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BANGLADESH NGO PROVIDER-BASED PREPAYMENT SCHEMES FEASIBILITY ANALYSIS

May 2016

This publication was produced for review by the United States Agency for International Development.

It was prepared by Yann Derriennic, Hamid, Syed Abdul, Andrea Feigl, Mursaleena Islam, for the Health Finance and Governance Project.

The Health Finance and Governance Project

USAID's Health Finance and Governance (HFG) project will help to improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team will work with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. As a result, this five-year, \$209 million global project will increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG will support countries as they navigate the economic transitions needed to achieve universal health care.

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ACRONYMS

ANC	Anti Natal Care
BLP	Below the poverty line
CBHI	Community Based Health Insurance
CWFD	Concerned Women for Family Development
DCE	Discreet Choice Experiment
DFID	Department for International Development (UK)
EPI	Extended Program of Immunizations
HCFS	Bangladesh's Health Care Financing Strategy
HFG	Health Finance and Governance Project
JPGSPH	James P Grant School Public Health at BRAC University
Icddr,b	International Centre for Diarrhoeal Disease Research, Bangladesh
NGO	Non-Governmental Organization
SSK	Shasthyo Shuroksha Karmasuchi
NHSDP	NGO Health Service Delivery Project
SS	Smiling Sun (NGO clinic network)
USAID	United States Agency for International Development

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I. BACKGROUND

Bangladesh's Health Care Financing Strategy identifies three target populations: the poor (below the poverty line, BPL); the informal sector; and the formal sector. These three populations are to be covered using different approaches. For the BPL, a government scheme known as *Shasthyo Shuroksha Karmasuchi* (SSK) is being tested. For the formal sector, a government-employee contributive scheme is being designed, and several initiatives are being implemented in the garment industry. For the informal sector, the financing strategy calls for the development of community-based health insurance (CBHI), micro health insurance, and other innovative initiatives. Global practice and knowledge identifies the informal sector population as the most difficult to reach with health protection coverage; these individuals are not classified as BPL and therefore do not qualify for government support, nor can they be easily reached through formal employment-based mechanisms yet they need health care that is affordable.

In the fall of 2013, USAID Bangladesh asked the Health Finance and Governance project (HFG) to design and facilitate a one-day workshop focusing on Health Micro Insurance (including CBHI, micro health insurance, and other insurance mechanisms) for the informal sector. The workshop, held in February 2014, concluded that the most promising area was Micro Health Insurance (insurance associated with micro lending), followed by provider-based insurance. Considering USAID's support for the Smiling Sun NGO network, USAID Bangladesh asked HFG to explore how provider-based prepayment schemes¹ could further the cost-recovery/sustainability goals of the Smiling Sun NGOs. HFG proposed a feasibility study.

Provider-based health insurance schemes in the developing world have not been studied extensively. Abt Associates has researched NGO/nonprofit provider-based insurance in Ghana and Uganda. Others have looked at a large scheme in the Democratic Republic of Congo. In the developed nations, the best-known provider-based insurance/prepayment mechanisms are found in the United States, for example, those administered by Kaiser Permanente and United Health Care.

Thus, HFG proposed, and USAID Bangladesh approved, the project to conduct a feasibility study and, if feasibility was determined to be positive, design an NGO provider-based prepayment scheme. This report provides an analysis of the feasibility of a provider-based prepayment scheme for Smiling Sun clinics, based on four studies conducted on select urban clinics of one NGO.

The benefits of a provider-based prepayment scheme would be to:

- Increase utilization of services through increased access and lower household direct out-of-pocket expenditures at time of service need;
- Increase provider sustainability through better cash flow and increased population participation; and
- Prepare NGO providers to integrate, eventually, into the national social health insurance scheme.

¹. The workshop highlighted the fact that each segment (CBHI, micro health insurance, provider-based schemes) fell under a different legal framework, each with its own challenges. Therefore, the term "prepayment" is used instead of insurance, as NGOs do not fall under insurance regulations.



2. OBJECTIVE

The objective of the study is to determine the feasibility of a Smiling Sun NGO-based prepayment scheme.

The study should identify the conditions under which a scheme would be feasible, if these conditions exist, what could be done to address any gaps, and if doing so would be recommended considering the costs, resources, and other identified issues.

The feasibility study should be designed to provide important information/ data to the partner NGO, NGO Health Service Delivery project (NHSDP), and USAID Bangladesh. The study should directly benefit the partner NGO and strive to minimize the burden of participation.

3. ACTIVITIES

In order to establish the feasibility of provider-based prepayment schemes in Bangladesh, HFG, in close collaboration with the NHSDP, implemented six steps: 1) Selected a Smiling Sun NGO network on a competitive basis; 2) Did a landscape analysis of Bangladesh prepayment schemes; 3) Costed the services provided and compared the costs to the prices charged to paying clients for these services; 4) Compared the prices charged at selected CFWD clinics to competitors; 5) Developed four prepaid services packages, and 6) Designed and implemented, in collaboration with HFG partner the Centre of Excellence for Universal Health Coverage icddr,b at the James P. Grant School of Public Health at BRAC University (the JPGSPH team), a study to gauge existing clients' interest/demand for these packages. The section below explains each of the six steps.

4. APPROACH AND FINDINGS

Network selection: Following a restricted expression of interest process, HFG and NHSDP, with USAID Bangladesh input, selected Concerned Women for Family Development (CWFD), which runs a 21-clinic mostly urban NGO network under Smiling Sun to participate in the study based on general administrative and financial competence and willingness to participate.

The landscape study showed that very few provider-based prepayment or micro insurance schemes have ever operated in Bangladesh. The study did a detailed review of several programs based on information gathered in a literature review and key informant interviews. It concluded that in Bangladesh as in many countries, voluntary schemes face low demand (i.e., low enrollment and low renewal). In Bangladesh, the number of schemes, population coverage, and growth of micro health insurance, including provider-based micro insurance, is very limited. Health insurance, in the form of private insurance schemes also provides little coverage. Finally, although the country's Health Care Financing Strategy calls for it, there is of yet no government-supported social health insurance.

Among demand-side factors reported to limit the development of health insurance sector are lack of confidence/trust in the prepayment approach, lack of awareness about the benefits of prepayment, and unaffordability of premiums of the few schemes that exist. Supply-side factors include limited benefits packages, high copayments, and the complex procedures of claim submission that often result in delayed claim settlement or claim rejection. Lack of trust, fear of fraud, and the absence of an insurance culture also are responsible for the underdevelopment of an insurance market in the country.

CWFD clinic services costing and pricing analysis: Out of the 21 CWFD-run clinics, four were chosen for the study based on utilization rates, cost recovery rates, percentage of poor clients seen, and services provided. The costing of individual services was done using a combination of step-down and bottom-up methods. Both static and satellite (outreach) clinics were costed. The total service costs were compared to the price charged to full-paying clients. This was done at the individual clinic level.

Utilization of services and the prescribing pattern of drugs and lab tests largely account for variation in unit costs across the clinics. The majority of costs are for drugs and supplies. Lab tests are also an important component of the costs for antenatal care (ANC). Overhead costs are an important portion of costs of family planning and other services with donated inputs, and when drug and lab test are excluded from the costing calculation. Other than for delivery care, direct labor is not a large contributor to unit cost. The negative difference between price and unit cost at the satellite outlets of all the clinics suggests that all services at satellite sites are offered at a subsidy to all patients. More surprising was the variation in prescription patterns noted.

Competitor analysis: The aim of the competitor analysis was to compare the competitiveness of user fees for clinic visits for all health clinics within a 1-km radius of the three main CWFD clinics in Rayer Bazaar, Gandaria, and Pallabi where data from the icddr,b Urban Health Atlas² was available. Overall, all three of the clinics have a large number of competitors within a 1-km radius. Most competitors are pharmacies with doctor chambers and often low-priced NGO clinics. All three clinics were extremely competitively priced; hence, there likely is room for CWFD clinics to

² International Centre for Diarrhoeal Disease Research (ICDDR,B), Centre for Health and Equity System (CEHS), *Urban Health Atlas, 2015*. <http://urbanhealthfacilities.icddr.org>

increase their minimum consultation fees. However, as earlier price elasticity³ and discrete choice experiment (DCE) studies⁴ have revealed, price is not the only deciding factor for clinic choice: many patients are concerned about the continuum of care offered in the facility, as well as provider quality. Often, the availability of free services and low consultation fees signals low service quality, and hence do not attract (enough) patients with the ability to pay for services.

Based on the results of the competitor and the costing analysis, there likely is a potential for CWFD clinics to increase consultation fees, and hence, increase revenue. This will be particularly true if Smiling Sun clinics offer upgraded laboratory and pharmacy services.

Prepaid service package development: On the bases of the results of pricing, costing, and competitor analysis and building on management and providers' knowledge of clients' preference, as well as an analysis of utilization of individual services at the network level, HFG working with CWFD management, service providers, and the JPGSPH team developed four service packages to assess the demand for prepaid service package schemes: the *basic family package* was priced at 600 BDT (~\$7.5⁵) for a year for a family and offered unlimited consultations at a static or satellite clinic including family planning methods and counseling and full immunization (EPI) for a child of relevant age; lab and drugs were excluded. The *extended family package* was priced at 2,000 BDT (~\$25) for up to five episode of illness: consultations, lab, and drugs prescribed included. The *maternity package* was priced at 12,000 BDT (~\$150) for ANC, delivery (either natural or C-section), and postnatal care. Finally, the *ANC-only package* was priced at 2,500 BDT (~\$31.25) for four ANC visits with ultrasound and tests, and unlimited additional ANC visits for counseling.

Demand analysis: In collaboration with HFG and CWFD, the JPGSPH team designed, developed, tested, and implemented the demand study. A cross-sectional study was conducted with 120 non-poor (paying) clients of the same four CWFD clinics studied for the costing. Paying clients are the target group of prepayment schemes to increase utilization and cost recovery. A study team collected quantitative and qualitative data through face-to-face interviews and focus group discussions using structured questionnaire and a semi-structured guideline. Married pregnant women, married couples, and mothers with one or more children were eligible for this study.

The demand study found little prior knowledge of prepaid plans among the respondents. Factors such as one-stop service (continuum of care) or lack of thereof, previous experience with cost of services (C-section), and to some extent education influenced choice of packages; payment in installments is preferable for expensive packages and for lower-income respondents. Once prepayment, the packages, and costs were explained, the respondents preferred the comprehensive maternity package to the ANC package and the basic family package to the extended family package.

³ Health Finance and Governance Project. March 2013. *Assessment of the price elasticity of demand for health care services in the Smiling Sun Franchise Program*. Bethesda, MD Health Finance and Governance Project, Abt Associates Inc.

⁴ Health Finance and Governance (HFG) Project. February 2015. *Understanding Client Preferences to Guide the Prioritization of Interventions for Increasing Demand at NGO Health Service Delivery Project (NHSDP) Clinics in Bangladesh*. Bethesda, MD: Health Finance and Governance Project, Abt Associates Inc.

⁵ One US Dollar = 80 Bangladesh Taka (BDT)

5. CONCLUSIONS

Is an NGO provider-based prepayment scheme feasible? The answer to this question lies in the definition and scope of a prepayment scheme. Ideally, to maximize coverage of the target population (the informal sector) and for efficiency and effectiveness, the scheme should be as expansive as possible so that it can afford the marketing and administrative costs. It should enroll, at least all USAID/DFID-funded Smiling Sun clinics and potentially other NGO providers. It should offer a standard package at a standard price and make the package available at all service points.

Based on the study findings, such a scheme is not currently feasible in Bangladesh. This is because there is likely to be little demand for a scheme covering all services offered at Smiling Sun clinic as Smiling Sun clinics offer a limited range of services and patients are informed about service options and go to different providers for different services. The limited range of services makes a comprehensive scheme less attractive, responses to the demand analysis pointed out client's perception of CWFD quality of services and their range of services, and their choice of CWFD clinics just for ANC or immunizations, and use of other providers for other services.

On the supply side, service utilization and prescription of drugs and laboratory tests drive the cost of each clinic's services. This prevents setting a standard price across all CWFD clinics, let alone the countrywide Smiling Sun network.

Global experience has shown that voluntary insurance/ prepayment schemes that cover a broad range of services have limited appeal. What is feasible are schemes focused on individual clinics and a limited service packages. This study confirmed this: CWFD clients expressed interest in a scheme that offers a well-defined, prepaid package of the specific services they need.

As was noted above, of the four packages presented, the basic family package, with unlimited visits but no lab and drugs, was the most attractive, and the comprehensive maternity package was well received, especially by clients who were aware of the cost of C-sections.

The competitor analysis showed that generally the services offered at CWFD clinics are priced at the low end of the service cost continuum. It also demonstrated that the urban settings studied have many service providers, and thus clients have choices. Some CWFD competitors are other NGOs, some of which provide free services.

The landscape analysis confirmed that there are few micro insurance and provider-based prepayment schemes functioning in Bangladesh. It also affirmed that there is very little health insurance at all. Bangladesh does not have a health insurance culture. Much work will need to be done to raise awareness about the benefits of insurance/pre-payment schemes as well build client trust in the system and offer quality services.

6. RECOMMENDATIONS

A large Smiling Sun, or even CWFD, wide prepayment scheme is not feasible, what is feasible at this time, what can be done to increase sustainability?

To CWFD and NHSDP

Invest where there is need: Do CWFD clinic site analysis: CWFD clinics with low utilization and low cost recovery should be analyzed in terms of poor population served and availability of competing providers. If the poor have adequate choices of nonprofit or government (i.e., free or lower-cost) providers, then moving or closing the CWFD clinic should be considered.

Increase utilization: Introduce the basic family package to increase utilization: Where utilization is low, and thus there is excess capacity, CWFD should consider introducing the basic family package to boost utilization and cost recovery. At first, the package should be clinic specific. The investment in the package offering should be kept low: a low-key introduction based on interpersonal contacts and limited advertising (brochures, posters). Utilization statistics tracked closely and the pilot should last at least a year to measure impact. CWFD could consider staff motivation tied to package uptake (sales).

Introduce the maternity package: This package should be introduced in “ultra” clinics, but only where there is excess capacity, i.e., not at Gazipur. Providing 24-hour emergency obstetric care (EmOC) services, the ultra clinic is expensive and utilization needs to be robust to cover cost. Providing the maternity package could shorten the time and cost to break even for new ultra clinics. Again, low-key introduction based on interpersonal contacts and limited advertising (brochures, posters). Additional design considerations are needed to respond to clients who give birth naturally and to avoid promoting un-necessary C-sections.

CWFD has the management, financial and utilization data capacity to track the impact of these packages and learn from their introductions

Increase revenue: Raise price of services, track impact: This study found that CWFD static clinics are at the low end of the price spectrum, and satellite clinics charge (30 BDT) below cost. The earlier-cited HFG assessment of price elasticity of demand in Shining Sun clinics (see footnote 4) showed no decrease in utilization for most services following the last major price increase under the Smiling Sun Franchise Project. USAID/NHSDP/CWFD should consider raising the consultation charge at satellite clinics and, on a case-by-case basis, at static clinics. Again, clinic utilization by both full paying and by free or subsidized clients should be tracked for at least a year to measure the impact of any fee increase.

Lower costs: Study prescribing practices: Excessive prescribing of lab tests and drugs to patients who receive free or heavily subsidized services can drive clinic costs up significantly. The variations in prescription practices observed need to be studied to ensure that quality and cost effectiveness of care is maximized.

To USAID

Invest where there is a need: The competitor analysis has shown that in the urban area there are numerous providers and thus competition for Smiling Sun clinics. USAID should work with the government to ensure that its investment is cost effective. Smiling Sun clinic competitiveness should be reviewed and noncompetitive clinics relocated or closed.

Increase efficiency: With the costing report, USAID now has service-level cost of provision estimates for CWFD. These estimates could be used to design performance-based incentives (PBI) to improve provider performance and increase efficiency.

Focus on serving poor population: Positioning of CWFD clinics: The previously mentioned HFG study on increasing demand at NHSDP clinics (see footnote 4) reported that prices were not a major determinant of use of Smiling Sun clinics. Rather, the major determinants were perceived quality, presence of branded drugs, and polite providers. The study also reported that clients were well informed about services and would chose different providers for different needs. However, the demand study for this feasibility analysis also found anecdotally that CWFD clinics are perceived as “poor people’s” clinics and that some clients have concerns about quality expressed through comments on existing equipment (non-color ultrasound printouts and non-automated laboratory results). While these are clients’ perceptions of CWFD services and do not reflect actual quality provided, in a highly complete environment, these perceptions make it challenging for CWFD to attract paying clients and meet its 40 percent cost-recovery goal. It is difficult for most CWFD clinics to compete directly with private sector providers; they are not given the resources for better clinic location (on the ground floor for example), shiny new equipment, and longer opening hours. If the role of urban Smiling Sun clinics such as CWFD is to provide high-impact, primary care services to the poor and underserved – helping narrow the demand gap that public providers cannot meet – then lowering the cost-recovery targets should be considered.

Invest in access and choice not service provision: The Health Care Financing Strategy calls for the long-term establishment of a contributive social health insurance system. The poor would be enrolled without a contribution. Considering the range of services provided in the urban areas, USAID should envision moving its financing from subsidizing service provision for the poor to financing access for the poor in the urban areas, including alternate purchasing mechanism for providers.



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LANDSCAPE OF PREPAID HEALTH SCHEMES IN BANGLADESH

STUDY I OF THE FEASIBILITY ANALYSIS OF NGO PROVIDER-BASED PREPAYMENT SCHEMES IN BANGLADESH

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ACRONYMS

ADB	Asian Development Bank
ANC	Ante Natal Care
BADAS	Diabetic Association of Bangladesh
BDT	Bangladeshi Taka
BMA	Bangladesh Medical Association
BPL	Below Poverty Line
CBMCB	Community Based Medical College, Bangladesh
DCH	Dhaka Community Hospital
DIISP	Developing Inclusive Insurance Sector Project
DRG	Diagnostic Related Group
FFS	Fee-for-services
GK	Gonoshasthaya Kendra
GP	General Physician
GDIC	Green Delta Insurance Company
HI	Health Insurance
ICDDR, B	International Centre for Diarrheal Diseases Research Centre, Bangladesh
JFPR	Japan Fund for Poverty Reduction
NAG	New Asia Group
NGO	Non-government Organization
MFI	Microfinance Institutions
MHI	Micro Health Insurance
PKSF	Palli Karma-Sahayak Foundation
PNC	Post Natal Care
SAJIDA	Sajida Foundation
SSK	Shasthyo Surokhsha Karmasuchi
SME	Small and Medium Enterprises
UIC	United Insurance Company
UK	United Kingdom
UHC	Upazila Health Complex
USD	US Dollar

EXECUTIVE SUMMARY

This landscape study is part of a series of studies and analysis, please see Annex X for complete list, undertaken by HFG on behalf of the USAID mission in Bangladesh to determine the feasibility of NGO provider-based prepayment schemes.

This paper describes, based on available documents, published and gray literature, and key informant and expert interviews, the landscape of prepaid health schemes in Bangladesh giving particular focus on provider based prepayment schemes. Bangladesh has extensive networks of NGO providers, some such as the Smiling Sun NGO networks have been supported through external funding. This paper reviews existing or recently completed prepaid schemes as a first step to determine the feasibility of provider-based prepaid schemes to increase the NGO providers' sustainability.

Micro health insurance (MHI) is an innovative health financing mechanism for increasing access and lessening financial burden of health care. The schemes often target the informal sector and the poor. MHI can be depicted as four delivery models: provider driven, partner-agent, full service and community based. In Bangladesh, historically mainly two motivations worked behind the introduction of MHI : (i) health care providers driven initiatives for providing health care to the unprivileged at affordable costs and (ii) Micro Finance Institutions (MFI) driven initiatives for protecting the borrowers from income/productivity loss due to illnesses and the huge burden of treatment costs.

Gonoshasthaya Kendra (GK) and Dhaka Community Hospital are the examples of provider driven model in Bangladesh. Gonoshasthaya Kendra offers a voluntary and social class based health insurance where premium and benefits vary across the six social classes (i.e., destitute and ultra poor, poor, lower middle class, middle class, upper middle class and rich) of the catchment populations. GK serves about 1.2 million individuals in its catchment areas. The insured are entitled to receive health care from GK owned health centres and hospitals. The copayments for the services are progressive across the social class and the upper three tiers of the social class face large co-payment which is above 70% for most of the services. The major challenges faced by GK are low enrolment of the rich and overall low renewal rate. Costs recovery is also low at 35% of the recurrent costs. Thus the scheme is highly cross-subsidized by the other entities of GK including a pharmaceutical company, a private medical college and a private university.

Dhaka Community hospital (DCH) operates a scheme to serve the garments workers. Under this scheme DCH provides a doctor and an assistance who visit once a week to an industry for a full day as long as patients are available; the employer manages the prescribed medicines for the patients; and pays to DCH an agreed amount per month for doctor's services. Although services on site are free, there are also very high copayments (90%) for the inpatient care and referral services provided by DCH. Currently, about 8000 workers are being served. The current cost recovery for this program is reported to be 100 per cent.

Of the two provider-driven schemes, one charges progressive premiums and copayments and faces difficulty in attracting the higher paying clients and is heavily subsidized, and the other only offers limited discount on hospital care, but breaks even. The main objective of prepaid health scheme or MHI is to increase access to health care and reducing out-of-pocket payments significantly at the point of receiving health care.

Sajida Foundation's Nirapotta is an example of MFIs initiated scheme. This scheme is mandatory for SAJIDA's microfinance and Small and Medium Enterprise (SME) members and the premiums are paid at the time of loan receipt. The premium ranges from BDT 250 to BDT 1,050, depending on the amount and tenure of loan. There is an additional premium of BDT 100 for each supplementary loan. SAJIDA reimburses some cash benefit which is up to BDT 4,000. SAJIDA also runs two hospitals.



The insured in hospital catchment areas have the opportunity to seek health care from these hospitals. However, the coverage, given the price of health care in the market, is not adequate and hence the insured pays a large amount of the medical expenses.¹ It is well recognised that 'reimbursement system' is not a form of prepayment as the insured first must pay. Cashless or low co-payments are preferred. SAJIDA has achieved the break even in the recent years (with part of operation subsidized by microfinance surplus).

Grameen Kalyan's health scheme is a MFI initiated voluntary scheme. The scheme is currently serving about 3 million individuals. The insured receive primary care from the health centres operated by Grameen Kalyan itself. There is also some hospitalization benefit which is BDT 2000 (or USD 25) per household. There are also high co-payments which are more than 50%. Low renewal rate and lack of continuum of care are the major challenges. There was 65-70 percent costs recovery in the recent years. Nonetheless, the scheme has been expanded recently.

Whatever the delivery models and/or motives the prevailing schemes in Bangladesh commonly face the following challenges: (i) non-existent of independent micro health insurance regulatory authority that would enable the recognition of micro health insurance as an independent sector; (ii) complexities of designing micro health insurance products appropriate for the low income market; (iii) lack of reliable health service providers and thus micro health insurance providers need to take the responsibility of providing health care (iv) lack of skilled resources in micro health insurance; and (v) more importantly a limited and negative perception of insurance in the country as a whole. For the provider-based models, the limited provider networks limits extension of the coverage.

As in many countries, voluntary schemes face low demand (i.e., low enrolment and low renewal) in Bangladesh. Evidence shows that enrollment figures are also low for many voluntary schemes worldwide (Matul et al., 2013). In terms of the number of schemes, population coverage and growth micro health insurance is very limited in Bangladesh. It should be noted that health insurance, present through private insurance schemes, has a low coverage in Bangladesh. Although included in the government's health care financing strategy, there is to this date no social health insurance scheme and government employees are given an amount each month to cover their health care needs. This to note that worldwide micro health insurance has close alignment with microfinance. Though an unquestioned pioneer of microfinance initiatives, Bangladesh has not had expected success with prepaid health schemes. Voluntary health insurance has also not been popular in the formal sector. For example, the contribution of voluntary health insurance in total health financing is only 0.1 percent (BNHA4 1999- 2012). There is no compulsory health insurance scheme.

Presumably demand side factors such as lack of confidence/trust on prepayment mode, lack of awareness about the benefit of prepayment scheme, lack of affordability to pay premium and giving more weight to the present consumption plays an important role for the low development of health insurance sector. Some supply side factors such as low level of benefit, high copayment charged, committing fraud, complex procedures of claim submission, delay in claim settlement and rejecting the claim are equally responsible. Lack of trust as well as insurance culture may also be responsible for the underdevelopment of insurance market as a whole in the country.

All these challenges and limitations along with limited coverage and high co-payments restrict the scaling up and replication of the prepaid health schemes. The provider based schemes also face the challenge of limited facilities.

¹The average costs of an inpatient episode is about BDT 8000 (USD 103) (Source: InM-GDIC pilot scheme 2013-2014)

I. BACKGROUND

Bangladesh's Health Care Financing Strategy (HCFS) identifies three target populations: the poor (below the poverty line – BPL); the informal sector; and the formal sector. These three type populations are to be covered using different approaches. For the BPL, a government scheme known as Shasthyo Shuroksha Karmasuchi (SSK) has achieved much progress to begin its operation. For the formal sector, a government employee contributive scheme is being designed, and several initiatives are being implemented in the garment industry. The HCFS calls for community-based health insurance, micro health insurance, and other innovative initiatives for the informal sector. Global practice and knowledge identifies the informal sector population as the most difficult to reach with health protection coverage; these individuals are not classified as BPL and therefore do not qualify for government support, nor can they be easily reached through formal employment-based mechanisms.

In the fall of 2013, USAID Bangladesh asked the Health Finance and Governance project (HFG) to design and facilitate a one-day workshop focusing on Health Micro Insurance (including Community Based Health Insurance (CBHI), micro health insurance, and other insurance mechanisms) to cover/reach the informal sector. The workshop concluded that the most promising area was Micro Health Insurance (insurance associated with micro lending), followed by provider based insurance. Considering USAID's support for the Smiling Sun NGO network, USAID Bangladesh asked HFG to explore how provider-based prepayment schemes² could further the cost recovery/sustainability goals of the Smiling Sun NGOs. HFG proposed a feasibility study.

Thus, HFG proposed, and USAID Bangladesh approved, the project to conduct a feasibility study (and thereafter, if feasibility is determined to be positive, design an NGO provider-based pre-payment scheme).

². The February workshop highlighted the fact that each segment (CBHI, Micro Health Insurance, Provider Based Schemes) fell under a different legal framework -each with its own challenges. Therefore, prepayment is used instead of insurance, as NGOs do not fall under insurance regulations.



2. OBJECTIVE OF THE FEASIBILITY STUDY

The objective of the activity is to determine the feasibility of a Smiling Sun NGO based prepayment scheme.

The study should identify under what conditions a scheme would be feasible, if these conditions exist, what could be done to address any gaps, and if doing so would be recommended considering the costs, resources, and other identified issues.

The implementation of the feasibility study should be designed as to provide important information/data to the partner NGO, NHSDP, and USAID Bangladesh. The feasibility study should directly benefit the partner NGO and strive to minimize the burden of participation.

3. ACTIVITIES

In order to determine the feasibility of provider based prepayment schemes in Bangladesh, HFG, in close collaboration with the NGO Health Service Delivery project (NHSDP), executed the following steps: 1) Selected a Smiling Sun NGO network on a competitive basis; 2) Conducted an analysis of Bangladesh prepayment schemes landscape; 3) Executed a costing of services provided, compared the costs to the prices charged for these services to paying clients; 4) Compared the prices charged at selected CFWD clinics to competitors; 5) Developed two prepaid services packages, and finally, 6) HFG partner, the Centre of Excellence for Universal Health Coverage icddr,b at James P Grant School of Public Health, BRAC University, designed and implemented a study to gauge existing clients' interest/demand for these packages.

This paper is the result of step 2 above. This landscape study and four other document, please see feasibility analysis content page for complete list, inform the feasibility analysis

4. INTRODUCTION

Poor people are more vulnerable to various idiosyncratic (e.g., illness, accident, injury, death, loss of livelihoods) and covariant (e.g., endemic, natural calamities) shocks. Illness, as found in the literature, is the most burdensome shock of the low income people (Ahsan et al., 2014). Micro health insurance has emerged as an innovative health financing targeting the informal sector (especially for poor and low income people) in many low income countries to increase access to health care as well reducing out-of-pocket outlays.³ The initiatives of micro health insurance worldwide are taken by the different stakeholders, such as (i) health care provider (e.g., hospital/group of doctors); (ii) insurance company with some microfinance institutions (MFIs), (iii) microfinance institution, and community based organization or social organization itself, and (iv) community people. Globally there are, thus, mainly four kinds of delivery channel of offering micro health insurance: the provider driven model, the partner-agent model, the full-service model, and the community-based model.

Historically there were two motivations of developing prepaid health scheme in Bangladesh. Microfinance institutions (MFIs), such as Grameen Bank and Sajida Foundation, initiated micro health insurance scheme aiming at primarily protecting their borrowers from financial loss resulting from illness or injuries and thus their ability to repay the loans. These initiatives are sometime opened to the general public. Some health care providers such as Gonoshasthaya Kendra, Dhaka Community Hospital started prepaid health scheme aiming at providing health care for low-income underprivileged people at an affordable cost in both the urban and rural areas of Bangladesh. The objective of the latter type of schemes seems to be more broad and altruistic.

Conducting country-specific critical analyses of prepaid health scenario focusing on provider driven schemes is important for policy context. Ahsan et al (2013a) conducted a detailed review of microinsurance sector (which covers credit insurance, micro life insurance, micro health insurance, cattle insurance, etc.) in Bangladesh. Although Micro health insurance was also covered in the study it was not the focus. Thus, for policy discussions, there is lack of information focusing on prepaid health insurance scheme in Bangladesh. This study will provide information for a feasibility study of NGO provider based prepayment schemes in Bangladesh.

This study was conducted on the bases of available documents, published and gray literature and key informant interviews.

The paper is organized as follows: after this introductory section, Section 2 explains the methods; Section 3 reviews the provider driven initiatives of prepaid health scheme; Section 4 depicts MFIs initiated schemes; Section 5 illustrates other initiatives; and Section 6 provides discussions and conclusions.

³ For the purpose of this paper, prepaid health scheme refers to micro health insurance; we have used these terms interchangeably throughout the texts.

5. METHODS

The paper analyzes both quantitative and qualitative data available in the secondary sources. The paper also analyzes some primary data based on key informant interviews and consultation with relevant experts. We conducted an initial review of the relevant documents (e.g., program manual, annual report, leaflet, assessment report) available at online, and made a list of prepayment health schemes in Bangladesh. In the next stage we conducted a thorough review of all the relevant secondary sources of information. In the third stage we conducted key informant interviews and consultation with experts. The data was presented in the cross-tabular format.

6. PROVIDER DRIVEN MODEL

Under provider driven model health-service providers (i.e. hospitals, clinics, or groups of doctors) take all the responsibilities including product designing, marketing, providing health and carrying the risk. In true sense, this delivery channel, outside of the United States where it is well developed⁴, is rare in the global context and in Bangladesh.⁵ Gonoshasthaya Kendra (GK) is an example of provider driven model in Bangladesh. Dhaka Community Hospital (DCH) also provides some discounted health services based on prepaid card.⁶ The health insurance scheme recently been piloted for garments workers by Diabetic Association of Bangladesh (BADAS) is an example of a different form of provider based model in Bangladesh. Each of these health schemes is critically described here.

6.1 Gonoshasthaya Kendra (GK)

Gonoshasthaya Kendra (GK), a non-government organization, was established by a group of doctors led by Dr Zafrullah Chowdhury after the liberation war of 1971. In addition to Dhaka City and Savar area of Dhaka district GK's health journey has expanded in rural and remote communities of Chittagong Hill Tracts (CHT), riverine chars of Gaibandha and Kurigram and offshore islands of Kutubdia, Moheskhalia and Charfashon. GK has established 40 Health Clinics in 25 Upazila and 5 secondary care hospitals at Savar, Dhaka City, Sreepur (Gazipur District), Kashinathpur (Pabna) and Gaibandha.

Gonoshasthaya Kendra operates its socio-economic based health insurance scheme in urban areas (Dhaka city, Savar, Tongi, Galachipa Pourshova, Sreepur, Cox's Bazar, Char Fasson, Monohordee etc.), rural areas (Shibganj, Sirajganj, Parbatipur, Sonagaji, Kashinathpur, Daulutdia, Delduar etc.) and char areas of Gaibandha and Kurigram in order to provide sustainable health care services to 1.2 million population in the catchment areas. About 43 percent of the population in the catchment areas hold insurance card. Among the poor 58 percent have insurance card where 100 percent ultra poor hold insurance card. This is to note that 52 percent populations in the catchment areas are poor.

4 The largest Kaiser Permanente is the third largest health insurer in the US with a 10% share of commercial insurance and the first in California with a 40% share (source LA Times, January 29, 2013).

5 Yeshasvini health insurance (initiated by Dr. Devi Shetty, chairman of Narayana Health, in 2002 for rural farmers at the Karnataka state in India) is a prominent example of provider based prepaid scheme in the third world country context. Yeshasvini health insurance provides low probability high-cost medical events only. The scheme allows preexisting conditions and offers hospitalization care with the ceiling of Rs. 200,000 per year and Rs. 100,000 per surgery. This is a cashless scheme where patients can seek treatment from any designated hospital (which may be public, private or charitable) by showing their Yeshasvini identity cards, an electronic card containing all the attributes of the individual. As a true public-private partnership, this scheme has built partnership with state government, non-for-profit and private sectors where state government Cooperation Department plays a vital role by mobilizing members, collecting revenue and overseeing the activities. Farmer co-operative society also plays a crucial role by helping the government for identifying and enrolling members and explaining the program's benefits to potential beneficiaries. A Third Party Administrator (TPA), an essential part of insurance operation, handles claims and preapprovals. Although the state government provides subsidies and administrative support an autonomous trust (where government representatives are also members) governs the scheme independently from the government.

6 Ad-din Welfare Centre also runs a hospital based discounted health scheme, which offers 10% discount for purchasing medicine from Ad-din and 50% discount for other services. These services are offered at free of cost to the ultra poor.

Insured persons are divided into six groups according to their socio-economic status: destitute and ultra poor, poor, lower middle class, middle class, upper middle class and rich. Each group is further classified into smoker and non-smoker. There are also options for individual enrolment and family enrolment. The premium is determined progressively across the socioeconomic classes (see Tables 1-2). Another distinct feature is that premium for each class is bit higher for smoker than the non-smoker. There is also variation in premium between the urban and the rural areas. There is also differential premium between the capital city and other urban areas where the scheme is in functional.

**Table 1: GK Social Class Based Health Insurance (HI):
Premium for Individual and Family of 5 Members for Urban Areas**

Social Classes	Annual Premium (in BDT*)							
	Dhaka City				Savar/Tongi/Galachipa/ Pourshova/Sreepur/ Cox's Bazar /Char Fasson/ Monohordee etc.			
	Individual HI		Family HI Yearly Premium		Family HI Half-yearly Premium		Family HI Yearly Premium	
	Non-smoker	Smoker	Non-smoker	Smoker	Non-smoker	Smoker	Non-smoker	Smoker
Destitute & Ultra poor	70	80	140	150	50	60	90	100
Poor	100	120	240	250	110	120	200	210
Lower Middle class	200	225	550	600	160	170	300	320
Middle class	500	525	1100	1200	240	250	400	450
Upper middle class	900	1000	2700	3000	350	400	600	700
Rich	1200	1300	3200	3500	400	450	800	900

Source: Key informant interview and official data of GK, 2015

* BDT 80 = 1 USD

**Table 2: GK Social Class Based Health Insurance (HI):
Premium for Individual and Family of 5 Members for Rural Areas**

Social Classes	Annual Premium (in BDT*)					
	Rural Areas (Shibganj, Sirajganj, Parbatipur, Sonagaji, Kashinathpur, Daulutdia, Delduar etc.)				Char Areas of Gaibandha & Kurigram	
	Individual HI		Family HI		Family HI	
	Non-smoker	Smoker	Non-smoker	Smoker	Non-smoker	Smoker
Destitute & Ultra poor	40	50	80	90	50	60
Poor	60	70	150	160	90	100
Lower Middle class	90	100	200	210	140	150
Middle class	120	150	300	320	190	200
Upper middle class	200	220	400	450	280	300
Rich	250	270	500	550	350	400

Source: Key informant interview and official data of GK, 2015

* BDT 80 = 1 USD

Benefits include both preventive and curative care (consultation, diagnostic, hospital bed, and medicine). Preventive care, paramedic and GPs services are free for all the insured. However, there are differential copayments among the social classes for other services (see Tables A1-A5 in the Appendix).

The closer look of the benefits provided by the this scheme shows that other than paramedic and GP's consultation services and some preventive care, GK charges for almost every service including junior and specialized consultants' services, laboratory services and surgical procedures. Although this charge may be bit lower than the market price (i.e., the price charged for the non-insured as seen Tables A1-A5 in the Appendix) the beneficiaries need to pay substantial co-payment (especially for middle class and above) for various services (Table 3). As a social class based scheme the copayment progressively varies across the different social classes.

Table 3: Co-payment Structure of Some Services of GK

Social Classes	Co-payment (at %) charges for various services							
	Junior Consultants	Specialized Consultants	Ultrasound	Cabin Charge	Major General Surgery Gynae/ Obstetrics	Normal Institutional Delivery	C-Section Delivery Package	
Destitute & Ultra poor	0	NA	8	Not admissible*	5	NA	3	
Poor	0	NA	25	Not admissible*		25	23	27
Lower Middle class	33	25	50	Not Admissible*		45	33	47
Middle class	42	37.5	67		75	6	67	60
Upper middle class	67	50	75		75	75	67	73
Rich	75	62.5	83		75	85	67	87

Note: The copayment has been calculated comparing the price charged for the insured and the non-insured for each category of service.

* Destitute, ultra poor, poor and lower middle class are entitled to general bed at free of charge.

The major challenge of the scheme, as per the views of the key informant, is low renewal rate. After more than four decades of its operation the renewal rate does not reach 50 percent. Presumably due to the level of premiums and high copayment, the scheme also could not attract the rich class. Moreover, the scheme has not achieved expected geographical coverage. The cost recovery rate is 35% and thus the scheme is highly cross-subsidized by the other entities of GK (e.g., medical college, pharmaceutical company, university). This is to note that GK owns a medical college, a pharmaceutical company and a private university. Thus a major finding is that one cannot replicate this scheme without the cross subsidy.

6.2 Dhaka Community Hospital (DCH) Trust

Dhaka Community Hospital (DCH) Trust started its journey in 1988 aiming at providing health care for low-income underprivileged people at an affordable cost in both the urban and rural areas of Bangladesh. Currently the trust has a fully equipped hospital with 500 beds and other institutes including a Medical College. DCH Trust also serves the community people through its Industrial Health Program and Rural Health Program.⁷

Industrial Health Program provides free to the workers preventive and curative health care to the garment workers paid by the employers. The satellite teams (doctors and paramedics) visit the industries at a regular weekly interval. The team provides health education session, ante natal care (ANC), post-natal care (PNC) including breast feeding, motivation for accepting family planning method, child care, education, environmental hygiene, reproductive health care, safe drinking water and food. Cardholders also receive thorough yearly medical check-up and referral service at DCH where they benefit from 10% discount on fees. Presently, 24 factories are covered and on average 350 workers/employees are being served every week. The current cost recovery for this program is reported to be 100 per cent. The salient features of the program are presented in Table 4.

Table 4: Salient Features of the Industrial Health Program of DCH Trust

Services	Services cost/fee	Period of services
<ul style="list-style-type: none"> DCH provides a doctor and an assistance who visit once a week to an industry for a full day as long as patients are available. Industry manages the prescribed medicines for the patients. DCH provides indoor service, pathology service, operation and emergency service to industrial worker by the 10% discount on general service rates at Dhaka Community Hospital. DCH makes necessary arrangements for providing the age certificate to industrial worker whenever needed by industrial organization. Industry pays for it. DCH provides PHC training to two workers to become Doctor's Assistants. Industry provides a place for Doctor and his Assistant to examine the patients. Industry Cardholders also receive thorough yearly medical check-up and referral service at 10% discount at DCH. Presently, 24 factories are covered and on average 350 workers/employees are being served every week. The current cost recovery for this program is reported to be 100 per cent. 	<ul style="list-style-type: none"> Industry pays to DCH an agreed amount per month for Doctor's services Industry pays the cost of PHC training for two workers for doctor's assistance Industry pays the printing cost of health card 	<ul style="list-style-type: none"> Agreement is effective for one year. It may be renewed on mutual discussion Termination of agreement will depend on mutual consent. 30 days notice is required from either side Doctor's visiting day and time are fixed by mutual discussion

Source: Key informant interview and official website of DCH

⁷ In addition, DCH Trust runs a school health program. This is a subsidized program and has been implemented in collaboration with NGO schools, in Dhaka City and Pabna. Each child is provided with a "Health Card" (BDT 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 16 schools (on average 80 children in each) are covered. The focus here is on general pediatric care, but targeted areas include vision, hearing (ENT), dental, immunization, etc. Funding of this program is mainly through DCH subsidies and fixed amounts of token money collected from the NGO school authorities. Estimated 'cost recovery' for this program is less than 30 per cent.

The rural health program is offered in collaboration with partner organizations (e.g., MFIs, CBOs/SBOs), operating in a large number of districts. Over and above primary health services, both preventive care and curative procedures are made available to the cardholders. Typically, in each rural health centre doctors are available 8 hours a day and paramedic service can be accessed 24 hours a day. Doctor and paramedic services are free. There is also some provision of referral services at 10% discount at DCH. DCH serves 100,000 people under this program, via approximately 20,000 cardholder households. A nominal premium (BDT 10-20) is annually charged for a household. This program is financed with support from Oxfam and DCH subsidies.

This program, as depicted above, mainly provides some primary care. There is a 10% discount on the referral services provided by DCH. This means that this scheme offers little protection at secondary care level.

6.3 Diabetic Association of Bangladesh (BADAS)

Diabetic Association of Bangladesh (BADAS) with the financial assistance of Swiss Agency for Development and Cooperation (SDC) and technical assistance of a Swiss Institute has been piloting a health insurance scheme for the garment workers since April 2014. The scheme aims at increasing health service coverage with improved disease prevention, immediate access to health information, and efficient cost control, through a health financing plan by testing the economic viability of a health insurance for industry workers. The key players of the scheme are: Diabetic Association of Bangladesh (BADAS), National Health Network (NHN), New Asia Group (NAG), and United Insurance Company (UIC). The hospitals under NHN are the health care providers, NAG is the employer of the garments workers insured under the scheme and UIC is the risk carrier. Ideally this is a proper model of health insurance as an insurance company is taking part in carrying the risk. However, the initiative was started by BADAS. Moreover, BADAS plays the main role in the piloting process. Thus, this also may be broadly treated as provider driven model.

This is a group health insurance scheme of 800 workers belonging to the lowest salary groups of 7 garment factories of NAG. The scheme provides both inpatient and outpatient benefits to the insured individuals. The annual maximum coverage is BDT 15,000 and annual premium is BDT 487. The premium is paid by the employer. UIC and NAG equally share benefits and loss. There are some innovations of this scheme:

- Introducing telemedicine through establishing a medical call centre for giving immediate access to health information which also plays gate keeping role.
- Introducing health promotion program to raise awareness on nutrition, hygiene, communicable and non communicable diseases, reproductive & child health, occupational health and financial literacy.

The 12-months long piloting has been ended recently. The available information shows that the use of call centre is not satisfactory; overall claim rate is high, some claims have exceeded the maximum limit. In addition, the scheme has incurred some loss. The preliminary findings of an evaluation study shows that the insured were 1.62 times more likely to utilize health care than the non-insured control group; health care use increased by 5.1%; sickness absenteeism was significantly reduced by 1 day (from 4.2 to 3.2); OOP expenditure did not significantly decrease; and there is ambiguity in willingness to pay (Roth and Gyr, 2015).

7. MICROFINANCE INSTITUTIONS (MFIS) INITIATED SCHEMES

A number Microfinance Institutions (MFIs) including Grameen Bank (through Grameen Kalyan), Sajida Foundation, BRAC and Society for Social Services (SSS) initiated micro health insurance primarily in late 1990 and early 2000 for protecting their borrowers from financial loss occurred due to income/productivity loss and treatment costs. However, after few years of operation, most of these organizations did not continue the schemes presumably due to not achieving expected performance or financial costs. The Bangladesh wing of International Network of Alternative Financial Institutions (INAFI) also piloted a micro health scheme. However, the scheme was not continued after piloting phase. Grameen Kalyan and Sajida Foundation are more prominent among the schemes currently offering micro health insurance in Bangladesh.

7.1 Grameen Kalyan

Grameen Kalyan, a sister concern of Grameen Bank (GB), introduced its version of MHI in 1996 and covered several hundred thousand individuals at its peak in 2008. MHI is central among its activities serving the dual purpose of ensuring the participation of the target group as well as acting as a source of revenue for the program. Grameen Kalyan attempts to cross subsidize its members by having higher pricing structure for non-Grameen Bank cardholders and non-cardholders.

Under Grameen Kalyan Micro health insurance scheme by paying only BDT 200 (USD 2.5) for GB borrowers and BDT 300 (USD 3.75) for Non-GB households can subscribe an annual health insurance policy. Each health insurance policy covers 6 members in the family. Till the end of 2014 Grameen Kalyan had 15,868 micro insurance policy holders. This is to note that there was a sharp fall in insurance policy holders in 2010 when Prof Yunus left Grameen Bank as the Managing Director. This is because Grameen Bank ended its cooperation with Grameen Kalayan although this belongs to the Grameen Family. Previously branch offices of Grameen Bank supported the scheme by enrolling the new members, renewal and premium collection.

The poor households in the community are allowed to pay micro health insurance premium through quarterly/half yearly installments. The main benefits include reduced medical consultation fees (50% of the fee to non-cardholders), discounts on drugs and pathological tests (10% and 30% respectively), hospitalization benefits (BDT 2,000 or USD 25), and free annual health checks and immunization (Table 5).



Table 5: Benefits Offered to the Micro Insurance Card Holders by Grameen Kalyan

Type of Benefit	Magnitude of Benefit	Magnitude of Co-Payments/Co-Insurance
Consultation	50% discount on consultation/advice/ prescription fees	BDT 50
Pathological tests	30% discount on pathological tests available in Grameen Kalyan Health Center; and 70% discount on monthly blood sugar tests for diabetic patients	70% on pathological tests
Medication	10% discount on medicine available in the pharmacy in Health Center	90% on medicine
Medical check up	Quarterly free health check-up at home for 6 family members at free of charge	None
Hospitalization	Compensation up to BDT 2,000 (USD 25) for hospitalization	BDT 6000 (USD 77)* or 75%

Source: Key informant interview and official website of Grameen Kalyan

*The average cost of an inpatient episode is about BDT 8000 (USD 103) (Source: InM-GDIC pilot scheme 2013-2014)

Grameen Kalyan provides a wide range of primary health care services including maternal care. The health services provided by the centers are operated by Grameen Kalyan itself. Each centre covers about 36-42 squared kilometer area with approximately 30,000-40,000 population. Each centre has a pharmacy with essential medicine and a mini-pathological laboratory. A center was initially headed by a MBBS doctor. However, due to severe drop out of MBBS doctors and their negligence to work in the rural areas most centers are run by Medical Assistant.⁸ The other staffs in each health centre commonly are: an office manager, a female paramedic, a laboratory technician, six community health assistants and some Trained Traditional Birth Attendants. The centre is open for both the insured and the noninsured for 8 hours a day and 6 days a week.

There was a sharp increase in the number of clinics in the recent past. The total number of clinics has increased to 76 in 2015 from 59 in 2013. Grameen Kalyan has also added some new services including blood grouping and diabetic tests. The recovery of recurrent costs varies between 65-70 percent during last three years (2013-2015). Low level of renewal rate is a major concern of the scheme. The low renewal rate is caused mainly due to large copayment, lack of continuum of care and lack of significant difference in benefits between the insurance card holders and the non-insured (Hamid et al., 2011a). The Grameen Kalyan Management believes that the current level of referral benefits is not sufficient to ensure the secondary and tertiary level of care. Thus, Grameen Kalyan has decided to establish some tertiary level hospitals.

7.2 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. In 2006 SAJIDA established a comprehensive micro insurance program called HELP, later renamed as Nirapotta (Safety net), with the aim of providing social protection and security to its members and their families. This is a comprehensive package inclusive of health, education, life/loan, legal and disaster coverage. Nirapotta is applicable for both microfinance members and SME members of SAJIDA. Nirapotta is currently being provided in all the 10 operating districts (including Dhaka, Narayangonj, Chittagong, Feni, Comillah, Munshigonj, Jamalpur, Narshindi) of SAJIDA. The number of Nirapotta members in July 2015 was 130,000.

⁸ About 7 centers are still run by MBBS doctors.

This is SAJIDA's priority program and mandatory for its microfinance members. The premium charged for Nirapotta ranges from BDT 250 to BDT 1,050, depending on the amount and tenure of loan. Additional premium of BDT 100 is charged for each supplementary loan borrowed by Nirapotta members.

Health insurance is the major component of SAJIDA's micro insurance program. The insurance holder can receive monetary support up to BDT 4,000 for most major hospital services as outlined in the policy. The detailed list of benefit is depicted in Table 6. However the scheme works on a reimbursement system which is less than optimum as the insured need to pay all medical expenditures from out-of-pocket at the point of service delivery.

The scheme has achieved the break even and even some surplus in the recent years. However, some of the operation costs are subsidized by the surplus of microfinance. The key success of this scheme is attributed to its integration with microfinance and its compulsory nature. However, there are some limitations. As micro insurance is operated within microfinance the program is regulated by Microfinance Regulatory Authority (MRA) which does not address the growth/scaling up of micro insurance as a stand-alone product. Hence, the expansion of micro insurance is entirely dependent on the expansion of the microfinance portfolio since the product is only being offered to SAJIDA members.

SAJIDA also faced some challenges including dissemination of incorrect information to the policy holders, errors in claim settlement and delay in claim settlement for operating both microfinance and micro insurance with the same set of staff. SJIDA has learned some important lessons that may be beneficial for the sector: (i) operational costs are low if integrated with other programs, hence keeping premium low; and (ii) a package product rather than single products like health, life, credit insurance etc. allows providing expanded benefit.

Table 6: Health Benefit of Sajida's Health Insurance Scheme

Description	Benefit Amount (BDT)	Description	Benefit Amount (BDT)
General Surgery		Other Surgery	4000
Appendectomy	2500	Hospitalization	
Cholecystectomy	4000	Normal vaginal delivery	2000
Fistula/Fissure/Abscess	2500	Brain injury	3000
Haemorrhoidectomy	2500	Burn/Scalding	1500
Hernia operation	2000	Neonatal (within 28 days age) hospitalization	2000
Obstetrical & Gynecology		Diarrhea	1500
Caesarean Section	3000	Fever	1000
Hysterectomy	4000	5-day hospitalization (if other illness)	3000
D&C Dilation and Curettage	1000	ANC support (can be claimed times a year) with the following danger signals:	
Ophthalmic Surgery		<ul style="list-style-type: none"> • Bleeding (moderate to profuse) • High blood pressure with severe • Headache and blurred vision • Odema/ positive urine albumin • Convulsion • High temperature 	500
Cataract operation (SAJIDA Hospital)	Free		
Cataract operation (other hospital)	1200		
Pterygium	1200		
Chalazion	1000		

Description	Benefit Amount (BDT)	Description	Benefit Amount (BDT)
Fracture			
Simple fracture and dislocation	1500	Asthma adult (can be claimed two times a year)	750
Compound fracture and dislocation	3000	Cashless Benefit Normal delivery (including medication) is free at Sajida hospitals for members Cataract operation (including medication) is free at Sajida hospitals for members	
Verbal dislocation/Prolapsed	3000		
Accident	800		
ENT			
Tonsillectomy	2500		
Nasal I septoplasty	2500		
Polypectomy	2500		

Source: Sajida Foundation's Annual Report 2014

Another program, which is SAJIDA's Health Program (HEALTH), 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 HEALTH program is targeted at the non-poor who live in the catchment area of the hospitals, and have to pay annually BDT 150 per person in order to be eligible for coverage. Once a cardholder, they receive some discount (up to 30%) on price, but no cash claims. 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. Currently there are only few hundred members in this scheme.

8. OTHER INITIATIVES

There are some initiatives, in addition to provider and MFIs driven initiatives, taken some research organizations, government, employers, etc. Most of these initiatives are experimental.

8.1 Niramoy

The Niramoy micro health insurance scheme was piloted jointly by Institute of microfinance and Green Delta insurance Company Ltd. with some local MFIs and Community Based Medical College, Bangladesh (CBMCB) in Mymensingh.

The scheme was designed by Ahsan et al (2013b) for keeping in view the goals of adequate risk protection, inclusivity of access and affordability.⁹ The benefit package, encompassing outpatient care (consultation, diagnostics), maternity and inpatient care with most common surgeries and medication, is the most comprehensive that is ever known of in Bangladesh.

Niramoy encompassed many more players, i.e., partners, than is standard, namely, the microfinance institutions (MFIs), the hospital, drug companies (probably the first of its kind), the insurance company, and, above all, the beneficiaries. In the overall design, each of these players took on some risks. MFIs run the risk of excessive operating costs that is not reimbursed by anyone, the providers offer discounts in the expectation of potential growth of business which may not materialise, while the insurer of course takes on the greatest of risk.

The provider hospital, Community Based Medical College Hospital (CBMCH), was the mainstay of this pilot project; its state-of-the-art facilities and rural location are major attributes prompting its selection. Three participating MFIs (ASPADA, POPI and SSS), all active in the vicinity of the provider hospital (i.e., within a 5-7 kilometre radius), form another indispensable partner as their clients are the eligible beneficiaries of the scheme. The induction of a leading commercial risk carrier, Green Delta Insurance Company (GDIC) shouldering a large responsibility, is a milestone for the micro health insurance sector in Bangladesh. Several pharmaceutical companies (including General Pharmaceuticals, Sanofi Aventis, and Delta Pharma) provide drugs at discounted prices.

The benefit package was designed on the basis of the local need. Over the 12-month period, a maximum of five outpatient visits were set for a household of four and five members, three visits for a household of two or three members, six visits for a household of six or seven members, seven for a household of eight or nine members and eight visits for a household of more than nine members (Table 7).

⁹ 'NIRAMOY' is a Bengali word, which refers to the recovery chiefly from illness, but may also refer to overcoming a crisis.

Each eligible household is entitled to receive one complete maternal care including four ANC, delivery (normal or Caesarean Section), two PNCs and neonatal care. Note however that a household is considered eligible for the maternity component of the package if the pregnancy develops after enrolment in the MHI scheme by a mother who is at least 18 years old and does not have more than two children. In addition, each household is entitled to receive up to two episodes of inpatient care (surgical or non-surgical) available at CBMCH. However, if a household avails the maternal care, this household would be entitled to receive only one additional hospitalization benefit. Low co-payments were set on drugs and injectable.

Table 7: Benefits, Co-payments and Premium Structure of Niramoy MHI Scheme

No. of Total Insured Persons in the Household (HH)	Eligible No. of Total Outpatient Care Visits Per HH	Eligible No. of Total Inpatient Stays Per HH	Eligible No. of Maternity Cases Per HH	Co-Payment on Drugs and Injectable*	Total Premium per HH (380 x No. of Members)
2	3	2	1	20%	760
3	3	2	1	20%	1,140
4	5	2	1	20%	1,520
5	5	2	1	20%	1,900
6	6	2	1	20%	2,280
7	6	2	1	20%	2,660
8	7	2	1	20%	3,040
9	7	2	1	20%	3,420
10	8	2	1	20%	3,800

Source: Compiled from Ahsan et al (2013b)

Despite all the innovations the enrolment was very low (about 1% of the target households) mainly, due to, negative perception of insurance and lack of awareness about insurance.¹⁰ This was very difficult to convince them to pay for health before onset of their illnesses. Although the scheme kept provision of some incentives there was also lack of proper efforts of the staff of MFIs to enroll their members in the insurance scheme as this was not their priority program. The scheme also faced difficulties in containing costs from the hospital side as it was not possible to introduce diagnostic related group (DRG) or any other innovative payment mechanisms other than fee-for-services (FFS). Presumably the FFS leads to provider moral hazards. Given the FFS educating the provider about the norms of health insurance for convincing them to rational prescription of drugs and laboratory tests many reduce the moral hazard to some extent. Thus, insurance education is vital for both the potential beneficiaries and the health care providers.

After first year of piloting Green Delta Insurance Company (GDIC) has taken over the charge of continuing the field operation, and GDIC has made slight changes in the premium structure and benefit package. GDIC is preparing ground to start this as a regular program in the piloting location and elsewhere.

¹⁰ This misperception has been generally arisen due to committing frauds of some life insurance companies, unusual delay in claim settlement and requiring many documents to submit the claims.

8.2 Amader Shasthya

The icddr,b, b has been piloting a project on community health insurance in Chakaria, a remote rural area in Cox's Bazaar district of Chittagong division, since 2012. This project is locally known as "Amader Shasthya," meaning "our health." Amader Shasthya believes that "a burden shared is a burden halved" and thereby encourages solidarity among villagers.

The scheme runs two packages: Indoor and outdoor. The premium for the outdoor package is set at BDT 500 per household per year, which entitles each household member to free consultation with paramedics, doctors, access to medicine, and diagnostic services at a discounted price.

This package has a special rate for the poor, which is set at BDT 200 and provides the same set of services. The maximum benefit under this package is fixed at BDT 5,000 per individual per year, and BDT 30,000 per household per year.

The indoor package, on the other hand, charges BDT 1,200 per household per year as a premium and provides services including consultation with paramedics, doctors, hospital admission, diagnostic services, medicine, and operation costs. The maximum benefit each household can claim is set at BDT 54,000 for this package, and for an individual, this amount is set at BDT 9,000 per year. As of July 2015, nearly 30% of the households (which is around 2700) in their area of operation have been enrolled in the scheme and the benefit received by the clients is worth BDT 7 million to date. The total number of enrolment for last three years is 6500 and annual renewal rate is about 30 percent. The current costs (without the costs of clinical and marketing team) recovery for inpatient is 65 percent and outpatient is 100 percent. The scheme started with financial assistance of Rockefeller Foundation. Now Government of Bangladesh (GOB) is providing annually one hundred thousand US Dollar for continuing the scheme.

As per the narration of the key informant out-of-pocket payment of the insured for inpatient and outpatient have reduced to 66 and 50 percent respectively. The lessons learned (e.g., establishing partnership with local hospital, and referral linkages with partner hospitals) by the scheme may be useful for the sector.

Confident relationship with local people and community participation in planning and implementation are the major strengths of the scheme. The main challenges of the scheme are low enrolment, low level of renewal, low cost recovery, donor dependent, tackling of fraud practiced by the pharmacies; and tacking the conflict of interest of the other pharmacies which are currently outside this scheme. Not covering the pre-existing illnesses and lack of establishing formal referral chain with government hospitals are the major weakness of the scheme.

8.3 BRAC Health Security Programme (bHSP)

BRAC, aiming at weighing the effectiveness of a pre-paid health financing scheme with differential premiums, has started to experiment an inclusive and innovative health financing model entitled as “BRAC Health Security Programme” (bHSP) targeted to cover 5000 urban households at Gazipur district in August 2014. This experiment will continue for three years. Based on the monthly income, the population was classified into 4 different groups as seen in Table 8. Different groups of households have differentiated annual premium: BDT 600, BDT 1500, BDT 1800 and BDT 2400 respectively for the poor, low income, middle income and higher income households.

Table 8: Level of Premium for Different Groups of Households

Grade	Criteria	Yearly premium *(Taka)
Grade 1	i. Monthly income <7,000 taka (Manoshi grade 1)	600
Grade 2	i. Monthly income 7,001-12,000 taka (Manoshi grade 2) ii. Micro finance loan size <50,000 taka iii. House rent <3000 taka	1500
Grade 3	i. Monthly income more than 12,000 taka (Manoshi grade 3) ii. Micro finance loan size 50,000-200,000 iii. House rent 3000-5000 taka	1800
Grade 4	i. Micro finance loan size >200,000 taka ii. House rent is more than 5000 taka or live in own house	2400

Note: USD 1= BDT 78

This scheme provides both outpatient and surgical and non-surgical inpatient supports to the beneficiaries. All household-members are entitled to receive three outpatient consultations (with some discount on drugs and diagnostics) and two episodes of hospitalization. The maximum annual benefit of a household for a surgical hospitalization is BDT 5000 and non-surgical hospitalization is BDT 1500. The package also includes maternal care worth of BDT 1000 for normal delivery and BDT 3000 for C-Section. The health care is provided by some empanelled hospitals (e.g., BRAC Clinic, Tairunnessa Memorial Medical College Hospital, and Desh Hospital). The patients are referred to Gazipur Medical College Hospital, and Dhaka Medical College Hospital. A referral program organizer is employed to manage the referral patients in each referral hospital.

A total of about 1000 households of different economic groups have been enrolled in the scheme of which 30 percent from the poor, 38 percent from the low income, 19 percent from the middle income and 13 percent from the higher income households. The average claim amount is BDT 1200 while average premium is BDT 1400 and, hence, the scheme may attend at the break even if sufficient number of household is enrolled.

8.4 Developing Inclusive Insurance Sector Project (DIISP)

Palli Karma-Sahayak Foundation (PKSF) piloted a microinsurance project titled ‘Developing Inclusive Insurance Sector Project (DIISP)’ with the financial grant support of the Japan Fund for Poverty Reduction (JFPR) under the cooperation of the Asian Development Bank (ADB). The objective of the pilot project was to protect the livelihoods of poor households, especially women, from risks such as accidents, illness or natural disasters to secure their welfare and assets through the development of low-cost microinsurance services. Key innovative aspects of the project were addressing the needs of the poor through reducing vulnerability, building protection against shocks by developing affordable insurance services and expanding insurance service outreach through the network of MFIs in a sustainable approach.

Health package was the more prominent component of DIISP. The other components were life, loan and livestock. Some 80 branches were selected from 40 MFIs (2 branches from each MFI) for the field level pilot testing of health program under DIISP. Members of 80 branches were eligible to buy hospital cash benefit (HCB) policy for them and their family. The policy holder and his/her insured family members were entitled to receive hospital cash benefit if any insured person is hospitalized for more than 24 hours. In that case BDT 200 to BDT 400 per day is given as cash benefit for a maximum of 30 days, excluding the first day. This is note that the project kept the provision to seek inpatient services from the empanelled hospitals. In addition, policy holders are entitled to receive free services from the paramedics employed by the MFIs under the project. The claim settlement was executed by the respective MFI itself. The project provided a financial grant to the respective MFI for claim settlement of HCB services.

A policy holder member needs to pay BDT 250 as premium for one year to obtain a HCB policy. The HCB policy is *optional* for the members and yearly renewable. Although project started in January 2010 the field experiment lasted in one year (during January-December 2014).

Table 9 shows the Piloting status of Hospital Cash benefit Insurance (HCB). The data shows that annual claim ratio is about 5 percent and loss ratio is 27 percent.¹¹ Both figures are very sound for practicing health insurance in the country. The surplus generated by the MFIs has been retained as a seed fund while introducing this as a regular scheme. This is to note that, as per the report of the key informant, the scheme is being continued by 8 MFIs out of 40 after the piloting phase.

Table 9: Piloting status of Hospital Cash benefit Insurance (HCB) (January 2014 to December 2014)

Total Number of HCB policy issued	Total amount of collected premium (in BDT)	Total numbers of claims paid	Total amount of claims paid (In BDT)
33,771	97,93,298	1,657	27,40,590

Source: Key informant interview and official website of PKSF

8.5 Ayesha Abed Foundation Health Security Scheme (AAF-HSS)

Ayesha Abed Foundation (AAF), a BRAC Social Enterprise, have taken a unique initiative of financial risk protection, which is an employer sponsored “health-security scheme” in 637 sub-centers for their contractual workers around 13 districts of Bangladesh. Each sub-center employs 20 to 25 female workers (called Artisans) to work on small-scale handicraft production primarily involving stitching. Ayesha Abed Foundation is supporting more than 60,000 Artisans of which 85% are women from low income communities. The unique business model helps develop the skills of Artisans and empowers them to make informed decisions and take shared control over production and assets through their involvement in quality control, financial management and microfinance loans. For accessing health security Fund an artisan have to give BDT 25 monthly and AAF will add the same amount into the pooled fund.

HSS will cover 13 districts around Bangladesh. The project intends to cover all the regular artisans working in the foundation across 15 districts of Bangladesh. The pilot for the Health Security Scheme (HSS) started in Manikgonj and Nilphamari in February 2015.

¹¹ A loss ratio is an insurance term that refers to the amount of money paid out in claims divided by the amount of money taken in for premiums. Insurance is profitable if the magnitude of this ratio is less than one and vice versa.

All listed household-members will receive monetary benefits for hospitalization for two incidents each year while seeking treatment and/before starting the treatment/surgical procedures. If artisan or the listed family members use health care facilities using this scheme they will receive BDT 1,000 as initial payment for all cases (emergency, normal delivery, surgical or medical) while seeking care. Other two benefits are of BDT 6,000 and 10,000 for minor surgeries including Caesarean Section and major surgeries respectively before starting the surgical procedures. They will receive maximum of BDT 3,000 for nonsurgical treatments. Three-five public and private facilities will be selected in every district for providing health care.

8.6 Shasthyo Surokhsha Karmasuchi (SSK)

As part of the governments' implementation of the Health Care Financing Strategy, the Health Economics Unit (HEU) of the Ministry of Health and Family Welfare (MoHFW) is in the progress of piloting Shasthyo Surokhsha Karmasuchi, a social health protection scheme designed for Below-poverty-Line (BPL) population, in three Upazilas of Tangail District. As per the current design government will pay the full premium on behalf of BPL population. BPL population also will not have to pay any copayment at the point of service delivery. Health card will be provided to every BPL household.

A list of reimbursable benefits will be basic in the beginning and will evolve over time. It will be regularly updated. Ultimately, the benefit package will include: in-patient care which is manageable mostly at Upazila and partly at District level (upon limited referral). The benefits include the following: free physician's consultation in UHCs; free drugs and diagnostic facilities in UHCs; structured referral to the secondary level hospitals; and hospitalized SSK members will be treated according to defined medical treatment guidelines.

9. SUMMARY AND CONCLUSION

This paper depicts the landscape of prepaid health schemes in Bangladesh giving particular focus on provider based prepayment schemes for its implications and lacks thereof. Prepaid health insurance or micro health insurance is an innovative health financing mechanism for protecting the health of the poor. This mechanism has become popular in many corners of the developing countries as there are lot potential benefits. Worldwide there are four delivery models of offering prepaid health scheme or micro health insurance: provider driven, partner-agent, full service and community based. Historically mainly two motivations worked behind the introduction of micro health insurance in Bangladesh: (i) MFIs driven initiatives for protecting the borrowers from income/productivity loss due to illnesses and the huge burden of treatment costs; (ii) health care providers driven initiatives for providing health care to the unprivileged at affordable costs.

Table 10 illustrates a summary of various prepaid health scheme in Bangladesh. Gonoshasthaya Kendra and Dhaka Community Hospital are the examples of provider driven model in Bangladesh. Gonoshasthaya Kendra (GK) offers a voluntary and social class based health insurance where premium and benefits vary across the six social classes (i.e., destitute and ultra poor, poor, lower middle class, middle class, upper middle class and rich) of the catchment population. GK serves about 1.2 million populations in its catchment areas. The insured are entitled to receive health care from GK owned health centres and hospitals. The copayments for the services are progressive across the social class and the upper three tiers of the social class face huge copayment which is above 70% for most of the services (see Table 3). The major challenges faced by GK are low enrolment of the rich and overall low renewal rate. The costs recovery is also low, 35% of the recurrent costs. The scheme is highly cross-subsidized by the other entities of GK including a pharmaceutical company, a private medical college and a private university. This presumably restricts the replication of the scheme. There is some evidence that the scheme has created significant impact on increasing the utilization of ANC (Islam et al., 2012) Dhaka Community hospital (DCH) operates a scheme to serve the garments workers. Under this scheme DCH provides a doctor and an assistance who visit once a week to an industry for a full day as long as patients are available; industry manages the prescribed medicines for the patients; and industry pays to DCH an agreed amount per month for doctor's services. There is a small discount, 10%, for the inpatient care and referral services provided by DCH. Currently, about 8,000 workers are being served every week. The current cost recovery for this program is reported to be 100 per cent.

Sajida Foundation's Nirapotta is an example of MFIs initiated scheme. This scheme is mandatory for SAJIDA's microfinance and SME members and the premium is paid while disbursing the loan. The premium ranges from BDT 250 to BDT 1,050, depending on the amount and tenure of loan. There is an additional premium of BDT 100 for each supplementary loan. SAJIDA reimburses some cash benefit which is up to BDT 4,000. SAJID also runs two hospitals. The insured in hospital catchment areas have the opportunity to seek health care from these hospitals. However, the coverage, given the price of health care in the market, is not adequate and hence needs a high co-payment. It is well recognised that 'reimbursement system' is not the best one as the insured need to pay whole amount of medical expenditure from out of pocket at the point of service delivery under reimbursement system. SAJIDA has achieved the break even in the recent years.

Grameen Kalyan's health scheme is a MFI initiated voluntary scheme. The scheme is currently serving about 3 million individuals. The insured receive primary care from the health centres operated by Grameen Kalyan itself. There is also some hospitalization benefit which is BDT 2000 (or USD 25) per household. There is also high copayment which more than 50% or above. Low renewal rate and lack of continuum of care are the major challenges. There was 65-70 percent costs recovery in the recent years. Nonetheless, the scheme has been expanded recently. Although the scheme has created some impact to increase access to primary health care, this has not have any mentionable impact on health outcomes (i.e. improving health status) and economic outcomes (i.e., reducing poverty) due to high co-payments (Hamid et al, 2011a; 2011b).

This is to note that there are some partial evaluation of some of the scheme, such as Gonoshasthaya Kendra and Grameen Kalyan. However, there is lack of scientific evidence on the impact of most of the schemes (See Table A6). There is also no plan to conduct any impact evaluation of some of the schemes in future.

Whatever the delivery models the prevailing scheme in Bangladesh commonly face a number of challenges and shortcomings, as depicted in the literature (e.g., Ahsan et al., 2011), in addition to moral hazard and adverse selection, the standard reasons for failure of insurance market in general.

The limited extent of risk shifting in most programs cited above implies that the insured have to pay upfront a significant copayment for any diagnostic test, medication and surgery or any inpatient episode. Although co-insurance or copayment is generally a desirable feature of any insurance arrangement primarily to reduce moral hazard, the major portion of the risk should be borne by the insurer, not by the insured. The necessity of payment in cash up-front in meeting various fees and copayments in each of these programs is another substantial drawback. The flow of cash in the poor rural households is typically irregular as most are involved in informal activities. This is a real conundrum while credit-link would appear necessary to overcome the liquidity issue for spending any bulk amount, this create the risk of greater indebtedness. There is also lack of provision of external referral services. These may lead to the low demand of the voluntary schemes. It also seems that the rural poor fully do not grasp the value of an advance payment for 'the right to buy protection against a future contingency'.

The other notable constraints and challenges are: (i) non-existent of independent microinsurance regulatory authority that would enable the recognition of microinsurance as an independent sector; (ii) complexities of designing microinsurance product appropriate for the low income market; (iii) lack of reliable health service providers and thus microinsurance providers need to take the responsibility of providing health care (iv) lack of skilled resources in microinsurance; and (v) more importantly a limited and negative perception of insurance in the country as a whole.

All the voluntary schemes face low demand (i.e., low enrolment and low renewal) in Bangladesh. Enrollment figures are also low for many voluntary schemes worldwide (Matul et al., 2013). In a systematic review on the enrollment of voluntary and community-based health insurance programs, Panda et al. (2013) find that enrollment decisions are associated with both supply side and demand side factors, while for renewal decisions, supply side factors (e.g., quality of healthcare) are more important.

The development of micro health insurance sector is low in all aspects including numbers, coverage and growth in Bangladesh. This to note that worldwide micro health insurance has closed alignment with microfinance. Though an unquestioned pioneer of microfinance initiatives, Bangladesh has not had expected success with prepaid health schemes. Voluntary health insurance has also not been popular in the formal sector. The overall development of voluntary health insurance sector is also not satisfactory. For example, the contribution of voluntary health insurance in total health financing is only 0.1 percent (BNHA4 1999- 2012). There is also no compulsory health insurance scheme.

Presumably demand side factors such as lack of confidence/trust on prepayment mode, lack of awareness about the benefit of prepayment scheme, previous bitter experience, lack of affordability to pay premium and giving more weight to the present consumption plays an important role for the low development of health insurance sector. Some supply side factors such as low level of benefit, high copayment charged, committing fraud, complex procedures of claim submission, delay in claim settlement and rejecting the claim are equally responsible. Lack of trust as well as insurance culture may also be responsible for the underdevelopment of insurance market as a whole in the country.

All these challenges and limitations along with limited coverage and high co-payments restrict the scaling up and replication of the prepaid health schemes, especially provider driven initiatives and hence the growth of the sector

Table 10: Summary of the prepaid health schemes in Bangladesh

Name of the Scheme and/ Organization	Delivery Model	Name of Insurance Product	Target Population	Enrolment Criteria	Annual Premium (BDT)*		Benefit Package (BDT)*	Costs Recovery (%)	Health Care Providers	Population and Geographical Coverage	Major Challenges and Criticisms
Dhaka Community Hospital (DCH)	Provider driven	Industrial Health Program	Garment workers	Compulsory, but free, for all workers in the selected garment factories	Lump sum payment by employers based on capitation method		(i) Preventive care (ii) Free consultation services (iii) Free medical checkup once a year (iv) 10% discount referral and/or inpatient care	100	DCH	About 8000 employees in 24 factories	Very high copayments for inpatient and referral services
Gonoshasthaya Kendra	Provider driven	Social Class Based Health Insurance	Destitute & Ultra poor	Voluntary	Individual (BDT)* 70	Family (BDT)* 140	(i) No charges for paramedic and GP services (ii) No charges for consultation of expert physicians	35%	GK health centers and hospitals	Target population: 1.2 Million population in 10 districts No. of card holders: about 50,000	Low enrolment of the rich and overall low renewal rate
			Poor	Voluntary	100	240	(i) No charges for paramedic and GP services (ii) No charges for consultation of expert physicians				
			Lower Middle class	Voluntary	200	550	(i) No charges for paramedic and GP services (ii) considerable discount on consultation of expert physicians				
			Middle class	Voluntary	500	1100	(i) No charges for paramedic and GP services (ii) Fair discount consultation of expert physicians				
			Upper middle class	Voluntary	900	2700	(i) No charges for paramedic and GP services (ii) Some discount on consultation of expert physicians				
			Rich	Voluntary	1200	3200	(i) No charges for paramedic and GP services (ii) Some discount on consultation of expert physicians				

Note: * USD 1 = BDT

Table 10: Summary of the prepaid health schemes in Bangladesh/Cont.

Name of the Scheme and/ Organization	Delivery Model	Name of Insurance Product	Target Population	Enrolment Criteria	Annual Premium (BDT)*	Benefit Package (BDT)*	Costs Recovery (%)	Health Care Providers	Population and Geographical Coverage	Major Challenges and Criticisms
BADAS	Provider driven	Outpatient and Inpatient	The lowest salary groups of some selected garment factories	Compulsory	487 per worker which is paid by the employer	Maximum annual 15000 per worker	Below breakeven	National Health Network	8000 workers of seven garment factories of New Asia Group	High claim rate and potential loss
Sajida Foundation	MFI initiated	Nirapotta	Sajida's microfinance borrowers and SME borrowers	Compulsory	250 - 1050 based on amount of loan	Reimbursement : 500-4000 per episode	Break even	Hospital of Sajida Foundation and any other hospitals	130,000 in 10 districts	Errors in claim settlement and delay in claim settlement for operating both microfinance and microinsurance with the same set of staff
Grameen Kalyan	MFI initiated	Basic primary care	Rural people	Voluntary	(i) 200 for Grameen microcredit member (ii) 300 for other	10-70% discount on various services Referral benefit: 2000 annually		Grameen Kalyan's own health centres	Card holders: 15,868	Low renewal and lack of continuum of care
Amader Shasthya (ICDDR,B)	Community based	Outpatient	Rural people	Voluntary	500 per household	Maximum annual 30,000 per household	-	Outpatient care by community run health centre with assistance of icddr,b; referral and inpatient by empanelled local hospitals	10,000	Low renewal rate
		Inpatient			1200 per household	Maximum annual 54000 per household				

Name of the Scheme and/ Organization	Delivery Model	Name of Insurance Product	Target Population	Enrolment Criteria	Annual Premium (BDT)*	Benefit Package (BDT)*	Costs Recovery (%)	Health Care Providers	Population and Geographical Coverage	Major Challenges and Criticisms
DIISP	MFI initiated	Inpatient	Rural people	Voluntary	250	200 to 400 per day is given as cash benefit for a maximum of 30 days, excluding the first day	Generated surplus	Paramedic services by MFIs and inpatient care by empanelled hospitals	33,771 members of 40 MFIs	Low enrolment
Niramoy (Institute of Microfinance and Green Delta Insurance Company Ltd)	Joint initiative of MFIs and Insurance company with the assistance of some researchers	Outpatient, inpatient and maternity	Microfinance members	Voluntary	380 per individual	No charges excluding medicine and injectable. There is 20% copayment on medicine and injectable.	Loss incurred	Community Based Medical College Hospital, Mymensing	Target: 3000 households or 15000 people Card holders: 200 household or 1000 people	Low enrolment

ANNEX A

**Table A1: Copayment and Benefits Provided: GK Social Class Based Health Insurance (HI)
[Taka 80 = US Dollar 1]**

Social Classes	Consultation with									Preventive Services		Recreation Services	
	Para-medical	General Practitioner (GP) / Dental Surgeon / Junior Physio-therapist	Registrar / Junior Consultant	Consultants of				Physician Home visit		Blood pressure check, Nail cutting, Foot care etc.	Immunization	Dental Checkup / Eye Sight Checkup	Annual Cultural Event & Sports for elderly
				Physio-therapy	Ayur-vedh	Medicine /Surgery /Cardiology /Eye/ ENT / Gynae / Obs. / Urology etc.							
						Dhaka City	Other Areas	Dhaka City	Other Areas				
Destitute & Ultra poor	Free	Free	Free	Free	50	Free	N/A	N/A	N/A	Free	Free	Free	Free
Poor	Free	Free	Free	Free	100	100 (\$1.25)	N/A	N/A	N/A	Free	Free	Free	Free
Lower Middle Class	Free	Free	100 (\$1.25)	100	150	150 (\$1.88)	100 (\$1.25)	N/A	N/A	Free	Free	Free	Free
Middle Class	Free	Free	125 (\$1.62)	300	300	200 (\$2.50)	150 (\$1.88)	2000	1000	Free	Free	Free	Free
Upper Middle Class	Free	Free	200 (\$2.50)	400	400	250 (\$3.13)	200 (\$2.50)	2000	1000	Free	Free	Free	Free
Rich	Free	Free	225 (\$2.73)	500	500	300 (\$3.75)	250 (\$3.13)	2000	1000	Free	Free	Free	Free
Non Insured	20 (\$0.25)	100 (\$1.25)	300 (\$3.75)	600	700	500 (\$6.25)	400 (\$5.00)	3000	2000	50 (\$0.63)	Free	200 (\$2.50)	200 (\$2.50)

Source: Official data of GK, 2015, Note: NA= Not Available

Table A2: GK Social Class Based Health Insurance (HI) Co-payment and Benefits Provided (in BDT)

Social Classes	Reproductive Health Services											
	Oral / Injectable FP/ Vaginal FP	Vasectomy	Tubectomy	Pregnancy Consultation & Testing	Menstrual Regulation (Early Abortion)		Ante Natal Care (ANC) & Post Natal Care (PNC)	Safe Home Birth Support		Institutional Normal Delivery		Caesarian Delivery package **
					Rural	Dhaka city & Savar		Rural	Dhaka city & Savar			
Destitute & Ultra poor	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	500
Poor	Free	Free	Free	Free	200	300	Free	Free	300	500	700	4,000
Lower Middle Class	At Cost Price	Free	200	100	500	800	Free	Free	800	800	1,000	7,000
Middle Class	At Cost Price	Free	300	200	700	1,000	Free	500	1,500	1,000	2,000	9,000
Upper Middle Class	At Cost Price	Free	500	200	700	1,500	Free	500	1,500	1,000	2,000	11,000
Rich	At Cost Price	Free	500	200	700	1,500	Free	500	1,500	1,000	2,000	13,000
Non Insured	At Cost Price	Free	500	300	1,000	2,000	200	1,000	2,000	1,500	3,000	15,000

Source: Official data of GK, 2015

**Hospital admission, seat rent, medicines, investigation, anesthesia operation charges etc. included in package

Table A3: GK Social Class Based Health Insurance (HI), Co-payment and Benefits Provided: Diagnostic Services

Social Classes	Pathological Services							Diagnostic Radiology					Specialized Investigations			
	Basic Hematology	Blood Biochemistry	Micro Biology	Immunology Serology	Cytology	Basic Stool / Urine	CSF (Spinal fluid) Histopathology	X-ray				Ultrasono USG	MRI/ CT*	ECG	Colour ECHO	Endoscopy Cystoscopy etc.
								Skeletal (Analog)	Skeletal (Digital)	Barium	IVU					
Destitute & Ultra poor	Free	Free	Free	Free	Free	Free	50	50	NA	100	1000	50	1,000	Free	Free	Free
Poor	Free	50-150	100	100	Free	50	200	50	NA	200	1000	150	2,000	100	500	200
Lower Middle Class	100	100-300	150	150-250	500	100	400	125	NA	500	2000	300	2,500	150	700	500
Middle Class	200	100-400	200	150-300	700	100	600	150	250	600	2500	400	3,000	200	1000	1000
Upper Middle Class	250	150-450	250	200-400	800	200	700	175	300	800	3000	450	3,500	250	1,200	1,200
Rich	300	150-500	300	250-500	900	250	800	200	400	1000	3500	500	4,000	250	1,500	1,500
Non Insured	400	300-600	500	300-600	1000	300	1000	250	500	2000	4000	600	6000	300	2,000	2,000

Source: Official data of GK, 2015

* At selected GK Hospitals

NA= Not Available

Table A4: GK Social Class Based Health Insurance (HI), Co-payment and Benefits Provided: Specialized Investigations of Essential Medicines, Blood Transfusion & Alternative care

Social Classes	Essential Medicines & Blood Transfusions								
	Ayurvedh	Physiotherapy		**					
	†	Rural	Dhaka City	Oxygen (O ₂)	Oral & Parental Medicines	Nutritional Supplements	Nebulizer		Exchange Blood Transfusion
Destitute & Ultra poor	Free	Free	Free	Free	50% of Govt. approved price (MRP)*	70% of Govt. approved price (MRP)	Free	Free	Free
Poor	100	50	75	Free	80% of MRP	80% of MRP	50	Free	1,000
Lower Middle Class	200	100	150	Free	at MRP	at MRP	75	Free	2,000
Middle Class	500	200	250	Free	at MRP	at MRP	100	Free	5,000
Upper Middle Class	500	250	400	Free	at MRP	at MRP	150	Free	7,000
Rich	500	300	500	Free	at MRP	at MRP	200	Free	9,000
Non Insured	1,000	500	600	Tk. 300 per hour or less	at MRP	at MRP	250	Free	12,000

Source: Official data of GK, 2015

* At specified GK Hospitals.

** Blood Transfusion is free. But the cost of blood bag, giving set and compatibility tests will be charged.

NA= Not Available

Table A5: GK Social Class Based Health Insurance (HI), Copayment and Benefits Provided: Clinical Service

Social Classes	Clinical Services															Urban Home Service **		
	Hospital Admissions	Daily Seat Rent (Food not provided)	Daily Special Cabin Charge (Without of food)	ICU/CCU Daily Charges (No extra charge for equipments used)	Specialised Consultation for Indoor patient		Operative Surgery						ENT	Major General Surgery / Gynae/ obstetrics	Orthopedic /Pediatric Surgery/ Urology	Trained Paramedics Day & Night Nursing care 12 hour shift	Qualified MBBS Doctor + Paramedic Visit*	Qualified Physio-therapist and paramedic Visit & Care
							Circumcision		Minor surgery	Medium surgery	EYE							
							Rural	Dhaka City			IOL	FACO						
9AM-8PM	9PM-8AM																	
Destitute & Ultra poor	Free	Free	Not Admissible	Free	Free	Free	Free	Free	Free	500-1000	500	N/A	500	1,000	2,000	N/A	N/A	N/A
Poor	Free	Free	Not Admissible	Free	Free	Free	200	300	500-800	1500-3000	1,000	N/A	3,000	5,000	6,000	N/A	N/A	N/A
Lower Middle Class	Free	Free	Not Admissible	2,500	Free	400	300	600	700-1300	4000-6000	2,000	N/A	5,000-8,000	9,000-12,000	10,000-12,000	N/A	N/A	N/A
Middle Class	Free	Free	3,000	5,000	Free	600	500	1,000	1000-2000	5000-7000	3,000	10,000	8,000-12,000	12,000-18,000	12,000-15,000	750	2,000	1,000
Upper Middle Class	Free	Free	3,000	5,000	Free	800	600	1,200	1200-2500	6000-9000	3,500	15,000	10,000-15,000	15,000-20,000	15,000-25,000	750	2,000	1,000
Rich	Free	Free	3,000	5,000	Free	900	700	1,500	1500-3000	8000-10000	3,500	15,000	12,000-20,000	17,000-20,000	15,000-25,000	750	2,000	1,000
Non Insured	1000	500	4,000	8,000	Free	1200	800	2,500	2000-4000	10000-15000	4,000	20,000	15,000-25,000	20,000-25,000	20,000-30,000	1,000	3,000	2,000

2015 Source: Official data of GK, 2015

Table A6: Impact evaluation of the prepaid health schemes

Name of Scheme/organization	Evaluation studies and major findings	Any plan for future evaluation?	Comments
Dhaka Community Hospital (DCH)	There is n study on the insurance component yet	Currently there is no plan to evaluate the scheme	
Gonoshasthaya Kendra	Islam et al (2012) evaluated the impact of this scheme on ANC	Currently there is no plan to evaluate the scheme	
BADAS	Undertaking a research by icddr,b	Not Applicable	Pilot phase has been completed
Sajida Foundation	Sajida regularly conducts MIS data based evaluation. However, there is no mentionable impact study on the beneficiaries	Not yet	
Grameen Kalyan	Hamid et al (2011a, 2011 b)	No provision for internal evaluation.	
Amader Shasthya (ICDDR,B)	None	Not yet	
DIISP	None	Not applicable	The pilot period is over
Niramoy (Institute of Microfinance and Green Delta Insurance Company Ltd)	None other background papers	Not applicable	The pilot period is over

ANNEX B: BIBLIOGRAPHY

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COSTING AND PRICING OF CWFD SMILING SUN CLINICS

March 2016

This publication was produced for review by the United States Agency for International Development.
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COSTING AND PRICING OF CWFD SMILING SUN CLINICS

STUDY 2 OF THE FEASIBILITY ANALYSIS OF NGO
PROVIDER-BASED PREPAYMENT SCHEMES IN
BANGLADESH

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government.

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ACRONYMS

ANC	Antenatal Care
ARI	Acute Respiratory-Tract Infection
BDT	Bangladesh Taka
CDD	Control of Diarrheal Disease
CWFD	Concerned Women for Family Development
DCI	Data Collection Instruments
EMOC	Emergency Obstetric Care
EPI	Expanded Program on Immunizations
ESP	Essential Service Delivery Package
HFG	Health Finance and Governance Project
HQ	Headquarters
IMCI	Integrated Management of Childhood Illnesses
IUD	Intra-Uterine Device
NHSDP	NGO Health Service Delivery Project
LCC	Limited Curative Care
LRA	Labor Room Attendant
MBBS	Bachelor of Medicine, Bachelor of Surgery
MIS	Management Information Systems
MRP	Market Retail Price
NGO	Non-governmental Organization
NHSDP	NGO Health Service Delivery Project
PNC	Postnatal Care
RTI	Reproductive Tract Infection
STI	Sexually Transmitted Infection
TB	Tuberculosis
UPHCSDP	Urban Primary Health Care Services Delivery Project
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Objective of the Feasibility Study

The objective of the activity is to determine the feasibility of a Smiling Sun NGO based prepayment scheme.

The study should identify under what conditions a scheme would be feasible, if these conditions exist, what could be done to address any gaps, and if doing so would be recommended considering the costs, resources, and other identified issues.

The implementation of the feasibility study should be designed as to provide important information/data to the partner NGO, NHSDP, and USAID Bangladesh. The feasibility study should directly benefit the partner NGO and strive to minimize the burden of participation.

Activities

In order to determine the feasibility of provider based prepayment schemes in Bangladesh, HFG, in close collaboration with the NGO Health Service Delivery project (NHSDP), executed the following steps: 1) Selected a Smiling Sun NGO network on a competitive basis; 2) Conducted an analysis of Bangladesh prepayment schemes landscape; 3) Executed a costing of services provided, compared the costs to the prices charged for these services to paying clients; 4) Compared the prices charged at selected CWFD clinics to competitors; 5) Developed two prepaid services packages, and finally, 6) HFG partner, the Centre of Excellence for Universal Health Coverage ICDDR,B at James P Grant School of Public Health, BRAC University, designed and implemented a study to gauge existing clients' interest/demand for these packages.

This paper is the result of step 3 above; the competitor analysis of selected CWFD clinics. This analysis and four other documents, please see feasibility analysis content for complete list, make up the feasibility analysis

Aims of the Costing Study

This study is one component of an overall study assessing the feasibility of an NGO provider-based prepaid scheme. It estimates unit cost of the services provided by Concerned Women for Family Development (CWFD) a member of the Smiling Sun (Surjer Hashi) NGO networks supported by the USAID and DfID funded NGO Health Services Delivery Project (NHSDP). It estimates costs from the provider's perspective, covering all the resources needed to provide a service inclusive of drugs, supplies, and laboratory tests. It also assesses which categories of inputs are the most important components of the costs of providing services. The study also calculates the price (cost to patients) of the services and compares unit costs and prices. The costs and prices along with competitor information were used to calculate the price of the prepaid service packages for the demand analysis.

Methodology

Four of CWFD's 21 clinics were purposely selected for inclusion in the study: Gazipur, Gandaria, Rayer Bazar, and Pallabi. The clinics were selected based on the following criteria: size of the clinic measured by utilization, percentage of poor and ultra-poor population served, cost recovery rate, type of clinics (vital or ultra), and type of premises (rented or government donated). We have applied a combined bottom-up and top-down approach to measuring unit costs.



Data

A time-motion observation, augmented by asking providers to estimate time spent on cases for which patients were not available for direct observation, is used to measure the amount of direct labor time used for different services. Providers were also asked to estimate the amount of time employed for delivery care because delivery care requires multiple stages (including post-delivery/post-operative care) which were not readily observable within the scope of this study. For staffs that spend all of their time dedicated to a single service ward, such as labor room attendants, all associated costs were allocated to individual services based on the number of services (i.e., number of normal deliveries and C-Sections) produced annually. Contractual providers, such as anesthesiologists and surgeons, are paid on a fee-for-service basis; thus, the fees paid for their services were treated as the costs of their services. The data collection was conducted using checklists and questionnaires for three consecutive days at each clinic during March and April 2015.

The data on administrative and support staff, utilization of services, and annual expenditures were obtained from the management information services of the CWFD Head Quarters. Furniture and equipment data were obtained from the audit reports regularly produced by CWFD. Provider's prescription pads for the 15-30 days prior to site visit were analyzed to determine units of drugs and lab tests prescribed to the patients. Costs of medicines, medical supplies, and laboratory tests for routine services (antenatal care, postnatal care, sexually transmitted infections, family planning, delivery, C-sections, and common childhood illnesses) were based on interviews with providers. The study uses the prices of drugs and medical supplies listed in the agreement between NHSDP and various pharmaceutical companies. As NHSDP procures drugs at 80% of market retail price (MRP), we multiply the prices by 80% to reflect the cost to the clinic. When drugs not included in these agreements were used, prices were collected from pharmacies located near the clinic. The costs of the ingredients used for lab tests were obtained from the lab technicians of the clinics. Incurred annual rental costs were used for as the cost of the building for the two rented premises. In the two facilities operating on government-donated premises, the study employed proxy of rental costs.

Cost Calculation

Labor costs for staff directly providing clinical services were first calculated by multiplying the number of visits by the average time spent for each type of visit. Unallocated time for each type of clinical staff was then allocated to each service based on the percentage of time spent in each service compared with the estimated total time spent in clinical care. Finally, we then divided the total labor costs of clinical staff for a particular service by the number of services provided to estimate the cost of clinical staff labor per service provided. These calculations were done separately for services offered at the static clinic and at satellite clinics. By adding these labor costs across different providers (where applicable), we calculated the total labor costs for an average visit for a particular service. Staff not provided clinical care were allocated to each service based on the number of visits. The cost of drugs, medical supplies, and laboratory tests were calculated by multiplying the unit price by the number of units prescribed, and then multiplying by the percentage of patients utilizing each type of input. We allocated the cost of other inputs to individual services based on the number of visits. All costs are presented in Bangladeshi Taka (BDT) using 2015 prices.

Price Calculation

With the active support of CWFD management, we collected prices charged for each service from each clinic using a written survey. We estimate the price of a service: (i) with drugs, supplies, and lab tests using the same quantities as in the costing component of this study and (ii) without drugs, supplies, and lab tests. The price of drugs and supplies were calculated as 95% of MRP, as sold by CWFD.

Findings

The number of visits (for all services) ranged from 39,425 at Gandaria to 94,579 at Gazipur. Gazipur handled about 3,398 visits per full-time equivalent staff, while Gandaria handled about 2,084 visits per full-time equivalent staff (Pallabi and Rayer Bazar saw about 2,947 and 2,819 visits per full-time equivalent staff, respectively). All facilities had at least one satellite clinic except Gandaria. At the four static clinics, the average cost of an ANC visit ranged from BDT 607 to BDT 735 at Rayer Bazar and Gandaria, respectively. An ANC visit's cost at the other two clinics were both just over BDT 609 and BDT 635 at Gazipur and Pallabi, respectively. The higher ANC costs in Gandaria compared to other clinics reflects that Gandaria offers ultrasound at each ANC visit, while other clinics provide ultrasound at only three of the four ANC visits (the ultrasound machine is also utilized less at Gandaria, raising the unit costs of an ultrasound there as compared to Gazipur). Gandaria incurred the highest unit cost for Limited Curative Care¹, LCC, (BDT 736) followed by Gazipur (BDT 670) at the static clinic. The unit cost of LCC for Rayer Bazar and Pallabi respectively is BDT 332 and BDT 521. This is mainly due to the variation in prescription of drugs.

Drugs and medical supplies constitute the majority of unit costs across services at all the static clinics and average 61% of the cost of a visit of any service across the 4 clinics. Lab test is also an important component of costs ANC; for all services lab tests constitute about 15% of costs, while for ANC they constitute almost 43% of costs. Direct labor does not have large contribution to the unit cost of all services (at about 9%), but represents about 64% of costs for delivery care. Overhead, similarly, contributes about 15% to unit costs across all services, but represents about 82% of costs for family planning services (as family planning commodities are donated, their costs were not captured). However, overhead costs become an important component of costs when drug and lab test are excluded from the costing calculation.

There is a positive difference, i.e. margin, between the current prices charged to patients and unit cost of ANC, IMCI and LCC at all the static clinics, and especially at Gazipur. The price-cost difference is negative for the family planning services (indicating the price is less than the cost of the service), largely because the prices do not cover the overhead costs associated with family planning services, and in some cases are not adequate to cover direct staff costs.

When excluding the drug and lab test, the price reflects the consultation and registration fees charged for a service. There is a high positive difference between price and unit cost of ANC, ARI, IMCI, and LCC at the static outlets of the Gazipur and Pallabi clinics, but the opposite situation prevails at Gandaria and Rayer Bazar.

As there is no provision of drug and lab test in the satellite outlets; the price refers to only the consultation fee for the paramedic services, which is BDT 30 for all services. Thus, price in the satellite outlets is lower than unit costs calculated i.e. the nominal fee charged does not cover the cost of providing the services. This finding applies to all services in the three clinics that have satellite clinics.

¹ Limited curative care are curative services offered at the clinics and satellite sites that were not individually tracked.

Conclusion

Utilization of services and prescription pattern of drugs and lab tests largely account for variation of unit cost across the clinics. For most services, drugs and supplies constitute the majority of costs. Lab tests are also an important component of the costs for ANC. Overhead costs are an important portion of the costs for family planning services and other services with donated inputs, and when drug and lab test are excluded from the costing calculation. However, other than delivery care, direct labor does not have large contribution to the unit cost of the services. The negative difference between price and unit cost at the satellite outlets of all the clinics suggests that all services at satellite sites are offered at a subsidy to all patients. This suggests exploring an increase in the price of services at satellite clinics may be necessary. However, the competitor analyses, another part of the feasibility study of NGO provider-based prepaid scheme, may provide more insights regarding the feasibility of increasing the price.

I. INTRODUCTION

The Smiling Sun (Surjer Hashi) clinics operated by Concerned Women for Family Development (CWFD) offer comprehensive Essential Service Delivery Package (ESP) that includes maternal health care, child health care, family planning services, and limited curative care (LCC) including diagnosis and treatment of communicable diseases. The clinics are funded by USAID and DFID through the NGO Health Service Delivery Project (NHSDP) project. This study is part of a larger effort to assess the feasibility of NGO provider-based prepaid service packages. This study primarily aims at analyzing and estimating the costs structures of CWFD Smiling Sun clinics from the provider's perspective. Unit costs includes all resources needed to delivery care, including drugs, supplies, and laboratory tests. The study also aims to analyze the pricing of the services of those clinics. A separate effort compares the prices to likely competitors (included in a separate report). These analyses provide the basis for Health Finance and Governance Project (HFG) and CWFD to develop prepaid services packages for testing of their acceptability among patients. The demand analysis of prepaid services packages is the subject of a separate report.

The specific objectives of the costing and pricing study are to:

- Estimate the unit cost of provision of various services (e.g., ANC, normal delivery care, C-Section, PNC, ARI, control of diarrheal diseases, RTI, STI, and Family Planning) provided by Smiling Sun clinics from the provider's perspective;
- Assess how unit costs vary under different conditions, such as utilization, range of services offered, location of the clinic, etc.;
- Identify cost drivers (what influences most of the cost of a service);
- Calculate the price² of the various services;
- Comparing the prices with the costs;

The report is organized as follows. Section 2 provides an overview of CWFD Smiling Sun clinics; Section 3 describes the methodology; Section 4 presents the findings; and Section 4 delivers some conclusions.

² Price is the amount charged to the beneficiaries of the services. It includes registration, consultation, laboratory and medicines prescribed. Thus price is the cost to the patients that do not benefit from a reduction in charges.



2. OVERVIEW OF CWFD SMILING SUN CLINICS

2.1 Services Offered by CWFD Clinics

Table 1: List of Services Provided by Smiling Sun Clinics Operated by CWFD

Type of services	Type of clinic		
	Static		Satellite (outreach)
	Ultra	Vital	
Maternal care	<ul style="list-style-type: none"> ANC PNC Normal delivery C-Section delivery Emergency obstetric care 	<ul style="list-style-type: none"> ANC PNC 	<ul style="list-style-type: none"> ANC PNC
Child health care	<ul style="list-style-type: none"> Control of diarrheal diseases/dysentery ARI Newborn care EPI Vitamin A supplementation 	<ul style="list-style-type: none"> Control of diarrheal diseases/dysentery ARI Newborn care EPI Vitamin A Supplementation 	<ul style="list-style-type: none"> Control of diarrheal diseases/dysentery ARI Newborn care EPI Vitamin A supplementation
Limited curative care	<ul style="list-style-type: none"> General cough/cold and fever Skin diseases Fungal infection Other child illnesses RTI STI TB 	<ul style="list-style-type: none"> General cough/cold and fever Skin diseases Fungal infection Other child illnesses RTI STI TB 	<ul style="list-style-type: none"> General cough/cold and fever Skin diseases Fungal infection Other child illnesses RTI STI
Family planning services	<ul style="list-style-type: none"> IUD NSV Tubectomy Injectable Pill Condom 	<ul style="list-style-type: none"> IUD Injectable Pill Condom 	<ul style="list-style-type: none"> Injectable Pill Condom
Other services	<ul style="list-style-type: none"> Registration Counseling Lab services Ultrasound Pharmacy Operating Theater Other supplies and consumables Ambulance services 	<ul style="list-style-type: none"> Registration Counseling Lab services Ultrasound Pharmacy Other supplies and consumables 	<ul style="list-style-type: none"> Registration Counseling Pharmacy Other supplies and consumables

CWFD Smiling Sun clinics cover about 1.8 million people in urban areas and provide free and/or subsidized health care to the poor and disadvantaged people in its catchment area³. CWFD operates a total of 21 clinics – 11 in Dhaka City Corporation; two in Barisal City Corporation; and the others in Gazipur, Mymensing, Netrokona, Tangail, Gopalpur, Gouripur, Jhalokathi, and Bhola Municipalities. Five clinics in Dhaka City Corporation are being operated in government-owned premises constructed under the Urban Primary Health Care Services Delivery Project (UPHCSDP), while the remaining 16 are operated in rented facilities.

Of the 21 clinics, 4 are classified as “ultra” and 17 as “vital”. The vital clinics (employing both static and satellite clinics) offer the ESP with basic lab services excluding delivery care (see Table 1). Some vital clinics have recently introduced ultrasound services. The ultra clinics offer the full range of ESP services with 24 hours EMOC services, i.e. normal and C-section deliveries, extended lab services, and ultrasonography (see Table 1).⁴

2.2 Staffing of CWFD Clinics

There are eight management and support staff at CWFD headquarters (HQ) that work full time in support of the 21 Smiling Sun clinics (see Table 2). The Executive Director also provides 30 percent of her effort. Based on staffing norms, a vital static clinic consists of the following full-time providers: one Bachelor of Medicine, Bachelor of Surgery (MBBS) doctor, 1-2 paramedics, one counselor, one lab technician, and one service promoter. An ultra-static clinic consists of 3-5 full time MBBS doctors, 3-4 paramedics, and 4 labor room attendants.⁵ In addition, a gynecologist, an anesthesiologist, and one sonologist (sonogram technician) provide services on an on-call basis. There is usually one paramedic and one community service provider in each satellite clinic associated with static clinic services provision.⁶ The administration and support staff in each vital clinic are: clinic manager, administration assistant, cleaner, and messenger cum security guard. In addition to these staff, there is one messenger and one security guard in each ultra-clinic (see Table 2).

³ Under NHSDP, CWFD and other Smiling Sun NGO networks have a 40% cost recovery target and 40% of their clients must receive free or subsidized services

⁴ Note that one of the ultra clinics currently provides normal delivery services and not C-section deliveries.

⁵ Some vital clinics also employ a part-time MBBS doctor.

⁶ There is typically more than one satellite clinic under each vital static or ultra static clinic.

Table 2: List of Direct Labor Inputs and Administrative and Support Staff, by Clinic Type

Type of inputs	Static clinic				Satellite (outreach) clinic	
	Ultra clinic		Vital clinic		Type	Number
	Type	Number/status	Type	Number		
Direct labor inputs	MBBS Doctors	3-5	MBBS Doctor	1	Paramedic	1
	Paramedics	3-4	Paramedic	1	Community service provider	1
	Gynecologist	On call	-	-	-	-
	Anesthesiologist	On call	-	-	-	-
	Labor Room Attendant (LRA)	4	-	-	-	-
	Counselor	1-2	Counselor	1	-	-
	Lab Technician	1	Lab Technician	1	-	-
	Service Promoter (SP)	1	Service Promoter	1	Service promoter	1
	Sonologist	On call*	On call*	-	-	-
Managerial and Support staff (at the clinic level)	<p>The following managerial & support staff work for functioning of each static clinic and associated two satellite clinics:</p> <ul style="list-style-type: none"> • Clinic Manager • Admin Assistant • Cleaner • Ambulance driver • Messenger (cum security guard in the vital clinic) • Security Guard (only in the ultra clinics) 					
Managerial and support staff (at HQ)	<p>Executive Director: 30% of the time spent in support of this project Total 8 managerial & support staff exclusively working for the project: Program Director Finance & Administration Manager Monitoring Officer Project Manager MIS Officer Account Officer Messenger Driver</p>					

Note: * In some clinics the regular MBBS doctor provides ultrasound services beyond their service hours and the clinics pay for this on a piece-by-piece rate.

3. METHODOLOGY

3.1 Sampling

The resources available allowed for the cost assessment of four Smiling Sun CWFD clinics. We have considered the following dimensions to select the clinics:

- Size of the clinic measured by utilization (total services provided by static clinic and satellite clinic);
- Percentage of poor and ultra-poor population served/accessing the services;
- Cost recovery rate;
- Type of clinics (ultra and vital clinics).

In addition, we considered the following in the final selection of facilities for inclusion in this study:

- Spatial distribution of the clinics; and
- Type of premises (rented and government-owned premises).

Table 3: Costing Study Clinic Selection, by Dimensions

Region	Name of Clinic	Major Dimensions*
Dhaka	Gazipur	<ul style="list-style-type: none"> • Highest utilization of all clinics • Lowest percentage of poor clients accessing services • Top ranking (or category 'A') in cost recovery • Ultra clinic • [Operating in a rented building] • [Spatial distribution: close to Dhaka]
	Rayer Bazar	<ul style="list-style-type: none"> • Intermediate level of utilization • In the top category among clinics for serving the poor • Category 'B' in cost recovery • Vital clinic • [Operating in the government premise] • [Spatial distribution: inside Dhaka]
Dhaka	Pallabi	<ul style="list-style-type: none"> • Intermediate level of utilization • Mid-level percentage of poor clients accessing services • Category 'B' in cost recovery • Vital clinic • [Operating in a rented building] • [Spatial distribution: inside Dhaka]
Dhaka	Gandaria	<ul style="list-style-type: none"> • Intermediate level of utilization • Mid-level percentage of poor clients accessing services • Category 'B' in cost recovery • Ultra clinic⁷ • [Operating in a government premise] • [Spatial distribution: inside Dhaka]

⁷ At the time of the study Gandaria provided only non-complicated delivery services.

Considering all these dimensions (as depicted in Table 3), we had originally purposively selected four clinics: Gazipur, Rayer Bazar, Tangail, and Barisal City Corporation. However, given security considerations in early to mid-2015, we were restricted to clinics in Dhaka or very close to Dhaka (such as Gazipur). Thus, Tangail and Barisal have been replaced, respectively, by Pallabi and Gandaria (see Table 3).

The sample thus covers clinics with intermediate levels of utilization, with the exception of Gazipur having the highest utilization of any clinic in the CWFD network. Gazipur, conversely, also had the lowest percentage of poor clients accessing services in the network, with Rayer Bazar having among the highest percentages, and Pallabi and Gandaria having an intermediate percentage of poor clients. Gazipur has high levels of cost recovery, while the other three clinics present category “B” (the middle category) levels of cost recovery. Two clinics are ultra clinics, and two clinics are vital clinics; similarly, two clinics operate in government-owned premises and two clinics operate in rented premises.

3.2 Costing Methods

For measuring unit cost we have employed a mixture of top-down and bottom-up approaches – we have applied the ingredients approach of costing drugs, medical supplies, and laboratory tests (bottom-up), and allocating other costs to services based on the number of visits for a service (top-down). For labor costs associated with clinical staff, we combined a time-motions study with a top-down approach.

Under this approach, we have, per standard procedures for conducting a costing study, followed the steps listed below to calculate costs:

1. Define the output unit for the costing of all services provided at a clinic (e.g., visit);
2. Identify all the direct inputs (resources) used to produce outputs;
3. Measure the amount of each direct resource that is used to produce one unit of output;
4. Assigning a value to each direct resource that is used to produce one unit of output;
5. Identify and value all indirect costs, e.g., the costs associated with managerial and support staff; and
6. Allocate indirect costs to individual services and calculate the indirect cost per unit of output.

Each of these steps is discussed in turn below. In order to capture all these dimensions we conducted a survey using a set of structured data collection instrument (checklists and questionnaires) for three consecutive days in the selected clinics during March and April 2015. We finalized the data collection instruments after incorporating the feedback received from pretesting and consulting with relevant stakeholders.

1. *Defining the output unit:* 'Visits to a provider' for seeking a health care service (as illustrated in Table 1) is the unit for the costing of that service; for deliveries, the unit is the cost per delivery or C-section (and not, e.g., the cost per bed-day). Note that each visit of ANC is defined as an individual unit of costing for ANC service (ANC1, ANC2, ANC3 or ANC4), but we also take the average costs across the four ANC visits.

2. *Identifying inputs:* The inputs required for producing the health services are: labor, buildings, drugs and medical supplies, laboratory, equipment, materials, utilities, and other overhead costs (e.g., maintenance, etc.). The labor inputs can be classified into the following categories: health service providers/clinical staff or 'direct labor' (i.e., the personnel who are directly involved in providing health services), managerial and support staff at the clinic level, and managerial and support staff at HQ level (see Table 2). From the provider's perspective, health care providers (e.g., doctors, paramedics, Gynecologists/surgeons, anesthesiologists), drug and supplies, and lab tests constitute the direct inputs for producing services in CWFD clinics.
3. *The amount of direct resources needed to produce one unit of output:* We use the treatment protocols to identify the amount of drugs, medical supplies, and laboratory tests for all services except limited curative care (LCC). The treatment protocols related to care for a particular service varies across the clinics. Hence, the use of direct resources, especially for drugs, medical supplies, and lab tests, vary across the clinics. Although there is a standard (WHO guidance) protocol for maternal care, especially for ANC and PNC (see Annex Table A2), clinics do not follow the same protocol and reported that the use of direct resources varies across the clinics for services. For example, some clinics restrict clients to 4 ANC visits (WHO recommends at least 4 ANC visits) while other clinics allows their clients up to 7 ANC visits (i.e., one per month for each month after the first visit held during the 12th week). Some clinics prescribe one round of ultrasound service per pregnancy for the majority of their clients, while other clinics prescribe ultrasound service for all visits. Thus, we have used the existing practice of the respective clinics to measure the direct resources used to provide services. However, we have only included four visits as the full ANC service package, and all the drugs related to ANC have been distributed amongst these four visits.

For LCC services, the types of resources used vary greatly based on the diagnosis and the mix of diagnoses between the clinics. Information regarding the types and units of drugs prescribed to the patients for LCC visits were collected from observing the prescription pads for the 15-30 days prior to conduct the survey at each clinic. We also used prescription pads for getting the types and units of lab tests used (prescribed) for each of type of service provided by the clinics.

There are two main methods of measuring the time of direct labor: the time-motion observation approach and the recall approach. The former produces more reliable estimates because it involves directly observing how much time is spent by a provider (e.g. MBBS doctor, paramedic, anesthesiologist, surgeon) with a patient receiving a particular service. Note that the provider usually spends more time for a patient while he/she is observed during the time motion observation than when they are not being observed. Despite this drawback, time motion approach gives more accurate data compared to the recall method. Thus, for outpatient care, we first used the time-motion observation approach for measuring the time of direct labor. In order to do so, for each type of direct labor, we administered a time-motion observation checklist, which includes the following entities: name of the clinic, service provided and designation of the provider, starting time of the patient 'in' to a provider's room/desk, time of the patient 'out' and total time (in minute) spent by the provider with the patient. The measure for time spent per patient includes the time a provider uses for record keeping related to a patient's visit or treatment.

We secondarily used the recall method for the cases where patients were not available for direct observation while conducting the survey. The relevant providers were asked whether they had treated any patient during the last one week prior to the survey and if so how much time spent for those patients each type of service. In the situations where the provider did not see any patients for such a service within the past week, we asked them how much time they spent on the service the last time they provided the service in the clinic.

Delivery care (both normal delivery and C-Section) undergoes multiple stages including post-delivery/post-operative care. This also requires the inputs of multiple providers for a longer duration of time. It was not practical to observe the time spent by all the providers in all stages of delivery care. Thus, we have used the recall method to estimate how much time each provider spends on each stage of the service. Further, there was no need to observe the time of the providers (e.g., labor room attendant) who are dedicated to a particular service (most relevant for delivery care). In this case, costs associated with these staff are allocated to a particular service; in cases where they are providing dedicated time that encompass more than one output type (i.e., normal deliveries and C-sections), the number of services provided for the different output types are used to allocate the costs of dedicated staff.

Anesthesiologists and surgeons are contractual providers paid on fee-for-service basis. The fees paid to them reflect the costs of their services from the CWFD perspective, and we use these fees when calculating the costs. Thus, there was also no need to observe the time these providers spent with clients.

4. *Assigning values to the resources used:* We used two main sources to obtain the prices of the medicines, injectables, and medical supplies: the MOU signed by NGO Health Services Delivery Project (NHSDP) with various pharmaceutical companies for procuring drugs, and the drug store nearest to each of the CWFD clinics assessed. However, the prices for some the medicines prescribed by the providers were not available in either the drug store or in the drug list enclosed with MOU. Thus, we also obtained prices at the pharmaceutical shops in Shahabag, a hub of retail drug shops, New Market, and Khalabagan areas of Dhaka City.

The variable part of lab test costs (i.e., the costs of the ingredient used) were obtained from lab technician at each clinic.

5. *Identify and value all indirect costs:* Information regarding numbers and salaries of administrative and support staffs were obtained from the management information system (MIS) of CWFD headquarters (HQ). Health services utilization data and annual expenditure data on different inputs (e.g., salary, allowances, maintenance, transport costs, utilities, and other expenditures), both for the period October 2013-September 2014, were also obtained from the MIS of CWFD HQ. Note that the MIS of the CWFD is well designed and captures all the necessary information. Expenditures incurred for recurrent items (utilities, non-medical supplies, maintenance, information technology charges, purchased services, and training) were counted as annual indirect costs.

CWFD regularly produces clinic-wise audit reports, which provide details on the furniture and medical and non-medical equipment present in each clinic. These audits provide information detailing the status (good or bad) of each item and their purchase price. We have used these audit reports to capture the costs of furniture and equipment; thus, the costs presented in these analyses are inclusive of the costs of the furniture and equipment which were in good condition.

Annual rental costs were considered for costing rented premises. In the government donated premise, we used estimated rental costs as the proxy costs (or the opportunity costs). Rental costs were estimated by multiplying the area of the premise (in square feet) with the local rental costs per square feet.

6. *Allocate indirect costs to service outputs:* We allocated indirect costs to service outputs based on the number of visits for each service. More details are provided in Section 3.3 below.

3.3 Cost Calculation

We use Microsoft Excel to calculate the costs. There are two steps to calculate the costs under the ingredients approach: (i) estimation of costs of each type of input (ingredient) used for treatment of a patient with given condition; and (ii) aggregating the costs of all inputs to obtain the total costs per patient per condition.

A detailed description of cost calculation methods used is presented in Table 4.

Table 1: Description of Cost Calculation Methods

Type of Cost Item	Description of Cost Calculation Methods
Direct labor input	<p>To calculate the clinical staff costs for a given service, the number of minutes a provider spent on the average patient (based on the time-motion observation or provider recall) is multiplied by the provider's per minute labor costs. The per-minute labor cost of a provider is calculated by dividing his/her annual salary and allowances by the number of minutes the provider works in a year. However, providers do not spend their entire work hours treating patients. They spend some of their time preparing and following official decorum, which are part of their work. They may also sit idle due to a lack of patients. As full time staff, they are paid the full amount of their salary and allowances regardless of the number of patients or how they spend their time. Thus, in addition to costing the per-service contact time, we have also considered non-contact time. In order to estimate costs of clinical staff, we have followed the stages below:</p> <ul style="list-style-type: none"> • <i>Estimate the amount of time spend in direct contact with clients for each service:</i> We first calculated the total number of minutes (annually) for each provider associated with each category of services by multiplying the total unit of services provided in each category and mean amount of time spent for one unit of each category (derived from the time-motion observation and/or recall methods). • <i>Estimate the proportion of all time spent for each service:</i> We next calculated the proportion of total time spent in each category of service. We first added the time estimated for each service across all service, and then divide the estimated amount of time in direct contact with clients for each service by the total amount of time spent in direct with clients for any service to calculate the proportion of all time spent for each service (i.e., we allocate time not spent in contact with clients based on the amount of time spent in direct contact with clients). • <i>Estimate the cost of time spend in direct contact with clients for each service:</i> In the third stage, we calculated the share of providers' labor costs for each category of service by multiplying the proportion of time spent for the respective category of service with the total annual salary and allowances of the provider. • <i>Estimate the unit cost of clinical staff for each service:</i> In the final stage, we get the direct labor costs for a unit of a particular category of service by dividing its labor costs by the total number of contacts for that service category. <p>By adding the labor costs across different providers, where applicable, we calculate the total labor costs for an average visit for a given type of care.</p>
Administration and support staff at the clinic level	<p>Labor costs for administration and support staff at the clinic level were obtained by dividing the amount of annual salary and allowances of all these staff by the total number of annual services provided of that clinic.</p>
Management costs at Head Quarter level	<p>We have followed a two-stage procedure to calculate HQ-level management costs. In the first stage, the amount of annual salary and allowances of all associated managerial and support staff (as depicted in Table 2) were divided by the number of clinics run by CWFD to obtain the overhead costs per clinic. In the next stage, we divided these overhead costs by the total number of annual services provided by the respective clinic.</p>

Type of Cost Item	Description of Cost Calculation Methods
Drugs and supplies	The cost of each drug/supply that patients received were calculated by multiplying the manufacturer's retail price (MRP) per unit by the number of units prescribed by the provider for a patient, and then multiplied by the percentage of patients for that service who were prescribed the medicine. The percentage of patients who received each type of drug was determined by the counter foils of the prescription pads (for LCC) and provider interviews (for other services). The MRP provides the unit costs of drugs and supplies. The costs were adjusted down by 20% as NHSDP procures drugs and medical supplies at 80% of MRP.
Laboratory costs	Information on the type and number of tests needed for an average client of a given condition, and information on percentage of patients of that condition that required the test were obtained by consulting the provider and the prescription pads. We found total laboratory costs of an average visit for a particular kind of care by multiplying the unit cost of a test by the percentage of patients who required that test and finally by adding the costs of the different tests.
Equipment and furniture costs	The procurement price for all equipment and furniture in a clinic was divided by the estimated number of equipment life years (i.e., 5 years) to get the annualized value of the equipment. The annualized unit value was multiplied by the number of units of equipment of each type available in the facility to get the total value for each type of equipment. The sum-total of annual values of all types of equipment gave the total annual cost of equipment. The total costs were divided by the total number visits in the facility during the year to get unit cost of equipment. Note that medical equipment used for a particular service – notably ultra-sound machines for ANC – were directly included in the cost of the particular service for which they are used.
Equipment maintenance Costs	The total annual maintenance costs of equipment of a clinic were divided by the total number of annual visits of that clinic to get the unit costs of equipment maintenance costs.
Vehicle costs	To get the annualized value of the vehicle used for the HQ level staff of the project we divided current market price by the estimated number of life years of the vehicle. We divided the annualized value by the total number of annual visits in all 21 clinics to get the unit costs of vehicle.
Vehicle maintenance Costs and fuel costs	To get the unit cost of maintenance and fuel of the vehicle used by the HQ level staff we divided the total expenses in this purpose by the total number of annual visits in all 21 clinics.
Building costs	The annual rental costs of the clinic premise were divided by the total number of annual visits of that clinic to get the unit costs of building.
Utilities	The total annual costs of utilities of a clinic were divided by the total number of annual visits of that clinic to get the unit costs of utilities.

3.4 Price Calculation

For the analysis of price-cost comparison, we collected price data from four CWFD clinics included in the costing study. We developed a standard template to collect the prices charge for the different services provided by the clinics. We finalized the template after incorporating the feedback of CWFD on the draft version. In the next stage, we sent the final template to CWFD. In the third stage, CWFD sent the template to the clinic managers at the respective clinics to fill in the price information (i.e., fees and/or price charged) for their services. After receiving the data, we visited all the four clinics to get more insights, including the level and type of services provided and to verify the information provided.

We have calculated the price of a service (e.g., for an ANC visit, an ARI visit, an LCC visit, etc.) in two ways: (i) including drugs, medical supplies, and lab tests as per the treatment protocol (as used in costing study) and (ii) excluding drugs, medical supplies, and lab tests. The latter metric includes the fees charged for consulting with the service providers. The price of drugs and medical supplies were adjusted down by 5% because CWFD sells these items at 95% of MRP.



4. FINDINGS

We included two vital clinics (Rayer Bazar and Pallabi) and two ultra clinics (Gazipur and Gandaria) in both costing and pricing analysis. However, each is different from the other in terms its location, catchment population, utilization of services, etc. (see Table 5). It should be noted that at Gandaria, a government dispensary (which provides prescription and medicines without charging any price) is located next to the clinic on the common boundary. Hence, the utilization of services is in this clinic are low for an ultra clinic.

Given the degree of variation between the four sites in terms of population served and services offered, we have carried out the costing and pricing analyses separately for each of the four clinics, and have not grouped the clinics (i.e., vital and ultra). Any averages reported are the simple mean across the four clinics (that is, we have not, for example, weighted the means to reflect utilization, etc.). We have also conducted separate analyses for the static clinics and the satellite outlets for each of the clinics. This disaggregation can help to inform the development of prepaid health services packages by highlighting the variation in costs according to different clinic characteristics, which may need to be accounted for in the design of the prepayment scheme.

Table 2: Description of the Clinics Included in the Sample

Variable	Rayer Bazar	Pallabi	Gazipur	Gandaria
Type of clinic	Vital	Vital	Ultra	Ultra
Main occupation of catchment population	Work in tannery industries	Work in garment industries	Low-grade occupations	Low-grade occupations
Services offered	Full ESP except for delivery care	Full ESP except for delivery care	Full ESP with delivery care and C-section; no TB services	Full ESP with delivery care (not enough room to establish an operating theater for C-section)
Ownership of building used for static clinic	Government	Rented	Rented	Government
Staff at static clinic	<u>Clinical staff:</u> 1 medical officer (MBBS doctor) 1 paramedic <u>Support staff:</u> 1 clinic manager 1 administrative assistant 1 counselor 1 lab technician 1 cleaner 1 messenger cum night guard 1 field supervisor (TB) 1 community volunteer (TB)	<u>Clinical staff:</u> 1 medical officer (MBBS doctor) 2 paramedics <u>Support staff:</u> 1 clinic manager 1 administrative assistant 1 counselor 1 SP 1 lab technician 1 cleaner 1 messenger cum night guard 1 field supervisor (TB) 1 community volunteer (TB)	<u>Clinical staff:</u> 5 medical officers (MBBS doctor) 5 paramedics 4 labor room attendants <u>Support staff:</u> 1 clinic manager 1 administrative assistant 1 counselor 1 SP 1 C/A 1 lab technician 1 messenger 1 driver 1 night guard 1 field supervisor (TB) 1 community volunteer (TB)	<u>Clinical staff:</u> 1 medical officer (MBBS doctor) 4 paramedics 3 labor room attendants <u>Support staff:</u> 1 clinic manager 1 administrative assistant 1 counselor 1 SP 1 C/A 1 lab technician 1 messenger 1 driver 1 night guard 1 field supervisor (TB) 1 community volunteer (TB)

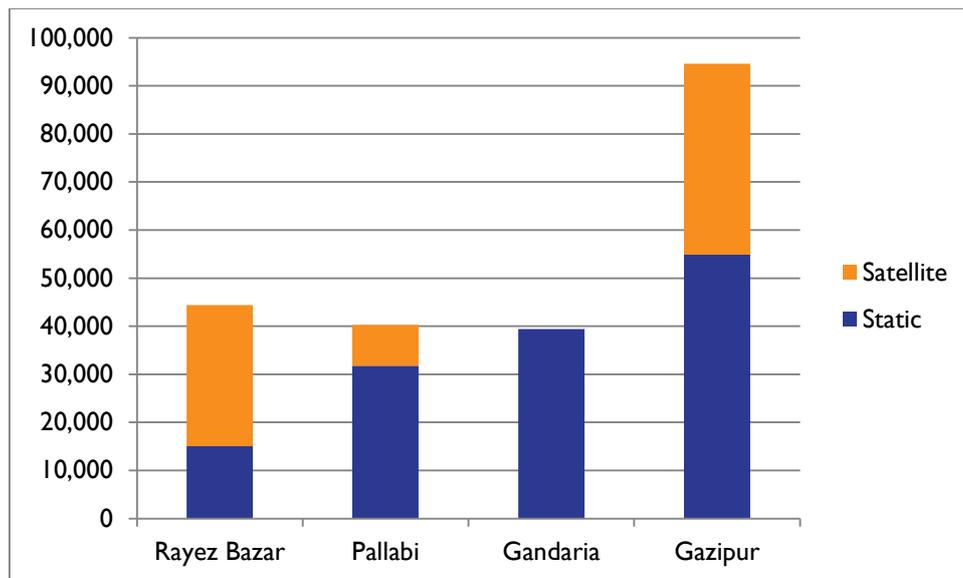
Variable	Rayer Bazar	Pallabi	Gazipur	Gandaria
Staff at satellite clinic(s)	3 paramedics 2 Service Promoters (SPs) 1 Clinic Aid (CA)	1 paramedic 1 SP	3 paramedics 3 SPs	None
Number of full-time equivalent staff	15.75	13.67	27.83	18.92
Average salary per full time equivalent staff (BDT)	130,412	117,387	120,756	112,387
Visits to static clinic (% of total visits)	15,029 (34%)	31,806 (79%)	54,868 (58%)	39,425 (100%)
Visits to satellite clinic (% of total visits)	29,375 (66%)	8,475 (21%)	39,711 (42%)	0 (0%)

The number of visits (at any clinic) ranged from just under 40,000 at Gandaria to just under 95,000 at Gazipur, with Pallabi (just over 40,000 visits) and Rayer Bazar (about 45,000 visits) more similar to Gandaria than to Gazipur (Figure 1). Gazipur had more visits at the static clinic than any other clinic had in total; Gazipur also had more visits at satellite clinics than Gandaria had overall.

While Gandaria did not have any satellite clinics (and thus 100% of visits at the static clinic), the majority of visits (66%) at Rayer Bazar were at the satellite clinic, while 42% of all visits at Gazipur were at the satellite clinics, and 21% of all visits at Pallabi were at satellite clinics. On average across the static clinics, LCC comprised the plurality of visits (36% of visits, ranging from 11% at Gazipur to 55% at Pallabi), followed by visits for the extended program on immunization (EPI) plus tetanus vaccinations (28% of visits ranging from 18% at Pallabi to 43% at Gazipur) and integrated management of childhood illnesses (IMCI) (10% of visits, ranging from 2% at Gazipur to 15% at Gandaria). In satellite clinics, EPI plus tetanus vaccine visits accounted for 34% of visits on average (ranging from 25% at Pallabi to 48% at Rayer Bazar), family planning accounted for 25% of visits (ranging from 12% at Rayer Bazar to 39% at Gazipur), and LCC and IMCI accounted for 13% of visits each.

Not all the staffs listed in Table 5 were employed at each clinic for the full year; we thus have calculated the number of full-time equivalent (FTE) staff for each clinic (Table 5). The number of visits per FTE ranged from 2,084 at Gandaria to 3,398 at Gazipur, with Pallabi having 2,819 and Rayer Bazar having 2,947 visits per FTE. More visits per FTE indicate that there were more visits per worker over the course of the year; if staff were paid the same on average across clinics then sites with more visits per workers would have lower unit costs. However, because of the different mix of staff and pay differentials between clinics, different clinics had different pay per FTE, ranging from about BDT 112,000 at Gandaria to just over BDT 130,000 at Rayer Bazar. (Note also that this analysis cannot control for any measures of the quality of care).

Figure 1: Total Number of Service Contacts during October 2013-September 2014



4.1 Unit Cost

As noted in section 3, unit costs are inclusive of drugs, medical supplies, lab tests, direct labor, admin and support staff, other overhead costs (including rents, equipment, furniture, utilities and maintenance) at the clinic level and the HQ level.

Table 6 summarizes the unit costs of major services provided at the static outlets of different clinics. The unit cost varies considerably across the clinics, with Gandaria generally having the highest and Gazipur having the lowest unit cost for most of the health care services, especially maternal care (Also see Figure 2). For example, at the static outlet the average cost of an ANC visit is BDT 735 at Gandaria while this is BDT 609 at Gazipur. The higher ANC costs in Gandaria compared to other clinics reflects that Gandaria offers ultrasound at each ANC visit, while other clinics provide ultrasound at only three of the four ANC visits (the ultrasound machine is also utilized less at Gandaria, raising the unit costs of an ultrasound there as compared to Gazipur).

While on average, Gazipur has the lowest unit costs overall, it had the higher unit cost, compared to Rayez Bazar and Pallabi, for some services, such as BDT 670 for LCC. This is mainly due to the costs of drugs; the drug cost for an LCC visit is BDT 548 at Gazipur, while the corresponding figures for Gandaria, Rayez Bazar and Pallabi respectively are BDT 521, 152 and 562. Thus, there is a wide variation in the prescription of drugs across the clinics and Gazipur prescribes more expensive drugs for LCC compared to the other. This may, in part, be due to different diagnoses at the different clinics. Also note that the number of prescription pads sampled from each clinic is relatively small (11 at Gazipur, 14 at Gandaria, 33 at Rayez Bazar, and 19 at Pallabi); differences observed between clinics may be due to sampling variance as much as any actual difference between the clinics.

Figure 2: Unit Cost of ANC Visits at the Static Outlet of Different Clinics

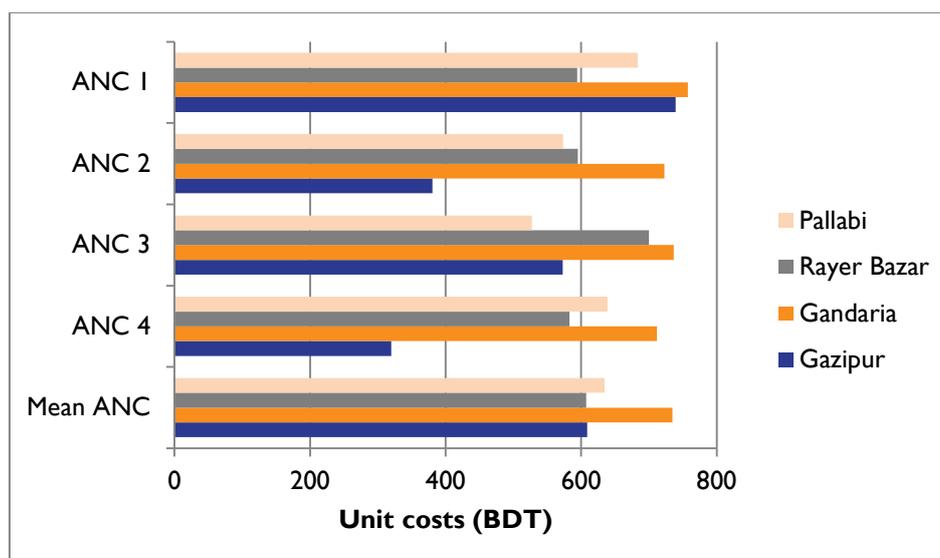


Table 3: Summary of Unit Costs (in BDT) of Major Services of Four Static Outlets of CWFD Smiling Sun Clinics

Services	Unit costs (in BDT)					Average	Range (high - low)
	Gazipur	Gandaria*	Rayer Bazar*	Pallabi			
Maternal Care							
ANC 1	739	757	594	683	694	163	
ANC 2	381	723	595	573	568	342	
ANC 3	573	736	700	527	634	209	
ANC 4	320	712	583	639	563	392	
Mean ANC	609	735	607	635	646	127	
Normal Delivery	1681	7875	N/A	N/A	4778	6194	
CS Delivery	5799	N/A	N/A	N/A	5799	N/A	
PNC	203	449	280	212	286	246	
PNC-revisit	206	272	262	210	237	66	
Child Care							
CDD	363	424	224	102	278	322	
ARI	453	136	349	148	272	317	
IMCI	162	220	157	215	189	63	
EPI	45	80	79	79	71	34	
Vitamin A suppl.	39	82	68	66	64	42	
Other Health Services							
LCC	670	737	332	621	685	718	
STI	81	1192	413	290	494	1111	
RTI	81	383	463	333	315	382	
TB	N/A	2078	2716	621	1805	2095	
TT	39	80	73	72	66	41	
Family Planning Services							
IUD	57	75	101	52	71	50	
NSV	106	79	52	55	73	54	
Pill	39	80	68	85	68	46	
Condom	39	80	52	79	62	41	
Injectable	40	80	73	85	69	45	

Note: * Unit cost reduces by BDT 17 for Gandaria and BDT 10 for Rayer Bazar if we exclude the rental cost (since these clinics use government donated premise free of charge).

We did not include drug and diagnostic costs in the unit costs for satellite clinics because there are no provisions for dispensing drugs and providing lab tests at these clinics. Thus, the estimated unit costs include only direct labor, clinic level overhead costs and HQ level overhead costs. Similar to the unit costs at static outlets, there are also marked variations in unit costs across the static outlets (See Table 7). For example, the cost of the first ANC visits was 83 BDT higher at Rayer Bazar than at Gazipur; Gazipur had the lowest unit costs for all the services provided. Since Gazipur had the highest utilization of satellite clinics and the same number of staff working in the clinics at Rayer Bazar, the low unit costs at Gazipur are explainable by the high level of utilization, with 6,619 visits per staff member. The comparison between Rayer Bazar and Pallabi is more mixed; Rayer Bazar had both more staff and more visits than Pallabi at its satellite clinics, resulting in 4,896 visits per staff at Rayer Bazar, compared to 4,238 visits per staff at Pallabi. Thus, difference in staff time spent on different services means that some services had higher unit costs at Rayer Bazar, and some services had higher unit costs at Pallabi; indirect costs and fixed costs were similar between the two clinics (BDT 49 per visit at Pallabi and BDT 45 per visit at Rayer Bazar, compared to BDT 39 at Gazipur).

Table 4: Summary of Unit Costs (in BDT) of Major Services of Satellite Outlets of CWFD Smiling Sun Clinics⁸

Services	Unit costs (in BDT)				
	Gazipur	Rayer Bazar	Pallabi	Average	Range (high - low)
Maternal Care					
ANC 1	47	131	70	83	83
ANC 2	50	84	70	68	34
ANC 3	54	76	70	66	22
ANC 4	50	109	66	75	59
Mean ANC	50	111	70	77	62
Normal Delivery					
CS Delivery					
PNC	47	84	74	68	37
PNC-revisit	54	71	79	68	26
Child Care					
CDD	57	84	78	73	27
ARI	54	92	78	75	39
IMCI	54	67	93	71	40
EPI	55	71	66	64	17
Vitamin A suppl.	58	63	66	62	8
Other Health Services					
LCC	58	74	74	69	16
STI	60	80	55	65	25
RTI	57	114	74	81	57
TB					
TT	55	67	70	64	16
Family Planning Services					
IUD	N/A	84	N/A	84	N/A
NSV					
Pill	48	92	69	70	44
Condom	51	63	66	60	15
Injectable	56	96	69	74	39

⁸ Gandaria does not provide any satellite services

4.2 Cost Drivers

In order to determine the cost drivers we have split the unit cost of each service into five categories of inputs: lab tests, drug and medical supplies, direct labor, and overhead costs. We have presented this analysis for selected services representing maternal care (ANC, normal delivery, C-section), child care (EPI, IMCI), other health services (LCC), and family planning services (injectable). For each the four categories of services (maternal, child, other health services, and family planning) the individual services selected represent either the services with the highest utilization (on average) or important in terms of representing either prevention or treatment.

Overall, drugs and medical supplies represent the majority (61%) of costs on average across services at fixed site clinics. This ranges from 80% of all costs at Pallabi, to 39% of costs at Rayer Bazar, and accounts for 60% and 65% of costs at Gandaria and Gazipur, respectively. Drugs and medical supplies account for the majority of costs at all the static outlets for all the services with the following exceptions: (1) services for which drugs and medical supplies are not included in the costs because they are donated (including family planning, EPI, TB, Vitamin A supplementation, and tetanus vaccination); (2) services where laboratory testing is an important component of costs (drugs and medical supplies are less than 50% of the costs for treatment of sexually transmitted infections (STIs) and urinary tract infections (RTIs) in 3 of the 4 clinics, and 46% of LCC costs at Rayer Bazar); and, (3) deliveries at Gandaria and C-sections at Gazipur, for which labor forms an relatively important component of the costs (see Table 8).

Drug and medical supplies constitute over 70% of to the unit cost of LCC at Pallabi, Gazipur and Gandaria (See Figure 3). At Rayer Bazar, drugs and medical supplies constitute 46% of the costs of an LCC visit; this is in part because the cost of drugs is lower at Rayer Bazar than other clinics (BDT 152 vs. over BDT 500 at all other clinics) and the unit costs of lab tests are higher at Rayer Bazar than at Pallabi and Gazipur. Lab test is an important cost driver for ANC of all the clinics (See Tables 7 and Table A3). The direct labor contributes less than 10% to unit costs, on average across clinics and services. Direct labor is a more important component of costs for services where drugs and medical supplies are donated and thus not included in the costs. Direct labor also contributes over 50% to the unit costs for deliveries at Gandaria, and about 40% or more of costs for delivery and C-sections at Gazipur. Direct labor is 87% of the costs for TB services, because in 3 clinics, TB has dedicated staff and the inputs are provided free of charge. The overhead portion of the unit costs constitutes about 15% of costs, on average across services and clinics. Overhead costs are a higher proportion of the unit costs again for services where drugs and medical supplies are donated, but also represent 27% of costs for IMCI and between 5% and 10% of costs for ANC, delivery, and LCC. After excluding drug, medical supply, and lab tests, the contribution of overhead is more than 75% of the unit cost for all the services (Figure 4).

Figure 3: Components of Unit Costs for an LCC Visit at Four Clinics

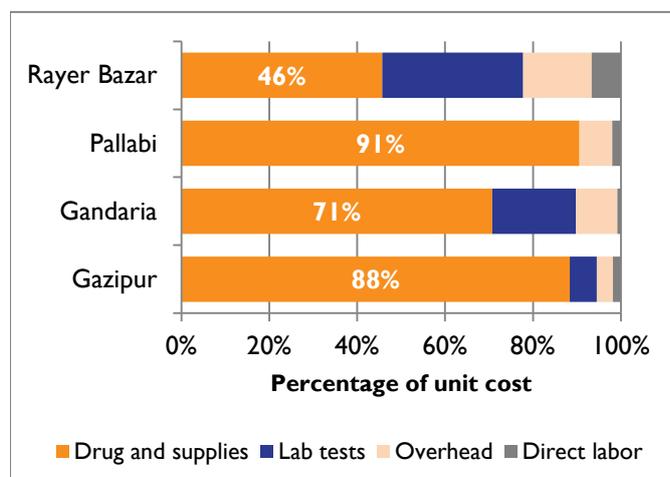
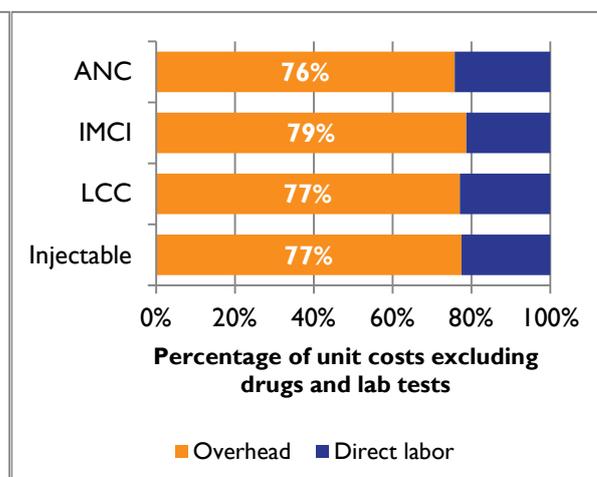


Figure 4: Contribution of Labor and Overhead Costs After Excluding Drugs and Laboratory Tests



*ANC is the mean value of ANC's

Table 5: Cost Driver of Clinic-wise Unit Cost of Some Selected Services of Static Outlets of CWFD Smiling Sun Clinics

Name of Clinic	Services	Breakdown of Static Clinic Level Unit Costs in BDT (in %) by Inputs				Total
		Lab Tests	Drug and Supplies	Direct Labor	Overhead	
Gazipur	ANC*	225	309	16	35	585
		38%	53%	3%	6%	100%
	Normal delivery	0	857	660	164	1681
		0%	51%	39%	10%	100%
	CS delivery	7	2894	2734	164	5799
		0%	50%	47%	3%	100%
	EPI	0	0	7	39	45
		0%	0%	15%	85%	100%
	IMCI	0	110	13	39	162
		0%	68%	8%	24%	100%
LCC	64	928	19	39	1050	
	6%	88%	2%	4%	100%	
Injectable (FP)	0	0	1	39	40	
	0%	0%	3%	97%	100%	
Gandaria	ANC*	356	303	6	70	735
		48%	41%	1%	9%	100%
	Normal delivery	189	1092	6420	174	7875
		2%	14%	82%	2%	100%
	EPI	0	0	10	70	80
		0%	0%	13%	87%	100%
	IMCI	0	143	8	70	220
		0%	65%	4%	32%	100%
LCC	140	521	6	70	737	
	19%	71%	1%	9%	100%	
Injectable (FP)	0	0	10	70	80	
	0%	0%	13%	87%	100%	
Pallabi	ANC*	300	279	9	46	635
		47%	44%	1%	7%	100%
	EPI	0	0	32	46	79
		0%	0%	41%	59%	100%

Name of Clinic	Services	Breakdown of Static Clinic Level Unit Costs in BDT (in %) by Inputs				Total
		Lab Tests	Drug and Supplies	Direct Labor	Overhead	
Rayer Bazar	IMCI	0	158	11	46	215
		0%	73%	5%	22%	100%
	LCC	0	562	12	46	621
		0%	91%	2%	7%	100%
	Injectable (FP)	0	0	39	46	85
		0%	0%	46%	54%	100%
Rayer Bazar	ANC*	246	274	35	52	607
		41%	45%	6%	9%	100%
	EPI	0	0	27	52	79
		0%	0%	34%	66%	100%
	IMCI	0	83	22	52	157
		0%	53%	14%	33%	100%
	LCC	106	152	22	52	332
		32%	46%	7%	16%	100%
	Injectable (FP)	0	0	21	52	73
		0%	0%	29%	71%	100%

Note: * Mean value of ANCs

4.3 Cost-Price Comparison

As mentioned above, we have used the same protocol for calculating price as used in costing. The price-cost comparison of services has been conducted to determine whether the prices charged to patients covered the cost of providing the service, and the scope for increasing the price of the services provided by CWFD clinics in order to improve cost recovery. We have calculated the price of the services both by including drug and lab test and excluding drug and lab test to compare the prices for ‘consultation’ with the labor and overhead costs for providing a service. We presented here the analysis for the same selected services as we did for costs, as explained above.

When including drug, medical supplies, and lab tests, the current price is higher than unit cost of ANC, IMCI and LCC visit at all the static outlets (Table 9). On average across the clinics, 24% of the price is above the cost of providing ANC services (see “Diff in % columns in Table 9), 15% of the price for IMCI is above the price, and 26% of the price for LCC is above the costs. The price for a normal delivery at Gazipur is higher than the costs, while the price of a normal delivery is lower than the costs at Gandaria. While the price charged for a delivery at Gandaria would cover the costs of delivery at Gazipur, Gandaria has a higher cost for a normal delivery. As there is no charge or nominal charge for family planning materials and EPI, the price-cost difference is negative, indicating prices are not sufficient to cover direct labor and overhead costs for these services.

Table 6: Comparison Between Price and Unit Cost Including Drug and Lab Test at the Static Outlets

Services	Gazipur			Gandaria			Pallabi			Rayer Bazar		
	Price	Cost	Diff. in %	Price	Cost**	Diff. in %	Price	Cost	Diff. in %	Price	Cost**	Diff. in %
ANC*	817	585	28%	890	735	17%	1009	635	37%	778	598	23%
Normal delivery	4017	1681	58%	2945	7875	-167%	NA	NA	NA	NA	NA	NA
EPI	20	45	-127%	40	80	-99%	20	79	-293%	20	69	-246%
IMCI	211	162	23%	229	220	4%	287	215	25%	159	148	7%
LCC	941	670	29%	881	737	16%	1005	621	38%	412	322	22%
Injectable (FP)	30	40	-32%	0	80	NA	40	85	-113%	60	64	-6%

Note: * Mean value ANC; **Costs excludes approximated rent for facilities operating in government-owned premises

When excluding charges for drugs, medical supplies, and lab tests, the price represents the consultation and registration fees charged for a service. The unit cost excluding these items is the sum of direct labor costs and overhead costs. When comparing these two metrics at static sites, Gazipur and Pallabi have prices that cover the direct labor and overhead costs for ANC, EPI, IMCI, and LCC visits, while Gandaria and Rayer Bazar do not (Table 10). In part, this is because Gazipur and Pallabi have higher prices, but Gandaria and Rayer Bazar also tend to have higher costs (especially compared to Gazipur). For injectable contraceptives, the price charged is lower than for other services, and not sufficient to cover costs at any clinic.

Because there is no provision of drugs and lab test in the satellite outlets, price refers to only the consultation fee for the paramedic services, which is BDT 30 for all services (with the exception of injectable contraceptives at Pallabi clinic). Thus, price in the satellite outlets is much lower than unit costs measured across all services; this finding is true for all services, not just those listed in Table 10.

Table 7: Comparison between Price and Unit Cost Excluding Drug and Lab Test

Type of outlet	Services	Gazipur			Gandaria			Pallabi			Rayer Bazar		
		Price	Cost	Diff. in %	Price	Cost	Diff. in %	Price	Cost	Diff. in %	Price	Cost	Change in %
Static	ANC*	80	51	36%	60	70	-17%	100	56	44%	60	82	-37%
	EPI	80	45	43%	60	80	-33%	100	79	21%	60	79	-31%
	IMCI	80	52	35%	60	78	-29%	100	57	43%	60	74	-23%
	LCC	80	58	28%	60	76	-26%	100	58	42%	60	74	-23%
	Injectable (FP)	2	40	-1886%	0	80	NA	12	85	-610%	10	73	-630%
Satellite	ANC*	30	50	-65%				30	70	-132%	30	111	-271%
	EPI	30	55	-82%				30	66	-121%	30	71	-138%
	IMCI	30	54	-78%				30	78	-160%	30	67	-124%
	LCC	30	58	-93%				30	78	-160%	30	74	-147%
	Injectable (FP)	30	56	-87%				40	70	-75%	30	96	-219%

Note: * Mean value ANC

5. CONCLUSIONS

This study is part of a feasibility study of an NGO provider-based prepaid service packages or scheme. Other analyses of the feasibility study are the competitor analysis and the demand analysis for the prepaid service packages. The feasibility study aims to determine if prepaid packages are acceptable, feasible and would result in a more sustainable provider network through an increase in utilization and income from non-subsidized clients. The first step is to know the cost of providing these services. The second is to compare the cost to the income from these services for the clients that are not subsidized. As NHSDP has a target of 40% subsidized or free clients, this is to be 60% of the clients of the Smiling Sun NGO network.

The cost price comparison shows that costs are not recovered for satellite services. This is important as the percentages of services provided through satellites are high for some clinics; 21%, 66% and 42% for Pallabi, Rayer Bazar, and Gazipur respectively. Charges at the satellite clinics are generally BDT 30, which leads to the question, “Is there competitive room to increase this fee?” An increase to 55 BDT would break even for Gazipur. Pallabi and Rayer Bazar satellite clinics have higher costs than Gazipur. In part this is driven by overall utilization lowering the overhead cost per visit at Gazipur compared to the other two clinics, but also in part to less efficient utilization of labor staffing the satellite clinics themselves.

When drugs and lab test are excluded from the costs, indirect costs (fixed and indirect labor) drive the costs of services. This is also true where the inputs are given to CWFD, for family planning etc., and are provided free of charge to the clients. With the data provided here, CWFD can estimate what it cost to provide ‘free’ services. This is also useful information for NHSDP and USAID as they consider performance based funding mechanisms. For these services utilization is a key factor in lower the costs as the fixed costs of providing services are allocated to fewer services.

When medicines and lab work is included in the costs, these become the cost drivers for many services. The variation in treatment protocol observed, medicines prescribed, and lab tests given results in varied cost to CWFD and to the clients. Since these costs are provided at cost recovery to the patients (i.e. CWFD does not subsidize these inputs), the variations in service provision do not have a negative impact on cost recovery. However, the variations in services should be studied from a quality of care perspective.

Limited curative care (LCC) services include a range of services. Until recently CWFD did not track individual services within this category. As a category, LCC appears to be profitable for all static clinics. The percentage of LCC as part of total services provided range from 55%, 41%, 39% and 11% percent of contacts for Pallabi, Gandaria, Rayer Bazar and Gazipur respectively. With the use of the patient card recently introduced, CWFD will be able to further break down the services provided under LCC.

Table A1: Various Dimensions of CWFD Clinics

Utilization (on an average) per month			% of Poor served			Cost Recovery		
							Rate	Rank***
Above 2000	Gazipur**	5,411	Above 60%	Rayerbazar	86.81%	Gazipur**	97.65%	A
	Mymensingh**	5,402		Tejgaon	79.35%	Bhola**	45.24%	B
	Pallabi	2,671		Doyagonj	77.25%	Doyagonj	44.78%	B
	Manikdi	2,642		Gopalpur	69.47%	Shahjadpur	41.79%	B
	Lalbagh	2,619		Shahzadpur	64.13%	Gandaria**	40.31%	B
	Gandaria**	2,490		Bhola**	63.52%	Manikdi	40.15%	B
	Doyagonj	2,347	Above 40%	Amanatganj	58.45%	R. Bazar	35.46%	B
	Rayerbazar	2,329		Lalbagh	56.63%	Wari	33.43%	B
	Shahzadpur	2,268		Gauripur	54.57%	Pallabi	33.29%	B
	Wari	2,048		Pallabi	53.54%	Tangail	31.17%	B
Gopalpur	1,991	Manikdi		53.09%	Mymensingh**	31.13%	B	
Muradpur	1,740	Barisal		52.53%	Muradpur	29.55%	C	
Tangail	1,718	Gandaria**		52.28%	Gopalpur	28.10%	C	
Tejgaon	1,536	Jhalokati		46.55%	Lalbagh	24.86%	C	
Bhola**	1,397	Mymensingh**		43.19%	Begumgonj	24.66%	C	
Begumganj	1,262	Begumganj		41.88%	Gauripur	23.79%	C	
Gauripur	1,167	Below 40%	Netrakona	38.69%	Netrokona	19.67%	C	
Barisal	1,064		Wari	32.13%	Tejgaon	19.62%	C	
Amanatganj	997		Muradpur	28.50%	Barisal	19.35%	C	
Netrakona	966		Gazipur**	25.90%	Amanatgonj	17.34%	C	
Jhalokati	668		Tangail	19.51%	Jhalokathi	9.36%	C	

Note: The analysis is based on one year utilization data of October 2013-September 2014

** Ultra clinic

***: A high (above 75%), B Medium (30% to 75%) C: Low (below 30%)

Table A2: Draft Protocol of Providing Services in Smiling Sun Clinics

Type of services	Duration of pregnancy/stage of treatment/definition (as applicable)	Protocol	Comments
ANC			
Early visit	As early as possible	Consultation + Pathological test (pregnancy test)+ Medication (Folic Acid) + counseling	
ANC 1	16 weeks	Consultation + Counseling + pathological tests (HB% + VDRL HBsAg + Blood Grouping + Blood Sugar + Urine R/M/E) + Medication (Tab Iron & Folic Acid + Tab Calcium) + one follow up consultation	One tablet of each kind everyday
ANC2	24 -28 weeks	Consultation + Counseling + TT + medication (Iron Tab + Folic Acid + Vitamin B +Calcium) + Ultrasound (if available)	It is essential to do ultrasound in this stage. It is better to do some pathological tests (urine R/M/E+ HB%) in this stage.
ANC3	32 weeks	Consultation + Counseling + TT + medication (Tab Iron & Folic Acid +Tab Calcium)	
ANC4	36 weeks	Consultation + Counseling + TT + medication (Tab Iron & Folic Acid +Tab Calcium)	Ultrasound is needed for case basis
PNC			
PNC1	Within 6-48 hours of delivery	Consultation	
PNC2	Within 6days of delivery	Consultation + Counseling + Medication (Vitamin A + Tab Iron & Folic Acid +Tab Calcium) + Symptom specific Medication if any)	
PNC3	Within 6 days of delivery	Consultation + Counseling + Medication (Vitamin A + Tab Iron & Folic Acid +Calcium) + Symptom specific Medication if any)	
PNC4	Within 6 months of delivery	Consultation + Counseling + Medication (Vitamin A + Tab Iron & Folic Acid +Tab Calcium) + Symptom specific Medication if any)	
Child Health			
CDD		Consultation + OR Saline + Baby Zink Tablet (with one course antibiotic if fever exists)+ follow up consultation (optional)	
ARI	Early stage	Consultation + One course antibiotic + follow up visit	
Other illnesses	Children age less than 5 years who suffer from illnesses other than CDD and ARI	Consultation + Medication + One follow up visit	
STI/RTI		Consultation+ Medication (antibiotic +antifungal for both wife and husband) + one follow up visit	

Type of services	Duration of pregnancy/stage of treatment/definition (as applicable)	Protocol	Comments
LCC			LCC can be broken down into various categories: headache/migraine, ENT, eye diseases, infection, chest diseases, gastric/ulcer, abdominal pain, joint pain/arthritis, back pain, skin diseases, burn/injury/minor accident, general cough/cold/fever, general weakness, post-operative complications, mental disease, etc. This is not feasible to estimate unit costs for each individual category of LCC because patients usually have multiple symptoms and hence there is no unique protocol to treat the patients. Thus, this is sensible to estimate an average cost of a LCC following counter foil of the prescription pads and consulting with providers.

Table A3: Components of Unit Costs, on Average, of Some Selected Services of Static Outlets of CWFD Smiling Sun Clinics

Type of outlet	Services	Breakdown of average costs (in %) by inputs				Total
		Lab tests	Drug and supplies	Direct labor	Overhead	
Static	ANC*	44%	46%	3%	8%	100%
	Normal delivery	1%	32%	60%	6%	100%
	EPI	0%	0%	26%	74%	100%
	IMCI	0%	65%	8%	27%	100%
	LCC	14%	74%	3%	9%	100%
	Injectable (FP)	0%	0%	23%	77%	100%

Note: * Mean value of ANC



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COMPETITOR ANALYSIS OF SMILING SUN CLINICS

March 2016

This publication was produced for review by the United States Agency for International Development. It was prepared by Andrea Feigl, PhD for the Health Finance and Governance Project.

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USAID's Health Finance and Governance (HFG) project will help to improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team will work with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. As a result, this five-year, \$209 million global project will increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG will support countries as they navigate the economic transitions needed to achieve universal health care.

March 2016

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COMPETITOR ANALYSIS OF SMILING SUN CLINICS

STUDY 3 OF THE FEASIBILITY ANALYSIS OF NGO PROVIDER-BASED PREPAYMENT SCHEMES IN BANGLADESH

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government.

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ACRONYMS

BLP	Below the poverty line
CWFD	Concerned Women for Family Development
DCE	Discreet Choice Experiment
HCFS	Bangladesh's Health Care Financing Strategy
HFG	Health Finance and Governance project
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh)
SSK	Shasthyo Shuroksha Karmasuchi
NHSDP	NGO Health Service Delivery Project
SS	Smiling Sun (NGO clinic network)
USAID	United States Agency for International Development



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The research presented here utilizes a comprehensive survey of urban health delivery services collected by the Centre for Health and Equity System (CEHS) at the International Centre for Diarrhoeal Disease Research (ICDDR,B). The survey data can be browsed at <http://urbanhealthfacilities.icddrb.org>. Specific data requests should be directed to Alayne M. Adams (Email: aadams@icddrb.org; Phone: +880 173 0338821). This manuscript was not prepared in collaboration with investigators of ICDDR,B and does not necessarily reflect the opinions or views of ICDDR,B. Any errors are attributable to the author.

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I. BACKGROUND

Bangladesh's Health Care Financing Strategy (HCFS) identifies three target populations: the poor (below the poverty line – BPL); the informal sector; and the formal sector. These three populations are to be covered using different approaches. For the BPL, a government scheme known as Shasthyo Shuroksha Karmasuchi (SSK) is being tested. For the formal sector, a government employee contributive scheme is being designed, and several initiatives are being implemented in the garment industry. The HCFS calls for community-based health insurance, micro health insurance, and other innovative initiatives for the informal sector. Global practice and knowledge identifies the informal sector population as the most difficult to reach with health protection coverage; individuals in the informal sector are not classified as BPL and therefore do not qualify for government support, nor can they be easily reached through formal employment-based mechanisms.

In the fall of 2013, USAID Bangladesh asked the Health Finance and Governance project (HFG) to design and facilitate a one-day workshop focusing on Health Micro Insurance (including Community Based Health Insurance (CBHI), micro health insurance, and other insurance mechanisms) to cover/reach the informal sector. The workshop concluded that the most promising area was Micro Health Insurance (insurance associated with micro lending), followed by provider based insurance. Considering USAID's support for the Smiling Sun NGO network, USAID Bangladesh asked HFG to explore how provider-based prepayment schemes¹ could further the cost recovery/sustainability goals of the Smiling Sun NGOs. HFG proposed a feasibility study.

Thus, HFG proposed, and USAID Bangladesh approved, the project to conduct a feasibility study (and thereafter, if feasibility is determined to be positive, design an NGO provider-based prepayment scheme).

¹. The February workshop highlighted the fact that each segment (CBHI, Micro Health Insurance, Provider Based Schemes) fell under a different legal framework -each with its own challenges. Therefore, prepayment is used instead of insurance as NGOs do not fall under insurance regulations.

2. OBJECTIVE OF THE FEASIBILITY STUDY

The objective of the activity is to determine the feasibility of a Smiling Sun NGO based prepayment scheme.

The study should identify under what conditions a scheme would be feasible, if these conditions exist, what could be done to address any gaps, and if doing so would be recommended considering the costs, resources, and other identified issues.

The implementation of the feasibility study should be designed as to provide important information/data to the partner NGO, NHSDP, and USAID Bangladesh. The feasibility study should directly benefit the partner NGO and strive to minimize the burden of participation.

Activities

In order to determine the feasibility of provider based prepayment schemes in Bangladesh, HFG, in close collaboration with the NGO Health Service Delivery project (NHSDP), executed the following steps: 1) Selected a Smiling Sun NGO network on a competitive basis; 2) Conducted an analysis of Bangladesh prepayment schemes landscape ; 3) Executed a costing of services provided, compared the costs to the prices charged for these services to paying clients; 4) Compared the prices charged at selected CWFD clinics to competitors ; 5) Developed two prepaid services packages, 6) and finally, HFG partner, the Centre of Excellence for Universal Health Coverage icddr,b at James P Grant School of Public Health, BRAC University, designed and implemented a study to gauge existing clients' interest/demand for these packages.

This paper is the result of step 4 above; the competitor analysis of selected CWFD clinics. This analysis and four other documents, please see feasibility analysis contents for complete list, make up the feasibility analysis

3. OBJECTIVE OF THE COMPETITOR ANALYSIS

The objective of this analysis was to compare the competitiveness of user fees for clinic visits for all health clinics within a 1km radius of the three Smiling Sun Clinics in Rayer Bazaar, Gandaria, and Pallabi. These were three of the four clinics studied in the costing study.

4. METHODS

ICDDR,B collected data on the geo-location of potential competitor clinics, the type of the clinics, the type of services they provided, as well as information on user fees (min and max) associated with clinic visits (and a range of services), and the presence of a midwife and/or a Ob/Gyn.

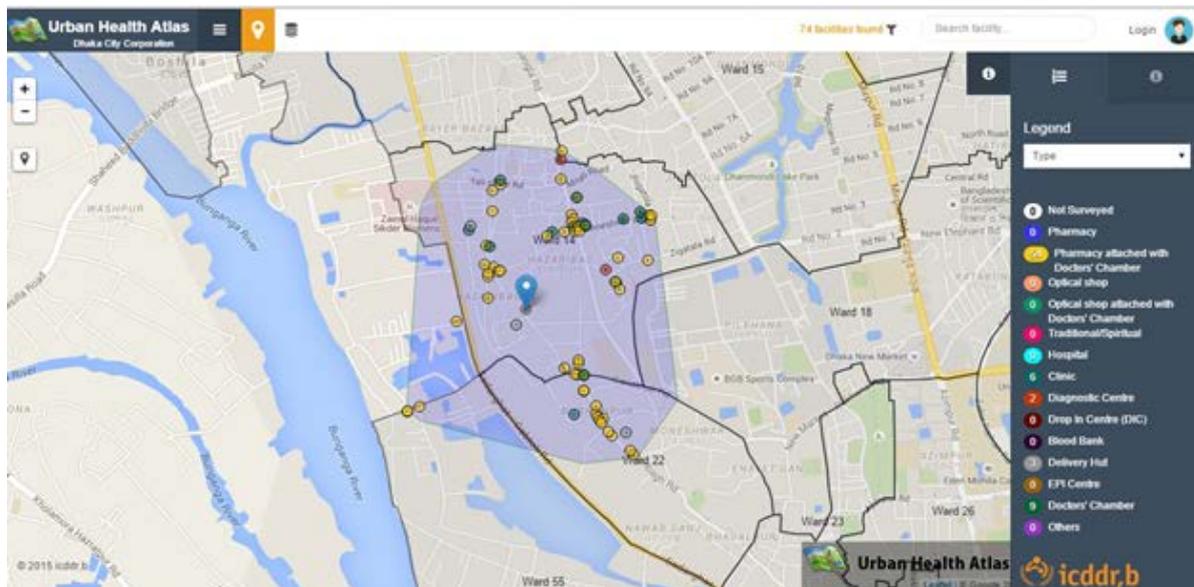
For each of the three Smiling Sun clinics in areas studied by icddr,b and under investigation, data on the range of user fees, clinic types, availability of family planning services, availability of subsidies, and availability of free services were tabulated and graphed. All clinic types except pharmacies (that did not have a physician or health worker present and hence did not function as clinics) were included. The results are presented in the Results section below.

5. RESULTS

I- Rayer Bazaar

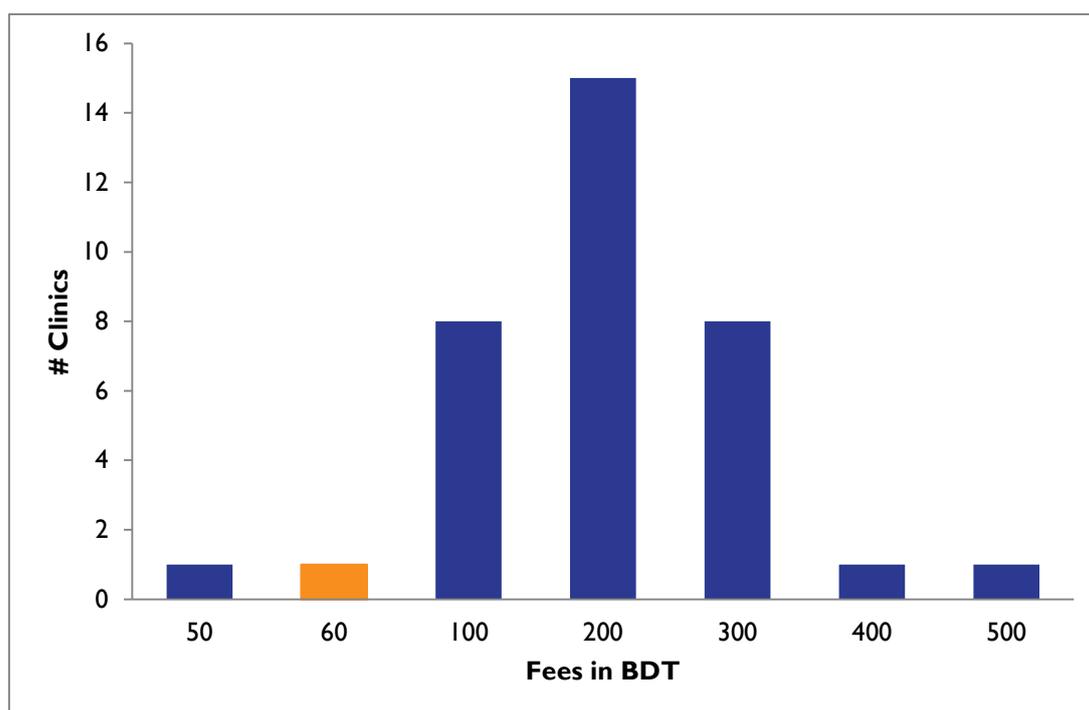
Within a 1-km radius of the Rayer Bazaar Smiling sun clinics, we identified 74 health facilities. 39 of these facilities were pharmacies-only, leaving 34 immediate competitor clinics, and 1 Smiling Sun Clinic (See Image 1 for a map of Rayer Bazaar Competitor clinics).

Figure 1: Map of Health Facilities Within a 1km Radius of Rayer Bazaar Smiling Sun Clinic.



Of the 35 relevant facilities, 2 were pharmacies with a doctor chamber, 2 were clinics (including the Smiling Sun Clinic), 2 were diagnostic centers, and 7 were doctor chambers. Only 2 of all these clinics offered maternal services: the Smiling Sun Clinic, and one pharmacy attached with a doctor chamber.

**Figure 2: Distribution of Consultation Fees, Rayer Bazaar.
Fee at Rayer Bazaar: 60 BDT per Consultation**

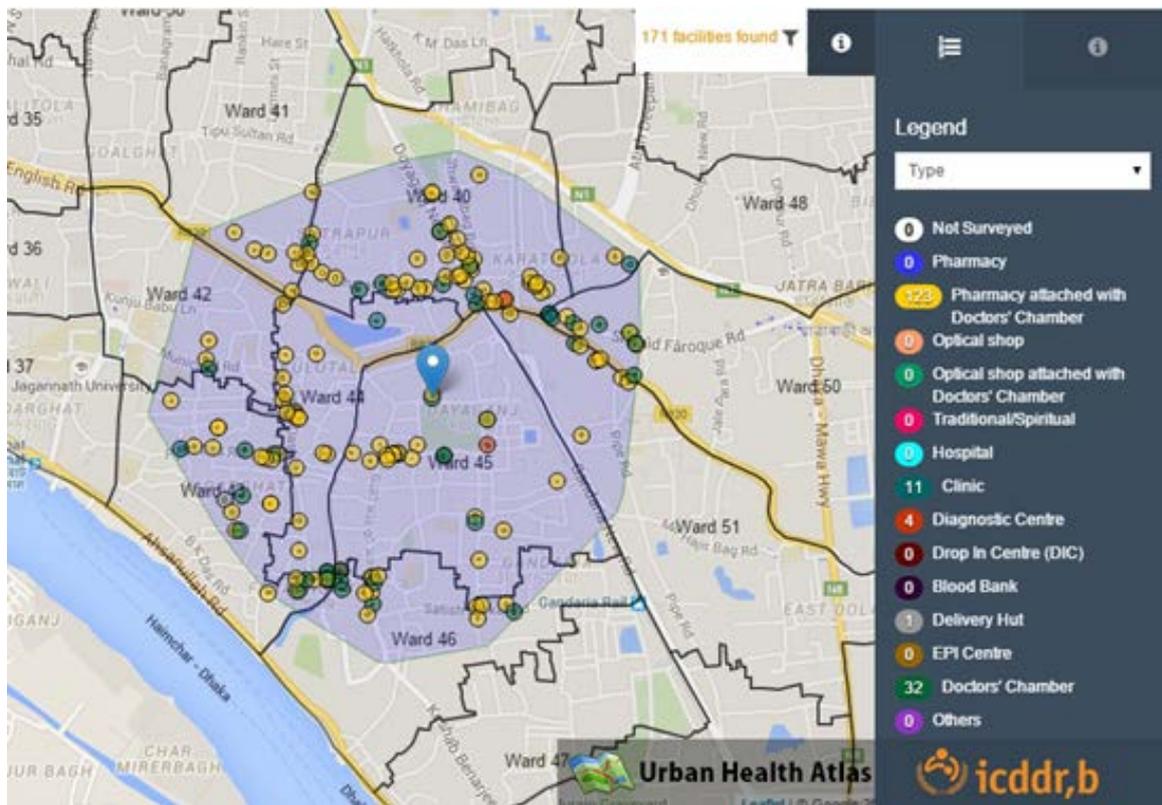


33 out of 34 clinics had a higher consultation fee than the Rayer Bazaar Smiling Sun clinic, which charged BDT 60 per consultation. The range of fees for clinics who charged more than Rayer Bazaar was 100 – 500 BDT, with a median of 200 BDT. Further, 26 out of 33 competitor clinics had subsidized services (76%). 1 competitor clinic listed a free clinic day, 4 clinics offered free services, and 1 facility had offered discounted medicines.

2 – Gandaria

Within a 1-km radius of the 3 Gandaria Smiling sun clinics, we identified 168 potential competitor facilities. 64 of these facilities were pharmacies-only, leaving 104 immediate competitor clinics, and 3 Smiling Sun Clinics (See Image 2 for a map of Gandaria competitor clinics).

Figure 3: Map of Health Facilities Within a 1km Radius of the 3 Gandaria Smiling Sun Clinic

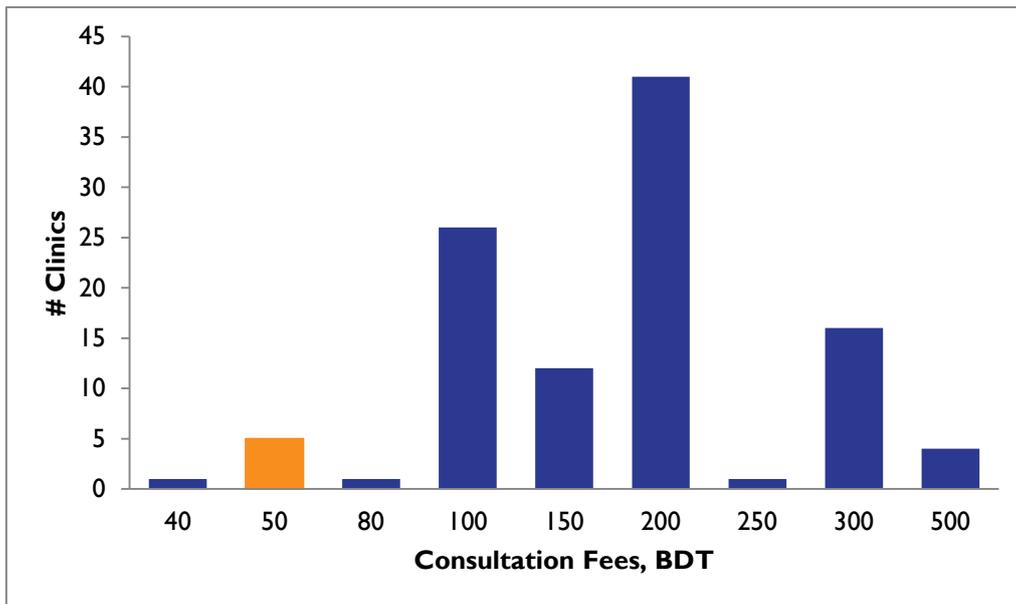


Of these 104 competitor clinics, 73 were pharmacies with an attached doctor chamber, 6 were diagnostic clinics, 4 were diagnostic centers, and 21 were doctor chambers. The 3 Smiling Sun clinics offered maternity services, as did one diagnostic center, and 2 doctor chambers.

101 out of 104 competitor clinics (97%) had higher consultation fees than the Smiling Sun clinics. The range of fees in clinics with higher than the Smiling sun fees was 80 - 500 BDT, with a mean of 195.3 BDT, and a median of 200 BDT (Figure 2).

52 out of 104 (50%) of competitor clinics had subsidized services. One competitor clinic listed a free clinic day, 41 clinics had free services, and 2 facilities had discounted medicines.

Figure 4: Distribution of Consultation Fees, Gandaria. Fee at Gandaria: 50 BDT/Consultation



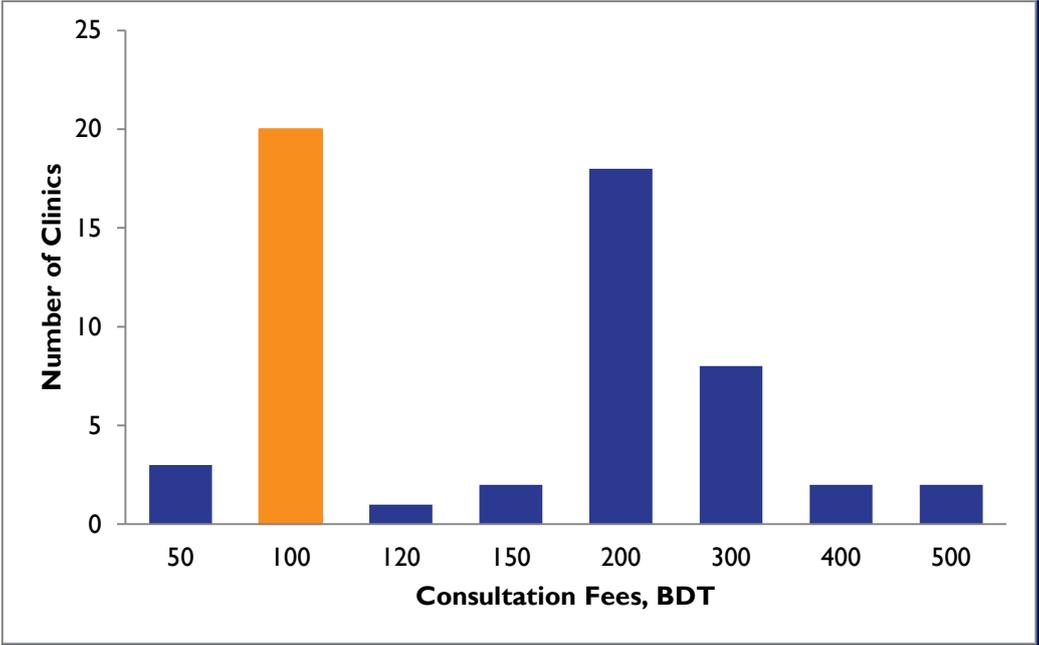
3 – Pallabi

Within a 1-km radius of the Pallabi Smiling Sun Clinic, 55 non-pharmacy-only competitor health facilities were identified. Of these 55 facilities, 33 were a pharmacy with an attached doctor chamber, 1 was a hospital, 1 was a clinic, 2 were diagnostic centers, and 20 were doctor chambers. The only competitor that offered maternity services was the hospital.

33 (60%) of Pallabi competitors had higher consultation fees than the minimum fee at Smiling Sun Clinic, which is 100 BDT. The fee range in clinics with higher fees is BDT 120 – 500BDT, with a mean of 250BDT, and a median of 200 BDT. The range of fees that are equal or lower than the Smiling sun fees were 50-100BDT with a mean of BDT93, and a median of 100BDT. (Figure 3)

55% of competitors have subsidized services, and 25 out of 55 competitors have free services. One competitor facility listed the availability of free medicines.

Figure 5: Distribution of Consultation Fees, Pallabi. Min Fee at Pallabi: 100 BDT/Consultation



6. DISCUSSION

Overall, all three Smiling Sun (SS) Clinics investigated have a large number of competitors within only 1km radius of the clinic setting. Most competitors are pharmacies with doctor chambers. Low-priced NGO clinics are also often competitors, though all three SS clinics were extremely competitively priced. Hence, there likely is room for SS clinics to increase their minimum consultation fees. However, as a parallel DCE study² (Source) has revealed, price is not the only deciding factor for clinic choice: many patients are concerned about the continuum of care offered in their respective health facility, as well as the provider quality. Often, the availability of free services and low consultation fees can signal low service quality, and hence might not attract (enough) patients with the ability to pay for services. To investigate this issue further, the planned demand analysis will address the question of what the most important deciding factors to decide which clinics to frequent are.

Still, based on the results of the competitor and the costing analysis, there likely is a potential for SS clinics to increase consultation fees, and hence, increase revenue. This will be particularly true if SS clinics offer upgraded laboratory and pharmacy services.

Limitations

A potential data limitation of the competitor analysis was that there might have been incomplete data and information on offered service and fee ranges at competitor clinics.

² Health Finance and Governance (HFG) project. February 2015. Understanding Client Preferences to Guide the Prioritization of Interventions for Increasing Demand at NGO Health Service Delivery Project (NHSDP) Clinics in Bangladesh. Bethesda, MD: Health Finance & Governance Project, Abt Associates Inc.



**BOLD THINKERS DRIVING
REAL-WORLD IMPACT**

Demand analysis of prepaid health packages for CWFD clients



USAID
FROM THE AMERICAN PEOPLE



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Executive Summary:

Background: Health care cost can be catastrophic for families if they do not take appropriate and timely preparation for that. With the rise in the demand for universal health coverage, along with developed countries many developing countries have taken several different initiatives in this regard. Bangladesh has made commendable progress in terms of providing at least basic health care to a significant level of population at an affordable price. NGOs providers play a critical role by making health care accessible to the rapid growing urban population. Smiling Sun clinics funded by USAID and DfID are committed to provide quality health care for this population. In light of decreasing their reliance on donor funding and to increase sustainability of these clinics the NGOs are considering the introduction of prepayment for services provided.

The aim of this study to assess the demand for such packages through measuring the knowledge of prepayment health package, and willingness to purchase the prepaid package at four clinics managed by the NGO Concerned Women for Family Development (CWFD) in and around Dhaka Bangladesh, The packages were developed in consultation with CWFD, HFG, and JPGSPH. The pricing of the packages was based on a recent HFG led costing study. Four packages were tested:

- I. The basic family package: For an annual prepaid card 600 BDT, a family can receive (for a year) unlimited consultations with a doctor at a static clinic, with a paramedic at a satellite clinic, family planning counseling and methods, and full immunizations (EPI) for any child of relevant age.
- II. The extended family package: Priced at 2,000 BDT, it includes the basic family package as described above and also includes medicines and lab tests for up to 5 episodes of illness (by any family member) in a year. The medicines and lab tests are will be the ones available the Smiling Sun clinic and prescribed by Smiling Sun clinic's doctor during consultation at the clinic.
- III. Maternity package: Priced at 12,000 BDT includes ANC, delivery (either normal or C-section if needed) and Post Natal Care (PNC).
- IV. ANC-only package: Priced at 2,500 BDT covers ANC visits (which covers all required medications and ultra-sound) up-to four times. Additional ANC checkup visits are included can be more than 4 times, as needed or recommended by doctor

Methodology: A cross sectional study was conducted among 120 clients of CWFD clinics in Pallabi, Rayerbazar, Gazipur, and Gandaria in Dhaka, Bangladesh. A study team collected quantitative and qualitative data through face-to-face interview and Focus Group Discussions (FGD) by using structured questionnaire and semi- structured guideline. Additionally they observed the clients non-verbal gesture regarding the pre-paid packages. Married pregnant women, married couple & mother with one or more than one children were eligible to this study.

Result: Notable respondents were favorable towards the basic family package compared to extended family package. On the other hand, respondents preferred the comprehensive maternity package to the ANC package from the maternity packages. In this study, most of the respondents (71%) from all four clinics were interested to take basic family package (BFP) followed by comprehensive maternity package (53.3%), Extended family package (45%) & ANC package (38.3%). For basic family package, significant number of the respondents (94%) will pay for the package fully and 81.3% of the respondents will need 2-3 installments to purchase the comprehensive maternity package (CMP). It was found that respondents from income group 20,000-40,000BDT were significantly ($p=.001$) more likely to purchase the basic family package than the respondents from other income group. Respondents having previous experience of delivery expenditure during last pregnancy and undergone C- section were significantly more likely to avail comprehensive maternity package (CMP) than the respondents who did not have experience or knowledge of this expenditure.

Key Findings:

Discussion and conclusion: The study found little prior knowledge of prepaid plan among the respondents. Once informed, the respondents preferred the comprehensive maternity package to ANC package and basic family package over extended family package. Prepaid packages offered in this study did not offer any risk pooling except for the basic family package. One stop service, improving the quality of services and responsiveness of the providers will be needed to improve client flow in these clinics. The preferred packages respond to different needs; the comprehensive maternity package could be offered at Ultra clinics while the basic family packages could be implemented in vital clinics with, relatively, low utilization to boost attendance.

ACRONYMS:

ANC:	Antenatal care
BFP:	Basic family package
BDT:	Bangladeshi taka
BRAC:	Bangladesh Rural Advancement Committee
CBHI:	Community based health insurance
CMP:	Comprehensive maternity care
CS:	Caesarian section
CWFD:	Concerned women for development
EFP:	Extended family package
EPI:	Extended program of immunization
FCC:	Family care card
FGD:	Focus group discussion
FP:	Family package
IRB:	Institutional review board
HFG:	Health finance governance
JPGSPH:	James P Grant School of Public Health
KAP:	Knowledge, Attitude & Practice
LMAF:	Local medical assistant and family planning
MP:	Maternity package
NCD:	Non communicable disease
NGO:	Non-government organization
OOP:	Out of pocket expenditure
PNC:	Postnatal care
POP:	Poorest of the poor
ROI:	Risk obstetric Insurance
SES:	Socioeconomic status
SPSS:	Statistical package for social science
SSC:	Smiling sun clinic
THE:	Total Health Expenditure
UHC:	Universal health coverage

USAID: United State Agency for International Development

WHO: World health organization

WTP: Willingness to pay

CHAPTER ONE: INTRODUCTION

1.1 Background

Overview of health systems in Bangladesh

Bangladesh has a pluralistic health system consisting of public, private and NGO health facilities working together to improve the health of the people in Bangladesh (Ahmed et al., 2009). The weaknesses in service delivery by health facilities in the public sector such as lack of available medicine, inconsistent power supply, ambulatory service, medical instrumental problems and also, deter people to go to the government facilities (Mustafa & Begum, 2014)

The health sector of Bangladesh has achieved significant progress in recent years in terms of improving maternal and child health, increasing life expectancy, fertility control and child immunization (Mustafa & Begum, 2014). Despite this progress, Out-of-pocket expenditures are still very high at around 60% of total health expenditure (THE) (Mustafa & Begum, 2014); government spending less than 1% of the total 3.4% of GDP expenditure on health. Less than 1% of the population is covered by an insurance scheme. Furthermore, due to demographic and epidemiological transitions non-communicable diseases are also becoming a major burden over and above the burden of communicable diseases, resulting in “double burden” of diseases as (Healthcare Financing Strategy, 2012-2032).

In Bangladesh, numerous NGOs are providing essential primary health care services such maternal and child care, elderly care, immunizations, TB and Malaria and limited curative care services care along with many other health related program (Zohir, 2004; Haq, 2003; Standing & Chowdhury, 2008; Islam, Wakai, Ishikawa, Chowdhury & Vaughan, 2002, Bangladesh Health Watch report, 2012). Most of NGOs are providing maternal care at a subsidized cost to their clients and they charge customers who can pay to aid cost recovery (RTI International, 2006).

Since inception, smiling sun franchised clinics are complementing the mainstream primary health and maternal care in Bangladesh (USAID & HFG, 2015). According to World Health Organization (WHO), this maternal care includes four ANC visits, childbirth care (labor, delivery, immediate postpartum), post-natal care up to six months, newborn care and postnatal newborn care (WHO, 2009). Lack of sustainable financing including underutilization of available services is major limitations for providing maternal care for these NGOs (O'Donnell, 2007). Some factors, which deter use of maternal health services, include cost of delivery, fear of high cost especially if complication occurs, and scarcity of

cash in time of need (Sychareun et al. 2013; Koblinsky, Anwar, Mridha, Chowdhury & Botlero, 2008; Ahmed & Khan, 2011). Evidence shows that the cost of maternal health care service may lead to financial crisis for a family especially at birthing (whether normal delivery or c-section), where lots of money are spent resulting in economic burden for household (McCord and Chowdhury 2003; Afsana 2004; Borghi et al. 2004; Borghi et al. 2006b; Borghi et al. 2006c).

Health care financing and its impact

Coping mechanism of health care expenditure for serious illnesses (e.g., depletion of savings, selling productive assets, mortgaging land, or borrowing from money-lenders at high interest rates) leads to catastrophic health expenditure, sometimes resulting in irreversible poverty (McIntyre, Thiede, Dahlgren & Whitehead, 2006). It may be mentioned here that Bangladesh has one of the highest burdens of catastrophic health expenditure in the Asia-pacific region. Since the OOP in 2010 was 64% and of this about 7% of the household experience CHE (WHO, 2011).

To reduce catastrophic health expenditures, some developing countries such as China, Democratic republic of Congo, Ghana, Kenya, India have introduced community based health insurance (CBHI) scheme (Ranson, 2002; Bogg, Hengjin, Keli, Wenwei & Diwan, 1996; Musau, 1999; Atim, 1999). In Bangladesh, few NGOs such as BRAC, Dhaka Community Hospital, *Dusthaya Shasthaya Kendro*, *Nari Uddog Kendra*, Society for Social Service, Sajida Foundation, Grameen Kalyan and icddr,b have introduced community based health micro insurance for the people but the extent of benefit and coverage of these are limited (Bangladesh health watch report 2012; ICDDR, 2013). Another innovative approach, pre-payment health scheme has been introduced in Rwanda and in China and such initiatives proved to be satisfactory and a good cost recovery rate has been observed as well (Schneider, Diop, & Leighton, 2001; Xu, Liu, Sun, Fang, & Hindle, 2002).

1.2 JPGSPH and HFG partnership

USAID had been supporting Bangladesh in its journey towards UHC through several initiatives. The Smiling Sun clinics provide subsidized and free-of-cost services for its poor and ultra-poor clients respectively as part of these initiatives. To address the problem of equitable access to services, these clinics charge for services from the non-poor clients. This

also ensures these clinics' financial sustainability and cost recovery. However, with the mushrooming of for-profit private clinics and health care providers available in their vicinity, these Concerned Women for Family Development (CWFD) clinics are facing challenges to attract the non-poor clients. To increase the flow of the non-poor clients has become of importance for sustainability of the clinics, especially for USAID.

Abt. Associates, a major American business and government research, technical assistance and consulting company, is presently involved in various activities. It leads a consortium implementing the USAID funded Health Finance and Governance (HFG) project. HFG in Bangladesh is focusing on the implementation of country's health care financing strategy. HFG collaborates with the National Health Services Delivery Project (HSDP), a project supporting the Smiling Sun NGO clinics, on various studies addressing sustainability. USAID has asked HFG to undertake a feasibility study of the NGO based prepayment schemes for Smiling Sun Clinics. HFG has partnered with the JPGSPH to conduct a demand analysis of two prepaid packages of maternity and primary care services among CWFD clinics. The research team designed and carried out a demand analysis survey for households and clients within the catchment population of four selected CWFD clinics in and around Dhaka.

1.3 Rationale

The aim of this study was to identify and analyses the demand of prepaid health packages at Smiling Sun clinics run by CWFD. From supply side perspective, this prepayment package is expected to improve cost recovery by retaining clients and increasing paid (non-subsidized) utilization of services, which in turn is expected to create demand for improving the quality of health facilities as well as service provision. (Schneider, Diop, & Leighton, 2001).

At the demand side, it will help to protect an individual or a household from high health expenditure by pre-paying cost of treatment rather than paying at the time of service. It will also help to access expensive medical care and ensure continuum and quality of care to low and middle income people in Dhaka. Increased demand will influence the responsiveness of the health care providers and thus improve client satisfaction. Eventually, this would push to improve the service quality of the clinics followed by reduction of maternal and child mortality and morbidity among its service recipients.

Demand analysis before establishing the pre-paid health package scheme, would help understand the challenges and its feasibility (acceptance within community and sustainability

of the scheme) among those targeted. Other findings (demographic data, demand for packages, factors influencing demand) will provide information, which, combined with the costing of services and a pricing analysis to determine the feasibility of providing these prepaid packages.

CHAPTER TWO

2.1 Research Question:

How do the non-poor clients of CWFD clinics perceive about enrolling into a pre-paid health benefit package for maternity and/or family care?

2.2 Objectives

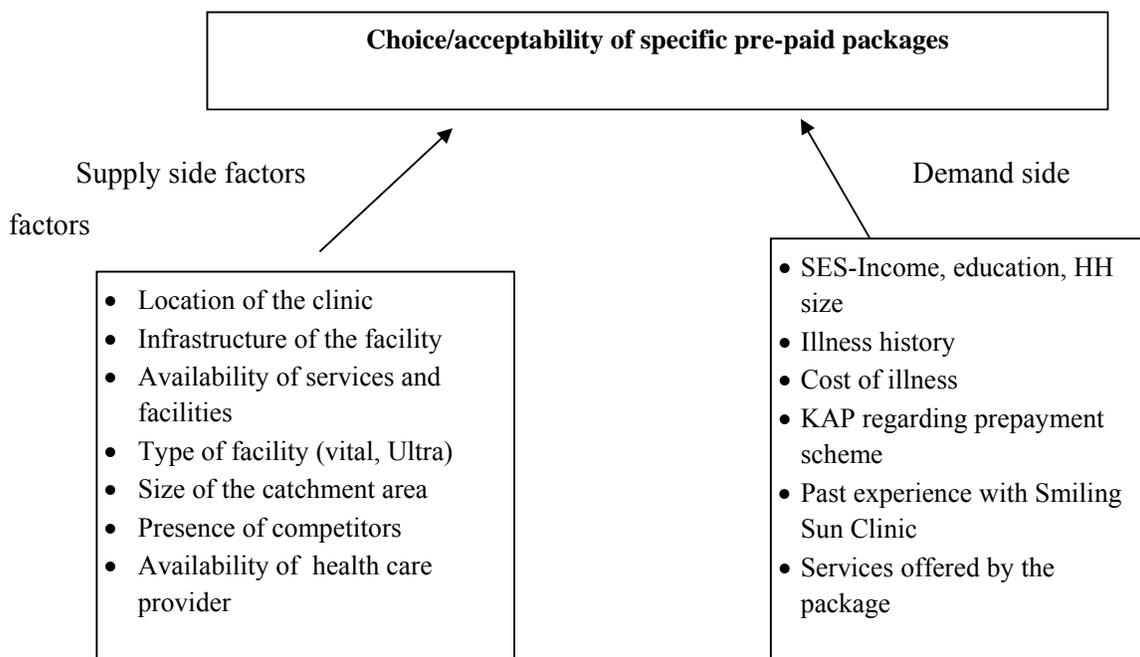
General Objective

- To elicit the perception of the CWFD clients regarding the selected pre-paid health benefit packages including acceptability of such packages

Specific objectives

- To explore the opinion/perceptions of the CWFD clients regarding selected prepaid health benefit packages proposed
- To identify underlying factors for such perception including its acceptability and differentiation by socio-demographic characteristics of the respondents

2.3 Conceptual framework:



There are two parts in conceptual framework. One is independent factor comprised of supply side & demand side factors and another one is outcome variable represented by demand of prepayment package.

Supply side factors consist of location of the clinic, infrastructure of the facility, availability of the services, type of facility, size of the catchment area, presence of competitor, availability of the health care provider and the demand side factors are socio-demographic factors (income, education, household size, gender) and illness history, cost of illness, knowledge regarding prepayment scheme, experience with smiling sun, service offered by the package. These different types of factors influence the choice of specific prepayment health package.

CHAPTER THREE: METHODOLOGY

3.1 Study design:

This was a cross sectional mixed method study using both qualitative & quantitative approach.

3.2 Study site:

The study was conducted in the four (04) selected CWFD clinics and their catchment areas in Rayerbazar, Gazipur, Gandaria, and Pallabi. These clinics were chosen for the overall feasibility study. (Annex 5)

3.3 Study Population:

Smiling Sun Clinics maintains list of regular clients resides in the clinic's catchment area.

These clinics have own definition for categorizing their patients as Ultra Poor, Poor and Non-poor. We conducted the study among non-poor service recipients of smiling sun clinics. Non-poor clients were selected from clinic registry with due support from the clinic authority for exit interview and the clients for the FGD.

Inclusion criteria:

We included currently pregnant mothers and mothers who has only one child for all types of packages and mothers having two and more children for both the family packages (basic and the extended).

Exclusion criteria

We excluded poor, ultra-poor (as per CWFD criteria) and newly married clients and clients under 18 years of age (minors).

Package descriptions

- I. The basic family package: For an annual prepaid card 600 BDT, a family can receive (for a year) unlimited consultations with a doctor at a static clinic, with a paramedic at a satellite clinic, family planning counseling and methods, and full immunizations (EPI) for any child of relevant age.
- II. The extended family package: Priced at 2,000 BDT, it includes the basic family package as described above and also includes medicines and lab tests for up to 5 episodes of illness (by any family member) in a year. The medicines and lab tests are will be the ones available the Smiling Sun clinic and prescribed by Smiling Sun clinic's doctor during consultation at the clinic.

- III. Maternity package: Priced at 12,000 BDT includes ANC, delivery (either normal or C-section if needed) and Post Natal Care (PNC).
- IV. ANC-only package: Priced at 2,500 BDT covers ANC visits (which covers all required medications and ultra-sound) up-to four times. Additional ANC checkup visits are included can be more than 4 times, as needed or recommended by doctor

Table 1: Summary of data collection methods and instruments

Methods	Tools	Target group	Aim
Observation	Non-participant guideline	Client and provider	<ul style="list-style-type: none"> – To have an overall understanding about clients and provider’s perception about pre-payment method – To observe clients’ non-verbal gesture/ body language regarding package price and features
Client Interview	Structured questionnaire (n=180)	Maternity package (n= 60): Currently pregnant mothers and mothers having one child Family package (n= 120): Currently pregnant mothers and mothers having one child and Mothers having two or more children	<ul style="list-style-type: none"> – To explore the opinion/perceptions of the CWFD clients regarding selected prepaid health benefit packages – To identify underlying factors for such perception including its acceptability and it’s differentiation by socio-demographic characteristics of the respondents
Focus group discussion	Guideline	Patient’s selected from different socio-economic class and area	<ul style="list-style-type: none"> – To gain a deeper insight about clients perception and preference for different packages
Informal discussion		Providers selected from different clinics	<ul style="list-style-type: none"> – Providers opinion and perception about different packages

3.4 Sample size

Qualitative: Eight focus group discussions (10-12 participants each) were conducted in order to get a more objective and macro view of the respondents; perception; Two FGDs were conducted per clinic. One focus group was on proposed maternal package and both the family packages. Respondents were the currently pregnant mothers and the mothers having only one child. The second FGD was conducted with the mothers having two and more than two children along with their husband. Only the two family packages was proposed and discussed in this FGD. FGDs were recorded using digital audio recorders. Interviewers and note takers took additional notes of the key terms. The researchers involved in data collection transcribed verbatim, the audio-recorded interviews and discussions. Participants' names or any other identifying information was not included in the transcription.

Quantitative: We have collected data from 180 respondents; 30 per clinics. We selected interviewees based on their pregnancy status and family size. For quantitative approach, both the maternal and the family packages were proposed to service recipients who are currently pregnant and have only one child. The family package information was shared with the women/couple having two and more children and their opinions were sought.

3.5 Data collection procedure: Trained data collectors conducted face-to-face interview with pretested questionnaire and guideline. We used two separate semi-structured Bangla FGD guidelines for these four types of proposed packages. One FGD guideline focused on both the maternity packages and another one focused on two different family packages. One structured questionnaire was used for client interview.

The questionnaire and guideline were prepared based on standard available questionnaire about prepayment method, willingness to pay, demand analysis etc. Different sections were revisited to contextualize and were revised based on study objective. The study tool was pretested at another two CWFD clinics situated at urban, Dhaka namely Tejgaon and Shahajadpur. The data collection team was divided into two groups as per the clinic type. One group went to two vital clinics (Pallabi and Rayer Bazar) and another group went to two ultra-clinics (Gazipur & Gandaria). The participants were selected by examining FCC card and by taking help from clinic officials to find out the targeted non-poor clients.

The questionnaire had seven different sections, see Annex 5. Each section started with a description to connect the interviewee with the information the enumerator wanted to have from him/ her. A significant amount of time was dedicated to describe the pre-payment method and to introduce different packages. The packages were described with pictorial guide (Annex-5).

Amendment from pre-test: In the first draft questionnaire, there were open-ended questions like what are the benefits of pre-payment scheme? Why the client would not be willing for the family package etc. Because of poor response rates, after pre-test the options were coded and structured. Based on the pre-test it was found that mothers having two and more children were uncertain and unwilling to discuss about maternity package. The team then decided to offer only the family package to this group. After pre-testing and incorporation of necessary changes in the tools, all the tools were back translated from Bangla to English and shared with HFG for review and finalization. For each of the questions in the questionnaire analysis plan have been planned and noted beforehand.

Study period:

The study was conducted from August to October 2015.

For timeline see: Annex 1

3.8 Data analysis

Qualitative: Collected data was transcribed on the same day of the FGD, data familiarization was done to facilitate better coding of the transcripts; coding of the transcripts was done based on pre-determined a priori codes and sub codes, identification of inductive codes and coding transcripts accordingly. Intra and inter coder validity check was done, thematic segregation of coded data was categorized under broad themes and a data matrix was prepared for data display, thematic analysis to identify patterns and then reporting the findings based on the emerged patterns according to study objective

Quantitative: Data entry, cleaning and analysis was done by using SPSS (version 20).

Uni-variate analysis:

Distribution of demographic data (gender, marital status, size of household, number of children, occupation, education), Social characteristics (factors influence to prefer health package, knowledge regarding prepayment) were found out through descriptive analysis.

Bi variate and Multi-variate analysis:

We did 'chi-square' test to compare categorical variable. Initially, bivariate analysis was done for all the determinants. Chi-Square values, P values and crude odds ratios were obtained. Multi-variate analysis was done to stratify the variables for confounders and new Chi-Square values, P-values and adjusted odds ratios were again obtained to estimate risks.

For all statistical analysis, we considered both 2-sided p-value of ≤ 0.05 and ≤ 0.01 as statistically significant.

3.9 Variables:

Independent variables: Demographic Characteristics (gender, marital status, size of household, number of children, occupation, education), Social characteristics (factors influencing the selection of preferred health package, knowledge regarding prepayment etc.

Dependent variables: Acceptability for the different packages, contents and price of packages, payment options, reasons for interest for prepaid package, design, amount, payment type and method for these packages.

Reliability & Validation: Triangulation of data was done through researcher's observation, client interview and FGD.

3.10 Operational Definition:

In this study, the following operational definitions are used.

Non-Poor: Criteria used by Smiling Sun clinics to define POP, poor and non-poor

- i.** Living in poor cluster area
- ii.** Living on the street, homeless
- iii.** Food/equivalent money for up to 3 meals not available in the home
- iv.** Identified by the government or other NGO as a Poorest of the Poor (POP) e.g. by card
- v.** Possesses a Poor Card
 - Non-poor: 0 criteria met
 - Poor: 1 criteria met
 - POP: 2+ criteria met

Smiling sun provides the non-poor clients a card, which is called Family Care Card (FCC). We included non-poor clients defined by smiling sun clinics with support from clinic managers and community service promoters.

Catastrophic expenditure: Households illness expenditure exceeds more than 40% of their monthly non-food expenditure. (WHO, 2006)

3.11 Ethical consideration:

The proposal was submitted to Abt Associates' IRB board before the study begins. The study received the approval from JPGSPH ethics board. We took verbal informed consent and explained about the study in order for the respondents to answer questions. There is no individual identifier beyond respondent/participant characteristics in the exit interview and FGD. All information about the study participants were kept confidential and their identities kept anonymous. Then we verbally asked for permission to record the conversation. We also informed them that the whole interview is voluntary; she/he can leave any time and can also choose not to answer any question if she/he wants. Please see consent form (Annex-2)

Confidentiality

Much of the information provided by the participants was related to their personal financial matters, health seeking behavior, opinion for choosing or not choosing a package. For these reasons, confidentiality of the information collected during the study is of fundamental importance and maintaining confidentiality is paramount. As part of the consent process, the participants have been informed that the data collected would be strictly confidential.

A number of mechanisms were used to protect the confidentiality of the information collected:

- All interviewers received detail instructions about the importance of maintaining confidentiality.
- No names were written on the questionnaires or records kept by the researchers. Instead, households and individuals were identified using a unique code. The identifiers linking the questionnaire/records with the household location kept separately and will be used only for research purpose.
- During FGD, the recorded conversations were kept in a locked file, and will be erased following transcription. Again, the identifiers linking the data/information were kept separately and will be used only for research purpose.

- Particular attention was taken during the presentation of the research findings that the information presented is sufficiently aggregated or anonymous to ensure that no one from the community or individual can be identified.

Table -2: Profile of FGD respondents in four smiling sun clinics:

Clinic name	No. Of FGD	Male	Female	Age (years)			Education			Total
				≤ 30	31-45	45+	No education - Primary	Primary - Secondary	≥ Higher secondary	
Pallabi	2	0	16	9	3	4	10	5	1	16
Rayerbazar	2	1	13	11	2	1	5	9		14
Gazipur	2	1	12	9	3	1	6	7		13
Gandaria	2	3	14	12	3	2	7	5	5	17
										N=60

FGD respondents included pregnant women (7), women having only one child (9) with any of her family members (16) for maternity package and women having two or more children (28) for family package. The numbers of participants in each FGD ranged from 6-10 with a mean of 7.5. Majority (28) of the respondents was having education less than primary level (Table- 6).

CHAPTER FOUR: FINDINGS

This section presents the findings and discussion of the present study.

4.1 Socio-demographic characteristic of client interview respondents in four smiling sun clinics:

Majority of the study respondents in the client interview had been female (88.3%) and homemakers (80%). A significant number (31%) of representatives were from the age group 21-25. Highest number (56%) of respondents had been earning 10,000-20,000BDT (Table-3).

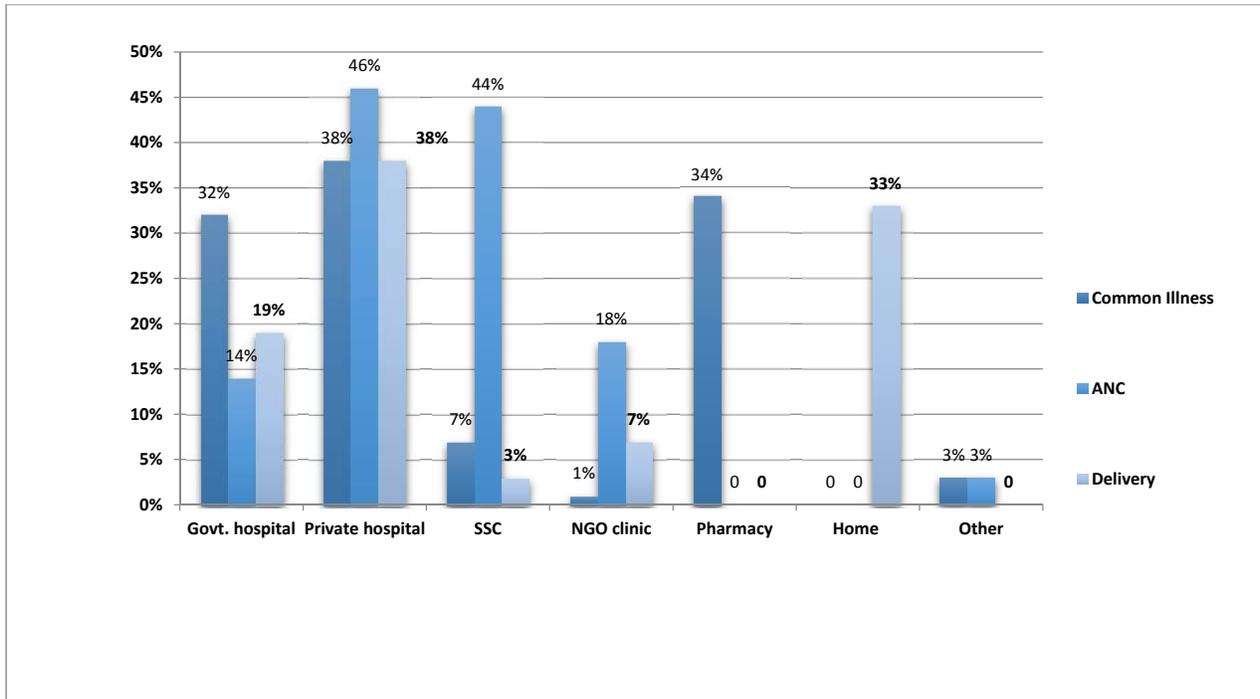
Table 3: Socio-demographic characteristic of client interview respondents in four smiling sun clinics:

Characteristics		Total sample (N=120)	(%)
Sex	Male	14	11.7
	Female	106	88.3
Age (year)	18-20	22	18.3
	21-25	37	30.8
	26-30	31	25.8
	31-35	20	16.7
	36-40	5	4.2
	41-45	4	3.3
	46-50	1	.8
Education	Primary	37	51%
	Secondary	22	18%
	Higher secondary & above	61	31%
Monthly income	10000-20000	67	56%
	20000-40000	34	28.3%
	>40000	19	16%
Occupation	Business/shop owner	11	9.2
	Mini business	1	.8
	Service holder	12	10
	House wife	95	79.2
	Other	1	.8
Household size	2-3	33	27.5
	4	33	27.5
	5-6	37	30.8
	>7	17	14.2
Cooperative member	Yes	28	23.3%
	No	92	76.7%
Knowledge on pre-payment	Yes	0	0%
	No	120	100%

4.2 Illness pattern and health seeking behavior of the study respondents for common illness and maternity care:

Fever (55%) and common cold (15%) had been the most common illnesses during last three months (Table-4). Almost all the respondents from client interview and FGD went to nearby local pharmacy (34%) followed by private hospitals (38%) and government hospitals (32%) during their last episode of common illness in the last three months (Figure-1) Analysis on health seeking behavior for maternity care reveals that a significant number of respondents (87%) had ANC only knew about necessity for ANC, a small proportion (17%) of them were aware about the required number of ANC. The respondents went to multiple health facilities and health care providers for their ANC's part of their ultrasound test. They did not prefer public facilities for ANC check-up. Some of the respondents never had ANC check-up.

Figure 1: illness pattern and health seeking behavior of the respondents for common illness & maternity care



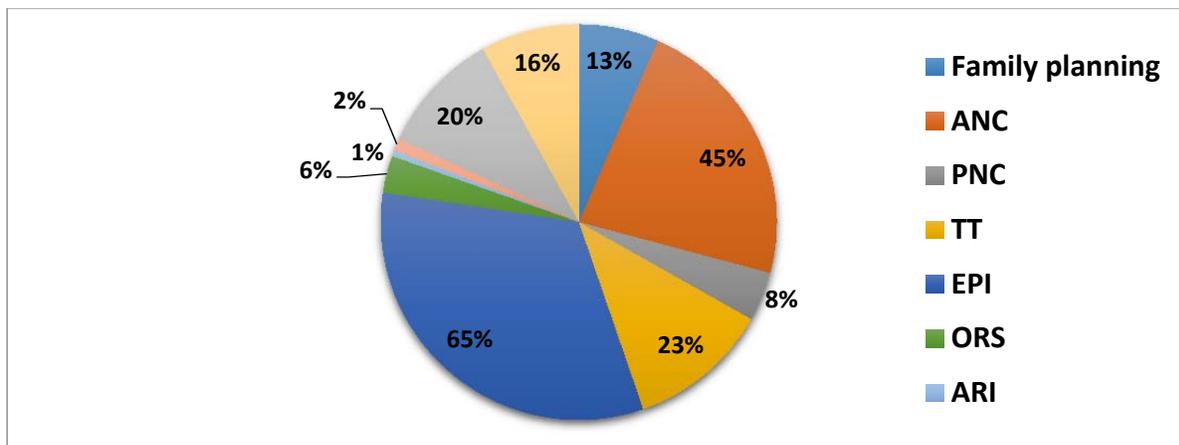
4.3 Reasons for choosing a health facility:

The findings reveal that, for general illnesses, previous experience regarding that facility (50%), distance (34%), cost of treatment (26%) and overall quality of care had been the factors for selecting a health care facility (Table-5). During FGD respondents highlighted about provider's attitude, type and severity of illness as one of the criteria for selecting a health care facility. For maternity care, they specifically highlighted about availability of good quality of medicine, female health care provider and with previously acquainted service providers.

4.4 Type of health care received from Smiling Sun clinic:

Regarding service utilization of smiling sun clinic, highest number of respondents (65%) mentioned that, usually they visit this facility for ANC care and immunization (Figure -2). However, some of the respondents (3%) had their normal delivery from the respective smiling sun clinics (Figure-1). None of them had their c-section from these clinics.

Figure 2: Services utilized by clients from smiling sun clinics



4.5 Cost of illness:

For general illness, the median expenditure had been 1,000 BDT during last three months. Direct cost included doctor's visit, medicine and transportation costs. Indirect cost included loss of income due to illness (Table-6). For delivery, the median expenditure had been around 5,000 BDT. Participants reported this as a cost intensive event of their life. A total of 47 (45%) respondents had c-section during their last pregnancy. Majority of them had their c-section from private clinics.

Table 6: Average cost of common illness & delivery

	Minimum Expenditure (BDT)	Maximum Expenditure (BDT)	Mean (BDT)	Median (BDT)
Common illness (n=72)	80	100000	4446.62	1000
Delivery (n=105) (normal and c-section)	200	70000	13008	5250

4.6 Coping strategies:

Majority of the respondents (90.5%) managed their common illness expenditure from household savings/ regular monthly income. For delivery, a significant number of households had to borrow money from local moneylenders with interest. They also borrowed money from neighbors (2.7%) and relatives (1.4%). A total of 30% respondents spent more than 40% of their regular monthly income to manage their delivery expenditure (Table-7).

4.8 Knowledge and perception of respondents about pre-payment mechanism:

In this study, none of the respondents had previous knowledge regarding prepayment mechanism. During FGD, some of the respondents related this with different voucher schemes, membership of co-operative society etc. Some of them heard about life insurance offered by different private insurance company but never experienced this (Annex – 3 Table 13).

4.9 Preference for different packages:***Basic family package:***

Around 71% respondents from all four clinics were interested to purchase the basic family package (Fig-4). Some of them raised the trust issue and mentioned that they would purchase it if they find others purchased it and are able to receive the mentioned services (Annex-3 Table-12). A significant number of participants perceived the basic family package is a lucrative package. As interesting features, they highlighted unlimited doctor's consultation at a reasonable price and less worry some about finances at the time of seeking health care (Fig-5).

One of the respondents mentioned;

“The basic one is good. Smiling sun clinic does not have all types of modern diagnostic set-up and equipment and facilities. I am not sure what kind of disease I may have in the next one year, if diagnostic facility and medicine are not available for my disease, why would I buy a card costing 2000 taka in advance? (FGD_ FP_ Gazipur_ Female _27years old_6; 202-5)

Another respondent mentioned, (Table -19)

“The facility is similar to ATM card. If I avail this card, I do not need to be worried about money while seeking health care.” (FGD_FP_Gazipur_Female_38years old_5; 189-90)

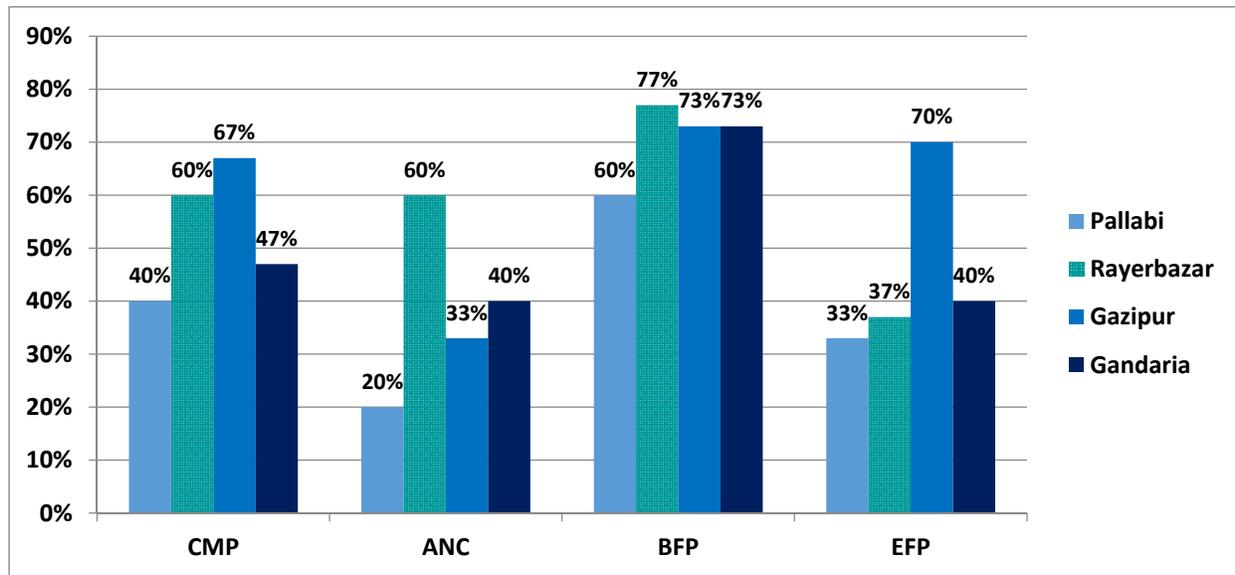


Figure 3: Demand for four-prepayment package among clients of four smiling sun clinics

Extended family package:

Many of the FGD respondents believed that the extended family package had been a useful package for their families. On an average 45%, respondents in all four clinics were in favor of purchasing it (Fig-3).

As advantages they mentioned, availability of drugs and diagnostic facilities for all family members. However, many respondents argued about uncertainty of disease. Both who had been willing and unwilling suggested some revision in the package design. They requested to reduce the price, extend the timeline of the package and upgrade the facility with modern equipment, specialist (pediatrician, gynecologist) and gender specific doctors and installment mechanism for extended family package (Annex 3-Table 14).

ANC package:

Clinics where delivery services were not available (Rayerbazar and Pallabi) during FGD respondents were inclined for ANC package. They opined that this package would be suitable for that setting since these clinics do not have delivery facility (Annex 3-Table -18).

From client interview, around 38% respondents expressed their preference for ANC package (Fig-3). Among them around 48% were willing to pay the package price at one-off lump payment (Fig-7).

One respondent said, (Annex 3- Table -18)

“I would like to take the ANC package. The setting and overall environment is not suitable for delivery. Nobody will take the risk to have her/ his wife’s delivery a place like this. Again, although you are talking about referral, who wants these type of uncertainty at the time of delivery? Me and my family always prefer facility with modern diagnostic facility and equipment and specialist health care provider” (FGD_MP_ Gandaria_ male _33years old_8;201-6)”

Comprehensive maternity package:

Both in the client interview and FGD a significant number of respondents highlighted about the importance of comprehensive maternity package. A total of (54%) respondents had been eager to avail the comprehensive maternity package if the clinic offers this (Annex-3 Fig-4).

Respondents who had been willing to avail the package once it is offered, as an advantage, majority (84%) of them mentioned about less tension regarding payment at the time of seeking health care (Fig-4). A significant number of them mentioned about availability of continuum of care or one stop services (63%) (Fig-5). During FGD, respondents appreciated the price of the comprehensive maternity package (Annex-3 Table-13). Although a significant number of respondents had been willing to have the comprehensive maternity package, only a very few said that they would be able to pay the money at a time. Many of them (81%) proposed to have installment system (Figure-7).

During FGD, one respondent said, (Annex 3-Table-17)

“I prefer the comprehensive maternity package. It offers one stop service. ANC check-up is an optional one and you can have check-up from different places but delivery is a crucial decision. For ANC 2,500 is too much. If I buy this (ANC package) the tension for management of delivery place and cost will still remain the same. That is why I think the comprehensive maternity package at the cost of 12,000 taka is reasonable and a good offer” (FGD_MP_Gazipur_female_34years old_13;345-49)

If I have this card it is kind of a preparation for me; I know where I will have my delivery. Whatever the type of delivery- normal delivery or c-section we need not to worry about the management of money and the place”. FGD_MP_Gazipur_ Sister of female respondent 34yearsold 34 14;364-65)

Regarding price one respondent said, (Annex 3-Table-17)

“Now a day if a patient goes to a clinic one day before her c-section, next day 15-14 thousand taka bill will come. And this card will give one-year service until one years of child. In that sense, its price is not very high, it’s appropriate” (FGD_MP_Gazipur_35years old_14;86-87)

During FGD, respondents who had normal delivery during their last pregnancy stated that the price for the comprehensive maternity package is too high (Annex 3-Table -13).

Figure 5: Advantages of different prepaid packages mentioned by clients

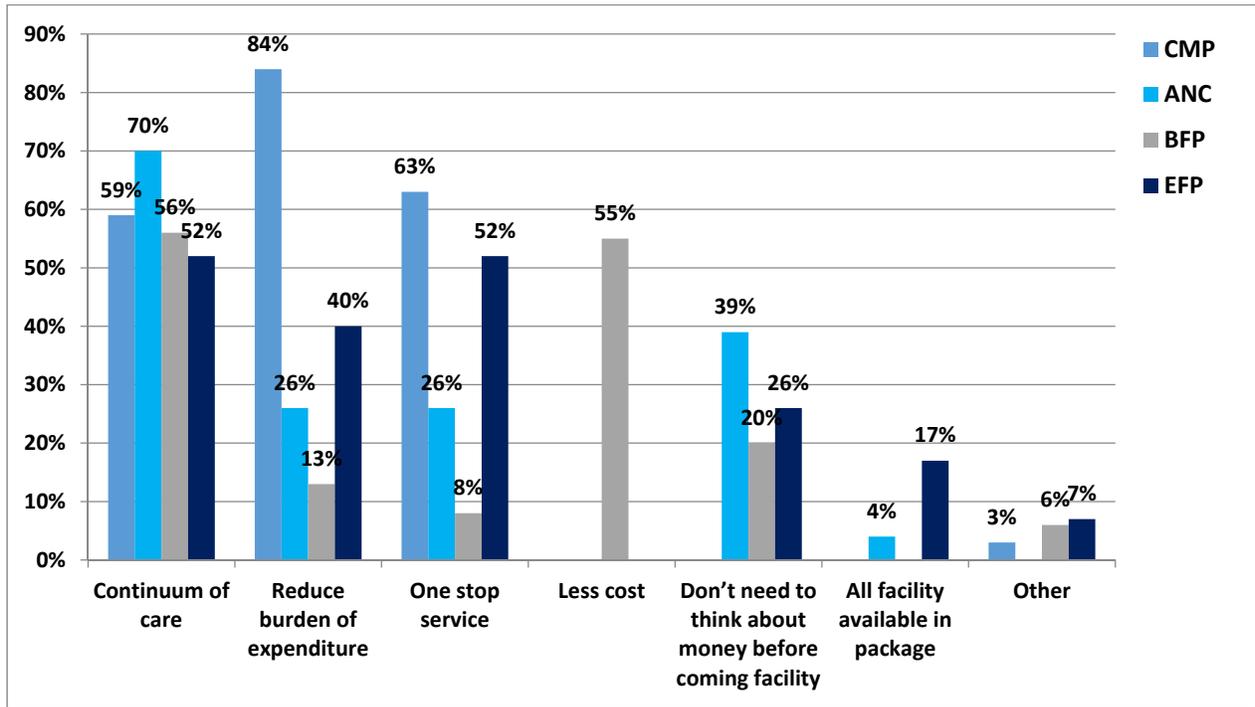
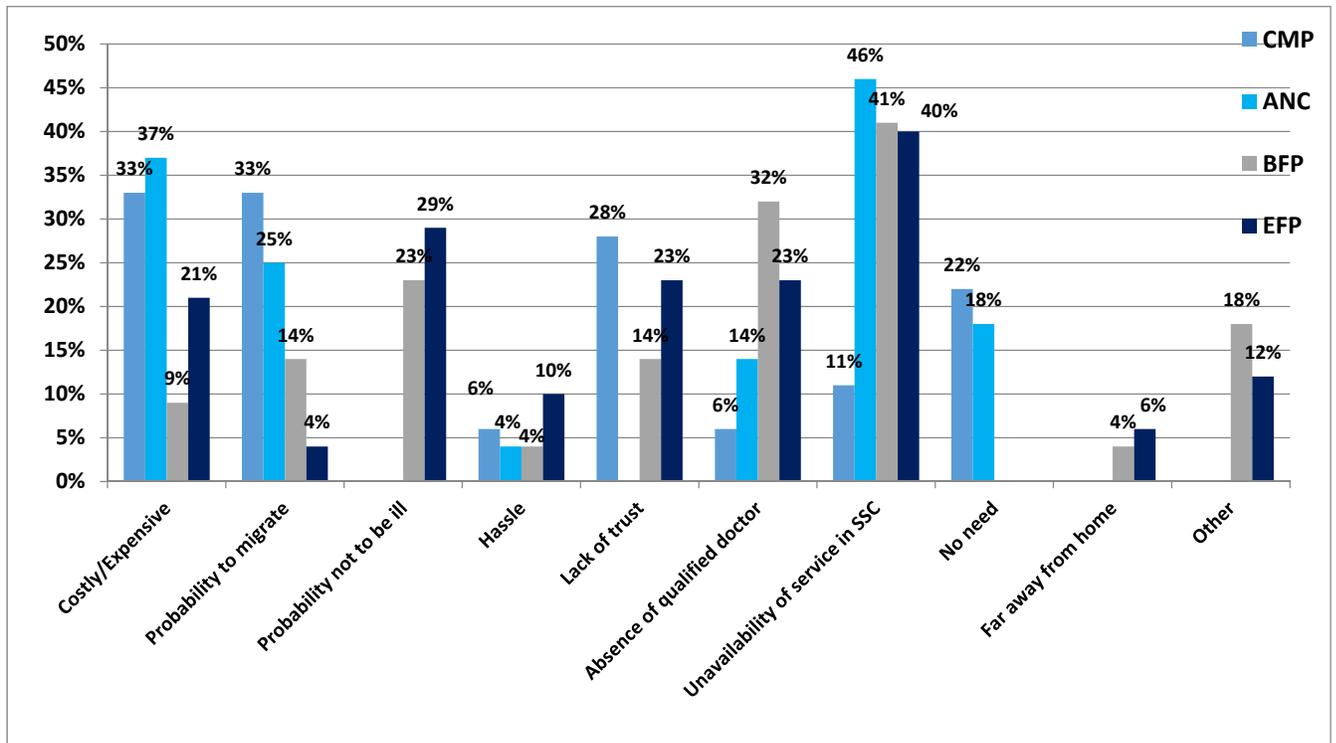


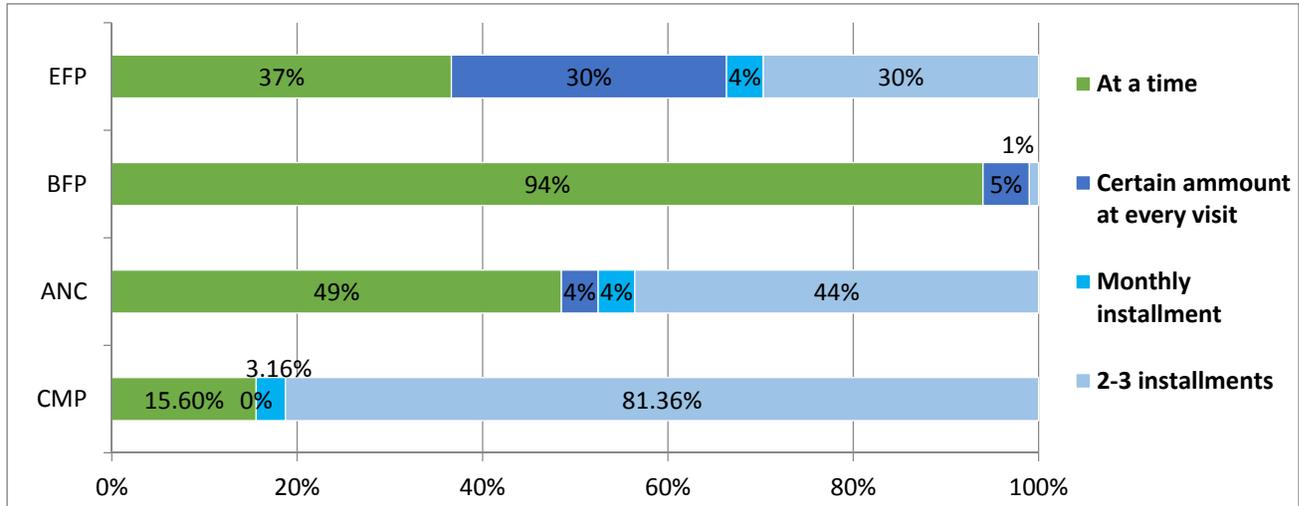
Figure 6: Reasons for client's non-interest for different packages



4.10 Mode of payment:

Mode of payment mainly dependent on the package price and the type of services offered. Although respondents preferred comprehensive maternity package over ANC package regarding way of payment, for CMP a significant number of them wanted to pay in 2-3 installments.

Fig 7: Mode of prepayment of maternity package and family package



4.11 Association of preference for packages with socio-demographic factors:

We derived association between different socio-demographic variable and preference for different packages. The chi-square tests reported significant association between variables like household income and catastrophic expenditure with preference for basic family package and comprehensive maternity package respectively (Table-8).

We did multiple logistic regressions to evaluate the predictors of demand for prepaid package and the magnitude of the association for the values that were found significant in the chi-square test (Table-9).

Respondents from income group 20,000-40,000 BDT are 11 times more likely to prefer the basic family package than respondents from income group $\geq 40,000$ ($p=.001$, 95% CI of AOR 2.66-45.98). On the other hand, respondents from income group 10,000-20,000, are 6 times more likely to prefer the basic family package than the respondents from the income group $\geq 40,000$ (95% CI of AOR 1.94-18.87).

We found a notable association regarding education and way of payment for the ANC package. Respondents who agreed for this package, all the members from higher secondary completed were willing to pay one lump off payment (100%) than who were primary completed (0%).

In the case of extended family package, respondents from income group 10,000-20,000 BDT are 4 times more likely to prefer the package than those were from $\geq 40,000$ income group (95% CI of AOR 1.17-13.56).

Respondents who had catastrophic expenditure ($\geq 40\%$) in previous delivery, for them the odds of preferring prepaid comprehensive maternity package is .23 times more likely than those who did not have catastrophic health expenditure during their last pregnancy ($p= 0.12$, 95% CI of AOR .071-.819). Male members during client interview were more likely to prefer the comprehensive maternity package than ANC package. Regarding demand and perception of the comprehensive maternity package one male respondent during FGD mentioned,

“She doesn’t know where the delivery would take place and I will decide whether to buy this package or not” (FGD_Gandaria_male_35years old_6;154-55).

Table 8: Associations of the four prepaid packages with demographic characteristics, health care expenditure, delivery pattern and engagement of cooperative society

Factors		CMP(N=60) n(%)	P value	ANC(N=60) n(%)	P value	BFP(N=120) n(%)	P value	EFP(N=120) n(%)	P value
Household Income (monthly)	10000-20000	19(53%)	.226	11(30.65)	.277	50(74.6%)	.001	34(51%)	.069
	20000-40000	12(63%)		10(52.6%)		28(82.4%)		16(47%)	
	>40000	1(20%)		2(40%)		7 (37%)		4(21%)	
Education	Primary	16(50%)	.354	12(37.5%)	.856	42(69%)	.896	28(46%)	.688
	Secondary	8(73%)		5(45.5%)		16(73%)		10(46%)	
	Higher secondary & above	8(47%)		6(35.5%)		20(67%)		11(37%)	
Cost of last illness (Maternity)	Catastrophic	16(76%)	.012	10(48%)	.312	26(72%)	.9	18(50%)	.5
	Not catastrophic	16(42%)		13(34%)		59(71%)		36(43.4%)	
Cost of last illness (Common illness)	Catastrophic	0	.272	0	.420	1(33.3%)	.139	1(33%)	.671
	Not Catastrophic	32(55%)		23(40%)		84(72.4%)		53(46%)	
Delivery pattern	Normal	7(33.3%)	.012	9(43%)	.841	41(71%)	.667	28(48.2%)	.558
	C-section	17(71%)		11(46%)		35(75%)		20(43%)	
Membership of cooperative society	Member	5(55.6%)	.885	4(44.4%)	.683	21(75.0%)	.580	15 (53.6%)	.298
	Non member	27(52.9%)		19 (37.3%)		64 (69.6%)		39 (42.4%)	

*CMP=comprehensive maternity package, ANC=antenatal care package, BFP= Basic family package, EFP=Extended family package
 * p< 0.05; **p < 0.001

Table 9: Factors associated for demand for prepaid packages

	P-value	CMP Odd ratio (95% C.I.)	P- value	ANC Odd ratio (95% C.I.)	P-value	BFP Odd ratio (95% C.I.)	P- value	EFP Odd ratio (95% C.I.)
Income (reference variable= >40000)								
10000-20000	.219	4.60 (.43-49.8)	.549	.539 (.071-4.08)	.002	6.06(1.94-18.87)	.027	3.99 (1.17-13.56)
20000-40000	.119	5.48 (.46-65.41)	.613	1.72(.210-14.09)	.001	11.05(2.66-45.98)	.097	3.10 (.815-11.83)
Education(reference variable =primary level)								
Secondary level	.245	2.46 (.540-11.91)	.288	2.14(.526-8.73)	.493	.697(.249-1.95)	.974	.99 (.415-2.34)
Higher Secondary level	.091	5.50 (.76-39.67)	.500	1.76 (.339-9.17)	.606	.695 (.174-2.77)	.952	1.04 (.329-3.26)
Catastrophic Health expenditure for delivery (reference variable = <40%)								
>40%	.023	.241 (.071-.82)	.250	.502 (.155-1.62)	.808	1.12 (.423-3.01)	.566	.79 (.344-1.79)

4.12 Discussion with providers:

The study team had informal discussion with clinic managers, community service promoters and counselors of different clinics. Regarding pre-payment package introduction, they stated some of their opinions. They mentioned about lengthy administrative procedure, presence of competitors in their locality, location of the clinics, shortage of human resources: unavailability of full time medical doctor and community service promoter.

One of the counselor's at Gandaria said,

“Respondents need 900 BDT for normal delivery, the price of this package seems very high for the clients will be required normal delivery’. The package price can be changed according to geographic location”

CHAPTER FIVE: DISCUSSION

This study was conducted to elicit client's opinion and perception about prepayment mechanism for health care offered by health care facilities. It also explored their preference for a package and underlying reasons behind their preference. To develop that understanding we observed the clients, had client interview and focus group discussion with the clients from four CWFD clinics' catchment area.

The study process revealed that most respondents did not know or understand prepayment schemes. Once the concept was explained the findings were a) positive perception about prepayment system b) preferences for comprehensive maternity package and basic family package over other packages c) Factors such as one-stop service, previous experiences of service costs and to some extent education and income influenced choice of packages d) payment in installments is preferable, especially for the lower income group and when the cost is high.

The implications of these findings for designing a strategy for enhancing client flows to the CWFD clinics are discussed.

Perception about pre-payment system and the use of Pictorial guides

When benefit packages were introduced to the study participants with pictorial guide, majority of respondents appreciated the concept and perceived it as a better approach than paying at the time of using services (user fee from out-of-pocket). However, respondents were concerned about quality of service and responsiveness of the clinic officials if they have to pre-pay for services.

Our finding about the use of pictorial guide to communicate health messages is consistent with studies in Nepal, Malawi and Bangladesh which also found that pictorial guides are an effective tool to elicit client's perception and preferences about different benefit packages offered to them (Dror et al., 2014, Abiuro et al., 2014). In Bangladesh also, Khan (2012) found that educational intervention using appropriated pictorial messages succeeded in motivating the female garments worker to pay for health insurance

While conducting client interviews and FGDs, we found household decision is more important than individual decision. A community based health insurance program at Chakoria advocated frequent counseling for both individual and household to develop motivation to join the scheme and this study concluded that people are willing to pre-pay if there is trust in the service provider

(ICDDR,B, 2013). CWFD also needs to build client's trust about pre-payment mechanism through frequent counseling to individual and households, preferably using pictorial guides.

Factors influencing preference for ANC and maternity packages:

We found that ANC check-up had been one of the reasons for visiting smiling sun clinics and respondents had good knowledge about its necessity. However, a very few of them have had all four check-ups from the same clinic. This is because they come for ANC visits only to get the ultra-sonogram done and as better and cheaper ultra-sonogram facilities are available in the area, they opt out.

Irrespective of availability of delivery services respondents preferred the comprehensive maternity package to the ANC package because of the inclusion of C-section services. Additionally, they emphasized one-stop services, and continuum of care at a reasonable price. . Similar observation was also made in Nigeria where a comprehensive benefit package offering both in-patient and outpatient services had been the most popular one (Onwujekwe et al., 2010). In Bangladesh also, availability of continuum of care was the most preferred attribute among all the scenario presented to the clients (USAID & HFG, 2015).

Past experiences with costs related to maternity care services also influenced the choice of package. We found significant association between previous history of catastrophic expenditure and selection of comprehensive maternity package over other packages. These respondents mentioned the current package as a reasonable one compared to their previous experiences. In Burkina Faso, the highest number of respondents who had been willing to have financial protection in the form of community-based health insurance had previous history of catastrophic expenditure (Dong et al., 2004).

Majority of our respondents, who preferred the CMP package, had been having secondary education and income in the range of 20000-40000 BDT; however, these were not statistically significant. We observed at the FGDs that richer and more educated people wanted to have delivery at the reputed private clinics and hospitals under reputed gynecologist whereas the poorer would be having delivery at cheaper public facilities. Similarly in Nigeria, comparison of willingness to pay among more and less educated families showed that more educated were

willing to pay more amounts for the insurance scheme that were offered to them (Babatunde, 2012).

Factors influencing choice of Family Package

Smiling Sun clinics as well as CWFD is popularly known for primary health care. We found, majority of the visiting clients from all income and education group found it rationale to pre-pay for the basic family package. They argued that this package offered primary health care services at an affordable price where they would be receiving unlimited doctor's consultation.

On the other hand, the extended family package with necessary investigation and medication was found to be popular among the lower income group. The lower income group visits smiling sun clinic for multiple purposes compared to other income groups and they found it useful to have this kind of packages. Respondents from higher and middle-income group, who mainly receives ANC and immunization services from smiling sun clinics and prefers to visit better facilities for their common illnesses, mentioned about unavailability of modern equipment and specialized health care provider at the clinics while highlighting reasons for not choosing this package.

In rural Nigeria and India also, richer households had been less willing to pay for a scheme offered to them. In Nigeria, one unit increase in income would lead to decrease in WTP by 53%. (Dror, Radermacher, & Koren, 2007).

Other common factors influencing the choice of any package:

We observed that households having lesser number (4-6 members) were more interested in all prepaid packages than the households having more than six members. However, it was not statistically significant. Household having lesser members may be a nuclear family where only husband or wife can take necessary decision than the join families where they need to consult with other members. In Africa, one study exploring the determinants of willingness to pay for CBHI highlighted that households with fewer members (4-6) had been willing to pay more money than households having more than six members. (Babatunde, 2012).

Both in the FGDs and in client interviews, male respondents were found to be more confident and expressed their demand for all of the different packages compared to females. In Bangladesh and in other developing countries, generally the male members deal the financial matters in their

family and can express their opinion confidently than the female members. In the study by Dong and Kouyat et al (2004) also showed that male member's willingness to pay per capita had been higher than the female members (Dong et al., 2004).

Mode of payment and price of package:

For the basic package majority had been willing to pay the one lump-off payment reporting it as affordable for them. Regarding paying the CMP price, they requested 2-3 installments. These findings comply with the study findings in Mauritania. Women preferred installments to pay for a risk obstetric insurance (ROI) scheme during their pregnancy, to cover the costs of all related health care, regardless of the pregnancy outcome (Renaudin, et al., 2008).

6. Limitations:

Small sample size, inaccurate classification of SES (due to unavailability of FCC cards from all) and including only 4 clinics out of the 21 clinics restricts the generalizability of the results for all CWFD clinics. Further study on a representative sample of the clinics and respondents is needed for this.

Conclusion

The study found little prior knowledge of prepaid plan among the respondents. Once informed, the respondents preferred the comprehensive maternity package to ANC package and basic family package over extended family package. Prepaid packages offered in this study did not offer any risk pooling except for the basic family package. One stop service, improving the quality of services and responsiveness of the providers will be needed to improve client flow in these clinics.

The preferred packages respond to different needs; the comprehensive maternity package could be offered at Ultra clinics while the basic family package could be implemented in vital clinics with, relatively, low utilization to boost attendance.

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Annex 1: Time line

Activity Plan for demand analysis of prepaid health scheme

Activities	2015				
	Jul	Aug	Sep	Oct	Nov
<ul style="list-style-type: none">• Develop study proposal and research methods					
<ul style="list-style-type: none">• Review of relevant literature,• Package finalization• Tools development and finalization					
<ul style="list-style-type: none">• Conduct client interview, FGD• Data synthesis• Data analysis					
<ul style="list-style-type: none">• First draft report					
<ul style="list-style-type: none">• Feedback incorporation and report finalization					

Annex 2: Quantitative Tables and Figures

Table 4: Types of illness respondents experienced in last three months

illness	Yes (%)	total
Cough	19(15.3%)	75(100%)
Fever	41(55%)	75(100%)
Diarrhea	10 (13.3%)	75(100%)
Vomiting	1(1.3%)	75(100%)
Tonsillitis	2(3%)	75(100%)
Asthma	1(1.3%)	75(100%)
Injury	1(1.3%)	75(100%)
Jaundice	2(3%)	75(100%)
Dysentery	2(3%)	75(100%)
Chest pain	4(5.3%)	75(100%)
Head ache	7(10%)	75(100%)
Abdomen pain	9(12%)	75(100%)
Gastric	4(5.3%)	75(100%)
Others	21(28%)	75(100%)

Table 5: Factors considered for selecting a health facility for general illness and maternity care

Reason	Common illness (N=120) n(%)	ANC (N=120) n (%)	Delivery (N=120) n(%)
Low expenditure	19(26.0%)	9(9.1)	9(8.6%)
Quality care	15(20%)	58(59%)	41(39%)
Near to home	25(34%)	58(59%)	33 (31%)
Satisfaction in previous experience/trust	37(50%)	25 (24.5%)	19(18.1%)
Referred by other	10(13.5%)	2 (2%)	5 (4.8%)
Home service provider		7 (7.1%)	9(8.6%)
Female service provider		9(9.1%)	6 (5.7%)
Clean environment		4 (4%)	1(1%)
No complication			20(19%)
Others	9 (12%)	9 (9%)	16(15 %)

Multiple response; among 120, 74 respondents respond for common illness; 99 respondents respond for ANC and 105 respondents respond of these reasons for delivery to select the facility.

Table 7: Types of coping strategies adopted by the families

Strategy to manage money	Common illness (N=74) n (%)	Delivery (N=105) n (%)
Regular income	67 (90.5%)	83 (79%)
Household savings	14(18.9%)	54 (52%)
Borrowing money from relatives	1(1.4%)	2 (2%)
Help from relatives	2(2.7%)	9(8.7%)
Others	3(4.1%)	2 (1.7%)

Multiple answer; Total population 120 among them 74 respondents respond on strategy to manage money for common illness and 105 respondents respond on strategy for delivery to manage money

Figure 4: Demand for four prepaid package

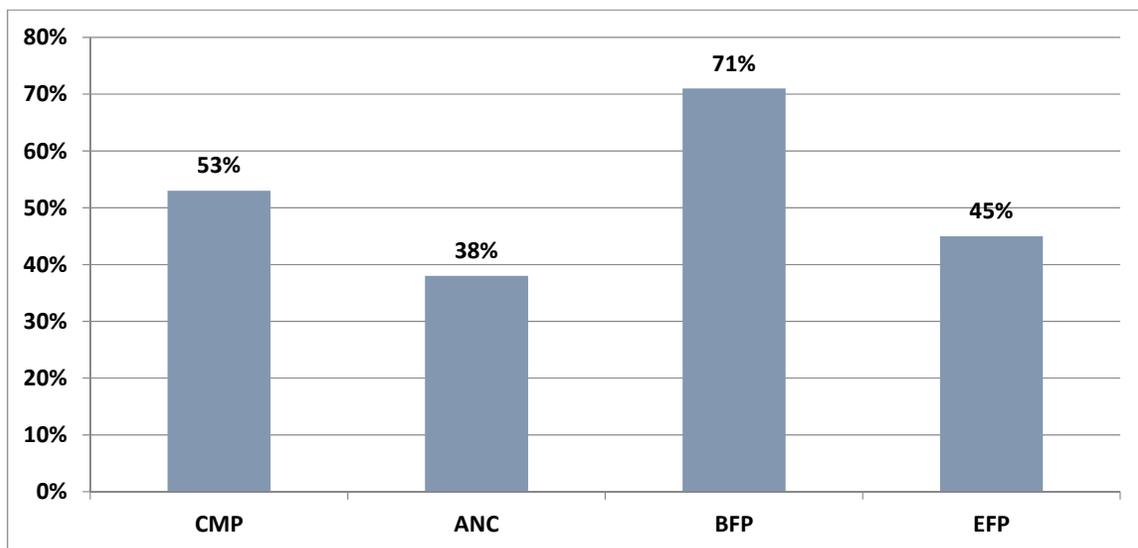


Table 10: The association between way to payment with demographic characteristics

		CMP n (%)			P value	ANC n (%)			P value	BFP n (%)			P value	EFP n (%)				P value				
Characteristics		At a time n(%)	Monthl y n(%)	2-3 time n(%)	.179	At a time n(%)	every visit n(%)	2-3 time n(%)	.583	At a time n(%)	every visit n(%)	2-3 time n(%)	.461	At a time n(%)	every visit n(%)	Monthly n(%)	2-3 time n(%)	.140				
Income	10000-20000	3(16)	1(5.3)	15(79)			4(36)	1(9)		6(55)		45(90)		4(8)	1(2)		10(29)		14(41)	1(3)	9(2)	
	20000-40000	1(9)	0(0)	10(91)			5(50)	1(10)		4(40)		27(100)		0(0%)	0(0)		7(44)		1(6)	1(6)	7(4)	
	>40000	1(100)	0(0)	0(0)			2(100)	0(0)		0(0)		7(100)		0(0%)	0(0)		3(75)		1(25)	0(0)	0(0)	
Education	Primary	3(20)	0(0)	12(80)	.311	4(33)	1(8)	7(58)	.05	38(93)	3(7)	0(0)	.467	9(32)	11(39)	0	8(29)	.191				
	Secondary	0(0)	1(13)	7(88)			1(20)	1(20)		7(60)		16(100)		0(0)	0(0)		4(40)		0(0)	1(10)	5(50)	
	Higher secondary & above	2(25)	0(0)	6(75)			6(100)	0(0)		0(0)		25(93)		1(4)	1(4)		7(44)		5(31)	1(6)	3(19)	
Delivery cost	<.40	3(19)	1(6)	12(75)	.546	5(36)	1(7)	8(57)	.255	55(93)	3(5)	1(1.7)	.786	12(33)	12(33)	2(6)	10(28)	.567				
	>.40	2(13.3)	0(0)	13(87)			6(67)	1(11)		2(22)		24(96)		1(4)	0(0)		8(44)		4(22)	0(0)	6(33)	
Illness cost	<.40									78	4	1	.968	20	5	2	16	.490				
	>.40									1	0	0			0	1	0		0			

Annex 3: Qualitative Tables

Total number of responses is not from individual respondent but a collective response from all participants in an FGD. also It is important to observe that in the data matrix, when only one participant responded differently from others, it was mentioned as one respondent's perception.

Sometimes one respondent mentioned something which others agreed in principle by showing non-verbal gestures, but it was counted as one response. While writing the summary findings, we also sought assistance of field notes and applied our own field observations (non-verbal expressions) keeping into consideration the nature of ambience during FGD.

Table 11: Data matrix (health seeking behavior for general illness)

1. Health seeking behavior for general illness						
Health seeking behavior for general illness						
Serial No.	Sub-theme	Serial No.	Findings	Transcript ID/Page No./Line No.	TNR	Summary findings
1.1	Health facilities	1.1.1	Local pharmacy	Rfp/1/4,16/79-80,pfp/1/5, Gzfp/1/18-19,,	4	All respondents' generally receive medicine from pharmacy for common illness. Sometimes followed doctor's suggestion / consultation if the doctor is present in the pharmacy.
		1.1.2	NGO clinic	Rfp/2/28,3/34-39,pfp/3/44,pfp/4/56-57,12/96, Gfp/3/66,70,72,74,77, 79,82,85,88,121,	15	All respondents visited smiling sun clinic for immunization. And during their pregnancy, few respondents also received ANC from the smiling sun clinic as well.
		1.1.3	Private clinic	Rfp/1/13-14,2/23,19/33-35	3	Many people go to private clinic
		1.1.4	Public hospital	Rfp/4/63,pfp/3/35-36, pfp/32/42-43, Gfp/4/104	4	Many of the respondents go to public hospital for treatment.
		1.1.5	MBBS doctor in local pharmacy	Pfp/3/46-48,4/52-54,64-66	3	In certain circumstances MBBS doctors attend for medical consultation on payment in local pharmacy in the market, they are very well known in the community, many people at first go to them for seeking

1.2	Factors for selecting health facilities	1.2.1	Cost	Rfp/4/50,5/71-76,pfp/6/62-93,11/71-77,pfp/32/44, Gpf/6/163,171, Gzfp/3/62-65	6	treatment. Majority of FGD respondents mentioned that, cost of treatment is an important issue for selecting health facility for treatment.
		1.2.2	Severity of illness	Gzfp/2/37-39, Gzfp/2/55-56, Gzfp/2/55-56	3	Health seeking behavior depends on the nature of severity of disease. For normal illness respondents usually purchase medicine from pharmacy and they go to doctor for further detailed consultation when illness gets severe.
		1.2.4	Providers attitude	Rfp/4/54-55, 26 th page,32/44-47,pfp/9/43-45,49-51,	5	Service provider attitude is one of the most important factors to consider for selecting a particular health facility
		1.2.5	Good quality of medicine	Rfp/23/397-400, Pfp/9/134-36	2	Some respondents mentioned good quality (branded medicine) is one of the important factors for attending a particular health facility.
		1.2.6	Nearest health facilities	Pfp/2/24,28,3/41, Gzfp/7/180, 2/50-52, 2/33, Gzfp/2/55-58	7	Respondents prefer to go pharmacy for seeking health as it is in close proximity to home and medicine vendors are familiar to them because of pervious acquaintance.
		1.2.7	No visit fees (local pharmacy)	Pfp/5/71	1	People used to go local pharmacy, because there is no visit fee, and they get credit facilities for buying medicine, if needed.
		1.2.8	Credit facilities	Pfp/31/22-26	1	
		1.2.9	Female health care provider	Gfp/5/127,132	2	Few suggestedfor female providers for convenience of female patients.
		1.2.10	Less time consuming (local pharmacy)	Pfp/5/73-75	1	Few mentioned about less time (waiting time) and convenient
		1.2.11	Known service provider	Pfp/12/208, Gzfp/2/50-52	2	/flexible time to visit local pharmacy and this facilitates quick treatment

					from previously acquainted care provider.	
1.3	Health care cost	1.3.1	Different costs related to health care (visit fees, transport, medicine cost, daily income, tests)	Rfp/5/78-84,6/86-96, pfp/6-7/96-105,8/117-118	4	Respondents were well aware about the health care cost. In addition to medicine and consultation costs, there are other associated costs like transport, other lab tests which the doctors often prescribe for further diagnosis.
		1.3.2	Don't go or delay seeking health care due to lack of money	Rfp/19/21-23, gzfp (depend on salary)	2	Two respondents mentioned, they did not go for treatment due to lack of money on time when treatment was required.
1.4	Shared experienced	1.4.1	Could not go to health facility due to lack of money	Rfp/7/105-15 (a quote)	1	Two respondents shared their personal account during situations where due to lack of money, they couldn't go to health facility for treatment.
		1.4.2	Could not seek treatment when thinking about children	Gzfp/5/134-156	1	
1.5	Managing finance	1.5.1	Take loan by interest	Rfp/7/121,127-38, 19/33-36, Gzfp/4/114-117	3	During emergency most of the respondents mentioned that, many people take loan with interest from money lender. Sometimes they take loan from their neighbors and relatives. Co-operative societies are very common to take loan during emergency but later on they pay back on a daily installment.
		1.5.2	Take loan from neighbours and relatives	Pfp/14/33-34,17/272-77	2	
		1.5.3	Take loan from co-operative society	Pfp/15/239-44,	1	
						Sometimes respondents mentioned of

				borrowing money from neighbors and relatives to mitigate unanticipated health costs.		
1.6	Pressure on family	1.5.4	Regular income	Gzfp/5/129-131, Gzfp/4/114-117	2	If healthcare expenditure is within their financial capacity, then they consider paying from their regular income
		1.6.1	Creates pressure on family	Rfp/9/145-48,pfp/13/208-11	2	Many of the respondents revealed that, spending money on health care sometimes creates pressure on family when large sum of money is spent unexpectedly.
		1.6.2	Effect on daily meal	Rfp/9/152,10/158-62,164-65.pfp/18/300-1,	3	Impact of these financial constraints are: effect on the frequency of daily meal, they often compromise daily meal quality and size
		1.6.3	Effect on child education	Pfp/18/95-98	1	One of the respondent also reported And some respondents mentioned that sometimes spending for health care affect their child's education because they have to redistribute their income to mitigate health expenses which means reducing expenditure for other expenses like education.
		1.6.4	Creates unforeseeable circumstances with the relative/neighbors	Pfp/18-19/302-7,Rfp/11/257-60	2	Sometimes when someone cannot repay the loan in due time may create unforeseeable situations with the relatives or neighbors.
		1.6.5	Take loan from others to cover repayment of existing loan	Rfp/10/170-71	1	Sometimes respondents take loan from others and make repayments of their existing loan
		1.6.6	Multiple health seeking has impact on the health care cost	Pfp/8/26-30	1	Health seeking behavior depends on severity of illness, during these adverse situations they seek care from multiple provider, it increase their

1.7	Pressure reduction on health care expenses	1.7.1	Reduce the health cost	Rfp/11/82-83, Gzfp/5/123-124, Gzfp/5/121-122,	3	cost, that also creates a pressure on their family. Many of the respondents mentioned that, reducing health care cost could be a solution for offloading pressure due to health care costs.
		1.7.2	No idea about prepaid mechanism	All the FGD		No FGD respondents had any idea about prepaid health scheme. Very few heard about the health insurance only, nothing more in details. The respondents heard about life and car insurance though.
1.8	Services received from the smiling sun clinic	1.8.1	Immunization	Rfp/22/74-75, pfp/19/22-23, gmp/21/63-65, Gzfp/5/144-145	4	Almost all the respondents receive immunization service from the smiling sun clinic and it is also observed that the respondents receive a continuum of care for immunization as well as for other illnesses for their family members.
		1.8.2	Family planning	Rfp/24/11, Gzfp/5/141-142	2	Many of the respondent mentioned that, family planning service, ANC checkup, treatment of common illness are available in smiling sun clinic.
		1.8.3	ANC check-up	Pfp/19/18-20, 22-23	2	
		1.8.4	Common illness	Rfp/22/74-75, pfp/19/19	2	
		1.8.5	Complain about smiling sun clinic	Rfp/25/34, Pfp/20/39-40	2	Negative response about the doctor's attitude and long waiting time of smiling sun clinic as many people take a few hours of their work time to come and visit doctor

Table 12: Data matrix (maternal health seeking behavior)

2. Maternal health seeking behavior						
Serial No.	Sub theme	Serial No.	Findings	Transcript ID/Page No./Line No.	TNR	Summary
2.1	ANC service	2.1.1	Respondents visit to doctor during pregnancy period	PMP/2/24-25,6/103-5RMP/1/12-16,25-27,gmp/all, gzmp/all	4	Almost all the respondents received ANC service during their pregnancy. Generally they go for ultra- sonogram and if any further complication arise then they go for further check-up. Most of respondents went to multiple health facilities for ANC visit. At initial stage, they usually visit NGO health facilities; later on they would go to private clinics. It was observed that, nobody went to public facilities first for ANC check up. One of the respondents mentioned that she did not go for check up, because she did not encounter any complication during her pregnancy period and the family members did not want her to visit hospital as well.
		2.1.2	Ultra sonogram	RMP/1/17-21,29-31, gzmp/1/18-19,25	3	
		2.1.3	Medicine	RMP/2/21,		
		2.1.4	NGO health facility	RMP/2/32-33,38-40,PMP/2/24,gmp/1/13,21, 23gzmp/1/18-19,27	7	
		2.1.5	Private hospital/clinic	Gmp/2/48-49, 2/38, gzmp/1/18-19	3	
		2.1.6	Took service from CSP	PMP/1/14	1	
		2.1.7	Didn't take ANC, because they were fine and healthy during pregnancy period	PMP/5/91-97	1	
2.2	Considering factors for selecting health facilities	2.2.1	Quality of service	PMP/17/345,RMP/3/48-51,4/61,gmp/11/316, gzmp/2/56,3/61-62	6	It has been observed that, respondents' priority is to receive quality service from the provider, they also identify the range of services available as well as the type of doctor(mentioned about specialist and experienced) doctor there. Service provider's attitude is one of the important factors for selecting a particular health facility followed by proximity from home, cost and their previous experience
		2.2.2	Doctor	Gmp/11/297-98, gzmp/3/76-78	2	
		2.2.3	Near from home	PMP/2/56,RMP/3/54-58,4/61,gmp/2/29, gzmp/2/41-43	5	
		2.2.4	Service provider attitude	RMP/4/61,69,gmp/12/302,13/333-35,336-41, gzmp/3/66-68	6	

2.3	Delivery History	2.2.5	Cost	RMP/4/64-67,5/79-94,PMP/6/116-18, gzmp/3/78-80	4	in that facility. Most of the respondents mentioned that, prior to visiting a health facility, they have to realize whether they can afford or not. It is perceived that people who have money will opt for private clinic otherwise they visit NGO clinics. It is generally understood that people from lower socioeconomic class attempt to save money within their limited income, even if it is a small amount ,it can help later on to cover other expenses.	
		2.2.6	Previous experience/referred by others	PMP/16/342-43,gmp/3/67-68, gzmp/2/45,3/54-56	3	Most of the respondents highlighted that, they repeatedly visit same facilities if they realize that they receive good service from one point; it depends on the previous experience. People begin to develop trust for a health facility by frequenting there and availing adequate services and in this way acquaintance is established. Respondents is general would prefer a certain health facility which has been usually referred to by family members.	
		2.3.1	Delivery at home				If there is a good track record of previous delivery experience at a certain health facility, people would certainly opt for that particular facility when needed. Histories of delivery of respondents were heterogeneous. Many of respondents had c-section
		2.3.2	Delivery at SSC	Gmp/1/23	1		
		2.3.3	Delivery at private clinic	PMP/2/24-25(normal delivery), gzmp/4/102 (c-section)	2		
		2.3.4	Normal delivery	PMP1/2/27-31	1		
		2.3.5	C-section	Gmp/2respondents/2/42-51, gzmp/4/102	3		

	2.3.6	No complication delivery	PMP/3/41-43,59	1	during their last pregnancy. Few underwent normal delivery at smiling sun clinic and some at home as well. Most of the respondents mentioned that they had no complication during delivery. One of the respondents was mentioning about the complication about her sister during delivery.	
	2.3.7	complication delivery	PMP/5/88-89	1		
2.4	Perception about maternal care cost	2.4.1	Have idea about maternity /delivery cost	RMP/5/95-97,6/112,16-18,gmp respondents),4/89, gzmp/4/102-104, PMP/12/248-50	7 (all)	All the respondents have some general idea about the delivery cost. They were mentioning about the types of costs such as doctor consultation fees, transportation, diagnostic tests, medicine, and daily income loss due to attending health facility for extended period of time including repeated visits. Many of the respondents reported that cost of entire maternity care is quite expensive. They also suggested that rather than considering a package, a breakdown of the costs of specific components would be useful. One respondent was mentioning that, they find it hard to go to health facility due to lack of money previously, but now situation has developed.
		2.4.2	Idea on breakeven of maternal care cost	RMP/5/99-105,6/114-19,7/123,130-31, PMP/7/132-35	5	
		2.4.3	Maternal care cost is expensive	RMP/7/27-31,	1	
		2.4.4	Experience on inaccessibility due to lack of money	RMP/7/136-44,	1	
2.5	Impact of maternal care cost	2.5.1	Maternal care cost creates a pressure on a family	PMP/5/127,RMP/8/150-53,gmp/3/68-78, gzmp/all respondents	4	All respondents revealed that spending large sum of money at a time for maternal care especially at delivery creates a huge financial burden on family. To manage
		2.5.2	Sell assets	Gzmp/6/150-57	1	

					money sometimes they have to take loan with interest from the money lender, sometimes from the neighbor or relatives, sometimes they sell their household assets, like jewellery etc.	
		2.5.3	Take loan by interest	Gzmp/5/128,6/149	1	Few respondents revealed that, sometimes people have to take loan with interest.
		2.5.4	Compromise life style, eating habits and meal size,	RMP/9/170-71	1	Few respondents in Rayerbazar reported that, it creates certain frictions in a family. Sometimes to bear health costs may need to borrow from others. Since the respondent is dependent on husband's income, sometimes, to mitigate health costs would have buy less food. It becomes difficult to manage expenses when there is limited income.
		2.5.5	Creates disturbance in households	RMP/9/75-79	1	When anyone can't return money at right time, can create a burden among the neighbors and relatives; also has impact on relationship. Regular installments of loan can have an impact on their daily meal quality and size of portion.
2.6	How financial burden can be reduced	2.6.1	Savings	RMP/11/16-18,gmp/4/86	2	All respondents reported that, savings can reduce the financial pressure on family.
		2.6.2	Health insurance	RMP/10/6-8,11/22-29	2	They heard about life insurance. But none of the respondents had any prior idea about health insurance.

		2.6.3	Prepaid mechanism for health	RMP/12/34-37	1	No respondents had any idea about prepayment mechanism for health.
2.7.	Service available at smiling sun clinic	2.7.1	For ANC service	Gmp/4/98,gzmp/8/211,pmp/2/24	3	Most of the respondents mentioned that, ANC check-up for the pregnant women is available in smiling sun clinic. And some of respondents also mentioned about immunization, child care service and common illness treatments are also provided by the smiling sun clinic
		2.7.2	vaccination	Gmp/2/27,pmp/3/8-10	2	
		2.7.3	Child care	gzmp/8/212	1	
		2.7.4	Common illness	Gmp/4/96-98	1	
2.8	Recommendation	2.8.1	Expand of ANC package	Gmp/last page	1	One of the respondents mentioned that, ANC package expansion into CMP will be good for them.

Table 13: Data matrix (prepaid maternity package)

3. Prepaid maternity package						
Maternity package:						
Serial No.	Sub-theme	Serial No.	Findings	Transcript ID/Page No./Line No.	TNR	Summary
3.1.	Willingness to join in different health benefit packages	3.1.1.	Willing to join in CMP	RMP/13/62,84,16/28, pmp/12/242,gmp/5/122,129,6/140,gzmp/10/257,11/292	9	Majority of the respondents of four clinics showed keen interest on comprehensive maternity package.
		3.1.2	Willing to join in ANC package	RMP18/66-70,PMP/370-79,7/172	3	Respondents in Gandaria and Pallabi clinics showed positive response on ANC package
		3.1.3	Select comprehensive maternity package over the ANC package	RMP/20/380-84,86-87,gzmp/13/345-49,59-60,14/364-65	5	Because the main hassle and/or risk during pregnancy is the delivery process, so without delivery facilities in the package, respondents perceive that risk will continue to exist. They want a complete and worry free package and were supportive of comprehensive maternity over ANC

						package.
3.2 Mechanism of payment	3.1.4	ANC package is suitable in this setting	PMP/18/375,gmp/8/201-6	2		The respondent perceived that since this clinic does not have the facility for c-section why opt for a maternity package. Everybody wants to ensure that their wives undergo delivery process in a safe facility where modern equipments are available.
	3.2.1	Installments	RMP 13/63-66,85,16/31,pmp/15/304,gmp/12/314-15,gzmp/12/331, RMP 13/69,73,gzmp/12/323	9		Everybody wants to pay through installments. For convenience, number of installments can be around 2-3 times for comprehensive maternity package. And those who are interested to join in ANC package, they also mentioned that they can pay through installments as well.
	3.2.2	Revenue collection mechanism	RMP 16/35-43	1		One of the respondents in Rayerbazar was mentioning about the revenue collection mechanism. One mechanism can be to generate receipts where the client keeps one receipt and another can be with the service provider for administrative records. The health card can be distributed once all the installments have been paid up.
3.3 Advantages of package	3.3.1	No tension	RMP 14/93-94,19/86-87gzmp/10/259-65,269-72	4		Most of the respondents revealed that, the main advantage of this card is that there is no financial worry during future delivery event and they preferred comprehensive delivery package. The c-section cost was considered as a reasonable offer.
	3.3.2	Less costly	Gzmp/10/276, PMP/12/259-60	2		Few mentioned that they considered it less costly and the combo services they will receive is adequate.
	3.3.3	One stop service	Gmp/5/131, Gzmp/10/276	2		They also mentioned that, from this card they can get all the services from one place including regular consultation from doctor can be availed.
	3.3.4	Easy to pay through installments	RMP 14/91	1		Few respondents suggested that, it will be easy to pay through installments without having to pay

						large amount at once.
		3.3.5	If c-section occurred we will be benefitted financially	PMP/12/259-60	1	Some of respondents compared C-section with normal delivery, and in case of normal delivery they will be financially benefitted.
		3.3.6	Increase the frequency of doctor visits	PMP/13/278	1	In Pallabi, respondents perceived that mother becomes habituated to go to health facility for regular and frequent check-up if the amount is paid in advance.
3.4	Package price	3.4.1	Appropriate price	RMP 15/1416/18,25,gmp/8 /208-9, Gzmp/14/79- 80,86-87,15/89-92	6	Most of the respondents appreciated the comprehensive package price as the newborn and the mother will be benefitted from this.
		3.4.2	less	RMP 16/20,gmp/9/229, Gzmp/10/276	3	Some of the respondents considered it comparatively less based on his/her estimates.
		3.4.3	Package price is high	PMP/11/229-30	1	Respondents of Pallabi reported that, package price seems high to them, reason could be that most of the respondents had normal delivery, they may not be well aware about maternity care cost.
Concern about the maternity package:						
3.5	Trust	3.5.1	Doubt about future service, after pay money, do they get good service or not?	PMP/13/271- 75,280-83,6/143- 44,157-58,7/161-62	5	Many respondents frequently asked if they do not receive the promised services after enrolling in the package, what will be the consequences. They want a good understanding of the contents in a package. The service provider initially needs to build on trust and this may be popularized when more people begin to enroll.
3.6	Uncertainty of birthing procedure	3.6.1	Those who will have normal delivery, for them price of the card is high	PMP/10/215- 16,13/61	2	Few were mentioning about the uncertainty of birthing outcome. If someone undergoes normal delivery, she will not be benefiting from this package whatsoever.
3.7	Availability of service	3.7.1	Not all the service is available in smiling sun clinic	PMP/15/320-22	1	Not all the health services are available in smiling sun clinic. The package to be designed accordingly.

3.8	Marketing	3.7.2	Quality of service	Gmp/5/129, gmp/10/246-51	2	Few respondents were directly raising issue about the quality of care.
		3.7.3	Modern equipment	PMP/15/313- 316,16/323- 329,gmp/5/123- 129,6/138,148- 49,154, gmp/10/246-51	7	Majority of the respondents frequently mentioned about the availability of modern (facility, instrument, specialist doctors for consultation and operations)health services and observe whatever promised under the package are actually available in order for them to be satisfied to move on purchasing this package.
		3.7.4	Specialist doctor	PMP/15/313- 316,16/323-329, ,gmp/5/123- 129,6/138	5	Specialist doctor was one of the major concerns among the respondents. The respondents suggested that they be attended by specialist doctors for proper diagnosis and treatment.
		3.7.5	Infrastructure of clinic	Gmp/6/145- 50,gmp/10/246-51	2	In Gandaria, few respondents were concerned about the infrastructure of the clinic or having the capacity to provide the needed services and general ambience of clinic as well.
		3.2.3.6	Clinic environment	Gmp/7-8/183-97 gmp/10/246- 51,gmp/11/285-88	3	
		3.8.1	Meeting with pregnant women	Gzmp/15/443	1	Few respondents were talking about yard meeting in the community for mass awareness campaign about marketing the package.
		3.2.4.2	Automatically	PMP/20/421Gmp/a ll, RMP/all	3	Most of respondent were mentioning that if smiling sun provides promised services under this card, it will become popular automatically.

Table 14: Data matrix (prepaid family package)

4. Prepaid family package						
Serial No.	Sub theme	Serial No.	Findings	Transcript ID/Page No./Line No.	TNR	Summary
4.1	Willingness to join	4.1.1	Willing to enroll in basic family package	Rfp/14/44,34/82,pfp/25/27, 30/17, Gzfp/7/189-90, Gfp/9/234, (GFP/9/246-47)	6	Most of the respondents were interested to enroll in this package. And few mentioned that if more people do become interested to avail this package then they might consider

				joining in this package as it becomes cheaper than compared to the cost associated with single visitation to the doctor.		
	4.1.2	Willing to enroll in the extended family package	Rfp/16/83,pfp/32/52	2	About the extended family package everybody considered it to be a good option; few were interested to join in this package if many people are enrolled.	
	4.1.3	Choose basic family package over extended family package	Rfp/21/69-70,22/86, Gzfp/7/199, Gfp/11/307,gzfp/7/200-202,206	6	Majority of the respondents desired for basic family package over the extended family package simply due to the fact that they do not predict what disease condition they might experience in future.	
	4.1.4	Choose EFP over the BFP	Pfp/36/16,	1	Only respondents in Pallabi clinic preferred EFP over BFP as the price is considered a reasonable one, having a better deal in the package.	
	4.1.5	Want to observe what others will do first for joining package	Rfp/23/93-94	1	Few respondents did not give any opinion, they want to see first how this works out and they will take decision in future.	
	4.1.6	People will not take EFP due its 2000 taka price.	Rfp/25/28	1	One of the respondents of Rayerbazar mentioned that people will not take this due to its cost. (actually she was taking about uncertainty of illness)	
4.2	Payment mechanism	4.2.1	Can purchase BFP at a time	Rfp/33/60,pfp/30/17,pfp/35/93,gzfp/7/210	4	Most of the respondents reported that they can purchase basic family card in one payment if they have the assurance of receiving the services promised in the package.
		4.2.2	Can buy BFP 2-3 installments	Pfp/34-35/91-95	1	Few respondents (lower quintile of non poor) wanted 2-3 installments for BFP card.

	4.2.3	Want to purchase extended family package through 2-3 installments	Rfp/20/52,28/76, pfp/30/17, Gfps/4/6,gzfp/7/214	5	Those who were interested in extended family package, they can purchase this card in 2/3 installments
4.3 Advantages of package	4.3.1	Continuum of care	Rfp/14/39,pfp/25/31,31/37,	3	Respondents reported that, it will increase the frequency of their hospital visits. Other advantage they mentioned is that this card will allow them to receive all the services from one place, also those who have children and also elderly members can be benefitted from this. All family members will receive service from this package. Respondents also mentioned that the package can be useful for elderly members as well as children in a family who need more frequent visit to doctor.
	4.3.2	One stop service	Rfp/24-25/16-23	1	
	4.3.3	Helpful for children and adult health	Rfp/22/80, pfp/25/29, Gfp/10/264,gzfp/7/207-8	4	
	4.3.4	All members will be receiving service	Gzfp/8/207-8	1	
4.4 Package price	4.4.1	Less costly	PfP/9/235, Gfp/6/167, Gzfp/7/190,233	3	Many of respondents perceive that it is less costly to them.
	4.4.2	Extended family package is costly	Rfp/22/86, Gfp/12/319, Gfp/11/301	3	Only clients of Rayerbazar bargained about the price. The respondent reported that people might come in the clinic 2-3 times in a year, in that sense 600 taka is considerably high.
	4.4.3	Expected price of basic family package 200-250 taka	Rfp/16/73,	1	
	4.4.4	Expected price of extended family package 500-600 taka	Rfp/16/75	1	
	4.4.5	Extended family package price is costly than basic family package.	Rfp/17/300	1	
	4.4.6	Bargain on price	RMP/18/18	1	
4.5 Concerns	4.5.1	Aware about quality	Rfp/14/37, /13/213,14/44,37, Gfps/4/11	5	All the respondents were very much aware about the quality of health service. If they receive quality service under this package, they can be

						motivated to join without giving more priority to the costs.
		4.5.2	Uncertainty of illness	Rfp/16/77-80,18/18 (a quote), Gzfp/6/176, Gfp/14/380,381,383	6	The common concern was uncertainty of illness and availability of doctor.
		4.5.3	Good doctor	Rfp/27/60,32/42	2	
		4.5.4	Medicine is the concern for extended family package	Rfp/20/45-47, Gzfp/7/201-2, Gfp/14/367	3	Medicine was the main concern for extended family package. The respondents considered medicine cost citing the reason that if they have certain disease which may be costly to manage.
1.6	Trust	4.6.1	Lack of trust	Rfp/13/16-22, 14/39-42,pfp/38/57-60, Gfp/12/319,gzfp/7/241-243, (Gzfp/8/241-43).	6	The main challenge identified by respondents is trust. Respondents frequently said paying money before treatment and remain hesitant whether they would receive the desired care from providers after few visits to the health facility. The issue raised here is that when doctors do not receive cash following consultation, they may be reluctant to attend patient with due importance.
4.7	Marketing	4.7.1	Automatically will be popular.	Rfp/27/65-67,41/9-10, Gfps/4/14,15	3	Most of respondents mentioned that, if smiling sun provides the guaranteed services under this card, this will be popular automatically.
		4.7.2	CSP can disseminate the information	Pfp/39/72,	1	Some of the respondents suggested that, CSP can disseminate information and/or benefits of the package in the community to popularize it.
		4.7.3	Meeting/campaign in the community	Pfp/39/64-65, Gzfp/9/269-70	2	Many of them were mentioning about organizing meeting/campaign in the community for advertising/publicity.
		4.7.4	Through co-operative society	Pfp/39/66-71	1	Few respondents in Pallabi mentioned about co-operative society to

advocate for the benefits from purchasing the package.

Table 15: Data display table: (General section of FGD guideline)

Sub-theme	Findings	Quote with references	Summary and findings
Health facilities	Local pharmacy	<i>Whenever we get sick, we just go to pharmacy, bring some medicine, take those medicines and work again. This is way our days going (Rfp16__79-80)</i> <i>Suppose, I am suffering from fever, go to pharmacy in the market and buy few paracetamol (PFP__1__5)</i>	All respondents usually receive medicine from pharmacy (within their vicinity) for common illness. Sometimes followed doctor's suggestion if present in the pharmacy during medicine purchase.
	NGO clinic	<i>We go to BRAC clinic and smiling sun clinic for our children's immunization (RFP__3__34-39).</i> <i>I go to Sobuj Chata (NGO clinic)for my child's illness (PFP__3__44)</i>	All respondents visited smiling sun clinic for the immunization. And during their pregnancy, few respondents also received ANC from the smiling sun clinic as well.
	Private clinic	<i>I went to Hajaribag, it is not shop, it is a private clinic (RFP__2__22)</i> <i>I did C-section in maternity clinic, my husband lent me some money for that, otherwise may be I would be dead, then what will happen to my two children? By free treatment, patient didn't get well soon. Trouble in human life, I have to realise by myself. (rjp__19__33-36)</i>	Many people go to private clinic.
	Public hospital	<i>For severe illness, I go to Kurmitola, Shahabag (govt.) hospital (PFP__3__35-36)</i>	Many of the respondents go to public hospital for treatment.
	MBBS doctor in local pharmacy	<i>I visit Mojammel doctor who sits in Johorul pharmacy(local); he is a child specialist</i>	Now a day's MBBS doctors attend patients in local pharmacy in the market, they are

		(PFP__3__46-48).	very well known in the community, many people at first go to them for seeking treatment.
Factors for selecting health facilities	Cost	<i>Whenever someone leaves his home for treatment, the first thing that strikes mind is where heshe will get quality service comparatively at low price, it depends on the affordability (RFP__5__71-76).</i>	Majority of FGD respondents mentioned that, cost of treatment in a particular facility is an important issue for selecting a particular health facility for treatment. Many people often crowd in the public hospital for regular and emergency visit due to free services.
		<i>I went to BRAC because of low cost and more facilities available there. (RFP__4__50)</i>	
		<i>Ok let's see. I've to think about this then I'll be deciding will I go there or not. If I'll go to Dhaka medical cost may reduce, because of low cost most of the people would be motivated to go there, even during emergency also.(RFP__5__71-76)</i>	Some people visit local pharmacy for treatment because, sometimes, the health service providers like Local Medical Assistant and Family planning (LMAF) often provide simple treatment without charging any fee and the patients just pay for the medicine.
		<i>I went to Pharmacy because free of cost only medicine cost. (PFP__4-6__62-93)</i>	
		<i>Depending on the severity of illness I've to go to a "good doctor" for consultation visit. (PFP__11__71-78)</i>	People stay satisfied by visiting local pharmacy if they get better simply due to low cost and reluctant to pay for a specialist doctor at first instant of visiting a doctor.
		<i>I went in Shahabagh because of low cost. (PFP__32__44)</i>	
		<i>Yes, if we get recovered going to the pharmacies easily, why would we go to other places? Yes, we need less amount of money there. (GFP__3__62-65)</i>	
	Severity of illness	<i>Far means we'll go to the medical. If the illness, we'll go to nearby doctors in pharmacies. (GzFP__2__37-39)</i> <i>If its common illness, if it has been for only one or</i>	Health seeking behavior depends on intensity of disease. For normal illness respondents take medicine from pharmacy and go to doctor when illness gets severe.

	<i>two days, we think that it may get well by taking a few medications, that's why we don't want to go far and thus, take medicines from a nearby pharmacies thinking that why bothering to go far when there are doctors near our doors.(GzFP__2,3__55-58)</i>	
Providers attitude	<p><i>"Once I had a cough, could not talk, so much pain in my throat, I was sitting as doctor said. I am a patient, a bedi (women) pushed me out from the room, tell me go there and cough, don't cough in front me. Since then I never went there"(RFP__26__437-40)</i></p> <p><i>They call us from our home for common illness, even give us oral saline, FarzanaApa's behavior was good (RFP__4__54,55)</i></p> <p><i>Many doctors attitude like their own child but few doctors are very rude and professional. (RFP__32__44-47)</i></p> <p><i>Example of Alom doctor, Mojammel doctors behavior is very polite.(PFP__9__43-45)</i></p> <p><i>Yes, few doctors' behavior very bad, we went there with money but they are doctor, so that their attitude like different. All the time we didn't say anything but thinking. (PFP__9__49-51)</i></p>	<p>Service provider attitude is one of the most important factors to consider for selecting a particular health facility.</p> <p>Sometimes the doctors and/or their assistant misbehave. But sometimes they treat patients with courtesy.</p>
Standard of medicine	<i>Concern about good medicine. Card will be taken but medicine is the main thing. If first time they will good medicine but then next time given in poor medicine? (RFP__23__397-400)</i>	Some respondents mentioned good quality (branded medicine) is one of important factors for going to particular health facility. The respondents cast doubt on the quality of medicine if they visit the next time to a health facility.
Nearest health facilities	<i>Suppose I had serious fever, I will avail services whatever facility is available near me, I will go there because I don't have time. Again for a serious</i>	Respondents prefer to go pharmacy or to any other health facility within their vicinity for seeking health as it is in close

patient sometimes may not remain enough time to send the patient in good hospital which is far from the home, so we have to go nearest facility as early as possible. (PFP__5__73-75)

proximity to their residence and also due to familiarity with the medicine vendors and can be reached to at flexible hours and avoid waiting time.

We've local, we used to go there usually. (PFP__3__41)

When my children became sick we were going to our nearest doctor. (PFP__2__24,28)

It's near to the home and we can get medicines whenever it's needed even if its midnight. They are familiar persons to us, we can even wake them up from sleep to take medicines.(GzFP__2__50-52)

Its common illness, if it has been for only one or two days, we think that it may get well by taking a few medications, that's why we didn't want to go far and thus, take medicines from nearby pharmacies thinking that's why bothering to go far when there are doctors near our doors.(GzFP__2,3__55-58)

No visit fees (local pharmacy)

We used to go pharmacy for treatment, we don't need to pay visit fees. (PFP__5__7172)

People used to go local pharmacy, because there is no visit fee, and they get credit facilities, if needed for buying medicine and can make payments with flexibility.

Female health care provider

Personally I prefer those facilities where female doctors are available because we being women can share many problems with a female which is not possible with male doctor (GFP__5__127,132)

Few were talking about female providers for convenience of female patients.

Credit facilities –

Suppose I went to pharmacy and doctors prescribe

	flexibility in repayment	<i>around 100 taka's medicine, I can buy that medicine from pharmacy in our market even though I have no money. They give us credit (PFP__31__22-26).</i>	Few respondents mentioned about credit facility, less time to visit local pharmacy and previously acquainted care provider. Due to long waiting time respondents preferred to visit nearby health facility. Even during emergency situations, they would prefer to visit health facility nearby their residence. Due to close acquaintance with medicine provider, they could approach the vendor for medicine at any convenient time.
	Less time consuming (local pharmacy)	<i>If you go to big hospital you have long waiting time, so every time it not possible to go good facilities. For emergency time, you have to go as nearest facility you have (PFP__5__73-75)</i>	
	Known service provider	<i>It is near the house and we can get medicines whenever it is needed even if it is midnight. They are familiar persons to us, we can even wake them up from sleep to take medicines (GzFP__2__50-52)</i>	
Health care cost	Different types of cost related to health care (visit fees, transport, medicine cost, daily income, tests)	<i>Suppose, I went to the doctor, there are so many costs associated such as medicine cost, transport cost, visit fees, test fees. Now a day, doctors always give tests when you go to a hospital. (PFP__6-7__96-105)</i>	Respondents were well aware about the health care cost. In addition to medicine and consultation costs, there are other costs like transport, other lab tests which the doctors often prescribe for diagnosis.
	Donot visit a healthcare facility when needed or delay seeking health care due to lack of money	<i>Last seven to eight days I am sick, my sister knew. Everybody is telling me to go to a doctor but my husband did not receive his salary yet.....this is our condition. (Rfp__7__105-15)</i>	Two respondents mentioned about, they did not go for treatment due lack of money at a time when treatment was required.
Managing finances	Take loan with interest	<i>Whenever we need money, we have to take loan with interest from someone. Nobody gives loan without interest (RFP__7__121)</i>	During emergency most of the respondent mentioned that, many people take loan with interest from money lender. Sometimes they take loan from their neighbors and relatives. Co-operative societies are very common to take loan during emergency but later on they a daily installment.
		<i>Once my little boy was very sick, I had to take him to Sadar(govt. hospital in district) at first, then I had to take him to Dhaka. At that time, I had spent money from my savings and when that depleted, I had to take loan. Then he died there. He was only 5 days old (GzFP__4__114-117)</i>	
	Borrow money from	<i>Sometime we need to take loan. We borrow money</i>	Sometimes respondents mentioned of borrowing money from neighbors and relatives to cover unanticipated health costs.

Pressure on family and its impact	neighbors and relatives	<i>from neighbors and relatives. But now-a day's people don't want to give loan that much, without high interest(PFP__14__33-34).</i>	
	Take loan from co-operative society	In emergency, we have no money as savings. We need to take loan from cooperatives. I forgot the name of the cooperative society from where I took loan 5000 taka with interest of 60 /100 taka per day for getting health service(PFP__16__260-267)..	
	Regular income	<i>Once my little boy was very sick had to take him to Sadar (govt.) hospital at first, then i had to take him to Dhaka. At that time, I spent money from my savings and when that savings depleted, I had to take loan. My son died and he was only 5 days old. (Gzfp_4__114-117)</i>	If healthcare expenditure is within their financial capacity, then they pay it from their regular income
	Creates pressure on family	<i>Spending for treatment creates pressure on family, my husband is only earning member in the family, therefore food expenditure for family members, children education and many other expenditure is regular. After that if I have to spend on doctor then what conditions would happen... you know? (PFP__13__208-11)</i>	Many of the respondents revealed that, spending money on health care sometimes creates pressure on family when large sum of money is spent.
	Effects on daily meal	<i>Sometimes I need to reduce the quantity of grocery product to buy. I always try to keep commitment to pay back the loan(PFP__18__300-1).</i>	Impacts of these pressures are: effect on daily meal, they compromise daily meal quality and size and child education as well.
	Effects on child education	<i>It impacts on education of children. We have to send them to school; there is no school in Dhaka where school fee is less. It is about 300__400 taka; every month we have to give the school fees (PFP__18__95-98).</i>	One of the respondents also reported and some respondents mentioned that sometimes spending for health care affect child education because they have to redistribute their income to cover health expenses which means reducing expenditure for other expenses like education.
	Creates unforeseeable circumstances with the relatives /neighbors	<i>If you can't repay your loan in due time, people make passive remarks about you, it creates tensions among the neighbors (PFP__18-19__302-7)</i>	Sometimes when someone cannot repay the loan in due time may create unforeseeable situations with the relatives or neighbors.

Pressure reduction	Reduce the health cost	<i>If you reduce the health care cost, the pressure will be relieved from us. (RFP__11__82-83)</i>	Many of the respondents mentioned that, reducing health care cost could be a solution for offloading pressure due to health care costs.
	No idea about prepaid mechanism	<i>I heard about life insurance, car insurance but I never heard about health insurance. When we get sick for that insurance system is available, I don't know about this (a male respondent GMP)</i>	No FGD respondents had any idea about prepaid health scheme. Very few heard about the health insurance term only, nothing more. The respondents heard about life and car insurance though.
Service received from the smiling sun clinic	Immunization	<i>I immunized my child; me and my husband also took service from here. Everything is good here (RFP__22__74-75) When I was pregnant, every month I went to smiling sun clinic and check-up, then my child was born, I immunized him from here, for common illness I take him here for treatment as well (PFP__19__18-20)</i>	Almost all the respondents receive immunization service from the smiling sun clinic and it is also observed that the respondents receive a continuum of care for immunization in due time as well as for other illnesses for their family members.
	Family planning	<i>Smiling sun clinic gives mayabori (contraceptive pill), but I never have it (RFP__24__11) I took Family planning, at first I took pills, then I discontinued briefly for a problem and after that I started again (GzFP__5__141-142)</i>	Many of the respondent mentioned that, family planning service, ANC checkup, treatment of common illness are available in smiling sun clinic.
	ANC check-up Common illness	<i>When I was pregnant, every month I went to smiling sun clinic and had check up, then my child has born, I immunized him from here, for common illness I take him here for treatment (PFP__19__18-20)</i>	
	Complain about smiling sun clinic	<i>Everything is good in smiling sun clinic but only you have stand in long serial, if you stand at 1.00pm, you get your serial at 4.00pm (PFP__20__39-40)</i>	Negative response about the doctor's attitude long waiting time of smiling sun clinic as many people take a few hours of their work time to come and visit doctor
Table 16: Maternal health seeking behavior			
ANC service	Respondents visit to doctor during pregnancy period	<i>I am currently pregnant, every month I go to doctor apa (sister) for check-up (RMP__1__12-13) During my pregnancy I went to clinic for check-up though I didn't have any problem. I regularly go checkup because I wanted to be safe</i>	Almost all the respondents received ANC service during their pregnancy. Basically they go for ultra-sonogram and if any further complication arise then they go for further check-up.

		(PMP__6__103-5)	
	NGO health facility	<i>I received TT vaccine during my pregnancy from this (smiling sun) clinic (RMP__2__32-33)</i>	Most of respondents went to multiple health facilities concurrently for ANC visit. At initial stage, they used to visit NGO health facilities; later on they would go to private clinics. It was observed that, among the FGD respondents, nobody went to public facilities at first instance for ANC check up.
		<i>I did two ultrasonogram, one from BRAC and other from Medipath (both are NGO clinic) due to my urine infection (GzMP1__20-21)</i>	
	Private hospital clinic	<i>When I was pregnant, I took ANC from National hospital (Pvt.) (GMP__2__48-49)</i>	
	Took service from CSP	<i>During my pregnancy I was in my father's house. An apa (CSP) regularly came in my house, she checked my BP, measured my weight and always took care of me (PMP__1__14)</i>	
	Didn't avail ANC checkup	<i>When I was pregnant, I was in village, didn't take any check-up, I was completely fine in my pregnancy period. Also my family member didn't want that I go to hospital (PMP__5__91-97).</i>	One of the respondents was saying that she did not go for check up, because she did not face any complication throughout pregnancy period and the family members did not want her to visit hospital.
Considering factors for selecting health facilities	Quality of service	<i>We don't look at the cost of care, we care about quality care. Whether we get quality care we go (PMP__17__345)</i>	It has been observed that, respondents' priority is to receive quality service from the provider, they also identify the range of services available as well as the type of doctor there. Service provider's attitude is the most important factor for selecting a particular health facility followed by proximity from home, cost and their previous experience in that facility.
		<i>Whether we get good treatment, get all facilities we try to go there (GzMP__3__61-62).</i>	
		<i>People see first, the quality of service, who are the doctors in a hospital, then people decide here he/she will go (GMP__11__316).</i>	
	Doctor	<i>When I go to a hospital for treatment, first I see, is my service available or not? And specialist doctors are available or not? (GzMP__3__76-78)</i>	
	Proximity to home	<i>Today I came here because it is nearest from my home, also I need to come again, I could come here (RMP__3__54-58)</i>	

	<p><i>I am pregnant, I go to SobujChata (Green umbrella) clinic regularly for ANC check-up because it is nearest from my house and there is no male person in my house, my husband is in abroad, a little children I have, how I can go far? (GMP__2__41-43).</i></p>	
Service provider attitude	<p><i>Provider's attitude is first, if behave is bad; I will not go there second time. In this clinic, staffs attitudes are good, that's why we come here. (GzMP__3__66-68)</i></p> <p><i>I came here (smiling sun clinic) because staff's of this clinic behave politely, they always take care (RMP__4__61, 69).</i></p> <p><i>People go there, where get good behave from doctor that he or she can share his/her problem frankly. If doctor's behavior is rude, patient feel uncomfortable (GMP__12__301-2)</i></p>	
Cost	<p><i>We took ANC service from BRAC, because cost of service in BRAC is less than other clinic even from smiling sun clinic (RMP__4__64-67)</i></p> <p><i>Those who have money, they go to private clinic, those who don't they go to BRAC, smiling sun clinic, SobujChata clinic. It depends on the individual affordability (RMP5__79-94)</i></p> <p><i>We are middle class or other poor family, if we can save two taka (arbitrary amount)it will help us later; we care about the cost (GzMP__3__78-80).</i></p>	<p>Most of the respondents mentioned that, before going to a health facilities, they have to think whether they can afford it or not. It is perceived that people who have money will opt for private clinic otherwise they visit NGO clinics. It is generally understood that people from lower socioeconomic class attempt to save money, even if it is a small amount so that it can help later on to mitigate other expenses.</p>
Previous experience/referred by others	<p><i>I have a card from Muslim Aid (NGO facility), my sister in law received service from there, they give better service than this (smiling sun clinic) (PMP__16__342-43)</i></p> <p><i>I will do my delivery in national hospital (Pvt.)</i></p>	<p>Most of the respondents highlighted that, they regularly go to same facilities if they get good service from one point source; it depends on the previous experience as well. People begin to develop trust for a health facility by frequenting there and</p>

		<p><i>because my first baby was delivered there (GMP__3__67-68)</i></p> <p><i>I took my sister in law there (clinic), me and my other relatives took service from there before. We all go there because doctors become known (GMP__3__54-56)</i></p>	<p>availing adequate services. Respondents is general would prefer a certain health facility which has been referred to by family members.</p>
Delivery History	Delivery at home		<p>If there is a good track record of previous delivery experience at a certain health facility, people would certainly opt for that particular facility when needed. For history of delivery, responses were heterogeneous(mode of delivery: normal, c-section, place of delivery- home, private clinic, public hospital). Many of respondents had c-section during their last pregnancy. Few underwent normal delivery at smiling sun clinic and some at home as well. Most of respondents mentioned that they had no complication during delivery. One of the respondents was talking about the complication about her sister during delivery.</p>
	Delivery at SSC	<i>My baby was delivered at smiling sun clinic (Gmp__1__23)</i>	
	Delivered at private clinic	<i>Well facilitated, my child was born there (national hospital). (Gmp__2__43)</i>	
	Normal delivery	<i>For C-section around 20000 taka have been expenditure. (gzmp__4__102)</i>	
	C-section	<i>My delivery was normal. (PMP2__27-31)</i>	
	No complication delivery	<i>For C-section around 40000 taka have been expenditure. (Gmp__2__51)</i>	
	complication delivery	<i>For C-section around 20000 taka have been expenditure. (gzmp__4__102)</i> <i>During delivery, I had no complication. (Pmp__3__41,43,49)</i>	
Idea about maternal care cost	Have idea about maternity __delivery cost	<i>For maternity care will be spend 20000 taka. (Rmp__5__97)</i> <i>For maternity care in private hospital may be spend 20000-25000 taka or more than. (Rmp__6__112)</i>	<p>All the respondents have idea about the delivery cost. They were mentioning about the types of costs such as doctor consultation fees, transportation, diagnostic tests, medicine, and daily income loss due to attending health facility for extended period of time.</p>
	Suggestions for breakdown for maternal care cost	<i>Purposes of maternal care expenditure will be breakdown like pathological test, ultra sonogram, EPI etc. (Rmp__5__99)</i>	

		<i>For maternal care some expenditure will be breakdown like medicine cost, convenience, doctor visit etc. (Pmp__7__132-35)</i>	
	Maternal care cost is expensive	<i>Maternal care cost is very expensive. (Rmp__7__27-31)</i>	Many of the respondents reported that cost of entire maternity care is quite expensive. They also suggested that rather than considering a package, a breakdown of the costs of specific components would be useful.
	Experience on inaccessibility due to lack of money	<i>Sometimes in case of an accident, may not have enough money but have to take good treatment. (Rmp__7__136-44)</i>	One respondent was mentioning that, they find it hard to go to health facility due to lack of money during previous circumstances, but now situation has developed.
Impact of maternal care cost Impact	Maternal care cost creates a pressure on a family	<i>If expenditure is more than income, definitely it will be pressure. (Rmp__8__150-53)</i> <i>Maternity cost is pressure on the family, everyone can't afford this expenditure, like ward and cabin vary of expenditure or C-section more expensive than normal delivery. Medicine also a pressure. (GMP__3__68-78)</i>	All respondents revealed that spending large sum of money at one instant for maternal care especially at delivery creates a huge financial pressure on family. To manage that money sometimes they have to take loan with interest from the money lender, sometimes also borrow from the neighbor or relatives, sometimes sell their household assets, like jewellery etc.
	Sell assets	<i>Sometimes emergency or important things may have to sell. During delivery, had no money, so that have to sell TV, Rickshaw or ornaments etc (Gzmp__6__150-57)</i>	
	Take loan by interest	<i>For treatment take loan because of human being alive. (Gzmp__5__128)</i> <i>I've seen loan by interest then going to take treatment. (Gzmp__6__149)</i>	Few respondents revealed that, sometimes people have to take loan with interest.
	Compromise life style, eating habits and meal	<i>Sometimes have to do extra work, may be sometimes</i>	Few respondents in Rayerbazar reported that, it creates certain frictions in a family

	size,	<i>reduce income, where I've to do market of 10 taka, there is I've do market of 5taka. (Rmp__9__170-171)</i>	due to borrowing of money. Sometimes to bear health costs may need to borrow from others. Since the respondent is dependent on husband's income, sometimes, to cover health costs would have compromise on food. It becomes difficult to manage.
	Creates disturbance in households	<i>Huge expenditure will be spent for children's education, even sometimes have to lend some money from others, then after that it will be pay that, so that because of this reason several time trouble in my family. I've to buy from my husband's income, low price food will be taken, and how many side I will be manage? It's very difficult, so that trouble in my family. (Rmp__9__75-79)</i>	When anyone can't return money at right time, can create a burden among the neighbors and relatives. Regular installments of previous loan can create an impact on their daily meal quality and size of portion.
How pressure can reduce	Savings	<i>Savings have to do before treatment, 2 taka will be spend for replace of 5 taka, if I were saving this money, it will be help for my emergency. (Rmp__11__16-18)</i> <i>For C-section I spent approximately 40000 taka, which I given from my savings. (gmp__4__86)</i>	All respondents reported that, savings can reduce the financial pressure on family when adverse medical situation arise in a family.
	Health insurance	<i>When mother will be pregnant, During this time have to savings the money. (Rmp__10__208)</i>	They heard about life insurance. But none of the respondents had any idea about health insurance.
	Prepaid mechanism for health	<i>No, I never heard about before getting the service will be paid, it's totally new to me. (Rmp__12__34-37)</i>	None of the respondents had any idea about prepayment mechanism for health.
Service available at smiling sun clinic	For ANC service	<i>I went to smiling sun clinic for ANC check-up and condition of the baby. (Gmp__4__98)</i> <i>I have taken ultrasonogram now. (gzmp__8__211)</i> <i>I have done my test at smiling sun clinic, in fact all I've done here and my baby were born in a villages clinic. (pmp__2__24)</i>	Most of the respondents mentioned that, ANC check-up for the pregnant women is available in smiling sun clinic. And some of respondents also mentioned about immunization, child care service and common illness treatments are provided by the smiling sun clinic

Vaccination	<i>I came at smiling sun clinic with my girl to given her immunization. (Gmp__2__27)</i> <i>I came at smiling sun clinic for EPI. (pmp__3__8-10)</i>
Child care	<i>Everybody's are not equal but for me, it's satisfied. (gzmp__8__121,212)</i>
Common illness	<i>I am used to came here for common illness. (Gmp__4__96)</i>

Data display Table 17: (Prepaid maternity package)

Maternity package			
Sub-theme	Findings	Quote with references	Summary/findings
Willingness to join different prepaid maternity packages	Willing to join in CMP	<i>Think this way, someone tried for normal delivery at home but they failed, and then suddenly go somewhere for c-section is difficult and time consuming. But if we have this card, everything is fixed. Whatever delivery, normal delivery or c-section needed, they will be responsible for providing service (RMP/10/259-65)</i>	Majority of the respondents of four clinics expressed positive interest on comprehensive maternity package.
	Willing to join in ANC package	<i>I think people will take this (ANC) package, because people may think that it is not the right place for c-section.(PMP/18/373-75)</i>	Respondents in Gandaria and Pallabi clinics expressed positive response on ANC package
	Select comprehensive maternity package over the ANC package	<i>"I prefer the comprehensive maternity package. It offers one stop service. ANC check-up is an optional one and you can have check-up from different places but delivery is a crucial decision. For ANC 2,500 is too much. If I buy this (ANC package) the tension for management of delivery place and cost will still remain the same. That is why I think the comprehensive maternity package at the cost of 12,000 taka is reasonable and a good offer. (a female</i>	Because the main hassle/risk during pregnancy is the delivery process, so without delivery facilities in package, respondents perceive that risk will continue to exist. They want a complete and worry free package and were supportive of comprehensive maternity over ANC package.

respondent _34_gazipur)

If I have this card it is kind of a preparation for me; I know where I will have my delivery. Whatever the type of delivery- normal delivery or c-section we need not to worry about the management of money and the place. (sister of female respondent _34_Gazipur)”

Select ANC package over the comprehensive maternity package

“I would like to take the ANC package. The setting and overall environment is not suitable for delivery. Nobody will take the risk to have her/ his wife’s delivery a place like this. Again, although you are talking about referral, who wants these type of uncertainty at the time of delivery? Me and my family always prefer facility with modern diagnostic facility and equipment and specialist health care provider. (a male respondent _33_ganM)”

The respondent perceived that since this clinic does not have the facility for c-section. Everybody wants to ensure that their wives undergo delivery process in a safe and in a facility where modern equipments are available.

Mechanism of payment

Installments

If you take the money through installments like monthly basis or 2-3 installments then we can afford the card, it will be helpful for the people, you know many people can’t save 12000 taka together (RMP 13/63-65)

We can pay 12000 taka but not at a time, even if we can’t pay by two installments we will pay it in 5 installments (PMP/15/304)

Everybody wants to pay through installments. For convenience, number of installments can be around 2-3 times for comprehensive maternity package. And those who are interested to join in ANC package, they also mentioned that they can pay through installments as well.

	Revenue collection mechanism	<i>You will not provide card at first. In every installment you will provide a receipt. When I will complete the full payment of the card, and give you back all the receipt, then you provide him a card. Without full payment you will not provide the card. (RMP/16/35-43)</i>	One of the respondents in Rayerbazar was mentioning about the revenue collection mechanism. One mechanism can be to generate receipts where the client keeps one receipt and another can be with the service provider for administrative records. The health card can be distributed once all the installments have been paid up.
Advantages of package	No tension	<i>“I prefer the comprehensive maternity package. It offers one stop service. ANC check-up is an optional one and you can have check-up from different places but delivery is a crucial decision. For ANC 2500 is too much. If I buy this (ANC package) the tension for management of delivery place and cost will still remain same. That is why I think the comprehensive maternity package at the cost of 12,000 taka is reasonable and a good offer. (a female respondent _34_gazipur)</i>	Most of the respondent revealed that, the main advantage of this card is no worry during future delivery event and preferred comprehensive delivery package and the c-section cost was considered as a reasonable offer.
	Less costly	<i>This package is good, as we will get all services at less cost, that’s why it is good to me. (GzMP10/274-76),</i>	Few were mentioned that they considered it less costly and the combo services they will receive.
	One stop service	<i>As we will get all services in one place, doctor will see a patient regularly; it will be good for us. (GMP/5/131),</i>	They also mentioned that, from this card they can get all the services from one place and a regular consultation from doctor can be availed.
	Easy payment through installments	<i>The advantage of this card is; we can pay it by installments, spending large amount of money is difficult. (RMP/14/91)</i>	Few respondents suggested that, it will be easy to pay through installments without having to pay large amount at once.

	If undergo c-section , will be benefitted financially	<i>Normal delivery costs less, but if I got c-section in this card, I will be benefitted. (PMP/12/259-60)</i>	Some of respondents compared C-section with normal delivery, and in case of normal delivery they will be financially benefitted.
	Increase the frequency of doctor visits	<i>If I have card, anytime I could go to hospital and consult with doctor for any reason as much as I wish, It will be not bad.(PMP/13/278)</i>	In Pallabi, respondents perceived that, the mother becomes habituated to go to health facility for regular and frequent check-up if the amount is paid in advance.
Package price	Appropriate price	<i>Here we are middle class people, for us this price is appropriate. As it will cover pregnancy through delivery service, in that sense price is not so much. (GMP/14/386-87)</i>	Most of the respondents appreciated the comprehensive package price as the newborn and the mother will be benefitted firm this.
	Less costly	<i>“Now a day if a patient goes to a clinic one day before her c-section, next day 15-14 thousand taka bill will come. And this card will give one year service till one years of child. In that sense, its price is not very high, it’s appropriate”(a female_35_gazipur)</i> <i>It will cover everything; first month to 10th month with delivery by 12000 taka, according to my calculation, it is less. I don’t know what about others (GMP/9/229)</i>	Some of the respondents considered it comparatively less based on his/her estimates.
	Package price is high	<i>For delivery 12000 taka is expensive, in our time we delivered at home, 200-500 taka has given on birth attendee’s(dai??) hand, everything is fine. For delivery, giving 12000 taka in advance is too much. (PMP/11/229-30)</i>	Respondents of Pallabi reported that, package price seems high to them, reason could be that most of the respondents had normal delivery, they may not be well aware about maternity care cost.

Concern	Trust	<p><i>For long term service we will pay in advance but if you don't provide promised service later, we have to understand it first.(PMP/13/271-75)</i></p> <p><i>Now we are paying and receiving service but after giving money people doesn't know, even they will provide good service or not we don't know, if we see, people are getting good service in this package, then we will buy also.(PMP/13/82-83)</i></p>	<p>Many respondents frequently asked if they do not receive the promised services after enrolling in the package, what will be the consequences. They want a good understanding of the contents in a package. The service provider initially needs to build trust and this may be popularized when more people begin to enroll.</p>
	Uncertainty of birth outcome	<p><i>If I buy this card, may not have undergone c-section, then isn't 12000 taka high?(PMP/10/215-16)</i></p>	<p>Few were mentioning about the uncertainty of birthing outcome. If someone undergoes normal delivery, she will not be benefiting from this package whatsoever.</p>
	Availability of services	<p>Not all the services are available in smiling sun clinic</p> <p><i>I had blood infection during my pregnancy, I tested here but suppose I need x-ray service, I don't know if x-ray service is available or not in smiling sun clinic. (PMP/15/320-22)</i></p>	<p>Not all the health services are available in smiling sun clinic. The package to be designed accordingly.</p>
	Quality of service	<p><i>If you can provide quality services within 12000 taka, even if you increase 1000-2000 more, people will take this package (GMP/5/228-29)</i></p>	<p>Few respondents were directly raising issue about the quality of care.</p>
	Modern equipment	<p><i>I have to see your service in my own eyes, instruments are available or not, are they functional or not, modern instruments are available or not, then we will take decision on this package. (GMP/10/249-51)</i></p> <p><i>Your clinic had to be modern in compare to other clinics; otherwise people will not be interested to take service from here. Modern means; Modern</i></p>	<p>Majority of the respondents frequently mentioned about the availability of modern (facility, instrument, specialist doctors for consultation and operations)health services and observe whatever promised under the package are actually available in order for me to be satisfied to move on purchasing this</p>

		<i>instrument, specialist doctor(PMP/15/313-16)</i>	package.
	Specialist doctor	<i>Firstly if people get service, they come, secondly, we have to see who are the doctor, what is their qualification, if they provide quality treatment people will accept this package. (A male respondent_35_Gandaria)</i>	Specialist doctor was one of the major concerns among the respondents. The respondents suggested that they be attended by specialist doctors for proper diagnosis and treatment.
	Infrastructure of clinic	<i>Another concern we have, infrastructure of smiling sun clinic, how many patients it can serve, I mean capability of providing service, our decision will also depend on it. I think the infrastructure of smiling sun clinic need to be improved. (a male provider_32_Gandaria)</i>	In Gandaria, few respondents were concerned about the infrastructure of the clinic or having the capacity to provide the needed services and general ambience of clinic as well.
	Clinic environment	<i>I will pay for card; I don't want that my money to be lost. I will see the clinic environment first; if it seems good then I will enter into the clinic. I think clinic environment need to be attractive like other private clinic (GMP/10/247-49).</i>	
Marketing of the package	Meeting with pregnant women	<i>For publicity of your package, you can arrange meeting in the community like today, if they understand the package, definitely they will be interested (GzMP/15/443)</i>	Few respondents were talking about yard meeting in the community for mass awareness campaign about marketing the package.
	Automatically	<i>Today I heard, I will tell another people, this apa (sister) will tell another one, and this how it will automatically get publicity. (GzMP/15/394-95)</i>	Most of respondent were mentioning that if smiling sun provides promised services under this card, it will become popular automatically.

Table 18: Family package

Willingness to join	Willing to enroll in basic family package	<p><i>This good, if you introduce it, we will buy. Because for doctor visit in a clinic is 300-500 taka, here we will get one year doctor visit by only 600 taka. It is good (GzFP/7/189-90).</i></p> <p><i>Personally I would say, we should take this opportunity, may be everyone will not agree with me but if you ensure the credibility of the package people</i></p>	Most of the respondents were interested to enroll in this package. And few mentioned that if more people do become interested to avail this package then they might consider joining in this package as it becomes cheaper than compared to the cost associated with single visitation to the doctor.
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will be interested. (GFP/9/246-47)

	Willing to enroll in the extended family package	<i>If I see everyone has taken this card and getting benefits, I will also take this card (RFP/16/83).</i>	About the extended family package everybody considered it to be a good option; few were interested to join in this package if many people are enrolled. .
	Select basic family package over extended family package	<i>“The basic one is good. Smiling sun clinic does not have all types of modern diagnostic set-up and equipment and facilities. I am not sure what kind of disease I may have in the next one year, if diagnostic facility and medicine are not available for my disease, why would I buy a card costing 2000 taka in advance?” (female _27_FGDGz)</i>	Majority of the respondents desired for basic family package over the extended family package simply due to the fact that they do not predict what disease condition they might experience in future.
	Select EFP over the BFP	<i>I liked package of 2000 taka (EFP) because I believe, good amount of money for good treatment (PFP/36/16)</i>	Only respondents in Pallabi clinic preferred EFP over BFP as the price is considered a reasonable one, having a better deal in the package.
	Want to observe what others will do first prior to joining package	<i>Let it be introduced first, if we see quality of service is good we will also take this (RFP/23/93-94)</i>	Few respondents did not give any opinion, they want to see first how this works out and they will take decision in future.
	People will not take EFP due to its 2000 taka price.	<i>If you introduce this card by 2000 taka, nobody will take this card (RFP/25/28).</i> <i>I think nobody will not buy this card by 2000 (more)taka (GFP/11/301)</i>	One of the respondents of Rayerbazar mentioned that people will not take this due to its cost. (actually she was taking about uncertainty of illness)
Mechanism of payment	Can purchase BFP at a time	<i>If you assure quality service for me and my family in this package, I can pay at a time even it becomes difficult (RFP/33/59-60)</i> <i>I can buy 600's package (BFP) at a time but 2000's package I need three installments (PFP/35/292-93)</i>	Most of the respondents reported that they can buy basic family card in one payment if they have the assurance of receiving the services promised in the package.

	Can purchase BFP 2-3 installments	<i>I can't pay 600 taka at a time, 2-3 three installments will be easier for me (PFP/35/694-95)</i>	Few respondents (lower quintile of non poor) wanted 2-3 installments for BFP card.
	Want to purchase extended family package through 2-3 installments	<i>I can buy 600's package (BFP) at a time but 2000's package I need three installments (PFP/35/292-93) I can buy BFP at a time but card of 2000 taka, we could not. If you take it by installment, it will be easier for us (GzFP/7/210-11)</i>	Those who were interested in extended family package, they can purchase this card in 2/3 installments
Advantages of package	Continuum of care	<i>"The facility is similar to ATM card. If I avail this card, I do not need to be worried about money while seeking health care." [FGD_Female_38]</i>	Respondents reported that, it will increase the frequency of their hospital visits. Other advantage they mentioned is that this card t will allow them to receive all the services from one place, also those who have children and also elderly members can be benefitted from this. All family members will receive service from this package. Respondents also mentioned that the package can be useful for elderly members as well as children in a family who need more frequent visit to doctor.
	One stop service	<i>Suppose I am suffering from different problem, I could come here, no need to go elsewhere. Treatment from one place since long time, doctor will understand me and my problem better (RFP/25/421-23).</i>	
	Helpful for children and adult health	<i>Those who have elder member in their family, who need frequent visit to the doctor they will be benefitted this package (GzFP/7/207-8) If I have card, it will be useful for me and my child, you know child get sick frequently so anytime any problem I can come here (GFP/10/264-65)</i>	
	All members will be receiving service	<i>Those who have elder member in their family, who need frequent visit to the doctor they will be benefitted this package (GzFP/8/207-8).</i>	
Package price	BFP Less costly	<i>I could buy card of 600 taka but the card of 2000 taka seems costly to me (RFP/22/86).</i>	Many of respondents perceive that it is less costly to them.
	Negotiate price	<i>"In market we can bargain but when you will go to a doctor, doctor will not say "apa (sister) gives me 10 taka less from the fees""That's why I am telling you, "reduce the package price we will take this". (a female _35_RFP)</i>	Only client of Rayerbazar bargained about the price. The respondent reported that people might come in the clinic 2-3 times in a year, in that sense 600 taka is considerably high.
Concerns	Trust	<i>Suppose I buy a card from you, initially you might</i>	The main challenge identified by

		<p><i>provide good service but after few days we will see that service is not good like before. Actually without cash payment doctors don't treat properly. But I can't go anywhere because I already gave money to you (RFP/13/16-22)</i></p> <p><i>If I buy this card, I might come five times instead of one time, in that case if they don't provide good service then what will I do?(RFP/14/239-42)</i></p> <p><i>In another place, they offered to take such a scheme and one suffered a lot. They did not provide the service well. They also came to offer like you and later she found that the services were not good and the child also had to suffer (GzFP/8/241-43).</i></p>	<p>respondents is trust. Respondents frequently said paying money before treatment and also remained hesitant whether they would receive the desired care from providers after repeated visitations. The issue raised here is that when doctors do not receive cash following consultation, they may be reluctant to attend patient with due importance and provide adequate time to the patient.</p>
	Aware about quality	<p><i>Money is not matter, matter is service, quality service (RFP/14/237).</i></p>	<p>All the respondents were very much aware about the quality of health service. If they receive quality service under this package, they can be motivated to join without giving more priority to the coats.</p>
	Uncertainty of illness	<p><i>We are poor people, we don't get sick much. We poor people get sick even less than you (RFP/18/318).</i></p>	<p>The common concern was uncertainty of illness and availability of doctor.</p>
	Good doctor	<p><i>If you provide good doctor and give good treatment, I am sure people will take this package (RFP/27/60)</i></p>	
	Medicine is the concern for extended family package	<p><i>I may suffer from different kinds of diseases, if medicine is not available for my disease, so why I will take this 2000 taka card? (GzFP/7/201-2)</i></p>	<p>Medicine was the main concern for extended family package. The respondents considered medicine cost citing the reason that if they have certain disease which may be costly.</p>
Marketing of the package	Automatically will be popular.	<p><i>Suppose I bought a card, other 2-5 people will see how I am getting treatment? Good or bad? They will ask me, how it is? If I say card is good, then also they will be interested (RFP/27/65-67).</i></p>	<p>Most of respondents mentioned that, if smiling sun provides the guaranteed services under this card, this will be popular automatically.</p>
	CSP can disseminate the information	<p><i>This apa (CSP) will tell everyone, she is very familiar in the community (PFP/39/72)</i></p>	<p>Some of the respondents suggested that, CSP can disseminate information and/or benefits of the package in the</p>

Meeting/campaign in the community	<i>What you have done here sitting with us, you can also call others to sit with you in some other place (GzFP/9/269-70).</i>	community to popularize it. Many of them were mentioning about organizing meeting/campaign in the community for advertising/publicity.
Through co-operative society	<i>Now a day, many women take from loan from the co-operative society, they can tell their client (PFP/39/66-71)</i>	Few respondents in Pallabi mentioned about co-operative society to advocate for the benefits from purchasing the package.

❖ **Only selected and relevant quotes have been incorporated in the data display table, not all the quote.**

Annex 4: Consent form for Quantitative Survey

Demand Analysis for pre-payment scheme

Introduction and Consent

I am..... I am from James P Grant School of Public Health, BRAC University. We aim to conduct a study to understand people's perception and interest about pre-payment scheme. This study will be conducted among the clients of Smiling Sun Clinic. Since you receive service from CWFD smiling sun clinic we would like to invite you to take part in this study. If you agree to participate we would like to ask you some questions related to this. It will take around 20-25 minutes to answer these questions.

All the information that you provide for the study will be kept confidential and will not be used for other purposes other than this study. Participation does not involve any risk to you as well as no monetary or direct benefit. Participation in the study is voluntary. You don't have to answer any question if you do not want to and you can stop the interview at any time.

However your honest answer to these questions will help us to better understand the situation and will contribute to improve the health status of the community by identifying the demand and ability to pay for the prepaid package and presenting to the policy makers so as to adjust the schemes with the local context.

If you have any query we would be obliged to respond to that. If you want to know something you can contact us at the following number.

Nadia Ishrat Alamgir

Mobile no: 01552320789

Lecturer III

James P Grant School of Public Health, BRAC University

We would greatly appreciate your help in participating in this study, would you be willing to participate?

Yes proceed, No, good bye

Thank you for your cooperation!!!

Signature of interviewee:

Signature of Interviewer:

Annex 4.1 : Quantitative Survey Questionnaire

SECTION 1: HOUSEHOLD SOCIO DEMOGRAPHIC INFORMATION

Now I would like to ask you some question regarding you and your households general health.

Q No.	Question	Responses
QA_1	Clinic's name	
QA_2	Respondent's ID no.	[][][][]
QA_3	Interviewer's name	
QA_4	Time of interview	[][] [][] [][][][] daymonth year
QA_5	Date of interview	[][]:[][] Minute Hour

Q.No	Question	Options	Answer
QA_6	Respondent's Age		[] [] Year month
QA_7	Sex	1=Male 2=Female	[]
QA_8	Marital Status	01= Married 02= Unmarried 03=widow/widower 04= Divorced 05= Separated 96= Others (specify)	[] If 96 []
QA_9	Religion	01= Islam 02= Hindu 03=Christian 04= Buddhist 96= Others (Please Specify)	[] If 96[]
QA_10	Education	01=Illiterate 02= Child (below 6 years) 03= Primary (Class 1-5) 04= Secondary (Class 6-10) 05= SSC/Dakhil/Equivalent 06= HSC/Fazil/Equivalent 07= Graduate/Degree (BA) 08= Masters/Post Graduate09= Diploma 10= PhD/M. Phill 96= Others (Please Specify)	[] If 96 []
QA_11	Occupation	01=Illiterate 02= Child (below 6 years) 03= Primary ⁴⁷ (Class 1-5)	[]

		04= Secondary (Class 6-10) 05= SSC/Dakhil/Equivalent 06= HSC/Fazil/Equivalent 07= Graduate/Degree (BA) 08= Masters/Post Graduate 09= Diploma 10= PhD/M. Phill 96= Others (Please Specify	If 96 [_____]
QA_12	Husband/ wife's occupation		
QA_13	Monthly Income/ Salary		[_____]
QA_14	Are you or any of your family members having membership in any co-operative?	1= yes, 2= No	[][]
IF yes then ask next question or go to QA_15			
QA_15	Name of the co-operative society		[][] If 96= [_____]
QA_16	What is your average monthly expenditure?	
QA_17	Monthly Expenditure related information		

	Expenditure	TK Amount (Monthly)
QA_17_01	House rent	[] [] [] []
QA_17_02	Food	
QA_17_03	Health	[] [] [] []
QA_17_04	Education	[] [] [] []
QA_17_05	Others (specify)	[] [] [] []
QA_17_06	How many members take food from the same cook pot	
QA_18	Who is the household head?	

Line no.	Name	Relationship with the HH head	Gender 1=male 2=female	Age
HL1	HL2	HL3	HL4	HL5
01				
02				
03				
04				
05				

01=Self	11= Sister
02=Husband/wife	12= Brother
03=Father	13= Father-in-law
04= Mother	14= Mother-in-law
05= Daughter	15= Uncle
06= Son	16= Aunt
07=Son-in-law	17= Grandson
08= Daughter-in-law	18= Granddaughter
09= Sister-in-law	19= Other relatives
10= Brother-in-law	20=Not related

SECTION TWO: I would like to ask some question related to you/your family members current pregnancy

2.1	In which month of pregnancy you are now?	_____]
2.2	Did you recive ANC services till date?	1=Yes, 2= No	
2.3	How many ANC services did you recieve?		
2.4	Why didn't you receive?	01=I did not know where to go 02=Did not have enough time 03=Financial (too costly) 04=No companion 05=Illness /need was not serious 06= Too far 07= Nobody was around to leave at home 08= Lack of trust 96=Others(specify) 01=I did not know where to go 02=Did not have enough time 03=Financial (too costly) 04=No companion 05=Illness /need was not serious	
2.5	Do you/your wife/name knows how many ANC is needed?	1= Yes, 2= No	
2.6	Why ANC service is needed?		Go to 2.6

2.5	Can you tell me why it is needed? (Multiple response allowed)	To understand mothers health condition 1 To understand baby's health condition 2 Injection 3 Regular test/ultrasound 4 Regular medicine 5 Others(Specify) 96	
2.6	What do you understand by PNC?	
2.7	Do you know how many PNC you need?	Yes 1 No..... 2 } }	Go to 2.10
2.8	Do you know, why do you need PNC?	Yes 1 No..... 2 } }	Go to 2.10
2.9	Can you tell me why it is needed? (Multiple response allowed)	To understand baby's condition -----1 To vaccinate -----2 Others (specify)-----3	
2.10	Do you have any plan regarding your delivery?	Yes 1 No..... } }	Go to 2.12
2.11	Where do you want to have your delivery?	01= government Hospital 02=Private Hospital 03=NGO clinic (Smiling Sun) 04=NGO Clinic (Others) 05=Pharmacy/Drug Shop	_____]

		Don't knowTK □□□□□□
2.16	What is your plan to manage your delivery expenditure?	1= Regular income 2= Household savings 3= Sold personal belongings 4= Sold livestock 5= Sold agricultural products or tree 6= Sold permanent assets 7= Mortgage of assets / land 8= Borrowed from friends/ relatives/ colleagues 9= Borrowed from money lender 10= Assistance from friends / relative 11= Borrowed from organization/co-operatives 12= All cost covered by bHSP 96= Others (Please Specify)	

Section 3: Last three months illness history

Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10
-------	-------	-------	-------	-------	-------	-------	-------	-------	--------

Member code				<p>If you did not seek health care than what was the reason?</p> <p>01=I did not know where to go 02=Did not have enough time 03=Financial (too costly) 04=No companion 05=Illness /need was not serious 06= Too far 07= Nobody was around to leave at home 08= Lack of trust 96=Others(specify)</p>	<p>If yes, from where did you take your treatment?</p> <p>01= Public hospital 02=Private Hospital 03=NGO clinic (Smiling Sun) 04=NGO Clinic (Others) 05=Pharmacy/ Drug Shop 96=Others</p>	<p>What was the reason for selecting that health care provider?</p> <p>1= Cheap 2= Nearby from the house 3= Did not know any other provider 4= Confident about the provider's service 5= Satisfied with previous experience 6= Referred by someone 7= bHSP covered facilities 96= Others (please specify)</p>	<p>How did you meet your treatment cost?</p> <p>1= Regular income 2= Household savings 3= Sold personal belongings 4= Sold livestock 5= Sold agricultural products or tree 6= Sold permanent assets 7= Mortgage of assets / land 8= Borrowed from friends/ relatives/ colleagues 9= Borrowed from money lender 10= Assistance from friends / relative 11= Borrowed from organization/co-operatives 12= All cost covered by bHSP 96= Others (Please Specify)</p>	<p>What was the impact of this treatment cost?</p> <p>1= Loan taken 2= Could not repay existing loan 3= Loan taken to repay the previous loan 4= Borrowed money with interest 5= Borrowed money without interest 6= Reduced food intake 7= Force migration 8= Children school dropout 9= Withdrawal from entertainment and luxury item 10= Additional work (Adult/Child) 11= Accessing Inferior health care service (eg. Quack, homeopath etc.) 12=Compromising quality of life 13= Mistreated by society 14=No effect</p>
	disease did you suffer from (indicate disease codes)	many days did you suffer from that disease?	you seek health care for that illness? 1=yes; 2=No	54		Cost of treatment in TK		

1= Cough 2= Fever 3= Diarrhea 4= Vomiting 5= Pain during swallowing 6= Constipation 7= Breathlessness 8= Minor Injury 9= Jaundice 10= Pregnancy complications 11= Generalized weakness 12= Worm 13= Dysentery 14= Chest Pain 15= Headache 16= Joint Pain 17= Skin Disease 18= Stomach-ache 19= Oral ulcer 20= Ear-ache 21= Convulsion 22= Heart burn 96= Others (Please specify)									

SECTION FOUR: Family illness history and health seeking behavior

Was there any illness in the HH in the last few months? Probe for last three months? Yes =1 No=2, if yes please fill up the following table

4.11	In your household, who are the members who seeks health care regularly?		
4.12	How frequently do they visit?		
4.13	How much do they spend each time? If nothing mention '000' If don't know mention '9998'	TK <input type="text"/>	
4.14	What is the average amount you spent annually?	
4.15	What type of services do you receive from the Smiling Sun clinic?	<p>Family Planning</p> <p>Clinical Method 11</p> <p>Non-clinical method 12</p> <p>Treatment /advice for side effects..... 13</p> <p>Maternal Health</p> <p>ANC 21</p> <p>PNC 22</p> <p>TT 23</p> <p>Child Health</p> <p>EPI 31</p> <p>Diarrhoea treatment/ORS 32</p> <p>ARI Treatment..... 33</p> <p>Vitamin A 34</p>	

		Illness (general) 35	
		Other	
		Other reproductive health / treatment of RTI / STD..... 41	
		General Health..... 42	
		Other 43	

SECTION FIVE: Demand analysis for maternity package

Maternity is an inevitable event of life. A mother should be very careful and should receive good care during her pregnancy. There might be several complications during pregnancy like convulsion, edema, high bleeding, high vomiting etc. ANC care is very important in his regard. Now a day’s ANC, delivery and other related services has become very expensive. Research also shows that majority of the mothers has to undergo C-section delivery. Like other similar nations, Bangladeshi people always do not plan beforehand for relevant expenditure. Therefore, delivery services have been found to be catastrophic for many families. CWFD clinic under its Smiling Sun franchise program would like to introduce maternity package for which they will allow pre-payment as installment basis where you can pay before taking service as like buying prepaid phone card. If you join this scheme and pay the package charge at a time or in installment, you won’t need to pay any money during your delivery. We would like to show you a chart with price and services we would like to offer through this maternity package and would like to learn about your opinion regarding this package.

5.1	In your opinion, what do you think what are benifitis you might recive if you would avail this package in future?	1=Will be able to recive a number of services at a low price 2= Creates motivation to visit the doctor regularly 3= Elimintaes the risk of loosing mone at a time 4=Will get all the services from the same place 5= We won't need to think for money before coming to the hospital 96= Others(specify)	
5.2	Would you be willing to buy this package in future?	Yes 1 No..... 2 } Can't decide right now 3 } Will have to think/consult 4 don't know 96	If no, 5.4or go to section six
5.3	How would you pay the price 12,000 TK if you would buy this package?	Mentioned Not mentioned At a time Per ANC Per Visit Specific amount per visit During doctor's consultation Others (specify)	

5.4	Why wouldn't you be willing to buy this package in future?	1=Costly 2=Sickness is uncertain 3=May migrate to other places 4=Won't be able to pay regular installments 5=The package seem problem some 6=Don't have trust 7=The facility do not have special doctors/health care provider 8=Far from my place 9=All the services are not available 10=Limited services 11=Can lend money from number of personnel at my community 96=Don't know 98=Others (Specify)	
5.5	What price of this package would be affordable for you?	------(taka)	
5.6	What changes in the package would motivate you to buy this package in future?		

SECTION SIX: Demand analysis for ANC package

Since due to several reasons you are not interested to buy the comprehensive maternity package in future I would like to share another package with you which offers only ANC care and costs 2500 tk. As usual, I would like to show you the pictorial guide for our better understanding.

6.1	In your opinion, what do you think what are benifitis you might recive if you would avail this package in future?	1=Will be able to recive a number of services at a low price 2= Creates motivation to visit the doctor regularly 3= Elimintaes the risk of loosing mone at a time 4=Will get all the services from the same place 5= We won't need to think for money before coming to the hospital 96= Others(specify)	
6.2	Would you be willing to buy this package in future?	Yes1 No..... 2 } Can't decide right now.....3 } Will have to think/consult4 Dont' know96	If no, Go to 6.4
6.3	How would you pay the price 2 TK if you would buy this package?	<p style="text-align: center;">Mentioned Not mentioned</p> At a time Per ANC Per Visit Specific amount per visit During doctor's consultation Others (specify)	
6.4	Whay woun't you be willing to buy this package in futtue?	1=Costly 2=Sickness is uncertain	

		<p>3=May migrate to other places</p> <p>4=Won't be able to pay regular installments</p> <p>5=The package seem problem some</p> <p>6=Don't have trust</p> <p>7=The facility do not have special doctors/health care provider</p> <p>8=Far from my place</p> <p>9=All the services are not available</p> <p>10=Limited services</p> <p>11=Can lend money from number of personnel at my community</p> <p>96=Don't know</p> <p>98=Others (Specify)</p>	
6.5	What price of this pakage would be affordable for you?	------(taka)	
6.6	What changes in the package would motivate you to buy this package in future?		

SECTION SEVEN: Demand for basic family package

Sickness is uncertain. Like other similar nations, Bangladeshi people always do not plan for health care cost. Health care costs have been found to be catastrophic for many families. CWFD clinic under its Smiling Sun franchise program would like to introduce a system through which people would be able to avail certain health care services very easily and at a low cost. Sometimes people get discouraged to seek health care due to lack of preparation at the time of need. This type of services is expected to motivate people to receive health care services at the time of their need.

We would like to propose these services through a package which we call family package. You will have to buy a card where the name of your family members who will be entitled to receive services from this package will be mentioned. Since they would pre-pay they won't need to pay any money while receiving services. The clients who would purchase this card will get priority while seeking health care against this. It is expected that the clinic authority will be accountable to render services for the card holders.

We would like to show you a chart with price and services we would like to offer through this family package and would like to learn about your opinion regarding this package. The price of this package is only six hundred taka. For an annual prepaid card of Taka 600, a family can receive (for a year) unlimited consultations with a doctor at a static clinic, with a paramedic at a satellite clinic, family planning counseling and methods, and full immunizations (EPI) for any child of relevant age.

7.1	In your opinion, what do you think what are benifitis you might recive if you would avail this package in future?	1=Will be able to recive a number of services at a low price 2= Creates motivation to visit the doctor regularly 3= Elimintaes the risk of loosing mone at a time 4=Will get all the services from the same place	
-----	---	--	--

		<p>5= We won't need to think for money before coming to the hospital</p> <p>96= Others(specify)</p>	
7.2	Would you be willing to buy this package in future?	<p>Yes1</p> <p>No..... 2 } Can't decide right now.....3 } Will have to think/consult4 Din't know96</p>	<p>If no, Go to section 7.4 then 8</p>
7.3	How would you pay the price 600 TK if you would buy this package?	<p style="text-align: center;">Mentioned Not mentioned</p> <p>At a time</p> <p>Per Visit</p> <p>Specific amount per visit</p> <p>During doctor's consultation</p> <p>Others (specify)</p>	
7.4	Why wouldn't you be willing to buy this package in future?	<p>1=Costly</p> <p>2=Sickness is uncertain</p> <p>3=May migrate to other places</p> <p>4=Won't be able to pay regular installments</p> <p>5=The package seem problem some</p>	

		6=Don't have trust 7=The facility do not have special doctors/health care provider 8=Far from my place 9=All the services are not available 10=Limited services 11=Can lend money from number of personnel at my community 96=Don't know 98=Others (Specify)	
7.5	What price of this package would be affordable for you?	----- (taka)	
7.6	What changes in the package would motivate you to buy this package in future?		

SECTION EIGHT: Demand for extended family package

Since you expressed your interest to buy the basic family package, we would like to mention that we have another package available with us which includes the basic family package as described above and also includes medicines and lab tests for up to 5 episodes of illness (by any family

member) in a year. This package will cost Taka 2,000. The medicines and lab tests will be the ones prescribed by Smiling Sun clinic's doctor during consultation at the clinic along with temporary family planning products.

8.1	In your opinion, what do you think what are benifitis you might recive if you would avail this package in future?	1=Will be able to recive a number of services at a low price 2= Creates motivation to visit the doctor regularly 3= Elimintaes the risk of loosing mone at a time 4=Will get all the services from the same place 5= We won't need to think for money before coming to the hospital 96= Others(specify)	Highlight as many as mention
8.2	Would you be willing to buy this package in future?	Yes.....1 No..... 2 } Can't decide right now3 } Will have to think/consult4	If no, Go to 8.4
8.3	How would you pay the price 2000 TK if you would buy this package?	<p style="text-align: center;">Mentioned Not mentioned</p> At a time Per Visit Specific amount per visit During doctor's consultation Others (specify)	

8.4	Why wouldn't you be willing to buy this package in future?	1=Costly 2=Sickness is uncertain 3=May migrate to other places 4=Won't be able to pay regular installments 5=The package seem problem some 6=Don't have trust 7=The facility do not have special doctors/health care provider 8=Far from my place 9=All the services are not available 10=Limited services 11=Can lend money from number of personnel at my community 96=Don't know 98=Others (Specify)	
8.5	What price of this package would be affordable for you?	-----	
8.6	What changes in the package would motivate you to buy this package in future?		

Thanks for participating in the survey

Interviewer's opinion



Annex 5 : Consent form for Qualitative Interview: FGD

Demand Analysis for pre-payment scheme

Introduction and Consent

I am..... I am from James P Grant School of Public Health, BRAC University. We aim to conduct a study to understand people's perception and interest about pre-payment scheme. This study will be conducted among the clients of Smiling Sun Clinic. Since you receive service from CWFD smiling sun clinic we would like to invite you to take part in this study. If you agree to participate we would like to ask you some questions related to this. It will take around 20-25 minutes to answer these questions.

All the information that you provide for the study will be kept confidential and will not be used for other purposes other than this study. Participation does not involve any risk to you as well as no monetary or direct benefit. Participation in the study is voluntary. You don't have to answer any question if you do not want to and you can stop the interview at any time.

However your honest answer to these questions will help us to better understand the situation and will contribute to improve the health status of the community by identifying the demand and ability to pay for the prepaid package and presenting to the policy makers so as to adjust the schemes with the local context.

If you have any query we would be obliged to respond to that. If you want to know something you can contact me at the following number.

Nadia Ishrat Alamgir

Mobile no: 01552320789

Lecturer III

James P Grant School of Public Health, BRAC University

We would greatly appreciate your help in participating in this study, would you be willing to participate?

Yes proceed,

No, good bye

Thank you for your cooperation!!!

Signature of interviewee:

Signature of Interviewer:

Annex-5.1: Focus Group Guideline (maternity package)

FGD guideline: Demand analysis of maternal service packages:

Instructions for interviewers:

- ✓ Check recorder before starting interview.
- ✓ General question earlier and specific question later
- × Don't ask one more question at a time.
- × Don't ask any leading question.
- × Don't use any jargon or medical terminology.

Demographic information's

No.	Name	Age	Occupation	Education	Number of Children
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

General questions

1. For maternal care where do women usually prefer to go the most in your area?

Probe:

- Private/public/NGO health facilities or other etc. and why?

- advantages and disadvantages
2. Can you tell us the issues that women/couple think before for seeking maternal health care in a health facility?

Probe:

- Quality of care, clinic environment, cost of care, providers attitudes, distance of households to health facilities, neo-natal care facilities, one stop service etc and why?
 - More emphasis on health care cost
3. Do you or your neighbor or any relative ever experienced situations that made you or them reluctant to visit hospital for seeking care due to shortage of money? If yes; can you please share such experiences?

Probe:

- Pregnancy period (for ANC check-up, diagnostic tests, delivery, PNC etc.)
 - How you or they managed?
4. Is spending for maternal care a burden for the family?

Probe:

- At birthing (both normal and c-section) and why?
5. What are the ways we can reduce this burden?

Probe: Let them say first

- pre-payment, installment, insurance

Prepaid maternal health service package

1. Do you know what are the types of services provided in smiling sun clinics? if yes, then what are these? Ask about quality of the services.

Probe:

- Doctors attitudes, medicine, diagnostic tests, clinic environments etc.
2. If we intend to introduce a prepaid maternal service package, (share the details about the both maternity (comprehensive and ANC) package, after respondents will be fully informed about the package) would it be of interest to you?

Probe:

- If yes; why? If not; why not (are any services missing that you would prefer? If yes, what are services)?
3. Do you think the range of services we are offering in the package will be useful for pregnant women in the community?

Probe: if yes; how?

Pricing of package

1. Do you know the pricing of any of the types of maternal health care services? If yes;

Probe:

- ANC, Diagnostic tests, Delivery, PNC etc
- How do you feel about the pricing of these services? Expensive or affordable and why?

2. What do you think about our maternal package price? What in your opinion other people in the community may think the price?

Probe:

- Cheap, good, ideal and why?

Revenue collection

1. Will you be able to pay the total amount of the package? If yes; how do you want to pay?

Probe:

- At a time, in installments or by any other means (how many and why?)

2. Would it be affordable for you and for others? If yes, ask why? If not, ask why not?

3. Can you please suggest ways of money collection that you or other people may feel comfortable in paying installments without any problem?

Probe:

- Domiciliary collection, time of collection or clients will come for paying

Closing questions:

1. How can we convince people to purchase this package?

Probe:

- Ask for Suggestions.

2. Could you tell us, what are the challenges that may emerge from introducing this package and how we can address it effectively?

Probe:

- Trust, Accountability, about the continuum of care if relocated to other areas etc. and why?

3. Do you feel there is/are something important that we should have explained that we did not address?

Probe:

- Recommendation

FGD guideline (Family package)

FGD guideline: Demand analysis of family packages:

Instructions for interviewers:

- ✓ Check recorder before starting interview.
- ✓ General question earlier and specific question later
- × Don't ask one more question at a time.
- × Don't ask any leading question.
- × Don't use any jargon or medical terminology.

Demographic information's:

No.	Respondents ID	Age	Occupation	Education	Number of Children
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

9.					
10.					

General questions

1. For health problems (General fever, cold, cough, child illness, elderly disease etc) where do you prefer to frequent the most in your area?

Probe:

Private/public/NGO hospital/ local pharmacy etc and why?

Strengths and weaknesses of those health facilities.

2. What are the different issues that you keep in your mind when seeking maternal health care in a health facility?

Probe:

- Severity of the disease, Quality of care, clinic environment, cost of care, providers attitudes, distance of households to health facilities, one stop service (for example, like diagnostic tests, availability of the prescribed medicines) or someone from the clinic assisting you to facilitate the services, etc. and why?
 - More emphasis on health care cost.
3. Do you or your neighbor or any relative ever experienced situations that made you or them reluctant to visit hospital for seeking care due to shortage of money? If yes; can you please share such experiences?

Probe:

- Doctor's consultation fee, costs for diagnostic tests, medicine costs, etc
 - How you or anyone known to you managed the money?
4. Do you think spending for health care becomes a burden for a family? If yes; why? Can you please suggest the ways we can reduce this burden? Tell them first;

Probe about; pre-payment, installment, insurance

Prepaid family health care package

5. Do you know what are the services provided in smiling sun clinics? if yes, then what are these? Ask about quality of services and also the range of services that they know about...

Probe:

- Doctors attitudes, medicine, diagnostic tests, clinic environments, the duration of waiting time etc.
6. If we introduce prepaid family healthcare package, (describe the details about the packages first basic family package and then extended family package), when respondents become fully informed about the package and the range of services offered within the package, would you be interested to avail such package?

Probe:

- If yes; why? If not; why not (are any services missing? If yes, what are the services missing)?
7. Do you think that is useful for the community people the Services we are offering in this package; if yes; how?

Probe:

- Child health care (LCC), elderly health care, chronic condition screening (example, BP measurement, rapid glucose test, etc.)

Pricing of package

8. Do you know the total cost of health care services (doctors visit fees, medicines, diagnostic tests etc)? If yes; can you please share with us the costs?

Probe:

- What is your opinion about the prices of these services?
 - Is it expensive or within your capacity ?Why do you feel that way?
9. What do you think about our maternal package price? How would other people in the community feel about the pricing of this package?

Probe:

- Cheap, good, ideal and why?

Revenue collection

10. Will you be able to you pay your total premium? If yes; how do you want to pay?

Probe:

- At a time, in installments or by any other means (how many and why?)
11. Would it be within your or others 'capacity to make payments? If yes, ask why? If not, ask why not?
12. Can you please suggest ways of premium collection that you or other people may feel comfortable for paying installments without any problem?

Probe:

- Domiciliary collection, time of the day when payments can be made or clients will come in person for paying

Closing questions:

13. How can we convince people to buy this package?

Probe:

- Ask for Suggestions.
14. Could you tell us, what are the challenges that may emerge from introducing this package and how we can address it more effectively?

Probe:

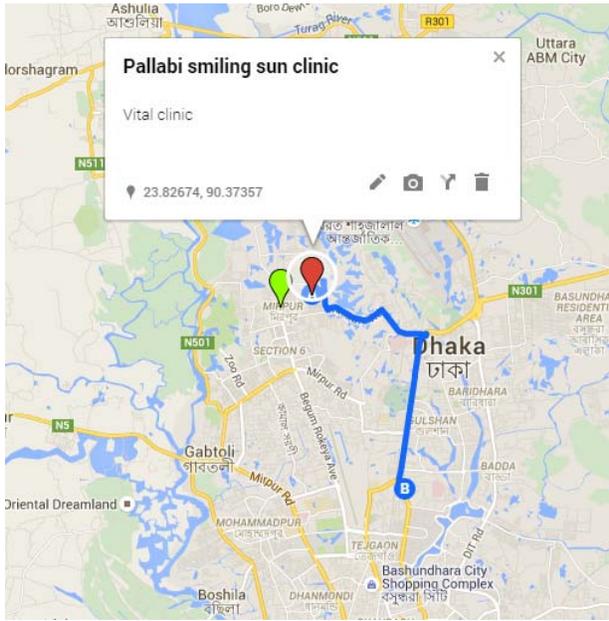
- Trust, Accountability, about the continuum of services if relocated to other areas, etc and why?
15. Do you feel there is/are something important that we should have explained that we did not address?

Probe:

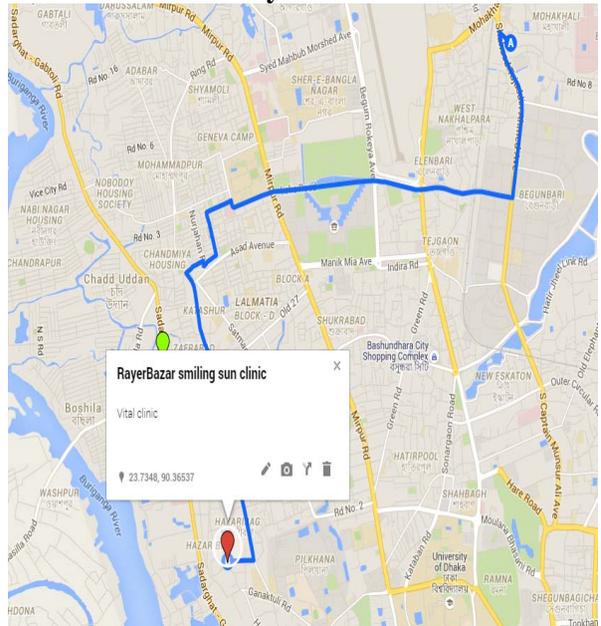
- Recommendation

Annex 6: Study site (Map)

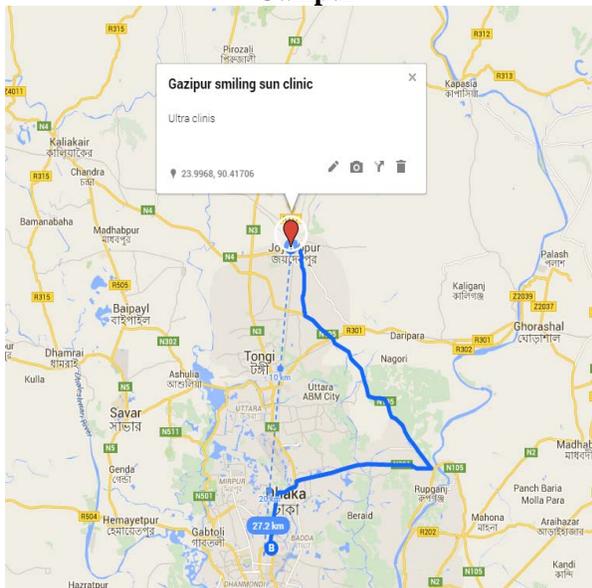
Pallabi



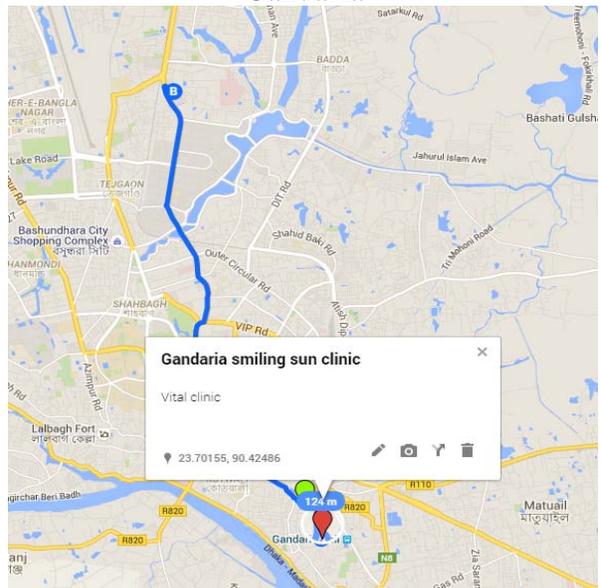
Rayerbazar



Gazipur



Gandaria



Annex-7: Package picture

Basic Family Package

Basic Family Package
Price: 600 Taka




Doctor's Visits for one year (For all family members)
(All types of illness)

Family Planning Service

Extended Family Package

Extended Family Package
Price: 2000 Taka




Doctor's Visits for one year and five times medicines and tests (For all family members)
(All types of illness)

Family Planning Service

Comprehensive Family Package

Comprehensive Maternity Package
Price: 12000 Taka






Pregnancy Identification

ANC Services (Four Times)
(Visits, Six Tests, Ultra sonograms & Medicines)

Counseling during Pregnancy (11 Times)
(Only Doctor Visits)

Vaccination
(Two Doses of TT)






Family Planning service

Neonatal Vaccination (One BCG)

PNC Services (Two Times)
For both mother and newborn
(Visits and medicines)

Normal Delivery or C-section
(Need based)

ANC Package

ANC Package, Price: 2500 Taka






Pregnancy Identification

Counseling during Pregnancy

Ultrasonograms

Iron Tablet



 data-bbox="696 506 758 546"/>


Other medicines

Pathological Tests

Vaccination (TT)

Calcium Tablet

Annex-8: Picture of Data collection:



Figure 1: Quantitative Survey at Pallabi Clinic



Figure 2: FGD at Gandaria Clinic



Figure 3: Quantitative Survey at Rayerbazar Clinic



Figure 4: FGD at Gazipur



Figure 1: FGD 2 at Pallabi



Figure 2: FGD at Gandaria Clinic



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