

# **Socio-economic Assessment to Identify the Poor in Pilot Areas and Baseline Studies on Willingness to Pay, Health Seeking Behaviour, Health Expenses and Patient Satisfaction**

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**Human Development Research Centre**

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Prepared for

Health Economics Unit  
Ministry of Health and Family Welfare  
14/2 Topkhana Road (3rd floor)  
Dhaka-1000, Bangladesh

Dhaka: June 2012

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## Acknowledgement

*Sashthyo Shuroksha Karmasuchi* (SSK) is a new initiative taken by Ministry of Health and Family Welfare (MoHFW) to introduce a national health insurance scheme to be piloted in three Upazilas (sub-district) from three districts under Chittagong, Dhaka and Khulna division of Bangladesh. Designing of health insurance scheme is a crucial phase before implementation of such initiatives. This study has generated an extensive knowledge base on poor identification strategy, health seeking behaviour, health care expenditure, willingness to pay and patient satisfaction.

In terms of complexity, volume, extent of issues covered and very short time span this study has been a challenging and not-easy-to accomplish endeavour. It is an outcome of team effort of the consultants of Human Development Research Centre (HDRC), the GFA consulting group and Health Economics Unit of MoHFW. We are thankful to GFA consulting group for entrusting us with the responsibility to conduct the study under the auspices of HDRC.

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All our efforts with this study would really be fruitful on the day when poor people would be able to get health services easily.

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&  
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## ABBREVIATIONS

ARI	Acute Respiratory Infection
BBS	Bangladesh Bureau of Statistic
BDHS	Bangladesh Demographic and Health Survey
BDT	Bangladesh Taka
BMMS	Bangladesh Maternal Health Services & Mortality Survey
BNHA	Bangladesh National Health Accounts
BPL	Below Poverty Line
CBN	Cost of Basic Need
CC	Community Clinic
CHC	Community Health Clinic
DCI	Data Collection Instrument
DSF	Demand Side Financing
FE	Field Enumerator
FGD	Focus Group Discussion
FI	Field Investigator
FS	Field Supervisor
FWV	Family Welfare Visitor
HDRC	Human Development Research Centre
HEU	Health Economics Unit
HH	Household
HIES	Household Income and Expenditure Survey
KII	Key Informant Interview
LGI	Local Government Institution
MICS	Multiple Indicator Cluster Survey
MOHFW	Ministry of Health and Family Welfare
NGO	Non-Government Organization
NHA	National Health Account
NHE	National Health Expenditure
OR	Odds Ratio
OOP	Out of Pocket Payment
PCA	Principal Component Analysis
PHC	Primary Healthcare Center
PPS	Probability Proportionate to Size
PRA	Participatory Rapid Appraisal
PSU	Primary Sample Unit
QCO	Quality Control Officer
RD	Rural Dispensary
SACMO	Sub-assistant Community Medical Officer
SSK	Sasthyo Shuroksha Karmasuchi
SSNP	Social Safety Net Programme
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infection
THE	Total Health Expenditure
TK.	Taka
ToR	Terms of Reference
UH&FPO	Upazila Health & Family Planning Officer
UH&FWC	Union Health and Family Welfare Centre
UHC	Upazila Health Complex
UP	Union Parishad
VGD	Vulnerable Group Development
VGf	Vulnerable Group Feeding
WTP	Willingness to Pay

## EXECUTIVE SUMMARY

### Background Information of Study

Health Economics Unit of MoHFW, with the assistance from KfW (German Development Bank) and GFA consulting group has undertaken *Shasthyo Shuroksha Karmasuchi* (SSK) Project to introduce a health insurance scheme in three pilot Upazilas: Debhata (Satkhira), Rangunia (Chittagong) and Tungipara (Gopalganj).

At the rolling-out phase the project initiated a study having the following specific objectives:

(i) conduct a socio-economic assessment of households by using beneficiary selection criteria of major social safety-net programmes (SSNP) to identify the poor, (ii) verify the list of poor endorsed by Local Government Institutions (LGIs), (iii) recommend mechanisms for issuance of health cards to identified below poverty line (BPL) families, ensure IT database updates and a feasible mechanism for poor identification at scale up level, (iv) identify the health services used by the poor (including the provider and expenses of such services), and (v) conduct sample survey at the community level on health seeking behaviour, willingness to pay, and patient satisfaction.

### Methodology

Being designed as quantitative and qualitative cross sectional, the study exploited two methods: (i) Household census to identify below poverty line (BPL) households and verification of list of poor (SSNP beneficiaries) endorsed by LGIs, and (ii) Household survey for assessing health seeking behaviour, health care expenditure, willingness to pay and patient satisfaction.

The study covered randomly selected 9 Unions and 2 Paurashavas of 3 pilot Upazilas using probability sampling approach. For rural areas, 46 villages were selected as primary enumeration units, and in Paurashavas, a total of 11 *mahallahs* were randomly selected as primary enumeration units. The household census covered all 18,505 households in primary enumeration areas, while household survey involved 844 randomly selected households. The study made use of six different types of data collection instruments like poor household identification format, household interview schedule, exit patient interview schedule, key informant interview check-lists, and focus group discussion guidelines. The data collection was conducted in two phases in April 2012 where household census and household survey was conducted in phase-1 and phase-2 respectively.

### Key Findings

- A total of 21 poverty identification criteria were selected based on beneficiary selection criteria of eight major SSNP. The most pronounced four criteria are “*main earning person or head of family is a casual day laborer (45%), landless household owning homestead only and no other land (44%), household have no permanent income source (29%), and household does not have regular income (26%)*”.
- Any household satisfying at least any three poor identification criteria (out of 21) needs to be classified as BPL households, and households not complying with any single criterion are to be classified as contextual non-poor households.
- About 41% households (satisfying at least three criteria) fall below poverty line in the three pilot Upazilas of SSK. Proportion of BPL households varies with definition of

poor where increasing or decreasing the number of criteria (satisfied) will change the proportion of BPL households.

- About 67% of current SSNP beneficiaries are BPL households (satisfying at least three criteria) implying estimated inclusion error is 33.2%. Use of various definitions of BPL (varying number of satisfying poor identification criteria) reveals that the estimated inclusion error ranges between 7% and 93%. Sensitivity analysis shows that a small proportion of listed beneficiaries are contextually poor (13.8% sensitive to poor) and specificity analysis reveals that list has to a large extent bias to non-poor (33.2%).
- About 37% reported that at least one of household members has suffered from fever during last 3 months in 3 pilot Upazilas taken together. The reported incidences of three major illnesses (fever, ARI and diarrhea) are highest in Rangunia (43%, 11% and 7% respectively). ARI, diarrhoea, helminthiasis, scabies and malnutrition are most prevalent among the under 5 children and common cold, enteric fever, dysentery, peptic ulcer, hypertension, diabetes, and asthma and skin diseases are most common in adults. Menstrual disorder, leukorrhoea (white discharge), delivery complications, back pain, urinary tract infection and anemia among women.
- People mostly prefer going for self treatment or pharmacy (23%), formal private practitioner (21%), and Upazila Health Complex (19%). The frequency of visiting service provider depends on the distance from the facility or service provider and household's ability to pay for the service. The pattern of visiting UHC for services from qualified providers slightly vary by locations; around 17% in Debhata and Rangunia, and 23% in Tungipara. Reported instances of availing health service from District Hospitals and above is low and varies between 3% and 7% in different Upazilas. Instances of receiving service in private clinics have been reported to be comparatively higher (ranging from 8% to 14%).
- Among those who go for treatment to Upazila Health Complex (UHC), a substantial large majority (92%) go for receiving out-patient medical services (ranging between 86% in Debhata and 96% in Rangunia) and only a few avail in-patient services. Across the Upazilas people use to seek health care services from qualified providers when they are severely ill. About 42% in Debhata, 33% in Rangunia and 94% in Tungipara reported the same. The people of Tungipara are more reluctant as well as less capable to go for treatment at early stage of disease.
- For pregnancy related services (mostly ANC) households are usually commonly dependent on nearby government clinics and hospitals (UH&FWC and UHC) irrespective of locations.
- The most commonly reported three reasons for not availing services from public sector health facilities in all the three Upazilas are: (i) long distance from home (Odds ratio = 25.7) (ii) non-availability of free medicine (Odds ratio = 20.4), and (iii) doctors are not examining properly (Odds ratio = 15.5).
- The average amount of health care expenditure per household is Tk. 1,521.5 during last three months preceding survey. Across the Upazilas the average health care expenditure varies considerably by economic status. Absolute amount of health care expenditure is lower among the households in poorest quintile (Tk. 686) as compared to the higher wealth quintile (Tk. 2,795). In Rangunia, the richest quintile spends 3.5 times higher compared to poorest. In Tungipara, the difference is about 4 times and in Debhata it is almost two times.

- The expenditure on drugs and diagnostic test constitutes the major share (57% and 20%) of total health care expenditure. On average, a service seeker spends Tk. 861 for purchasing medicines out of total treatment cost (Tk. 1,736). The total treatment cost substantially varies by facility, from Tk. 520 for self treatment, Tk. 943 in UHC and Tk. 22,496 in Medical College Hospital.
- About 75% of the households are willing to accept the insurance scheme. Majority of those (44%) who were willing to accept the scheme, preferred to have free consultation, diagnostic facilities, inpatient care, surgical facilities, transportation costs for referral and preventive care to be included in the benefit package (Benefit Package-3) .
- The willingness to pay for three different benefit packages across the pilot Upazilas is low. The estimated annual premium per household (about 35% of total households reported of paying insurance premium) for health insurance is Tk. 1,064 for mostly preferred benefit package-3.

### Recommendations

Based on the above findings, the study team recommends SSK Project to consider the following:

1. The eligible poor for SSK scheme should be those satisfying any 3 of the 4 criteria which includes (i) main earning person or head of family is a casual day laborer, (ii) landless household owning homestead only and no other land, (iii) household have no permanent income source, and (iv) household does not have regular income.
2. Regarding issuance of SSK benefit card, maintenance and up-gradation of the data base during rolling-out stage a joint team comprising SSK officials, LGI representatives and consultants should be engaged for preparing the comprehensive beneficiary list containing names and appropriate identification (including photograph) of all members of BPL households. The group should issue individual SSK benefit card to each and every members of BPL households.
3. Proposed joint-team will visit every village and *mahalla* of respective Upazila to prepare list of beneficiary with comprehensive information to issue SSK benefit card. There will be a mechanism for incorporating new members in or out from households at Unions or Ward level.
4. Interaction with poor reveals apprehension of bias without involvement of third party in poor identification. The main reason for proposing inclusion of consultant is to prepare an un-biased comprehensive list of beneficiaries. The consultant should train the respective SSK staff so that during the scaling-up period the identification of BPL households can be continued in an un-biased manner, data base is maintained as well as up-graded and SSK benefit cards are regularly issued.
5. Deployment of more number of doctors and other service providers and ensuring regular presence would lead to reduce waiting time.
6. Adequate supply of medicine and improved quality of care are necessary for optimal utilization of public health facilities.
7. The benefit package should cover consultation fee, diagnostic fees, drugs, immunization, inpatient cost, transportation costs for referred cases and surgery cost (Package 3).

8. As willingness to pay among different non-poor strata for different benefit packages is very low, a mechanism needs to be developed to aware the people about the benefits of SSK packages.
9. Before implementing the scheme, mass campaign and behavioural change communication activities is crucial to create awareness among community relating to receipt of medical care at proper time and from qualified service providers.
10. A number of supply side barriers in accessing services at public facilities needs to be removed. Health care providers need to be more committed in providing quality care in public facilities so as to build clients' trust on public facilities.