


Bangladesh Health Watch Report 2011



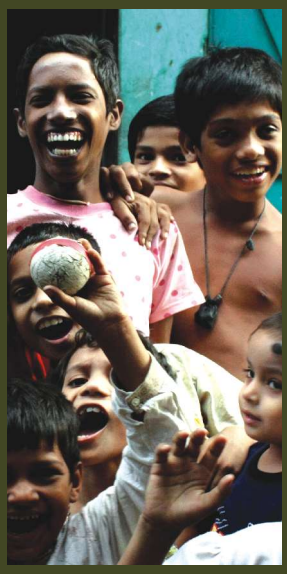







MOVING TOWARDS UNIVERSAL HEALTH COVERAGE





BANGLADESH HEALTH WATCH

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Moving Towards Universal Health Coverage

BANGLADESH
HEALTH WATCH

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FOREWORD

This report on "moving towards universal health coverage in Bangladesh" is the fourth such report presented by the Bangladesh Health Watch (BHW) on the state of health in Bangladesh. BHW, a multi organisation civil society network, was founded in 2006 to hold the state and non-state sectors accountable for their performance in delivering quality health care to the citizens. Each year, BHW brings out a report that is timely and relevant to the discussions taking place in the national and global arena, which deserves priority attention. As a citizen's initiative, BHW prides itself on its quality of work and independence as well as non-partisan nature of its contributions. These qualities have now, hopefully, been established over the course of three successive reports, the first one focusing on the theme of health equity, the second one on the status of the health workforce, and the third on the governance of the health sector in Bangladesh. These three reports have been widely used as objective measures of the state of health in Bangladesh by various stakeholders including the government, professional and civil society organisations, service providers and users, media and the international development agencies.

As the movement for Universal Health Coverage (UHC) intensifies globally, there is an imperative to prepare Bangladesh for it. The key challenges to financing for universal coverage in Bangladesh are the high and potentially impoverishing out-of-pocket spending on health; poor quality of service delivery in the public sector; a large and mostly unregulated private sector that dominates provision of care; the increasing burden of non-communicable diseases requiring high-cost individual care; and lack of experience with insurance schemes through pre-payment and risk pooling mechanism.

In this year's Bangladesh Health Watch Report, several studies have been undertaken to investigate Bangladesh's preparedness to achieve UHC within the foreseeable future, and identify opportunities as well as challenges which need to be overcome. The studies have looked at Bangladesh's experiences with public sector in-patient health care; demand side financing; health care financing by NGOs; and for profit private health insurance. Several messages emerge from these studies. These include, first, the need to establish a shared understanding of universal coverage. Two dimensions are important: a comprehensive set of quality services according to need and financial protection in accessing care ensuring that individuals are not economically compromised in paying for care.

Second, strong arguments can be made for UHC on grounds of both shortfalls and opportunities for coverage. The shortfalls in health coverage include: limited coverage of priority interventions such as skilled attendance at birth, inequities in the patterns of coverage (e.g. rural/urban, vulnerable groups), and shortfalls in financial protection arising from a health care system that is financed primarily out of pocket. However, the rationale for UHC can be drawn from current and future opportunities: universal coverage is possible (e.g., Expanded Program on Immunization); significantly more resources will be available as Bangladesh moves towards a middle-income country in the next ten to fifteen years, and increasing demands for 'integrated' and 'portable' care amongst the population.

Third, educating and empowering consumers is important as the complexities of insurance schemes such as the design of benefit packages and payments is not clear to many. Fourth, provision of more equitable and efficient health services is needed to gain trust in any system of pre-payment. Fifth steps should be taken towards developing prepayment and pooling of finances for health in Bangladesh. Several options can be considered such as more and better government financing; redesigning non-government insurance schemes; and use of a portion of official development assistance towards health insurance. Sixth, information and evidentiary systems need to be developed to support UHC. The government, communities and individual consumers need to remain well informed, and understand the level and types of services available to ensure optimum use of services. There needs to be a sensitized system for insurance premiums and claims which takes into consideration the catastrophic expenditures on health incurred by the poor. Finally, it is critical that the relevant technical expertise be available to ensure that UHC is established in an efficient and equitable manner.

I firmly believe this report will not only raise awareness about the manifold challenges related to moving towards universal health coverage, but more importantly it will catalyze concrete actions by government as well as non-government agencies to address these challenges which will result in a comprehensive and equitable delivery of health services to all our citizens.

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Secretariat
Bangladesh Health Watch

EXECUTIVE SUMMARY

Universal health coverage (UHC) refers to organized health-care systems in which "all people have access to essential health services without the financial hardship associated with payment" (Lancet 2010). The WHO defined UHC as 'access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access' (WHO 2005). Despite continuing improvements in the health sector in recent times in Bangladesh (NIPORT, Mitra & Associates, and Macro International 2009, Streatfield *et al.* 2010), the income erosion effect of ill health for the poor households is also well documented (Sen 2003). This is because in Bangladesh, like any other LMIC countries, the main source of financing health care is out-of-pocket (OOP) payment at the point of service which currently exceeds 60% of the total health expenditure (BNHA 2010). This frequently leads to catastrophic health expenditures ('health shocks') and according to a report, accounts for 22% of all shocks in the lives of poor households in Bangladesh (WB 2008). Thus, improving poor people's ability to access 'good health at low-cost' has a potential poverty-alleviating effect. Some forms of insurance involving risk pooling and pre-payments have been the call of the day to achieve this (WHO 2010).

In this year's Bangladesh Health Watch Report, studies are done to investigate Bangladesh's preparedness to achieve UHC within foreseeable future, and identify opportunities as well as challenges which should be overcome. For this purpose, seven studies were commissioned by the secretariat on different aspects of UHC in Bangladesh by experts in the field. They made state-of-the-art reviews of their respective field based on secondary data available, and attempted to carve a road map for the policy makers. This overview summarises the key findings from the different studies including conclusions and recommendations.

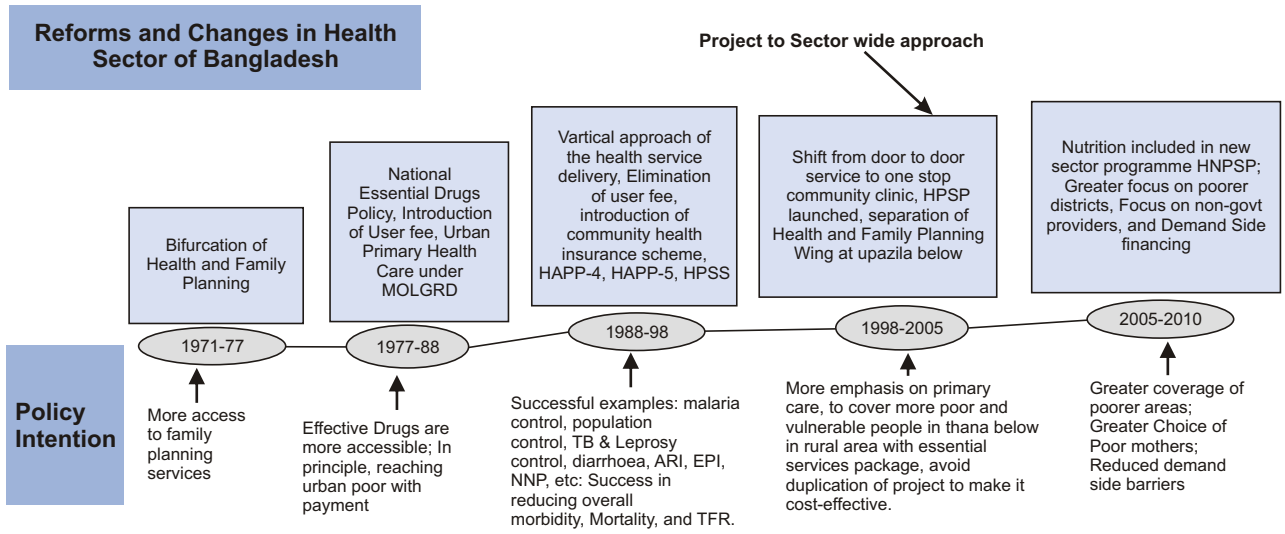
Universal Health Coverage: the next frontier

In this introductory chapter, the authors introduced the concept of UHC and discussed how it can contribute to the existing poverty reduction strategies in Bangladesh. Out-of-pocket (OOP) payments for accessing health-care is one of the most regressive way of financing healthcare and is responsible for pushing a substantial no. of households into poverty annually in Bangladesh. Thus, some form of pre-payments through insurance and other mechanisms (on the principle of 'from each according to his ability, and to each according to his need') will help in achieving UHC for the population. For this, challenges such as raising resources, reducing OOP expenditures, and inefficient and inequitable use of resources, have to be overcome. Recent experiences from countries such as Thailand, Ghana, and Rwanda which were successful in implementing health insurance schemes in varied context can be used for carving out a path for Bangladesh.

Health sector changes in historical perspectives and public health expenditures

In the next two chapters, the authors sketched the changes taking place in the policies and associated reforms in the health sector of Bangladesh since independence in 1971 from a historical perspective (See Figure below). Since the '80s, the participation of donors in financing health sector increased gradually over the years. Simultaneously, the policy environment changed as also the focus from family planning alone to an integrated, rights-based health and family welfare approach, and relevant reforms instituted. Prominent among these were: transition from a vertically integrated project-based approach to an horizontally integrated sector-wide approach, unification (and later segregation) of the health and family planning wings of the MOHFW, introduction of an *Essential Service Package* (ESP) (comprising basic preventive and curative services found as cost-effective), and providing one-stop preventive services fromonly 8% in case of the poorest 10% (BNHA 2003). The authors argue the case for some forms of insurance through prepayments and risk-pooling mechanism to reduce the income-erosion effect of illness and concomitant OOP health expenditures. Finally, a simulation exercise shows that total public health expenditure for universal health coverage (as per WHO estimate of US$ 24 per person annually) has to be increased from 274 crore to 300 crore taka between 2009/2010-2014/2015 and the community clinic which replaced the door-to-door approach promoted in the '80 and '90s. From the second-half of the 1st decade of the new millennium, issues such as pro-poor focus, community voice and accountability, public-private partnership for service

Figure: Health sector reforms, changes and policies in Bangladesh: 1971-2010



Source: Bangladesh Health Watch 2011

delivery and demand-side financing gained momentum. The implications of these for growth of the health sector are detailed.

An analysis of the National Health Accounts data revealed various level of inequity (with respect to age, sex, SES, divisions) in resource allocation and expenditure incurred with little gain on the parts of the poor. For example, the richest 10% of the population enjoyed 15% of the national health expenditure compared to health budget has to grow by 35+% during the same period (See Table below).

Inpatient health care

In further pursuance of the issue of public funding for achieving UHC, chapter 4 dealt with the distribution and utilization of existing inpatient care facilities in the public, private (for-profit) and NGO (not-for-profit) sectors including human capital and financing mechanism. There are 14,557 hospitals (10-50 bed) at the *Upazila* level, 46 hospitals (100-150 bed) at district level and 11 hospitals (200-250 bed) in the public sector but only 59.6% have 100% or higher bed occupancy rate (See Table below). The distribution of public hospitals across geographic regions is proportion to population size and equitable. However, at the *upazila* level, only 1.2% hospitals have 100% or higher bed occupancy rate which is much higher at the district and higher levels. This is not surprising as shortage, inappropriate skills-mix and inequitable distribution of human resources for health (HRH) hampers access and delivery of quality services (Ahmed *et al.* 2011), especially at the *upazila* levels (Sharif 2010). The government allocates resources from revenue and development budget to the public hospitals based on number of beds and staffs of the hospitals and not on disease burden. To make

Table: Public Expenditure required for universal health coverage

Indicators	2009/2010	2014/2015	2019/2020	2024/2025
A. Population	158,665,000	178,682,560	197,279,985	217,813,044
B. Total public health expenditure Ideally required for universal health coverage (million Taka)	274,173	308,763	340,899	376,381
C. Estimated health care budget with 6% growth rate (million Taka)	68,320	91,427	122,350	163,732
D. Deficit to achieve universal health coverage (million Taka) (B – C)	205,853	217,335	218,549	212,648
E. Amount of budget if GOB provides 50% of ideally required budget (50% of B) (million Taka)	137,086	154,382	170,450	188,190
F. Amount of budget if GOB provides 40% of ideally required budget (40% of B) (million Taka)	109,669	123,505	136,360	150,552
G. Required budget if GOB provides 25% of ideally required budget (25% of B) (million Taka)	68,543	77,190	85,224	94095

Source: Bangladesh Health Watch 2011

Table: Distribution of utilization (bed occupancy) of public hospitals in Bangladesh, 2010

Division	*Upazila* Health Complex			Secondary and tertiary level hospitals				All hospitals
	10-50 bed			100-150 bed		200-250 bed		
	Total	Hospitals with 100% or higher BOR**	Percentage of hospitals with 100% or higher BOR*	Total	100% or higher BOR*	Total	Hospitals with 100% or higher BOR**	Percentage of hospitals with 100% or higher BOR*
Barisal	33	4	12.1%	4	1	1	0	20.0%
Chittagong	85	5	5.9%	9	6	3	2	66.7%
Dhaka	103	13	12.6%	11	6	3	0	42.9%
Khulna	50	9	18.0%	8	5	2	2	70.0%
Rajshahi	111	21	18.9%	11	9	2	1	76.9%
Sylhet	31	0	0.0%	3	2	0	0	66.7%
Total	413	52	12.6%	46	29	11	5	59.6%

Source: Source: Bangladesh Health Watch 2011

resource allocation method more equitable for inpatient care, disease-specific cost using Diagnosis Related Group (DRG) should be followed for the hospitals or health facilities (Ghaffari *et al.* 2009).

Demand-side financing

In Bangladesh, most of the health programmes (including maternal and child health programmes) pursued through supply-side interventions failed to achieve the stated objectives of reaching the poor. This was due to factors such as distance to health facilities, poor quality of services provided, shortage of medicine and supplies, extraction of unofficial fees, long waiting time, social exclusion etc. (Cockcroft *et al.* 2007, Ahmed *et al.* 2011). This led the researchers and policy makers to look into the demand-side of the problem, and to improve targeting of the vulnerable groups and also, provider efficiency (Ensor and Cooper 2004). Of late, demand-side financing for reducing the OOP expenditure related to use of skilled birth attendants is being experi-mented in the public sector in 44 *upazilas*. The pregnant women can exchange the vouchers given free of cost against services from providers in the public sectors thereby stimulating competition among them for better quality of services. Initial experiences with this voucher scheme is not rosy: mis-targetting due to political influence and non-adherence to exclusion criteria properly, differential practice of beneficiary selection followed by govern-ment health workers, delay in disbursement of fund creating frustration among consumers and providers, increased demand for services at public facilities without concomitant increase in human resources etc. were some of the pitfalls encountered. Improvement in institu-tional delivery was seen as also management of complications by skilled hands. However, concern was raised about its probable negative effect on family planning especially among the poor. Similar schemes in private sector are also in place e.g., those initiated by ICDDR,B, RTM International and Marie Stopes. All these donor funded vouchers programme have been found to increase the use of ANC, PNC and delivery care. Also, the sustainability of the high-cost voucher programme is a limiting issue to be resolved. It can be said that DSF is a first step in achieving UHC for pregnancy care; however, it needs rigorous cost-benefit evaluation before scaling.

Healthcare financing by NGOs

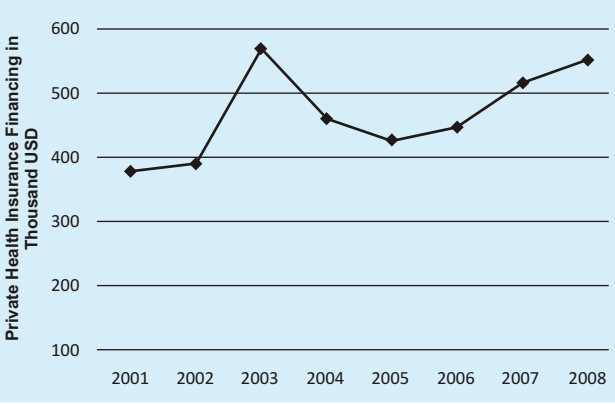
Not-for-profit non-governmental development organizations (NGOs) are one of the major players in the field of health service provision especially at the grassroots (ILO 2008). These NGOs provide health services through micro health insurance (MHI) as well as payment-for-services basis. The NGO health budget is mainly financed by development partners and share of NGO's own expenditure on health as a percent of total health expenditure (national) ranges from 1-2% only. Their modus operandi varies from NGO to NGO: BRAC charges only the cost of medicine and other services through community health workers,

while Marie Stopes charges at a flat rate of Tk 5 to 10 per visit and covers the cost of medicine as well. Marie Stopes and Dhaka Community hospital also provide services through Health Card-based MHI to selected groups such as garments workers. Any higher level care is provided free or at a heavily subsidized cost. Vulnerable groups like poor and ultra-poor receive free treatment from all. However, a comparative assessment of the different NGO financed health care showed that they were lacking in equitable health care financing through cross-subsidy. Only GK succeeded in implementing progressive premium and co-payment scheme through its pioneering MHI scheme. Experiences show that MHI requires different expertise and experience than managing microcredit and that poor are not good candidate for MHI. These need to be overcome before success of MHI can be convincingly demonstrated.

For-profit private health insurance

Voluntary private health insurance (for-profit) may aid in achieving UHC by helping households to cope with large health expenditures without drawing on its resources. However, the private Health insurance market is in a very nascent stage now in Bangladesh.

Figure: Annual healthcare financing through private health insurance in Bangladesh



Source: National Health Accounts (WHO 2010). The series has been inflation adjusted using GDP deflator with 2008 as base year.

The above figure suggests that between 2001 and 2008 the total healthcare financing (in nominal terms) annually increased by about 11% and rose from $263 million to about $550 million. Controlling for inflation for the same period actually leaves the growth curve of financing through private health insurance essentially flat.

Currently, there are about 44 enlisted insurance companies in Bangladesh mainly focusing on general, life and accident insurances. Out of these, 14 companies offer some forms of health insurance products of which group health plan for the office or factory employees is most common. Besides, individual policies are also available, usually supplemental to some other insurance schemes such as life insurance. Interestingly, the packages are mostly homogeneous and the main component of any scheme is coverage for hospitalization. Annual coverage usually reaches up to only Tk 150,000 even for the most generous policies. These companies also offer individual *mediclaim* policies for people traveling abroad. However, the private health insurance market in Bangladesh is yet to take-off and the contribution of the private health insurance companies in healthcare financing is minimal. A number of factors may be responsible: a large informal sector and therefore difficult to reach by conventional insurance companies, lower willingness-to-pay for health, high transaction costs and even the highest coverage not covering very large expenditure. For development of the sector, proper guidance and regulation from govern-ment is required and only then it will be able to complement public and not-for-profit sectors' effort to provide UHC in Bangladesh.

Micro health insurance: choice of model and regulation

Micro Health Insurance (MHI) is a type of health insurance where accessibility to essential health services is ensured to individuals and families, who are unable to afford formal health insurance schemes provided by the private sector, through affordable premiums and low prices for health services (WEEH 2003). This chapter dealt with some technical aspects of a MHI scheme such as 'appropriate size of the risk pool, the delivery mechanism as well as the regulatory regime'. Different models of MHI in the literature included (a) the partner-agent model (b) the community-based model (c) the full service model whereby an organization 'operates its own insurance scheme absorbing full risks and income but typically engages a provider who is responsible for service', and finally, (d) the provider model, where the risk-carrier also delivers the service. For choosing a particular delivery model, factors such as awareness, trustbuilding, transaction cost, claim settlement and risk pool and inclusivity need to be considered. An analysis of the different NGO health

services found these to be providing subsidized care instead of risk shifting which is a hallmark for insurance. Other constraints to develop a self-sustaining MHI model included supply and demand-side constraints, distribution and quality of services, absence of a functional referral system, comprehen-siveness of package etc. Finally, a set of regulatory and supervisory directives that respect both product and process innovations and uphold the goals of cost efficiency, financial viability and client inclusivity is put forward for reflection.

Conclusions and recommendations

In the concluding chapter, seven common messages emerging from the chapters are drawn together which constitute an agenda for action moving forward. These are:

1. Establishing a shared understanding of Universal Health Coverage

While there appears too little disagreement with the idea of Universal Health Coverage, its precise definition is difficult to pin down. WHO suggests that two dimensions of coverage should be secured: 1) a compre-hensive set of quality services according to need; and 2) financial protection in accessing care ensuring that individuals are not economically compromised in paying for care (WHR 2010). These principal axes of UHC, however, require further definition and operationalization in the specific context of Bangladesh.

2. Making a strong case for UHC

All of the chapters in this Report provide important perspectives on the many reasons for a concerted mobilization towards universal health coverage in Bangladesh *beginning immediately*. The primary and most important rationale relates to shortfalls in coverage in the current context. There are three components of these unacceptable shortfalls: limited coverage of priority interventions such as skilled attendance at birth, inequities in the patterns of coverage, and shortfalls in financial protection arising from a health care system that is financed primarily by individual households.

The rationale for UHC also draws inspiration in a much more positive way from a spectrum of opportunities: universal coverage is possible (e.g., EPI); as Bangladesh moves towards a middle-income country in the next 10-15 years, total resources for health will grow significantly; growing demand for "integrated" and "portable" care amongst the population.

3. Moving to pre-payment financing is imperative

Every country that has made a concerted effort towards a universal health coverage system has taken steps towards "prepayment and pooling" (WHR 2010). What options, therefore, should be considered in moving towards more pre-payment and pooling of finances for health in Bangladesh? These may be: more and better government financing of health, re-designing non-governmental insurance schemes, promoting a more conducive environment for health insurance, and shifting official development assistance (ODA) towards health insurance. As a concrete first step, the ODA community could assist the Government of Bangladesh in preparing a UHC financing strategy. A second step for the ODA community to consider would be to examine how their current donor flows could be rechannelled to support more pre-payment and pooling of finances for health.

4. Educating and empowering beneficiaries

As many experts have pointed out in this report and elsewhere, the value of health insurance to the consumer is not immediately clear, especially if it entails finding scarce cash to pay premiums when one is otherwise healthy. This under-appreciation of benefits dampens demand for health insurance and erodes the sustainability of voluntary membership schemes. There are a number of options for managing this challenge: to develop clear communications or education messages related to the advantages of the pre-payment system, active engagement of representatives of consumers in the design of benefits packages such that there is under-standing and awareness of consumer needs and expectations, and to make premium payment simple and sustainable.

5. Accelerating provision of more equitable and efficient health services

More and better prepayment financing systems for health care that are well understood and friendly to clients of different economic means and health needs, are critical ingredients to UHC but on their own

insufficient. A further vital input is the robust, high quality and trusted provision of health services. Should health services be of low quality, health providers absent or unresponsive to the needs of patients, or inaccessible due to informal systems of under-the-table payments, then the trust in any pre-payment system will evaporate very quickly. Therefore, identifying what services are covered and how they are delivered is an extremely important part of any systems striving for UHC.

6. *Transforming information and evidentiary systems*

The information, measurement and evidence demands related to health insurance systems add significantly to the complexity of information systems in the health sector. This requires first and foremost investment in the development of an information strategy to support UHC. This strategy would involve at a minimum i) strengthening the basic information systems required for design of packages; ii) building management information systems for insurance premiums and claims; and iii) developing more reliable and valid measures related to effective coverage of health services and protection from impoverishing health care expenditure. Besides, development of common frameworks for monitoring and evaluation and establishing a learning environ-ment for UHC among government policymakers, programme implementers, researchers etc. are also needed.

7. *Acquiring core competencies for UHC*

Designing, implementing and evaluating efforts towards UHC places special demands on the health professional workforce that go well beyond those related to clinical provision of services. These include the need for highly specialized professionals like actuaries to inform insurance design, to a wide range of practical skills involved in implementation like premium collection and pooling; benefit identification; provider payment; cross-subsidization mechanisms, and a diverse set of management skills at various levels related to policy and design, sustainable and accountable financing, and effective information systems. A full inventory of these skills needs is required to inform the scope and design of appropriate training programmes.

This seven point agenda is not meant to be a blueprint for UHC but to guide debate to inform decisive actions towards a more equitable and just health system in Bangladesh.

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Universal Health Coverage: The Next Frontier

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INTRODUCTION

Bangladesh has made important progress over the past few decades. This is particularly true in the social sector which led some observers to call it 'a near miracle' (Huq 1991). Many of the inequities and deprivations that characterized this nation historically has either been corrected or reduced significantly. In human development, life expectancy has increased by over 50% - from about 45 years in the early 1970s to over 65 years currently. More importantly, women now live a longer life than men, as expected biologically and experienced around the world. The infant mortality rate has reduced from about 150 per 1,000 live births three or four decades ago to 51 in 2007 (NIPORT *et al.* 2009). The recent report of decline in maternal mortality ratio to under 200 per 100,000 births bears testimony to the nation's ability to address the pervasive social issues. Many strides have also been made in education, particularly at the primary level. The net enrolment rate has reached nearly 90%. Here also, the gender inequity has been removed. At the time of independence in 1971, girls' enrolment in school was about half of boys which has now been corrected with girls going to school in the same rate as boys (CAMPE 2009). The agricultural production has been trebled over the years since independence outpacing the population growth which just doubled during the same period.

However, challenges remain. Although Bangladesh is poised to achieve a few of the millennium development goals such as child health by 2015, the country has to strive harder to compete with others in South Asia such as Sri Lanka. It appears that the country has harvested all the 'lower hanging' fruits very successfully. So, the next challenge is to identify and act on the more difficult and formidable ones. The issues in health systems strengthening such as efficiency and good governance will require increased attention in the immediate future if Bangladesh has to move forward with the same pace of progress.

One of the important building blocks for a health system is financing. Health financing, in general, has three objectives, viz., generate resources (revenue collection), use resources optimally (purchasing), and ensure financial access to health services by all citizens (pooling) (Normand and Weber 2009). Although health financing is commonly misconstrued as only revenue collection or generating resources, indeed, from a citizens perspective, it is more important to understand how is this resources used and who gets what. This chapter introduces the concept of universal health coverage (UHC) which deals more with the latter issues of resource redistribution.

Universal Health Coverage the next frontier

It is now well recognized that poverty is not just about income or employment. Poverty is the manifestation of a much deeper array of deprivations that includes healthcare, access to education and environmental protection. In health, it has been shown in Bangladesh and many other countries that income erosion through health shocks and catastrophic illnesses leads to impoverishment and further poverty. For many people living in low and middle income countries, health services is obtained through out-of-pocket (OOP) payments at point of service. Globally such costs account for 19% expenditures on health. But for low income countries such as Cambodia, Ghana, India, Pakistan or Vietnam, it accounts for over 50% of total health expenditures (Garrett *et al.* 2009). For Bangladesh, the OOP is nearly 60% (Rannan-Eliya 2010). Bangladesh has one of the highest rates of catastrophic illnesses, varying, depending on how it is defined, from 7 to 25% which drive up to 3.8% of the population or 5.7 million people into poverty every year. According to a World

Bank report, health is the most important shock that happens to Bangladeshis accounting for 22% of all shocks (WB 2008). High OOP payments restrict long-term economic survival and lead to further poverty and impoverishment. Worldwide, 150 million people suffer serious financial hardships and up to 100 million people are forced into poverty (Carrin *et al.* 2008). Based on a study across many countries, Krishna (2010) found health shocks as the main reason for people falling into poverty. It has been argued that catastrophic health spending is not necessarily caused only by high cost medical procedure or any single hospitalization. A steady and continuous medical bill for chronic illnesses or disabilities can force people into poverty as well (WHO 2010).

Direct payments through user fees (formal and informal) deter people from using health services. It is estimated that about 1.3 billions of the world's poor cannot access healthcare because of their inability to pay. In Bangladesh, primary healthcare services are 'officially' free at *upazila* (sub-district) and levels below it. There is a nominal fee for services at tertiary and specialized hospitals. However, according to studies such as the Bangladesh Service Delivery Survey of 2003, 80% of the respondents reported paying for services, with 20% making direct payments to service providers (ILO/KFW Study team 2008). In addition, problems in terms of the quality of care such as the absenteeism of personnel, shortage of medical supplies and behavioural issues discourage people, particularly the poor, from accessing services at government facilities. They either forgo care or turn to private practitioners. It is well known that the private caregivers in great majority are informal providers who provide services of unknown or doubtful quality (BHW 2008).

The cycle of illness, impoverishment, and further poverty is best interrupted by the introduction of pre-payment schemes and health insurance through UHC. The UHC promises a better way of paying for health services against the regressive OOP methods. Instead of burdening the poor and the sick, this shares the costs more equitably across all population. The origin of UHC can be traced back to Bismarck's Germany which adopted social legislation that included the Health Insurance Bill of 1883, Accident Insurance Bill of 1884 and Old Age and Disability Insurance Bill of 1889. In the first half of the twentieth century, other countries of Europe began to follow Germany in adopting UHC. In Britain, the National Insurance Act marked the first step that led to the creation of National Health Service after World War II. Article 25 of the Universal Declaration of Human Rights in 1948 declared health as a human right, thus strengthening the need for UHC. The adoption of 'Health for All' agenda at Alma Ata in 1978 reflected the continuing evolution of coverage for all.

The World Health Assembly in May 2005 endorsed a resolution urging its member countries to work towards health financing, defining UHC as access to appropriate health services for all at an affordable cost. The 64th World Health Assembly in May 2011 re-emphasized the 2005 resolution and endorsed the various activities undertaken towards institutionalizing UHC in member countries and called upon the Director General to work towards having a UN General Assembly resolution on the subject (see Box 1.1 for the May 2011 resolution). The 2010 World Health Assembly has convened an international advisory panel for the Ministerial Working Group on Scaling up Primary Health Systems, with an emphasis on achieving UHC. The 2010 World Health Report was devoted entirely to universal health coverage, stressing that "reaching the 'highest attainable standard of health', as stated in the WHO Constitution, requires a new or continued drive towards universal coverage in many countries" (WHO 2010). The Executive Board of the WHO, of which Bangladesh is an active member, has recently decided to recommend a new resolution in the World Health Assembly to endorse UHC in stronger terms: "to ensure that health financing systems evolve so as to avoid significant direct payments at the point of delivery, and include a method of pre payment of financial contributions for health care and services, as well as a mechanism to pool risks among the population in order to avoiding catastrophic health-care expenditure and impoverishment of individuals as a result of seeking the care needed" (EB128/SR/10). Preparations are also being made to table a resolution in the UN General Assembly in September 2012 along the same line. Nobel Laureate Professor Amartya Sen and many other high profile personalities including human rights activist and former President of Ireland Mary Robinson and Harvard University Dean Julio Frenk have also signed up as 'global ambassadors' to promote the case for UHC.

Box 1.1. World Health Assembly Resolution 58:33, May 2005 on universal health coverage

The 64th WHA urges the member states, inter alia:

(1) to ensure that health-financing systems evolve so as to avoid significant direct payments at the point of delivery and include a method for prepayment of financial contributions for health care and services as well as a mechanism to pool risks among the population in order to avoiding catastrophic health-care expenditure and impoverishment of individuals as a result of seeking the care needed;

(2) to aim for affordable universal coverage and access for all citizens on the basis of equity and solidarity, so as to provide an adequate scope of health care and services and level of costs covered, as well as comprehensive and affordable preventive services through strengthening of equitable and sustainable financial resource budgeting;

(3) to continue, as appropriate, to invest in and strengthen the health-delivery systems, in particular primary health care and services, and adequate human resources for health and health information systems, in order to ensure that all citizens have equitable access to health care and services;

(4) to ensure that external funds for specific health interventions do not distort the attention given to health priorities in the country, that they increasingly implement the principles of aid effectiveness, and that they contribute in a predictable way to the sustainability of financing;

(5) to plan the transition of their health systems to universal coverage, while continuing to safeguard the quality of services and to meet the needs of the population in order to reduce poverty and to attain internationally agreed development goals, including the Millennium Development Goals;

(6) to recognize that, when managing the transition of the health system to universal coverage, each option will need to be developed within the particular epidemiological, macroeconomic, sociocultural and political context of each country;

(7) to take advantage, where appropriate, of opportunities that exist for collaboration between public and private providers and health-financing organizations, under strong overall government-inclusive stewardship;

(8) to promote the efficiency, transparency and accountability of health-financing governing systems;

(9) to ensure that overall resource allocation strikes an appropriate balance between health promotion, disease prevention, rehabilitation and health-care provision;

(10) to share experiences and important lessons learnt at the international level for encouraging country efforts, supporting decision-makers, and boosting reform processes;

(11) to establish and strengthen institutional capacity in order to generate country-level evidence and effective, evidence-based policy decision-making on the design of universal health coverage systems, including tracking the flows of health expenditures through the application of standard accounting frameworks;

According to WHO, the health financing system for a country should be designed in such a way that it (a) provides all its citizens access to needed and sufficiently good quality health services (including prevention, promotion, treatment and rehabilitation), and (b) ensures that use of these services does not lead the user to financial hardship (WHO 2010, Carrin *et al.* 2008). Although the models vary by country, the fundamentals of UHC include:

- Instituting risk-pooling and an equitable health system where the ability to pay determines financing contributions and the use of services is on the basis of needs for care
- Reducing user fees and other out-of-pocket payment
- Increasing the level of pre-payment in order to maximize the size of the pool.

Indeed, there is hardly any country in the world where some population groups are not covered at all (Wagstaff 2010). There are two ways through which countries are trying to reach UHC: the state financed National Health Service (NHS) as implemented in UK (also called the *Beveridge model*) and the insurance based model as implemented in Germany and many other countries (also called the *Bismarck model*). With the

Ministry of Health and Family Welfare being the provider of both financing (through salaries of health staff, and meeting costs of supplies and hospitals, etc.) and services, Bangladesh may be considered a NHS model. However, with very high OOP and inefficient use of resources, as mentioned above, Bangladesh seems to be an unsuccessful and failed example for the model. The challenge is whether and how the country can move to an insurance-financed model?

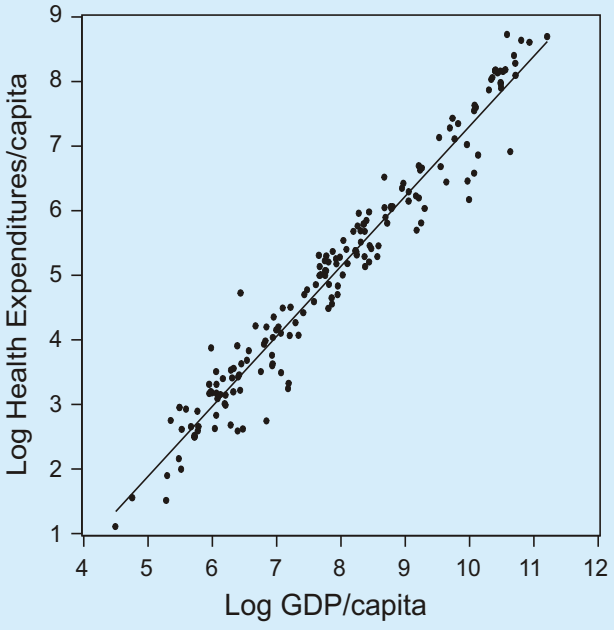
Why UHC?

The WHO defined universal health coverage or UHC as 'access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access (WHO 2005). There is hardly any difference of opinion on the merit of and need for UHC. Indeed, all countries and leading health agencies have enthusiastically endorsed it. Dr. Margaret Chan, the director general of WHO said, 'All countries, at all stages of development, can take immediate steps to move towards universal coverage (WHO 2010). Lamenting the failure to ensure UHC, leading medical journal the Lancet said, 'That universal coverage is so distant for so many people is unacceptable' (Lancet 2010).

There are at least three major reasons for countries to act fast on moving towards UHC. Briefly, these are:

1. It is ethically and morally correct; it represents social solidarity for poor and ill people as its successful implementation ensures health service to them
2. It is economically feasible; in line with the *first law of health economics*, spending on health is growing rapidly with the unprecedented growth of the economy as a proportion of the GDP, with an R-squared of 0.96 (Fig. 1.1 for 2004 figures). The increased health spending can be opportunistically utilized to meet the extra requirements for UHC. A small marginal investment can bring big return as has been shown in case of Ghana where an additional US$40 per year for six years spearheaded a big jump towards UHC (Rockefeller Foundation 2010).
3. It is politically timely; as democracy holds its foot in many countries the governments find it advantageous to win popular support through UHC reform as seen in Thailand (Pitayarangsarit 2004), Mexico and Brazil.

Figure 1.1. Link between total health spending and GDP, 2004



Source: Gaag and Stimac (2008)

For Bangladesh, the run-away OOP expenditures and the number of people moving to poverty due to health shocks and catastrophic spending every year are absolutely unfortunate and not acceptable, either morally or ethically. For any country it is an 'avoidable tragedy' (Bennett *et al.* 2010). For any popularly elected government this should be an issue of immense political significance. The civil society has been clamouring for reforms that would reduce the burden on the poor and other disadvantaged groups. With a marginal increase and simple readjustment of the current spending, Bangladesh can perhaps quickly move *towards* an effective UHC. With a lower base of capital assets and human resources, it will probably take many years to achieve a full-fledged UHC. As has been shown for many countries, with right policies and strategies, and more importantly, political commitment, Bangladesh can achieve substantial progress quite rapidly. According to a recent report, UHC is essentially a 'journey'; it starts with a broad coverage of a larger section of the population with a limited set of benefits but as countries consolidate and more resources are available the benefit package increases. It has been shown that substantial progress can be made in a short period of time if right vision, policy and strategies are adopted (Rockefeller Foundation 2010).

The example of China is relevant here. Before 1978, basic services were made available to all virtually free. With the transition to a more market-based approach the direct payments increased to 60% (from 20% in 1980). In 2009, the Chinese government reverted its earlier decision and decided to return to UHC and provide 'safe, effective, convenient and affordable' care to all (Meng and Tang 2010, WHO 2010).

Three challenges for UHC

The WHO report 2010 identified three challenges for countries moving towards universal health coverage. It also opined that every country could do more in addressing such challenges. Here are they:

Raising resources for health: Inadequacy of resources for health is a perennial problem. This is true irrespective of whether the country is rich or poor. Interestingly, achievement of UHC is not always related to the country's wealth. The United States with a per capita health spending of US$ 7,000 achieved almost the same coverage as Rwanda which has a per capita spending of US$ 37. It is essentially the way the countries decide to use their scarce resources. Nevertheless, implemen-ting UHC will require additional resources and many countries have found innovative ways to raise this. Indonesia, for example, has been able to raise its tax collection by encouraging compliance, a part of which is used for health. Ghana, as another example, meets most of its funding needs for its national health insurance scheme through a 2.5% levy on VAT. Bangladesh spends only US$ 16 per capita for health annually, a part of which comes from development partners. The country's tax base is small, only about 9% of GDP, one of the lowest in the world. However, there may be innovative ways to mobilize internal resources. These may include new taxes (earmarked and un-earmarked), diaspora bonds for the large number of overseas Bangladeshis, and (additional) excise tax on unhealthy products such as cigarettes, foodstuff and ingredients. The WHO 2010 report recommends many such innovative financing mechanisms. Improving the nego-tiating capacity of MoH with MoF could yield positive results in terms of increased allocation for health in the national budget paving the way for quick transition to UHC. More importantly, with the rise in the country's GDP, there will be more money available for health. A recent analysis shows that between 1998 and 2007, nominal growth rate of GDP per capita was 8.5% per annum whereas health expenditure rose by 11.1% (PI consulting 2011).

Reducing out-of-pocket expenditures: The devastating effects of user fees and direct payments (formal and informal) have been described already. A best way to deal with this is to share it. While on average only 5% of people fall ill in a given year, these people bear the brunt of national health spending. Introduction of some form of insurance or risk pooling is recommended as an effective measure to curb OOP spending. Similar to home or car insurance, which is used to protect oneself in case of an 'unplanned' emergency (a legal requirement in many countries), health insurance pools risk across the nation (or for a particular group in the population) and is used only in case of 'unplanned' ill health or health-related emergency (Rockefeller Foundation 2010). The 2010 WHO report narrated the story of a poor Thai casual labourer who met with a serious accident involving his motorcycle and describes how the UHC scheme helped him pay for all his treatment costs, recover and resume his normal life. However, the efficiency of such a risk-pool depends to a large extent on its size, the bigger the pool the more efficient and effective it is. The pooling is a most important aspect of UHC and will be covered in more detail subsequently.

Reducing inefficient and inequitable use of resources: Calling it 'haemorrhaging of money', the 2010 WHO report estimates that 20-40% of health resources worldwide are wasted. Reducing this waste would definitely help health systems perform better, reach more people with effective services and reduce inequity. Apart from cutting costs which maybe possible in selected cases, large gains can be made by improving governance. The 2010 WHO report identified ten leading causes of inefficiency in the health systems which included eliminating unnecessary spending on medicines, equipment, diagnostics and hospitalization, inappropriate staff mix and increasing their motivation, reducing medical errors and containing health systems leakages through waste, corruption and fraud. Having an insurance mechanism which separates providers from purchasers can help reduce inefficiency by introducing some form of pay for performance at different levels of services.

Risk-pooling and health insurance

Risk pooling (in health) has been defined as the 'aggregation of individual financial contributions to cover the total health costs of a broader population' (Lagomarsino and Kundra 2008). Risk pooling and pre-payment are integral to any insurance product, including health insurance. Indeed, there are three elements in any health insurance plans: revenue (premium) collection, pooling of all revenues into a common fund and its management, and purchasing (meaning transfer of health pool money to providers of health for providing the best possible services to the insured). Researchers have identified several benefits for a health insurance system as a way to ensure health services to all:

- Reduces out-of-pocket spending
- Improves final risk protection to all, particularly the poor and vulnerable
- Increases access to care and its utilization
- Improves quality of care
- Enhances equity
- Empowers women to seek care for themselves and their children
- Increases accountability and transparency of health system
- Gives freedom to people to choose providers thereby improving quality.

There are three types of health insurance systems that are commonly implemented in different parts of the world (Ensor 2007). These are:

Social health insurance (SHI): Much of the health insurance implemented in Germany and other OECD countries (the so-called Bismarkian model) belong to this type. This is financed largely from earmarked pay-roll tax based on both employee and employer contributions calculated as a percentage of earnings. As it stipulates collecting contributions from the payroll, it is a less appropriate mechanism for the informal sector, and that is for the many developing countries where the formal sector is small. In some countries, social health insurance is supplemented by other schemes that purport to cover others. In Vietnam, for example, the SHI covers the formal sector but to cover others the government has introduced separate schemes for the poor, young children and the elderly with state subsidies and voluntary schemes to include the 'nearpoor' such as farmers. This is now being extended to include the students as well (Tien *et al.* 2011).

Community or micro-insurance: In societies where there is a large informal sector, micro or community health insurance have been tried as an alternative. This is voluntary in most cases in the sense that the people or community members are given the choice to join or not. Since this is voluntary the pool is generally small leading to smaller benefits for the members. On the other hand, this is claimed to increase social solidarity as richer sections opt to contribute voluntarily on behalf of the community. Indeed, most of the SHIs that are implemented in most Bismarkian Europe can trace their origins to some forms of community schemes based around workplaces implemented earlier. The SHI is resulted through merger of such small schemes. The Thai UHC can also trace their origin to a few smaller schemes (health card). Ghana, for example, has extended coverage by linking several NGO-based schemes with social insurance (Ensor 2008). In Bangladesh, several NGOs are implementing community-based micro-insurance schemes with mixed success. One challenge with the community-based schemes is subsidizing for the poor. As mentioned by Ensor (2008) some level of government subsidy would entitle the poor to reap benefit of such schemes.

Private insurance: Private or commercial insurance is another way to insure for health. The private companies usually assess individual risk as a basis for premium calculations and pool risk of those buying insurance. In some countries such as India, the government contracts private insurance companies to provide insurance service to schemes financed by the state. The Rashtriya Shwasthya Bima Yojana (RSBY) is an example in this regard (see later).

Lagomarsino and Kundra (2008) have documented various health insurance schemes implemented in low and middle income countries. In their opinion, the 'transition to a national health insurance model requires either a wholesale shift in existing government health expenditures away from direct delivery and into insurance, or a significant increase in funds from another source (such as general taxation, payroll-taxes and donations)'. There are only a few examples of government-led reforms. Rwanda, Ghana, and some states in India are among in this list of countries.

Rwanda has done it with support from donors, particularly the Global Fund and the state of Andhra in India has done it through generous support from the central government. Other countries such as Colombia, Philippines and Thailand have used the opportunity of higher economic growth that facilitated more money for health. The community-based schemes also offer hopes as they may become building blocks for a future and larger national coverage scheme.

Dror (2006) studied the perceptions of the Indian poor population in seven states and found that most people were ready to pay for health insurance. As the poor were heterogeneous, he suggested that any insurance product should respond to their 'context specific needs, costs and willingness to pay levels'. He concluded that there was a solvent market for health insurance among the poorer population of India.

Experiences

As has been mentioned earlier, many countries have made significant progress in their march towards UHC in recent times. They comprise of countries from both low and middle income backgrounds. However, each country has taken a different strategy based on its own socioeconomic context, health status and political will. In the following we narrate the cases of four countries where significant attention has been given to UHC and important progress made. Table 1.1 shows how these countries have addressed different issues related to UHC implementation (Joint Learning Network 2010, Tangcharoensathien *et al.* 2011, Rockefeller Foundation 2010, WHO 2010, World Bank 2008).

Thailand: A long but successful road to UHC

In 1963, Thailand's formal health coverage was estimated to be 9%. In 1975, the Thai government introduced the Medical Welfare Scheme (MWS) or "Free Medical Care for Low Income" funded through general taxation, raising the coverage rate to 20%. This marked the beginning of Thailand's transition to UHC. In 1980, the Civil Servant Medical Benefit Scheme (CSMBS) was created to cover for government employees, their dependents and retirees.

Recognizing the problem of high OOP payments which was highly regressive, the Thai Ministry of Public Health (MOPH) initiated the Health Card Scheme (HSC) in 1990 that was voluntary in nature and subsidized by the state. The voluntary nature of HSC led to problems of bias selection with the healthy opting out but the sick seeking to be a member. In addition to targeting the poor and near-poor through voluntary health cards, MOPH implemented in 1992 the compulsory Social Security Scheme (SSS) whereby all private employees must contribute to a common fund through a tri-party arrangement: employees, employers, and the central government. This scheme now includes all private companies including those small businesses with only 1 employee. This type of scheme utilizes the notion of "risk-pooling" to maximize resources. In addition, in 1993, the Thai government introduced free medical care for children and subsequently, in 1995, for the elderly defined as 60 years and above.

In 1997, the Financial Crisis struck Thailand with devastating impacts on the near poor, poor and lower middle class. The adverse economic impacts of the Crisis lent a push towards reforms which ranged from political to financial as well as allowed health to be on the political agenda. The momentum for change and new bold policies resulted in the election of Thaksin Shinawatra from the Thai Rak Thai (TRT) party, in 2001, who won by promising populist policies which include the '30 Baht' Health Care Scheme.

In 2001, the four existing health schemes mentioned above, combined with a small percentage of private health insurance, covered approximately 75% of the population. The adoption of Thaksin's '30 Baht' scheme, which required the patient to pay 30 Baht (approx. 1 USD) per medical visit, steadily put Thailand onto attaining UHC. From 2006, the Democrat Party's government abolished the 30 Baht co-payment except for non-emergency services from unregistered facilities, and all Thais are eligible to utilize public medical services under the Universal Coverage Scheme (UCS), which are financed through general taxation. Currently, approximately 98% of all Thais are covered under the UCS (Table 1.1).

Ghana: UHC through community-based health insurance schemes

In 1957, Ghana gained independence and began to provide healthcare to its population through a network of primary care facilities, which was financed through

general taxation as well as contributions from international donors. In 1985, user fee was introduced that created greater inequities in health because access to basic and essential clinical services was limited by financial ability. Of the people who sought public healthcare they often faced catastrophic health expenditures which eventually resulted in bankruptcy.

In 1997, the Ghanaian government with support from development partners initiated a pilot project the National Health Insurance Scheme (NHIS). Before this, the Christian Health Association of providers began to experiment a 'community health insurance'. Soon, there were at least 57 district-wide health insurance schemes and over 100 other group-based schemes. In 2000, the New Patriotic Party (NPN) led by John Kufuorn was sworn into power, promising better healthcare and ending of user fees. In 2003, the parliament passed the National Insurance Act paving the way for the community-based NHIS. By 2009, there were 14.5 million people of Ghana were insured or approximately 70% of the population.

Financing under the community-based NHIS is done through several mechanisms:

- 2.5% health insurance levy added to VAT
- 2.5% from the Social Security and National Trust (2.5% deducted from payroll of formal sector workers)
- Interest earnings from the combined funds
- Allocations from the Ghanaian Parliament
- At local level, premiums from informal workers and subsidies from National Health Insurance Fund (NHIF)

Some of the challenges of the CBHI are that each of the mutual health insurance schemes that form the national scheme is actually operating as a separate risk pool. This implies that fragmentation remains an important issue as well as long-term sustainability of each community-based scheme (Table 1.1).

India: Health insurance for the 'below poverty line' population

Like Bangladesh, India's health care is financed through a variety of sources from individual OOP payments, central government and state tax revenues, donor assistance and private sector profits. It is estimated that 20% of total healthcare spending in India is publicly financed while over 75% is paid for by individual, unpooled OOP. In 2008, the government of India launched the Rashtriya Swasthya Bhima Yojana (RSBY) programme in 2008 for those living below the poverty line (BPL), implemented by the Ministry of Labour[1]. The central and state governments co-finance the premium to the insurer who is selected based on a competitive bidding process. Beneficiaries contribute Rs.30 (approximately $0.66) to register for the programme in which coverage extends to a family of five members.

1. It may be mentioned here that RSBY is one of the many schemes being implemented, perhaps the largest in terms of enrolment and geographical reach. Another scheme which has gained international attention is the Rajiv Aarogyasree model being implemented in Andhra Pradesh. India is also home to many micro-insurance projects implemented by NGOs.

Table 1.1. UHC implementation in four countries

Country	Date imple-mented	Name health scheme	Cove-rage level	Primary source of funding	Types of benefits	Provider payment mechanism	Service delivery system
India	2008	Rashtriya Swasthya Bhima Yojana (RSBY)	100 million	The primary source of funding is general government revenues. Members pay a registration fee of Rs.30. Insurance premiums are calculated at the state-level and vary from Rs.400 to 600.	Hospitalization coverage up to Rs.30,000 ($700) per year per household. Covers primarily inpatient care.	Diagnosis Related Groups (DRG)	A network of 2,067 hospitals (1,516 private and 551 public) that work with the insurance company selected by the state. Insurance companies are tasked with recruiting and overseeing service providers.
Ghana	2004	National Health Insurance Scheme (NHIS)	14.5 million (70% of pop.)	70% of total funding is from a 2.5% health insurance levy added to VAT. 23% comes from contributions made by formal workers to the Social Security and National Trust (SSNIT). 5% comes from Premium payments.	Benefits package offers extensive coverage. About 95% of health problems reported by Ghanaian healthcare facilities are covered under the NHIS. These include in-patient as well as out-patient services, as well as dental care and maternal care, including antenatal and postnatal care.	DRG	A total of 2,334 service providers (1,368 facilities are public providers and 966 are non-state providers) are part of the NHIS. A primary healthcare facility is the first point of service, and includes health centers, district hospitals, polyclinics, quasi public hospitals, private hospitals, clinics and maternity homes.
Rwanda	2002	Communit y-based Health Insurance (CBHI)	9 million (85% of pop.)	Premiums ranging from $4.30 to $19.90 depending on the programme. Co-payment is set between $0.17 to $0.16 per disease episode. The government covers the premium and co-payments for indigents and other vulnerable groups. The government and donors also contribute to the fund.	Two types of packages exist: 1) Minimum Package of Activities (MPA) covers all services and drugs provided at health care centers: pre/post natal care, vaccinations, family planning, minor surgeries and essential and generic drugs. 2) Complementary Package of Activities covers a limited number of services at district hospitals including hospitalization costs, caesarian operations, minor and major surgeries and all diseases afflicting children under 5.	Capitation	Public health centers, district hospitals, government-assisted health facilities and private health facilities provide primary and secondary care. Government-assisted health facilities account for 40% of primary and secondary care delivered in Rwanda, and are run by NGOs, religious groups and other third parties, and are partially funded by the government.
Thailand	2001	Universal Coverage Scheme (UCS)	66 million (98% of pop.)	The primary source of funding is general tax revenues. When the scheme was launched in 2001, a co-payment of 30 Baht (approx. $1) was charged per medical visit in order to discourage over-utilization. This was abolished in 2006 for political reasons. The utilization rate did not vary significantly after the end of the co-payment.	Benefits are comprehensive and include both out- and in-patient care. The Thai UCS also emphasizes preventive care such as vaccinations, family planning, ante natal care, as well as pre-marital counseling. Recently, ARV treatment for HIV and renal therapy have been included under the UCS.	Capitation and DRG	Providers under UCS include both public and private facilities. A private provider will have to submit the required documentation as well as meet the standard criteria set by UCS prior to registration as part of the scheme. Public facilities are automatically registered under the network. The Thai scheme emphasizes the primary care provider as the gatekeeper to UCS.

Sources: http://www.jointlearningnetwork.org (Last accessed 17/02/2011) Rockefeller Foundation, 2010

The benefits package include hospitalization expenses of up to Rs. 30,000 annually (approximately $700) per family per year. Most diseases and surgical treatments in which hospitalization is required are covered under the scheme. Package rates for approximately 727 inpatient surgical procedures have been pre-defined and these also include maternity and newborn care. Furthermore, the benefits include one day pre- and five days post-hospitalization expenses as well as a transportation benefit that covers Rs. 100 per visit to the patient. RSBY does not cover some forms of treatment or procedures such as OPD expenses or expenses in the hospital which do not require hospitalization, congenital external diseases, drug and alcohol induced illnesses and sterilization and fertility related procedures.

Key features:

- *Beneficiary empowerment*: RSBY provides the beneficiary the freedom in the selection of the hospital because they can access any public or private provider in RSBY's network all over the country.
- *Business model for all stakeholders*: RSBY is designed as a business model, with incentives built in for each stakeholder.
    - *Insurers*: The insurer is paid a premium for each household enrolled in RSBY.
    - *Hospitals*: Payment to the provider is made for each beneficiary treated. As such, both private and public hospitals are incentivized to treat an RSBY beneficiary. Insurers are incentivized to monitor providers that no fraud or duplications exist in order to keep payments under control.
    - *Intermediaries*: RSBY includes intermediaries such as NGOs and MFIs as these organizations have a stake in assisting those living below the poverty line (BPL). Intermediaries under the scheme also act as service providers and are paid for the services they render to BPL households.
    - *Government*: The inclusion of public service providers into the scheme makes for a competitive environment where the both the private and public providers have to engage in healthy competition.
- *Smart card*: Every household registered under RSBY is issued a smart card that includes their fingerprints as well as photographs. Patient information is retrievable through the smart card as information is electronically stored. All hospitals under RSBY are IT enabled and connected to the server at the district level.
- *Portability*: A beneficiary who has enrolled in one district can use his/her smartcard in any RSBY hospital across India. This makes the scheme highly user friendly to those families who have to migrate for work.
- *Cash-less*: Transactions under the RSBY scheme are completely cashless. Beneficiaries do not pay cash for any services except if they exceed the Rs. 30,000 per annum coverage package. Claims between providers and insurers are also paperless as these are conducted electronically.

To date, RSBY is operational in over 25 states in India and has issued smartcards to nearly 30 million BPL households covering 150 million individuals and over 2,500 hospitals are part of the scheme.

Rwanda: community-based health insurance schemes in a low-income country

Rwanda is a small, landlocked and low income country in Central Africa with 10.7 million inhabitants. It has gone through a devastating civil war and a genocide that left between 500,000 to one million people dead. Although much left is to be done, Rwanda has made remarkable progress despite the violence it has endured. Rwanda has restored its economy to the pre-1994 level as well as achieved political and social stability. Today, Rwanda has a GDP/capita of $951 compared to $390 in 1994 (PPP-adjusted). Life expectancy is 55 years for men and 58 years for women, 80% of the population lives in rural areas and an estimated 50% lives below the national poverty line. In 2004, Rwanda lost 597 disability-adjusted life years (DALY) per 1,000 lives more than double the world average and higher than nearly all of its Sub-Saharan African peers. In addition, Rwanda faces an acute shortage of physicians 2 doctors and 2 paramedics per 100,000 people.

Despite these daunting challenges, the government has committed itself to providing health coverage to its population. The Rwandan health care scheme began in 1999 with the initial design and development of prepayment services, followed by 54 community-based pilot health insurance (CBHI) schemes. Once these CBHIs were set-up, local populations began enrolling in the schemes. Families paid about $4.30 to enroll and

co-paid $0.17 per treatment episode. Within one year, 88,000 members were enrolled or about 8% of the population.

In 2002, the pilot was extended to cover the entire nation with CBHIs as the core strategy of health care coverage in Rwanda. The Ministry of Health, in conjunction with the Ministry of Local Affairs and external partners including the Global Fund designed scale-up models that now cover 85% of the population.

The Rwanda model has two benefit packages:

- The minimum package of activities (MPA) which covers all services and drugs provided at the health centers, including pre- and postnatal care, vaccinations, family planning, minor sur-geries and essential and generic drugs.
- The complementary package of activities (CPA) with a higher premium covers a limited number of services at the district hospitals, including the cost of hospitalization, caesarian operations, minor and major operations, medical imaging and all diseases afflicting children under five.

Government assisted and partially funded health facilities account for 40% of primary and secondary care in Rwanda and are mostly run by NGOs, religious groups and other third parties. Tertiary care is offered at four hospitals of which three are public and one private.

Rwanda is the exemplar case of a low income country that has implemented a universal health coverage programme. Yet, achieving a high coverage rate is not an end to itself. Many challenges lay ahead, for example, building local institutional capacities to manage the health system as well as building capacities of local human resources in health. See Table 1.1 for more details.

Bangladesh: the way forward

The world is moving ahead in ensuring health coverage for its population. What was seen in 2005 (the time when the first WHA resolution on UHC was adopted) as *laudable but unrealistic* is now *bold and achievable*. It is now desirable and unavoidable (Preker *et al.* 2009). Twenty years ago Abel-Smith (1991) had said, "(HI) has the prospect of bringing in more money to the health sector, and it does not place at risk access to health care for the poorest and neediest." As the latest WHO report says, many countries in different levels of economic development are undertaking health finance reform and the programme that is seen closest to addressing the needs of their populations is 'prepayment and pooling' (WHO 2010). Instead of burdening the poor and the sick, such programmes share it equitably. As has been shown in the text, many countries have already achieved UHC and many more are on their way to achieving it. With the rise in the momentum for UHC as is seen now, few countries will remain untouched. Bangladesh cannot afford to miss the bus. For all conceivable reasons Bangladesh should embrace the challenge. The regressive system that has unfortunately been developed over the years must change and any decision to move towards UHC would shake it vigorously leading to a more equitable system. UHC means improved health and reduced poverty; it means that rich and poor, women and men, young and old, sick and healthy, urban and rural are all covered with a set of affordable health service packages.

It is not expected that Bangladesh will achieve UHC overnight. This is simply not possible for a variety of reasons including financial constraints, inadequate availability of service provisions and shortage of appropriate human resources. What is important, however, is for Bangladesh to express its strong political will and chart a road map with clear timeline. In this the government must play its stewardship and leadership role. The civil society and development partners will also have important responsibilities including making sure that the schemes benefit the poor (Joint NGO Briefing paper 2008, Gwatkin 2010).

The following is a tentative agenda that the country can consider pursuing with flexibility for in-course modifications.

1. Articulate clearly and unambiguously the government commitment to UHC through the next Health Nutrition and Population Sector Programme (HNPSP). This should include a 10-year road map with clear goals for 2015 and 2020.
2. As a step towards more accountability and better implementation, separate the purchasing function of MOHFW from the provider function by creating an independent purchasing authority in the like of NHSO in Thailand or RSBY in India.
3. Explore possibility for introducing health insurance (HI) for different groups in the population (through pilots if necessary), including:

- State employees
- Formal sector employees in big Industries
- Formal sector employees in small to medium industries including the garments sector
- Staff of NGOs
- Members/borrowers of micro-finance institutions (the poor)
- Members/beneficiaries of different social safety net programmes (the extreme poor)
- Women and children

The above proposal to introduce HI for specific groups may be seen as fragmentary and perhaps inefficient (producing smaller pool). But this may be necessary to creating the space and demand which can in the future be amalgamated as was done in many countries.

4. Encourage the big players in the NGO sector, such as ASA, BRAC and Grameen to join hands to develop and provide HI to their micro credit borrowers and the greater public through creating a joint pool. The three may also consider setting up a specialized health insurance company for the purpose. BRAC is already moving towards developing a scalable model for HI for its beneficiaries.
5. Involve and engage the media, professional groups such as the Bangladesh Medical Association and Bangladesh Economic Association and the civil society for advocacy work.

Fortunately, Bangladesh is not sitting idle. A lot has already being initiated as evidenced by the amount of activities being generated. The Prime Minister Sheikh Hasina in her inaugural address at the 64th World Health Assembly in Geneva in May 2011 made her commitment to achieve universal coverage for all its citizens[2]. A host of activities are already taking place (See Annex for an account of the current activities towards UHC). From the government side, there is an increased interest to learn more about its feasibility. The Health Economics Unit of MOHFW has already started the ground work for piloting health insurance in two upazilas. The civil society groups are already piloting their versions of health insurance with their members. The media has also started covering UHC. If the nation sets the goal to reach UHC by 2020, it may not be too ambitious. As mentioned in the text, UHC is a 'journey' and the first step has to be made immediately!

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2. http://www.who.int/mediacentre/events/2011/wha64/sheikh_hasina_speech_20110517/en/index.html.

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ANNEX: MOVEMENT FOR UHC IN BANGLADESH

Introduction

As the movement for universal health coverage (UHC) intensifies in other parts of the world, there is an imperative to prepare Bangladesh for it. Bangladesh, being a low income country with a vast majority of its people living in poverty, needs to protect its citizens against health shocks and run-away out of pocket expenses (OOP). This will also be an important and significant anti-poverty measure for which the country is pledge-bound. Fortunately, the country is not sitting idle and a good amount of investment is already being made by the government, NGOs and development partners. The following gives a summary of the different interventions/activities being implement-ted and/or are planned.

Government of Bangladesh: The government is committed to ensuring effective access to health services by the people, particularly the poor, as reflected in various plan documents. The Prime Minister Sheikh Hasina in her inaugural address at the 64th World Health assembly in May 2011 declared her commitment to universal coverage for all of its citizens[3]. A variant of demand-side finan-cing (DSF) for pregnancy care and delivery is being piloted in 35 *upazilas* (sub-districts) and the government has recently given a 'go ahead' to its Health Economics Unit to pilot a health insurance (HI) scheme in two *upazilas*. A few other activities are also being planned/imple-mented, some of which are narrated below. The vision for health financing is being articulated in the new document for the next Health Nutrition and Population Sector Programme (HNPSP).

Indo-Bangladesh Dialogue: In the last Indo-Bangladesh Dialogue (February 2010) in Dhaka, a session was exclusively devoted to UHC in which three papers describing experiences from Bangladesh, India and Thailand were presented. The participants, who included top government officials, civil society leaders and academics from the India and Bangladesh including Nobel Laureate Professor Amartya Sen, discussed the need and feasibility for UHC in the Bangladeshi context.

High-level visit to India and Thailand: Thailand has already attained UHC and India is moving fast towards it. To expose the policy makers in Bangladesh to such experiences in these countries, exposure visits by top officials of the Ministries of Health and Family Welfare are being undertaken. The delegation also includes representatives of the academic community and the civil society. In January 2011, the Minister of Health and Family Welfare Prof Ruhal Haque and a high-level delegation visited the Thai National Health Security Office in Bangkok to know for themselves how the Thai UHC system worked. Similarly, a delegation from Bangladesh attended a training workshop in Kerala, India on the functioning of the Indian Rashtriya Shasthya Bima Yojana (RSBY). In June 2011, a high level delegation led by the Chairman of the Parliamentary Standing Committee on Health Sheikh Fazlul Karim Selim visited Thailand and India[4]. Included in the delegation were MPs, senior officials of MoHFW, the Prime Minister's Office and NGOs and representatives of the media. They saw for them-selves how the UHC system worked in these two countries and how the learning could be used to develop a similar system for Bangladesh.

Leveraging the micro-finance (MF) platform: Bangladesh is the pioneer in popularizing micro-credit for poverty alleviation and women's em-powerment. More than half of the country's 160 million population are borrowers of MF and are connected with micro-finance institutions (MFIs). The Palli Karma Sahayak Foundation (PKSF) is an apex body through which the government provides funds to MFIs to carry out MF activities. The PKSF has recently decided to initiate a pilot to test how the MF borrowers (numbering over 10 millions) served by its 250+ partner organizations could be offered better health care through HI. Some big MFIs such as Grameen, BRAC and others are already piloting different insurance products. BRAC is also exploring possibilities of bringing HI to its all 7.5 million borrowers.

Pilot by ICDDR,B: The Centre for Health and Population Research (popularly known as ICDDR,B) is embarking on testing the feasibility of HI in Chakoria *upazila* in Cox's Bazar district. Chakoria is one of their field sites. This will make use of the availability of a large number of private providers in the area to provide HI services.

Bangladesh Health Watch (BHW) report: The BHW is an influential civil society initiative in the country that monitors progress in attaining good health for the people. With support from a selection of Bangladesh's leaders in health, the BHW has already produced three influential annual *State of Health* reports ('Challenging inequities in health'; 'Health human resources: who constitutes the health

3. Her Excellency Sheikh Hasina, Prime Minister of Bnagladesh: Speech to the Sixty-fourth World Health Assembly. http://www.who.int/mediacentre/events/2011/wha64/ sheikh_hasina_speech_20110517/en/index.html.
4. In India they visited the Rajib Aarogyasree programme in Andhra Pradesh and RSBY in Delhi and Haryana.

system?'; 'How healthy is health governance in Bangladesh?'). For this year, the BHW is focusing on UHC.

Health insurance for Social Safety Nets beneficiaries: Bangladesh implements a number of social safety nets programmes, most of which target the extreme poor population. A pilot programme to introducing HI for the beneficiaries is being planned by an NGO in collaboration with relevant government departments. Similar HI programmes are also being planned for the country's large ready made garments sector which employs millions of women workers.

Mutual insurance Company: An international MFI network with operations in Bangladesh, INAFI, that set up a mutual micro-insurance company has decided to offer health insurance to the poor micro-credit borrowers.

Centre of Excellence (CoE) on UHC: The BRAC University James P. Grant School of Public Health in Dhaka has set up a CoE on UHC. The purpose of the Centre is to engage in research, training and advocacy for UHC. In addition, the CoE will also work as the co-Secretariat (with Results for Development or R4D in Washington DC) for the Global Task Force which is being set up to promote UHC globally.

International Conference on UHC: Bangladesh hosted an international conference on UHC in March 2011. This will be repeated every year until 2015. The purpose is to provide a platform for discourses on UHC in low income settings.

The Lancet series on Bangladesh: The Lancet has decided to publish a series on Bangladesh. Although the paper titles are yet to be finalized, a potential candidate is health financing and universal coverage.

Engagement of development partners: Several development partners in Bangladesh have expressed their clear interest in promoting UHC. They include, among others, GTZ, KfW, The Rockefeller Foundation, Unicef and the World Bank (the protection cluster).

Media interest: The media is getting more interested in the area of UHC. In the recent past there has been a number of special reports in leading dailies such as the *Prothom-Alo*. The Presss Institute of Bangladesh (PIB) is planning to initiate a capacity development project for journalists who would be writing on health issues that affect the common people including the provision of UHC for the poor.

Dynamics of Health Sector Policy and Reforms

Nazme Sabina

Abul Barkat

INTRODUCTION

Health services in Bangladesh is primarily guided by its Constitution which says, 'Provisioning of medical care to improve material and cultural standard of living of the people' (Article 15a of the Constitution). World Health Organization (WHO) defines health in a broader context where the Constitution limits it into medical care only. By the Alma-Ata Declaration signatories (noted as Health for All) in 1978, it was believed that Health for All would contribute to a better quality of life. Accessibility of health services can not be achieved without a well-functioning health financing system. The terminology of Universal Health Coverage (UHC) is new in the sector and has come to a discussion in 2005 when member states of the WHO committed to develop their health financing systems with an aim of ensuring accessibility of health services of all without financial hardship paying for them (WHO. 2005). The goal is defined as universal health coverage. In WHO Health Report (2010), it emphasizes three fundamental questions to achieve this goal:

1. How is such a health system to be financed?
2. How can they protect people from the financial consequences of ill-health and paying for health services?
3. How can they encourage the optimum use of available resources?

Although equity and reliability are important, UHC is broadly focused on financing health services.

Given that total spending on healthcare is mainly determined by the macro-economy, the most important question is whether total resources available are sufficient to meet the needs of universal coverage. A second factor is whether a sufficient proportion of total spending on health-care can be channeled to finance a core package (Ensor 2008). This chapter does not consider that universal primary health care (PHC) would only constitute universal coverage. There is a need to cover priority services such as emergency obstetric care, care for life threatening injuries that can only be provided in hospitals. In this chapter, universal coverage includes PHC, maternal and child health, family planning (MCH-FP), and Essential Services Package.

In this chapter, we will touch upon the issues on policy and reforms of the health sector which have an effect on universal health coverage.

HEALTH SECTOR POLICY AND REFORMS: HISTORICAL PERSPECTIVES

The health sector in Bangladesh has experienced policy formulation and reforms during last forty years. The issues such as integrated and comprehensive service, pro-poor service, vertical approach, door to door and one stop service, cost-effective essential service package, etc dominate the reforms and policy.

Since independence, Bangladesh did not have a coherent health policy for the first three decades. Immediately after the independence, population control received the top most priority as the population density was 531 people per square kilometer with an annual population growth rate of 2.6. A stated objective of *First five-year plan* (1973-1978) was to create a rural health infrastructure for providing integrated and comprehensive health services. In early 1974, the country's population sector was overwhelmed with external assistance (Buse 1999) and the government began to initiate policy and organizational changes following donor prescriptions (Jahan 2003). The World Bank became involved with an appraisal for a first population project and evolved in 1975 along with six development partners that acted as co-financiers (Buse and Gwin 1998). The population projects were based on vertical family planning service delivery and the

bifurcation of the health and family planning services of MOHFW, with most resources and programme interventions targeted to family planning. Since the mid-1970s until 1990s, the family planning programme was largely supply-driven and incentive-based. Along with the government, NGO participation was remarkable. The main strategy of first population policy (1976) was to provide comprehensive health and family planning services through clinics and field workers, with a strong emphasis on doorstep services to rural women. It was an attempt to ensure coverage of the family planning services among the people in need. The *Second five-year plan* (1980-85) encouraged the private sector and NGOs to share responsibilities to deliver services to the people. Secondly, following the Alma Ata Declaration (1978), the country adopted a comprehensive community-based PHC system. Instead of providing these services, the system primarily focused on child health, especially growth monitoring, oral rehydra-tion, breastfeeding, and Expanded Programme on Immunization (EPI). Despite government repeated commitments, Bangladesh largely failed to translate the Alma Ata principles in its PHC system.

In the early 1980s, Bangladesh led the world in formulating an essential drug policy, the National Drug Policy (Drugs (Control) Ordinance, 1982) and updated and revised it in 2004 (MOHFW 2005). The home-grown Drug Policy played the far-reaching role and was defended by the political leadership in the face of serious external reservations (Chowdhury 1996 and White 2007). This was instrumental in the country in making essential medicines available at low cost and was appreciated as the share of out-of-pocket expenditure by households in total national expenditure is exceptionally high.

By the early 1990s, the portfolio of donor involvement reflected global concern with health sector reform. When the government started negotiations with the donors for the preparation and financing of the Fifth five-year Health and Population project in 1995, the donors[1] pressed for policy and structural reforms. The health sector has been shifting its health policy priorities and investment from a focus on family planning to comprehensive services. Equity was important consideration and the country put poverty issues on the agenda at a joint government-donor consultation in Paris in September 1995 (Jahan 2003). The first SWAp, Health and Population Sector Programme (HPSP) was launched in 1998 for five years to 'improve the health of women, children and the poor.' The core strategy of HPSP approach is to earmark about 60% of the national health budget for ESP to be delivered through the PHC system, i.e., at *upazila* level and below. HPSP was designed not to operate in urban areas as urban health is the responsibility of the city corporations and municipalities and not of the health ministry.

The HPSP got approval from an administrative body (ECNEC) not from the legislative body, i.e., the parliament. A number of reforms have been carried out: a) Transition from a vertically integrated but horizontally segregated project-based approach towards a sectorwide approach; b) Unification of the health and family planning wings of the MOHFW at *upazila* level; c) Introduction of an Essential Service Package[2] (ESP) which included basic services; d) The doorstep approach was phased out in favour of services delivered through 16,000 new community clinics[3], each serving a population of around 6,000. The intention was to access health services by enabling community to meet their needs in one single visit. The health and family planning workers who previously made home visits were gradually redeployed and based in these

1. In general, the reforms supported by the donors were geared towards improving the efficiency and financial sustainability of the health system. However, Different donors promoted different issues (detail Jahan 2003, Buse 1999)
2. The package includes a) reproductive health care-including safe motherhood, family planning, other reproductive services including sexually transmitted diseases; b) child health care-including acute respiratory infections, diarrhoeal diseases, vaccine preventable diseases and adolescent care implemented through an integrated management of sick approach; c) communicable diseases control including tuberculosis, leprosy, malaria, filarial, kala-azar, and emerging diseases; d) limited curative care concentrating on first aid, for trauma, medical and surgical emergencies, asthma, skin diseases, eye, dental and infectious ear diseases; and e) behavior change communication is meant influencing health behaviours and health-care-seeking practices across all of the ESP components (MOHFW 1998)
3. Few health professionals do not consider community clinic as a reform as five basic maternal, child and public health services were previously delivered from one single service point.

facilities. In the first three years of HPSP implementation (1998-2000), the government started to build 'one-stop' community clinics to provide ESP. There was also a paradigm shift regarding NGO and private sector involvement in the HPSP which sets out the basic principles for government-NGO collaboration.

Prior to SWAp and followed by the World Bank's publication of 'An Agenda for Reform' and global influence, the user fees were introduced in Bank's projects (MOHFW 1997). There was a strong push by encouraging the private sector to take care of health service delivery and resource mobilization in public facilities. NGOs implemented a number of cost-recovery schemes, such as, selling of family planning commodities, and community financing/health insurance. The user fees were introduced[4] in 1997 to increase revenue in the health sector. An outpatient fee of Tk. 3 and an admission fee of Tk. 5 were introduced at THC level but the practice was discontinued from March 1998. The practice was continuing in the Thana Functional Improvement Pilot Project (TFIPP), a pilot project of the DGHS was implemented during 1992-1999. The project ultimately tried to increase the demand for health services through community involvement. However, under the user fees scheme, the cost recovery was less than 15% (NHA 1996-97) and coverage levels. These were not the aim of HPSP and also it does not satisfy the issue of protecting people from ill health according to UHC.

The first *National Health Policy was introduced* in 2000. The Policy does not include any guideline related to finance for private sector health service system and regulation. It only discusses about user fee system and introducing the health insurance system. There is no guideline how to respond to financial consequences of ill health and paying for health service. There are some provision of financial support system during care service through social welfare ministry, but comprehensive support for ill health specially for chronic diseases are absent in health policy.

After 2003, when the HPSP ended, the SWAp was continued under the name of Health, Nutrition and Population Sector Programme (HNPSP). During HPSP the policy was targeting more resources towards facilities at *upazila* and below as lower income groups predominantly use these facilities. Under HNPSP, this policy has been adjusted with greater emphasis to providing more resources to poorer households. In resource and implementation terms the programme remains largely focused on a targeted delivery strategy.

The nutrition component started with the first major nutrition project called the *B*angladesh Integrated Nutrition Programme[5] (BINP 1995-2002) with World Bank funding. Despite criticism (INFS 1999, MOHFW 2002, Haider *et al.* 2004, Hossain *et al.* 2005, White 2005, World Bank 2005a, World Bank 2005b, White and Masset 2007) the government went ahead with a scaled up version of the project titled National Nutrition Programme (NNP) and it was launched in 2004 and became in conjun-ction with the HNPSP. The Programme[6] had coverage of 11.9 million under-2 children and 3 million pregnant women.

The HNPSP reverted to the unification of the health and family planning wings of the MOHFW, with a partial return to the earlier practice of domiciliary services and suspended community clinics where about 10,000 of planned 16,000 were already constructed. Some observers point to the clinics as fallout from the unification episode, others argue that the failure of the

4. According to a pattern established by the Secretary, MOHFW through general circulars issued by Ministry of Finance, the sources of user fees collected and distributed at district hospitals and medical college hospitals.
5. The project had three inter-related objectives: (a) To improve the capacity of national level nutrition institutions in Bangladesh in the areas of advocacy, analysis of causation and consequences of malnutrition, policy advice, operational research, and operational support of national programmes; (b) To improve the capacity of communities, households and individuals in the project areas to better understand their nutritional problems in practical terms and take appropriate actions to address them at their own level; (c) To improve the nutritional status of the population in the project area, with particular emphasis on children and pregnant and lactating women.
6. The project itself claims to have reduced prevalence of low birth-weight, improved exclusive breastfeeding practice, and reduced moderate and severe malnutrition better than the national average. The validity of these claims is difficult to judge, however, since as a recent review notes authentic supervision and monitoring mechanism does not seem to exist at any level of NNP (IRT 2009a). The project's own monitoring report is based on recording by NGO partners who are implementing most of the activities. Since these are not technically supervised or monitored and there are no external evaluations of the activities of the NGOs, the success claimed by them is open to question.

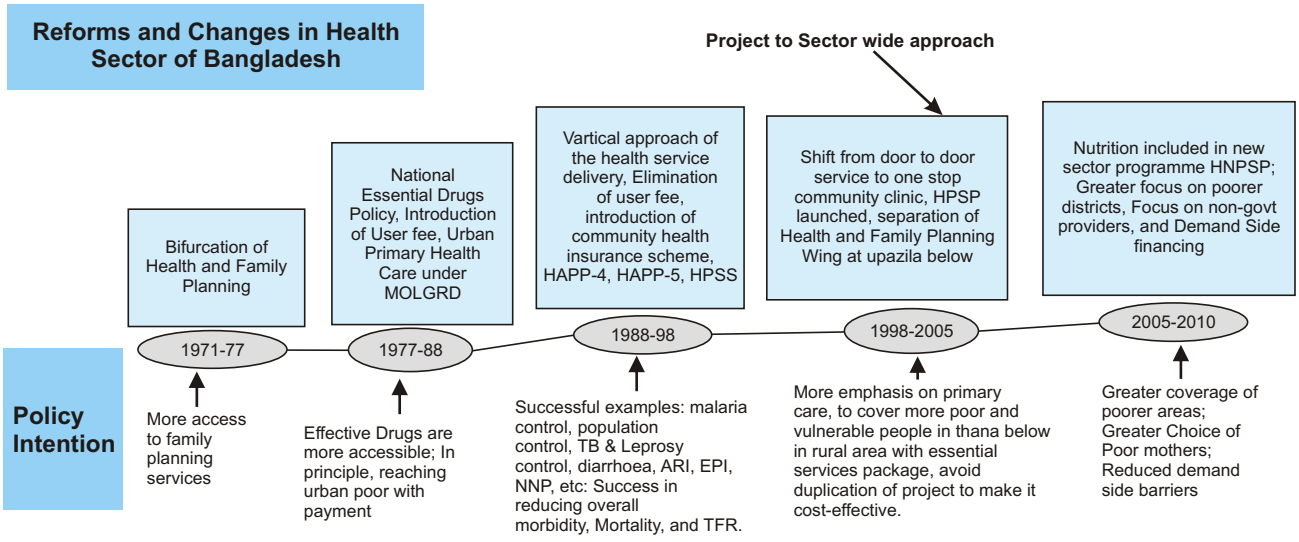
clinics was indeed politically motivated (White 2007). The programme adopted demand side financing (DSF) options and this project distributes vouchers to pregnant women entitling them to access free antenatal, delivery, emergency referral, and postpartum care services, as well as providing cash stipends for transportation and cash and kind incentives for delivering with a qualified health provider. The analysis of DSF and its effect on universal health coverage is presented in greater detail chapter 5.

During this time, two major NGOs responsible for health care of urban people: a) NGO Service Delivery Project (NSDP), supported by USAID; and b) The *Urban Primary Health Care Project (*UPHCP), mainly financed by ADB and DFID and Nordic Development Fund. The main objective of the project was to provide ESP services and curative care with a focus on women, children and reproductive health, and that was operated by the local government. The partner NGOs were supposed to mobilize resources through user fees. This initiative has increased coverage of health services and among poor in the urban area.

During 2005-2010, Bangladesh has successfully accessed grants of US$265 million from Global Alliance for Vaccines and Immunization (GAVI) and Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) in a number of rounds[7]. Till 2011, the funds are being used to strengthen current DOTS (Directly Observed Treatment Short course)activities to involve the private sector more closely in fighting TB; to create demand by conducting advocacy and social mobilization communication campaigns and to develop joint TB-HIV/AIDS collaborative activities. This is an example of government-NGO cooperation. The relationship and support started by the government to ICDDR,B for ORS; the government manufactured ORS in its own factory, while Social Marketing Company (SMC) developed the marketing chain. The cooperation has been able to serve more people in need.

A summary of reforms and changes are shown graphically in Figure 1.

Figure: Health sector reforms, changes and policies in Bangladesh: 1971-2010



Source: Bangladesh Health Watch 2011

7. The government of Bangladesh, the principal recipient of the Global Fund HIV grants, signed an agreement with Save the Children USA as the Management Agency (MA) to manage the projects at national scale in both rural and urban settings. Save the Children USA has been managing the grants through facilitating the implementation by sub-recipients at the NGO, institutional, private sector and community level. For TB, the GFATM works in coordination with the government and with BRAC, the latter being responsible to coordinate fund disbursement to NGOs.

DISCUSSION

The analysis of policy and reforms of the last forty years in Bangladesh reveals that the government, through reforms and policy, has emphasised the coverage of services in an equitable way. There is no guideline and strategy of how these services to be financed or how to protect people from catastrophic expenditure or how to encourage the optimum use of resources.

The government of different time periods has always been eager to look at the indicators which give quick and visible results rather than systematic changes where gains will be attained in the long run. For example, one of the major factors in reducing IMR is universal coverage of child immunization which is target oriented and visible. Despite progress in reducing IMR, neonatal mortality remains high: 39.2 per 1000 live births (BDHS 2007) and a reduction cannot be achieved through immunization only. Improvements in the health system to ensure quality, sustained supervision, and monitoring (*Arifeen* 2008) and placement of appropriate staff at the health facility, blood transfusion, and other essential logistics (BMMS 2011) are essential in reducing neonatal and maternal mortality. Achievement from the investment in these areas takes time, specifically for universal coverage.

The government ownership and leadership in policy formulation and reform are not strong enough; most of the steps are influenced by the donors. Even the Health Policy and sector reforms have not been debated in the National parliament. It is often said that sector reforms serve more the interest of donors than national interest (IEG 2006*)*. The delivery of universal coverage of essential service package (ESP) was disrupted because of a number of systems issues that were not fully addressed in the reforms and policies. For example, the unification decision of health and family planning services which was reversed with great political fall-out within the country. Construction of community health clinics was partially implemented, yet very few became operational, was scrapped by the government for political reasons. Under upcoming Sector plan, this initiative will be implemented with an aim of community involvement; however the effort does not mention about the mechanism of resource mobilization and use.

Despite initiating health sector reforms, the MOHFW of Bangladesh could not channel the target allocation (60-65% of total resources) towards *upazila* and lower administrative levels. Moreover, there remains inequity in resource distribution across administrative units.

Financing the huge amount of resources required for the universal health coverage might not be feasible for the public sector alone. To achieving universal health coverage, policy makers, therefore, need to assess the feasibility of devising non-traditional mecha-nism for financing, such as, introduction of social health insurance, private health insurance and community financing.

RECOMMENDATIONS

- Bangladesh, in its reforms and policy, has proved quite good at achieving outcomes which are immediately and directly linked to visible intervention and is less interested on those which took time to have substantial changes in the health system. The disruption of delivery of ESP is an example of putting less emphasis in the reforms and policies. All these result in prevailing socio-economic and geographical inequity in health outcome. There is a need to be consistent in priority setting in the policy and reform to achieve UHC.
- The government's leadership and ownership is vital to achieve UHC in the country as it is a reform and policy issue. The high level policy makers need to have commitment to adopt a homegrown and contextualized policy and strategy.
- There is a need for an appropriate mix of supply side subsidies and demand side financing. Ultimately UHC depends largely on compulsory payments whether general taxation or payroll taxes, known as social insurance. The extent to which the country can provide this type of funding largely determines whether UHC is possible. Another observation is that how the money is used. Health financing strategy is immediately needed in the sector programmes and policy.

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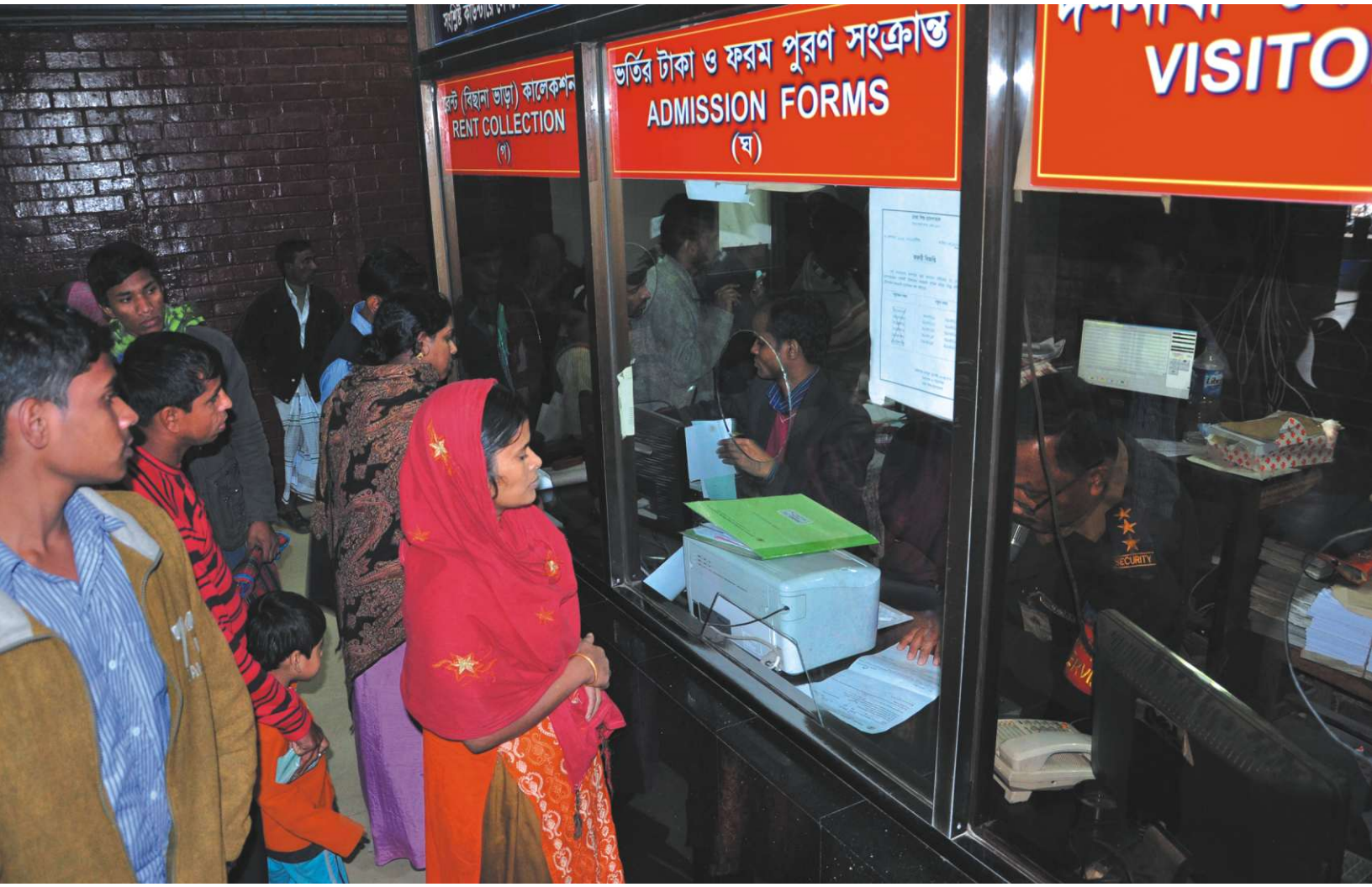
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Public Health Expenditure: Equity, Efficacy and Universal Health Coverage

Rumana Huque
Abul Barkat
Nazme Sabina

INTRODUCTION

From the late 1980's and throughout the 1990s the ministries of health in many developing countries began to review and reform the functioning of their health system as part of a general economic restructuring. The contextual factors of introducing health sector reforms included demographic and epidemiological change, changes in politics and political regime, ideology and public policy, changes in economic and financial policies, process of social and economic change, and influence of external factor (Collins *et al.* 1999). The deep rooted inefficiencies, inequities, unresponsiveness to users, and inability to contain costs within publicly funded and provided health systems were also responsible to initiate several changes within the health system (Mills 1998). Although variations can be found between countries, the key approaches to the health sector reforms involved decentralisation, the public/private mix, separation of the functions of 'purchaser' and 'provider', cost sharing (health insurance) and cost recovery (user fees) (Green *et al.* 2000, Bossert *et al.* 2003). The Ministry of Health and Family Welfare (MOHFW) of Bangladesh also introduced health sector reforms in late 1990's to promote greater equity and efficiency in resource use (MOHFW 2002). The main elements of the reforms were Sector Wide Approach (SWAp), Essential Service Package (ESP), unification of the Directorates, adminis-trative decentralisation, creating static clinics (known as Community Clinic) and introducing user fees. Under the health sector reforms, the MOHFW aimed to achieve sustainable improvements in health, nutrition and reproductive health status of the vulnerable groups, including women, children, the elderly and the poor (MOHFW 2005).

The policy reforms commenced under SWAp, known as Health and Population Sector Programme (HPSP) necessitated changes in the resource allocation, budgeting and health care expenditure pattern of the MOHFW. To achieve equity and efficiency in resource distribution, *an ESP was designed to* allocate 60-65% of the total healthcare resources to the primary level (*upazila* and lower level). It was also planned to target the poorer districts and allocate more resources towards them, while performance-based financing had been introduced very recently within MOHFW.

However, evidence suggests that there exists high gap in health conditions between the rich and the poor (World Bank 2005), and poor still find it difficult to access high quality essential services in Bangladesh (Rabbani *et al.* 2006). Along with limited resources to ensure universal health coverage, inequity in resource distribution across adminiatrative units and inefficiency in resource use are also influencing access of the poor to health services (Rabbani *et al.*, 2006; World Bank 2005; HEU and MAU 2001). Though a number of interventions were initiated under reforms, less attention has been paid on the equity and efficiency of public spending on health and population services. In recent years, the MOHFW and development partners are therefore emphasizing the development of strategic options that would provide greater opportunities for equitable and efficient allocation and expenditure of health care resources (Ensor *et al.* 2001, MOHFW 2005, Rabbani *et al.* 2006, World Bank 2005). The followup programme of HPSP- the Health, Nutrition and Population Sector Programme (HNPSP) now considers the proportion of the Government budget devoted to health, and the proportion of funding to the 25% poorest districts as the two major indicators to assess the performance of HNPSP (Begum *et al.* 2007).

This paper aims to analyse the extent to which the MOHFW could achieve the stated objectives of achieveing equity and efficiency in resource use. It also intends to explore the additional resources the government of Bangladesh (GOB) must spend to achieve universal health coverage in Bangladesh, and the feasibility of accumulating the resources through the traditional mechanism of financing.

SPENDING OF MOHFW

The Ministry of Health and Family Welfare (MOHFW) of Bangladesh is one of the largest ministries in terms of budgetary allocation. It works as a financial intermediary of the Government of Bangladesh (GOB); it receives funds from the Ministry of Finance (MOF) and the development partners, and allocates funds to health facilities at different levels (Fig 1).

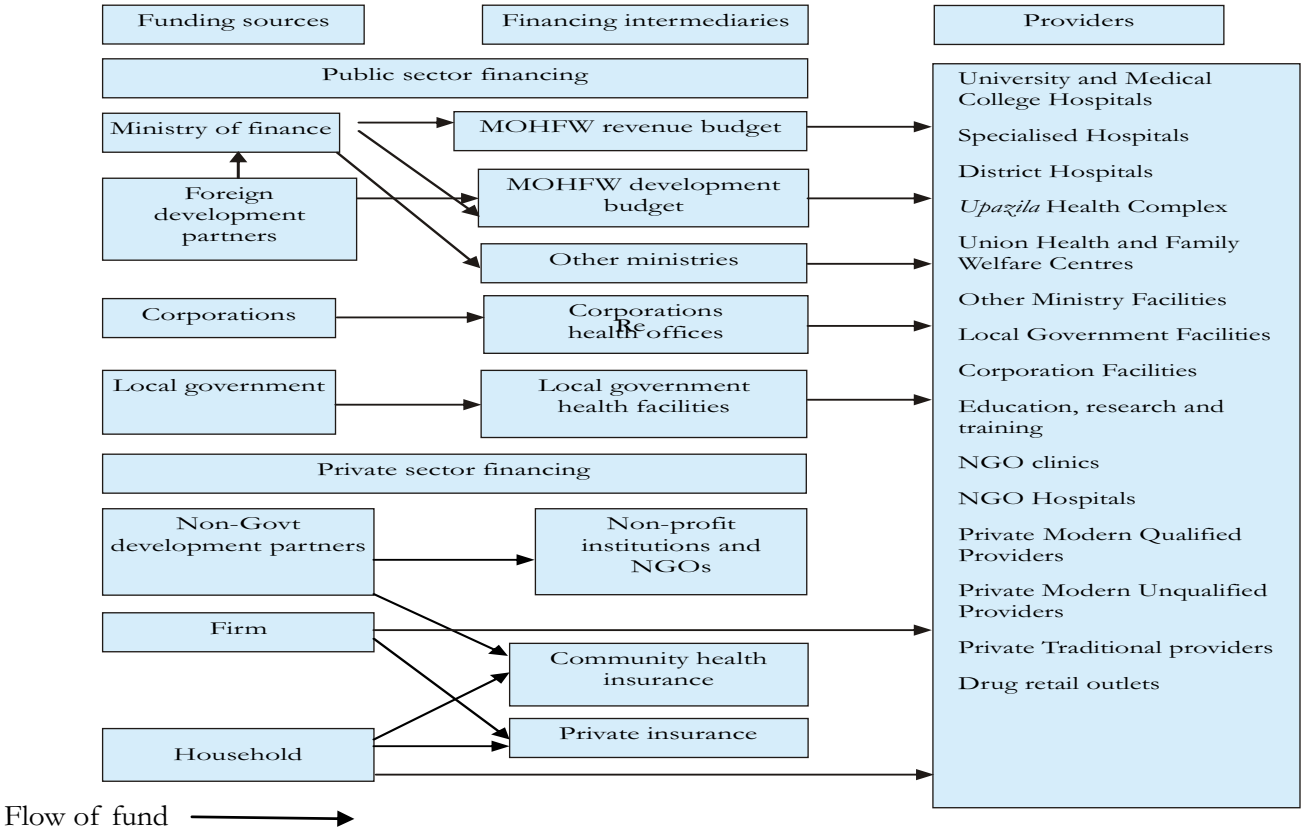
Expenditure by level of care

There has been a considerable shift in the trend of public health care expenditure by level of care over the last decade. Before the health sector reforms in 1996/97, the share of the MOHFW resources going to primary and tertiary level care was nearly the same, 38% and 37% of total health care expenditure, respectively, while in 1999/2000, the propor-tion of MOHFW expenditure incurred at the *upazila* and lower level health facilities to total MOHFW expenditure increased to 62%. *However, d*espite the initial changes in the expenditure pattern, the MOHFW could not meet the target of channelling 60-65% health care resources to the primary level facilities since 2003/04 (49%), and the proportion declined to 52% in 2006/07 (Fig 2). There is no evidence that the SWAp itself had an impact on the total level of funding devoted to ESP services.

Geographic allocation

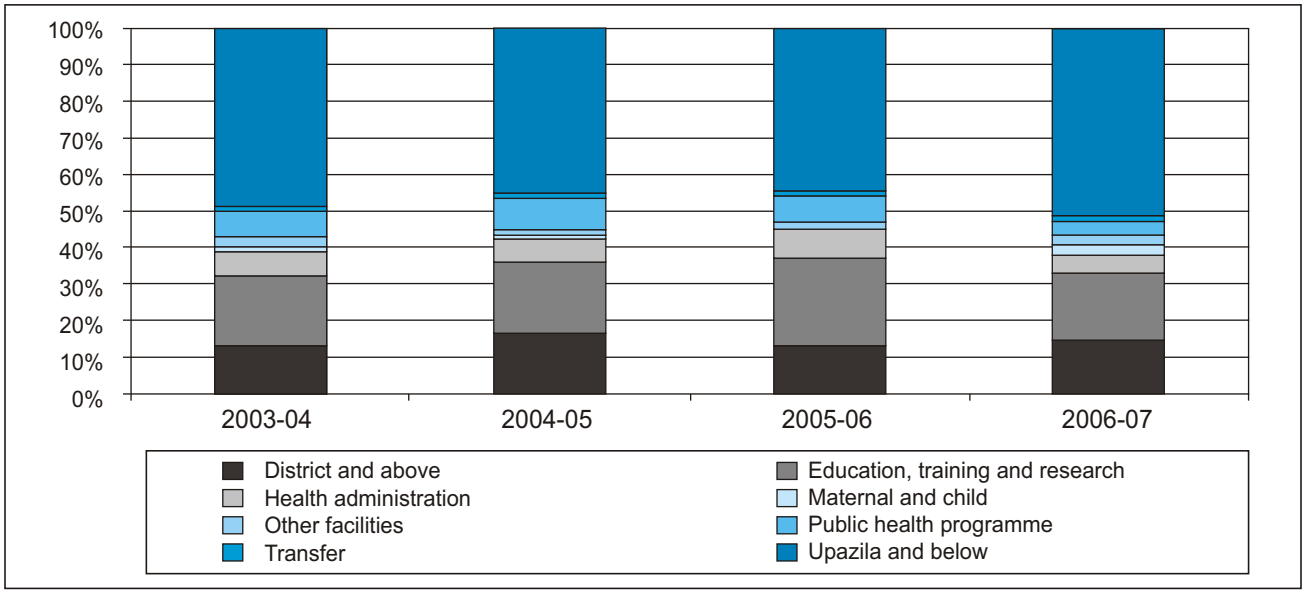
Effectiveness of MOHFW goal of spatial equity can be broadly assessed by disaggregating the MOHFW expenditures by rural-urban categories and by the income quintile. The findings of Rabbani *et al.* (2006) suggest that though the two-thirds of total MOHFW allocation goes to rural areas, per capita expen-diture in rural areas (Tk. 172) is markedly lower than that in urban areas (Tk. 338). Comparing per capita spending across districts by poverty status suggests that per capita healthcare expenditure through the revenue and development budgets of the MOHFW has been highest for the richest districts and lowest for the poorest districts, in contrast to the government policy to allocate more resources to the poorer areas. This suggests that those who are in greater need are actually receiving relatively fewer amounts of resources (Huque 2009), the case of 'Inverse care law' (Hart 1972). The BNHA (2003), for the first time systematically assesses spending by geographical division. Not all the expenditures can be apportioned to a particular division, but ignoring such expenditures, in 2007 the overall health expenditure per capita was highest in Dhaka division (Tk. 1,337), which was three times higher than that in Barisal (Tk. 449 per capita). However, it needs to be acknowledged that there have been changes in the current spending pattern in favour of poorer areas as compared to early HPSP period with spending in the poorest areas growing by 52% as compared to 24% in the richest areas. Moreover, over the three-year period of 2003/04-2005/06, the per capita allocation to the poorest districts has risen by around 31% compared to an average of 25% for all districts (Huque 2009).

Figure 1. Financial flow of funds in the Bangladesh health system



Source: Bangladesh National Health Accounts 2003, MOHFW 2003, pp 11.

Figure 2. MOHFW spending by level of care



Spending by income quintile

The successive health sector plans of Bangladesh aim to channel resources to the vulnerable groups women, children and the poor. However, the public expenditure continues to favour the rich relative to the poor. Health care expenditure of the MOHFW at different levels shows that 27% of the primary level health care allocation is going to the richest quintile and 21% to the poorest quintile. At all three levels primary, secondary and tertiary the poor people receive less healthcare resources provided by the public sector than the rich people, as opposed to the policy objective as well as meeting universal health coverage. The BNHA (2003) suggests that the tenth or the richest decile is the largest beneficiary group using 15.4% of National Health Expenditure (NHE), while the poorest represented by the lowest decile account for around 8.2% of NHE. The richest decile as a group used more than one and half time the healthcare used by the poorest decile.

It is to note that expenditures by the NGO facilities are relatively progressive, benefiting the poor more compared to the richer deciles, while public provisions were the least progressive, benefitting the rich compared to the poorest decile. The poor still finds it difficult to access essential services at public facilities in rural areas, which needs particular attention of the policy makers while moving towards universal health coverage.

Efficiency of resource use

Allocating additional resources from centre to local levels does not necessarily imply that it will lead to improved health outcome, unless resources are used efficiently. The widespread waste of resources because of poor purchasing and distribution systems, overstaffing, and spending resources disproportionately to a few tertiary care hospitals are seen as inefficiency of public sector resource use (Withanachchi *et al.* 2007, Daniels 2000, Mills 1998, Sahn and Berneir 1995).

In Bangladesh, medical and surgical requisites, vaccine and medicines, food, computer and accessories are being purchased from both the revenue and development budgets of MOHFW. This leads to duplication of efforts in one area and less attention in other areas within MOHFW leading to inefficiecy in resource use. Moreover, actual final expenditure falls short of approved budget in almost every year with huge amount of unspent scarce resources within MOHFW. In 2006/07, 16 percent of the revised MOHFW revenue budget and one fourth of the revised MOHFW development budget remained unspent, much higher than that in 2005/06 (Table 1). One of the major reasons of underspending during the HPSP remained unfamiliarity with the new procurement methods based on World Bank guidelines under '*pool*' funding mechanism. These methods had delayed much procurement and meant that over the first two years of HPSP, spending was around 12% below the planned budget. Family planning supplies had largely been untouched and spending on maternal care was only 40% of what was planned in the initial HPSP planning documents. Inappropriate disbursement mechanism also delayed progress of work leading to unspent resources within MOHFW (Huque 2009). This under spending of health care resources drew attention of the policy makers in recent years, and actual spending of health care resources as a proportion of total MOHFW budget is therefore seen as a criteria for measuring efficiency in resource use (Begum *et al.* 2009, HEU and MAU 2001).

We now turn to examine the additional resour-ces the government of Bangladesh (GOB) must spend to achieve universal health coverage in Bangladesh.

Table 1. Total health care budgets (development and revenue) and actual expenditure of MOHFW (in Million Taka, current price), 1993/04 2007/08

Year	Actual budget	Revised budget	Actual expenditure	Expenditure as % of revised budget
1993-94	9,540	n/a	10,730	112.5*
1994-95	13,430	n/a	13,740	102.3*
1995-96	15,830	16,270	14,589	89.7
1996-97	16,640	16,649	17,170	103.1
1997-98	19,070	n/a	18,980	99.5*
1998-99	21,236	19,197	18,569	96.7
1999-00	24,417	23,450	20,783	88.6
2000-01	25,585	26,270	20,627	78.5
2001-02	25,861	26,490	23,810	89.9
2002-03	26,011	27,970	23,897	85.4
2003-04	29,220	33,450	27,861	83.3
2004-05	37,320	31,750	28,390	89.4
2005/06	42,400	41,120	37,040	90.1
2006/07	47,850	49,580	39,420	79.5
2007/08	54,700	52,510	n/a	n/a

Source: HEU and MAU (2001), Rabbani *et al.* (2006), Begum *et al.* (2009)
Expenditure as % of actual budget

PROJECTED PUBLIC HEALTH EXPENDITURE TO ACHIEVE UNIVERSAL HEALTH COVERAGE

For universal health coverage, policy makers need to carefully project the minimum amount of resources the GOB needs to spend, and the possible ways to generate the required amount of money.

Barkat (2010) made an attempt to estimate the minimum amount of money the Government of Bangladesh (GOB) should spend to provide with PHC. He suggests that the annual public health budget should be Tk. 234,000 million (US$1= BDT 65) if the GOB wants to comply with the norm of World Health Organization (WHO) to spend US$24 per capita per year. Following his estimate, the authors have estimated the required budget to achieve the universal health coverage (Table 2).

Currently, the population of Bangladesh is 158 million (UN estimate) and using the WHO suggested norm, requires annually a total of 274,173 million Taka to provide the 'basichealth services'. The population is expected to each 217 million in 2024/25 if population grows at a rate of 2%. This would require public health care spending of Tk. 376,381 million. If GOB wants to allocate 100% of the required budget, public health budget has to grow at a rate of 35% over the period of 2009/10 and 2014/15, which may not be feasible for GOB due to resource constraint. If public health budget complies with 40% norms suggested by WHO, the budget should grow at an annual rate of 5.4%, it will increase from current level of Tk. 68,320 million to Tk. 150,552 million in 2024/25. This shows a huge deficit for GOB to provide 'basic health care' as suggested by WHO.

If we assume that GOB will allocate 50% of the required budget, public health budget has to grow at a rate of 17.7% over the period of 2009/10 and 2014/15, and at a rate of 2% over the period of 2014/15 and 2024/25.

Table 2. Public expenditure required for universal health coverage

Indicators	2009/2010	2014/2015	2019/2020	2024/2025
A. Population	158,665,000	178,682,560	197,279,985	217,813,044
B. Total public health expenditure Ideally required for universal health coverage (million Taka)	274,173	308,763	340,899	376,381
C. Estimated health care budget with 6% growth rate (million Taka)	68,320	91,427	122,350	163,732
D. Deficit to achieve universal health coverage (million Taka) (B – C)	205,853	217,335	218,549	212,648
E. Amount of budget if GOB provides 50% of ideally required budget (50% of B) (million Taka)	137,086	154,382	170,450	188,190
F. Amount of budget if GOB provides 40% of ideally required budget (40% of B) (million Taka)	109,669	123,505	136,360	150,552
G. Required budget if GOB provides 25% of ideally required budget (25% of B) (million Taka)	68,543	77,190	85,224	94095

Assumptions of the projection are:

1. Population growth rate remains constant at 2% over the period
2. Per capita expenditure per year is Tk. 1,728
3. The total public health expenditure in 2009/10 is Tk 68,320 million (This is the total budget of MOHFW)
4. Health care budget will grow at an annual rate of 6%

If GOB aims to allocate the target expenditure (US$ 24 per person per year) by 2014/15, then budget has to grow at a higher rate of 35% over the period of 2009/10- 2014/15. Once GOB achieves this target, growth rate of the budget will be proportional to growth rate of population, given the per capita expenditure constant. However, if the GOB attempts to achieve the target by 2024/25, the required annual growth rate of the budget would have to be 12% (Table 3).

Table 3. Required growth rate of public health budget

Indicators	Required growth rate of budget			
	2009/2010-2014/2015	2014/2015-2019/2020	2019/2020-2024/25	2009/10-2024/25
If GOB provides 100% of ideally required budget	35.21%	2%	2%	12.05%
If GOB provides 50% of ideally required budget	17.7%	2%	2%	7%
If GOB provides 40% of ideally required budget	12.57%	2%	2%	5.4%
If GOB provides 25% of ideally required budget	2.5%	2%	2%	2.2%

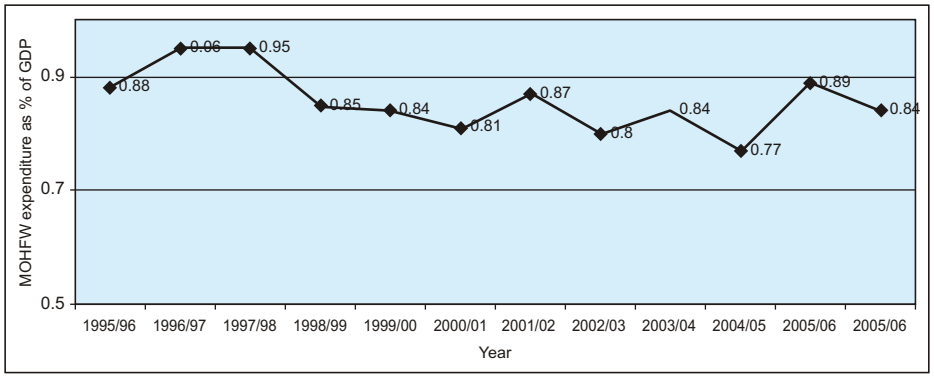
Feasibility of generating resources for universal health coverage

In Bangladesh, the major sources of healthcare funding include: household, government, NGOs and development partners. Insurance makes up a small percent share of the total source of financing in Bangladesh (BNHA 2003). The above projection (Table 2, 3) raises the question of whether the GOB can generate the required amount of resources to achieve universal health coverage. Government health expenditures are principally funded through general revenue taxation and support from international development partners. Government's revenues are mobilised through tax and non-tax revenues. In 2008-09, the total revenue receipt of GOB was Tk. 692 billion. It can be said that with such a low tax base of the country, it may not be possible for the government to generate sufficient revenue to meet the resources required for universal health coverage. The financing pattern of Bangladesh's national health expenditure also supports this. Share of the public sector in the overall financing of the national expenditure, which is dominated by MOHFW expenditures, is declining (BNHA 2003). Though the Total Health Expenditure (THE) shows a steady increase in both per capita and total volume of expenditures[1], the share of government proportion in THE is decreasing over time from 36% in 1997 to 26% in 2007. The MOHFW spent 0.95% of GDP in 1996/97, which declined to only 0.77% of GDP on health in 2004/05. The share of MOHFW expenditure in GDP was 0.84% in 2005/06 (Fig 3).

The share of development partners' contribution in Annual Development Programme (ADP) is also declining over time as evidenced by a lower share of Annual Development Programme (41.2%) in 2007 compared to 50.8% in 1997 for MOHFW. During the five years of HPSP, the proportion of the development partners' contribution to HPSP stood at around 66%, which has also fallen to 54% during the first three years of HNPSP. This is far from achieving UHC in the country from government's end, which in turn, is increasing the out-of-pocket expenditures of households to meet their health care need over the years.

Together with the continued absence of social insurance initiative and a minuscule privateinsurance market is compelling the house-holds, particularly the rural poor, to bear a large proportion of national health expen-diture through direct or out of pocket (OOP) payments. Household OOP expenditures constitute by far the largest component of the National Health Expenditure (NHE), its share was around 69% in 2001 (BNHA 2003)[2]. The share of out-of-pocket expenditure in the total health expenditure increased from 57% in 1997 to 64% in 2007.

Figure 3. MOHFW expenditure as a proportion of GDP, 1995/96-2005/06



Source: Adapted from Rabbani *et al.* 2006; Begum *et al.* 2009

1. The overall expenditures, measured by THE, exhibit a modest rising trend compared to GDP – from 3% of GDP in 1996/97 to 3.2% in 2006/07. Over the 1998–2007 period, the average annual THE growth rate was 12.7% in nominal terms and 8.1% in real terms. The per capita spending on health increased from Tk. 1,085 (US$14.7) in 2006 to Tk. 1,118 (US$16.2) in 2007, while real growth in per person health expenditure between 1998 and 2007 averaged 6.4% per year (Bangladesh National Health Accounts 2010).
2. The absence of third party payments through healthcare insurance or social insurance in Bangladesh remains the major reason of the continued dominance of household OOP expenditure in national health expenditure

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Inpatient Healthcare in Bangladesh: Current Status and Future Prospects towards Achieving Universal Health Coverage

Jahangir AM Khan

INTRODUCTION

In countries like Bangladesh, where most of the people live under deprivation, out-of-pocket (OOP) payment for healthcare leads to limited healthcare utilization, catastrophic economic burden and consequently poor health condition (Van Doorslaer *et al.* 2006; O'Donnell *et al.* 2005). In such a situation, appropriate measures need to be taken so that all citizens can access healthcare at an affordable price whenever needed, i.e., can have universal health coverage (UHC).

For ensuring UHC, the health system needs to be equipped with all types of preventive, ambulatory, inpatient and rehabilitative care in the healthcare spectrum. Among these, inpatient care requires qualified labor (specialist physicians, nurses, medical techno-logists) and strong capital (hospitals with hi-tech medical technology including medicine, surgery and diagnostic tests) investment. Estimating the magnitude of capital and labor required for providing inpatient care services to all citizens in need is challenging while data on prevalence of hospitalization due to specific diseases, unmet need for hospitalization and the resources required for treating such patients are not available.

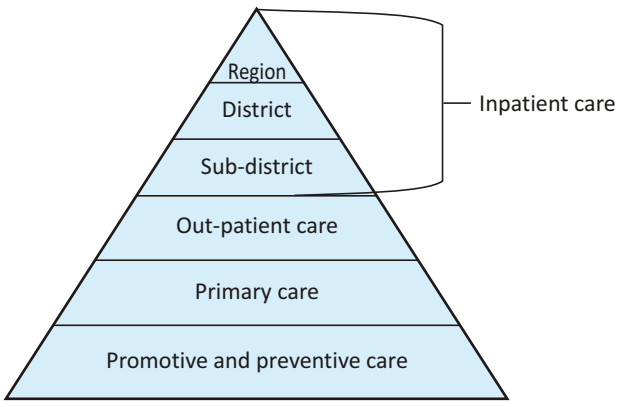
The public infrastructure for inpatient care in Bangladesh is extended to sub-district level and private facilities are also found in a number of sub-districts. However, whether the infrastructure fulfils the requirement for achieving uni-versal health coverage is yet to be investigated. In the absence of appropriate information on need and supply of healthcare, some indicators can be analyzed for getting an idea about the magnitude of gap between existing inpatient care facilities (hospital and health workforce) and the facilities required for achieving universal health coverage. This chapter will critically review existing healthcare facilities, its distribution and utilization as well as financing mechanisms, compared to some low and middle income countries which are approaching towards universal health coverage, using social health insurance.

BACKGROUND

Inpatient care includes both secondary and tertiary care. Secondary care is defined as a service provided by medical specialists who generally do not have first contact with patients. Secondary care is usually delivered in static facilities (hospitals or clinics) and patients have usually been referred here by their primary care provider. Tertiary healthcare is specialized consultative care, usually on referral from primary or secondary medical care personnel.

In figure 1, it is illustrated that the promotive and preventive care can be applied to a broad base of population. The primary and outpatient visits are more frequent than the inpatient care. Within inpatient care, tertiary care is sought by least number of patients compared with secondary care and care in sub-district hospitals respectively. Rehabilitive care is normally applied in outpatient service.

Figure 1: Health care in system for meeting an universal health coverage



In this chapter, we limit our discussion with inpatient care. For providing care for all citizens in need, a health system should have an adequate number of physical facilities (hospitals), enough health workforce, adequate and regular supply of consumables and durables to the hospitals as well as awareness among population about need for modern healthcare. It implies that both supply and demand-sides should be well equipped. A management information system (MIS) contai-ning both demand and supply side information is essential for planning and progressing a health system towards universal health coverage.

In Bangladesh, sub-district, district and regional level hospitals provide inpatient care. The sub-districts have 10-50 bed hospitals in almost all *Upazila* (sub-district) Health Complexes and the health ministry posts several specialists or specially trained generalists (surgery, obstetrics/gynaecology, paediatrics, anaesthesia etc.) in their absence. District public hospitals (secondary level) provide care in several specialty areas of diseases. This is the level where diseases are diagnosed and the hospitals provide services with a view to render out-patient, in-patient, emergency, laboratory and imaging services. It is the secondary level referral facility of health services of Bangladesh. The tertiary level hospitals generally attached to the medical college; have more sophisticated medical apparatus and well-trained specialist physicians, nurses and medical technologists. Besides, a number of specialist hospitals in specific disease areas are also available. Since 1980s, government has been encouraging private investment in healthcare delivery. As a consequence, a large number of private general and specialized hospitals have been established, though mainly in the urban areas. Along with the public medical colleges, a significant number of private medical colleges have been established in the last decades which are producing a good number of medical graduates and contributing to improve health workforce availability in the country (Directorate General of Health Services, 2010). Both public and private initiatives have also been undertaken for producing nurses, midwives and paramedics.

A number of developing nations have targeted universal health coverage by adapting social health insurance in their national health agenda. Hsiao and Shaw (2007) classified such countries into five stages of social health insurance implementation, namely designing (Kenya), initiating (Ghana), extending (The Philippines), Combination of Social health insurance and managed care (Colombia) and achieving (Thailand). Bangladesh lies far behind in this regard and out-of-pocket expenditure at point-of-care is the major mean of financing healthcare. Demographic struc-ture considering age and residency (urban and rural) have shown high implication on having a clue about how to plan universal health coverage for a country. Age is a significant determinant of healthcare need and utilization (Folland *et al.* 2007; Roh 2007). It is observed that the aged population as well as children in early years are more prone to disease incidence and consequently to utilization of hospital care. The working age people in a nation finance healthcare not only of themselves but also of dependent children and elderly as well as unemployed and permanently disabled in the society. From a sustainable financing point of view, the age dependency ratio and participation in labour force thus have significant importance for predicting health-care utilization and costs in the absence of nationally representative disease prevalence and disease specific unit cost for treating patients in the hospital. The question thus arises if Bangladesh is in an advantaged or disadvantaged situation considering demo-graphic structure in comparison with UHC approaching developing countries at different stages of implementation of social health insurance.

The population of Bangladesh is 2.4 times higher than Thailand and more than 4 times higher than Kenya. Arranging healthcare for all of its citizens is certainly a big challenge. However, when we look at the distribution of population across age groups, it shows that the senior citizens (65 years and above) who are more prone to inpatient care utilization are less as a proportion of total population in Bangladesh than in Philippines, Colombia and Thailand (Table 1). In Thailand, senior citizens constitute 7.0% of total population, while the corresponding proportion in Bangladesh is 3.8 percent. Though the total population is much larger than any of the UHC approaching developing countries, Bangladesh is in relatively more advantaged situation since the proportion of elderly people is less.

Bangladesh is predominantly a rural country and only 26 percent of its population lives in urban areas. The government policy for healthcare development in Bangladesh has been emphasizing private sector investment since 1980s. It resulted in high concentration of private inpatient care facilities in urban areas where more affluent people reside. It means that the rural people are more dependent on public hospitals (Bhuiya *et al.* 2009) and choice of rural people is thus limited. Such a limitation is a big concern since the public hospitals have limited number of beds and

poor quality of care (Andaleeb *et al.* 2007). Implying the observation that geographic nearness to hospital increases its utilization, the rural people are in disadvantageous condition since the secondary and tertiary care are available in district towns or above in administrative structure of Bangladesh (Roh 2007; Folland *et al.* 2007).

All countries except Kenya (Table 1) have higher proportion of people in urban areas than Bangladesh. However, Thailand with its high proportion of rural population (68%) is close to achieving universal health coverage. Bangladesh is a high densely populated country with 1,229 persons in each square kilometre. The Philippines is the closest country to Bangladesh in this regard though far below in population density (303 persons per square kilometre). Colombia has the lowest density (41 persons per square kilometre). In comparison between Bangladesh and Colombia (or the countries with lower population density), one hospital can provide services to more people in Bangladesh and can be more efficient in resource utilization until the hospital get exhausted.

In sum, Bangladesh in relation to the selected UHC approaching developing countries has both advantages and disadvantages in working towards universal health coverage. While some of the demographic factors may help accelerating the process, the other may decelerate. In such a condition, the current status of inpatient healthcare supply, utilization and financing need to be explored.

Table 1. Demographic characteristics of Bangladesh in relation with universal health coverage (UHC) approaching developing countries using social health insurance (SHI)

	SHI stage[1]	GDP per capita (International $)[1]	Population[2] (in thousands)	Population (%) across age (years) groups[2]			Urban population[2,3]	Population density[2,4]
				0-14	15-64	65+		
Bangladesh	Not adapted	1,233	160,000	32.0	64.1	3.8	26	1,229
Kenya	Designing	1,432	38,765	42.8	54.6	2.7	21	68
Ghana	Initiation	1,351	23,351	38.7	57.7	3.6	48	103
Philippines	Extension	3,244	90,348	34.3	61.6	4.1	63	303
Colombia	SHI+managed care	8,117	45,012	29.6	65.1	5.4	74	41
Thailand	Achieving UHC	7,469	67,386	22.0	70.6	7.44	32	132

Source: [1)] Hsiao and Shaw 2007, [2)] United Nations 2010, [3)] Percentage of total population,[4)] Per square kilometre.

The main objective of this study is to map the existing inpatient care facilities of Bangladesh and identify the gaps for planning inpatient care for achieving universal health coverage. The following specific objectives, therefore, needs to be addressed:

i) To explore the current level of healthcare supply in terms of inpatient care facilities and health workforce, supply chain of consumables and durables in hospitals and the distribution of inpatient care facilities across geographic regions.
ii) To explore the current level of inpatient care utilization and its differential across geographic regions, gender and socio-economic groups as well as quality of care.
iii) To explore the healthcare financing mechanism for in-patient care.
iv) To explore the status of management information system.
v) To compare the current status of inpatient care facilities, utilization and financing mechanism with UHC approaching developing countries.

Published literature and statistics have been reviewed and analyzed for understanding the current status of Bangladesh in terms of inpatient care facilities, health workforce, utilization of inpatient care and the financing mechanisms. The current status of Bangladesh has been compared with a number of developing countries which are at different stages on their way to achieve universal health coverage.

FINDINGS

Findings from the review and statistics are presented in this section, separated into five sub-sections. Existing inpatient care facilities and service packages in public, private for-profit and private not for-profit are presented in the first sub-section, followed by the distribution of these facilities across geographic areas. Health workforce, utilization of inpatient care, healthcare financing mechanisms and management information system are described in the next sub-sections.

Inpatient care facilities

The Healthcare system in Bangladesh provides inpatient care services through sub-district, district level public hospitals, medical college and specialized hospitals, private for-profit and not for profit hospitals. District hospital is considered as secondary level referral facility and the medical college and specialized hospitals as the tertiary facilities. While information on public facilities is available from government sources, no reliable data is found for private ones. A complete picture, therefore, cannot be provided. An effort is made below for presenting the existing facilities in public, private for-profit and private not for-profit sectors.

Public facilities

A total of 536 public hospitals with 37,387 beds provide inpatient care services in Bangladesh. There are 413 *Upazila* (sub-district) Health Complexes which have limited inpatient services (Table 2). District hospitals are usually termed secondary hospitals since unlike the medical college hos-pitals these have fewer specialty cares. Apart from these, there are different types of special care centres such as, infectious disease hospitals, tuberculosis hospitals, and leprosy hospitals which fall under secondary care health facilities. The medical college hospitals are located in the regional level covering several districts, and provide specialty care in a wide range of disciplines. These hospitals are called tertiary hospitals. Tertiary hospitals include even national level super specialty hospitals or centres which provide high end medical care services, specialized in only one particular area of healthcare.

Over the last few decades, Bangladesh has experienced a rapid development in secondary and tertiary care network all over the country (Table 2). Of 64 districts, 59 have a hospital with secondary health care. However, these hospitals have limited specialist, diagnostic and laboratory services. In addition, there are nine general hospitals with 100-250 bed capacity. The types and number of public hospitals, number of beds and service packages are presented in the table below.

Varieties of inpatient care services are available in public hospitals. In its three tier-system (sub-district, district and region), a good network of hospitals has been established in Bangladesh.

Table 2. Inpatient facilities in public sector and service package

Inpatient hospital	No of hospitals	No of beds	Service package
Sub-district level			
Sub-district hospitals	413	14,557	Comprehensive emergency obstetric care services (EOC), gynaecology, anaesthesia, nursing and basic laboratory facilities.
Secondary level			
District hospital	59	7,650	Medicine, surgery, orthopaedics, Eye, ENT
General hospital	9	1,250	Medicine, surgery, orthopaedics, Eye, ENT
Tertiary level			
Medical college hospitals	17	10,005	Medicine, surgery, orthopaedics, Eye, ENT, Eye and ENT, ARI, Reproductive care etc.
Infectious disease hospital	5	180	Treatment of Infectious diseases
Specialized hospital	2	500	Selected services
Chest disease/TB hospitals	12	546	Chest disease
Leprosy hospital	3	130	Leprosy
Specialized centres	3	150	Selected services
Specialized hospital affiliated with post-graduate training institute	7	2,114	Selected services
Other hospital	6	305	
Total	536	37,387	

It needs to mention here that while basic health care service is supposed to be free in public hospitals, patients end up bearing the costs of medicine and laboratory tests, as well as some additional unseen costs (Andaleeb *et al.* 2007). It was also observed in public hospital that the ambulance, though available, was not in use for the hospital (Sarowar *et al.* 2010). It implies that there is a gap between principle and practice in the public facilities.

Private for-profit

The government of Bangladesh has been encouraging private investment in health sector since early 1980s. Government policy has reiterated and reaffirmed the need for the private sector to share the provision of health care with the public sector "with a view to achieving the spirit of participation and owner-ship in health development" (GOB 1998: 463). The private health care facility constitutes an important component of the national health care system of Bangladesh, providing services to people with better affordability to pay. Private sector offers both modern and alternative (homeopathic, ayurvedic) care. Private facilities are naturally developed in urban areas where affluent sections of the population reside.

In the early 1980s there were only 150 private clinics and hospitals in Bangladesh (Chowdhury and Osmani 2010), which increased to 2,501 registered hospitals and clinics (Directorate General of Health Services 2010). These facilities contain a total number of 42,237 beds in the registered private hospitals and clinics (Table 3). Moreover, 5,122 registered diagnostic centres are currently available. Apart from these, there are a large amount of private clinics in different districts and cities that are not registered.

Private for profit hospitals naturally intend to maximize profit and such hospitals targets middle- to high-income segments of the society. Some of these hospitals have varying numbers of free beds (included in bed number mentioned above).

Table 3. Selected private for profit hospitals, number of beds, cabins, departments and operation theatres

Name of private hospitals	Sanctioned bed	Free bed	Department	Ward	Cabin	Operation Theatre
Ad-din Medical College Hospital	500	290	23	15	98	7
Apollo Hospital, Dhaka	304	0	31	15	49	8
Aysha Memorial Specialized Hospital (P.Ltd)	50	0	6	24	40	3
Delta Medical College Hospital,	250	15	3	200	50	2
East West Medical College Hospital, Dhaka	400	80	14	14	29	6
Fashion Eye Hospital	20	5	1	5	5	2
Islami Bank Hospital	160	0	9	8	76	5
Jalalabad Ragib Rebeya Hospital, Sylhet	890	9	14	18	120	10
Lions Eye Institute & Hospital	84	10	6	6	10	4
Meditech General Hospital	10	0	10	2	6	1
Metropolitan Medical Centre Ltd.	70	0	8	40	30	5
Monowara Hospital	74	4	6	26	48	3
North Bengal Medical College Hospital	250	25	10	0	0	0
Pan Pacific Hospital	62	0	10	20	42	3
Rushmono General Hospital	200	5	12	76	75	4
Samarita Hospital Ltd.	200	5	12	76	75	4
Shahid Mansur Ali Medical College Hospital	500	200	19	13	20	6
Uttara Adhunik Medical College Hospital	500	0	12	12	0	11
Z.H. Sikder Women's Medical College Hospital	100	0	0	2	17	2

Private not for-profit (NGOs)

Private not for-profit (NGOs) facilities normally provide outpatient services in Bangladesh. A handful number of NGOs has successfully established secondary and tertiary inpatient healthcare services. Some NGOs have established their own hospitals, aiming to provide free or subsidized healthcare for the poor. A number of these hospitals offer some kind of health insurance. Such insurance generally covers consultations and a minimum level of treatment. Thirty four NGOs are providing secondary healthcare that are operating mainly on charity basis.

The numbers of inpatient care beds vary largely across NGO driven hospitals, operated nationally and internationally. Among the national NGO hospitals Gonoshasthay Kendro (GK), AK Khan Healthcare Trust, Dhaka Community Hospital, BIRDEM hospital etc. are wellknown ones. The number of hospital beds and cabins vary largely across these hospitals. For instance, GK Dhaka hospital has a capacity of about 410 beds and 46 cabins. AK Khan Healthcare trust is operating a 50 bed hospital for women and children in Chittagong. Wide range of services are provided by these hospitals, for instance, in the speciality areas of burns, endocrinology, cardiology, surgery, and obstetrics/gynaecology, diabetes, Surgery, ERCP and CT Scan.

Example of international NGOs, which provide secondary and tertiary healthcare are ICDDR,B, LAMB Hospital. ICDDR,B has two hospitals in Dhaka and one in Matlab. These hospitals, with a total of 370 beds are providing service mainly for diarrheoal and cholera diseases and also in obstetric/ gynaecology and paediatrics. Lamb Hospital in Parbatipur, Dinajpur provides inpatient service through departments of obstetrics/ gynaecology, paediatrics, surgery and medicine with 115 beds.

Distribution of inpatient care facilities

Bangladesh is divided into six administrative divisions (excluding Rangpur division which has been recently separated from Rajshahi). The distribution of the facilities across divisions is presented in Table 4 below in relation to the distribution of population.

In the upper panel of the table, absolute number of hospitals in each division is presented. Inpatient hospitals are distributed in an equitable manner across divisions considering the distribution of population as shown in lower panel in Table 4. Services available in sub-district and district hospitals are generally uniform in all areas. The medical college hospitals also possess a similar manner across the country. However, if the hospitals with specific specialties are established considering the need of people in the region (division) cannot be clearly justified without disease prevalence data of that region.

Table 4. Distribution of secondary and tertiary public hospitals under DGHS between divisions, year 2010

Types	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Total
Sub-district hospitals	33	85	103	50	111	31	413
Secondary & tertiary	8	17	40	16	26	10	117
Medical College	1	2	8	1	4	1	17
Infectious Disease	0	1	1	1	1	1	5
Chest Hospitals	1	2	1	2	4	2	12
Total	43	107	153	70	146	45	564
Percentile distribution of hospitals	7.6%	19.0%	27.1%	12.4%	25.9%	8.0%	100.0%
Percentile distribution of population	6.6%	19.5%	31.4%	11.8%	24.3%	6.4%	100.0%

Source: Directorate General of Health Services, 2010 and Bangladesh Bureau of Statistics 2009.

Available data from district hospitals shows that the number of beds per hospital ranges between 100 and 250. The information on morbidity in the districts (including even those who do not visit hospital) is not readily found which could have been used for planning the allocation of beds across district hospitals. In absence of such data, the population size of the catchment areas (districts) can be compared with

number of beds allocated[1]. Though no significant relationship is observed between number of beds and population size, we found that population size is higher in the districts where higher number of beds is allocated.

Comparison in international context (WHO, 2011b) shows that hospital beds per 1,000 populations in Bangladesh are 0.400 which is less than half of Ghana (0.9 per 1,000 populations). Kenya is at the same economic level as Bangladesh, but has 35 percent higher number of hospital beds. To reach the level of Thailand, which is close to achieve universal health coverage, we need to increase the number of hospital beds by 5.5 times in Bangladesh.

Effective management of supply chain of consumables and durables is important as it affects the access of medical goods to the patients. The public procurement rules are applied for purchasing goods for public hospitals. Central Medical Stores Depot (CMSD) is responsible for purchasing medical goods for public hospitals in Bangladesh. CMSD can purchase both from local and international market. The requisitions for any purchases are raised by the local hospitals which need to be approved by the office of Directorate General of Health Services and the Ministry of Health. The supply chain is strongly centralized and follows the public procurement rules of Bangladesh. However, the local hospitals can purchase goods up to a certain maximum amount.

External sources, like development agencies supply certain goods (like, vaccines) using their own procurement rules. In the private sector, the hospitals follow their own procurement strategy in the private competitive market.

Health Workforce

Unlike many service sectors, inpatient healthcare demands highly qualified labour force (health workforce) including physicians, dentists, nurses, midwives and medical technologists. Inadequacy of health workforce has been observed in Bangladesh and considered to be a strong limiting factor of population health (Joint Learning Initiative 2004).

Bangladesh government has sanctioned 20,234 positions for physicians of which 11,300 are currently filled up, which means a total vacancy of 44.2%. In total 13,483 nurses are currently working in the public health facilities, while the total number of positions sanctioned are 17,183. The Distribution of vacant positions of different levels of nurses shows that around 96 percent positions of senior nurse are vacant. Corresponding vacancies for junior (class II) and aide nurse (class III) are 67.6 and 19.5 percent respectively. It means that vacant position is higher among the nurses with higher qualification. Table 5 presents information on sanctioned and vacant positions in public hospitals of different types of medical personnel.

Statistics on private sector appointment of medical staff is not available. However, the physicians in public sector often provide services in private hospitals. The gap between what the government has assessed (sanctioned) as requirement for providing healthcare services and the positions vacant clearly shows that Bangladesh has yet to go a long way. It is not even clear if the sanctioned positions are sufficient to provide healthcare services to all citizens for meeting universal health coverage. The highest vacancy in medical staffs is observed in Barisal (64.9%), followed by Khulna (58.2%), Rajshahi (55.3%), Sylhet (54.7%), Chittagong (50.7%) and Dhaka (25.4%).

There are currently 20 public medical colleges in Bangladesh of which 17 have the capacity to produce 2,509 physicians and the rest can produce 210 dentists. A total of 1,250 places for nursing education are available in public institutions. Furthermore, places for educating 650 medical assistants are available in public institutions. From the public medical colleges 10,990 physicians have been graduated between 2004 and 2009 of which 49.2 percent is female.

The scope for medical education has been extending beyond public medical institutions since the beginning of 1990s. A sum of 44 private medical colleges can educate 3,335 physicians. Twelve dental colleges have the capacity to educate 770 dentists. A sum of 530 nurses, 140 midwives and 1,855 medical assistants can be graduated by private institutions. However, statistics on number of physicians actually graduated from private institutions is not available.

1. The districts with 100-150 bed hospital have an average population of 1,624,479 (1,063,208) and that of with 200-250 bed is 2,204,051 (SD= 709,959).

Table 5. Health Workforce in public facilities in Bangladesh, 2010

Types of medical care and staff	Sanctioned	Filled up			Vacant	
		Male	Female	Both	Number	Percentage
Allopathic Medicine						
Physicians	20,234	8921	2,379	11,300	8,934	44.2
Nurses						
Class – I (senior)	161			6	155	96.3
Class – II (Junior)	463			150	313	67.6
Class – III (Aide)	16,559			13,327	3,232	19.5
Medical technologists	6,150			4,658	1,492	24.3
Medical assistants	5,411			3,694	1,717	31.7
Domiciliary staff	26,416			23,285	3,131	11.9
Non-medical	466	168	50	218	248	53.2
Alternative medicine						
Unani	66			20	46	69.7
Ayurvedic	66			22	44	66.7
Homeopathic	66			16	50	75.8
Compounders	64			48	16	25.0
Herbal garden assistants	467			425	42	9.0

Source: Directorate General of Health Services, 2010

Table 6. Comparison of health workforce in Bangladesh with universal health coverage (UHC) approaching developing countries using social health insurance (SHI)

Country	SHI stage	Physicians per 1,000 population	Nurses and midwives per 1,000 population	Dentistry personnel per 1,000 population
Bangladesh	Not adapted	0.300	0.28	0.02
Kenya	Designing	0.139	1.18	0.04
Ghana	Initiation	0.090	1.05	0.01
Philippines	Extension	1.150	6.00	0.56
Colombia	SHI+MC[1)]	1.430	0.55	0.78
Thailand	Achieving UHC	0.305	1.52	0.07

Note: [1)] Managed care
Source: World Health Organization 2011b

Bangladesh has an overwhelming bias towards urban areas in the distribution of qualified healthcare providers (BHW 2007). Unregulated providers, pharmacies, para-profession and trained community health workers have a complementary role. But such providers cannot be utilized for providing inpatient care services in the hospitals. However, among all providers for each 1,000 population, 0.77 percent is constituted by physicians, nurses and dentists. It needs to be noticed that Bangladesh with 0.300 physicians per 1,000 populations is in the same level as Thailand (0.305 physicians per 1,000 populations). Bangladesh even has higher number of physi-cians than Kenya and Ghana per 1,000 popula-tions. Dentistry personnel in Bangladesh are low (0.02 per 1,000 populations). The highest number is found in Colombia (0.78), followed by the Philippines (0.56), Thailand (0.07) and Kenya (0.04). Only Ghana has lower number (0.01) than Bangladesh. Among these six countries, Bangladesh has lowest number of nurses and midwives per 1,000 populations (0.28). The highest number is observed in the Philippines (6.00). The closest country to

Bangladesh in this regard is Colombia which has 0.55 nurses and midwives per 1,000 popu-lations.

Utilization of inpatient care across geographic areas, gender and socioeconomic groups

Data from Bangladesh government shows that the mean bed-occupancy rate in sub-district hospitals is 77.2%. The highest occupancy rate is observed in Khulna division, followed by Dhaka, Barisal, Rajshahi, Chittagong and Sylhet respectively. However, hospitals with 100 percent or higher bed occupancy are very few in *Upazila* (sub-district) Health Complexes. In the table 7, percentage of hospitals with 100 percent or higher bed occupancy rate in Sub-district Health Complex and district hospitals are presented. Only 18.3% of all hospitals are occupied by 100% or higher rate. The district hospitals are more occupied than the sub-district hospitals. In the divisional level share share of such hospitals (100% or higher occupancy) ranges between 5.9 percent (Sylhet) and 26.7 percent (Khulna).

Gender-based disparity is observed in inpatient care utilization in district hospitals according to Directorate General of Health Services (2010). Among the total patients who admitted to district hospitals in 2009, 60 percent were female. This pattern is not uniform in all districts. For instance, in Barguna district, 74 percent admitted patients were male, and it was only 36 percent in Kishorgonj.

A total picture of inpatient care utilization across socioeconomic groups in Bangladesh is not currently available. An impression about this can observed in a study on inequity in maternal health care service utilization in a rural area (Matlab) in Bangladesh, which shows that 4.8 percent of all mothers in poorest socioeconomic quintile receive care at ICDDR,B (international NGO) Matlab hospital (Anwar *et al.* 2005). The corresponding percentages in public and private facilities are 1.0 and 0.4 respectively. It increases with higher socioeconomic positions in all three types of facilities. Such utilization is 3.7, 5.0 and 12.0 times higher in the least poor socioeconomic quintile in comparison with poorest one at ICDDR,B, public and private hospitals respectively. It is thus observed that hospital care utilization across socioeconomic groups varies largely in all types of hospitals and it is largest in private facilities.

Table 7. Distribution of utilization (bed occupancy) of public hospitalsat sub-district and district level in Bangladesh, 2010

Division	Sub-district hospitals		District hospitals		Share of hospitals with 100% or higher bed occupancy in all hospitals
	Total number	With 100% or higher bed occupancy	Total number	With 100% or higher bed occupancy	
Barisal	33	4	5	1	13.20%
Chittagong	85	5	12	8	13.40%
Dhaka	103	13	14	6	16.20%
Khulna	50	9	10	7	26.70%
Rajshahi	111	21	13	10	25.00%
Sylhet	31	0	3	2	5.90%
Total	413	52	57	34	18.30%

Source: Directorate General of Health Services, 2010

Quality of hospital care is a concern of any healthcare system. While several indicators are used for quality assessment in different countries, we observed in a study in Bangladesh that nine areas of quality indicators (Doctors' service orientation, Nurses' service orientation, Tangibles (hospital), Tangibles (staff), Access, Treatment cost, Baksheesh, Process features and Patient satisfaction) have been used (Andaleeb *et al.* 2007). The indicator "Access" captures to some extent the coverage of inpatient care, while asking about if it was difficult to get a bed/cabin. However, it can be improved by taking the information on what proportion of the patients who sought inpatient care had to be denied services due to any reasons, like, scarcity of beds, physicians etc.

Financing healthcare

The healthcare financing of Bangladesh is strongly dominated by private out-of-pocket payments. The government expenditure is only 35.7% of total expenditure. The total health expenditure of Bangladesh in 2008 is 191,486 million taka or 2,775 million US dollars. It constitutes 3.5 percent of GDP. Current per capita health expenditure is 47 US$, which increased by 176.5% since 1995 (World Health Organization 2011a). However, health expenditure as a percentage of GDP varied between a small range i.e. 2.7 and 3.7 percent during the same period.

The financing of public hospitals comes from revenue and development budget. While the revenue budget is the source of revenue collected through taxes, the development budget is from Health, Nutrition and Population Sector Program (HNPSP 2003-2011). The public hospitals receive funds from the government on the basis of number of beds and staffs allocated to the hospital.

Pre-payment mechanism for financing health care is less used one. Few hospitals like Gono Shasthya Hospital and Dhaka Community Hospital sells health card at a very low price against which the card holders get services at a low cost. The services that are provided against the card are highly subsidized. Dhaka Community Hospital has an industrial health insurance. Under this insurance, the firms can make contract for getting primary care, health check-up etc. for their employees against a premium. For inpatient care, the employees can only be referred to the hospital.

National Health Accounts show that Bangladesh has lower health expenditure as a percentage of GDP or as per capita expenditure than any UHC approaching developing countries. The private source of expenditure in Bangladesh (64.3%) is next highest. Colombia has little higher (67.1%) private expenditure than Bangladesh. However, pre-payment mechanism dominates the private health expenditure of Colombia through private insurance (51.3%).

Pre-payment mechanism, like social security fund in Bangladesh is not adapted yet; while in Colombia and Ghana 70 percent and 37.4 percent of general government expenditure are constituted by social security fund. Further-more, another pre-payment mechanism i.e. private health insurance does not have any share in private health expenditure in Bangladesh. About nine percent of Kenyan private health expenditure is covered by this mechanism. The highest contribution of this mechanism is observed in Colombia (51.3 percent).

Management Information System

For planning universal health coverage information about health and healthcare is essential. In recent years, the Management Information System of the Directorate General of Health made tremendous progress. The activities of MIS-Health related to health information system include collection of data from various health sources and cleaning, analysing , summarizing the data to generate and distribute reports through routine administrative report, web site, year book, health bulletin, newsletter, etc. The existing data flow system covers all public health facilities from sub-district to national level. Additionally, data from lower level (union health centres, community clinics etc.), than sub-district levels are gathered through paper-based system for including electronically in sub-district database system. The databases include health facility information, health facility utilization, morbidity profile of indoor patients, mortality profile, emergency obstetric care profile, statistics of integrated management of childhood illness, health work force, logistic information system, population information. A pilot project on Geographic Information System (GIS) has shown success in introducing in health sector and scaling up of the GIS has been undertaken.

DISCUSSION

Findings of this investigation have addressed four broad areas, i.e. capital, labour, utilization and financing. Capital and labour which are the factors of healthcare production are reflected on hospitals and health workforce respectively.

There are 0.300 physicians, 0.280 nurses and midwives and 0.020 dentistry personnel in Bangladesh. In the public hospitals, we observe large vacancies in health workforce. Moreover, the number of hospital beds is very poor. It implies that Bangladesh does not have a good combination of inputs (capital and labour) for producing inpatient healthcare in an efficient way. It is observed in most of the countries, which successfully provide healthcare to all citizens that a larger proportion of nurses and midwives are available in the health workforce in comparison with the number of physicians. For instance, Thailand has five times higher nurses and midwives than physicians (WHO, 2011b). Data from industrialized welfare states like Canada, United Kingdom, Sweden, Switzerland and France show that the number of physicians is 3 to 5 times higher than nurses and midwives. All these indicate that the number of hospital beds as well as health workforce should be increased sharply and a good mix of inputs i.e. hospitals, hospital beds, physicians, nurses and midwives should be maintained for using the resources efficiently.

Along with efficiency, a fair distribution of beds across geographic regions considering the population size and need for inpatient care is essential for reaching universal health coverage.

It is observed that the distribution of public hospitals is equitable, considering the population size, across regions within the country. Since the data on disease prevalence is missing, we cannot make estimation that reflects equity in distribution of hospital beds considering need for inpatient care. On the contrary, the private hospitals are skewed to urban areas. The number of beds should therefore be increased using public facilities (existing and new establishment) and simultaneously incentives should be created for private sector so that private investment can be attracted to rural areas. Not for profit (non-governmental organizations, consumer society etc.) sector can have a strong role in this respect.

Bangladesh has 0.400 hospital beds per 1,000 populations. Under-utilization of hospital bed (only 18.3 percent of hospitals are utilized fully or more) indicates that supply may not guarantee equitable or efficient utilization of services. Inequity in utilization of maternal care in hospitals is explained by lack of education among mothers in Bangladesh (Anwar *et al.* 2005), which means that the demand side plays a strong role for under-utilization of inpatient care and fostering inequity.

A question can be raised in this context regarding how many beds and medical staff (like, physicians, nurses, dentists) should be arranged per 1,000 population in Bangladesh for providing healthcare service for all patients who require inpatient care. Estimation is yet to be made. However, scientific literature suggests that health care need indicators (for assessing need for hospital care) can be developed based on Census information and odds ratios derived from logistic regression analyses of the relationships between hospital utilization, health status, socio-demographic characteristics and area indicators of supply (Benzeval and Judge 1994). As indicated earlier Bangladesh needs 5.5 times higher hospitals bed to reach the level of Thailand. However, the country characteristics regarding need for hospital care may vary largely due to their disease pattern. It implies that the need for hospital beds per 1,000 populations can vary between countries. A rigorous analysis thus is required for estimating the need for hospital beds for meeting universal coverage. It is equally relevant for assessing the need for health staffs. In addition, Bangladesh lacks survey on the consumable (like, drugs) and durable goods (x-ray machine, ultra sonogram, ambulance etc.) utilized in hospitals. Surveys in public hospitals had been undertaken in some areas, like health workforce earlier. Such surveys are unavailable in private sector, presumably due to practical constraints, like inaccessibility to required information.

There is opportunity to improve the quality of services in public hospitals in Bangladesh referring the weaknesses identified by Andaleeb *et al.* (2007). We have observed that the hospital supply chain is highly centralized, which can result in inadequate scope for meeting the need of consumable and durable goods in the hospital. For instance, the unavailability of drugs in public hospitals is highly prevalent. A number of countries (like, Thailand, Ghana), which have adapted

universal health coverage, have simultaneously developed an accreditation method for hospitals to be contracted for service delivery to the citizens. Such action is important in Bangladesh for improving the quality of inpatient care while considering universal health coverage to be implemented. It needs to emphasize here that the private hospitals also should go through such accreditation process for ensuring quality service.

Progress in Management Information System (MIS) of the Directorate General of Health will be useful for planning universal health coverage. Additional databases in MIS will be required when social health insurance will be introduced in the health system. For instance, database of insurance clients (like, information in biometric smart card in RSBY in India) is essential component for such an effort. Bangladesh health system can take advantage of the knowledge acquired by the Joint Learning Network consists of countries (Kenya, Ghana, Thailand, The Philippines etc.) which working for achieving universal health coverage.

The total healthcare expenditure in Bangladesh is borne by government (35.7% of total) and private persons (64.3% of total). The govern-ment allocates resources from revenue and development budget to the public hospitals. Most of the services in public sector are financed through revenue collected by the government. The revenue base in Bangladesh is small, which is a strong barrier to accumulate enough healthcare funds. Moreover, the allocation of revenue to health sector is subject to negotiation with other sectors like, education, national defense, agriculture etc. At the same time, the allocation of health fund to public hospitals is based on number of beds and staffs of the hospitals. It means that the government does not consider disease burden for allocating budget to hospitals, while the resources for treating patients with different diseases can vary largely. The system is thus suffering from vertical inequity since the resource is allocated for patients with different diseases similarly. A vast number of countries, including Thailand, South Korea, Iran and many industrialized ones, are currently using Diagnosis Related Group (DRG) which considers disease-specific cost for inpatient care for allocating public funds (collected through revenue or insurance premium) to the hospitals (Jackson *et al.* 1993; Ghaffari *et al.* 2009). Using this allocation procedure based on types and severity of disease, costs involved for treatment are considered. In this way both vertical and horizontal equity in resource allocation can be ensured.

Out-of-pocket payment (OOPP) mechanism is dominating the health financing system of Bangladesh, where a high proportion of people are living under deprivation. This payment mechanism puts a huge number of people in a vulnerable socioeconomic situation. Van Doorslaer *et al.* (2006) observed in a study on Asian countries that the people of Bangladesh faces catastrophic economic healthcare burden due to out-of-pocket payments. Bangladesh, therefore, should concentrate on a financing system, where people can avail healthcare at an affordable price while seeking healthcare.

It is observed that pre-payment either through taxes (often not earmarked for health and subject to negotiation with other sectors) or/and insurance (social or private) occurs in different degrees in any UHC approaching developing countries, while this mechanism is weakly existent in Bangladesh. Industrialized countries show that pre-payment mechanism is the most dominating one. In Canada and UK, government expenditure is 69.8% and 82.8% respectively. Government health expenditure in the USA is lower (46.5%), but major portion of private expenditure is funded by private health insurance (63.8%). Pre-payment can be made in different ways such as taxes, social health insurance contribution, private health insurance, community-based health insurance etc. (Mossialos *et al.* 2002).

Bangladesh is a country with small base for taxes. This base is widening very slowly and we cannot expect a big expansion of the tax base in a few years. The country is suffering from price hike for sometimes. Any expansion of indirect tax (value-added tax, fuel tax etc) may not be appropriate in such a condition, which may put more people into economic deprivation. Moreover, the revenue collected as either direct or indirect taxes is subject to negotiation with other governmental sectors, like education, national defense, agriculture etc. for allocation in health sector. Pre-payment system is weakly existent in Bangladesh for recovering the cost of healthcare. In such a condition, Bangladesh should explore the possibilities of introducing pre-payment system, like social or community-based health insurance by testing on people in different

socioeconomic segments. The public and private formal sector employees can be targeted as a first step. It can gradually be extended to informal sector workers, which constitutes 88 percent of total labour force of Bangladesh (Maligalig *et al.* 2008). These people can be covered for healthcare by sharing health risk across themselves. The ultra poor, students, disabled and elderly, who lack ability to pay the premium, should be included in the system by using cross-subsidization.

In recent years, a number of developing countries have adapted social health insurance mechanism for meeting universal health coverage. It is observed that while some countries are attempting to offer comprehen-sive care (like, Thailand, Ghana), some other are going to offer in-patient care only (like, the Philippines, India-RSBY). A number of arguments for and against such arrangement can be provided. Catastrophic economic burden due to health hazard is often connected to in-patient care. By offering inpatient care such burden can be reduced for vulnerable people. On the contrary, it is unclear how the gate-keeping will work for reducing inappropriate consumption of care. Primary or out-patient care which can prevent further deterioration of disease condition cannot be tackled by incorporating only inpatient care in social health insurance system. It can further argued that through primary or out-patient care the social insurance clients will be more frequently in contact with social health insurance system, which can be useful for building trust of citizens to the insurance system.

Finally, Bangladesh should take a careful step forward by gathering experience from both types of countries which have achieved universal health coverage and which have not. For instance, the United States, being one of the richest countries, has not covered health-care for all citizens, though it has the highest per capita health expenditure. It is two times higher in the USA (7,536 US$) than in Canada (4,095 US$) and UK (3,248), while later two countries have achieved universal health coverage. Private health insurance (a pre-payment mechanism) is dominating the US healthcare financing system. It is argued by Noble laureate Paul Krugman that involvement of private insurance raises the healthcare expenditure in the USA (Krugman 2007). Any countries that are planning implementation of UHC should critically analyze the experience of healthcare financing from other countries.

CONCLUSION AND RECOMMENDATIONS

Ensuring universal health coverage for 160 million people of Bangladesh is a challenging task. However, the age-dependency ratio shows that lower proportion of people at young and old age are dependent on working age people compared to the UHC approaching developing countries. Scarcity of hospitals and medical personnel are observed. A fair distribution of public hospitals across geographic regions (divisions) is observed. But the rural people who constitute 74 percent of total population live far away from the existing public hospitals. Moreover, private hospitals are concentrated in the urban areas. We have also observed unjustified mix of physicians, nurses and midwives in Bangladesh. Generally, under-utilization of public hospitals has been observed in different public hospitals. The quality of services in such hospitals is poor.

To allocate the revenue (healthcare fund) in an efficient way is important so that maximum number of patients can be treated with given fund considering the need for care. Currently, number of hospital beds and the number of employees are considered for budget allocation in public hospitals. Private sectors are highly dependent on out-of-pocket payments, which is a reason of barrier to healthcare access and of catastrophic economic burden. The international comparison shows that the current status of inpatient care in Bangladesh has both advantages and disadvantages towards universal health coverage. Considering these observations in inpatient healthcare system in Bangladesh, the following recommendations can be made:

1. More hospitals and medical personnel as well as its good combination are required for providing services to all citizens.
2. Empirical scientific investigation on assessing need for hospital beds, health workforce, medical equipment, drugs and diagnostic services should be carried out.
3. The possibility for creating incentives for private investment in rural areas needs to be investigated so that the distribution of hospitals in urban and rural areas can ensure physical access to hospital based healthcare.

4. The reasons for under- and over-utilization of hospital beds should be investigated and equity in utilization across geographic areas, gender and socioeconomic groups should be ensured.
5. For an efficient resource allocation in the public hospitals as well as reimbursement to the private ones, it is important to estimate the disease-specific treatment cost and case-mix of patients in different hospitals.

In sum, both supply and demand sides need to be critically studied and the possibilities for financing healthcare through pre-payment mechanism and an efficient and equitable resource allocation model should be developed so that need-based universal health coverage can be established in Bangladesh.

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Learning from Demand Side Financing: Bangladesh Scenario

Rumana Huque

INTRODUCTION

In Bangladesh, primary health care services, including the maternal and child programmes have been pursued mainly through supply side interventions many of which failed to achieve the expected objectives of reaching the poor. Non-availability of drugs and commodities, discrimination against poor, imposition of unofficial fees, lack of trained providers, weak referral mechanism, unfavourable opening hours and interdepartmental difficulties contribute to low use of public facilities in Bangladesh (Ahmed and Khan 2011, HEU 2010). Providers available in the system are also inequitably distributed between urban and rural areas, with rural facilities experiencing vacancies, which adversely affect use of services at public facilities (HEU 2010a, MOF 2005).

Weaknesses on the supply side interventions have led to some interest in demand side financing (DSF) as a way to improve the targeting of specific groups and as an instrument for promoting provider efficiency in many developing countries including Bangladesh (Ensor 2004). Demand side funding through the provision of vouchers or coupons that individuals can exchange for services with government and non-government providers are being piloted in several countries as potential methods for overcoming some demand side barriers.

Demand side financing involves channelling a part of government subsidy for health services directly to households allowing them to purchase health services themselves or through an agency (Bhatia *et al.* 2006). This approach aims to raise the overall consumption of a specific service; to improve the targeting of benefits at identified vulnerable groups and to improve the quality of service provided to members of these groups.

One form of demand side financing is condi-tional cash transfer (CCT), which provides grants to consumers based on personal or household characteristics while the value of the voucher is limited and payment beyond a certain limit is made in full by the consumer or some other third-party payer (Ensor 2004). CCT has been criticised on the ground that the schemes may not lead to increased access to services since cash is transferred to recipients after the desired behaviour has occurred, and they often face high operational and transactional costs. Another demand side approach provides vouchers for free or sold to eligible participants, allowing them to access specific health services from selected providers. It is argued that, if designed and implemented well, voucher programmes can overcome access barriers as vouchers are provided in advance of service utilization that CCTs may not address (Ensor 2004). Vouchers can be used to accurately target priority groups and increase demand by subsidising services. Vouchers have the potential to increase consumers' choice of providers and improve quality of care through enhancing competition among providers for voucher clients (Bhatia *et al.* 2006, Ensor 2004).

It is to note that the benefits of DSF accrue in practice depend not only on subsidies provided to the target group but also on a number of supply-side factors, such as, the appropriate number of providers and facilities in place to meet the increased demand created by the scheme. The enhanced demand for services arising from the implementation of DSF must comply with expansion in staff, physical capacity, and accompanying increases in the supply chain within the health system. Specific physical improvements to accommodate the increased utilisation of facilities include the need to improve cleanliness, hold more beds for pregnant women, and establish easy-to-reach toilet facilities for women in labour (Koehlmoos *et al.* 2008). The benefits of DSF therefore depend on the current functioning of health sector institutions within a specific country, the extent to which they are able to change with and without external catalyst, on the nature of the healthcare market and the extent to which facilities can compete to improve quality of services (Ensor and Cooper 2004, Ensor 2004).

There is, however, little evidence on whether DSF mechanisms are more effective than supply side subsidies while it is also questioned whether the mechanism is sustainable with the greater transaction costs of the approach. The purpose of this paper is to review some of the potential reasons for using a demand side approach, and to examine whether demand side financing can contribute in achieving universal health coverage in Bangladesh.

Bangladesh situation

By the efforts of the government combined with the contribution of non-government organizations (NGO) Bangladesh has achieved considerable progress in the health indicators over the last decade through expanding the coverage of essential services to the disadvantaged people. Despite these achievements several challenges still remain unmet. Though the United Nations' Millennium Development Goal 5 (MDG 5) calls for reducing Bangladesh's MMR to 143 deaths per 100,000 live births by the year 2015, 70% of the pregnant women have no access to emergency obstetric care (EmOC) (BDHS 2007). **S**killed attendants assist only 26.5% of births; while around 2.4 million births take place at home annually in Bangladesh (Streatfield and Arifeen 2010), mostly in unsafe and unhygienic conditions. Only 4.3% of women use a medically trained provider to attend deliveries at home which poses risk of maternal death (Streatfield and Arifeen 2010). While access to family planning is increasing, access to three other pillars of safe mother-hood namely, antenatal care, clean and safe delivery, and essential obstetric care remain largely unfulfilled. It is, therefore, a great challenge to meet MDG 5 with the current level of low use of skilled birth attendants and EmOC.

In Bangladesh, demand side barriers for low use of public facilities for maternal care include cultural and social belief system, distance of the facility from home, lack of information on sources of care, lack of awareness on the value of maternal health services, and high access costs (e.g. direct and indirect costs) (Ensor and Cooper 2004). One of the most important barriers to access maternal care is high cost of services which needs to be paid for out-of-pocket. Consumer medical expenditures for ANC (for a package of four visits, including drugs, supplies, and diagnostic/laboratory tests) and normal delivery in public facilities vary from 854 Taka at the primary level to 1854 Taka at the tertiary level (HEU 2010b). Moreover, costs of services not only include the facility cost but also include unofficial fees, transportation cost and opportunity cost. Evidence suggests that non-medical out-of-pocket expenditures incurred by patients for outpatient maternal services (ANC and postpartum care) ranges from 32 to 68 Taka per visit to the facility, which are mainly incurred for transportation to and from the facility. For inpatient maternal services, total non-medical expenditures are in the range of 1,654 to 2,059 Taka, which involves travel and food costs for the patient and attendants (HEU, 2010b). Most of these demand side costs are financed by user charges either at the time of treatment through loans, often at high interest rate, or by selling productive assets. Conventional funding mechanisms generally fail to address the demand side costs faced by women in accessing care during pregnancy. These costs may influence delays in the decision to seek care and reach a facility impacting significantly on use of services (Ensor and Ronoh 2005). Killewo *et al.* (2006) also confirmed that lack of money for transport is an important reason for delay in seeking care in rural Bangladesh. A demand side financing scheme for maternal and neonatal health is expected to reduce financial barriers to access and, therefore, to improve use of the services by the poorer sections of the population (Ahmed and Khan 2011).

The Ministry of Health and Family Welfare (MOHFW) of Bangladesh is piloting a maternal health voucher programme in 44 *upazilas* (sub-districts) around the country as part of its Health, Nutrition and Population Sector Programme (HNPSP) as a test case for demand side financing. The objective of the programme is to increase the use of qualified birth attendants and ease the financial costs of delivery. The programme also intends to include private and NGO facilities as potential providers of maternal care to stimulate competition among providers to improve quality of care. It is expected that the DSF would contribute to Bangladesh's efforts to reach Millennium Development Goal 5 and achieve a 75% reduction in maternal mortality by 2015 (HEU 2010).

In Bangladesh, there are experiences with at least three other voucher programmes for maternal health services, although all are small in scale. One programme implemented by the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)

is the Community Health Project in Chakaria *upazila* of Cox's Bazaar district, while another voucher scheme called 'Demand-based Reproductive Health Commodity Project', was jointly piloted by RTM International, ICDDR,B, and the Population Council. Marie Stopes Clinic Society is implementing a voucher scheme, alongside other interventions, in three districts: Shariatpur, Bhola, and Barisal (HEU 2010). Under these voucher programmes, women received antenatal care (ANC), post-natal care (PNC) and delivery services free of cost at designated facilities. Demand-based Reproductive Health Commodity Project and Marie Stopes Clinic Society provided transportation voucher to facilitate access to services, however, women did not receive any other cash incentives besides the voucher under any of these projects. All these small scale voucher programmes, with financial assistance from development partners, had been successful in increasing use of ANC, PNC and delivery care (HEU 2010; Rahman *et al.* 2009).

METHODS

This paper is based on review of relevant published documents. Peer reviewed journal articles and research reports were selected for reviewing. These mainly focused on three broad themes i) operational issues in the management of DSF ii) the impact of DSF on the use of services and management process, and iii) sustainability of DSF initiatives to achieve universal health coverage.

A number of relevant personnel were also interviewed who had been involved in implementation and evaluation of maternal health voucher scheme in Bangladesh. A guideline was used for interviewing the respondents, and evolved around the following key questions: i) Who are the major stakeholders involved in implementing the voucher programme? ii) Do the organizations have appropriate number of health personnel and support staff? ii) Whether voucher programme has increased service utilization as expected, and if yes, what measures the organizations had adopted to meet increased demand for services? iv) Does the organization have mechanism to closely monitor/follow-up the implementation of different activities of voucher programme? What indicators are used to monitor programme activities? v) Has the programme brought about competition among providers? vi) What are the cost implications of the voucher programme? vii) What are the major barriers in implementing the DSF in Bangladesh and how the obstacles can be reduced? viii) Is DSF a solution to achieve universal health coverage? Thematic approach has been used to analyze the information.

FINDINGS

The findings are summarized in three broad thematic areas. It mainly focuses on the experiences of the maternal health voucher programme initiated by the MOHFW, Bangladesh.

Operational issues in the management of voucher programme

The pilot DSF scheme implemented by MOHFW was formally launched in 2004, though actual distribution of vouchers and provision of services were delayed due to delayed release of funds. The start of the voucher programme varied among *upazilas* - between August 2006 and June 2007 (Koehlmoos *et al.* 2008, HEU 2008).

The MOHFW used two different types of targeting mechanisms for voucher programme in Bangladesh. Some *upazilas* offered universal coverage, and others used means-testing to target the poor. Among the initial 33 *upazilas* 9 had universal coverage with all the pregnant women receiving the vouchers. In the remaining 24 *upazilas*, targeting was based on economic status of the beneficiaries. In these *upazilas*, eligibility was restricted to extremely poor women who owned less than 6,534 sft. of land, whose household earning was less than US$38.50 per month, who lacked ownership of other productive assets and who was first or second time pregnant (HEU 2010).

The vouchers entitled the pregnant women to access free ANC, delivery care, emergency referral, and post-partum care services. Women could obtain these services from selected facilities and providers. In the case of referral for complications, pregnant women accessed services at specific hospitals with a referral certificate. Cash stipends for transportation (Tk. 500 for routine or emergency transport to referral facility), Tk. 2,000 cash incentive to mothers for the purchase of nutritious food and medicines, and incentives in-kind (A gift box worth Tk. 500) for delivering with a qualified health provider had also been provided to consumers (Koehlmoos *et al.* 2008).

Upazila DSF (UzDSF) Committees and Union DSF (UnDSF) Committees were formed followed by orientation of all members of the committees (HEU 2008). The senior staff nurses and family welfare visitors (FWV) were oriented as service providers. The duration of the orientation of voucher distributors and service providers varied from one to four days (Koehlmoos *et al.* 2008).

Family welfare assistants (FWA) and health assistants (HA) were responsible for identi-fication and registration of pregnant women and distribution of vouchers. District designated bodies were responsible for selecting and accrediting eligible public, private and NGO providers in the pilot *upazilas* with the capacity to provide basic and/or comprehen-sive EmOC, including management of normal and problem pregnancies, surgical obstetrics, anaesthesia, and blood transfusion. An UzDSF committee was responsible for monitoring and supervision of activities of the maternal health voucher scheme. This committee allocated vouchers to UnDSF committees for distri-bution among the target beneficiaries. The UzDSF committee reported to the national DSF committee (HEU 2008, HEU 2010).

The programme provided incentives to health care providers for identifying eligible women and providing maternal health services. Besides doctors and nurses at the public facilities, the support staff (aya, ward boy and cleaners) were also entitled to financial incentives (HEU 2008). Accredited private service providers could reimburse the voucher at designated financial institutions, while public facilities used part of voucher revenue to pay incentives to staff. Healthcare facilities were reimbursed for providing voucher-covered services at fixed rates. Fifty percent of the reimbursement amount had been deposited into the *upazila* 'seed fund account', while the remaining 50% was distributed as an incentive to the government service providers who provided those services.

The World Health Organization (WHO), with co-funding from the UK Department for International Development (DFID), provided technical assistance to the DSF programme, such as, administrative and monitoring support. The DSF organizers, who were posted to each DSF *upazila*, played a key role at the local level in coordinating *Upazila* Health Complex (UHC) management to run the DSF programme. They were supervised by a national DSF coordinator, based in the national DSF cell in Dhaka.

Voucher programme had been criticised on several grounds. It was reported that the eligibility criteria were not being followed strictly in a few areas rather nepotism worked in the distribution of vouchers (HEU 2010a, HEU 2008). One respondent confirmed that local leaders often influenced the distribution of vouchers. Moreover, inadequate validation of information provided by the women led to adverse selection. Women often did not disclose the actual number of children and received vouchers during their third child birth. It is evident that a number of voucher recipients had three or more children contrary to the exclusion criterion set out in the guidelines (HEU 2008).

The HA and FWA followed different practices for distributing vouchers across the *upazilas*. In some *upazilas*, they distributed vouchers mostly at household level. However, in some instances, the FWA took passive role in the distribution of vouchers and registration, while the HAs accomplished the distribution of vouchers and registration task through the outreach immunization site (Koehlmoos *et al.* 2008, HEU 2008).

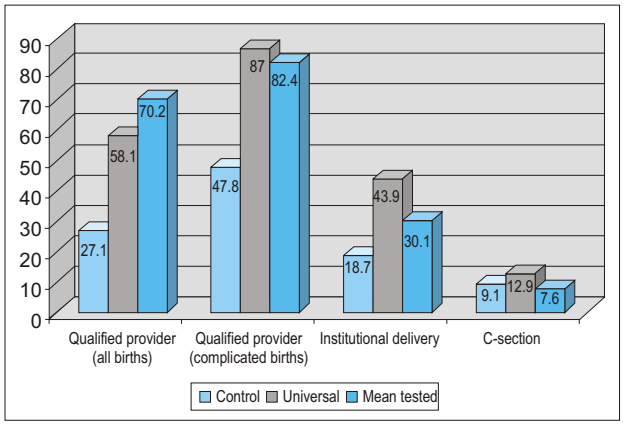
It is evident that the scheme, during its imple-mentation, faced problem of delay in disbursement of funds from central to local levels. This, in turn, delayed reimbursement to the providers and paying incentives to consumers. This created frustration among the consumers and providers, which adversely affected voucher-supported service activities (Koehlmoos *et al.* 2008). Moreover, the Government of Bangladesh's standard financial regulation that unused monies are returned to the Treasury at the end of the fiscal year created an additional, serious disruption to voucher programme operations (HEU 2010).

Though the voucher programme aimed to provide subsidy to only poor pregnant women in 24 districts at the initial stage of implementing the programme, the local level mistakenly provided voucher to all pregnant women irrespective of their socioeconomic status. This also resulted in temporary suspension of voucher distribution for a few months due to shortage of voucher books (Ahmed and Khan 2011).

Effects of voucher programme on service utilisation and management process

Evidence suggests that the implementation of the voucher programme increased awareness of the poor women on the importance of accessing maternal health services, and increased demand for ANC, delivery care and PNC from qualified providers (HEU 2010, Ahmed and Khan 2011, HEU 2008). The health complex saw increased demand for services especially from the poor people. HEU (2010) found that the DSF programme was significantly associated with higher rates of delivery with qualified providers and with higher rates of institutional deliveries[1] (Figure 1).

Figure 1. Delivery care for births taking place in the 6 months preceding the survey



Source: Adapted from HEU (2010)

The likelihood of delivering with a qualified provider was more than twice as high in intervention areas as in the control *upazilas*. The effect was strongest for means-tested *upazilas* (70% of births), as compared to universal (58%) and control *upazilas* (27%). A much greater proportion of complicated deliveries were attended by qualified providers in intervention than in control areas. The effect was strongest for the universal *upazilas* (44% of births), as compared to the means-tested (30%) and control *upazilas* (19%). However, the number of those undergoing Caesarean section (c-section) remained low (HEU 2010, HEU 2008).

HEU (2010) also suggest that 9% women in the control *upazilas* gave birth in private sector facilities, which tend to charge higher fees, compared to women in universal (5%) and means-tested areas (2%). Similar proportions of women delivered in public sector facilities in both universal (32%) and means-tested *upazilas* (28%), while only 9% of women in control areas gave birth in public facilities (Table 1).

Table 1. Location of most recent delivery, by intervention type (%)

Delivery location	Control	Universal	Mean tested
	N=1104	N= 552	*N=552*
Home	80.9	56.1	69.8
Public sector	9.0	31.6	28.0
NGO	0.3	7.0	0.0
Private sector	9.3	5.3	2.1
Other	0.6	0.1	0.1
Total	100.0	100	100.0

Source: HEU 2010

However, Koehlmoos *et al.* (2008) suggest that the DSF programme was adversely affecting the family planning programme of MOHFW. Being attracted by the financial benefit, the field workers were more engaged in DSF activities, which resulted in reduction of routine home visits and satellite clinics (SC), thereby affecting the family planning performance. Moreover, it has been argued that the cash incentive would encourage poor women to become pregnant, which is contradictory to the family planning objectives of the GoB (Ahmed and Khan 2011). Since the programme began, the poor and low income people had been showing more interest in conception than in contraception as better incentives in cash and kind were offered for delivering a children rather than contraception (Koehlmoos *et al.* 2008).

It is also apparent that the increased use of services resulted in considerable increase in workload of health personnel and administrative officers in public facilities. However, there was no increase in supply of service providers or support staff to cope up with this situation. Moreover, the public facilities lacked appropriate skill mix. The respondents stated that due to inappropriate skill mix, some services such as EmOC

1. The evaluation measured demand-side impact of the voucher programme based on a household survey in 16 DSF (universal and mean-tested) *upazilas* and 16 matched control *upazilas,* covering 2208 women who delivered between February 1, 2009 and July 31, 2009.

could not be provided in UHCs. They could not even perform some laboratory tests because of scarcity of supplies (Koehlmoos *et al.* 2008). Due to inadequate supplies and limited human resources, particularly gynaecologists and anaesthesiologists (HEU 2008), the UHCs were often compelled to refer clients to district hospital. This increased the transportation cost of clients, which were not being covered by the voucher programme. Travelling long distance also worked as a disincentive to use of the services. Furthermore, the *Upazila* Health and Family Planning Officer and the Resident Medical Officer experienced increased administrative role, which led to inefficient management and supervision as well as possible conflict of interest (HEU 2008).

As mentioned earlier, the vouchers entitle the pregnant women to cash incentive of Tk. 2,000. However, a number of respondents reported that women actually received only part of the cash incentives in several areas due to corruption. One respondent said, '*Women do not receive the full amount of Tk. 2,000 cash incentive in several instances. They often receive maximum of Tk. 800*.' HEU (2008) reported that many beneficiaries complained about either not receiving or delays in receiving cash benefits after child delivery. It further emerged that the beneficiaries were not well informed of the voucher scheme benefits. As a consequence they developed unrealistic expectations regarding financial benefits resulting to dissatisfaction especially when their expectations were not met.

The service providers received extra payments for direct provision of services, which was directly proportional to the number of clients seen. However, the administrative personnel did not receive any incentive despite their indirect contribution to the implementation of the scheme (Koehlmoos *et al.* 2008). Ahmed and Khan (2011) suggest that neither the providers nor the administrative personnel were satisfied with the incentive structure. Service providers considered the amount of incentive quite low for the additional workload, which resulted from the increased use of maternal healthcare in facilities. Another concern remained whether the scheme provided perverse incentives for surgical services as the designated institutional providers received Tk. 6,000 for performing C-section delivery. It was evident that 9% of women in the control group had a C-section at their last birth, which is comparable to the national average of 8% (HEU 2010). A slightly higher proportion of women in the universal group (13%) received C-sections while there was no difference between control and means-tested groups (8%). Though the evaluations of the voucher programme demonstrated that the C-section rates remained low by all providers (HEU 2008, HEU 2010), it needs to be closely monitored.

The voucher programme aimed to increase competition among healthcare providers through including both public and private providers; however, very few non-public facilities are participating in the voucher programme run by the MOHFW. Since there was no accredited private health facility or NGO clinic in the *upazila*, patients had no choice other than to seek care from public facilities. Therefore, the objective of improving the quality of services or respon-siveness of the system to clients through increased competition remained unmet.

Sustainability of the programme

The voucher programme involves huge transaction cost for providing services. It is expensive to provide incentives both to the providers and consumers, and to administer the scheme. The average cost per voucher distributed (based upon the direct costs of the DSF programme) is estimated to be US$ 41. In addition to program administrative costs, this cost includes incentives to pregnant women as well as to providers and facilities (HEU 2010). According to the national financial incentive structures (Table 2), the cost per voucher distributed ranges from 3,800 Taka to 11,300 Taka depending on the level of complications (Koehlmoos *et al.* 2008).

Table 2. Structures of financial incentives

Entitlement of beneficiaries	Taka
3 ANC check-ups (@ Tk. 100/visit)	300
Transport cost for having institutional delivery	100
Safe delivery (institutional/SBA at home)	2,000
1 PNC check-up	100
Gift box (baby soap, big towel, baby attire, and Horlicks)	500
Entitlement of voucher distributors/ service providers	
Registration per pregnant woman	10
2 haemoglobin tests before delivery (@ Tk. 35/test)	70
2 urine tests before delivery (@ Tk. 35/test)	70
3 ANC check-ups (@ Tk. 50/visit)	150
1 PNC check-up	100
Conduct of safe delivery	300
Other associated expendable costs	
Medicine cost	100
Cost subsidy for ambulance if referred from UzHC to a designated service provider in the case of complications	500
Forceps delivery/vacuum extraction/placenta removal by hand/dilatation & curettage (d&c)/eclampsia	1,000
Caesarian section	6,000

Source: Koehlmoos *et al.* (2008)

The voucher programme in Bangladesh is currently being implemented through donor support. The WHO provides administrative and monitoring support to the DSF programme. The MOHFW implements DSF voucher programme through pooled funds co-financed by the World Bank, United Kingdom, the European Community, Germany, Sweden, Canada, Netherlands, and the United Nations Population Fund. If the donor support is withdrawn, it would be virtually impossible to run the programme by internal resources. Moreover, as already stated earlier, with the existing capacity of public facilities, it is not feasible to meet the additional demand unless private providers are also involved in the process of service delivery mechanism through voucher.

DISCUSSION

In Bangladesh, DSF has been adopted as a means of subsidizing women of low income group to reduce their out-of-pocket expenses at point of delivery, and thereby encourage them to seek maternal healthcare. The DSF scheme is designed to protect households from catastrophic expenditure associated with relatively high cost interventions like EmOC. It allocates a restricted cash grant to the poor preg-nant women. Though consumer satisfaction is higher with unrestricted transfers, the voucher programme restricts both what the consumer buys with the transfer and what services the providers are eligible to supply. It is expected that the DSF would empower women to make decisions on buying services based on their need and perceived quality of service. It is argued that the voucher programme would contribute in enhancing quality of maternal health services through provider incentive and increased competition among providers.

Initial evidence shows that the DSF mechanism has been successful in increasing the use of maternal health services in Bangladesh (HEU 2010, HEU 2008). This increased use has been achieved through the provision of incentives to both the consumers and the providers. Along with the provision of free services for poor women, SBAs were compensated directly based on voucher used, which helped create effective demand for services. Further investigation needs to be done to explore the disaggregated effects of these two types of incentives on the use of maternal health services.

Limitations

The programme has some limitations. It has been criticized for the potential perverse incentive of having additional children, especially in rural areas. The universal coverage under the DSF scheme in some *upazilas* extended the benefit to the non-poor, which appeared to promote an interest of an increase in pregnancies at all levels of society (Koehlmoos *et al.* 2008). Moreover, as the cash benefit for cases of sterilization is lower than that of the DSF scheme for an institutional delivery, this may create a perverse incentive in favour of producing more pregnancies. Due to the financial benefit, the field workers were more engaged in DSF activities, which adversely affected the family planning performance.

Though the programme is designed to provide subsidy for maternal healthcare for up to two children, lack of reliable data and inadequate monitoring system leads to adverse selection of beneficiaries. Moreover, due to absence of a local committee to conduct home visits for determining eligibility, women from non-poor income groups also received voucher in a few cases. Unethical

exercise of political power and nepotism influenced the distribution of voucher, as stated by respondents.

Concerns have also been raised regarding the potential increase in C-sections due to supplier induced demand. HEU (2010) reported that 13% women in the universal group received C-sections, which was slightly higher than the national average rate (8%). However, it was unclear what accounted for the higher C-section rates in universal but not in means-tested areas (8%). It needs to be acknowledged that some increase in C-section rates is expected and desired as a result of the DSF programme in order to address unmet need for medically indicated surgical deliveries (e.g., in the case of obstructed labor or fatal distress), however, the disparity in incentive payments to physicians conducting C-sections (Tk. 3,000 vs. Tk. 150 for normal deliveries to physician) might put women at risk of unnecessary C-sections (or encourage facilities to report some normal deliveries as C-sections to obtain the incentive) (HEU 2010).

Shift of an organization from a predominantly supply side financing towards one based heavily on DSF will require a fundamentally different skill. Moreover, increased work load due to increased number of clients and the incentive payments may raise human resource management issues within the facilities. To introduce DSF, building a staff base with relevant competencies is required, and be backed up for institutionalizing the process. Under the 'Demand-Based Reproductive Health Commodity Project' 21 days hands on training was provided to the FWVs to perform normal delivery at the UHFWCs, while three days training for the service providers and field workers were arranged to disseminate information on the importance of maternal healthcare issues and the process of using vouchers (Rahman *et al.* 2009). However, there is limited evidence of providing compre-hensive training to the healthcare providers and administrative staff before implementing the voucher programme initiated by MOHFW.

Moreover, providing services requires appropriate input mix, which is often lacking in lower administrative levels, and requiring referral of clients to *upazila*/district level. In rural areas, a large proportion of posts remain vacant for long time. Though the voucher programme has increased service utilization, no attempt has been taken so far to fill in the vacant posts in the 44 *upazilas* to accommodate additional workload of providers. Though the SBAs are satisfied with the incentive scheme, this additional workload and delayed payment of incentives has created frustration among managers and healthcare providers. It also appears that there is lack of communication between the central and local level managers in providing the voucher scheme. The vision, mission and implementtation plan of voucher programme were not communicated properly from the central to the lower administrative levels. Delay in paying incentive to the consumers and partial payment created frustration among consumers, and mistrust towards administrators of the scheme.

Universal maternal coverage

Despite these challenges faced in implementing the maternal health voucher scheme in Bangladesh, it may be considered as an important step in removing demand side barriers to maternal health services. It raises the question whether DSF can be used as a mechanism to achieve universal health coverage in Bangladesh. A number of factors need to be considered like what services should be covered and who should be subsidized under the scheme? Policy makers also need to critically assess the added costs of the programme compared to the additional benefits and sustainability of the programme. Benefits include increased access to services by vulnerable groups and the potential improvement in quality. The costs include the creation of an organization for assessing and allocating vouchers, accrediting facilities and paying providers (Ensor 2004).

Evidence suggests that the best use for vouchers are for predictable services that are relatively simple to package. This suggests that groups and conditions should be chosen that are reasonably predictable such as pregnant women, basic care for newborns, high risk groups for sexually transmitted infections (STI), sufferers of priority diseases that take some time to treat such as malaria and tuberculosis, and sufferers of chronic illnesses and disabilities. Thus, schemes could focus primarily on fixed packages of key services aimed at easily identifiable groups. Vouchers could be given directly to those suffering from illnesses based on standardized packages of care. It is argued that in the case where there is no externality from non-treatment as in the case of maternal health or chronic non-communicable diseases, they might be targeted at low income groups.

Only public facilities are providing services through voucher programme in Bangladesh. To scale up the current maternal health voucher programme or to include additional services in the package such as basic care of newborns and STIs would require enhanced capacity of public facilities and to involve private sector in service provision. Increased competition among the providers needs to be ensured to widen the choice of providers for consumers and to improve quality of care. The monopoly of public facilities in providing DSF scheme poses a threat of reducing the benefits of introducing the financing system.

It appears that the voucher programme involves marked amount of transaction cost. These costs can be substantial where they include costs of voucher production, contracting providers and monitoring their performance, distributing vouchers, reimbursing providers, providing incentives to consumers, and establishing systems to avoid perverse incentives and abuse of the voucher scheme (Bhatia *et al.* 2006). The additional benefits gained may not exceed the transaction cost of voucher programme for a number of services. Policymakers therefore need to assess the potential benefit of a voucher scheme, the cost of service provision, and the sources of funding before initiating any voucher programme with universal coverage.

CONCLUSION AND RECOMMENDATIONS

DSF have been successful in raising the use of specific and easily identifiable services amongst poor pregnant women in Bangladesh. Despite initial success, it is crucial to address the following issues for implementation of the voucher programme for universal coverage:

Due consideration must be given to the potential occurrence of perverse effect of voucher, and inadequate capacity of public facilities to provide additional services. The voucher programme must be designed and implemented in such a way that it does not generate any perverse incentive to providers or consumers. Behavioural Change Communication, strict monitoring and supervision, and periodic evaluation of the programme need to be ensured to reduce perverse incentive, if there is any. Capacity in administering the financing schemes and also accrediting providers needs to be developed. Capacity building both at the central and local levels through basic and refresher training is needed. It is also crucial to fill up the vacant posts in public facilities, create additional posts if required (such as anaesthetics) and recruit appropriate number of personnel to provide services effectively.

The vision, mission, planning and budgeting of the organization needs to incorporate a commitment to achieve the stated objectives of voucher programme in order to transmit an explicit and unambiguous message to all staff and external stakeholders about the value base and principles of the organization regarding DSF. The central level needs to communicate the vision properly to the lower administrative levels, and to other stakeholders including beneficiaries.

In order to reduce corruption in targeting the poor within public services, monitoring and supervision, and developing data base are crucial. Involving community in the process may contribute in ensuring transparency in selecting beneficiaries. Database needs to be developed incorporating information on demographic and socioeconomic characteristics of the local population for better targeting of the poor.

DSF should strengthen the private market for service provision. Measures need to be taken to involve private providers (profit and not-for-profit) in the service delivery mechanism through voucher.

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Financing Health Care: An Evaluation of the NGO-led Micro Health Insurance

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INTRODUCTION

Health care financing issues remain a key agenda in global health policy. The most recent World Health Report puts greater emphasis on the country's health financing mechanisms in order to ensure universal coverage (WHO 2010a). Rising health care costs and the large share of out of pocket expenses appear as among major hurdles for the poor to break out of poverty. Consequently, poverty reduction strategies within the purview of the millennium development goals (MDG) necessitate a review and possible reforms of health care finance so as to arrest the growing impoverishment on account of health shocks.

While primary health care services in Bangladesh, as in most developing countries, are meant to be free, the poor appear unable to access public sector facilities, except possibly for child and maternity care. As a result, they end up paying directly for most health services from the private and informal sector. The disproportionate reliance on out-of-pocket payments (OPP) represents a most regressive way of financing health care expenditures. Consequently, despite significant progress in health indicators, significant inequities in the access to health care still exist in Bangladesh. Many believe that health finance reforms by incorporating a risk sharing plan such as micro health insurance (MHI) hold the promise of providing meaningful financial protection to mitigate the poverty consequences of ill health. However, it is uncertain if the latter strategy can be a pathway toward achieving universal health coverage (UHC). Indeed, one of major objectives of the paper is precisely to examine the latter hypothesis.

The main health financing mechanism consists of tax-financed government funding, private health insurance (both mandatory as well as voluntary insurance) and OPP. In addition to spending by households and the Government, other financing agents include NGOs and international development partners. Some 400 NGOs are engaged in the health care provision in Bangladesh, most of which work in rural areas offering primary health care services and health education. These NGO activities partly compensate for the large gaps created by the inadequacy of public health programmes.

The objective of this paper is to provide an assessment of health care financing programmes being offered by some of the prominent NGOs and other dedicated health providers in the country. We also elaborate on the viability of these models for possibly targeting UHC via this route. In particular we focus on evolving MHI programmes being offered by the above mentioned NGOs. For the purpose of this paper, pre-purchase of a member card for a fee in exchange for specific health services (either free or on a co-payment basis) may be described as an 'insurance' modality. Hence our selection of NGOs is restricted to all those involved in offering such an insurance programme.

With these remarks servings as an 'introduction', the rest of the paper proceeds as follows. In the next section we provide a brief 'micro' overview of the health financing situation prevalent in the country, which is based on a recent 4,000-strong household survey carried out by the Microinsurance Research Unit (MRU) at InM. Selected MHI programmes are reviewed in the following section as to their scope, client acceptability and financial sustainability. Then we discuss the major challenges faced by these programmes as well as pathways to possible scaling-up so as to contribute to the attainment of UHC. Some concluding remarks are put forward in the final section.

COST OF HEALTH SHOCKS, VULNERABILITY AND THE MEANS OF FINANCE

That health shocks can be catastrophic for individuals, which can also trap the vulnerable households indefinitely into poverty cycles, is a matter of great concern from a public policy perspective (Dercon and Hoddinott 2005; Jalan and Ravallion 1999). In most datasets, demographic shocks appear to contribute significantly to variability in *full income* (defined to be the sum of crop profits and wage income earned by adult males over the year). In the ICRISAT sample gathered annually over a ten-year period (1975-84), about 40% of the families reported loss of working days due to illness in a given year. Loss of savings or capital combined with the inadequacy of social security schemes in developing countries, the poor are often forced into deeper poverty (and the low-income non-poor into poverty) by their limited ability to cope.

How widespread are health shocks in Bangladesh? In a 2009 survey carried out by the Microinsurance Research Unit (MRU) at InM, 3,941 households (hhs) (comprising of 19,424 individuals) reported 1,457 having missed work over the preceding 12 months due to illness. Of this group, 462 cases involved loss of up to 5 working days, while 219 remained absent for more than 31 days. Altogether 1,186 illness episodes can be classified as 'health shocks' over 2 years, where a shock is defined to involve a certain threshold in terms of either expenditure or duration of illness.

About 88 percent (3,459 out of 3,941) households reported at least one episode of illness over the preceding 12 months. While more than half (55%) of them had more than one episode of illness, about 35% had 2 episodes and remaining 20% had 3 or more. Translated to the level of persons in the sample, the above figures reveal that 33 percent of the individuals had self-reported morbidity and 98 percent of them utilized some kind of healthcare over the 12-month period in question. However, only 40 percent sought healthcare from formal providers. The poor and the children are the most deprived section of the population in terms of utilization of formal healthcare. The poorest quintile had significantly higher utilization of informal care (and lower utilization of formal care) than richer quintiles (fourth and fifth).

OPP per *affected household* during the preceding 12 months (i.e., over 2008-9 fiscal year) amounted to roughly USD 59 which was about 6% of the total household (and about 9 % of food) consumption over the year[1]. Drugs were seen as the principal component of OPP, accounting for about 60 percent of direct OPP (about USD 31.50), a figure that was even higher (nearly 70 percent) for the poorest quintile. How do these primary survey figures tally with aggregate national statistics? Broadly consistent would be a fair assessment. The government spending at a meagre 1% of GDP on healthcare in recent years implies a disproportionate reliance on private out-of-pocket spending of 86% of private health expenditures. Total health expenditure (THE) is still rather low at about 3.4% of GDP (WHO 2010b).

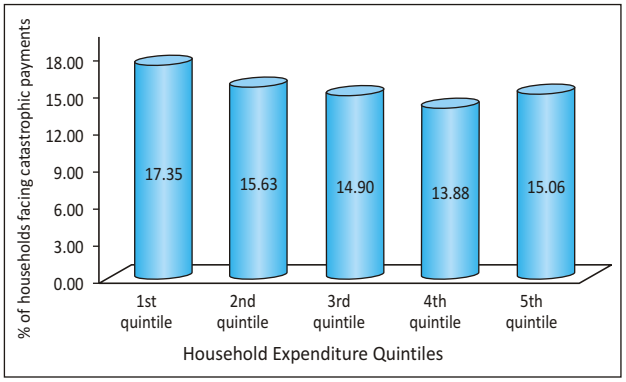
Turning to the incidence of *catastrophic* health expenditure (defined presently to exceed 10% of gross monthly outlay), the MRU data reveals that about 15 percent of the affected households incurred such level of healthcare expenditures. Utilization of both public and private care leads to substantially higher incidence of catastrophic expenses compared to NGO care. Lamentably however, national statistics reveal that NGO spending on health (including the share borne by international donors) is of minor quantitative significance in dollars and cents, between 6 to 10% of THE (MOHFW 2010). Even then the relatively small sum may yield major benefit if strategically spent in targeted directions (e.g., in *ante* and *neo-natal* care).

It is notable that catastrophic expenditures happen to be somewhat regressive in the sense that such expenditures appear to fall disproportionately on the poorer quintiles, where about 17.4% percent of households in the poorest quintile fall into this category, vis-à-vis about 13.9% in the 4th quintile[2]. Figure 1 illustrates this well.

1. All survey based expenditure figures cited in this document represent summer 2009 figures and utilize the prevailing exchange rate of BDT 69/USD.
2. Focusing on 90-day records reveals a much greater incidence of catastrophic expenses (about 27%) as a share of household expenditure, where the burden on the poorest quintile was dramatically high (about 37%). While annualization is a standard means of restating such data, the immediacy of the issue gets muffled in the process.

Means of coping with health shocks: The MRU data reveals that the largest group (about 30%) attempted to meet the expenses from regular income, which is incidentally consistent with the scope of offering additional labour by the affected household in the market as reported elsewhere (Kochar 1995)[3]. Another 21% used their savings, while about 28% incurred additional debt from different sources. About 9% of the sample households, which is far from negligible, however, sold and/or mortgaged permanent assets (e.g., land, live-stock, etc) as a coping mechanism (Ahsan et al., 2011). Thus, in the majority of cases (58%), the victims' choice of coping strategy exposes them to further vulnerability, which is in principle preventable by well designed microinsurance products.

Figure 1. Incidence of catastrophic health expenditure (over 12 months)



MAJOR NGO-LED 'MICRO HEALTH INSURANCE' PROGRAMMES

Most MFI-NGO activities in the health field are primarily of awareness building and educational in scope, which indeed constitute the first line of attack in the war on improving health and hygiene in a society. While it would be of importance to take a comprehensive look at all such activities and embark on an evaluation of the same, this is clearly not feasible in a short chapter focussed on MHI. Instead below we review several rather well-known health financing programmes initiated by NGO-MFIs. Even though many such programmes are labelled 'insurance', typically these do not embody a great deal of risk shifting. A key feature of an insurance mechanism is the shifting of the underlying risk from the party in a relatively weak state to weather the risk on her own (e.g., the care seeker) to those who are more capable of doing so (e.g., a risk-pool like a commercial insurer or a mutual association of cooperatives). It is implicit in this arrangement that while bulk of the risk will be shifted in the process, a small share (typically 25% or less) is to be borne by the insured entity in order to minimize the chances of moral hazard (Arrow 1976). A strict adherence to this quantitative rule of risk shifting, which in the first place is not of the 'cast-in-stone' variety, would imply that none of the programmes that we have in mind here qualifies as 'insurance'. Instead, we propose a weaker definition in the present context; *pre-purchase of a membership card for a fee in exchange for the promise of some services (either free or on a co-payment basis) may be described as an 'insurance' programme.*

While discarding the quantitative restriction cited above, it ought to be emphasized that the degree of risk shifting accomplished in an insurance type arrangement remains a key criterion of its effectiveness in preventing vulnerability to poverty. As Arrow (1976) had remarked, if the co-insurance exceeds 25%, the insurance principle, namely risk shifting, is lost. The point is that even 25% of a large bill may be so burdensome as to push the household below the poverty line or deeper into poverty.

Even when some specialized insurance companies, health sector NGOs and MFIs are involved in the provision of microinsurance services (often in collaboration with each other), these are mostly of credit or some version of credit-cum-life variety. The health insurance market for the poor in Bangladesh is served exclusively by NGO/MFIs. Many of these entities claim to have been offering a variety of MHI products since the late 1970s, but registered insurers are yet to jump into the fray. Given that many of these programmes were introduced about a decade or longer ago, most were rightfully seen as important innovations in the context. Hence a time has come to take stock of the situation in the light of current developments and thinking on the issue.

3. This observation is consistent with the characterization of rural labour market as suffering from the 'surplus labour' condition, namely that a sudden absence of working members may not necessarily lead to a fall in household production (Sen 1966).

Among the NGO initiatives, health financing mechanism varies from one organization to another. Normally, outreach services are provided for free. Some organizations charge nominal amounts. Many NGOs have developed specific, customized interventions to address the needs of the ultra-poor and other disadvantaged groups. The health programmes of different NGOs consist of preventive, curative, rehabilitative and promo-tional health services, where a greater emphasis is given on improving maternal, neo-natal and child health along with fighting communicable diseases and common health problems. Some organizations focus on other important public health issues such as HIV/AIDS, malaria, tuberculosis, vision care and sanitation.

NGOs mainly use community-based approaches with trained community health workers (CHWs) to implement their programmes. Micro health insurance (MHI) is primarily provided by NGOs, which also provide health services and microcredit. MHI covers basic and preventive health services including immuni-zation, family planning, consultation, and normal deliveries. Discounts are also provided on medicine and pathology tests, where available. MHI of most NGOs specifically target women, micro credit members, and in many cases the poor and ultra-poor house-holds in the working area. In case of larger organizations having their own health service centres or hospitals, over and above basic services noted above, the card holders are able to receive more specialized services such as ultrasound and to avail surgeries (e.g., cataract, C-section and similar) either at their own premises or at referral clinics/hospitals. However two important features of most programmes are (a) the high copayment (typically 50% or more) for services such as drugs, pathology, ultrasound tests and surgeries, and, (b) the lack of a formal referral system. Both these issues are discussed further in the next section on 'challenges'. Hence often the very low sticker price of a 'card' (say BDT 20) can be very misleading. Some programmes, as we shall see below, however, do offer extremely low-cost products to the ultra-poor (e.g., Gonoshashthya Kendra).

With these remarks, let us now briefly run through the MHI programmes operated by some of the major national-level NGO-MFIs and those that happen to be major initiatives of smaller/regional NGOs. However due to lack of publicly available information, we are unable to include all worthy programmes[4]. Those included are Ad-din, BRAC, Dhaka Community Hospital (DCH), Gonoshashthya Kendra (GsK), Grameen Kalyan (GrK) and Sajida Foundation (SAJIDA).

(a) Ad-din: Established in 1985, Ad-din works with health, education, social and financial matters, targeting mainly underprivileged people, particularly women and children. Its working areas include Khulna and Barisal divisions and Dhaka city. It is reported to be offering quality hospital and community based health services through 23 office clinics, 26 paramedics, 390 traditional birth attendants and it runs 368 satellite clinics every month. It is unclear if they have any qualified doctors and surgeons on its employment or if they are actually engaged as consultants, who would otherwise be gainfully employed elsewhere. Like many health-focussed NGOs, Ad-din's health workers routinely visit client houses distributing contraceptives, oral re-hydration therapy, vitamin-A capsules and providing health education. They also run sessions on reproductive health with adolescent females. The hospital network focussed on maternal and child health care includes nutritional rehabilitation units in Dhaka and Jessore. Compared to other local private hospitals, charges for hospital services are believed very nominal, and include a number of free services as well.

The Health Insurance scheme was launched in 2004 for the members of the microcredit programme. The cardholders receive 10% discount for purchasing medicine from Ad-din and avail all other services at half price. The ultra poor are offered these services free of cost. In 2009, 14,520 received free health services under the insurance scheme, which included 452 operations at a cost of BDT 1.4 million. Moreover, 6,229 members of the microcredit scheme received health services under the insurance plan. This included 3,305 outpatient services, and 2,924 inpatient services[5]. It

4. The information cited below resulted from both direct discussions with the providers as well as from what is publicly available in various publications and on the web, and as such they are not uniformly up to date. See Ahsan and Tax (2010) for more details.
5. The Ad-din claims, facts and figures are based on information accessed on its website (www.ad-din.org) and from its annual reports, Ad-din (2007) and Ad-din (2009).

would seem that the number of ultra poor members exceed the regular insurance cardholders, though the latter appear to utilize inpatient services more extensively. Lacking adequate information, it is difficult to evaluate the financial model underlying the health activities, and therefore, be able to say more about the financial viability of the scheme.

(b) BRAC Bangladesh: While BRAC has a large health programme targeted at the rural poor (through its Essential Health Care programme reportedly covering 16-17 million households), it has only a minor health insurance presence. Though BRAC began its first insurance initiative in Sulla in 1977, it had to be soon closed down due to the difficulty in reaching the target population. A pilot MHI was eventually introduced in 2001 in two rural locations in the Narsingdi and Dinajpur districts, with financial and technical support from ILO. After the termination of ILO funding in 2005, the programme in Dinajpur was discontinued. The programme in Narsingdi continued up until April 2007, after which it was also discontinued. However, in February 2008, the programme in Narsingdi was restarted with BRAC's own fund.

The premium for the general package (which lists 695 of 1,210 covered households) is either BDT 150 or 250, differentiated as to the membership status of the member in what BRAC calls 'voluntary organizations' (VO, e.g., BRAC/other NGOs) and those not belonging to any VO, presumably a proxy for poor vs. non-poor[6]. As with other programmes cited here, most services are offered on a discount basis; for the general package, the discounts are 10% on drugs, 50% on consultations, pathology tests and normal chid delivery at its own facilities. There is also a provision of a limited cash payment (up to BDT 1,000 per year per family) to be made available to the insured upon referral to external providers.

There is a second programme, 'prepaid pregnancy related care package', where the premium is 100 or 150, respectively, again differentiated as above[7]. The latter has a membership of 514 families. The BRAC MHI programme engages 2 doctors, 6 nurses, one lab technician and 3 administrative staff members. Between Feb 2008 and April 2009, the programme as a whole accounted for 2,865 episodes of treatments.

However the programme appears unexciting to the area residents and they are unenthusiastic about signing up or to renew the packages; the renewal rate as of April 2009 stood at a mere 25%. Perhaps due to the poor scale, the operational cost recovery, at 39%, is well below the break-even level. Tables 1-3 briefly summarise the detailed features of BRAC and those of most of the programmes reviewed in this chapter.

Going forward, it would seem that, perhaps being ambivalent about the programme design, BRAC has been less than serious in scaling up its MHI programme over the past decade. Nor has it done much about developing a business model for its financial solvency. The programme has been 'on again/off again', partly depending on the availability of donor grants. Given the important health sector role it has played over the past decades, it would seem that a viable model could have been developed where it could leverage/upgrade its considerable experience and 'already-in-place' dedicated resources (in terms of both trained personnel and existing health infrastructure) to bargain for a prominent role in MHI implementation. It would thus seem logical to conclude that to date BRAC has given greater priority to its role in advancing the cause of UHC outside of the insurance mode.

(c) Dhaka Community Hospital (DCH): Currently, DCH works through 30 primary health care centres outside Dhaka (10 are owned by DCH, and the rest are by other participating NGOs), employing on average 10 persons in each centre[8]. In addition, DCH has its own 250-bed modern hospital in Dhaka, which also acts as the referral centre. DCH has been implementing the health card type insurance scheme for some time. Their schemes are as follows: School Health Programme, Industrial Health Insurance Programme, Family Health

6. Here, the ultra-poor qualify for the 'Equity Package', but there is only *one* household in that category. These members do not pay any premium whatsoever, and also receive 80% discount on drugs and pathology.
7. The pregnancy package entitles the holder cash benefits which are multiples of the premium cost; for example, these range between 2 to 5 times the premium for pre- and post-delivery complications and newborn illness. For normal delivery they can receive up to 3 to 4 times the annual premium. But the cash benefit for referrals are half of the figures for the 'general' package.
8. Most of the information about DCH described in the paragraphs to follow is taken from its site www.dchtrust.org/ health_program.htm.

Insurance Programme and Rural Health Insurance Programme. Though these schemes are called 'health insurance programmes', they function differently compared to regular health insurance programmes. For instance, there are no fixed premiums. However each plan involves the acquisition of a 'health card' for a fee, as explained below. The core funding comes from the DCH Trust (which runs the medical college), Oxfam and the participating partner organizations.

Under the *Family Health Insurance programme*, for example, each family gets 'Family Health Card' against yearly payment of Tk. 20 (on average, and this amount is set by the community keeping in mind the 100% cost recovery objective). Family members receive: inpatient and outpatient services (managed and financed by the local community), referrals, 10 per cent commission on overall expenditure in case of additional services, 4 home visits per month by health workers for basic services and health education, and emergency services.

The Rural Health Insurance Programme is similar to the family health coverage and is offered in collaboration with partner rural health organizations, operating in a large number of districts (in excess of 20). Over and above primary health services, both invasive preventive and curative procedures are made available to the cardholders. Typically in each rural heath centre doctors are available 8 hours a day and paramedic service can be accessed 24 hours a day. DCH serves 100,000 people under this programme, presumably via some 20,000 cardholder households. This programme is financed with support from Oxfam and DCH subsidies.

The industrial programme, one of the oldest of the DCH programmes, works in close collaboration with industrial units that are covered by the programme. These units let their staff trained as medical assistants, and factory personnel actually manage the pharmacy set up by DCH on location. DCH doctors provide care services to the cardholders once a week at the factory premises. Cardholders also receive yearly thorough medical check-up and referral service at DCH. Presently 24 factories are covered and on average 350 workers/employees are being served every week. The current cost recovery for this programme is reported to be 100 percent

The school health has been implemented in collaboration with NGO schools, mostly in and around Dhaka city. Each child is provided with a 'Health Card' (Tk. 20 on average, borne usually by the NGO school or DCH). DCH doctors visit the schools once a week and provide care services to the students. Currently a total of 13 schools (on average 80 children in each) are covered. The focus here is on general paediatric care, but targeted areas include vision, hearing (ENT), dental, immunization etc. Funding of this programme is mainly through DCH subsidies and fixed amounts of token money collected from the NGO school authorities. Estimated cost recovery for this programme is less than 30 per cent.

Unlike the other schemes discussed here, DCH health card schemes are community-based programmes. The community decides the health card fee (premium amount) and fees for other services as well with the goal of cost recovery in mind. The primary discount scheme appears to be 10% off the usual rates, beyond the range of free services (e.g., awareness and advisories, check ups, limited home visits etc). The primary attention is claimed to be not cost recovery, but to offer quality health care services at low costs. The low-cost claim must be due to both the equality and variety of free services as well as procedures of payment in instalments etc. Otherwise the 10% discount seems to be the lowest of what the other programmes offer. The reason the industrial programme is self-financing is primarily due to the fact that most services are in effect being imposed (beyond the training phase) on the factory itself (via the training of its staff as 'health assistants' and the running of the pharmacy by staff who are already in the company's payroll). And the 10% subsidy for services accessed at DCH is not much of concern from this point of view. In non-industrial packages, these 'free' services are given directly by DCH and its partner organizations, which is costly to the provider. Overall, however, the community-based DCH mode is very interesting and may hold the promise of significant expansion especially if means can be found to distribute the large burden of the 'free services', a common feature of its core programmes, to a greater number of social actors and not just to charity.

(d) Gonoshasthaya Kendra (GsK): Launched in 1975, GsK's micro health insurance programme has been among the earliest anywhere[9]. The programme's goal is to provide sustainable health care services. Insured persons or families pay for a health insurance subscription according to their socio-economic status but everyone gets the essential and comparable health care in GsK facilities. Different risk groups are also differentiated in premium setting (e.g., smokers vs. non-smokers). The GsK premium scheme is progressive so that the destitute, poor and ultra-poor pay little for consultations, medicines and referral services.

Presently GsK offers its programme through 4 hospitals (Dhaka, Savar, Sreepur and Kashinathpur) and 39 rural health centres (RHCs) covering 648 villages from 47 unions comprising 14 districts. A fifth hospital has recently been established in the Gaibandha-Kurigram area (about 30-bed as of June 2011). At present, GsK employs 58 doctors and 280 paramedics altogether to serve this network of health facilities. One senior paramedic remains in charge of each RHC. Various types of medical care are provided in these centres including minor surgeries. However only doctors working as consultants on a rotational basis provide regular surgeries.

Presently the number of families covered by GsK health insurance is about 169,000, which would translate to about a million people, which would by far be the largest programme in the country. The cardholders are mostly categorised as 'poor' (67%, i.e., about 113,230 households), 25% in middle class, while 2,64 % are ultra-poor, and 0.42% belong to the poorest cadre, 'destitutes'. The remaining 4.5% are declared 'rich'. It accommodated 232,265 patient visits in 2008[10]. The general premium and co-payment structure appears to be at the low end of what is seen throughout South Asia.

GsK therefore has already played a vital part in allowing the poor to access critical health care needs in remote locations, and is thus playing a significant role in the cause of UHC. However, lack of publicly available financial data makes it hard to evaluate its scalability or its capacity to operate in a self-financed manner. For example, eligible drugs are given free to the 'very poor', who also pay mere BDT 5 as consultation fee for each visit, but it is uncertain to what extent these subsidies are squared off against other surplus generating insurance and non-insurance services. Among non-health premium sources of funds, evidently the two urban hospitals generate positive cash flows, as does the medical college in Savar. Besides, its own pharmaceutical company is presumably another source of cash, and then there are the donors. However it would be useful to analyze the issues in clearer terms and explore the relative efficacy of the alternative modes of sustainability open to GsK.

(e) Grameen Kalyan (GrK): GrK introduced its version of MHI in 1996 and at its peak covered several hundred thousand individuals. MHI is central among GrK's activities serving the dual purpose of ensuring the participation of the target group as well as acting as a source of revenue for the programme. GrK attempts to cross-subsidize its members by having higher pricing structure for non-Grameen Bank cardholders and non-cardholders.

Earlier, the premium was rather low at BDT 100 for Grameen Bank (GB) members and BDT for 150 non-GB members. Since 2009, the premium has however been doubled to BDT 200 and 300, respectively, for GB members and non-members per year. Once a cardholder, however, all benefits are identical between both sets of members. The fee entitles the household (up to six persons) to access all eligible services[11]. Insurance coverage (for all members) includes free annual check-up for the family, immunization against common diseases and home visits for educational, counselling and health awareness campaign. Doctor's consultation fee is BDT 10 per visit and basic annual pathology tests cost BDT 25. Standard discounts apply to drugs (25% for basic, 10% for other) and normal pathology (30-50%). The scheme also allows hospitalization expenses of 50% of costs at external clinics (but limited to BDT 3,000 per year), and that too just for the cardholder. Some researchers have claimed however that the hospitalization benefits have not

9. While Gonoshasthya Kendra (GsK) and Grameen Kalyan (GrK) both claim the identical acronym (GK) in their own documentation, to avoid confusion, we have chosen to abbreviate the two terms differently

10. However, the actual breakdown of the number of patient visits into different categories of membership is not available.

11. Additional family members pay only BDT 35 to join in. Just recently (2011) GrK has started to allow the cardholder to pay the premium in two instalments than one, as was the practice till then. At the same time, basic free check was extended to all members of the household, not just the head.

being exercised on a routine basis, neither for GrK nor for BRAC MHI programmes (Radermacher and Dror 2006).

Membership has fallen off significantly in recent years due to a variety of reasons. Beyond the premium hike, difficulty in retaining doctors in rural locations is proving to be a major challenge and is prominently among factors causing the decline in subscription. From some 21 doctors in 2009, it now has to do with only 15 for all 53 of its Health Centres spread over 16 districts in Bangladesh. GrK, much like other programmes reviewed here, plays both the roles of insurer and of direct service provider. See Tables 1-3 for additional details.

While the programme clearly is in some turbulence as staff morale is low in the absence of doctors and falling renewal rates. Thus it would need some major paradigm shift in order to break out of the impasse it has been facing of late. The decline in the operational cost recovery from 83% in 2008 to about 55% in 2010 is worrying to say the least, though GrK is not alone in that sort of range. However, it does have a hefty capital fund (built up from the income earned on an interest-free loan of USD 42.5 million from GB back in 1996, duly returned to the parent organization in 2002), and the interest income out of this is more than sufficient to meet all operational costs. While the latter is not a viable strategy, GrK can well shoulder the lean period should it be able to reengineer itself. The Grameen brand, despite the recent backlash, is an enviable commodity, and the pool of millions of loyal trusting clients, could provide a win-win backdrop should it choose to experiment with new products and delivery modalities (say, in collaboration with a rural network of external service providers).

(f) Sajida Foundation (SAJIDA): Originally started as a private family-run charity, by 1993 SAJIDA evolved into a formal institution offering micro-credit to poor urban women. It became involved in the health field in 1999 in response to demand from its microfinance members. Currently it has two micro health insurance programmes: HELP (covering health, education, life/loan, legal and man-made disaster) which is SAJIDA's priority programme and mandatory for its micro-finance members. This is a comprehensive package inclusive of health, education, life/loan, legal and disaster coverage. The second one, SAJIDA Health Programme (HEALTH), which is open to all and used as a marketing strategy to promote SAJIDA's two urban-based hospitals in Keraniganj (100-bed) and Narayanganj (70-bed). The second hospital in N'ganj opened in 2010[12]. Both HELP and HEALTH programmes run independently. As of May 2011, a total of 153 people were working in the programme of whom 60% staff is female with 21 specialist doctors, 28 medical officers, 3 sonologists, 3 pathologists, 43 paramedics and a field team of service promoters and supervisors.

The HEALTH programme is targeted at the non-poor who live in the catchment area of the hospitals, and have to pay BDT 150 *per person* in order to be eligible for coverage. Once a cardholder, they also receive the discounted price as HELP members, but no cash claims unlike HELP (see below). Only those purchasing coverage are eligible, there being no family membership here. The benefits are only available at the two hospitals as there is no referral system. The membership happens to be on a growth trajectory; from 389 members in 2007-8, it rose to 681 in 2008-9.

In its flagship HELP programme, launched in 2006, the newest of the set analyzed here, SAJIDA has about 94,311 eligible families as members as of 2011. Per family annual premium is BDT 250 (for up to 5 members, BDT 50 per additional member), which is to be paid at the time the loan is disbursed. A number of services (e.g., inoculation against major diseases, annual check-up for head of the family, normal child deliveries) are offered on a *gratis* basis to the insured members. They also stand to gain 30% discount on diagnostic (i.e., laboratory tests) services and 10% on medicines and x-ray. The diagnostic discounts are available only if members can access the two hospitals. In addition, panel doctors are available for free consultation at each of the 62-microfinance branches at specific times during the week (about 3 times per week).

This is a two-tier plan; first the insured residing in the catchment area of the hospitals benefit from discounted rates for all services made available at the two full-fledged hospitals it runs. Various surgeries are offered in packages (inclusive of medication) ranging between BDT 3,000 to 14,000 (as of 2011), which are typically 20% lower than comparable facilities in similar

12. A third hospital in Chittagong is due for completion in 2012; though the old 'satellite clinics' have been closed down to achieve operational efficiency.

locations. The HELP clients pay on average about 30% less than the posted price cited above [13]. At the second tier, all insured members receive a further cash credit, ranging between BDT 500 to 3,000, against most treatment categories once it is established that they have received hospital treatment. For example, the cash claim for Caesarean surgery is BDT 2,000. The cash 'claim' is offered to all insured regardless of where the treatment is accessed from. Note that a majority of the SAJIDA's HELP beneficiaries do not live in the catchment area of the two hospitals cited above, and thus they have to contact outside clinics for these services [14].

In 2010 it settled 5,043 episodes of health claims incurring an expense of about BDT 9 million. The settlement process is fairly efficient. For example, 67% of the health claims by HELP members in 2009 were all completed within one month, though there exists room for progress in this area.

One unsatisfactory aspect of the HELP programme is that the benefits received by the insured vary depending on their location, while each paying an identical premium. In particular, those not able to access services of the Sajida hospitals, have to find treatment facilities on their own and pay the market prices in force there, and are only entitled to the cash claim cited above. In other words, they do not benefit from the quality care of SAJIDA's hospitals at a discount as some members do. However the co-payment rate for surgical care as well as diagnostics remain considerable from the risk shifting perspective, though not out of line vis-à-vis the comparator group here.

On the plus side, the programme seems to be on a sound financial footing, as evident from excellent cost recovery figures for both the HELP (102%) and HEALTH (about 85%) programmes. The two hospitals are self-financing once the set up costs have been incurred. The surplus covers the shortfall in the HEALTH programme. The member fees essentially cover the cost of the various discounts and cash back programmes, while the hospital charges allow an operating margin on the plus side. In terms of capital funds, it may be noted that SAJIDA received a corporate grant of 51 % of the Pfizer Bangladesh Ltd (now called Renata Pharmaceuticals) from the parent company in New York, and the annual dividend from these shares amount to about BDT 60 million annually.

Given this backdrop, SAJIDA would appear poised for an even greater role as an important partner in the quest for UHC in Bangladesh. The recent collaboration with 'Click Diagnostics' of US is another jump up the ladder, which would allow the mobile technology to be put to greater use so that SAJIDA medical staff located in rural areas may regularly consult the hospital for diagnostics and issuance of prescriptions. The technology being developed by 'Click' is expected to be piloted later in 2011. The final obstacle would appear to be what ails all programmes we know of, namely the client apathy toward the insurance concept. Give the compulsory nature of the HELP programme, current borrowers have to buy it by default, but it would seem that members, once they no longer active borrowers, opt out. The number of cardholders is actually less that the number of microfinance members (94K vs. 107K). If made into a voluntary scheme, SAJIDA staff suspect that membership would fall off dramatically.

The Health programme being voluntary in nature, exhibits renewal rate that are rather low, below 50%, echoing the similar proclivities. Once the need seem to disappear, the members feel reluctant to buy the protection. Is significant reliance on OPP the real concern? One must then address design changes such that once sick, there would be little or no OPP once the package has been bought. Another knowledge gap seems to be 'value for money' perception of HELP clients who live close by the hospital and those who do not, since the effective delivery of services are very different. Whether the degree of client indifference is identical in both sets of locations is not known, which can only be discerned by careful experimentation by means of scientific surveys. In the meantime, alternative modalities of delivering MHI must go on till these become synchronized with the tastes, preferences and ability to pay on the part of the poor.

13. For example, in 2009, the hospital rate for a caesarian section (without medication) was BDT 7,500; cardholder had to paid only 5,000. The 'high street' price for this surgery may have a sticker price of 10,000.
14. The hospitals also market a distinct 'insurance' product to the non-poor public (i.e., the HEALTH program), as well as treating the general public outside of the insurance mode.

Table 1. MHI premium and benefits

Organization	Insurance Product Name	Premium Rate (BDT)		Discounts			
		Member	Non-Member	Consul-tations	Medicine	Pathology	Hospitalization (Referral Benefits) (BDT)
BRAC	General Package	150	250	50%	10%	50%	500-1000
	Prepaid Pregnancy	100	150	Included	Free Iron Tablets	n/a	200-500
	Equity Package	0	0	Free	80%	80%	500-1000
Gonoshasthya Kendra (Rural/Urban)	Destitute	5/15		2/Free	Free/77%	n/a	n/a
	Ultra Poor	6/20		3/Free	Free/33%	n/a	n/a
	Poor	10/40		5/Free	75%/25%	n/a	n/a
	Middle Class	50/70-200		10/15-25	MRP/20%-MRP	n/a	n/a
	Rich	80/400		12/30	MRP	n/a	n/a
Grameen Kalyan	Micro Health Insurance	200	300	60%	10%	30-50%	50%, max 3K
Dhaka Community Hospital (DCH)	Family Health Insurance Programme	20					
	Rural Health Insurance Programme	20		BDT 5	10% discount on general services		
	School Health Programme	n/a					
	Industrial Health Insurance Programme	n/a					
SAJIDA Foundation	Health Card	Old: 600/family New: 150 per person		Free	10%	30%	No referrals since 2009, but discounted inpatient services
	HELP *	250	n/a	Free	10%	30%	Discounted inpatient services, PLUS cash rebates

Note: HELP Programme includes: Loan & Life Insurance, Health Insurance, Disaster Insurance, Education Scholarships & Legal Support)

Sources: http://www.brac.net, http://www.dchtrust.org , http://www.gkbd.org, www.grameen.com, http://www.sajidafoundation.org.

Table 2. MHI membership and sources of finance

Organization (Date)	Insurance Product Name	Number of Households Insured	Number of Patients Treated Annually	Total Premium Collected (BDT)	Operational Cost Recovery (%)	Source of Funding
BRAC (April 2009)	General Package	695	2, 865	140, 620	39	External Support from ILO, BRAC's own fund, Member Contributions
	Prepaid Pregnancy	514				
	Equity Package	1				
Gonoshasthya Kendra (June 2011)	Destitute	710	232,265	1,260,346	73	Member Contributions, non-state subsidies, donations and cross subsidization from other development programmes
	Ultra Poor	4,460				
	Poor	113,230				
	Middle Class	42,250				
	Rich	760				
	Total	169,000				
Grameen Kalyan (June 2011)	Micro Health Insurance	37,776 (2008) 23,794 (2009) 13,066 (2010)	323, 495 (2008) 247,328(2009) 214,847 (2010)	5,590,725 (2008) 1,852,609 (2010)	83 (2008) 55 (2010)	Grameen Bank Endowment Fund, Donor Funds, Member Contributions
Dhaka Community Hospital (DCH)	Family Health Insurance Programme	100,000 persons	Not available	Not available	100%	DCH subsidy, Partner NGO subsidy, Donor support
	Rural Health Insurance Programme					
	School Health Programme	13 schools				
	Industrial Health Insurance Programme	24 factories				
SAJIDA Foundation	HEALTH Programme	681	5,382 (first 5 months in 2011)	408, 800 (2008-9)	85%	Dividend earnings from Renata Ltd, Cross Subsidization from MF Activities, Member Contributions
	HELP	94,311 (May 2011)	9,510 (first 5 months in 2011)	23, 577,750 (2010-11)	102%	

Sources: http://www.brac.net , http://www.dchtrust.org , http://www.gkbd.org , www.grameen.com , http://www.sajidafoundation.org .

Table 3. MHI coverage location(s) under each programme

Organization	Working Areas	Health Facilities	Number of Staff	Services Offered
BRAC	Madhabdi, Narsingdi	1 upgraded center	12	Health Education, Pharmacy, Primary & Secondary Health, Diagnostic and Pathological testing, ANC, PNC, Caesarean Delivery, Normal Delivery, Minor Surgical, Menstrual Regulation, Post Surgical Care, Immunizations, Family Planning, Nutrition.
Gonoshasthya Kendra	Savar, Sherpur, Gazipur, Manikgong, Serajgonj, Chapai, Nawabgonj, Feni, Pabna, Cox's Bazar, Bhola, Dhaka, Gaibandha & Kurigram	5 Hospitals 39 Static Clinics	400	Preventive Care & Health Education, Out-patient Care, Hospital Treatment, Midwife Services, Medicines, Referrals.
Grameen Kalyan	Tangail, Manikgonj, Munchigonj, Savar; Narayangonj, Keraniganj, Mymensingh, Comilla, Chandpur, Rajshahi, Gazipur, Pabna, Bogra, Shirajgonj.	53 Health Centres (16 districts) [15 MBBS Doctors: 2010]	433 (2009) 398 (2010)	Primary and Preventive Care, Diagnostic Services, ANC, PNC, Satellite Camps, Normal Delivery, Minor surgeries, Eye Disease & Diabetes & Geriatric Management, Cataract Surgery, Mobile Health Programme, Community Cardiology & Nephrology & Dentistry, Out-patient Care, School & Adolescent Health Programmes, Immunizations, Hospital Treatment, Medicines, Consultations, Referrals.
Dhaka Community Hospital (DCH)	Dhaka, Rajshahi, Pabna, Munshiganj, Patuakhali, Sylhet	30 Primary Health Centers [10 owned by DCH] A 250-bed modern hospital in Dhaka	Not available	Primary and preventive care, inpatient, outpatient, referral, emergency, consultation and other general services

Sources: http://www.brac.net, http://www.dchtrust.org, http://www.gkbd.org, www.grameen.com, http://www.sajidafoundation.org.

CHALLENGES FACING MHI PROGRAMMES

While moral hazard and adverse selection, due to the mismatch of information at the disposal of the buyer and seller, are the standard obstacles to the viability of an insurance market in general, in a developing country context, these also take on additional nuances. Moral hazard gets exacerbated due to difficulties of verification and the inadequacy of the formal legal framework (Ray, 1998). Further, preponderance of agricultural and self-employment activities among the poor are often pointed out as roadblocks to implementing good adverse selection strategies. Designing an appropriate health insurance scheme for a particular group of people is a complicated task even in the best of circumstances. The above cited issues would have significant bearings on questions as to the type of health risks to be covered, the extent of coverage, and on the modalities for co-payments and deductibles. Below we review how these and related bottlenecks may be addressed in designing feasible micro health insurance products especially in the context of the valuable experience that the currently offered MHI programmes has to offer.

Beyond the buyer-seller information gap, more ground level concerns over programme feasibility, equity, efficiency, sustainability and conformity with the legal statutes of the land also need to be addressed. Below we attempt to identify and summarize the key challenges and shortcomings of the initiatives reviewed in the preceding section.

(i) Insurance vs. subsidized care and OPP: The limited extent of risk-shifting in most programmes cited above implies that even after having paid for a card, the insured members still has to rely on significant

out-of-pocket expenses for any diagnostic tests, medication and, where available, surgeries. These cost have to be put up in advance of the treatment, and thus may pose a major obstacle to most of the poor. While co-insurance is generally a desirable feature of any insurance arrangement primarily to ward off moral hazard, the bulk of the risk ought to be borne by the risk carrier, and not the insured. Moreover, for catastrophic events (e.g., major surgeries), the co-insurance can easily be set to zero. Given the low probability of such events, the expected costs of this additional clause would be small, and hence actuarially manageable in a good-sized programme. Hence any MHI programme must endeavour to contain large co-payment requirements especially for diagnostics and inpatient care.

(ii) Quality and extent of care: Both GsK and Sajida Foundation provide a wide variety of treatment in full-fledged hospitals, though mostly located in urban and semi-urban locations. GrK (53 HCs) and BRAC (just one centre), by contrast, operate rural clinics with a rather limited range of services. While urban locations make up for operational surplus on the hospital side of the ledger due to the demand for non-insurance services, access by the 'insured' poor is only feasible for those in close proximity, thus diluting the benefit of the coverage from their perspective. In a similar vein, at GrK, surgeries are limited to cataract and caesarean section, which are again available in limited locations. Both BRAC and GrK find it hard to retain doctors in rural locations; in 2010 there were only 15 doctors available for a network of 53 GrK centres.

A major challenge in providing meaningful health policies in rural Bangladesh thus appears to be the shortage of qualified personnel and infrastructure. Overall system costs cannot be lowered unless an adequate range of treatment procedures is made available locally. Thus, one would require a network of hospitals for each coverage area. As noted above, *upazilas* with good infrastructure and a strong local economy would be an ideal place to locate the network hospitals, which in turn ought to be linked to better-equipped district hospitals by a seamless referral system. Plausibly, once insurance is under-way, the demand for healthcare would lead to appropriate supply response from the private sector. The programme design and placement issues are therefore vital to creating value for client and thus the eventual acceptability of the programme.

(iii) Cash-in-advance Constraint & Credit Linkage: The necessity of payment in cash up front in meeting various fees and co-payments in each of these programmes is a substantial drawback for a rural programme even with the advent of microcredit. Since most are engaged in the informal sector, the flow of cash in the household is typically irregular. This is a real conundrum; while a credit link would appear necessary to overcome the liquidity issue, this creates the risk of greater indebtedness (even though for a good cause). On the other hand, regulatory guidelines as to the bundling of credit and insurance have to be attended to. And, above all, the client must not feel that the insurance costs are a necessary evil to access the much-needed credit (as is often claimed to be the case). The latter remark calls for a much greater role of the insured's participation in the process of programme design as would be *de jure* requirement in a 'community-based' programme placement (see Ahsan and Mahmud 2011; Chapter 8 in this volume). Below we briefly state the case for a health line of credit to pay for the co-payment.

(iv) External referral and absence of network hospitals: In none of these cases reviewed above there is any functioning referral system; Sajida, for example, stopped this option in 2009. Where it exists on paper (e.g., for GrK and BRAC), the procedures are not user-friendly (e.g., cash up front, very limited coverage: max BDT 500-1000 in BRAC and 3K for GrK). As Radermacher and Dror (2006) noted, less than 1% have ever been referred by these organizations to external facilities. Moreover, there has been no dedicated external provider, let alone a network of empanelled hospitals. The issues here are complex, but a poor-friendly resolution would require both the establishment of dedicated providers, hands-on guidance in getting patients admitted/treated, and deal with the cash requirement bottleneck.

(v) Awareness and Demand: Over and above the inherent quality of the insurance product in all its dimensions, it seems that rural poor do not fully grasp the value of an advance payment for 'the right to buy protection against a future contingency'. Resource constraints, it has been pointed out, generally suggest a high discount rate and hence the urge to take care of the current while the future waits. Given that in community-based programmes being piloted elsewhere with apparent success do typically embody an

advance payment of premium, it seems this constraint can and has been overcome, at least in many contexts. One must then try harder to grapple with the difficulties and find user-friendly means of resolving the matter in that mode (i.e., community-based).

In order to ease the burden of OPP, one can try alternative means of 'post-pay' devices within or outside of the community model? One example would be the health line of credit idea cited above; once sick the 'insured' would call in the co-payment necessary to receive treatment in real time mediated through an MFI. Here the insurer need not be the MFI; only mutual agreement would suffice, i.e., MFI members may buy coverage from a third party, where the MFI merely advances a new 'health' credit to its members at the request of the insurer. However, such post-payment means is to facilitate the co-payment part only. Adequate risk shifting cannot be accomplished without the pre-payment portion.

At another level, it is often believed that awareness may develop through experience with the product/service; however the frequently encountered low renewal rates noted above implies that this is not happening. This suggests some uneasiness with the product quality/features; pricing, design, delivery modality may all be relevant issues.

On the design issue, note that for a health insurance product to be of value to the poor, it must have the scope of minimizing vulnerability to poverty. None of the programmes reviewed above would appear to fit this goal mainly on account of the high co-insurance and the limited range of service availability. It is seen that out of 1,703 episodes of illnesses requiring treatment reported by GrK members over the preceding 12 months of the survey, 165 (i.e., below 10%) sought GrK care as first choice; instead 38% went to village quacks (Ahsan, Hamid and Barua 2011).

Further, the MRU sample cited above finds that in spite of 25% of surveyed households (precisely 979) being covered by GrK health plan, none reported having used this window when confronted with 'health shocks'. This presumably reflects the fact that since 'shocks' are understood here as aggravated events of illness (in terms of the 'cost of treatment' or 'severity of illness'), the local GrK facility's capacity was known to the member as not up to par. Consequently, the provider's services remained largely under-utilized.

(vi) Inadequate risk-pooling and high costs: Unless the pool of insured is large enough, effective risk pooling cannot be accomplished rendering the programme cost-inefficient. Larger programmes also allow the insurer to engage quality professionals, which in the long run lead to costefficiency. As Morduch and Karlan (2009) pointed out, BASIX, an Indian MFI, managed to build a large pool of insured allowing it to contract highquality doctors. A common feature of the Bangladesh programmes reviewed above is that membership in MHI is mostly voluntary (except, e.g., the HELP programme of SAJIDA), which adds to the cost of intermediation in that the service has to be marketed on a continuing basis. This also opens up the scope of adverse selection, although due to inadequate data, this claim cannot be readily established. An alternative would be to seek branch-level membership of NGOs who collectively decide on participation *en masse*. A similar process is currently being practised by the community-based health insurance (CBHI) model being promoted by the Microinsurance Academy (MIA) in Delhi.

(vii) Delivery Modality & Reinsurance: All the programmes reviewed above are examples of the 'provider' models of delivery, where the service provider and the insurer are one and the same entity, which leads to many conflicts in cost containment, range and adequacy of care as well as in reaching an adequate riskpool. While these issues have been discussed at length elsewhere in this volume (Ch 8), let us merely note the missing role of formal insurers (even in the cooperative/mutual mode). Unless insurers are carrying the risk it would be hard to entice international reinsurers without which covariate events may not be accounted for. The latter deficiency can jeopardize an otherwise efficient and popular programme.

(viii) Financial Viability and Scalability: As Table 2 shows, none of the programmes reviewed above manage to cover even the operational costs. It is too hasty to claim that the premium and co-payment rate structures are inadequate for an actuarially sound plan. The scale issue along with the programme design may well be the primary causes of concern here. SAJIDA's HELP programme appears to perform better in financial terms than others, but this is possibly due to the larger pool made possible by the conditionality imposed on receiving credit.

Though many of these programmes have played a role of value in rural communities, the overall conclusion for the programmes reviewed here gives an indication that none of these are ideal candidates for possible replication or for possible scalability to the national level. The shortcomings include the high co-payment structure, the cash-dependent elements and coercion, which are not ideal features of a programme designed for the benefit for the poor. The range of services and quality of hospitals are generally inadequate in terms of offering a meaningful degree of care to the majority of MHI clients. Moreover, the delivery modality is flawed in cost containment, among other. Finally, these are not solvent financially even at an operational level without subsidies. Hence reform and experimentation must be the order of the day.

CONCLUSIONS

Globally there is a growing consensus for prepaid health care financing such that government tax revenue or dedicated health levies can be utilized to pay for health insurance. Given the uncertainty as to the feasibility of such a mechanism in the present Bangladesh context, micro health insurance may be expected to play an important role in the quest for UHC over the intermediate future. Although, there are promising community-based initiatives such as Health Card Schemes and Micro Health Insurances (MHI), these schemes however remain limited in scope and design. Currently, a tiny proportion of the total population is insured under various such schemes. In order to address the void in a bold manner, alternative versions of MHI programmes need to be scaled up to reach masses of the poor. Experiences in other low- and middle-income countries encourage one to double up the efforts to seek innovative approaches to achieving universal health coverage through the microinsurance mode. Some of these ideas have been explored in the preceding sections of the paper.

Micro health insurance schemes provided by the NGOs offer valuable experience on which it is necessary to build upon. One major knowledge gap is caused by the fact that some of the larger programmes (e.g., GsK) are yet to release programme details (especially financial data) of sufficient quality to allow an informed analysis. But, to be scaled up to the national/regional level, only financially viable models need be focussed on.

A second drawback is that like the health sector of Bangladesh, MHIs seem to be primarily focused on preventive care. Thus greater emphasis should be placed on curative care as well. So far few programmes are able to offer proper quality inpatient services (beyond maternity) to most of its rural members.

Acceptability of MHI schemes is an essential pre-requisite for programme success. So far attempts to create enthusiasm for MHI have not materialized in any of the programmes that target self-financing. Studies show that the poor are often reluctant to give up resources unless a health problem arises. An important task would be to discern the reasons behind the ambivalence of the potential insured toward embracing the value of risk sharing and thus be prepared to buy into the scheme.

Another deficiency relates to the insufficient experimentation with the mode of delivery. As noted above and elaborated upon elsewhere, the provider mode of MHI delivery, the dominant approach thus far, has its drawbacks (Ch 8). Given that the NGO-MFIs operating at the grassroots level in Bangladesh enjoy trust and acceptance of people, they can be used as effective partners in efficiently implementing the goal of achieving universal coverage through the insurance modality.

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Status and Prospect of For-Profit Private Health Insurance in Bangladesh

Atonu Rabbani

INTRODUCTION

Covering the healthcare expenditure for the population has garnered much attention in the recent times and countries in all income strata with diverse historical backgrounds are striving for just and equitable healthcare financing using different approaches (WHO 2010b). Financial hardship emanating from large healthcare cost is common across the world and such hardship can be burdensome even in the most developed countries where a proper health system based on universal coverage is yet to take place (Reid 2009). However, finding the right mix of different sources of funding modes for a specific country require detailed understanding of its institutional structure including understanding of socio-economic status of the clients in the market for such insurance products, and interaction with the actual suppliers and providers of healthcare services (e.g. physicians and drug industry).

It is worth noting that only a handful of countries have truly provided an extensive coverage for healthcare cost through a third-party payment mechanism. The countries that have universal coverage are primarily high income countries with a strong institutional set-up in place for contract enforcement[1]. It is important to understand overall market for such insurance products and the business atmosphere. The impediments within the latter may inhibit the development of private third-party payers who would cover the unforeseen spending at the onset of major healthcare expenditure.

Insurance in general is a contingency claim for revelation of a state of the world. Insurance against health shocks are desirable because (a) there are general uncertainties when such health shock will occur and who will face such shock, and (b) also about the severity of such shock. The required expenditure to mitigate the impact of such shock may not be known ex ante. The society needs products that reflect the contingency claims against idiosyncratic shocks related to adverse health outcomes (Arrow 1963). Risk pooling for a relevant population then must be very important. The average price of that product (premium for health insurance) will reflect the systemic health risk of the population and competitive market can confirm that the insurance providers do not accrue above normal margin of profit. It is also important to realize that the provision of a universal public health insurance financed through tax (income or otherwise) may be limited because of limited scope for levying tax due to presence of a large informal labour and goods market (Sekhri and Savedoff, 2004, Pauly *et al.* 2009). Thus, a voluntary private insurance system can provide the much needed buffer against unexpected and substantial drain on household's financial resources.

In this paper, we define the private insurers as entities that directly pool financial resources in the form of premium from the private parties to pay the health care providers and as such not part of the the entities that provide the health care service (e.g. subscription base hospital managed care). We also preclude risk-pooling entities that are commercial and primarily profit motivated. These agents are commonly characterized by being voluntary and commercial as opposed to being mandatory, publicly financed and managed insurance (see Sekhri and Savedoff, 2004). Typical of many less-developed countries, Bangladesh has a private health insurance market which is in a very nascent stage. Globally, private health insurers play a minor role in

1. Few developing countries have been successful in providing mass coverage for healthcare expenditure for population. Thailand in recent time has introduced universal health coverage. Cuba would be another exception which has established reasonable health cost coverage for its population. Strong political will played an important role for development of government-based healthcare cost coverage.

overall healthcare financing where government sponsored financing remained the most prominent source. This is especially true for the developing countries where out-of-pocket payments for health services continue to be the major source. However, it is not uncommon for many such developing countries to experience increasing share of GDP allocated for receiving healthcare services. Bangladesh is not atypical of this trend, and thus provides a possibility of private health insurance market to play a larger role in overall healthcare financing.

This chapter will attempt to present some of the important facts regarding private health insurers' roles as third-party payers globally and specially in Bangladesh. The official data suggests that private health insurers continue to play limited roles in overall health care financing. This paper identifies lower willingness to pay for health care need (as evident from still low fraction of national income devoted to health care), high cost of contract enforcement and large informal sector employment as possible constraints for private health insurers to contribute more in health care financing and lower the out-of-pocket payments. A number of insurance companies (traditionally involved in more conventional life and property insurance products) have started to delve into the health insurance market. However, both the industry and policymakers should exploit the possibility of private health insurers to contribute more into overall health care financing.

DATA

National Health Accounts (NHA) data from WHO is often the most systematic and comprehensive source of information on the resources used to finance the healthcare expenditure at the national level which are also comparable across countries (Poullier *et al.* 2002). We used this data for our analysis (WHO 2010a). We merged the health accounts data with a number of country-specific aggregate markers for willingness to pay for healthcare, cost of doing business, and prevalence of informal sector which we expect to be jointly associated with the level of healthcare expenditure provided by the private insurers. WHO National Health Accounts data also provided us with GDP series and population figures. The ratio between total healthcare expenditure and total GDP provided us with an indicator for country-specific willingness to pay for health. For consistent and comparable estimates for informal economy in different countries we relied on Schneider *et al.* (2010). Thus, our definition of informal economy is basically synonymous with 'shadow' economy which may result from effort to avoid government tax burden and/or not being able to be accounted for by the official statistical queries which go into measuring the official GDP (Schneider *et al.* 2010). We collected the cost of doing business data from the World Bank that maintain the most comprehensive database on different aspect of cost of business around the world for a number of countries (World Bank 2011). We focused mainly on the cost of contract enforcement which we assumed to be vital for a viable private health insurance market.

It is very difficult to gather business data on number of clients or beneficiaries for a specific insurance company. Insurance companies are usually very protective about such information and any guess on the overall size of the market at best will be just an improper extrapolation. Rather than focusing on such aspects of the market, this paper will focus on products offered by the insurance companies. For such information we relied mostly on publicly available information on products and schemes offered by the insurance companies. Such information is available from different company websites. The paper also addressed a specific case study focusing on an employer's experience with the health insurance scheme it subscribed to.

METHODS

We relied mostly on simple statistical analysis based on univariate and multivariate methods. We first estimated the fraction of total healthcare expenditure financed through different modes such as government funding, out-of-pocket payments, and private health insurance among others. We first did it at the global scale and then stratified the analysis by countries at different levels of development (as defined by the World Bank). The fraction of total healthcare paid through different sources provide us with some guidance to the relative role of private health insurance might have played in overall healthcare financing. We continued to explore the association of few selected variables (namely health care expenditure as percent of national income, fraction of labour force employed in the informal

sector and cost of business especially cost of enforcement) we identified in the introduction that may determine the level of private health insurance industries' contribution in the overall health-care financing.

To draw a picture of the private health insurance market in Bangladesh we mostly relied on secondary data from websites and used mostly on qualitative analysis. We included a case study highlighting some experiences of a small non-profit research institute with a group health plan. However, one should note that this would essentially be an incomplete picture of the current state of affairs of the private health insurers in Bangladesh and would probably need a much more comprehensive study in future.

RESULTS

In 2008, a total of $5,794 billion was spent on healthcare with an average of about $864 per person of which, government provided $3,503 billion constituting about 62% of total spending on healthcare services (Table 1 and Figure 1). Both out-of-pocket payments and private health insurers played equal roles paying for the rest of the healthcare expenditure. In 2008, globally $1,034 billion was paid out-of-pocket in healthcare, averaging at about $523 per person. Private health insurance companies provided another $1,014 billion. Both these sources provided about 18% of the total healthcare expenditure in 2008. Non-profit sectors (e.g. charities) and external sources (e.g. foreign donations and grants) played a minor role in overall healthcare financing globally (Figure 1 and Annex Table 1). Thus, across all countries, estimates suggested that private health insurers provided much less than the government in overall healthcare expenditure while they were almost at par with private out-of-pocket healthcare payment.

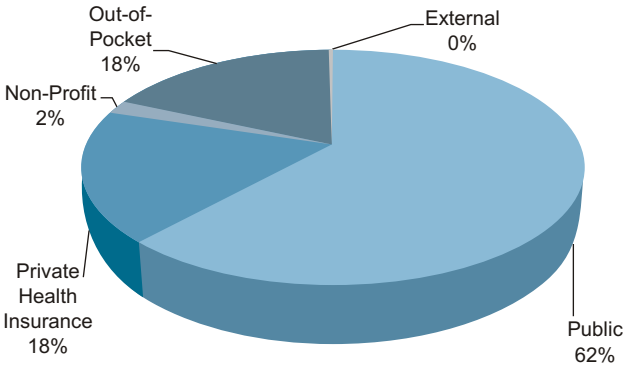
It was also important to note that different sources of financing played varied roles in terms of level of contribution depending on the level of development of the country. The government played a much bigger role compared to the global average in the more developed countries (see Figure 2 and also Annex Table 2). An average high income OECD country spent about $4,753 per capita on healthcare (of which government's contribution is $2,959 per capita). On the other hand, high income non-OECD countries spent much less on healthcare per capita domestically ($959, see Annex Table 2), the governments in these countries paid even a larger share (69%, see Figure 2) for healthcare. However, it was important to note that private health insurers contributed very unevenly as they contributed about 19% and 5% of total healthcare expenditure in high income OECD and non-OECD countries respectively. Private health insurers continued to play a significant role among the upper-middle income countries as 12% of total healthcare spending is financed by the private health insurers. Governments continued to bear the major share (55%) of total healthcare spending in the upper middle income countries.

Table 1. Summary statistics for selected variables

	Number of countries	Mean
Health expenditure as % of GDP	138	6.5
Cost as % of claim	133	33.1
Informal economy as % of GDP	125	32.5

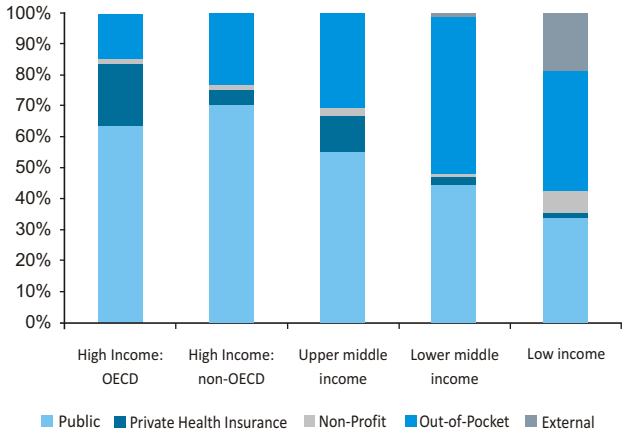
Source: Health expenditure and GDP data is from WHO (2010). Data on cost of contract enforcement as percent of claim received are from The World Bank (2010) and data on informal economy is from Schneider *et al.* (2010).

Figure 1. Distribution of health expenditure by sources of financing



Source: WHO National Health Accounting Data. (Table 1)

Figure 2. Distribution of health expenditure by sources of financing for different income groups of countries



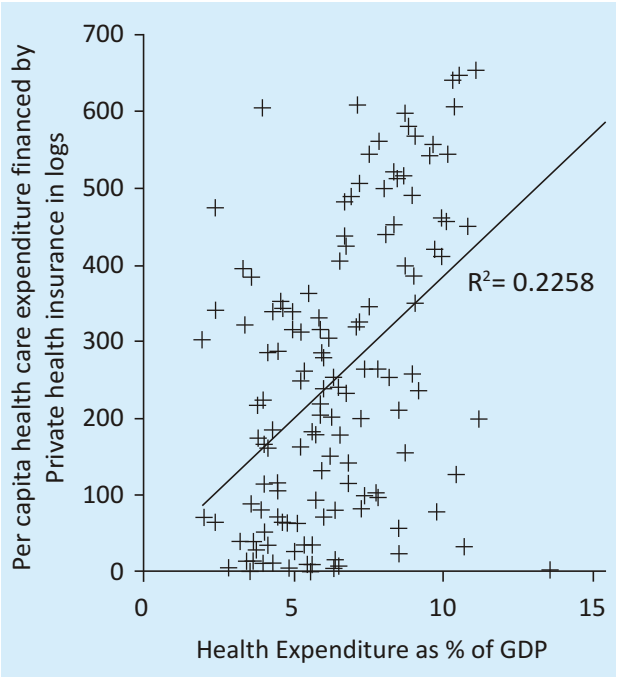
Source: WHO National Health Accounting Data. (Annex Table 1)

The healthcare recipients' contribution to healthcare spending through out-of-pocket payments became larger and larger as we moved from high income countries to low income countries. Only among lower middle income and lower income countries out-of-pocket payments became the major source of healthcare financing (around 50%). The private health insurers provided a very small share of total healthcare expenditure (<4% in both lower middle and lower income countries). Governments provided about 44% and 40% of total healthcare spending in these two sets of countries respectively.

It remained to be seen what factors might be associated with the apparent variations in the level of private healthcare expenditure (per capita) across different countries. Countries were fundamentally different both institutionally and technologically (broadly incorporateing preference heterogeneity as well). As put forth in the introduction, we focused on three aspects of the healthcare expenditure financed from private health insurers. The summary statistics for these three factors (lower willing-ness to pay for health[2], business cost of running a health insurance firm, and prevalence of informal economy) are presented in Table 3. There were also considerable variations in the values of these variables across countries and we associated these variations with per capita healthcare expenditure financed through private health insurers.

As one would expect we can see a positive association between fractions of total country expenditure on healthcare and per capita healthcare spending financed by private health insurance (Figure 3)[3]. This suggested that countries with a higher level of spending probably offered a larger market for private health insurers. Since health insurance (like any other insurance) presupposed being able to pool risk over a large population through pre-payments, a larger market was certainly conducive to a "thicker" private health insurance industry.

Figure 3. Healthcare expenditure (% of GDP) and per capita healthcare expenditure financed by private health insurance

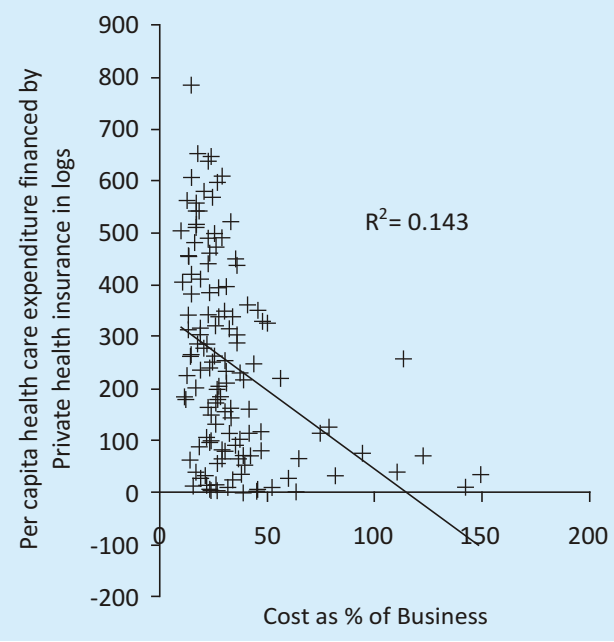


Source: Per capita health financing from private health insurance figures are from WHO National Health Accounts (see WHO, 2010a). The same data set also included GDP figures. All data are for 2008 (except for Zimbabwe for which 2007 information was used).

2. We have already addressed the level of income and its association with the per capita expenditure through private health insurers. Here we delve further by focusing at aggregate healthcare expenditure as a percent of gross domestic product as a surrogate marker for willingness to pay for healthcare.
3. If we compare two countries where one spent ten percentage points more on healthcare as a fraction of its GDP, then we should expect the per capita contribution from private health insurers to rise 37.5%.

One should also note that c*ost of doing business* was higher in the low income countries which also had lower penetration in the healthcare financing by the private health insurers. We focused more specifically at cost of contract enforcement. The service of insurance particularly involves enforcement of a more com-plicated contract typically based on contingency claims. As such a higher cost of enforcement of such contacts could certainly act as a deterrent for a viable private health insurance market. We found this relationship in data as cost of business (measured by cost as a percent of claim) was negatively associated with the level of per capita healthcare spending financed through private health insurance (Figure 4).

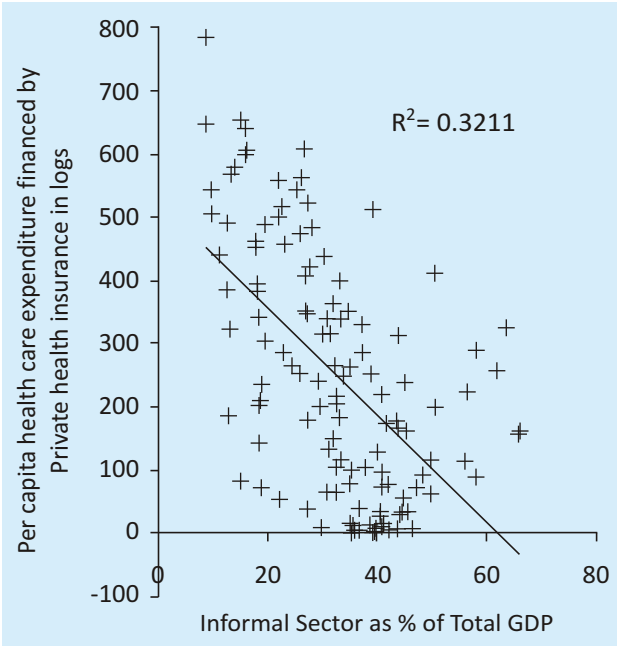
Figure 4. Cost of business and per capita healthcare expenditure financed by private health insurance



Source: Cost of business was defined as cost of settlement of a contract as percent of total claim for a country (World Bank 2011). Per capita health financing from private health insurance figures were from WHO National Health Accounts (WHO 2010a).

Another important fact was that *the low income countries usually had larger informal sectors*. In general the private health insurance providers were comfortable to reach the clients through the formal sector participants (for example, through employer based group insurance schemes rather than offering individual policies). Thus, one should expect that the overall level of informal sector was negatively associated with lower penetration of private health insurers and we also saw this in the data (Figure 5).

Figure 5. Prevalence of informal sector and per capita healthcare expenditure financed by private health insurance



Source: Per capita health financing from private health insurance figures are from WHO National Health Accounts (WHO 2010a). Information for Informal sector data are from Schneider *et al.* (2010).

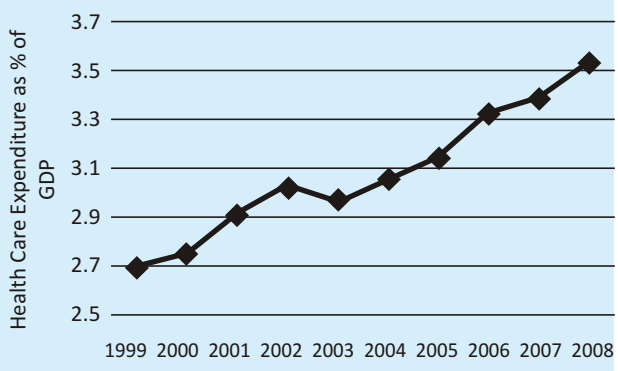
EXPERIENCE OF BANGLADESH

According to constitutional provision, Bangladesh is committed to provide healthcare services to all her citizen. Since independence different measures have been taken to provide access to primary healthcare services *en masse*. The instrumental role of health to ensure the human development of the population has received its due recognition. However, healthcare financing and role of private health insurance perhaps have not received enough attention. This is probably because private health insurances have continued to be a minor contributor in the overall healthcare expenditure (according to available aggregate health account statistics; WHO 2010).

The most important trend in healthcare expenditure in Bangladesh is that a larger share of overall GDP has been allocated for healthcare in the recent times (Figure 6). While at the end of 1990s 2.7% of the GDP was spent on healthcare, it was 3.5% at the end of 2010s. This modest increase hides the fact in absolute amount health expnditure has increased from $1.2 billion to about $2.8 billion over the same time registering an increment of more than two-fold or an annual growth rate of about 9.3% over the same period. In per capita terms, the total healthcare expenditure has also increased from about $8.7 to $17.4 over the same period.

In the backdrop of this increasing emphasis on health and associated expenditure, one should expect private health insurance market should also grow over time. But according to available aggregate healthcare expenditure statistics, private health insurance market remained negligible and recent efforts by the private health insurers still maintained the industry at a very nascent stage. For example, Figure 7 suggests that between 2001 and 2008 the total healthcare financing (in nominal terms) annually increased by about 11% and rose from $263 million to about $550 million. Controlling for inflation for the same period actually leaves the growth curve of financing through private health insurance essentially flat. Thus, one can infer that our earlier implications of limited role of private health insurance industry in the overall coverage of healthcare spending remained largely valid for Bangladesh.

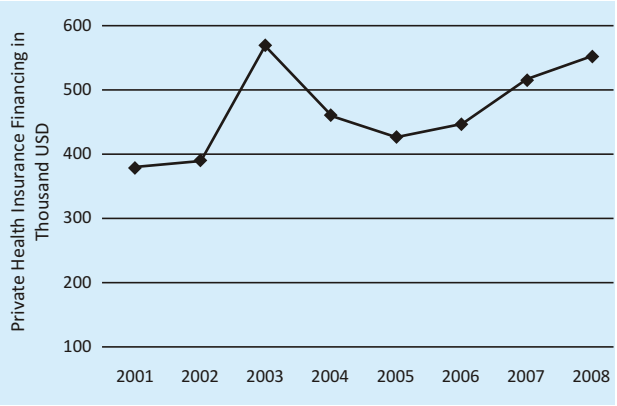
Figure 6. Trend in healthcare expenditure as % of GDP in Bangladesh



Source: National Health Accounts (WHO 2010)

At the same time, the nascent private health insurance industries have exhibited growth over the last couple of years. The existing insurance companies, traditionally offering life and accident insurance policies, are quickly entering and creating a private health insurance market. Currently, there are about 44 firms listed as insurance companies mainly focusing on general, life and accident insurances. There is no central repository of data on the entire inventory of health insurance products. Of the 28 insurance companies for which product information was available, 14 companies offered some forms of health insurance products. There are different modes of delivery of these products. The dominant mode appeared to be group health plan the insurance companies offer to the employers. So, the large employers (in both private and public sector) act as the main clientele for the insurance companies. In addition to the group plans, insurance companies also offer individual policies (while giving group ones additional discount on premiums) and *mediclaim* policies for people travelling abroad (as required by the visiting country). For the last case local insurance companies some times work as an agent of more visible international insurance companies.

Figure 7. Annual healthcare financing through private health insurance in Bangladesh



Source: National Health Accounts (WHO 2010). The series has been inflation adjusted using GDP deflator with 2008 as base year.

In addition to the features described above the health insurance products also show interesting characteristics. For example, the policies reviewed for the purpose of the present work suggested that insuring for hospitalization is the main component of health insurance schemes. Most insurance companies offer multiple products depending on the size of coverage. One interesting aspect of the industry is that the products are surprisingly homogeneous (see Annex Table 3 and the case study). Annual coverage usually reaches up to only Tk. 150,000 ($2,100) even for the most generous policies (among the health insurance companies studied, *Green Delta Life Insurance Ltd.* only had coverage up to Tk. 75,000 or about $1,100).

Beside usual group and individual health insurance schemes, private health insurance companies also offer insurance coverage for the travellers (many countries require the travellers to have some form of health coverage). There are few cases where the insurance companies also offer dread disease coverage. In these cases the insured individuals can claim coverage against some fatal diseases and old age complicacy (Annex Table 3). Many of these hospital coverage and health insurance are supplemental to some other insurance schemes (life or otherwise) and offered as "rider" (i.e. additional benefits, possibly optional, over and above the basic coverage in a term life insurance policies, for example) in a package.

DISCUSSION

The private health insurance market or industry in the developing countries is generally very thin and most people are usually self-insured through own income or rely on social network to some extent (while government or public spending cover health care need that is mostly primary in nature or has some public health aspect). However, in almost all countries commercial private insurance works side-by-side with other types of financing agents.

For example, the USA has large private health insurance industry that work through employers' subscription within a regime where there are large public entitlement programs such as Medicare (for senior citizens, federally funded), Medicaid (for earning challenged households), SCHIP (for children in needy families) and veteran health support programs. The last of the three programs are run through individual states with federal contribution. There are also not-for-profit programs such as Kaiser Permanante which also has a large membership albeit having geographic concentration in the west coast.

Germany uses a model where private insurers play an important role. Germany introduced world's first universal coverage and uses a multi-payer system where private insurance through numerous sickness funds and private insurance companies play important roles in covering healthcare spending. Private insurers also play important roles in the Netherlands and Switzerland and also supplement specialized care in some countries (such as dental and cosmetic surgeries in Canada and the UK). In the developing countries the private health insurance market is yet to become a major contributor in overall health care financing because of the problem of contract enforcement (high transaction cost) and low willingness to pay emanating from more sophisticated knowledge of the product (one has to pay upfront but only gets paid when there is some adverse health outcome).

In this context Colombian experience is probably worth mentioning. It achieved a very high rate of coverage from 24% of the population covered to more than 80% coverage through a comprehensive overhaul of the financing system in 1993 (known as *Law 100*). People are covered through contributory regime (for people earning over certain level) and subsidized regime (for people in need chosen based on pre-determined proxy means testing). Both these regimes are funded through mandatory payroll tax contributions. However, the insured person can choose from a pool of insurers, private or public, who compete for memberships. It is an interesting experiment where both the premiums and benefits are fixed by the government. The only margin where the insurers can compete is through

assuring the quality of health care service for which they contract with network of health service providers. While the system is perhaps still dominated by supply-side financing (paid to the provider through insurers, private or otherwise, as of 2009; see Giedion and Uribe 2009), it has achieved a high level of coverage within a short period of time. At the time of the policy uptake (i.e. in 1993), Colombia belonged to the upper-middle income group, however, it offers an experiment where private insurers played an important role in extending the coverage against health care cost (reforms aimed at minimizing government role while introducing social insurance based on regulated competition among private parties and also separating provision of insurance from the actual service delivery; see Trujillo, Portillo and Vernon 2005).

None of our findings on the asserted association between different country specific parameters and per capita healthcare spending covered by private health insurance should be interpreted as treatment effects and low ability for the private health insurers in the developing countries to cover for healthcare spending are probably jointly determined and driven by unobserved factors. So, positive association of private health insurers' contribution with higher fraction of GDP spent on healthcare services and fraction of labour force employed in the formal sector of the economy will suggest private health insurers will try to choose clients who have sufficiently high willingness to spend on healthcare (% of income on health) and people who are easy to find (who are employed in the formal sector). However, given the limited formal market such insurers will remain quite small in the near future.

It is widely believed that dominace of commercial private insurers may lead to unequal access, denied participation because of (e.g.) pre-existing conditions leading to large uninsured population and rent seeking based on situations known as "cream-skimming". At the same time, there are large out-of-pocket payments for health care cost especially in the developing countries. So a managed competition among the private insurers with commercial motive can offer better access and lead to more equity. Moreover, in some countries (such as Switzerland), social insurance schemes has evolved from voluntary (and guild-based) private insurance practices. Government can also issue mandates that require coverage of an entire group like government employees or formal sector labor force. Nigeria introduced such requirements recently with an aim to cover its entire citizen in future. HMO type delivery model with cost capitation and in-house provision of care has also emerged in coutries like Nigeria and many other sub-saharan countries (see IFC 2009). Lessons learnt from these experiments provided a better guideline for future policy debate.

Like most other developing countries people in Bangladesh finance their health expenditure largely through out-of-pocket expenditure. People's willingness to pay such a substantial amount on health needs warrant for existence of a viable health insurance market in Bangladesh albeit so far exhibiting a very limited outreach of such product through a competitive market mechanism. Insurance can provide households to cope up with large health expenditure without drawing from household wealth thus reducing the financial vulnerability (Pauly *et al.* 2006).

Experience with employer-based group health plan – case study

The main purpose of this case study is to document experience of an employer that provides coverage for its regular employees. It is not very common for employers to subscribe to group insurance offered in most insurance companies. As such one cannot claim that it is a common situation.

In this case study, we focused on an employer-based insurance scheme which covers the employees of a research and training institute with employee size of 40. The organization is insured by Delta Life Insurance company. The employer pays Tk. 4,100 for each employee under 60 years of age and Tk. 10,750 for people over that. The policy covers against incidences that require the insured person to remain at a hospital. The coverage is quite comprehensive and includes insurance against most regular diseases for which such hospitalization may be required. The exclusions include some special healthcare 'need' (e.g. pregnancy).

The paper work is not very onerous. However, not a single claim was filed under this policy. The coverage itself seems limited as maximum Tk. 1.5 lac is covered per hospitalization. The claim should be filed through the employer. According to the human resource policy there is a provision that the employer may decide to provide supplementary support for the employee at the incidence of hospitalization which is much higher than the actual coverage (Tk. 5 lac).

CONCLUSION

In Bangladesh, the for-profit private health insurance market is yet to take off. At present, it is most likely serving a very small niche through group plans for employers. However, as our case study seems to suggest that the propensity of taking benefit of health service coverage through pre-payment is still low. The experience of Bangladesh actually fits the theoretical prediction that developing countries are probably less likely to benefit from for-profit private health insurance market. It is not because there is no gain from trade in this market *per se* rather lack of coverage through private health insurance because of different constraints (both supply side and demand side) is impeding the growth of the sector.

This situation suggests that voluntary private healthcare insurance can provide a much needed coverage against unforeseen, idiosyncratic and possibly large healthcare cost (Pauly *et al.* 2006). However, a lower willingness to pay for such services may remain an important impediment towards the growth of private health insurance in developing countries[4].

It is also important to realize that the insurance, especially health-related ones, is a complicated contractual agreement and enforcement of these contracts are also important. With high transaction costs associated with enforcement of such contracts, the potential growth of private health insurance industry may be compromised in less developed countries such as Bangladesh. One of the major goals of health insurance is to pool the risk over a larger population. This is a necessary condition which makes the average health cost burden predictable and is shared by a group so that the average cost (from the point of view of the private insurer) is insurable. However, the vast population of the developing countries operates in the informal sector which is difficult for the private insurers to bring them under insurance coverage.

Thus, settlement of dispute and claims has to be smooth and efficient without which it will be difficult to lure clients into the sector and be impossible to have a viable scale for insurance schemes to work. The insurance companies should also not be allowed to perform selection based on pre-existing conditions. It will be important for regulators to avoid using price control like settings of premium which will discourage competition in the sector.

Bangladesh is not atypical of the conditions (or lack thereof) that would probably inhibit the growth of private health insurance industry. The available data show that the contribution of the private health insurance companies in healthcare financing has remained very low and the trend has been fairly flat. The products offered in the market are quite homogeneous and even the highest coverage is incapable to cover very large (possibly catastrophic) health spending. A specific case study also suggests that people's knowledge and understanding of the insurance products is generally low and utilization has remained only at a modest state.

There are cases (e.g. Germany) where a country has benefited much from competition of the private health insurance providers. They can provide a necessary conduit through which health financing need for the masses are fulfilled. But government's provision and regulation provide a conducive environment for the private health insurers to grow. In this paper, the role of actual health providers (such as hospitals and physicians) is not addressed although they are also important players in the overall delivery of healthcare. Bangladesh has been growing at a healthy pace in the past two decades and the demand for quality healthcare will become a more pertinent issue in the coming years. Through proper guidance and regulation private health insurers can finance the healthcare cost of people with higher willingness to pay, easy access through the formal sector employment, and more sophisticated consumer for whom the cost of delivery will be low and a viable private insurance market for healthcare is likely to exist. The for-profit private health insurance can

4. This analysis assumes that healthcare is essentially a normal good with a growing fraction of income spent on this "product" as income grows (healthcare as a luxury good). People's willingness to pay for better health increase as income grow and a higher healthcare demand is conducive to the growth of a private voluntary health insurance market as third-party payers can keep the transaction cost of delivery low for per unit healthcare provided to the clients.

benefit a lot from participation of the private sector employers. While there are long run implications, the nascent industry can initially take off with support and proper guidance from the policy makers and regulators by motivating the large employers[5] in the formal sectors to take up group insurance. The insurance companies will be able to tap into a niche which will probably have a higher willingness to pay for health care. The cost of reaching out and pooling risk will also be low. As such, private health insurance market can essentially complement the government's and other non-profit sectors' effort to provide universal health coverage in Bangladesh.

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5. The large NGOs can also participate by offering health insurance to their beneficiaries through a private intermediary.

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ANNEX

Annex Table 1. Global aggregate and per capita health expenditure in 2008 by sources of financing

	Aggregate (billion USD)	Per capita (USD)
Total	5,793.90	864.39
Sources of Financing		
Public	3,502.56	522.55
Out-of-pocket	1,034.23	154.30
Private health insurance	1,013.88	151.26
Non-profit	94.29	14.07
External	9.42	1.40

Note: WHO National Health Accounting Data. Health Expenditure

Annex Table 2. Per capita health expenditure (in US Dollar) by different financing sources in 2008

	Total	Public	Private health insurance	Non-profit	Out-of-pocket	External
High income: OECD	4,753	2,959	920	83	657	0
High income: non-OECD	959	657	46	6	220	0
Upper middle income	535	294	65	7	166	1
Lower middle income	93	41	3	0	47	1
Low income	25	10	1	2	12	6

Note: WHO National Health Accounting Data. Health Expenditure

Annex Table 3. Description of some selected health insurance schemes

Item	Delta Life Insurance Company	Green Delta Insurance Ltd.	Meghna Life	Pragati Insurance Limited	Pragati Life Insurance Ltd.
Services covered	□ Hospital accommodation □ Consultation fee □ Medicine and accessories □ Medical investigations □ Surgical operation and □ Ancillary services like blood transfusion, ambulance service, dressing etc.	□ Hospitalization due to accident or illness. □ Ancillary services like ICU/CCU room, post-operative room, blood transfusion, special investigations, etc. □ Labour room services. □ Intensive care facility. □ Oxygen therapy. □ Skilled nursing services. □ Blood transfusions. □ Ambulance services. □ Dressing while in confinement and test other than the routine investigations.	□ Staying in the private room. □ Doctor"s consultation fees. □ Diagnosis expenses. □ Surgical operation expenses. □ Medicine. □ Relevant services expenses.	□ Hospital accommodation □ Consultation fee with physicians and surgeons □ Medicine and accessories medical investigations, diagnostic tests □ Major and minor surgical operation □ Ancillary services like post-operative care, intensive care facility, blood transfusion, ambulance service, oxygen therapy etc.	□ Hospital accommodation in private room □ Consultation with physicians and/or surgeons □ Medical investigations and tests □ Major and intermediate surgical operations □ Use of operation theatre, anesthesia and other services □ Medicines □ Ancillary services like labour room, post-operative care and intensive care facility, blood transfusion, oxygen therapy etc.
Maximum benefit (Yearly)	Tk. 140,00	□ Tk. 75,000		□ Tk. 150,000	
Types of insurances			□ Supplementary hospitalization insurance benefit (Those who are within the age of 18 to 55 years, they take this insurance with the principal policy) □ Supplementary dread disease benefit (DDB 50%, 25%)	□ Group hospital healthcare insurance plan is offered to organizations/corporate groups/employers of all sizes for their employees and family. □ Non-group hospital healthcare insurance plan is provided to individuals/their spouses (between the ages of 18 to 60) and their children (between ages 1 to 25).	□ Individual hospitalization insurance plan □ Group hospitalization insurance plan

Source: Company websites.

Micro Health Insurance: Scale, Delivery and Regulatory Challenges

Syed M Ahsan
Minhaj Mahmud

INTRODUCTION

This paper dwells on health shocks, which are believed to be a major source of vulnerability for the poor and near poor. The economic cost of illness is two-fold; the cost of medical care and the loss of income associated with reduced labour supply and productivity. Short-run self-insurance mechanisms such as the depletion of savings, sale of assets, loan from moneylenders and exhaustion of current income flow may typically allow the victims to ride out smaller events, but not major health events that compromise the capacity to perform *activities of daily living* (Gertler and Gruber 2002). The resultant exposure to consumption shocks may increase *vulnerability*, i.e., *the likelihood of a non-poor household falling into poverty or the poor getting poorer in the near future*[1]. Emphasizing the *expectation of poverty* would help to shift policy focus towards designing measures that prevent (better, eliminate) poverty, thereby interrupting the transmission of poverty from one period (generation) to another than merely dwell on remedial measures of poverty alleviation.

While improvement in health infrastructure has the potential to soften the income shock, the overwhelming evidence in developing countries such as Bangladesh is that public investment in this area has not met the demands of the poor (See Chapter 3 and Chapter 4 of this volume). As a result they mostly end up accessing rural private facilities offering services of questionable quality at a relatively high cost. The resulting impact on household expenditure averages at about 6 percent or more of total annual expenditure as seen from large-scale sample surveys (Ahsan and Hamid 2011)[2].

In the intermediate term (say next 10-15 years), it is doubtful if public resources in the Bangladesh context would be sufficient to both widen and deepen the network of public health services to allow meaningful universal health coverage (UHC). One must therefore look for alternative options toward achieving UHC. Insurance is one such tool as will be explained more fully below.

Insurance, by permitting households to shift risks to more competent risk carriers, allows them to adopt more productive use of their resources and time. Conceptually however 'insurance' contracts whereby premium collected from many is used up to pay for the cost of treating the afflicted few, are poorly understood generally, and more so, among the ill-informed.

Micro health insurance (MHI) is merely health insurance designed for the poor, where the risks need not be small vis-à-vis those facing the better-off. However, the poor typically access rural/district level services, and would thus generally incur significantly lower costs than those prevalent in major urban facilities.

The dichotomy between microcredit and microinsurance is curious. Microcredit has flourished partly on account of the usurious rates charged by the moneylenders. But growth of insurance has not taken off despite that the implicit risk premium associated with informal or self-insurance can be even more exorbitant (indeed, infinite).

Apart from the awareness issue, the low demand for MHI emanates from the fact that there is a paucity of products that can meaningfully address the shocks

1. Reportedly 100 million of world population fall into poverty annually due to health emergency (WHO 2010).
2. However the annualization of health expenditure is uninformative; when the shock arises, costs have to be incurred immediately; the poor do not have the luxury to smooth these expenditures over the 12-month horizon.

faced by the poor and are at the same time affordable. However, well designed insurance products that secure efficient risk-pooling are widely believed to be capable of delivering the needed care at a moderate cost, the actual allocation of such costs among the stakeholders may however be a separate topic of discussion. Scaling up successful models may therefore be a path to UHC in the intermediate term.

While it appears straightforward that larger the size of the 'risk pool' the lower would be the unit cost of insurance coverage. However, at the same time, a large pool would require access to appropriate technology to manage the information flow. Moreover the probability of various insured events need not dictate an excessively large group in order to reach the cost-efficient scale in each case. In health context, since the actual size of the efficient pool would be subject to the terms of the policy coverage and the incidence of illnesses in a given location, it can only be established with adequate information and upon experimentation. But it is common sense that such a pool is going to be 'large' and may also require geographic diversity in coverage. Practitioners engaged in field experimentation often suggest 20,000 households as the minimum size for effective pooling of health shocks. For life and livestock coverage, the desirable figure is likely to be much higher.

This paper analyzes how the microinsurance delivery mechanism as well as the regulatory regime may be designed so that it becomes feasible for an insurer and/or an implementing agency to offer insurance coverage at low costs. Without the cost advantage, it would be hard to obtain a sustainable and scalable microinsurance market in a developmental context. While in much of the discussion we refer to health, most of the analysis would also apply to other types of insurance (e.g., life, crop/weather or property).

With the foregoing serving as the introduction, the rest of the paper proceeds as follows. In the next section, we examine the choice of the delivery channel and explore the factors that render it compatible with an efficient insurance market. In the following section, we propose a set of regulatory directives appropriate for the emergence of a viable MHI market in Bangladesh. This discussion is conducted in light of the recent experience in contemporary developing societies (e.g., India and the Philippines) where regulation has been a major catalyst in bringing about innovations with health insurance products. The role of the public sector in terms of actual marketing of insurance, provision of medical services and in providing a facilitating environment for the orderly growth of the industry are put forward in the concluding section. Related policy recommendations are also included there.

CHALLENGES IN THE DELIVERY MODALITY OF MHI

The principal institutional arrangements for delivering microinsurance include (a) the partner-agent model (partnerships between an insurer and distribution agents), (b) the community-based model whereby the risk-carrier is the network of savings and credit cooperatives, (c) the full-service model, where the insurer and the implementation agency is one and the same, but may rely on external service providers for specific components, and (d) the provider model, where the service provider is also the risk carrier. We explore below how each of these maybe best taken advantage of in specific developmental contexts with a special focus on Bangladesh[3].

The partner-agent model

Under this model two parties come to a 'partner-agent' agreement of a fiduciary nature primarily to achieve a superior allocation of risk in the conduct of business that they jointly intend to carry out. Here the 'partner' (or the 'principal') is typically the risk carrier (insurance company) that underwrites the risk and, often in collaboration with the agent, designs and innovates upon the product[4]. The 'agent' in most cases is a microfinance institution (MFI), a non-governmental organization (NGO) or a self-help group (SHG), which facilitates the relationship between the insurer and the third party, namely microinsurance clients (policy holders)[5]. Often the product (at least in its rough form)

3. While in a much abbreviated form, the material described in this section relies heavily on Ahsan and Mahmud (2011).
4. Strictly speaking, the 'partner' or 'principal' is the party who has the claim to residual profit/loss, while the agent works for a pre-assigned fee (e.g., a share of the premium or fees paid by the insured). Thus, if an insurer engages an MFI to sell its products for a fee, the latter is the 'agent'. However, if the MFI in question designs a product and engages a risk-carrier for a fixed fee, the former is the principal or ('partner') and the insurer is the agent.
5. From here on these entities are denoted MFIs since at a minimum they are all in the microinsurance arena, where the term 'microfinance' is understood to be be broader than just credit.

is developed by the agent, which is fine-tuned in terms of actuarial calculations, by or in collaboration with the insurer. Clearly, for the partnership to be on an equal footing, the agent must also be able to speak the insurer's language, so to speak. The former would thus be at an advantage if they too have staff comfortable with actuarial calculus.

Typically the agent operates by dealing with sales and the servicing of the product in line with the terms and conditions stipulated in the agreement drawn up with its partner (the insurer). Thus, one of the agent's roles lies in representing its partner to the clients. The concept of the 'agent' in partnership with an insurer as discussed above is in line with the use of the term in the modern economic theory of contracts, where the primary driver of the mechanism is risk shifting from one party to the (more eligible) other. Though McCord (2006) said otherwise, this is materially different from the notion of traditional 'sales agents' employed by life insurers who typically move door-to-door marketing the latter's products for a pre-assigned commission or fee. This latter type of 'agents' serve under the direct supervision of staff that the parent company appoints, which is in effect an example of a company outsourcing some of its chores to freelance staff to achieve cost efficiency (e.g., as in the modern day 'call centre' idea).

The strength of this model is that the agents (i.e., MFIs) are usually able to exploit their existing relationship of trust with the poor already established in providing the credit or saving services thereby allowing the marketing of the insurance services a lot easier than otherwise (Pauly 2008). Indeed, unfamiliarity with insurance products and their modalities often stand in the way of membership growth, and the role of a trusted agent may be of material help. Depending on the circumstances, the MFI in question may offer its entire pool of members overcoming the scale issue, and if marketed on a compulsory basis, it also eliminates *adverse selection*, both of which are prerequisites for cost efficiency[6]. The distribution potential of the MFIs with the institutional capacity of an established insurer, who collaborates in designing and delivering the product, would thus create a 'win-win situation'. Unlike traditional insurance sales agents, MFIs having experience of past dealings with the members, would actually be in a better position to identify client needs, their willingness and capacity to pay for services, and thus be able to devise prototype insurance products, and approach the insurer for further refinement (McCord 2006).

The partner-agent model is often claimed to be the simplest, cheapest and quickest way for an MFI to start offering insurance products to its clients outside traditional credit and savings products. For example, SEWA and ASA in India, who are in partnerships with national public insurance companies and private insurers such as Bajaj Allianz, provided integrated insurance schemes covering broad ranges of risks such as sickness, death, widowhood, maternity, and losses due to flood, fire, and riots to its clients[7]. In the Indian market, since all insurers are required by law to be in the micro business, MFIs have an advantage in its negotiations with the insurer over premium rates, and often the insurer is let go by the MFI due to a lack of accommodation. Similarly in Ghana, even without the regulatory help as in India, CARE used a bidding process that proved to be effective for an MFI to get the product that it wanted under the most favourable terms (McCord 2006).

However, as the insurer underwrites risk, the agent also stands to lose the trust of its clients should the product fail. Thus, it is in the interest of both parties in the partner-agent model to keep the cost of the insurance attractive enough for the poor so that they can enter and remain in the market while also addressing the insurers' concern of the low returns of microinsurance (McCord 2006). Insurers, in principle gain access to hundreds of thousands of low income policy holders usually through a single group policy. The low income policy holders would in turn stand to benefit from affordable and professionally managed insurance products, which they are otherwise unlikely to have. Moreover, being clients of an MFI, policy holders do not have to unduly worry about disputes with insurers in dealing with policy coverage.

Among other advantages, the partner-agent set up has also the potential of developing a client friendly claim settlement process. Many MFIs often advance the claim

6. *Adverse selection* describes the tendency of the risk-prone to seek insurance cover with greater enthusiasm than the rest of the population, especially if the product is subsidized.

7. Many other MFIs have met the insurance needs of their clients by partnering with a variety of insurers. For example, *Grama Vidiyal*, an MFI in Tamil Nadu, provides life insurance through Bajaj Allianz and AMP Sanmar (UNDP 2006). BASIX in India began by working with ICICI Prudential and currently works with AVIVA Life Insurance Company.

even when the insurer is yet to settle it pending receipt of documents such as the death certificate. Competent field staff can assess the veracity of the event as they are in regular contact with the insured and members of the community. Similarly this institutional arrangement also comes in handy in implementing health insurance that allows hospitalization in third party facilities (i.e., a service provider). Here field staff can direct the insured to appropriate facilities and mediate in dealings with the service provider, all of which can improve client satisfaction with the product.

In the partner-agent model, while MFIs sponsoring the product benefit from risk shifting, especially the smaller units, which are more numerous vis-à-vis the handful of large entities, are likely to be handicapped by their limited command over the insurance contract, pricing, etc. due to lack of qualified personnel[8]. It would also be costly for them to train staff and make them conversant with the insurance issues that would be necessary to provide clients with effective after sale service. Shortage of skilled personnel would also hamper liaising with the service providers in ensuring that the agreed-upon treatment protocol be made available, in processing transactions and in building insurance awareness among the poor. There are several avenues of dealing with such a situation, one of which is to propose a variant of the partner-agent model whereby an MFI-owned brokerage is added to the chain such that the broker would acquire the necessary insurance expertise (and be licensed if appropriate) in order to assist MFIs to negotiate the best deals with commercial insurers. In the Bangladesh context PKSF/InM/CDF, severally or jointly, may serve such a role, which may however require regulatory approval[9]. Another awkwardness of the partner-agent model is the potential conflict between their core business (typically, credit) and microinsurance. The former is a revenue earner while the latter is unlikely to be profitable. The pressure to achieve break even status may lead them to neglect the insurance portfolio.

Overall, the net advantage of the partner model in the Bangladesh context would be the existence of many large and successful MFIs who are well trusted by their members. They would also have the capacity to allocate staff to be trained up in insurance modalities. Success of this mode of delivering insurance services would depend on the capacity of the organization to seamlessly deal both with the insurer as well as service providers, namely the network of local hospitals and clinics.

The community-based organization (CBO) model

In many contexts a cooperative entity is legally constituted as a 'cooperative' or 'a mutual society', the latter often being preferred due to its advantage vis-à-vis cooperatives in terms of the formal regulatory stance. The organizational nature of cooperatives has several variants; (i) stand alone variety, which are usually large mutual insurance companies and which are not part of any network of mutual institutions (e.g., CARD in the Philippines); (ii) mutual insurance company that can be the insurance arm of a network of financial cooperatives (e.g., savings and credit cooperatives, 'SACCO') providing service to members of the network (MUSCCO in Malawi and ServiPeru in Peru); (iii) network of mutual insurance associations that creates its own hierarchy, such as Union Technique de la Mutualité Maliennne (UTM). In the cooperative network model, i.e., SACCOs, insurance is an add-on to the portfolio of services, for which the network engages a risk carrier, which creates and underwrites the insurance products, while the cooperatives serve as the distribution network as well as the market (Fischer and Qureshi 2006).

Strictly speaking, it is the third type of cooperative organizations, namely a network of mutual insurers, where insurance is the core service, which is ordinarily referred to as the community based organization (CBO) approach, though in common parlance, any cooperative framework is often cited as CBOs. In the discussion below, we follow the more heuristic approach and refer to all types mutual/cooperative insurance arrangements as CBOs. In common with the partner-agent model, the CBO framework allows the network of cooperatives to jointly develop and distribute their own insurance products to the members in a cost effective manner without the intermediation of outsourced sales staff. In both set-ups, community involvement and peermonitoring reduces information,

8. About 75% of MFIs in Bangladesh are categorized as 'very small', namely with membership below 20,000 (IFC 2009).
9. The Philippines Insurance Commission (PIC 2010) provides for several categories of licensed agents or brokers to facilitate the distribution of microinsurance products.

enforcement & transaction costs, the risk of adverse selection and *moral hazard*[10]. Studies have shown that community participation achieves better targeting outcomes and reduces the administrative costs of handling financial transactions (e.g., premium collection and claim settlement). Given that members are actively involved in management and decision making, they can directly influence the scope of coverage and the size of contributions. As they are also better informed about the needs of the insured, the members can design the product accordingly. Here the interests of individual members are aligned with those of the group, as members share the benefit from profit as well as the loss. Thus, the model potentially strengthens social cohesion in the group. The higher the extent of social cohesion the greater the potential for reducing costs associated with fraud, adverse selection and moral hazard.

The critical difference between the CBO and the partner-agent models lies in the risk-sharing aspect. In the latter context, by engaging a registered commercial insurer, the NGO/MFI in question gets to divest itself of all risks. CBOs, by contrast, pool, manage and absorb the risk themselves, though frequently by forming an insurance company. Here the risk-carrier is created for the express purpose of delivering insurance services to network members, and where the former is owned and controlled by the CBO and member policy-holders. Hence the risk is borne by the insured, who themselves are the owners of the scheme[11]. The policy holders manage the insurance programme and negotiate with external service providers (e.g., hospital chains as in health insurance) as relevant.

Other presumed advantages of the CBO structure include the non-profit mode of operation, thereby leading to low premium cost. Of course, for the latter to be feasible it is essential to reach a risk pool of efficient size. A cursory look at the well known CBOs indicates that most networks have less than 100,000 members (exceptions being CARD of Philippines and Yeshasvini Trust of India, which are in the million-plus categories). Well-known partner-agent examples (e.g., SKS or BASIX in India) boast of million-plus membership pools[12]. The larger size allows the latter to bargain effectively over the terms of contract with external service providers (suppliers) as for example required for health insurance.

In terms of ground reality however, community-based organisations often lack managerial resources as well as reserve funds due to their geographic location and the level of attendant social and economic advancement. Community characteristics (e.g., in terms of ethnicity, gender, kinship, geographical boundary, social networks or wealth) may have an impact on the level of inclusion in the insurance scheme. These factors may well limit the number of policy holders and compromise risk pooling. Absent access to reinsurance, insurance affiliates of smaller CBOs would generally fail to cover covariate or sporadic risks due to inadequate reserves (Maleika and Kuriakose 2008). However, if the insurer is publicly listed as some larger ones are (e.g., ALMAO and Columna), it may have access to shareholder capital thus alleviating the concern to an extent (Fischer and Qureshi 2006). Radermacher and Dror (2006) also note that typical CBOs would encounter challenges in acquiring specialist knowledge necessary to design, implement and run a successful insurance programme.

In the Bangladesh context, there is a scope for smaller NGOs to form a mutual pool; however, the lack of expertise in insurance matters would suggest that such an entity could effectively run an insurance program only if aided by a third party such as noted above[13].

On balance, we note that in principle the community based model of microinsurance has the advantage of being entirely non-profit, where members exert direct influence in the design of the coverage, costs and implementation. But such benefits may only be fully exploited by a few of the larger entities.

10. *Moral hazard* is distinct from fraud; it is the inclination to change behaviour after insurance protection is bought (e.g., to take less precaution against theft after having purchased such coverage).
11. Often the risk bearing department of the cooperative network is transformed into a full-fledged mutual insurer (e.g., witness the case of ALMAO and Sanasa societies of Sri Lanka).
12. Fischer and Qureshi (2006) summarize the data for 10 major cooperative network models (Table 36, p337), where the median figure for the membership strength is seen to be 56,000.
13. MIME life insurance program, run under the auspices of INAFI, is an example of a mutual arrangement. However it is yet to establish itself as a viable entity (Ahsan et al. 2011).

The full service model

In this model, basically non-commercial but registered organizations operate their own insurance scheme. The organization fully absorbs the risk, profit and loss. The insurer here is in full control but would typically engage a provider (another NGO) to provide the service for example in health care. The provider here has no claim on any residual profit or loss. The insurer is responsible for all aspects of product development, sales, servicing and claims assessment. The insurers are responsible for all insurance-related costs and losses and they retain all profits. The insurer provides the full range of insurance services-product development, product distribution, risk absorption- thereby reducing processing time and allowing strong controls over the system. Full service models require substantial investment in human and financial resources and acquisition of actuarial expertise before becoming operational, which limits its popularity in most developing countries.

Alternatively, if commercial insurers plan to enter the field of microinsurance in the full service mode, the bottleneck arises in liaising with the potential insured who are in 'remote' locations, and to whom these urban entities are unknown and generally not trustable. Selling of insurance and provision of follow-up services (e.g., verification and settlement of claims, and extending help in assisting clients registered for health insurance in accessing the service) become extremely difficult and cost ineffective. For example, DELTA life, a full service operator in Bangladesh, spends about 3 to 4% of the sum assured (endowment policies) as administrative expenses, while the similar cost for SKS of India (in partner-agent set up with Bajaj-Allianz) is below 1% between the insurer and the agent for a retail endowment product that has 2.7 million subscribers (Ahsan and Hakim 2010).

For the reasons cited above, it is hard to find successful examples of the full service model. Historically speaking, the Self-Employed Women's Association (SEWA) and SPANDANA, both of India, started to offer insurance along the principles of the full service model. SEWA while starting off as a woman employees' union in 1972, has been more ambitious, offering a broad range of insurance coverage (life, disability, health, and property) initially all provided under a full service model. However, following IRDA stipulations of 2005, SEWA's *solo* initiatives have given way to partnerships with various insurers (e.g., ICICI Lombard in weather insurance, LIC in life, Aviva and Bajaj-Allianz for other non-life coverage).

The Provider model

Under the provider model, the insurer and the service provider are one and the same entity (e.g., hospitals or doctors offering policies to individuals or groups). Most microinsurance programmes in Bangladesh are examples of the provider model run either by commercial insurers (typically in the case of life or livestock) or by MFIs (loan/life and health). The products offered by the latter are usually coupled with credit, for example, typically to insure against default risk. Here the risks faced by an insurer are the same as in the full service model. While similar to the full service model, the insurer is responsible for all aspects of designing and delivering the service, but the responsibility of actual provision of service becomes a new element. Thus, for urban commercial insurers, provision of micro-insurance in this mode is even more difficult than in the full service format. Because, it has not only to sell insurance, it also needs to operate as a service provider, which is rather extensive in non-life coverage. For life products, there is little distinction between the two institutional structures.

But a more fundamental design incongruity of the provider model is that (say in the case of health insurance) the health care provider is involved in developing the business model and the financial plan. For health coverage, the care provider's control over the benefit package makes it clearly distinct from an insurance company employing a service provider or setting up its own health care facility (Radermacher and Dror 2006). The provider is handicapped by the incentive to under-provide or compromise on the quality of care. Unifying the roles of provider and purchaser of services would thus be seen as creating a potential conflict of interest. This feature allows the provider-driven scheme to restrict the client's choice to the provider's facility or designated health professionals as we saw in the case of those offering MHI in Bangladesh.

Just as in the full service model, the single largest shortcoming of a non-insurer provider is the scarcity of competent professionals to determine the actuarial basis of the plans. Moreover for such providers, the lack of access to re-insurance significantly compromises the prospect of long term sustainability of the insurance mechanism in a competitive environment.

How to choose among delivery modes?

Since no single delivery model of micro-insurance appears free from disadvantages, which implies that there is scope for one model to incorporate the

advantageous features of another. For example the partner-agent model can be strengthened by incorporating some features of the community-based model such as involving the target group in designing the benefit package. Similarly the community-based model, if the risk pool is large enough (e.g., as in the SEWA network), can always engage high quality professionals conversant in insurance knowledge with regards to the issues of technical and operational sustainability.

On cost efficiency, given that different delivery modes have different cost implications, unless these costs are minimized, an optimal choice that matches the best possible benefits and most affordable premium to poor households cannot be achieved. Moreover, since not all micro insurers typically market the same product, the product type needs to be distinguished and the issues of 'after-sales service' ought to be considered. Ahsan and Mahmud (2011) have proposed five principal criteria for choosing among delivery models in terms of their potential, which focus on the twin goals of the adequacy of the service and premium affordability. These are 'awareness building', 'building trust', 'cost efficiency', 'satisfactory and timely settlement of claims' and 'subscriber inclusivity'.

Among major microinsurance products, health insurance is most difficult to implement as it requires considerable managerial as well as actuarial capacity. The (health) insurers need to have a sound understanding of risk management techniques and the solutions to the problem of adverse selection. Accurate verification of the incidence of illness turns out to be difficult and rather subjective. Moreover, for effective implementation of any health insurance programme, it is necessary to secure access to locally existing infrastructure of health service providers, where policy holders can obtain immediate service. Only events that cannot be handled locally need to be treated in referral facilities. These elements imply that the provider mode of offering MHI would be generally untenable since the capacity to carry risk need not imply an equal advantage in implementing and servicing the products. In the Bangladesh context, it can arguably be stated that both BRAC and Grameen are facing real challenges in keeping up the subsidized MHI programmes (à la provider set up) they launched some years ago[14].

Although the partner-agent and/or the CBO model are advocated on grounds of operational efficiency, there are several areas of concern that need to be addressed before going to policy holders. In particular, the role of each party (insurer and agent or, between the insurer and service provider, as appropriate) should be clearly understood and spelled out on the basis of the comparative advantages each has in performing various chores. MFI agents, in partnership with commercial insurers, need to perform a dual role by ensuring their own institutional requirements in terms of distribution, cost recovery, capacity requirements as well as representing the client and their needs. Studies have shown that MFI clients often have little understanding of the insurance products they have purchased non-voluntarily (Churchill 2006). This accounts for the failure of MFI staff to promote products and provide adequate information. Due to such lack of commitment and/or orientation on the part of delivery agents, policy holders will only find themselves discontinuing subscription for voluntary products and, for non-voluntary products, would tend to perceive insurance to be an additional cost of borrowing. This situation maybe largely corrected by engaging trained and dedicated staff to serve the insurance portfolio. If MFIs become too focused on their loan portfolios to maximize their earnings, neither the provider model nor other types of delivery channels would be able to provide meaningful insurance products that maximize value to the policy holder.

Moral hazard and fraud are more likely in health and livestock coverage than in life. In most cases, low-cost means of reaching a large client pool would be difficult without the full participation of MFIs, i.e., a partner-agent or a 'mutual' type of structure. Hence Bangladesh would appear to be suitably poised to experimenting with these two schemes. A general comparison of different delivery channels in terms of the key indicators cited above is shown in Table 1.

14. Both Gonoshasthaya Kendra (GsK) and Sajida Foundation have advantages in this regard since they run full-fledged hospitals of their own. The tension between cost containment and offering quality care still exists. However in their environment, (especially Sajida), the insured still bear a majority share of all treatment costs, and thus the conflict issue is not as obvious as it would otherwise be. See chapter 5 for further analysis of MFI-run MHI programmes.

Table 1. Choosing among delivery channels*

	Partner-Agent	CBO	Full service	Provider
(a) Awareness	A: Campaign led by local staff belonging to the community	A: Campaign led by local staff belonging to the community	A:	A:
	D: Prior and specialized training is a pre-requisite	D: Prior and specialized training is a pre-requisite	D: Generally, lack of eligible local staff except where the insurer is a CBO/NGO-MFI	D: Generally, lack of eligible local staff except where the insurer is a CBO/NGO-MFI
(b) Trust Building	A: Clients are already in a trust relationship with the agent as micro lender	A: Clients are already in a trust relationship with the CBO affiliates as micro lender	A: Trust relationship exists only if the insurer is a CBO/NGO-MFI affiliate	A: Trust relationship exists only if the insurer is a CBO/NGO-MFI affiliate
	D:	D:	D:	D: Conflict of interest since insurer is the buyer of service
(c) Lowering Transaction Costs	A: Possible to have least cost by using trained and dedicated staff	A: Possible to have least cost by using trained and dedicated staff	A: Least cost only if the insurer is a CBO/NGO-MFI affiliate	A:
	D:	D:	D:	D: Conflict between cost control & service adequacy
(d) Claim Settlement	A: Friendly & timely if local staff is in charge	A: Friendly & timely if local staff is in charge	A:	A:
	D:	D:	D: Slow & stressful if the insurer is not a CBO/NGO-MFI affiliate	D: Slow & stressful if the insurer is not a CBO/NGO-MFI affiliate
(e) Risk Pool and Inclusivity	A: Facilitates reaching a large pool	A:	A: May reach a large pool only if the insurer is a CBO/NGO-MFI affiliate	A: May reach a large pool only if the insurer is a CBO/NGO-MFI affiliate
	D:	D: A large pool may be reaching only by large CBOs	D:	D:

*By 'A' we denote a major 'advantage', while 'D' denotes a major 'drawback' (adapted from Ahsan and Mahmud 2011).

FILLING THE REGULATORY VACUUM

It may be perceived that in an emerging context as in Bangladesh, MHI is in its infancy, and therefore, one can wait before dwelling on the regulatory issues. However such a view may be shortsighted for the reason that regulation itself may be a force that catapults microinsurance into a mainstream activity of both NGO-MFIs and commercial insurers as for example has already occurred in India[15].

Insurance contracts entail a relationship between a *fiduciary* (or *trustee*) and a *principal* (or *beneficiary*) that is primarily of trust and legal nature. These two features are common to all legal financial transactions. Therefore, regulation is important for consumer protection since the product (a promise of certain benefits due upon the occurrence of certain events) is a contingent one. Accordingly, most stakeholders strongly believe that the emerging microinsurance

15. Besides, the Government of Bangladesh is actively seeking to draft a full-fledged regulatory regime and has employed consultants to help design the same (see below).

market needs a comprehensive but compliance-friendly legal regulatory framework. Such views notwithstanding, to date the regulation of micro-insurance has largely been rudimentary in many contexts including Bangladesh. The recent Insurance Development and Control Authority (IDCA) Act of March 2010, which replaces the earlier Insurance Act of 1938 (amended in 1973 and in 1984), promises to develop an autonomous entity. While the draft statutes of the IDCA does not employ the term 'microinsurance' even once, it nevertheless mandates all insurers to offer 'life' or 'non-life' products (though not together) to the 'rural and social sectors'.

Turning to MFIs, the Government of Bangladesh (GoB) enacted the "Microcredit Regulatory Authority Act, 2006" on August 27, 2006. Under the act, the Microcredit Regulatory Authority (MRA) has been established. The MRA Act recognizes insurance services of MFIs as a discretionary component of their activities beyond core activities such as micro lending and collecting member deposits. Each licensed MFI, therefore, has the authority to "offer different types of insurance services … for the loan recipients and members of their families" (MRA 2006, article 24). One of the early challenges, therefore, would be the coordination of insurance services of commercial insurers and NGO-MFIs. Having reviewed a number of areas where there are significant regulatory challenges, we suggest how these can be overcome[16].

The regulatory challenges identified below presume that suitable insurance products are available for piloting, experimentation and eventual roll-out that meet the adequacy test. In other words, such products are capable of preventing vulnerability to poverty in the event of the occurrence of the insured-against events. The proposed regulatory statutes, though not exhaustive, highlight the key goals of cost efficiency, financial viability and inclusivity. They are also aimed at fostering innovations in product design and delivery. These ought to be implemented in stages depending on the maturity of the industry and the evolving capacity of the regulator(s).

How many regulators?

While India has chosen to regulate micro-insurance under a common rubric, this is unlikely to emerge as the common practice. In other words, in most contexts it will be necessary to address how to coordinate the regulatory directives applicable to microinsurance activities of commercial insurers vis-à-vis those operated by CBOs and NGO-MFIs. In such a context, while a variety of institutions may provide microinsurance services, the regulatory/licensing guidelines, if they exist at all, may be uneven, or may only relate to one segment of the market. In the absence of a coordination process, the provision of service by a heterogeneous class of insurers may ultimately undermine the protection of the policy holder and thwart market development. How can regulations relevant to activities of different types of organizations be coordinated?

At another level, regulation of the industry may appear difficult because the orientation of commercial insurers (profit-driven) and CBOs/NGOs/MFIs, who operate under a variety of social objectives, differ markedly. Given that both IDRA and MRA operate under the Ministry of Finance (MoF), a common set of guidelines may apply to all microinsurance products, where the coordination process may also be formalized. The MRA stance would, however, have to change if IDRA successfully gains the sole authority to regulate microinsurance services. A similar initiative is underway in South Africa to create a dedicated regulatory framework for microinsurance.

Regulation and delivery

While in 2005 Insurance Regulatory and Development Authority (IRDA), the Indian regulator, had imposed the 'partner-agent' model as the sole means of distributing insurance services to the poor and at the same time mandated all insurers to serve this market within an enforceable time bound modality, this was seen by many as heavy handed. It had been feared that short circuiting experimentation with the delivery mechanism, which had been underway for many years at the behest of major CBOs and MFIs, would harm the industry. Five years on, while many still find some of the

16. Parts of the material described in this section draw upon more detailed analysis by Ahsan and Mahmud (2011) and Ahsan, Barua and Tax (2010), which have however been updated in light of relevant developments.

regulatory statutes out of date or irrelevant, IRDA has dealt with the ground realities prudently and with consideration. Not only have many experiments been allowed to continue; the regulatory stance has led to a proliferation of products offered by nearly all registered insurers in partnership with MFIs/SHGs/CBOs. Moreover, nearly all insurers presently happen to be organized as joint ventures between the Indian parents and major multinationals. The entry of the latter may have been hastened by the demand for skill necessary to develop specialized products directed at the poor.

The primary lesson one can learn is perhaps that regulation ought to keep up competition at all levels, among delivery channels, among those who are eligible to distribute the products, and the mix of products an insurer may want to offer. In this regard, the Philippines Insurance Commission (PIC) directives of 2010 are a case in point. It allows insurance to be sold by all licensees, namely commercial insurers, cooperative insurance societies, or Mutual Benefit Associations (MBA). While MFIs are authorized to serve as licensed agents, nothing stops the larger entities from launching a separate insurance company fashioned as MBAs or CBOs if they so choose.

Definition

It is critical to have a working definition of microinsurance as it is distinct from the standard insurance. It is, therefore, *proposed that the regulator determine if a product developed by a potential insurer would be eligible; and only the eligible products may be marketed by a licensed microinsurer*. The discussion in the literature points to the following key elements as characterizing the idea. 'Microinsurance' products are (a) targeted at low-net worth households, (b) designed to reflect pooling of risk faced by the insured, and (c) priced in keeping with the willingness to pay criterion as well as being proportional to the likelihood and costs of the risks involved (Churchill 2006), (d) that all phases of the products be developed in close collaboration with the communities they are supposed to benefit (MIA 2006), and (e) the products must be of substantive value to the poor in terms addressing the issue of vulnerability to poverty (see Ahsan 2009). In essence, therefore, *microinsurance services are those risk-shifting devices offered by insurers that are especially suited to the needs of low-income households and are affordable*.

Quantification and standardization

The conceptual definition cited above may not suffice for regulatory purposes if the goal is to encourage the development of a set of 'standard' products, which typically promotes competition. Given standardization, potential beneficiaries may easily compare products available in the market, while at the same time, allowing insurers to operate the entire range or specialize to a subset of products depending on their expertise and circumstances. Law of one price is the ultimate test of efficiency! Even in the dynamic Indian market (growing at about 10% annually) there appears extreme product diversification, which are similar but distinct. These are telltale signs of insurers fighting for market share in the absence of true competition.

To allow innovations, it would be useful to offer a flexible structure by twinning the size of the indemnity to parameters of income distribution such as the average annual income, poverty line or the size of average annual microcredit. Thus, for example, *for credit/life (term, endowment, etc.) type policies, the benchmark products may offer indemnity in a range of 1.5 to 5 times the average size of the annual microcredit loan, which as of Feb 2011 stood at about BDT 15,000*[17]. A similar figure may be assigned to health coverage per family as well[18]. Setting the limits in this manner does in no way imply that the insured necessarily be a member of a credit group. Coverage below the threshold cited here can be presumed to offer little value to the average poor/low-income person since it would be inadequate to offer her a chance to overcome the vulnerability due to the loss. It would seem that a good portion of 'microinsurance' policies currently marketed by commercial insurers in developing countries are below the threshold of the quantitative guide proposed above, which will cease to be so defined if such a regulation is passed.

17. This figure corresponds to the average amount of loans disbursed by PKSF partner organizations (PO), which is expected to be close to the industry average.

18. By contrast the IRDA definition is far more stringent. It specifies absolute figures typically in a range between 10 and 50 thousand Indian rupees (with additional specifications as to family size, individual vs. family coverage for health insurance etc) requiring revisions over time. The Philippines definition pegs it to (500 times) the daily minimum wage in metro Manila (PIC 2010).

Simplicity of products

The regulatory directives ought to require that each microinsurance product be described, as well as the contract be written, in plain language where all benefits and documentary requirements for the time-bound claim settlement process are clearly stated. Frequency of premium due must be flexible enough to match irregular earnings of the insured.

Life vs. non-life products

The historical demarcation as to carriers of life and non-life risk has largely disappeared in most developed financial systems. The IRDA statutes permit marketing of each other's products, but the carriers are required to remain distinct. The Indian scheme allows a life microinsurer to act as an intermediary for a general microinsurance company (and vice-versa) rather than as a risk carrier. Thus in the end, competition is curtailed and the poor may suffer as a consequence. Perpetuation of this dichotomy, also embodied in the IDCA guidelines in Bangladesh, makes little sense in microinsurance, since that may well be one way of pooling risk across product lines. Hence it may allow an insurer, if socially deemed fair, to cross-subsidize some services by others (e.g., health by life). If an insurer were to specialize in one category, nothing prevents it from doing so. Indeed, Philippines Insurance Commission (PIC) has approved the bundling of micro products so long as each component of the bundle is underwritten separately (possibly by the same insurer).

Inclusivity

Some countries have targeted inclusivity and sought to expand the reach of microinsurance by requiring all insurers to serve the low-income market (as is the case in India). The IRDA requirements are that all insurers will have to attain a certain share of premium income from policies catered to 'rural areas' and 'unorganized workers, economically vulnerable or backward classes in urban and rural areas', and failure to achieve the targets may lead to financial penalties or even cancellation of the license. Such a heavy-handed approach need not be productive at all times. For large, nationwide firms, this policy may be practical, but certainly not for the smaller entities. Even for larger ones, some may specialize in some niche market, and dilution of their business strategy may harm efficiency and sustainability. The draft Bangladesh IDCA guidelines appear to mandate each insurer to offer 'life' or 'non-life' products in the 'rural and social sectors' (article 6). In view of no further elaboration, however, it is unclear if this is a deliberate requirement of each, though the language reads so.

Bester *et al.* (2008) suggest that in the South African context marketing innovations have played an important role in promoting inclusivity. These include the use of cell phone as communication and sales tool and collaboration with retailer chains or sports clubs as distribution channels. Design features such as choosing the policy contracts using a "tick-of-the-box" approach have led to low transaction costs and the ability to reach a large pool of clients. It would be interesting to experiment how similar innovations may be adapted in other contexts.

Separation of credit and insurance activities

The credit and insurance services ought to be separated for financial transparency, though in case of credit risk coverage, this is difficult. If MFIs merely design and market insurance products where the risk is shifted onto commercial insurers (as in a partner-agent set up), the question of separation does not arise. However, if MFIs are authorized to carry insurance risks, it is *proposed that they separate microinsurance operations from all other activities, and possibly receive a separate license from the appropriate regulator to run microinsurance.* This separation of credit and insurance is also justified since the separate activities of an MFI would in principle face different regulatory directives, especially when it comes to prudential matters. Such a step will, therefore, go a long way in evaluating the financial situation of each activity of the same organization, and all arms' length transactions will be put on a transparent perspective.

However, there may well be the need for a *credit linkage in an insurance model.* For example, a health line if credit on easier terms, even if utilized to pay the co-insurance and deductible may go a long way in boosting demand for coverage. This may not be appropriate for the ultra poor, but those a little higher up the ladder may find this modality helpful since this would allow broadening the range of services offered under insurance (e.g., day surgeries in an otherwise 'in-patient' programme).

Reserves

In commercial insurance, reserves, typically an actuarially determined fraction of net premiums, are kept in a more or less liquid form to meet contingency payments. However, insurers often neglect the important task of determining the size of adequate reserves against the temporal pattern of policy liabilities (Uddin 2009). This is an area that the regulator may address forcefully without necessarily requiring full-fledged compliance with the prudential guidelines that maybe made mandatory at some stage. Pauly argues that "regulations that assure adequate reserves … and protection of customers from arbitrary denial of benefits or rate increases are all important" (2008, p.1018). It is, therefore, important that experienced actuaries be engaged to project the future liabilities of microinsurers. Attention maybe drawn to the Centre for Agricultural Research and Development (CARD) in Philippines, an MFI, which had started offering a pension plan in 1996 without any actuarial advice, but had to stop (in 1999) due to fast erosion of the fund. It has since then formed a separate entity, a mutual benefit association (MBA), known as CARD MBA, which has been successfully offering actuarially sound microinsurance products, which has recently reached a millionplus client pool.

Capital adequacy and prudential guidelines

Determination of the required level of capital for microinsurers, which in principle reflects the shareholder equity (for publicly traded entities) or retained earnings (for mutual insurance companies), is far from an exact science. The primary accepted norm is that capital adequacy be linked to the riskiness of an insurer's business. Dwelling on the notion of *risk-based capital* (RBC), capital needed to offset the 'insurance risk' alone is often referred to as the *solvency margin*, which is not adequate for the overall risk scenario, but captures an important component[19]. The insurance regulator ought to deliberate both the appropriate standards, which may well deviate from the current Basel RBC guidelines for the banking sector, as well as what stage and to what extent such risk stipulations should apply to microinsurers.

In setting the capital requirement, it is relevant to recognize that the funding sources are different between commercial insurers and NGO-MFIs since the latter do not have access to equity capital. Thus, meeting the capital goals would be easy if smaller MFIs were to partner with national level MFIs or with commercial insurers for insurance services. The capital issue further reinforces our earlier remark that MFIs separate their credit and insurance services. Hence, the regulatory directives ought to consider that *the scale necessary to successfully operate credit and insurance services need not be the same, and microinsurers may well face a higher capital requirement than if they restricted themselves to only credit and saving activities.*

Design, accumulation and investment of the reserve fund

Guidelines would be necessary so that the regulator can examine the rationale of the premium rate, the adequacy of the evolving reserve fund, and sustainability of the programme. Regulatory directive would also be necessary to determine the investment of reserve funds and rules regarding excess funds and disposal thereof. Investment of the funds should be guided by the need to match the time profile of investment returns with that of the stream of anticipated claims, an issue that is much more serious for life-based (e.g., term or endowment) policies than annual health or livestock insurance. The risk characteristics of the investment portfolio are another important dimension over which the regulator may provide guidance to the insurer. It is conceivable that if an MFI insurer has actuarially determined 'surplus' in its fund, a portion of which can be loaned out for its other (e.g., credit) services, but in such an event there ought to be an explicit understanding of the terms of the loan and the collateral[20]. Moreover, in most regulatory guidelines, it is generally forbidden for an insurer to build-up excess funds not called for by the underlying actuarial calculus.

19. Beyond the 'insurance risk', other important categories of risk include the (a) asset default risk, (b) asset-liability mismatch risk, (c) business risk, and (d) operational risk (Uddin 2009). The latter author also proposes the solvency margins as a first step toward adopting a more comprehensive RBC down the line.

20. In other words, the insurer (being a distinct business entity from the credit provider) would loan the funds in question to the lending arm of the company under explicit terms.

Policy delinquency

Microinsurance policies, like other insurance contracts, are often discontinued by the insured due to both voluntary and involuntary reasons. Regulatory directives would be essential to protect the rights of both the parties and ensure fairness. In the case of registered insurers, the Bangladesh provision is that if premiums are paid for at least two consecutive years the policy qualifies for a *surrender value* (Uddin 2009). The surrender value is less than the premium paid. If the 2-year cap is not met, the policy lapses with no cash value[21]. What would be an equitable benchmark in the case of microinsurance? On the presumption that successful programmes would be lowcost operations, one would be tempted to suggest that surrender value should accrue after 12 months of consecutive payment for micro products.

Audit and supervision

External audit has been made mandatory for each licensed MFI which is to be carried out by an eligible chartered accounting *firm* with experience in microfinance activities, and who must follow the Bangladesh Standard of Auditing (BSA) guidelines. However, if these entities also engage in carrying insurance risk, the nature and extent of audit would materially change and be comparable to that relevant for insurers. It is uncertain what would be the audit and supervision regime for the microinsurance industry under IDCA's mandate. It is also uncertain at what stage of its development they will acquire enough capacity to carry out these tasks in a professional manner.

Reinsurance

As many writers have stressed, microinsurance can only flourish when the risks carried by the domestic insurers (whether joint ventures or otherwise) are shifted further via reinsurance to global firms. To attract reputable reinsurers into this market, it would be essential that insurers be registered under the regulations in force. Here the regulator may facilitate the process by encouraging smaller MFIs to choose a delivery mechanism compatible with scale efficiency. However, the regulatory statutes in turn must also be viewed as appropriate as outlined here.

Educating the regulator

Many developing country regulators do not have skilled manpower who would fully understand how the low-income insurance market should function and what it may strive for. The burden on available resources may be too severe, jeopardizing the goals of regulation. Hence, a road map would be necessary to impart and endow the regulatory authority with the required human resources and training on an ongoing basis.

POLICY RECOMMENDATIONS AND CONCLUSIONS

To date public sector insurance companies have not gone into MHI in Bangladesh. In India, by contrast both public insurers and public sector health care providers have a major presence in the implementation of the state-sponsored Rashtriya Swasthya Bima Yojona (RSBY). However, given the poorly equipped public hospitals in the rural areas and the overcrowding of district hospitals, such an initiative would be difficult to implement in the short run in the Bangladesh context. In the interim therefore, public sector role in promoting MHI can be in the capacity of a facilitator and a provider of complementary services. Health education maybe included in the compulsory curriculum in schools, with health advisories disseminated on a regular basis via radio, web and cell phone.

The government may encourage employer-sponsored health insurance (especially company-wide coverage encompassing both white and blue colour employees) through the tax code for the business sector[22]. This would lead to experimentation at the level of service providers as well as insurers, and thus create a workforce appropriately trained for the sector.

Another important role of the public sector would be to move in a determined fashion to implement a suitable regulatory regime as outlined above. Regulation itself has the capacity to jump-start MHI activities and lead to orderly growth of the sector.

Given the limitations of existing MHI programmes operated by MFIs (see Chapter 5 of this volume), it is of

21. Uddin (2009) notes that while NGO-MFI-run microinsurance offers no evidence of the lapse ratio, those offered by registered insurers are suggestive of high ratio of lapses, discontinuities and low surrender values. Such a scenario is not poor-friendly to say the least.

22. In many companies, there already exist special packages for executive level employees, but rarely one that is inclusive of all employees.

utmost importance that newer and bolder initiatives be undertaken so that various parties may start multiple 'pilot' experiments that feature a variety of products (both health and non-health) as well as trying out a variety of delivery and distribution modalities. To date the experimentation has been only with the provider level, while the partner-agent or the mutual modes of delivery have remained unexplored. Here again an enabling regulatory regime would be an important advance.

Over and above the regulatory help, public sector efforts may also be directed at the creation of awareness as to the benefits of health insurance and its modalities by means of promoting consumer education through the media. The latter efforts would also encompass messages about the scope of regulation, and the rights of the insured in dealing with insurers as well as service providers.

Since insurance purchase is an act of trust, local intermediation by the trusted NGO-MFIs and similar agents may be seen as indispensable. The element of trust also contributes to raising awareness about insurance and its scope or limitations, and to help create demand for the service so that the poor believe that the premium is worth paying for. The available case study based evidence is consistent with the above claim.

Government may also explore an incentive mechanism whereby public sector hospitals, to the extent they have the capacity to take on additional patients, participate in private sector led health insurance activities in their capacity as service providers. This may be initially done selectively by targeting specific facilities under an agreed upon protocol in collaboration with specific partners.

Moreover, affordability relates to scale, careful product design and continuous innovation. These suggest that registered insurers are perhaps best suited as risk carriers, and products should be of a group nature with minimal options/riders and be mandatory to all members in a group. The latter feature, namely the group orientation, also points to the engagement of MFIs/ CBOs/ NGOs/ SHGs as distribution agents either on their own behalf (e.g., as in CBO/MBA set up) or for the dedicated risk carriers (e.g., as in the partner-agent mode).

Finally note that if a good fraction of the poor of Bangladesh is to be brought under some form of MHI intervention, we are necessarily talking about millions of households. This task would require the use of a vast network of rural/district hospitals, many of which are yet non-existent. To facilitate the emergence of such institutions even in the private domain, the country would require significant improvement of road communication, provision of electricity, gas, clean water, telecommunication and other means of communication. The above would require significant public investment, and hence a strong public commitment to undertaking the investment would be a good point of departure.

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Concluding Chapter : A Seven Point Agenda for Universal Health Coverage

Timothy G Evans

Introduction

On the 40th anniversary of its liberation, Bangladesh is celebrating 4 decades of independence and sustained development. The country, once thought incapable of surmounting the enormous barriers to its socio-economic development, has defied the skeptics and won the attention and the accolades of the world for its rapid progress and accomplishments. The health sector in many respects is the poster child of this success as seen in the evidence of rapid declines in infant, child and maternal mortality as well as impressive gains in access to essential services such as immunization.

These successes notwithstanding, when projecting forward, the next 40 years promise a new and perhaps even more daunting set of health and social development challenges. Beyond securing achievement of the health-related MDGs, Bangladesh faces a rapidly growing and diverse spectrum of complex health problems related to chronic disease, injuries, occupational and environmental threats including climate change. Responding to these will require much more favorable arrangements related to both the effective provision of health services and their equitable financing for the greater than 200 million Bangladeshi citizens in 2050.

This country, of course, is not alone in facing these challenges. Rapidly changing and growing complex health sectors with systemic performance deficits are endemic to all countries in the world. The dimensions of these common challenges have helped to push the health reform agenda beyond the articulation of a set of essential services and towards securing solid foundations for health systems such as health workers or information systems and upon which universal access to services are dependent. Indeed, the World Health Assembly resolution on Universal Health Coverage and Health System Strengthening that was passed in May 2011 (WHA 2011), in many ways represents the global consensus that unites countries with respect to these common challenges.

The chapters in this volume of the Bangladesh Health Watch provide insights with respect to the magnitude of the problem and opportunities in moving towards Universal Health Coverage especially as regards efforts towards more equitable financing. The purpose of this chapter is to draw together seven common messages emerging from the chapters that constitute an agenda for action moving forward.

1. Establishing a shared understanding of Universal Health Coverage

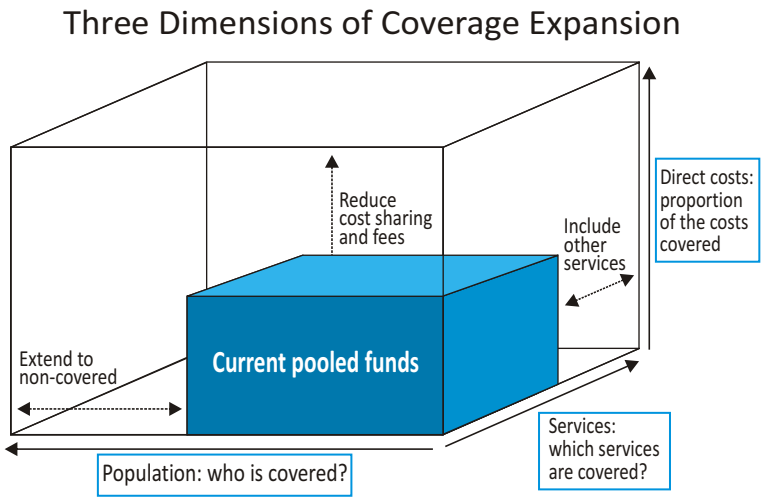
While there appears to little disagreement with the idea of Universal Health Coverage, its precise definition is difficult to pin down. Fundamentally, it draws on the notion of a right, or entitlement, to health as is defined for example in the constitution of the World Health Organization: *"the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being..."*.In realizing this right, a further question is raised related to coverage of "what"? WHO suggests that two dimensions of coverage should be secured: 1) a comprehensive set of quality services according to need ranging from public health prevention to community-based primary care to facility-based tertiary treatment and rehabilitation; and 2) financial protection in accessing care that avoids individuals being inhibited from accessing care due to cost as well as ensuring that individuals are not economically compromised in paying for care (WHR 2010).

These principal axes of UHC, however, require further definition and operationalization in specific contexts, Bangladesh being no exception. Regarding the "services" side: what services are included in UHC? What services are not included? and how are the services provided? These questions raise a further set of considerations related to governance in terms of priority-setting criteria and regulation as well as to systems capacities for delivery of services. This Report deals with some of these issues in Chapter 2 through the review of priorities in health sector plans over the last 40 years; and in Chapter 4 with respect to the determinants of universal coverage for inpatient care. Other critical inputs to universal coverage such as medicines/supplies, facilities, public awareness and demands and health workers are also primary considerations in the translation of UHC. The importance of these inputs in defining universal health coverage cannot be under-estimated as is seen in the chronic challenges of effective supply, distribution and retention of the health workforce (BHW 2007).

The second axis of UHC, financial protection, raises questions that focus on the mode of financing the health sector such as: how much financing is needed? for what? from where? how are resources to be generated? and effectively disbursed? These questions were the primary focus of the 2010 World Health Report on "Financing the path towards Universal Health Coverage" (WHR 2010). The chapters in this report touch on some of these questions Chapter 3 looking at the question of how much money is required to publicly finance comprehensive primary health care; Chapter 6 examining how financial barriers to maternal care can be overcome; and Chapters 5, 7 and 8 examining the current state of, and future prospects for, NGO, and private-for-profit, health insurance options.

It is important that these two axes of universal health coverage service coverage and financial protection - be brought together as they are in many ways inseparable. Conceptually, this is done in the World Health Reports 2008 and 2010 whereby Universal Health Coverage is defined along both the services axis ("depth" what percentage of total services are provided?) and financing axis ("height" - what percentage of health costs are pre-paid?) with respect to a third axis the percentage of the total population covered ("breadth" what percentage of the population is covered by a package of services). (see figure 1 -below - WHO, WHR 2008, 2010). Beyond the conceptual unification, there is an imperative to establish measures and indices of UHC that allow us to know whether universal coverage (inclusive of both services and financial protection) is improving or not (also see point 6 below).

Figure 1: Three dimensions of coverage expansion for universal health coverage



Source: World Health Report (WHR), 2010

2. Making a strong case for Universal Health Coverage

All of the chapters in this Report provide important perspectives on the many reasons for a concerted mobilization towards universal health coverage in Bangladesh *beginning immediately*. The primary and most important rationale relates to shortfalls in coverage in the current context. There are three components of these unacceptable shortfalls. The first is the limited coverage of priority interventions such as skilled attendance at birth, or screening for modifiable risk factors of chronic disease such as high blood pressure, smoking or glucose intolerance. The second relates to inequities in the patterns of coverage: those with more resources and fewer health needs are much more likely to access care than the poorer and needier segments of the population. The third relates to the shortfalls in financial protection arising from a health care system that is financed primarily by individual households. The estimates of between 4 and 5 million persons being impoverished annually (Doorslaer *et al.* 2006) due to health care payments places this issue as a national development priority for reducing vulnerability and poverty and not "simply" a health sector problem.

Missing from this analytic assessment of the shortfalls in coverage, are the daily experiences of those adversely affected. A mother with no coverage of emergency obstetric care who dies due to post-partum hemorrhage is not simply a maternal mortality statistic but a real life avertable tragedy whose demise spells disaster for her newborn and the future well-being of her family. A household with a sick family member faces a grim choice between either accessing care with a high risk of household impoverishment or forgoing care and losing the life of loved one. These choices play out in the lives of everyone on a regular basis as is evidenced by the frequent e-mails in office settings soliciting financial contributions towards the expensive costs of treating a colleague's sick child. More publicly visible is the humiliation of people begging in the streets with their medical bills in hand.

The rationale for UHC also draws inspiration in a much more positive way from a spectrum of opportunities. First, universal coverage is possible. A number of health services or interventions cover the entire population at present. The Expanded Program of Immunization (EPI) has developed a decentralized, high quality, reliable universal immunization capability over the last 25 years (Coverage Evaluation Survey MOHFW 2006). The detection and treatment of persons with Tuberculosis reaches very high levels of coverage through an innovative consortium of NGOs working with the public sector (BRAC Health Program, 2011). These successes in coverage are strengths to be built upon in expanding more comprehensive primary care coverage.

Second, as Bangladesh moves towards a middle-income country in the next 10-15 years, its health economy will continue to expand at a rapid rate and as such total resources for health will grow significantly. In the period, 1997-2007 the nominal growth rate in total health expenditure was over 12% per annum. Projecting this growth through to 2025, total health expenditure will be in the order of about $US 500 per capita per annum (CoE, JPGSPH 2011). Many countries today with that level of per-capita expenditure such as Thailand have been working on UHC reforms for over 10 years! As the World Health Report 2008 concluded, the opportunity is to begin to harness this growth in total health expenditure for the ends of UHC (WHR 2008).

Third, there is an important opportunity related to the growing demand for "integrated" and "portable" care amongst the population. Citizens are keen to avoid being victims of the traditional "divides" including urban-rural, levels of care (primary-secondary and tertiary); and the public, informal and private sectors. The commitment of the Government to a Digital Bangladesh by 2021 provides an important opportunity to accelerate applications in health that help to bridge these divides in health care. For example, within the design of the new National Population Register, a universal registration system with unique identifiers could provide real-time monitoring of vital events as well as coverage of services through linkages to personal electronic health records. (see box on MOVE-IT Bangladesh and point 6 below).

Finally, there is growing evidence that UHC reforms work in terms of increasing equity in access to services and reducing the financial risks of impoverishment or catastrophic asset depletion (Wagner *et al.* 2010).

3. Moving towards pre-payment financing is imperative.

A top priority in taking action towards UHC is to move beyond the current predominance of individuals paying directly for their care at the point of service. This system of self-payment is unequivocally the most inefficient and inequitable way to finance health services. It must be replaced by a system where financial contributions are pre-paid and pooled. Every country that has made a concerted effort towards a universal health coverage system has taken these steps towards "prepayment and pooling" (WHR 2010). What options, therefore, should be considered in moving towards more pre-payment and pooling of finances for health in Bangladesh?

3a. More and better government financing of health.

One option - recommended by the World Health Report 2010 - is to increase the government budget for health. The current level of government financing in health is low in absolute terms (about $4/capita) and represents about 25% of total health expenditure. Chapter 1, acknowledging the very low level of tax collection in Bangladesh identifies other revenue generation mechanisms such as earmarked taxes that should also be considered to increase government revenues (Chowdhury *et al.* Chapter 1 BHW 2011). But

how much more government money is needed? In Chapter 3 of this Report, the authors calculated that provision of a basic package of care (costed at $24/capita), would require an average annual increase of 12% in the government's health budget over the next 15 years (Haque *et al.* Chapter 3 BHW 2011). Given the history of chronic under-spending of budgetary allocations by the Ministry of Health and Family Welfare, any significant increase in government financing for health also requires clarity in terms of how those monies might be invested to meaningfully extend coverage. The findings in Chapter 3 that show government financing benefits the rich more than the poor, underline the need for careful review and prospective equity-impact assessment of government expenditure. Further, it suggests that government financing should perhaps be targeted towards the poor or "below poverty line" populations as has been done for example in the National Health Insurance program in India known as RSBY (Haque *et al.* Chapter 3 BHW 2011 & RSBY 2009).

Possible avenues for more and better government investment might include: 1) building on programs that are already providing universal coverage e.g. EPI or TB control; 2) enlarging the package of services covered under the voucher schemes known as demand side financing (also see below); and 3) establishing an independent purchasing authority separate from the provision function of the public sector that might not only purchase services from health providers in the public sector (with an appropriate payment mechanism i.e. capitation), but might also subsidize the service packages of non-governmental providers who are building pre-payment and pooling financing mechanisms aimed at the poor and disadvantaged.

3b. Re-designing non-governmental insurance schemes

While this Report has pointed to various NGO-led micro-health insurance and private-for-profit health insurance schemes, its clear that as a whole they touch a very small fraction of the Bangladesh population with little prospect for significant expansion over time. This is surprising in a country where its NGOs are renowned for going to scale. Indeed Chapter 5 in its evaluation of NGO-led Micro-Health Insurance concludes that they "cover a tiny proportion of the total population" and "remain limited in scope and design" (Ahsan *et al.*, p.95 Chapter 5 BHW 2011). In addition to classic insurance problems of moral hazard and adverse selection, Chapter 5 identifies eight important challenges that are re-grouped here into three major categories: 1) Financing of insurance; 2) Provision of services; and 3) Client demand.

Table 1. Challenges with Micro Health Insurance in Bangladesh

1. Financing of insurance: a. Mostly subsidized care, not insurance b. Inadequate risk pooling and high costs c. Lack of financial viability and scalability
2. Provision of services: a. Limited range of services, variable quality and accessibility b. Ineffective referral, absence of network hospitals c. Providers not sufficiently separated from insurers
3. Client demand: a. Poor understanding amongst clients on value of health insurance b. Difficulty finding cash for premiums and co payments c. No real protection from medical-care poverty

Source: Adapted from Chapter 5, Bangladesh health Watch 2010.

A more detailed analysis of micro-health insurance in Chapter 8 points to further advantages/disadvantages associated with diverse structural relationships between insurers, providers and clients conceptualized as "models" (Ahsan & Mahmud Chapter 8 BHW 2011). The analysis suggests that the prevailing models of micro-insurance in Bangladesh characterized as "full service" and "provider" are less advantageous than "partner-agent" and "community-based" or "mutual" models in terms of client buy-in, building trust, lowering transaction costs, claim settlement and inclusivity. Moving forward these more advantageous models should be given higher priority.

Chapter 7 in its analysis of the status and prospects of for-profit private health insurance in Bangladesh points to a similar set of challenges as well as identifying a variety of market conditions that are constraining

growth in this sector including: 1) the complexity of health insurance contracts; 2) the small proportion of the workforce in the formal sector; 3) low willingness to pay; and 4) a poorly developed regulatory regime (Rabbani Chapter 7 BHW 2011).

Tackling these challenges related to micro health insurance, or private for-profit insurance, requires significant re-thinking of the design and scope of these efforts if they are to become veritable and vital agents of health insurance. As suggested boldly in Chapter 1, this goes well beyond tinkering with the details of existing programs to thinking (and acting) out-of-the box with for example the "the big players in the NGO sector" providing a common health insurance, or contributing to a joint pool, that can protect all micro-credit borrowers and their families (Chowdhury et al. Chapter1 BHW 2011). Such intrepid ideas could be further developed by also looking outside and learning from the numerous and growing innovations in health insurance in other low and middle income countries such as Rwanda, Ghana, India and Thailand. Such learning is easier than ever with the emergence over the last two years of a Joint Learning Network for Universal Health Coverage to which Bangladesh has recently joined (JLNUHC 2011).

3c. Promoting a more conducive environment for health insurance.

The potential of both the government and non-government efforts related to health insurance would benefit from a strategy for health insurance that lays the foundations for the provision of insurance. The government could play an important role by revising existing insurance regulations to cater more effectively to both the special provisions related to health insurance (as opposed to other types of insurance) as well as the special insurance needs for the poor. Indeed, there are a broad range of issues such as minimal pool size, fair adjudication of benefits, reserve ratios, capital adequacy, policy delinquency, audit and accountability criteria among others that require the attention of a robust regulatory authority. Such regulatory regimes for health insurance in the Philippines and India are identified in Chapter 8 as "major catalysts (to)…innovations with health insurance products" (Ahsan & Mahmud Chapter 8 BHW 2011).

Beyond regulation, the government could also provide incentives and co-financing to stimulate more and better health insurance initiatives, be it employer-based, private-for-profit, community-based or micro-insurance. As recommended in Chapter 1, identification of a list of priority population groups for health insurance such as state employees or borrowers from micro-finance institutions will help to accelerate more discrete activity and appropriate options for health insurance (Chowdhury et al. Chapter 1 BHW 2011).

3d. Shifting official development assistance towards health insurance

Official development assistance for health in Bangladesh represents about 8% of total health expenditure and about 30% of government health expenditure (BNHA 1999 - 2007). As a significant minority financier of health with even greater influence on policy, its priorities, or lack thereof, related to pre-payment and pooled financing are important. Over the last 30 years, the donor sector has moved from "project"-based financing of health to a sector-wide approach (SWaP) that pools donor funds to government in support of jointly agreed strategy as seen in the recently completed HPNSDP 2012-2016. Despite this evolution in the way donors finance the health sector plan, there have been only minimal efforts by the international community to tackle the bigger picture of unfair financing that prevails in Bangladesh (Ensor 2007, ILO 2008, Sabina & Barkat Chapter 2 BHW 2011). In part, this reflects uncertainty and disagreements on how to move forward, be it through taxes, social health insurance etc., and whether health insurance is affordable. It also reflects that attention is focused on other priorities such as achievement of the health related MDGs. Paradoxically, the strong evidence that health care payments are a major source of impoverishment and hence a constraint to the poverty reduction targets of MDG 1, seems not to have registered as something that requires immediate attention among the donor community.

Nevertheless, with the publication of the WHR 2010 on health systems financing the path to Universal Health Coverage - and the adoption of the World Health Assembly 2011 resolution on financing universal health coverage, the global community

appears more interested than ever in figuring out a value-added role (WHR 2010; WHA 2011). As a concrete first step, the ODA community could assist the Government of Bangladesh in preparing a UHC financing strategy. This would involve stepping up the financing policy capacity and leadership within the MOHFW and establishing strong links to the Ministry of Finance. Such a strategy could assess the strengths and weaknesses of a variety of pre-payment and pooling options, define the different roles for government involvement (from purchaser to provider to regulator) and identify the requisite investments in establishing functional government institutional capacities for example related to regulation or accountability. The experience of other countries in establishing these institutional capacities emphasizes both their importance and their affordability meaning that they are not costly relative to the overall cost of the system (Catalyzing Change 2010).

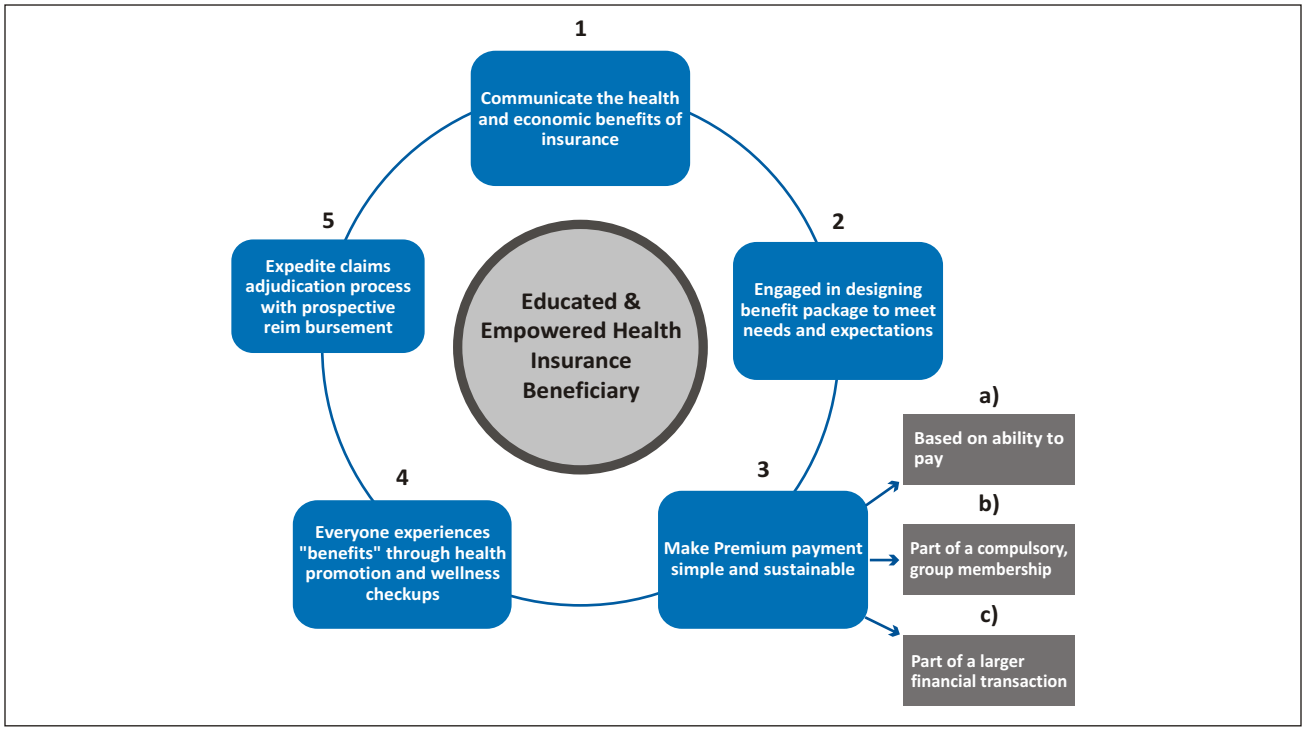
A second step for the ODA community to consider would be to examine how their current donor flows could be (re-)channeled to support more pre-payment and pooling of finances for health. The donor community, for example, could build on its efforts related to "demand side financing". In essence, demand side financing is insurance put in the hands of the people for a priority intervention e.g. maternal health. As suggested in Chapter 6, the planned extension of demand-side financing in the new Health Sector Plan (HPNSDP) might provide an opportunity to expand the package of services that are included such as basic care of newborns and children and STIs (Huque Chapter 6 BHW 2011). This expansion might be done drawing on the experience of innovative insurance efforts in India that have provided health entitlements to below the poverty line populations e.g. RSBY (RSBY 2009). Furthermore, donors might look at the financing reforms undertaken in Rwanda whereby Global Fund monies for HIV/AIDS, TB and malaria were channeled through a common health insurance mechanism rather than through separate national programs. Finally, building on the early experience related to financing micro-health insurance pilots, donors might look at investing in more and larger demonstrations with built-in monitoring and evaluation to facilitate lessons learned.

4. Educating and Empowering Beneficiaries

A critical dimension of the financing reforms directed toward greater pre-payment and pooling relates to the consumer or client or so-called "beneficiary". As many experts have pointed out in this Report and elsewhere, the value of health insurance to the consumer is not immediately clear, especially if it entails finding scarce cash to pay premiums when one is otherwise healthy. This under-appreciation of benefits dampens demand for health insurance and erodes the sustainability of voluntary membership schemes.

There are a number of options for managing this challenge that involve educating and empowering beneficiaries (see Figure 2). First, is to develop clear communications or education messages related to the advantages of the pre-payment system illustrating how medical indebtedness has been avoided and how better and more timely care has been accessed. Second, is to have active engagement of representatives of consumers in the design of benefits packages such that there is understanding and awareness of consumer needs and expectations. Third, is to make premium payment simple and sustainable. There are a number of options including a) looking at how premium and co-payments can be appropriately tailored to the economic means of the client i.e. their ability to pay, (this includes provisions in the design of the financial protection to include secondary or extra protection should ceilings be surpassed in the context of catastrophic illness requiring extremely expensive interventions); b) removing premium payment from being contingent entirely on individual choice and more a function of a compulsory collective, or group, membership scheme: e.g. micro-credit members of garment factory workers, etc.; and c) looking at ways to facilitate premium contributions from groups in such a way that they don't entail a separate financial transaction e.g. as part of a pay slip or as part of microcredit transaction. Fourth, is the importance of ensuring that all insurance members experience "benefits" (not just payment of premiums) through for example health promotion and wellness check-ups (Sinha et. al. 2007). Fifth, is to expedite the claims adjudication process with innovations like prospective reimbursement thereby minimizing time waiting for claims to be processed with cash out of pocket (Ranson et.al. 2007a).

Figure 2: Options to educate and empower health insurance beneficiaries



5. Accelerating provision of more equitable and efficient health services

More and better prepayment financing systems for health care that are well understood and friendly to clients of different economic means and health needs, are critical ingredients to UHC but on their own insufficient. A further vital input is the robust, high quality and trusted provision of health services. Should health services be of low quality, health providers absent or unresponsive to the needs of patients, or inaccessible due to informal systems of under-the-table payments, then the trust in any pre-payment system will evaporate very quickly. Therefore, the identifying what services are covered and how they are delivered is an extremely important part of any systems striving for UHC.

The first question relates to what services to provide. Ideally, a package of services should reflect the health needs of the population and be informed by the availability of services that have high efficacy and can be provided at reasonable cost. This needs-based, or rational, approach can be adjusted to different localities and also incorporate expectations of the population through discussions on the contents of the package. The number of services in any package its depth - will also be a function of the size of the population being covered its breadth and the size of the benefits pool - its height (WHR 2010) figure. These parameters come together to frame two strategy extremes that are useful to policy-makers with a fixed budget: 1) shallow and broad; or 2) deep and narrow. In the first scenario a small number of services would target a very large population i.e. a set of primary care interventions that are delivered in every community in the country. In the second scenario a large number of services target a narrow segment of the population i.e. a comprehensive package of primary, secondary and tertiary services for the ultra-poor.

These trade-off challenges associated with what interventions to include in a package, however, appear simple when compared to the complexity of organizing their delivery. Successful delivery the right services, at the right time in the right place with the right providers and right commodities -- brings together a diverse set of inputs in a complex management soup that traverses levels of care (primary through tertiary) and the spectrum of care-givers (public-private, informal-formal, rural-urban etc.). Unfortunately, these sorts of integrated delivery models are the exception and as such require concerted attention in the context of financing

systems for universal health coverage. Important to such delivery models is the concept of "networks of providers" that span both the community and facility-based delivery of services. Provider networks must recognize the importance of orienting services around the needs of individuals, integrating care and ensuring continuity (WHR 2008). In addition, the delivery of a comprehensive, integrated, package of services requires a much stronger "team" approach to provision of services whereby the work of front-line community agents is recognized and valued as highly as facility-based services. Beyond appropriately skilled professionals for the provision of individual services, there is a high demand for team management skills, gatekeeper and referral capabilities in order to ensure the most appropriate use of care.

Chapter 3 in this volume, for example, points to the challenges of in-patient care (Haque *et al.* Chapter 3 BHW 2011). It notes the massive under-supply of hospital beds and skilled health workers in Bangladesh relative to other countries and their increasingly inequitable rural-urban, public-private and rich-poor distribution. Private-for-profit hospitals, for example, are largely clustered in urban centres, account for 80% of the 3,100 hospitals in Bangladesh and only 50% of the total 85,000 hospital beds. Furthermore, this public-private skew is growing with about 100 new private hospitals and clinics and 200 new diagnostic centres opening every year. While public sector in-patient provision is more proportionately distributed across administrative boundaries of the country, it is plagued with an inability to cover facilities with the requisite skilled health workers. Amongst the public sector sanctioned nurse posts, for example, 96% of class 1 posts; 68% of class II posts and 20% of class III posts are vacant! These health care supply challenges to rural areas are also contingent on meaningful extension of the underlying power, transport, and water infrastructures as recommended in Chapter 8 (Ahsan & Mahmud, Chapter 8 BHW 2011).

These shortfalls in the supply of in-patient health care are indicative of a more systemic challenge related to public-private mix or Mixed Health System Syndrome (MHSS) that plagues many countries (Nishtar 2010). In short, MHSS characterizes the pervasive and ominous trend towards high quality private services for the rich and poor quality public services for the poor. Universal health coverage must find a way to bridge these two solitudes of public and private provision towards more equitable and efficient services responding to the population's needs. For example, government provided services might focus more narrowly on public health priorities with a subsequent outsourcing of comprehensive personal care services through a third-party financier to the NGO and private sectors. Agreeing such a division of labor requires tackling sticky issues related to the organization, management and accountability of health services as well as attention to more structural issues related to the composition of the health workforce, procurement and supply chains of commodities, and the role and authority of regulatory institutions. While there is no substitute for more concerted attention and capacity to address these complex issues, there is growing experience that innovative financing arrangements e.g. demand-side financing, may help to bridge these supply-side gaps in services (WHO 2009). Furthermore, there is evidence that certification of qualified providers or identification of "preferred providers" can assist health insurance members access better quality services (Ranson *et al.* 2007b).

6. Transforming Information and Evidentiary Systems

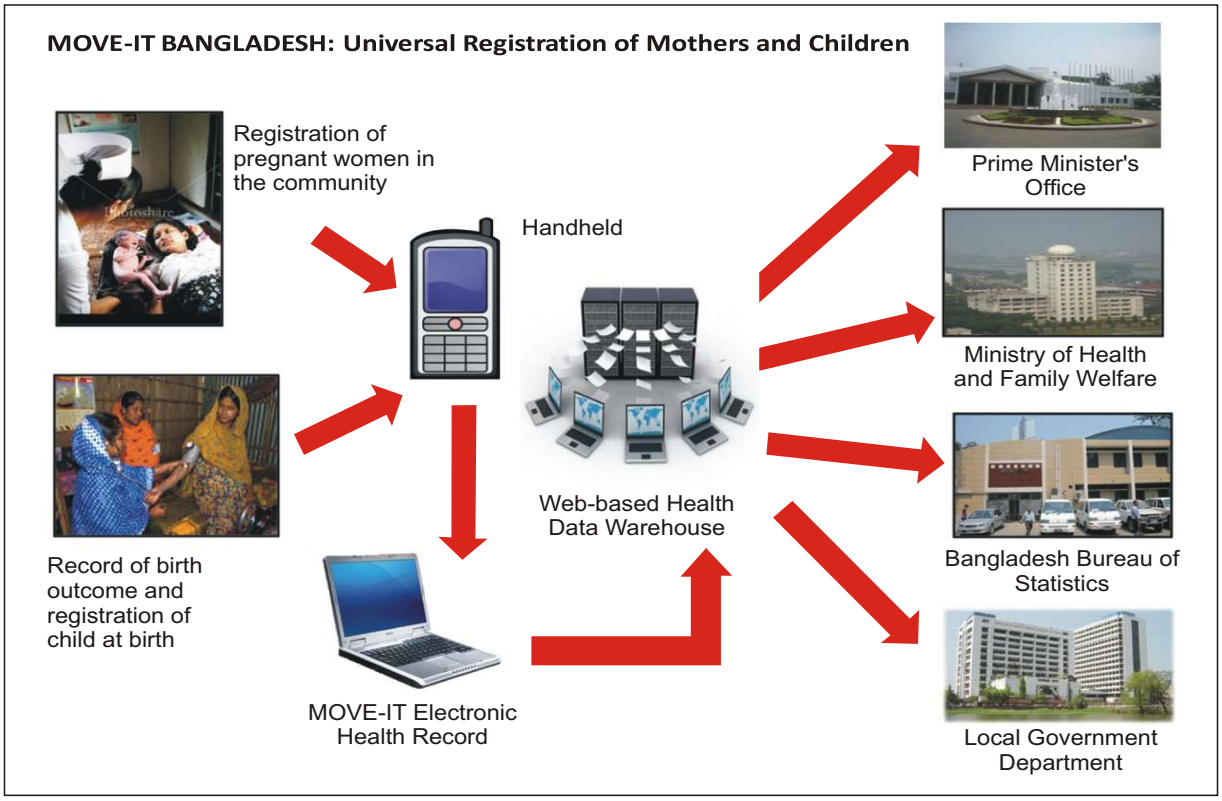
The information, measurement and evidence demands related to health insurance systems add significantly to the complexity of information systems in the health sector. Identifying, or designing, a package of services requires information on the health needs of the population covering the major causes of mortality and morbidity, the costs and cost-effectiveness of interventions to deal with those needs, the service expectations of the populations covered and their ability/willingness to pay. Delivering such a package through a network of providers, collecting premium payments and adjudicating claims requires a very sophisticated management information system. Finally, evaluating outcomes for UHC necessitates data and measures for assessing effective coverage of services and the degree of financial protection for service users. On all of these fronts - from design to delivery to performance assessment the demands on the information and measurement systems often overwhelm their ability to respond.

Bridging these information and measurement gaps requires first and foremost investment in the development of an information strategy to support UHC. This strategy would involve at a minimum i) strengthening the basic information systems required for design of packages; ii) building management information systems for insurance premiums and claims; and iii) developing more reliable and valid measures related to effective coverage of health services and protection from impoverishing health care expenditure.

A second priority is to seize the transformative opportunities related to the digital age innovations in health information. The experiences in India and other countries with electronic health records and payment of claims has proved that paperless and cashless insurance systems are not only possible but offer attractive benefits in improving access to services and in reducing graft and corruption. Tapping this experience, together with the national "Digital Bangladesh" strategy, could lead to the design and implementation of "e" and "m" health innovations that not only support UHC initiatives but contribute to strengthening health information systems more generally (see MOVE-IT box below).

Box 1. MOVE-IT Bangladesh: Universal Registration of Mothers and the Children

Text: Drawing on the Government of Bangladesh's commitment to Digital Bangladesh 2021 and the health sector priority to scale-up maternal, neonatal and child health programs, MOVE-IT Bangladesh is a multi-stakeholder collaborative process that aims to register all pregnant mothers and their children in Bangladesh in a unified electronic information system that tracks vital events (births, deaths, causes of death), non-fatal health events, and coverage of priority services. Through the development of common standards for unique identification of mothers and children and agreement on a minimal data set, MOVE-IT Bangladesh is harnessing the power of mobile and electronic health technologies to ensure that all mothers and children are part of a universal vital events and health information system. Such a system promises to transform traditional paper-based approaches to vital statistics and health records with the prospect of real-time, continuous reporting on the health and well-being of mothers and children.



Source: www.move-itbangladesh.org

A third priority is to develop common frameworks and approaches to monitoring and evaluating implementation of UHC programs. With the advent of real-time information systems, there are opportunities to incorporate research designs into implementation of UHC efforts. In Mexico, for example, a major social protection reform entitled "opportunidades" benefited from a built-in research design that identified more effective ways to deliver services (Frenk 2007). These and other scientific approaches to testing different implementation packages enhance rapid learning of what works and what doesn't and how to accelerate scaling-up.

A fourth and final priority relates to establishing a learning environment for UHC among government policy-makers, program implementers, researchers, multi-laterals and bilaterals. Recognizing that there is no blue-print or simple recipe for UHC, there is a need for a forum that facilitates joint learning on the range of difficult policy/program questions that are invariably encountered in advancing UHC reforms. These include questions and "choices" related to source of financing, the type of payment mechanism for providers, the scope of coverage, the service delivery system and institutional structures (see JLN table below). To this end, a "Bangladesh Forum for Universal Health Coverage" should be created. This Forum would meet regularly to discuss specific challenges and opportunities related to UHC and to promote information exchange and the development of a common agenda inclusive of both the evidence and competency dimensions above. The Forum, drawing on a common framework for UHC, would focus its interactions on a mutually agreed agenda of priority topics around UHC e.g. strategies for getting clients to pay premiums, mechanisms for cross-subsidization, or regulating quality amongst providers etc.

Table 2. Options and choices in designing systems for universal health coverage.

Low and middle-income countries are making choices along these four dimensions that lead to mixed and highly varied systems

	Key decisions to be made
Source of financing	☐ Options for raising government revenues to expand coverage ☐ Whether to make enrollment voluntary or mandatory ☐ How to incorporate donor funding to strengthen the health system
Scope of coverage	☐ Deciding between breadth (number of people) and depth (package of covered services) ☐ Where to start, and how to expand coverage over time
Service delivery system	☐ Choosing between public and private provision of services ☐ Deciding the level of patient choice and competition among providers
Institutional Structure	☐ Identifying which government agency takes the lead ☐ Whether to have one large risk pool or several/many smaller ones ☐ Choosing between centralized and decentralized models ☐ Determining the role (if any) of private insurers

Source: Adapted from www.jointlearningnetwork.org

7. Acquiring Core Competencies for Universal Health Coverage

Designing, implementing and evaluating efforts towards UHC places special demands on the health professional workforce that go well beyond those related to clinical provision of services. These include the need for highly specialized professionals like actuaries to inform insurance design, to a wide range of practical skills involved in implementation like premium collection and pooling; benefit identification; provider payment; cross-subsidization mechanisms, and a diverse set of management skills at various levels related to policy and design, sustainable and accountable financing, and effective information systems. A full inventory of these skills needs is required to inform the scope and design of appropriate training programs. The implementation of such programs should be led by education institutions in Bangladesh as part of a more ambitious set of reforms aimed at acquiring systems competencies for health equity in the 21st Century (Frenk et al. 2010).

Summary

In summary therefore, a seven point agenda for UHC is proposed drawing on the key recommendations emerging from the Chapters of this report of the Bangladesh Health Watch that includes:

1. ***Establishing a shared understanding of Universal Health Coverage***
2. ***Making the case for UHC***
3. ***Moving towards pre-payment financing is imperative.***
    a. *Increasing and improving government financing*
    b. *Redesigning non-governmental insurance schemes*
    c. *Promoting a conducive environment for health insurance.*
    d. *Shifting official development assistance towards health insurance*
4. ***Educating and empowering beneficiaries***
5. ***Accelerating provision of equitable and efficient services***
6. ***Transforming Information and Evidentiary Systems***
7. ***Acquiring Core Competencies for UHC***

This seven point agenda for UHC is not meant to be a blueprint or invoke some sort of "cookie-cutter" approach to UHC. Rather it is meant to stimulate discourse and guide debate to inform decisive actions towards a more equitable and just health system in Bangladesh.

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Ms Sabina is a development economist with a track record of more than 15 years. She obtained specialization in Health and Development Economics and a MSC in Economics from University of London UK. Before that she graduated from the Department of Economics at the University of Dhaka where she obtained MSS in 1993 and BSS (Honours) in 1991. Recently she finished working with Save the Children UK Bangladesh programme as Livelihoods Adviser (2008-2010). Before that she worked in Health Economics Unit of ICDDRB. She specializes on research by focusing on health systems and livelihoods programme evaluation as well as gender and disability related topics. Ms Sabina has several publications in her credit such as articles in Journal of Health and Population, policy briefs on child survival and also she is a co-author of a book on gender budgeting.

Rumana Huque PhD

Dr. Huque is an Assistant Professor of Economics, University of Dhaka. She got her PhD in Health Economics from University of Leeds, UK, in 2010. After completing BSS (Honours) and MSS in Economics from University of Dhaka, Bangladesh, she did MA in Health Management, Planning and Policy from University of Leeds, UK in 2002. Currently, she teaches Health Economics at the department. She taught Health Services Management and Health Policy and Planning at the Institute of Health Economics (IHE), University of Dhaka during 2000 2009. She has wide experience in working with the Ministry of Health and Family Welfare of Bangladesh, local NGOs and international donor agencies since 2002. Dr. Huque has been involved in a number of studies in Bangladesh in the field of health care financing and communicable diseases programs/ service delivery. A number of her papers/articles have been published in peer reviewed national and international journals.

Syed M. Ahsan PhD

Dr. Ahsan is currently working as a Professor of Economics at Concordia University (since 1977) and taught at the University of Western Ontario during 1974-77. He did MA in Economics (1971) at the University of Essex in England and a PhD (1974) at McMaster University in Hamilton, Ontario, Canada. Professor Ahsan also served as a visiting professor at many prestigious universities in many countries including Bangladesh. His principal areas of expertise are Agricultural /Micro Insurance, Taxation and Fiscal Policy, and Poverty, Institutions and Growth. Currently he is the Team Leader of a longitudinal research project at the Institute of Microfinance, Dhaka entitled, 'Microinsurance, Poverty & Vulnerability'. Professor Ahsan has published extensively in peer reviewed journals in the field of economics such as American J. of Agricultural Economics, American Economist, Canadian J. of Economics, Developing Economies, Econometrica, European Economic Review, J. of Business & Economics Research, J of Finance, J of Public Economics among others.

Syed Masud Ahmed MBBS, PhD

Dr. Ahmed is Senior Research Coordinator at the Research and Evaluation Division of BRAC (http://www.brac.net/research) in Bangladesh. He graduated from Dhaka Medical College in 1978 and did MPH from NIPSOM in 1991; he did PhD in Public Health from Karolinska Institutet University, Sweden in 2005. He joined BRAC in June 1992. He was a visiting fellow (David E. Bell Fellow) in Population and International Health at Harvard Center for Population and Development Studies during 1997. His research interests include studying the impact of microcredit-based development interventions on the health and well-being of the poor especially the ultra-poor, and exploring the mechanisms of such impact. He has published extensively in national and international peer reviewed Journals and authored book chapters, monographs and working papers. He reviewed papers for Journals such as Bulletin of WHO, Social Science and Medicine, Tropical Medicine and International Health, Health Policy and Planning, BMC Public Health, Health Research Policy and Systems etc.

Shubhasish Barua

Shubhasish Barua is currently pursuing his PhD in Economics in the University of Warwick. Previously he did his Masters in Economics and Econometrics in the University of Essex. Mr. Barua has about 8 years experience of teaching and research in Economics and published a number of papers in the peer reviewed journals. He is currently serving as a Lecturer at the Department of Development Studies, University of Dhaka.

List of Previous Publications of Bangladesh Health Watch

1. The State of Health in Bangladesh 2006
   Challenges of Achieving: Equity in Health

2. The State of Health in Bangladesh 2007
   Health Workforce in Bangladesh: Who Constitutes the Healthcare System?

3. Bangladesh Health Watch Report 2009
   How Healthy is Health Sector Governance?

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