa or mandatory insurance as in Ghana, careful attention needs to be paid to the structure of insurance contributions.

In relation to the distribution of benefits from using health services across socio-economic groups, services are pro-rich in all three countries. The distribution of service benefits is particularly skewed in favour of the richest groups in South Africa. Relative to estimated need for health care, based on self-assessed health status, there is a mismatch between the distribution of service benefits and the need for care.

Distribution of percentage share of health service benefits and health care needs across socio-economic groups



These findings strongly suggest that there are inadequate risk cross-subsidies in these health systems in the sense that individuals are not necessarily able to use health services when needed; rather, the benefits of using health care are distributed according to ability to pay.

We also explored the factors that influence these incidence patterns. In relation to the distribution of the burden of health care financing across socio-economic groups, many of the issues are outside the control of the health sector as they relate to tax policy, which is the domain of the Ministry of Finance. The key factors contributing to the regressivity of out-of-pocket payments and insurance contributions of those in the informal sector (in Ghana and Tanzania) were that flat rates were used (i.e. there was no differentiation of payment amounts according to ability-to-pay) and that policies to exempt the poor from these payments were ineffective, largely due to the inability to identify the poor. Similarly, private voluntary insurance contributions in South Africa imposed a greater burden on lower-income than higher-income scheme members due to charging flat rate contributions.

The consideration of factors influencing benefit incidence patterns highlighted a range of access barriers that affected poorer and rural communities more than their richer and urban-based counterparts. Affordability was a key constraint, not only in terms of the cost of health services themselves but, often more importantly, due to the cost of transport to facilities. The availability of appropriately trained health professionals, equipment and medicines, in addition to the location of health facilities relative to the communities needing health services was also a key constraint. An aspect of access that frequently does not receive attention, namely acceptability, was found to be a particularly important access barrier in all three countries. Poor staff attitudes are a major deterrent to using health services when needed.

Finally, we developed country-specific scenarios of possible future health care financing reform. In Ghana, the focus has been on exploring the implications of alternative interventions to include the informal sector in the NHI. To date, the

informal sector was required to make a contribution to their district health insurance scheme (which is the decentralised level of the NHI). While relatively high levels of NHI coverage have been achieved (about 60% of the population), it is apparent that it is becoming difficult to enrol more members outside of the formal employment sector. The government of Ghana has proposed introducing a 'one-time payment' for those outside the formal employment sector. The implications of different ways of funding NHI membership for the informal sector once they have made their 'one-time payment' has been explored.

In Tanzania, the focus is also on how to include those outside the formal sector in some form of health insurance scheme. There are moves to integrate the community health funds (which cover those outside the formal employment sector) with the mandatory NHI, which covers civil servants. In Tanzania, the status quo was compared to expanding insurance coverage to the informal sector without subsidised contributions for those with the least ability-to-pay (i.e. population coverage of about 60%) and with universal coverage, which require considerable additional health sector investment.

The South African government has committed itself to introducing a universal health system that is largely tax funded, does not require people to pay for health care at the point of service and that covers a reasonably comprehensive package of care. Previously, it had been proposed to introduce mandatory social health insurance, using existing private insurance schemes as financing intermediaries, for all those working in the formal sector and to continue to cover the rest of the population from tax funding. These two alternatives were evaluated and compared to the status quo. The modelling found that, ultimately, the universal coverage option would lead to the lowest levels of health care expenditure. This is largely due to the greater involvement of private health insurance schemes, which have relatively high contribution levels, in the other two scenarios. However, the universal coverage option requires substantial additional public spending on health care.

Another key result of the SHIELD project has been its contribution to capacity development in the African region. One participant of the SHIELD project from Ghana has successfully completed his PhD on SHIELD related research (graduated in June 2010 from the University of Cape Town). A second Ghanaian is due to submit her PhD based on SHIELD related research for examination in early 2011 (University of Cape Town) and a Tanzanian is also nearing completion of his PhD (London School of Hygiene and Tropical Medicine) on SHIELD related research. Finally, a Nigerian who is part of the South African SHIELD team is undertaking his PhD using SHIELD data (jointly supervised by University of Cape Town and London School of Hygiene and Tropical Medicine).

Expected end results and potential impact

The SHIELD research is contributing substantially to current policy debates in all three countries. In particular, the detailed consideration of the resource requirements of alternative health care financing reform options is assisting policy makers in each country in identifying the most appropriate route for future health care financing development. These analyses are timely given that all of the countries are in the process of embarking on major health care financing reform. SHIELD is primarily aimed at contributing to policy efforts to promote health system equity, including

improving access to health services and financial protection from the costs of health care for a greater section of the population in each of the three African countries.

SHIELD is innovative in its exploration of the system-wide implications of health care financing options, and its development of innovative tools and methods that will be made available to other groups to use. The approach is novel insofar as it covers the entire process involving the identification of existing health system equity challenges as well as the identification and evaluation of health care financing options and likely implementation challenges. In addition, this project is innovative in its consideration of the potential influence of key stakeholders and how to manage them to support successful implementation of equity promoting policies, in addition to technical design issues.

Another important impact is the contribution that the SHIELD project has made to developing capacity for health system equity analyses in the African region. More specifically, the doctoral level training of four African health economists is an important achievement.

SHIELD partners and contact details

The SHIELD project involves the following partner institutions:

- Health Economics Unit, University of Cape Town, South Africa
- Centre for Health Policy, University of the Witwatersrand, South Africa
- Health Research Unit, Ghana Health Service, Ghana
- Ifakara Health Institute, Tanzania
- Health Economics and Financing Programme, London School of Hygiene and Tropical Medicine, United Kingdom
- Medical Management Centre, Karolinska Institutet, Sweden
- Royal Tropical Institute, The Netherlands

More details about SHIELD and reports arising from the SHIELD project can be found on http://web.uct.ac.za/depts/heu/SHIELD/about/about.htm. The co-ordinator of SHIELD, Prof Di McIntyre, can be contacted on Diane.McIntyre@uct.ac.za.

Section 1 – Project objectives and major achievements during the reporting period

Participant list

Participant no.	Participant name	Participant short name	Country
1	Health Economics and Financing Programme, London School of Hygiene and Tropical Medicine	LSHTM	United Kingdom
2	Health Economics Unit, University of Cape Town	HEU	South Africa
3	Centre for Health Policy, University of the Witwatersrand	CHP	South Africa
4	Health Research Unit, Ghana Health Service	HRU	Ghana
5	Ifakara Health Institute	IHI	Tanzania
6	Medical Management Centre, Karolinska Institutet	MMC	Sweden
7	Royal Tropical Institute	KIT	Netherlands

General project objectives and project's relation to the state-of-the-art

The general objectives of the SHIELD project are to critically evaluate existing inequities in health care in Ghana, South Africa and Tanzania and the extent to which pre-payment mechanisms for funding health care could address equity challenges by:

1. evaluating the distribution of the current health care financing burden between socio-economic groups, distinguishing between public and private financing mechanisms, and the factors influencing this distribution
2. evaluating the distribution of health care benefits across socio-economic groups and health system related factors that influence this distribution of benefits
3. identifying and critically evaluating current experience, and options for the likely future development, of pre-payment mechanisms for funding health care in and between Ghana, South Africa and Tanzania in relation to their actual and/or potential equity impact and their feasibility and sustainability given attitudes of key stakeholders
4. developing strategies and policy recommendations on pre-payment funding mechanisms that will most appropriately address the identified health system equity challenges.

Until recently, international debates about financing and health care equity have primarily focused on mechanisms to promote equity in relation to very specific aspects of health systems: e.g. user fee exemption mechanisms; allocation of limited public sector resources through needs-based formulae; mechanisms for regulating private providers and improving effectiveness in contracting with private providers. However, in recent years there has been growing interest in considering these equity challenges from a more systemic perspective.

Health system equity evaluations often draw on financing and benefit incidence analyses. To date, most of the work on financing incidence analysis has been confined to high-income countries. Only recently have such approaches been applied in low- and middle-income countries, mainly through the EQUITAP project which was confined to Asian countries. No *comprehensive* financing incidence analyses exist for African countries. In relation to benefit incidence analyses, some work has

been undertaken, but this has focused solely on quantifying who benefits from publicly funded health services. The SHIELD project has greatly added to existing knowledge through not only undertaking the first set of comprehensive financing incidence analyses within African countries, but also through undertaking the first set of benefit incidence analyses that cover publicly funded health services *as well as* services funded through other financing mechanisms. In this way, it is the first study to explore in detail income and risk cross-subsidies within the overall health system. SHIELD then went further to undertake a detailed evaluation of the factors contributing to the financing and benefit incidence patterns within each country. This then provided an excellent basis for considering alternative health care financing mechanisms that may address those factors contributing to inequitable financing and benefit incidence.

There is growing international attention on pre-payment health funding mechanisms as a core instrument in promoting progress towards universal health care entitlements and explicitly addressing the socio-economic divisions that exist in many health systems. Pre-payment funding is seen as potentially being a mechanism for overcoming existing structural inequities and negotiating the entrenched interests that have influenced health sector reforms over the past few decades. There has not been much critical evaluation of African experience with increasing pre-payment funding for health care within the context of moving towards universal coverage. No primary level research has been undertaken to explore whether system-wide interventions, such as mandatory insurance (and associated reforms to ensure that insurance entitlements can be claimed), translate into overall health system equity gains. Further, previous research has placed a heavy emphasis on 'technical' solutions, with little or no attention paid to the policy context and process and to whether these technical solutions will be supported or opposed by influential stakeholders. As policy analysis in relation to health care financing reforms in low- and middle-income countries is a relatively new area of investigation, this project has contributed to international understanding of health care financing and wider health system restructuring processes.

Objectives for reporting period, work performed, contractors involved and the main achievements in the period

The general objectives for this reporting period were:

1. To analyse the distribution of the current health care financing burden and health service benefits between socio-economic groups;
2. To evaluate the factors influencing financing and benefit incidence; and
3. To initiate modelling of health insurance design options for each African partner country.

The following activities were undertaken in the reporting period:

- All work on WP 2 and 3 was completed in all three countries.
- Work on WP 5 and 6, which were the priorities for this period, was undertaken and completed.
- A workshop of a few researchers from the three African countries was held to make progress on some of the key analyses where face-to-face collaboration was needed.

- Considerable effort was devoted to dissemination activities during this period. A partner workshop held in August was devoted largely to collaborative cross-country analyses and to drafting articles for peer-reviewed publications. This workshop also provided an opportunity to bring together policy makers/senior health sector officials from the three countries to engage with each other and with the research team.
- A detailed report on these activities and the involvement of each contractor is provided in the next section.

Section 2 – Workpackage progress of the period

It was planned that during this period, workpackages 2 and 3 would be completed early in the period, and that the modelling activities in WP5 would be the main focus of efforts. It was also planned that WP6 would be completed in this period. These planned activities have largely been fulfilled, and each is reported on in detail below.

Workpackages 2 and 3: Financing and benefit incidence studies

The objectives of WP 2 (financing incidence) are:

- To generate context-relevant measures of socio-economic status for finance incidence research;
- To analyse the distribution of the current health care financing burden between socio-economic groups for individual financing mechanisms separately and overall, with a particular focus on the poor and other vulnerable groups;
- To evaluate certain aspects of financing incidence in detail through case studies, particularly in relation to existing health insurance mechanisms; and
- To evaluate the factors influencing financing incidence.

The objectives of WP 3 (benefit incidence) are:

- To analyse the benefit incidence of health services in the public and private sectors
- To gain insights into the distribution of health care benefits across socio-economic groups with a particular emphasis on the poor and other vulnerable groups
- To establish how health system related factors influence the distribution of benefits between different socio-economic groups
- To investigate the underlying determinants of utilisation patterns as well as group-specific barriers to access

All of the partners have been involved in the activities for these two workpackages. The core work has been undertaken by the teams located in the African countries (i.e. HEU, CHP, HRU and IHI). LSHTM and KIT have provided considerable in-country support to some teams. MMC has provided general support with respect to the financing incidence analysis.

In this reporting period, the financing and benefit incidence analyses were completed in all three countries.

Workpackage 5: Appraisal of health care financing design options

The objectives of this workpackage are:

- To elaborate health care financing design options for each African partner country;

- To develop a spreadsheet model that allows analysis of the equity implications of health care financing design options and distinguishes these options by their degree of equity promotion;
- To evaluate a wide set of possible design options using the spreadsheet model, emphasising those that would address existing health system inequities;
- To design maps of prospective service and financial flows in order to portray potential equity-stakeholder acceptability trade-offs of health care financing options; and
- To derive immediate policy advice.

Activities in this workpackage were largely undertaken by the teams located in the African countries (i.e. HEU, HRU and IHI).

In this reporting period, detailed scenarios for health care financing reform options in each country were developed, based on engagements with key stakeholders. Work was completed on the spreadsheet models that were used for evaluating the affordability implications of each of the alternative health care financing designs (resource requirements and revenue sources). These have been presented to key stakeholders, particularly policy makers. In South Africa, the SHIELD model has been used by the Ministerial Advisory Committee on NHI for its costing work. The development of the spreadsheet models required a considerably greater investment of time and effort than originally anticipated. The planned activity of assessing the impact of different health care financing reforms on financing and benefit incidence (to quantify the extent to which such reforms would promote health system equity) also requires considerable time and effort. For this reason, we are only attempting to do this latter modelling within South Africa (this will be on an unfunded basis as the EU project has now ended).

Workpackage 6: Method documentation and toolkit development

The objectives of this workpackage are:

1. To document processes of method development and testing.
2. To present and describe methods applied in the process by different research teams under different constraining factors.
3. To develop a comprehensive toolkit for health system equity analysis with a focus on the introduction of health insurance in low- and middle-income countries

Considerable progress has been made on this workpackage. Details of aspects of the methodology used in this project have been written up in two peer-reviewed publications (one on financing incidence and one on benefit incidence – see later). In addition, the toolkit has been drafted and only requires finalisation.

The financing incidence methods publication involved a wide range of the partners (LSHTM, MMC, HEU, IHI, HRU), while the benefit incidence publication only involved HEU staff (it was an article commissioned by the journal). MMC has taken the lead on drafting the toolkit and is drawing in contributions from all the other institutions.

Table 1: Deliverables List

Del. No	Deliverable name	WP no.	Date due	Actual/ forecast delivery date	Estimated person-months	Used person months	Lead partici-pant
D1	Three brief reports summarising the findings of WP1 in each African country	1	6	7	6	6	1, 2, 3, 4, 5
D2	Brief report for each country quantifying macro-level financial flows within the health system ***(Published as book chapter)***	2	16	34	6	6	1, 2, 4,5, 6, 7
D3	Peer-reviewed journal article(s) on financing incidence submitted	2	29	42	4.5	3	1, 2, 4, 5, 6, 7
D4	Macro-level benefit incidence reports ***(Revised to focus on articles and policy briefs)***	3	29	46	6	3	1, 2, 4, 5
D5	Peer-reviewed journal article(s) on benefit incidence submitted	3	33	44	4.5	3	1, 2, 4, 5
D6	Brief report for each country of stakeholder assessment findings ***(Revised to focus on articles)***	4	33	--	6	--	1, 3, 4, 5
D7	Peer-reviewed journal article(s) on stakeholder assessment	4	36	48	4.5	4	1, 2, 3, 4, 5
D8	Report on health care financing design options and key equity and resource implications & strategies for managing stakeholders	5	33	48	9	6	2, 4, 5
D9	'Toolkit' on health system equity analysis with a focus on the introduction of health insurance in low- and middle-income countries	6	36	48	11	8	1, 2, 4, 5, 6, 7
D10	Presentation materials and notes from workshop of partners and policy makers	7	34	47	1.5	1	1, 2, 3, 4, 5
D11	Three final reports of country studies including key findings, policy conclusions and recommendations *(Revised to focus on articles and policy briefs)*	7	36	--	9	--	1, 2, 3, 4, 5, 6, 7
D12	List of feedback presentations and copies of policy briefs in each country	7	36	46	4.5	3	2, 4, 5
D13	Peer-reviewed journal articles and conference presentations	7	44	48	6	20	1, 2, 3, 4, 5, 6, 7
D14	Project presentation	8	1	1	0.5	0.5	2

D15	Plan for using and disseminating knowledge	8	1 (revisions at 12, 24 and final report at 36)	1 (revisions at 12, 24, 36 & final report at 48)	1	1	2

Table 2: Milestones List

Milestone no.	Milestone name	WP no.	Date due	Actual/ Forecast delivery date	Lead contractor
1	Determine nature & extent of feasible incidence studies	1	9	11	2, 4, 5
2	Agree common SES methodological approach	2	8	17	1, 2, 4, 5, 6, 7, 8
3	Agree format of reports after completing macro financing incidence analysis	2	15	23	1, 2, 4, 5, 6, 7, 8
4	Selection of benefit incidence case studies	3	12	13	2, 4, 5
5	Workshop on benefit incidence case studies ***(combined with annual partners' workshop)***	3	27	47	1, 2, 3, 4, 5, 7
6	Initial tables of key characteristics of stakeholders (after first round of interviews)	4	9	17	1, 2/3, 4, 5
7	Revised tables of stakeholder characteristics and tables on insurance design preferences	4	30	46	1, 2/3, 4, 5
8	Agree tools for analysis of equity, efficiency and sustainability of health care financing options	5	18	32	1, 2, 3, 4, 5
9	Debating impacts of health financing design options before finalising comprehensive policy guidelines	5	32	47	1, 2/3, 4, 5, 7
10	Select and agree set of methods for toolkit	6	20	20	1, 2, 4, 5, 6
11	Workshop of partners and key policy makers to decide on appropriate policy recommendations	7	34	47	1, 2, 3, 4, 5, 6, 7
12	Submission of progress & final reports as agreed by all partners	8	13, 25, 37	13, 25, 37, 49	2

Section 3 – Consortium management

Project management was initiated by negotiating a consortium agreement amongst all partners. Overall project management has been largely shared by two partners: one partner (Health Economics Unit, University of Cape Town) has prime responsibility for project co-ordination, organising events and deliverables, and assessing technical progress of the project as a whole. The other partner (London School of Hygiene and Tropical Medicine) has prime responsibility for financial management of the research project. Given the close connection between technical and financial aspects, these two partners work very closely together to ensure effective technical and financial management, and prompt performance on deliverables.

The key ongoing consortium management task was maintaining regular communication between consortium partners. The main mechanism for this communication was via electronic mails and occasional phone calls between the technical co-ordinator and principal investigators in each of the partner institutions. A problem identified in previous periodic activity reports is the lack of resources for more regular face to face meetings between project partners. One of the partners, KIT, was able to fund an unplanned partner meeting during the previous reporting period. This has been

extremely helpful in enabling collaborative comparative analyses of findings to be undertaken and to allow for detailed engagement in conducting the key analyses, which has helped to ensure consistency between the analyses in the different countries. We are also making use of every opportunity where two or more partners are able to work together (e.g. when attending conferences, etc.).

In relation to the contributions of different contractors, there has been one major change in responsibilities over the period of the project. KIT initially indicated a desire to devote most of their time to WP4. However, due to a change in staffing within KIT, it was not possible to play this role. Thus, CHP has taken over the full co-ordination of this workpackage. KIT's inputs have instead been primarily devoted to supporting the Tanzanian team in their work on workpackages 2 and 3. European partners are providing inputs both on certain workpackages on which they have specific expertise and interest as well as to specific African country research teams.

We applied for and were granted a no-cost extension. The additional year has enabled us to complete all the major activities proposed for this study and to invest considerable energy in dissemination activities. As will be seen below, the project has produced a large number of peer-reviewed journal articles, reports, conference papers, policy briefs and other outputs.

Section 4 – Other issues

There are no other major issues to report on. We are extremely grateful that the European Commission granted a no-cost extension on the project.

We would like to take this opportunity to thank the European Commission for their continued support of this project. We believe that the SHIELD project has produced very important and interesting results that are of considerable policy relevance.

Annex: Plan for using and disseminating the knowledge

Plan for using and disseminating the knowledge

Section 1 - Exploitable knowledge and its Use

This research project will not produce exploitable results, in terms of the definition as knowledge having a potential for industrial or commercial application in research activities or for developing, creating or marketing a product or process or for creating or providing a service.

Section 2 – Dissemination of knowledge

The following table provides an overview of dissemination activities undertaken to date (date in **bold** type) and planned for the future (expected date in ***bold italic*** type). We have made some changes to planned publications – instead of publishing reports on the key findings, we have successfully negotiated for the publication of a special issue of the journal Health Policy and Planning in 2011, which will include 10 articles and will cover all the key results from the different workpackages. These changes are reflected in the table below.

Overview table

Actual/ *Planned* Dates	**Type**	**Type of audience**	**Countries addressed**	**Size of audience**	**Partner responsible /involved**
April 07	Three country specific reports (WP1)	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Several hundred	Primarily partners 2, 3, 4 and 5 (but all in some way)
May/ June 07	Stakeholder meetings in each country (WP1)	Researchers, policy makers	Ghana, South Africa, Tanzania	About 20 per country	2, 3, 4 and 5
July 07	Conference special session (International Health Economics Association)	Health economics researchers/ academics; policy makers; donors & multilateral organisations	Ghana, South Africa, Tanzania	100-150	All partners
September 07	Project website	Researchers, policy makers, general public	Ghana, South Africa, Tanzania	Thousands	Partner 2 for setup
August 08	Dissemination of findings to policy makers in Tanzania	Policy makers; donors & multilateral organisations	Ghana, South Africa, Tanzania	35	All partners
November 08	Article in WHO Bulletin - WP1	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	1-5 & 7
January 09	SA country specific report (macro level incidence results)	Researchers, policy makers, international organisations	South Africa	Thousands	Partner 2
March 09	Conference presentations	Health economics researchers/	Ghana, South Africa,	Less than a hundred	Most partners

Actual/ *Planned* Dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible /involved
	(African Health Economics Association)	academics; policy makers; donors & multilateral organisations	Tanzania		
July 09	Book chapter on methodological challenges in financing incidence analyses – WP 2	Health economics researchers/ academics	Ghana, South Africa, Tanzania	Thousands	All partners
July 09	Conference special session & other papers (International Health Economics Association)	Health economics researchers/ academics; policy makers; donors & multilateral organisations	Ghana, South Africa, Tanzania	Several hundred	All partners
October 09	Policy briefs on WP2 and WP3	Policy makers, general public	South Africa	Thousands	Partner 2
October 09	Article in peer reviewed journal (methods for WP3) (date of submission)	Researchers, policy makers, international organisations	South Africa	Thousands	Partner 2
February 10	Article in peer reviewed journal (results of WP2) (date of submission)	Researchers, policy makers, international organisations	South Africa	Thousands	Partner 2
June 10	Article in peer reviewed journal (results of WP3) (date of submission)	Researchers, policy makers, international organisations	South Africa	Thousands	Partner 2
August 10	Meeting of partners and policy makers	Researchers, policy makers	Ghana, South Africa, Tanzania	About 40	All partners
August 10	Media reports on key findings and policy proposals	General public	Ghana, South Africa, Tanzania	Thousands	Primarily 2, 3, 4 and 5
September 10	Dissemination of findings to policy makers in Tanzania	Policy makers, researchers, insurance groups, CSOs, FBOs, international organisations	Tanzania	Over a hundred	Primarily 5 and 1
November 11	Conference special session & other papers (First Global Health Systems Research Symposium)	Health systems researchers; policy makers; donors & multilateral organisations	Ghana, South Africa, Tanzania	Over 1,200 (plus many other via online webcasts)	All partners
February 11	Article in special issue of journal (date of submission) – financing & benefit	Researchers, policy makers, international organisations	Ghana	Thousands	Partner 4

Actual/ *Planned* Dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible /involved
	incidence				
February 11	Article in special issue of journal (date of submission) – financing & benefit incidence	Researchers, policy makers, international organisations	South Africa	Thousands	Partner 2
February 11	Article in special issue of journal (date of submission) – financing & benefit incidence	Researchers, policy makers, international organisations	Tanzania	Thousands	Partners 1, 5 and 7
February 11	Article in special issue of journal (date of submission) – Factors influencing financing & benefit incidence	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	Partners 1-5
February 11	Article in special issue of journal (date of submission) – Impact of insurance on utilisation	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	Partners 1, 2, 4, 5, 7
February 11	Article in special issue of journal (date of submission) – Willingness to tolerate cross-subsidies	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	Partners 1, 3, 4, 5
February 11	Article in special issue of journal (date of submission) – Stakeholder analysis	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	Partners 1, 2, 4 and 5
February 11	Article in special issue of journal (date of submission) – modelling reform options	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	Partners 1, 2, 4 and 5
February 11	Toolkit on health system equity analyses	Researchers, policy makers, international organisations	Not country specific	Thousands	Partner 6 with inputs for all partners
April 11	Article in peer reviewed journal - Tax incidence	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	2, 4, 5, 6
April 11	Article in peer reviewed journal - Benefit incidence of public subsidies	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	1, 2, 4, 5
April 11	Article in peer reviewed journal - Impoverishment	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	2, 4, 5

Actual/ *Planned* Dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible /involved
	effect of out-of-pocket payments				
April 11	Article in high impact peer reviewed journal –Key SHIELD findings	Researchers, policy makers, international organisations	Ghana, South Africa, Tanzania	Thousands	All partners

The main dissemination activities that have taken place during the full period of the SHIELD project are:

Peer-reviewed journal articles or book chapters

- The publication of some of the key findings of WP1 for South Africa in an annually published book: McIntyre D, Thiede M (2007). Health care financing and expenditure. In: Health Systems Trust (2007). South African Health Review: 2007. Durban: Health Systems Trust. (Downloadable on the following website: http://www.hst.org.za/uploads/files/chap3_07.pdf). This publication provided an overview of the current financing and expenditure in, and the key challenges facing, the South African health system. The South African Health Review is widely read by researchers, health managers and policy makers in South Africa. The data presented in this chapter have already been widely drawn on in policy proposals around introducing a national health insurance.

- An article on the findings of WP1 in the three countries has been published: McIntyre D, Garshong B, Mtei G, Meheus F, Thiede M, Akazili J, Ally M, Aikins M, Mulligan J, Goudge J (2008). Beyond fragmentation and towards universal coverage: Insights from Ghana, South Africa and Tanzania. *Bulletin of the World Health Organisation* 86: 871-876.

- A book chapter on the methodological challenges relating to WP2 has been published: Borghi J, Ataguba J, Mtei G, Akazili J, Meheus F, Rehnberg C, McIntyre D (2009). Methodological challenges in evaluating health care financing equity in data-poor contexts: Lessons from Ghana, South Africa and Tanzania. *Advances in Health Economics and Health Services Research*. Volume 21. Pages 133-156. Emerald Group Publishing Limited.

- An article which draws on the modelling undertaken as part of the SHIELD project and which relates that to the issue of funding anti-retroviral treatment was published: Cleary S, McIntyre D (2010). Financing equitable access to ART in South Africa. *BMC Health Services Research*; 10; (Suppl 1): S2 (10 pages).

- An article which draws on the experience of the South African team in undertaking benefit incidence analysis as part of the SHIELD project was published: McIntyre D, Ataguba J (2010). How to do (or not to do) ... a benefit incidence analysis. *Health Policy and Planning*. (Reference for advance publication: doi:10.1093/heapol/czq031)

- A special issue of *Health Policy and Planning* will be published in 2011. Articles are at an advanced stage of drafting, including:

- Mills A, Ally M, Goudge J, Gyapong J, Mtei G. Progress towards universal coverage: the health systems of Ghana, South Africa and Tanzania
- Akazili J, Garshong B, Aikins M, Gyapong J. Incidence of health care financing and service benefits in Ghana.
- Ataguba J, McIntyre D. Paying for and receiving benefits from health services in South Africa: Is it equitable.
- Mtei G, Makawia S, Ally M, Joachim A, Borghi J. Who pays and who benefits from health care? An assessment of equity in health care financing and benefit distribution in Tanzania.
- Macha J, Harris B, Garshong B, Ataguba J, Akazili J, Joachim A. Factors influencing the burden of health care financing and the distribution of health care benefits in Ghana, Tanzania and South Africa.
- Meheus F, Ataguba J, Akazili J, Joachim A, Govender V, Makawia S, Borghi J. The impact of health insurance on utilisation: evidence from three African countries.
- Goudge J, Akazili J, Ataguba J, Kuwawenaruwa A, Borghi J, Harris B, Mills A. Social solidarity and willingness to tolerate risk and income-related cross-subsidies within health insurance: experience from Ghana, Tanzania and South Africa.
- Gilson L, Erasmus E, Macha J. Using stakeholder analysis to support moves towards universal coverage: lessons from the SHIELD project.
- McIntyre D, Borghi J, Akazili J, Aikins M. Modelling the implications of future health care financing options in Ghana, South Africa and Tanzania.

- Several other articles are in preparation or have been submitted for review, including:
  - Akazili J, Ataguba J, Mtei G, Rehnberg C, McIntyre D. Tax incidence in Ghana, South Africa and Tanzania.
  - Garshong B, Ataguba J, Borghi J, Gyapong J, Joachim A, Makawia S, McIntyre D. The incidence of public subsidies for health care in Ghana, South Africa and Tanzania.
  - Ataguba J, Akazili J, Mtei G, Goudge J, Meheus F. Catastrophic payments for health care and the impoverishing effects of out-of-pocket payments in three African countries.
  - Ataguba J, McIntyre D. Who benefits from health services in South Africa? Submitted for review.
  - Ataguba J, McIntyre D. Progressivity of health care finance in South Africa. Submitted for review.
  - Akazili J, Gyapong J, McIntyre D. Who pays for health care in Ghana?

Monographs

- Three country specific reports containing the findings of WP1 were produced in mid-2007. These reports include a 'map' of the health system in each country, identifying all the major sources of finance and financing mechanisms, key categories of health care providers and user groups. Particular emphasis was placed on documenting the type and scope of existing health insurance mechanisms as well as all proposals for future health insurance developments. Financial flows were mapped and a preliminary indication of their nature and extent provided. There was a focus on categorising financing, provision and user

groups in relation to the public and private health sectors and identification of the nature and extent of interactions between the two sectors. An overview of the nature of the factors that influence financing and benefit incidence (e.g. structure of existing contribution mechanisms, coverage, benefit packages etc.) was provided. The existing policy and regulatory framework was also explored, in terms of how this may influence the current financing, provision and use patterns. This information was used to critically evaluate the equity of the current health system, and identify the key drivers of inequity in each country.

Gyapong J, Nyonator F, Garshong B, Aikins M, Agyepong I, Akazili J (2007). *A critical analysis of Ghana's health system with a focus on equity challenges and the National Health Insurance.* Accra: Ghana Health Service.

Mtei G, Mulligan J, Ally M, Palmer N, Mills A (2007). *An assessment of the health financing system in Tanzania*. Dar es Salaam: Ifakara Health Research and Development Centre.

McIntyre D, Thiede M, Nkosi M, Mutyambizi V, Castillo-Riquelme M, Goudge J, Gilson L, Erasmus E (2007). *A critical analysis of the current South African health system.* Cape Town: Health Economics Unit, University of Cape Town and Centre for Health Policy, University of the Witwatersrand.

- Ataguba J, McIntyre D (2009). *Financing and benefit incidence in the South African health system: Preliminary results*. Health Economics Unit Working Paper 09/1. Cape Town: Health Economics Unit, University of Cape Town. ISBN: 978-0-7992-2394-1. This was produced in order to make these research findings available as rapidly as possible to key policy makers and other interested groups in South Africa. This was due to requests from policy makers who are embarking on initiating a National Health Insurance in SA. It was widely disseminated and placed on the HEU website.

- McIntyre D (2010). *Modelling the estimated resource requirements of alternative health care financing reforms in South Africa*. SHIELD Work Package 5 Report. Cape Town, Health Economics Unit, University of Cape Town. This report provides detailed information on the methods employed for modelling alternative health care financing reforms and the key findings of the models. It was produced in order to make these findings available at an early stage due to the substantial policy interest in the findings in the context of debates to introduce a universal health system in South Africa. (The release of this report received such wide press coverage that the EU team in South Africa and in Brussels contacted us to indicate that they had seen the press coverage).

- Mtei G, Borghi J (2010). *An assessment of health care financing progressivity in Tanzania.* SHIELD Work Package 3 Report. Dar es Salaam. Ifakara Health Institute.

- Makawia S, Macha J, Ally M, Borghi J (2010). *An assessment of distribution of health service benefits in Tanzania*. SHIELD Work Package 3 Report. Dar es Salaam. Ifakara Health Institute.

- Borghi J, Mtei G, Ally M (2010). *Modelling health insurance expansion in Tanzania*. SHIELD Work Package 5 Report. Dar es Salaam. Ifakara Health Institute. This report provides detailed information on the methods employed for modelling alternative health care financing reforms and the key findings of the models. It was produced in order to make these findings available at an early stage due to the substantial policy interest in the findings within Tanzania.

- Rehnberg C, Khan J, Mtei G, Akazili J, Borghi J, Ataguba J, Makawia S, Garshong B, Meheus F, McIntyre D. *Toolkit for health system equity analyses in data-poor contexts.* SHIELD Workpackage 6 Report.

Conference papers

- A special session on SHIELD was held at the International Health Economics Association Conference, held in Copenhagen in July 2007. Three papers were presented in the session, covering the results from WP1 in Ghana, South Africa and Tanzania. All partners were involved in the session, with African country researchers presenting the papers on their respective country and the European partners serving as discussants of the papers. This session was well received, with a packed parallel session venue.

- Papers relating to different aspects of the SHIELD project were presented at the Inaugural Conference of the African Health Economics Association in Accra, Ghana, 10-12 March, 2009. These include:
    - Meheus F, Okorafor O, McIntyre D. The challenge of measuring need for health care in household surveys – a preliminary analysis for South Africa.
    - Okorafor O, Akazili J, Borghi J, Blecher E, Ataguba J, McIntyre D, Khan J, Meheus F. Generating composite indices as a proxy for consumption expenditure.
    - Akazili J, Ataguba J, Mtei G, Rehnberg C, Khan J, McIntyre D. The incidence of tax funding for health services in Ghana, South Africa and Tanzania. (Poster)

- A considerable number of papers relating to different aspects of the SHIELD project were presented at the International Health Economics Association conference in Beijing, China, 12-15 July 2009. These include:
    - Akazili J, Ataguba J, Mtei G, Khan J, Meheus F, Rehnberg C, McIntyre D. Health care financing incidence analysis: The experience of Ghana, South Africa and Tanzania.
    - Ally M, McIntyre D, Ataguba J, Borghi J, Meheus F. A system-wide benefit incidence analysis of health services in South Africa and Tanzania.
    - Ataguba J, Mtei G, Garshong B, Akazili J, Ally M, Gyapong J, Mills A, McIntyre D. Implications of the analysis of financing and benefit incidence in Ghana, South Africa and Tanzania for health insurance policy debates.
    - Ataguba J, Akazili J, Mtei G, Goudge J, Meheus F. The catastrophic effects of out-of-pocket payment for health care across three African countries: Ghana, South Africa and Tanzania
    - Meheus F, Ataguba J, Joachim A, Aikins M, Govender V, Ally M, Borghi J. The impact of health insurance on utilisation: evidence from three African countries.

- Mtei G, Ataguba J, Akazili J, Meheus F, Makawia S, Khan J, Borghi J, Rehnberg C. Composite index construction and its comparison with consumption expenditure in ranking households for financing incidence analysis.
- Goudge J, Borghi J, McIntyre D, Akazili J, Harris B, Mills A. The feasibility of national health insurance: Willingness to pre-pay for health care and cross-subsidise others.
- Mtei G, Akazili J, Ataguba J, Rehnberg C, Khan J, McIntyre D. Tax incidence analysis for health care in Africa: The experience of Ghana, Tanzania and South Africa. (Poster)
- Macha J, Mtei G, Borghi J. Prepayment schemes in Tanzania: examining their potential for increasing access to health care. (Poster)

- A poster related to the financing aspect of SHIELD was also presented at the International Conference on Urban Health in Nairobi, Kenya, 18-23 October 2009
  - Akazili J, McIntyre D. Incidence of Health Care Financing in Ghana

- A presentation on the financing and benefit incidence findings was presented at the Joint Platform Meeting of the Netherlands Platform for Global Health Policy and Health Systems Research and the Platform for Health Insurance for the Poor in Amsterdam, The Netherlands, 23 April 2010 (see following website: http://www.hip-platform.org/agenda/joint-platform-meeting-23-april-2010)
  - Meheus F (on behalf of SHIELD team). The SHIELD project: preliminary findings.

- A number of papers and posters were presented at the First Global Health Systems Research Symposium in Montreux, Switzerland, 15-19 November 2010:
  - A special session (chaired by Prof Mills) was held covering the key findings from SHIELD and included three presentations:
    - Garshong B, Ataguba J. Overview of the key findings of the SHIELD study on financing and benefit incidence in Ghana, South Africa and Tanzania.
    - Gilson L, Erasmus E. Policy actors' perspectives on moving towards universal coverage: Insights from the SHIELD project.
    - Borghi J, McIntyre D. What are the resource requirements for universal coverage: Insights from modelling in the SHIELD project.
  - A special session (chaired by Prof Mills) was held, focusing on policy makers' responses to research such as that undertaken in this project. It included two presentations about the SHIELD experience as well as presentations on the Asian experience with similar research:
    - McIntyre D. Policy engagements around financing and benefit incidence analyses in South Africa.
    - Borghi J. Policy response to financing and benefit incidence analyses in Tanzania.
  - A paper was presented on SHIELD findings as part of a cross-regional session involving research from Africa, Asia and Latin America: McIntyre D (on behalf of SHIELD team). Health care financing equity issues from the African SHIELD project.

- A poster was also presented: Akazili J, McIntyre D. Comparing the financing incidence of general tax revenue and the National Health Insurance in Ghana.

Policy briefs

A number of policy briefs have been produced and widely disseminated to key stakeholders. These include:

- Who pays for health care in Ghana?
- Who benefits from health services in Ghana?
- Access barriers to the use of health care in Ghana.
- Who pays for health care in South Africa?
- Who benefits from health services in South Africa?
- Who pays for health care in Tanzania?
- Who benefits from health services in Tanzania?
- What resources do we need for a universal health system in South Africa and what are the design implications?
- Should we pursue a universal health system or something else in South Africa?

Direct engagement with policy makers

There has been ongoing engagement with policy makers and other stakeholders (formal and informal meetings) and SHIELD results have been presented in various national-level forums on a regular basis. In addition, we have held two SHIELD workshops with policy makers:

- The annual SHIELD partners' workshop was held in Zanzibar in August 2008. This workshop was used to undertake collaborative analysis of the financing and benefit incidence in the three countries and to refine the methodology for these analyses. In addition, we used this opportunity to disseminate key findings from the SHIELD project to policy makers in Tanzania. A high-level delegation of Ministry of Health officials, officials from the national health insurance organisation, and representatives of key donors was invited to this meeting. This was seen as an important opportunity to create stronger interaction between the SHIELD research team and key policy makers in Tanzania, as well as to inform policy makers of the nature of the findings being produced by the SHIELD project.

- The 2010 SHIELD partners' workshop was held in August in Accra, Ghana. The partners worked on various collaborative journal articles. In addition, a day of the workshop was devoted to engaging with senior policy makers from Ghana (including the Deputy Minister of Health) and other key health sector stakeholders in Ghana. In addition, senior officials from Tanzania and South Africa came to Accra to participate in these discussions. The key findings from SHIELD were presented and extensively discussed. The SHIELD project then provided a field trip for the Tanzanian and South African officials to allow them to see the operation of the National Health Insurance in Ghana first hand.

Section 3 - Publishable results

As indicated previously, this research will not produce exploitable results.