Learning lessons and moving forward: how to reduce financial barriers to obstetric care in low-income contexts

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Introduction: typology of interventions

In all of the contexts described in this book, the problem statement is the same - few women are accessing formal delivery services, for reasons which include their inability to afford the cost of care. Skilled attendance rates, nationally, range from around one-third in the case study countries with the highest proportion living in absolute poverty to two-thirds in those with the lowest levels (Table 1). All, apart from Bolivia, have caesarean section rates that fall far below the recommended range of 5%-15% of deliveries (and in Bolivia, the low rural rates are counterbalanced by excessive urban one).

The financial barriers that they face stem from a range of factors, including low household incomes, low prioritisation of maternal health within the household, high costs of care, unpredictability of costs of care, and lack of risk-sharing mechanisms within the health financing system (so that the majority of costs are paid out-of-pocket by households). The financial and non-financial barriers result in low demand for obstetric care and low effective access. Although interconnected, some of these barriers are addressed more directly through health system interventions and others through household and community interventions (Figure 1).

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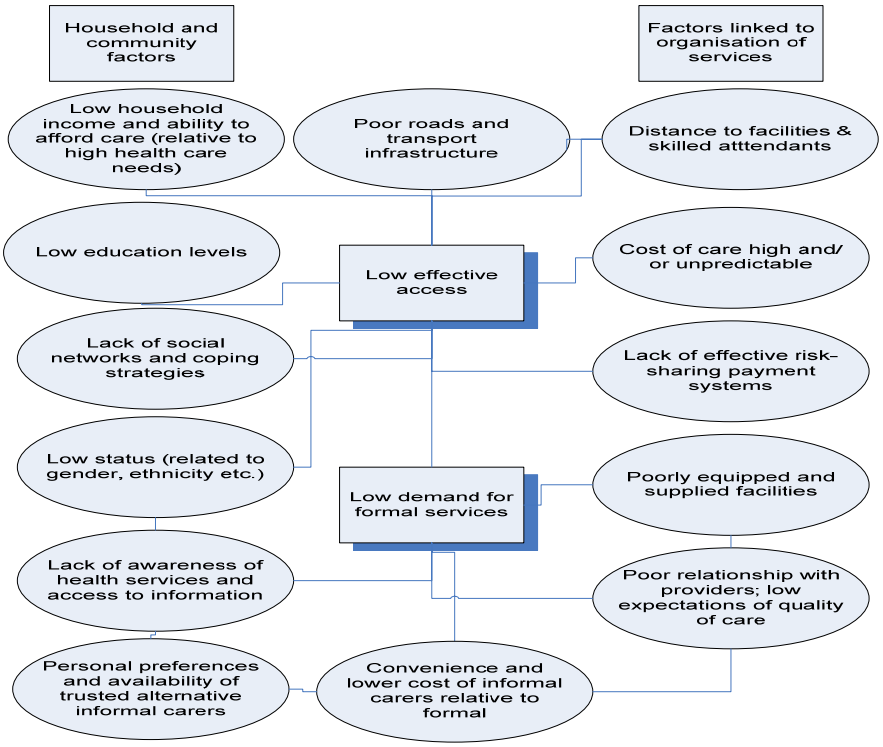
Table 1. Selected characteristics of cases study countries

Country	GNI per capita in current US$ (2007)	National skilled attendance coverage (DHS)	C-section rate (DHS)			Out of pocket as % of total expenditure on health (2007)	% population below 1.25 US$ per day
			Total	Urban	Rural		
Bolivia	1,260	67% (2003)	15.8	23.0	6.1	32%	19.6% (2005)
Burkina Faso	430	38% (2003)	0.7	2.6	0.4	44%	56.5% (2003)
Cambodia	540	44% (2005)	2.2	6.7	1.4	63%	40.2% (2004)
Ghana	590	47% (2003)	4.2	8.9	1.8	45%	30.0% (2005)
Guinea	400	38% (2005)	1.8	5.2	0.8	88%	70.1% (2003)
India	950	47% (2005-2006)	9	17.3	6.2	78%	Rural 43.8% (2004) Urban 36.2% (2004)
Mauritania	840	57% (2000-2001)	3.3	5.6	1.5	31%	21.2% (2000)
Senegal	820	52% (2005)	3.5	7.1	1.4	56%	33.5% (2005)

Sources: World Bank (key development data & statistics), Countdown 2015 (Country profiles), DHS Stat Compiler

Figure 1. Barriers for households to accessing obstetric care (source Witter 2008a)



The interventions described in this book aim to lower access barriers by averting some of the economic and social costs of paying for obstetric care which are described in the context chapter (Borghi *et al.* 2008). Cost structures vary according to context, with facility costs dominating in some contexts and non-facility costs (for example, for transport) dominating in others. The costs of obstetric care take many forms and are not just focussed on the intrapartum period, but can also last for some time after the delivery, particularly in the event of an obstetric emergency or near-miss event (Storeng *et al.* 2007).

Most of the approaches described in this book focus on the cost of care and on increasing risk-pooling of costs. They mostly adopt one or more of the direct strategies to reduce financial barriers to care described in Table 2.

Table 2. Direct strategies to reduce financial barriers - an overview

Strategy	Funding	Targeting	Which costs?	Purchasing	Payment systems
Supply side (financial barriers tackled via the health system)					
Fee exemption or reduction (Ghana, Senegal, Burkina)	Public finance or donors	Service-based; possible geographic targeting and self-selection	Official fees for services and goods	Health facilities - public, private, private not-for-profit	Subsidies on inputs or retrospec-tive payment per case to facilities
Waivers (Cambodia HEF)		Individual or household targeting			Payments per case or per capita to facilities
Tackling informal payments (Mauritania)	User fees, with possible subsidy component	All services within specific facilities or facility types			Internal to facility budget: substitution of official for unofficial payments
Demand side (financial barriers tackled directly via the households)					
Conditional cash transfers (India)	Public finance or donors	Individual or household targeting	Any cost compon-ent, potentially - fees, transport, food, opportunity costs	Usually third party organisation, based in community, or at facility, or indepen-dent (but generally not-for-profit)	Payment to client, subject to specified attendance at facilities
Vouchers (Cambodia)	Public finance or donors, with possible co-payments	Individual or household targeting, usually, though could be geographic	Official fees for services and goods		Payment per case to facilities in exchange for redeemed vouchers
Loans	Public finance, donors, community contribu-tions	Individual and needs-based (sometimes based on creditworthiness too)	May be restricted to certain costs or situations, or general		Loans to clients with or without fixed limits and interest
Prepayment/ community health insurance (Guinea, Mauritania)/social heath insurance (Bolivia)	Public finance or donors, with possible co-payments	Individual or household targeting, usually, though could be geographic	Official fees for services and goods		Subsidy payment to insurance fund per target client enrolled

Source: adapted from (Witter 2008b)

In addition to direct approaches to reducing financial barriers, there are a variety of actions which, while not usually framed in those terms, do in reality bring down the real costs of accessing services for clients. These include, for example:

- Changes to public resource collection and allocation in such a way that poorer areas benefit and are able to pass on the benefits in the form of fee reductions or quality improvements.
- Any policy which increases the income of clients, particularly the poor, will have the effect of reducing the real cost of accessing care (e.g. micro-credits).
- Bringing services closer to clients, which has the effect of reducing transport and opportunity costs (e.g. increase the number of CEmOC facilities or/and provision of funded ambulance service).
- Improving the quality of care and the provision of drugs and supplies similarly reduces real costs to clients, by removing the need to seek alternative sources of care (e.g. in the private sector) and to purchase additional inputs, such as drugs and supplies, which are lacking in facilities.

Lessons derived from case studies

A summary of the policies described in this book and their impact is given in Appendix 1.

Senegal and Ghana present examples of national fee exemption policies, which have achieved positive results at relatively low costs per case, but with significant implementation difficulties. These included inadequate funding in Ghana and failure to adequately reimburse lower level facilities in Senegal, both of which reduced the real benefits which were realised for households (Witter *et al.* 2008c). These policies were wide but thin: entitlement was universal, with rapid scale up from poorer regions, but with theoretical cost reductions limited to service fees, while the bulk of household expenses go to drug costs and transport. Community health insurance (CHI) could play a complementary role by taking on these costs not covered by the national fee exemption policy. However coverage of CHI remains low and access is not guaranteed if households cannot afford the premium (Soors *et al.* 2008). In Guinea, a CHI was developed specifically to protect women and their families from excessive expenditures (Ndiaye *et al.*

2008). This system, called MURIGA, is progressively scaling up in terms of district coverage but the the proportion of adherents remains low, as is common for more general CHI.

In Mauritania, household solidarity is expressed by a flat fee pre-payment scheme. This prepayment is offered to pregnant women at the first antenatal consultation and covers all costs until the end of the pregnancy. The state pays salaries to the health personnel involved in the obstetric care and the pre-payment covers consumables and fees. This is a district-managed scheme (Renaudin *et al.* 2008). The Burkina initiative in Secteur 30 includes all care for the mother and her newborn (transport, intervention and post-delivery care) but is limited to emergency and/or life-threatening obstetric care. This scheme involves not only the district, the households and the health centres, but also the local authorities. This system is district-driven and cannot be implemented without the willingness of the district team and local authority (Ouédraogo *et al.* 2008).

Other approaches target the poorest pregnant women. In Cambodia, a voucher system and a Health Equity Fund (HEF) were implemented with the specific aim of protecting the poorest. The number of voucher and HEF beneficiaries represented a large share (32.5%) of total reported facility deliveries and increased sharply over time. But the study questions the effectiveness of the targeting (Por *et al.* 2008). In India, the government introduced a conditional cash assistance programme called the Janani Suruksha Yojana (JSY) in 2005 to promote institutional deliveries. Under this programme, poor women who attended three antenatal clinics and who delivered in a health facility were to be given money soon after delivery to take care of their direct and indirect costs (Devadasan *et al.* 2008). Process evaluation shows the difficulty of assuring efficient and transparent cash transfers in a policy of this ambitious scale.

In the case of Bolivia, a variety of packages for free care have been developed over the past decade, promoting access for priority groups such as mothers and children. Although these are called social health insurance, they are funded not by membership but by national and local revenues, and to that extent are similar to the national exemption policies. A significant and sustained increase in access has been achieved, but overall coverage of services remains low and indicators for rural areas still lag far behind those of urban areas (Pooley *et al.* 2008).

There are a number of lessons which emerge from these case studies. One is the importance of setting out a clear monitoring and evaluation framework for new policies. Given the frailty of funding for many of these policies, robust evidence of results is needed to justify further external investment. It is also important to look at beneficiary incidence - how much of the subsidies are reaching the poorer households. Few schemes do this at present (only Ghana out of the case studies in this book).

The need for clear implementation plans and guidelines also emerges for some of these initiatives. Differences have been observed in terms of implementation that can lead to a complete distortion of the objectives of the plan (for example, in India, where some areas decided to reimburse home deliveries). This has also been noted in similar policies elsewhere (Powell-Jackson *et al.* 2007).

Funding sources vary greatly between schemes - some rely fully on national government funding (Ghana, Senegal, India); some are fully funded by donors (Cambodia); some are mainly funded by users (Mauritania); and others have a mix of sources (three levels of government in Bolivia; a mix of users, local government and national in Burkina). Many had considerable assistance with set-up costs from donors (Mauritania and Guinea). Funding sources correlate to some extent with the scale of the policy: those funded by government are much more likely to be national in scale, compared to other sources. They are also most plagued by funding delays.

The low take-up of some of the benefits packages - even where these are substantial and do not require co-payments by households - merits further investigation. In the Cambodia voucher scheme, less than half of the eligible women used their vouchers for delivery care. In Guinea, a 10% take-up rate was reported, despite the high external subsidy and potentially large cost-savings for households. These imply non-financial barriers, such as concerns over quality of care or geographical and cultural barriers.

A theme shared by most of the studies is the dissatisfaction of health workers with rising workloads and the lack of income supplements (with the exception of Mauritania) - though in some (such as India) informal payments may be filling the gap. To ensure the sustainability of the policy and to minimise adverse effects, this constituency should be won over in reforms to user payments. This is likely to involve a mixture of measures, including consultation over changes, improvements to pay and working conditions, and ensuring adequate staffing and controls over working hours.

All schemes report increased uptake of services, though few have robust evidence of the extent of the increase (see Table 3). Costs of intervention are equally under-reported, but where this information is available, the estimates are fairly close (for example, $18-$21 per normal deliveries and $154-$165 per CS). These costs do mask differences in benefit packages though.

Table 3. Summary of costs and utilisation responses

Obstetric finance scheme	Cost of intervention	Impact on utilisation
Bolivia social health insurance	Not reported	17% increase in supervised deliveries at national level over period 1994-2003, partly related to SUMI. 5% increase in CS over same period (though no change in rural areas).
Burkina cost sharing	Estimated $165 per CS	20.3% increase in supervised deliveries between 2003 and 2007 (secteur 30 district)
		1.2% increase in CS
Cambodia vouchers	$5 per voucher recipient	12.3% increase in public health facility deliveries (2006-2007-
	$18 per supported delivery	(increase of vouchers deliveries as well as self paid deliveries)
Ghana fee exemption	$22 per delivery (all types)	12% increase in supervised delivery rate (2003-2005, Central Region)
	$0.16 per capita (nationally)	5% increase (2004-2005, Volta Region)
	$62 per *additional* delivery (all types)	
India cash transfer	Not reported	Between 15 and 27% increase (depending on the areas) in facility deliveries (2004-2006)
Mauritania EmOC insurance	Set-up costs of $1.3 to $4 per reproductive age woman	33. 8% increase in facility deliveries (2000-2007)
	Premium of $22 per pregnancy	
Muriga CHI, Guinea	Not reported	Little impact on supervised deliveries : 5% increase from 2000 to 2006
		1.1% increase in CS (not different from non-Muriga areas)

Senegal fee exemption	$2.2 per normal delivery $154 per CS $0.10 per capita nationally $21 per *additional* normal delivery $467 per *additional* CS	Based on sample of facilities in five exempted regions (2004-6): 4% increase supervised deliveries 1.4% increase in CS rate

Most of the policies described here were young, and so the impact on more 'fixed' costs, such as staff, equipment and maintenance were not significant, but over time, as activity levels increase, governments must budget for increased allocations to these areas.

There is a clear trade-off between depth and breadth, with targeted schemes (Cambodia, India) able to include a wider range of costs, such as access costs. However, the assumed equity advantages of individual targeting over geographical targeting was questioned by the Cambodia case study, which highlighted the problem of maintaining systems for identifying the poor in all villages.

Some of the initiatives had very short lifetimes, being soon superseded, fully or partially, by new policy initiatives (e.g. in Ghana, by the shift from exemptions to national insurance, or in Burkina Faso, by the shift from localised cost-sharing to a national subsidy policy). These policy shifts can be positive, if they represent scaling up of policies and are based on lessons learned from previous experiences.

The only case study with a longer history (of more than a decade) is the Bolivian one. It demonstrates the possibility of improving national indicators with sustained national commitment over time, but also issues of cost-control, and the limit to policies which target financial barriers alone, without addressing wider health system, geographical and cultural barriers.

The case studies highlight a range of practical lessons on the implementation of policies aimed at reducing financial barriers to obstetric care. These are summarised in Box 1.

Box 1. Lessons on implementation of policies to reduce financial barriers to obstetric care

1. Design of policy

- The policy should be based on a thorough situation analysis of the main barriers to raising skilled delivery (financial barriers may not be the most significant factor in some contexts). Policies directly addressing financial barriers are most appropriate where there is:
    - High maternal mortality (and/or high inequalities in maternal mortality rates by area or socio-economic group)
    - Relatively low skilled attendance rate at delivery (and/or high inequalities in skilled attendance at delivery rates by area or socio-economic group)
    - Low caesarean rates (below 5% of all deliveries) and/or high inequalities in CS rates by area or socio-economic group
    - Physical access by population to health care facilities
    - Staffing of health facilities with at least minimum norms of trained personnel
    - Acceptable quality of care, with functioning equipment and adequate drug supply
    - High out-of-pocket payments by households for delivery care, relative to household income
- The package of services to be covered should address the policy's objectives (e.g. including the interventions which save lives and cause most economic hardship to families)
- The policy should be consistent with the wider policy environment and thinking in government
- The policy should extend to major service providers, whatever their sector of work, reflecting current utilisation patterns of services and subject to minimum quality standards
- Eligibility should reflect areas of greatest need but also a realistic assessment of available resources
- Additional investments should be planned alongside the policy to address key supply-side constraints (such as staff shortages) and to cope with increased utilisation in the medium-term
- The scope for additional demand-side investments, such as in transport funds, should be considered alongside supply-side approaches, in specific areas of need
- The role of complementary players, such as TBAs, should be considered - can they be involved in the policy in a constructive way?
- Policies should reinforce the referral process, so that uncomplicated deliveries

are handled at lower level facilities
- Conversely, the policy should support access to referral care for those with medical needs

2. Policy development process
- All key stakeholders should be consulted and involved in development of the policy. This process should engage with potential 'champions', who can sustain the policy momentum nationally and sell the policy politically
- The policy should be carefully and realistically costed (based on utilisation patterns, caseload, unit costs, and projected changes to these) and matched with likely funding sources (also projected to assess likely changes over the medium-term)
- Policy guidelines should be clearly elaborated and communicated to all key stakeholders
- Policy should be subject to periodic review and revision with major stakeholders

3. Policy dissemination
- Core messages should be kept as simple as possible
- Strategy should be developed for active dissemination of policy to communities and health workers
- Statements of benefits package and eligibility criteria should be prominently displayed

4. Resource allocation
- Funds should be allocated by area according to a population-based formula, adjusted for service utilisation rates and case-mix
- Other public funding sources should be maintained so that the policy provides additional resources
- Funding should be regular and predictable

5. Payment systems
- The payment mechanism should ensure that average production costs (or the components that are not centrally funded or subsidised) are reimbursed (but not over-reimbursed) for each provider type
- Payments to facilities should *either* be made in advance, based on predicted caseload, and adjusted periodically, based on reports, *or* paid retrospectively but frequently, to avoid cash-flow problems
- If based on activities, there should be record-keeping which allows for independent verification of cases managed
- Indicators of cost escalation, including caesarean rates, should be monitored, and incentives adjusted to counter-act over-medicalisation
- The financial impact on health facilities should be monitored, with checks to ensure that costs are not being shifted onto other services, or into informal payments

- If health workers were dependent for part or whole of their income on user fees, then compensatory measures should be built into the policy

6. Management, monitoring and evaluation

- There should be clear lines of responsibility (both institutional and individual) for managing and monitoring the policy implementation process
- Timely monitoring should pick up and respond to problems, but also flag up successes to generate continued financial support
- Periodic community-based surveys should assess actual benefits to different socio-economic and geographical groups
- Evaluations should be conducted periodically, using baseline indicators of utilisation, quality of care, health outcomes and household costs
- Country experiences should be documented and shared, focussing not only on costs and outcomes, but also on the processes which enabled policies to be sustained and to be effective, or conversely, which acted as barriers

Is there a best bet strategy for different contexts?

There is increasing recognition of the importance of context and process, which will determine the dynamic responses of health systems to changes. A three-country study of health reforms and maternal health (Penn-Kekana *et al.* 2007) found large differences between de jure systems (as laid out in official documents) and de facto systems (in terms of actual care). Informal behaviours, structures and relationships mediated the official policies in unintended ways which sometimes worked against their purpose. This limits the transferability of lessons (positive and negative) from one context to another.

It is also widely recognised that there is no single successful way to 'target' the poor (Gwatkin *et al.* 2005), and that many different approaches are required to re-orient health systems towards greater equity. A recent report for WHO included wide-ranging recommendations covering political and legal frameworks, regulatory measures, health financing and management initiatives (Gilson *et al.* 2007). Others go even broader, and emphasise that equity should involve addressing the root causes of poverty and inequity, not just addressing the symptoms: ' "Pro-poor" interventions deployed around a deeply inequitable core structure are insufficient' (UN Millennium Project 2005). There is a growing view that health systems should not just seek to guarantee equitable access to interventions but

should be seen as a core social institution which reinforces social solidarity and citizenship. Conversely, exclusion and marginalising treatment by the health system is increasingly recognised as forming a core part of the experience of being poor in low-income countries (UN Millennium Project 2005). The authors of this report argue for a paradigm shift away from the focus on competitive markets to deliver health care goods more efficiently to a human rights approach which recognises the role of the state in ensuring redistribution and social solidarity. This involves reinforcing the legitimacy of the state, strengthening collaborative relationships between public and private sectors, and giving the poor a stronger voice and power to assert claims.

Financing increased coverage

The overall financial climate remains highly constrained in low-income countries. Many countries spend less than $10 per capita per year on health care, which is well below the ballpark figure suggested by the Commission for Macroeconomics and Health (CMH) of $35-40 to finance a basic package of health in developing countries (World Health Organization 2001). Some are pessimistic about the likelihood of reaching that figure in the period to 2015 (Pearson 2007). These projections suggest that health financing is likely to increase over the period to 2015, but will be lowest and starting from the lowest base in the poorest countries, and unlikely to reach CMH targets. Even if the Abuja targets for government allocations to health were met (15% of public expenditure allocated to health), there would continue to be significant shortfalls in funding, relative to the $35 per capita target. Consequently, this report argues, the focus should be on improving the use of such additional resources as are realistically to be expected.

A recent modelling exercise of the additional resources required to reach the MDG goals for maternal and newborn health in 75 countries produced estimates of $39 billion over the next ten years to achieve moderate scale up, and $56 billion for a more rapid scale up (Johns *et al.* 2007). Mobilising these resources will be challenging, despite recent initiatives, such as the Global Business Plan for MDGs 4 and 5 and the International Health Partnership. Estimates of the cost of reaching MDG 5 in high-burden countries range from $0.22 per head to $1.40 (Gill *et al.* 2007). Based on 2004 levels, donor funding would have to increase 11-fold to achieve the

investment which the WHO estimates is needed by 2015 (Borghi *et al.* 2006; Powell-Jackson *et al.* 2006). A recent review of donor funding found that funding for maternal and neonatal health had increased between 2003 and 2006 from $7 per live birth to $12 per live birth (Greco *et al.* 2008). However, the authors noted that funding has reduced in some high-burden countries and that resources were not well targeted to areas of highest maternal health need.

Maternal health is also in competition for resources with other health goals, and has traditionally attracted fewer resources than the more 'vertical' interventions, though this is something that the recent initiatives aim to address. The relatively modest cost of providing free mother and child care in countries like South Africa - 2.5% of the recurrent budget (Schneider & Gilson 1999) - suggest that resources for this strand could be found at the national level, if this was seen as a priority intervention by policy-makers. Recent initiatives, such as the Partnership for Maternal, Newborn and Child Health have attempted to act as advocates for MCH and to create harmonised messages - one of the weaknesses identified by some observers of the Safe Motherhood movement (AbouZahr 2001, Shiffman & Smith 2007).

International financial support is currently being pulled in two directions. One is towards strengthening health systems, with the recognition that high levels of funding tied to specific diseases can weaken the sector as a whole. For example, a recent report found that only about 20% of all health aid goes to support the government's overall programme (i.e. is given as general budget or sector support), while an estimated 50% of health aid is off budget (Foster 2005). On the other hand, there is a shift towards output-based aid, in which aid is dependent on specified targets being met (World Bank 2007). Depending on how, by whom and which targets are set, these approaches may or may not reinforce one another.

Conclusion

There is renewed interest in closing the gap in skilled attendance and maternal health, between and within countries, and a variety of approaches have been tested in recent years in different contexts. In addition to policies which directly address the financial barriers for households, which are the focus of this volume, there is also a growing interest in complementary areas, such as getting the right incentives for health workers to increase coverage

and creating aid modalities which enable and reward higher performance by the health system as a whole. These approaches can all contribute, if designed in an integrated way, to meeting the MDG goals.

Adopting the right package for a given context is not a mechanistic matter. The balance of supply- and demand-side constraints will vary, and the design of an appropriate policy has to take into account resource availability, cultural expectations of roles and responsibilities, as well as the way in which the health service is financed and organised.

There are no single 'best bet' strategies for all contexts, but there are established pathways to success, derived from country experiences. The key ingredients are local commitment, perseverance over time, a holistic approach which addresses demand- and supply-side barriers, and maintaining a focus on universal coverage as the ultimate, if not immediate, goal.

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Appendix 1. Summary of case studies

	Ghana delivery fee exemption policy	**Senegal free delivery and caesarean policy**
Design features		
Date and geographic extent of implementation	End 2003 introduced for four poor regions; end 2004 scaled up to whole country	2005 introduced for five poorer regions; extended in 2006 to all regional hospitals (except Dakar)
Beneficiaries	All women who deliver in health facilities	All women who have caesareans; all normal deliveries in health centres and health posts
What services are covered by the scheme?	All normal deliveries; all assisted deliveries (including CS); all complications arising from deliveries. All direct facility costs for the mother are meant to be covered (consultation, tests, drugs, supplies etc.).	Normal deliveries and caesareans (now extending to other complicated deliveries). All direct facility costs for the mother are meant to be covered (consultation, tests, drugs, supplies etc.).
Which providers are eligible to participate?	Public, mission and private providers are eligible	Public only
Funding arrangements	Funded by government, with inputs from HIPC funds	Funded by government
Management of the scheme	Funds transferred to districts, based on population numbers. Funds managed by District Assemblies and District Health team.	Coordinating committee at national level. Operates through regions and districts, working with national and regional medical stores for provision of kits.
System for paying providers	Facilities present monthly reports on exemptions provided. Reimbursed according to agreed tariffs (according to acts and provider type)	Funds transferred at start of year, based on estimated case-load, to regional hospitals; lower facilities receive kits for CS or normal deliveries
Assessment of impact		
Impact on utilisation	Estimated 12% increase in deliveries in Central Region (over 18 months of implementation) and 5% in Volta (6 months of implementation). Main increase in health centres. Main attendance: by midwives.	Data from selected facilities visited by researchers showed small but significant increases in facility deliveries (4%) and CS (1.4%) in year after introduction. Control data lacking but some national data for non-intervention regions supports claim that increase in five regions may be linked to intervention.
Impact on quality of care	Quality unchanged by scheme (poor before and after)	Small but non-significant reduction in fresh stillbirths. Qualitative results suggest quality unchanged – neither deteriorated nor guaranteed by exemptions policy.

Impact on household costs/expenditures	Significant fall for fees for CS (28% decrease) and facility deliveries (26%); also non-significant fall for TBA/home deliveries (14%). Out of pocket payments remain significant however (continued non-fee and fee expenses)	Qualitative evidence that households continuing to pay for many delivery costs at facilities, especially drugs not included in kits. Reduction in costs unlikely to be sufficient to convert non-users, except for CS, where reductions probably more significant (though regional variations). Other complications not included in policy.
Impact on health outcomes	Not established, though mortality and morbidity should be reduced through increased facility deliveries and quicker access to emergency care	
Impact on facilities	Initially positive – increased income and ability to purchase supplies – but later debts as scheme under-funded	Value of transfers to regional hospitals far exceeded cost of services. Lower level facilities lost out though, due to kits not covering labour and other costs. Also shortages of kits and irregular supply. Some have recouped through increases in other prices or continued charging for deliveries.
Impact on health workers	No direct impact on health worker income, though workloads increase. Few incentives related to scheme. Health worker income going up independently at time of implementation.	Policy threatens income of community staff at district and sub-district facilities (previously paid from delivery user fees). However, no evidence of cuts to staff – rather facilities now support in other ways. Increase in workload. Most deliveries conducted by 'matrones' (community staff with 3-6 months' training).
Scheme's performance in terms of equity	Decrease in inequalities of utilisation by quintiles under policy in Volta (unchanged in Central). Fall in catastrophic payments and household pushed into poverty. Proportionate reduction in out-of-pocket greatest for top quintile (22%), compared to bottom (13%).	Geographic inequity in distribution of funds and kits (poorly correlated with expected deliveries by region or district). Qualitative evidence that remote communities not able to access exemptions as too far from facilities. Main beneficiaries probably poor in urban/peri-urban areas. Poorest probably unaffected as limited waivers (e.g. free drugs) existed before.
Adequacy and sustainability of funding	Scheme funded almost adequate for first phase with four regions, but under-funded by 62% when expanded nationally. Lack of commitment. Poor monitoring and evaluation. Exemptions to be subsumed within new National Health Insurance Scheme	Initial budget adequate but hampered by poor planning of policy implementation (e.g. transfers to lower facilities) and poor communication. Lack of consensus on policy approach undermined sustainability.
Cost/cost-effectiveness of the scheme	$3 million total expenditure 2005. Average $22 per delivery. $0.16 per capita. $62 per additional delivery (all types)	$300,000 spent on policy in 2005 for five regions (0.5% of total national health expenditure for year). $0.10 per capita. $2.2 average per normal delivery. $154 average per CS. $21 per additional normal delivery. $467 per additional CS.

Improving access to safe delivery, Kampong Cham, Cambodia		
	Vouchers	**Health Equity Funds (HEF)**
Design features		
Date and geographic extent of implementation	The first scheme started in February 2007 in one health district (Kampong Cham) and extended to two other health districts (Prey Chhor, Chamkar Leu) in mid- 2007	Progressively started in late 2005 in 3 district hospitals and one provincial hospital
Beneficiaries	Poor pregnant women in the coverage area	All poor patients admitted in the four government hospitals, including voucher recipients
What services are covered by the scheme?	User fees for delivery, 3 ANC visits and one postnatal care visit in contracted health centres; transportation cost between home and health centre to get the above services; cost for referral to hospital in case of complication	Depending on eligibility level, total or part of the following benefit: hospital user fees, transportation cost, food allowance and funeral cost in case of death
Which providers are eligible to participate?	30 government health centres in the 3 districts selected based on having: full Minimum Package of Activities, at least one skilled midwife, record of good performance in delivery and ANC	4 contracted government hospitals
Funding arrange-ments	Voucher and HEF schemes are funded by a bilateral project between Cambodian government and Belgian government	
Management of the scheme	2 NGOs as both Voucher Management Agencies (VMA) and HEF operators	
System for paying providers	Case-based payment: by the end of each month the health centres and hospitals get their services paid according to the number of vouchers and HEF cases and agreed tariffs of user fees	
Assessment of impact		
Impact on utilisation	Deliveries in contracted health centres increased considerably; voucher supported 21.5% of the total health centre deliveries. However, more than one half of voucher recipients did not use their vouchers for delivery at contracted health centres	Deliveries in contracted hospitals increased considerably; HEF supported 57.5% of the total hospital deliveries, including voucher recipients
Impact on quality of care	Not established, though it was reported to be improved	

Impact on household costs/ expenditures	Not established, though household costs/expenditures should be reduced as they could get the services for free	
Impact on health outcomes	Not established, though maternal and child mortality and morbidity should be reduced through increased access to safe delivery: skilled birth attendance at public health facilities with quicker access to emergency care	
Impact on facilities	Not established, though in general positive: increased income and better management	
Impact on health workers	Not established, though it was reported that health workers were more regularly present at work thanks to increased income and better regulations through contracts and monitoring and supervision	
Scheme's performance in terms of equity	Not established, though equity should be promoted through targeting poor pregnant women. A large number of poor pregnant women was covered by the schemes	
Adequacy and sustainability of funding	The present funding is very reliable. But external fund may not be sustainable. Anyhow, government budget is allocated for HEF. A plan supported by government to extend the vouchers to four other provinces is under process. This increases chances of sustainability of the schemes	
Cost/cost-effectiveness of the scheme	US$5,309 total expenditure in 2007. Average about US$5 per voucher recipient and US$18 per supported delivery	Not established

	Cost-sharing system, Secteur 30 district, Burkina Faso	**The Janani Suraksha Yojana, for institutional deliveries. India**
Design features		
Date and geographic extent of implementation	Started in 2005 in Secteur 30 district, Ouagadougou	Started in 2005 - entire country. 1.1 billion population
Beneficiaries	All pregnant women living in the district	Poor pregnant women (below poverty line) who have had 3 antenatal check-ups and delivered in a health facility. (Later changed to any delivery)
Beneficiaries contribution	A fixed rate 25,000 FCFA (38.1 €) till September 2006 6,000 FCFA (9.1€) from 1st October 2006	Nil

What services are covered by the scheme?	Only obstetrical emergencies (mainly c-section). Items included: transport, intervention, drugs, lab exams, post-surgery care, hospital fee, new born care, dressings in OPD, post-natal consultation	Institutional delivery. Subsequently, it was changed to 'any delivery – not necessarily institutional delivery'
Which providers are eligible to participate?	Secteur 30 district hospital	Officially both public and private. In practice, only public practitioners were involved
Funding arrangements	Funded by health committees, district health team, government, local authorities	Funding from budgetary allocations at the Central level
Management of the scheme	Management committee (hospital staff, district team, health committee, local authorities representatives) Meeting every trimester	National, State, District level committees (comprising mostly of health staff).
System for paying providers	Funds transferred to district for one year based on the expected number of c-sections (2 to 3.5% of expected births)	Providers were not paid any money for this. But village health workers who had motivated the mother for an institutional delivery received an incentive from the nurse
Assessment of impact		
Impact on utilisation	Facility based delivery: from 66.2% in 2003 to 86.5% in 2007 Population based C-section rate from 2.5 to 3.7 %	Apparently has increased the institutional deliveries. Some evidence that the Caesarean section is high.
Impact on quality of care	Improvement of quality but due to multidisciplinary activities (public health, anthropological, social mobilisation)	Anecdotal evidence that the quality of care has reduced as the health facilities are not able to cope with the extra workload
Impact on household costs/expenditures	No household survey done but qualitative survey indicates satisfaction of the patients for cost reduction and quality of care	No evidence
Impact on health outcomes	No case of maternal mortality due to a lack of c-section but maternal mortality due to post-partum haemorrhage or severe anaemia persists.	No evidence that maternal or neonatal deaths have reduced
Impact on facilities	Increasing workload but no increase of government budget for equipment and infrastructures (equipment gets quickly damaged with high workload)	Increased workload without a corresponding increase in the resources.

Impact on health workers	No direct impact on health workers income, though workloads increase. No incentives related to the scheme. Comfort: care immediately provided (C-Section performed prior to payment)	Mixed response. Health staff feels that this is a good scheme to promote institutional deliveries. Some of the staff seems to benefit from it due to the informal fees that they charge. At the same time, they are unhappy about the high workload.
Scheme's performance in terms of equity	Flat rate (6,000 FCFA) means that poor pay as much as rich people but indigents are exempted after social interview Utilisation still higher in urban than in rural area.	While originally the scheme was for poor women, subsequently it was opened up for all women (especially in the poorer states). It is not clear who is now benefiting from the scheme, the better off or poor. Indicators for this are not being monitored.
Adequacy and sustainability of funding	Funding adequate as subvention is readjusted every year with the expected C-Sections Many stakeholders involved and contract to be negotiated every year. Need for a constant political mobilisation.	Funds are not a problem. But there is an issue of fund flow to the periphery, resulting in women receiving the benefits after considerable delay.
Cost/cost-effectiveness of the scheme	52 million FCFA for 2007 for the district of Secteur 30 (632 CS planned)	Not established

MURIGA (Community Health Insurance for Safe Motherhood)		**Obstetric Risk Insurance (ORI) in Mauritania**
Design features		
Date and geographic extent of implementation	1997 : solidarity fund in the district of Dabola 2006 : 17 districts out of 33	17/11/2002 for 2 districts of Nouakchott 11/05/2004 for a 3rd district of Nouakchott 11/05/2005 for 3 regional capitals (Kiffa, Aioun, Néma) 12/05/2007 for 1 regional capital (Aleg) 1/03/2008 for rural areas of the department of Kiffa 13/05/2008 for 3 regional capitals (Kaédi Nouadhibou)
Beneficiaries	All women of child-bearing age and children under five	All pregnant women choosing this mode of payment

What services are covered by the scheme?	-Ante Natal Care (ANC) (including medicines); delivery (including caesarean sections); obstetric complications (including hospital care and medicines); transportation costs in the event of referral to a higher-level health facility	Ante Natal Care (ANC) including biological testing and ultrasound; all types of delivery including caesarean section; post-natal care
Which providers are eligible to participate?	Existing public sector health facilities in the chosen catchment area.	Public sector health facilities in the chosen geographical area
Funding arrange-ments	Premiums are paid by the households but international organisations and NGOs (UNICEF, World Bank, UNFPA, African Development Bank, USAID, etc.) supported the implementation phase of the MURIGA (meetings, transport). Some compensate the deficits, if any, at the end of the year.	The scheme is funded by the contribution (pre-payment) of the households. Development partners (UNFPA, UNICEF, French Ministry of Foreign Affairs (SCAC, AFD) supported the implementation phase of the scheme (financial and technical support) in the first years.
Management of the scheme	General Assembly of members who entrust the implementation of activities to an executive committee; the prefectural health team (Prefectural Director of Health, Director of Micro-realisations, Prefectural Director for the Advancement of Women).	Batch of drugs supplied for the first six months then management autonomy, run by a local committee composed of beneficiaries and health staff members
System for paying providers	Receipts are paid into the rural credit bank and the service providers (care-providers and union of transport workers) issue the MURIGA with an invoice.	The monthly receipts are used to pay re-supply of medicines and consumables plus duty personnel to cover emergencies 24/7; the balance is distributed as personnel bonuses
Assessment of impact		
Impact on utilisation	Little impact on assisted delivery rate (17% to 22% between 2000 and 2006). C-Section rate rose from 0.75 to 1.85% between 2000 and 2006 for the MURIGA areas versus 0.4 to 1.6% for the areas without MURIGA	Increase in the rate of assisted deliveries (61.5% in 2000 before the start of the ORI and 95.3% in 2007) in the 5 ORI maternity wards of Nouakchott

Impact on quality of care	Beneficiaries have quicker access to care, but the MURIGA do not solve all the problems of bad management in health facilities, such as drug shortages, staff absenteeism, etc. , which explain the health services' low utilisation rate.	Significant improvement in the provision of emergency obstetric care in the 5 ORI facilities of Nouakchott (tripled rate of caesarean sections, with delay between indication and intervention reduced by three); no changes in daily care
Impact on household costs/expenditure	Financial relief for the beneficiary families, but the enrolment rate is still low (about 10%)	The rate fixed for the ORI is overwhelmingly supported by the users themselves. Even if there are still a few attempts to get unofficial payments; the women questioned cite the "price" as the biggest advantage.
Impact on health outcomes	No data available on the MURIGAs' impact on maternal and neonatal mortality.	No population data. Whether in the regions or in the 5 maternity wards offering ORI in Nouakchott, the participating facilities' maternal mortality rate has halved on average.
Impact on facilities	In some hospitals, financial and technical support from the supporting institutions has enabled the MURIGA to set up new services and provide ambulances, radios, equipment and other supplies, as well as training for health staff.	The hospitals display a certain hostility to the system. Their revenues have decreased following the introduction of the ORI - the income from obstetric activity is going elsewhere. Nevertheless, they no longer provide medicines or consumables and they receive bonuses that did not previously exist;
Impact on health workers	Some health managers feel that the MURIGA have made no real contribution.	They are less satisfied than the users because they consider their bonuses insufficient, especially in the capital
Scheme's performance in terms of equity	In principle, the system caters to the poorest women free-of-charge. There are no figures available to back this up.	The constant increase in the number of enrolments seems to indicate that even the "poorest" can pay; very few "non-paid" fees have been recorded.
Adequacy and sustainability of funding	Most of the financial support for the strategy comes from development partners in the health sector. The contribution paid by beneficiaries and the benefits package are still globally low. Financial viability and autonomy are not yet guaranteed. Current interest from the Rural Development Communities (CRD) may well provide a source of local funding.	The scheme can only be implemented in a region after the allocation of a working capital fund to cover six months of medicines and consumables.

	Bolivia's health insurance packages
Design features	
Date and geographic extent of implementation	Nationwide 1998: Seguro Nacional de Maternidad y Niñez (SNMN) 2000: Seguro Básico de Salud (SBS) 2002: Seguro Universal Materno Infantil (SUMI)
Beneficiaries	SNMN: pregnant women and children under 5 SBS: pregnant women and children under 5 SUMI: pregnant and puerperal women until 6 months after childbirth, women 15 to 60 years for cervical cancer and family planning, children under 5
What services are covered by the scheme?	SNMN: Infant and child health problems (diarrhoea, cough) and obstetric care SUMI: 547 service packages, all illnesses with some exceptions. Medical consultation, laboratory, surgery, in-hospital care, drugs, supplies, nutritional supplements
Which providers are eligible to participate?	In theory public (Ministry of Health), public insurance, private and church/NGO providers. In practice only public, public insurances and some church providers, because SUMI reimbursement does not cover staff costs
Funding arrangements	National, departmental and municipal revenues
Management of the scheme	SUMI administration unit at national and departmental levels
System for paying providers	Administrative bill is prepared by the health facility and send to the municipality, which reviews it, records it in a database, debits the sum from the municipal account and credits it to the health centre's account
Impact of policy	
Impact on utilisation	Institutional deliveries increased from 33% in 1996 to 64% in 2005
Impact on quality of care	Some decrease reported due to overcrowding of services
Impact on household costs/expenditures	Decrease, but no current data available
Impact on health outcomes	Maternal, infant, neonatal mortality reduced over period, which may be linked to the policy
Impact on facilities	No data available on financial impact on facilities
Impact on health workers	Increase in work. Some report more satisfaction.

Scheme's performance in terms of equity	Gaps in urban-rural and mestizo-indigenous coverage
Adequacy and sustainability of funding	Adequate and sustainable for the population covered
Cost/cost-effectiveness of the scheme	No specific data available