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***Hospital improvement initiative:
follow-up community based users' survey***

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Bangladesh Hospital Improvement initiative

Follow-up community based users' survey

Final report

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Acronyms

SOMCH	Sylhet Medical College Hospital
SyDH	Sylhet District Hospital
SuDH	Sunamganj District Hospital
MDH	Moulvi Bazar District Hospital
HDH	Hobiganj District Hospital
CIET	Community Information and Epidemiological Technologies
ESP	Essential Services Package
HII	Hospital Improvement Initiative
HLSP	Health and Life Sciences Partnership
HPSP	Health and Population Sector Programme
IP	Indoor patient
MOHFW	Ministry of health and Family Welfare
OPD	Outdoor patients department

Summary

The Hospital Improvement Initiative (HII), part of the HPSP, aims to increase access to and use of cost effective (hospital) health services by the poor, particularly women and children, with a longer term goal of improving the health of these vulnerable groups. The use and experience of hospital services by community members is an important parameter in assessing success of the HII. The baseline survey undertaken in 1999/2000 provided benchmarks for measuring the effects of the HII. The follow-up survey has allowed progress against these benchmarks to be measured.

The sample and instruments in the follow-up survey were the same as for the baseline survey, although with some new or modified sections in the instruments. The survey included: a household survey in ten communities immediately served by the hospitals (one urban and one peri-urban for each hospital); a survey of outdoor and indoor hospital patients; interviews with key hospital managers; and 20 focus groups of women and men in the communities included in the household survey.

The sample

During the follow-up survey, a total of 1230 households were visited: 608 in urban and 622 in peri-urban sites. Some 318 outpatients and 294 inpatients were interviewed at the five participating hospitals. Most of the characteristics of the household sample were similar between the baseline and follow-up surveys. There were some differences between baseline and follow-up surveys in the characteristics of the outpatient and inpatient samples; these were taken into account in the analysis of differences in outcomes between baseline and follow-up surveys.

Knowledge and opinion about the hospitals

Virtually all the households had heard of their local district hospital. The proportion who had heard about the Sylhet district hospital was higher in the follow-up survey (96%) than in the baseline (83%).

Some 37% of households in the follow-up survey had a good opinion of the medical college hospital and 32% had a good opinion of their district hospital, more than in the baseline. Some 14% of households reported no problems with their district hospital, compared with 6%

in the baseline. Non-availability of medicines remained the main complaint (44% for the medical college hospital and 31% for district hospitals). Less households mentioned bad attitude of staff as the main problem (9% district hospitals, 7% SOMCH), than in the baseline (15% and 12%).

Willingness to pay for the services

Eight out of ten (80%) households in the follow-up survey said they were willing to pay for outpatient services and 66% were willing to pay for inpatient services of the district hospitals. Significantly *less* households in the follow-up survey were willing to pay compared with the baseline.

Illness and use of health facilities by the households

Over half the households (52%) reported at least one member ill in the last month. One out of every ten ill household members was not taken anywhere for care. More of the ill household members were taken to a government health facility than in the baseline (27% vs 18%), while less were taken to private providers (59% vs 63%). Only 2% were taken to traditional or religious healers (3% in baseline). Almost all of those who went to a government health facility went either to their district hospital or to the medical college hospital.

Households in the follow-up survey were more likely to have a member visiting a district hospital as an outpatient during the last three months or as inpatient during the last year in comparison with the baseline survey. For the medical college hospital, the increase in use was only for inpatient services. Nearly three quarters of households had a member who used private medical care as an outpatient in the last three months; and 3% had a member admitted to a private facility in the last year, same as in the baseline survey. The proportion of households reporting a member visiting traditional or religious healer or shrines for a health problem was lower in the follow-up survey than in the baseline survey. Also among those who reported such a visit, the proportion of those who did not visit any conventional medical care has also gone down.

Referral to hospital services

Only 4% of the household reported outpatients and 17% of household reported inpatients were referred to the hospital. Among hospital interviewed outpatients, only 2% were referred. There was no consistent difference from the baseline. The proportion of hospital

interviewed inpatients referred in the follow-up survey was higher (40%), and higher than in the baseline (30%).

Management and administrative aspects of services

The HII focused on improving the patient management component of hospital service delivery. There is evidence of a positive impact of the interventions.

The proportion of household reported inpatients who used an agent to secure admission (12%) was lower than in the baseline (23%). Among hospital interviewed inpatients, only 7% used an agent, compared with 30% in the baseline.

The mean waiting time for registration was 12 minutes, shorter than in the baseline (18 minutes). The mean waiting time to be seen by a doctor was 22 minutes, again shorter than in the baseline (32 minutes). The mean consultation time was 7 minutes, longer than in the baseline (4 minutes). Despite these improvements, observation in the district hospitals revealed that full official timings for outpatients are not used: staff come late and leave early.

Some 60% of the hospital inpatients were seen by a doctor within an hour of admission; this proportion was lower in the baseline. Almost all except three (99%) of the inpatients reported that they were visited at least once a day by the doctor, compared with 79% in the baseline.

Just 3% of the hospital interviewed inpatients did not have a bed on the day of interview, compared with 7% in the baseline. Most of those with a bed (76%) got it on the day of admission.

Attendants staying with the patients

Over half the household reported inpatients said they had two or more attendants with them during their hospital stay and 23% of hospital interviewed inpatients had two or more attendants with them. Both these figures were higher than in the baseline. Focus groups said they needed to have attendants to ensure quality of care for their relatives. However, people also agreed that having too many attendants could pose problems both for staff and patients.

Referral to other health facilities

Nearly a third of household patients (29%) reported visiting another health facility, mostly private, following

their hospital visit for the same health problem, much the same as in the baseline (32%). Among hospital outpatients, a third (33%) was advised to come back to the hospital by the consulting doctor. More than three quarters of the patients (78%) mentioned that they would come back to the hospital if their condition did not improve.

Among hospital inpatients, 17% reported that they had been referred for treatment or investigation to some other facility, mostly private (80%). A quarter (25%) of the inpatients at the medical college hospital reported such referral, again mainly to private facilities.

Prescription and receipt of medicines

Just 8% of household reported outpatients said they received all the prescribed medicines from the facility, less than in the baseline. Some 42% of hospital interviewed outpatients got all the prescribed medicines, much less than in the baseline. Just 6% of hospital inpatients got all the prescribed medicines, compared with 7% in the baseline.

Expenditures

Most outpatients paid a registration fee. The mean reported fees paid for SOMCH, Sunamganj and Hobiganj district hospitals were slightly higher than their official fees. Most (84%) inpatients paid an admission fee, with the mean amount slightly higher than the official fee in all the hospitals. Only 6% of inpatients (94%) paid any bed charges. Only 8% paid for food from the hospital.

Only four patients (four outpatients and one inpatient) who received medicines from the hospital paid for them, less than in the baseline (6%). Most of the inpatients (86%) reported paying for medicines from outside. The mean amount spent was Taka 1301/-. A patient in the follow-up survey was more likely to pay for medicines from outside compared with one in the baseline.

None of the outpatients and only 5% (15/294) of the inpatients reported making any extra payment when asked directly. Some patients may not be aware that they are paying above official rates.

Cleanliness and hygiene

An improvement in cleanliness was observed at all hospitals in the follow-up survey. Nearly all hospital

outpatients (91%) were satisfied with cleanliness, more than in the baseline.

Inpatients were less satisfied with cleanliness. Some 61% of household and hospital inpatients were satisfied with cleanliness, but nevertheless these figures are an improvement on the baseline.

Most of the recommendations about cleanliness from the community focus groups are already part of hospital routines at least in theory and have been the subject of HII interventions. Focus group participants emphasized better training, supervision and monitoring of the existing staff. They also recognized the responsibility of hospital users to help maintain cleanliness in the hospitals.

Management of central waste disposal pits

Central waste disposal pits were functional in all the hospitals, but there were some problems with management. It was noted that staff did not always put the waste into the pits carefully; waste material was seen lying around the pits. There were no barriers or warning signs by the pits. Hospital managers were concerned about the final disposal of waste from the central pit, and mentioned it was difficult to clean out the pits safely.

Privacy

Some privacy practices have improved since the baseline, such as closing the door of the consultation room (open in 93% of consultations in baseline and 76% in the follow-up), other people being present during consultation (54% baseline, 40% follow-up) and using screens.

Most (72%) hospital outpatients were satisfied with privacy during the consultation, more than in the baseline. Less were satisfied with privacy as inpatients (44%), and this was not different from the baseline. Among household reported inpatients, however, 68% were satisfied with privacy and this was higher than in the baseline. Focus groups made recommendations about staff practices of privacy and mentioned that additional privacy arrangements were needed for women.

Satisfaction with staff members

Nearly all outpatients were satisfied with the registration clerk and this did not change from the baseline. Over two thirds of household reported and hospital

interviewed outpatients were satisfied with the behaviour of the doctor, higher than in the baseline.

Among inpatients, some three quarters were satisfied with the treatment from the doctor, higher than the baseline. Over two thirds were satisfied with the way they were treated by nurses, higher than in the baseline. Nearly all the patients were satisfied with the treatment from the cleaner. Fewer patients reported specific problems with any staff members in the follow-up survey compared with the baseline.

Overall satisfaction with hospital services

Some 60% of hospital interviewed outpatients were satisfied with the service overall, more than in the baseline. The change was more pronounced at Hobiganj district hospital. At Moulvi Bazar hospital *fewer* patients were satisfied with hospital services than in the baseline. Some 59% of inpatients were satisfied with the overall service, with no significant difference from the baseline.

Institutional perspective and service providers' views

All the hospitals had standard quality assurance protocols. Hospital managers thought these had improved the quality of services. Staff members at all the hospitals have received training on hospital service management, backed up by refresher courses. There was a lack of documentation about training and other HII related activities available in the hospitals, despite this documentation being sent out from the central HII team.

The functioning of management committees varied between hospitals. All the committees met irregularly, but SOMCH, and Sunamganj and Hobiganj district hospitals reported more frequent meetings. Meetings were well documented. Most hospital managers were able to identify achievements of the management committee.

Quality assurance teams were formed at all the hospitals. Views about these teams were mixed. Managers at the medical college hospital and Moulvi Bazar hospital were satisfied with the quality assurance team. But managers in the other hospitals said the teams needed to be fully operational before they could comment on their effectiveness.

The HII provided support to improve hospital physical infra-structure where felt necessary. This included construction and renovation of buildings, provision of

toilets both for staff and clients, especially for females, construction of improved nurses counters, construction of fire escape stairs, renovation of operating theatres, construction or renovation of labour rooms, provision of equipment and renovation of ticket counters to reduce waiting time. Hospital managers were generally satisfied with this aspect of the HII.

Concerns about the HII

The most common problem hospital managers mentioned was the quality of supplies. In the medical college hospital and Sylhet district hospitals they also said the communication component of the HII had not produced the desired results.

Sustainability

Managers in the hospitals were generally positive about sustainability of the HII initiatives, considering they could eventually become part of hospital routine. They did express concerns about shortage of staff and sustaining of trained human resources due to frequent transfers.

Advisory Committee – Community views

Community focus groups appreciated the idea of an advisory committee for the hospitals to support the management committee. They suggested publicizing the committees by community meetings, public announcements, media, and posters to display membership and contact details of the advisory committee. They suggested the committee could monitor the quality of services, and receipt and distribution of medicines, as well as serve as a channel for the public to voice problems and concerns about hospital services.

Introduction

The Hospital Improvement Initiative (HII), part of the HPSP, has stated goals to:

- improve the health of the poor, particularly women and children
- increase access to and use of cost effective health services by the poor, particularly women and children

The specific purposes of the HII include: to improve the quality of services delivered; and to ensure the delivery of the hospital element of the ESP.

As part of the HPSP, the HII is intended to make hospital services more client-centered, more responsive to needs (especially of the poor, women and children) and more accountable to the communities they serve. Thus, the use and experience of, and satisfaction with, hospital services by community members are important parameters in assessing success of the HII. A baseline survey conducted by CIET in 1999/2000¹ provided benchmarks for measuring the effects of the HII. The follow-up survey was planned to allow progress against these benchmarks to be measured. The baseline survey also provided information for fine tuning the HII, as it covered user priorities and preferences and highlighted areas of concern. The follow-up survey helps to relate the actual changes to service provision made in the HII to changes in experience and perceptions of service users.

The survey has served other purposes beyond assessing the success or otherwise of the HII interventions. By comparing changes in use, experience and satisfaction between the pilot hospitals and in relation to the way the HII has been implemented in each hospital, the survey examines whether different modes of implementation are related to changes in experiences and views of users. The survey has also provided insights into reasons for current community usage patterns and why these might or might not have changed during the HII project. The survey has provided an opportunity to ask community members (users and current non-users) about the acceptability of aspects of the HII (such as user charges). Community members should not be simply passive recipients of services planned and managed without any

¹ Cockcroft A, Omer K. CIETeurope. Baseline community based user survey, Bangladesh hospital improvement initiative. April, 2000

input from them. In the spirit of promoting their meaningful participation in the planning of services, the baseline and the follow-up surveys have provided a way to hear their perspective about service priorities, both in individual interviews and in focus group discussions.

Components of the Hospital Improvement Initiative

Conceptual Aspects

1. Policy shift: to decentralize the decision making at the hospital level. This is aimed at helping the hospital management to have better control over their resources and make decisions about improving hospital services on their own. The project has been working very closely with the Ministry and Directorate General, Health Services, especially the line director hospitals, to delegate the authority for decision making and resource utilization to the hospitals. Aspects covered so far include levying user fees and making use of the money collected, contracting out the hospital cleaning system, and having a full time superintendent for each hospital instead of the civil surgeon holding the additional responsibility. To facilitate and promote this aspect hospital management committees and advisory committees have been formed for each of the five hospitals. They are in place now and working with well defined responsibilities.

2. Management development: This aspect deals with establishing and streamlining the service delivery systems in each hospital. So far the project has been able to work in the field of hospital waste management, financial systems, and local level annual planning.

3. Capacity building: This aspect aims at helping the hospital management to develop skills to sustain the systems established by the effort of the project. A bottom up approach has been adopted to build ownership of the activities and generate enthusiasm and interest among hospital staff to strive for success. For this component the process starts with a sensitization effort to help hospital management to appreciate the nature and extent of the problem. Further discussions and brainstorming sessions help to identify solutions. The hospital staff are provided with training on key aspects of hospital service management and systems. The training encompasses areas such as waste management, infection control and communication among staff and with the client. A simple but comprehensive training

module has been developed to facilitate the training and to be used as reference material².

Intervention Components

1. Hospital infrastructure and physical facilities. This included construction and renovation of buildings, provision of toilets both for staff and clients, especially for females, construction of nurses counters that provide a better chance for them to monitor patients and still enjoy privacy from the general public, construction of fire escape stairs in some hospitals, renovation of operating theatres, construction and/or renovation of labour rooms in some hospitals with provision of non-available equipment, and renovation of ticket counters to reduce waiting time, especially for females.

2. Hospital waste management: This has been a major aspect of the HII initiative. The system includes provision of colour coded bins for collection and removal of different types of hospital waste from different departments. The colour coding follows the international rules recommended by WHO. The project has also provided each hospital with central waste disposal pits for disposal of all the waste collected.

3. Infection control: Staff at all levels have been trained on hand washing and hygiene and the appropriate use of the waste management system. All staff members, from cleaners to doctors and management personnel, have received this training.

4. Privacy: This involves provision and use of screens during consultation and examination both in the outpatient and inpatient departments. The issue has been repeatedly emphasized from the perspective of patients' rights. The construction of separate latrines for female staff and patients is also an effort to deal with the privacy issue.

5. Behavior Change Communication: HII has put a major emphasis on improving the behaviour and communication of hospital staff with each other as well as with clients. The communication component of the training module helps staff members to understand different problems that they can face to communicate with different types of clients and how to handle them. The module helps the trainees to improve upon areas

² Quality assurance manual, developed by the Quality assurance team, Hospital Improvement Initiative, Line director Hospital, Ministry of Health and Family Welfare, Government of Bangladesh

such as prompt responses to patient's needs, paying attention when required, to be caring and polite, giving adequate time during consultation and examination, and explaining the problem and the treatment to the client/relatives.

6. Financial system: In the medical college hospital HII has established a computerized financial system. In other hospitals the existing manual financial system has been streamlined to respond promptly to management needs.

Methods

The survey process used the methodology developed by CIET and used in service delivery surveys and social audits in many countries, including in the CIET service delivery survey process which forms part of the evaluation of the overall HPSP (baseline nationally representative survey undertaken earlier in 1999³, first repeat survey in late 2000⁴ and third survey now taking place in 2003). A detailed description of the CIET methodology can be found elsewhere⁵ as well as on the CIET website (www.ciet.org).

Survey sample

The sample was deliberately kept the same as in the baseline survey, allowing direct comparisons between the findings of the two surveys (see table 1). For each of the five pilot hospitals, the community sample was designed to include communities close enough to the hospital to make access to the hospital for primary as well as secondary care feasible and to include both urban and peri-urban communities. Although community members in communities further distant from the hospital may be referred from upazila level facilities, the frequency of district hospital use among households in these communities is low, so it was not efficient to survey them regarding their experience of or views about the hospital. Identified communities within the agreed access area (using census projection data and local knowledge) were stratified into urban and peri-urban/rural types. Within each group of communities a sample ward or village was randomly selected, giving two sample communities per hospital. Each sample site consisted of an enumeration unit of around 125 households, and all households in the site were surveyed (there was no sampling within the sites).

Within each hospital, 50 outdoor patients and 50 indoor patients were interviewed (100 in the case of the Medical College Hospital). For the outdoor patients, efforts were

Table 1: Information Base for the Community based user's survey

	Baseline	Follow-up
Households	1200	1249
Outpatients	309	318
Inpatients	309	294
Hospital IR*	5	5
Community FGDs	20	20

³ Cockcroft A, Monasta L, Onishi J, Karim E. Baseline service delivery survey. Final report. CIETcanada and Ministry of Health and Family Welfare. Dhaka, Bangladesh, June 1999

⁴ CIETcanada and Ministry of Health and Family Welfare, Bangladesh. Service delivery survey, second cycle, 2000. Dhaka: CIET and MOHFW, February 2001

⁵ Andersson N. Evidence-based planning: the philosophy and methods of sentinel community surveillance. CIETinternational and World Bank, Washington 1996

made to identify and interview patients from different sections of outpatient departments, following their consultation, and also to include all age groups and both sexes. For indoor patients, the total was split between the male and female wards and included specialist areas where relevant. In case the patient was unable to respond to the interview, his or her attendant relative was approached for the interview.

Survey instruments

The survey instruments developed for the baseline survey were reviewed in consultation with the HII programme managers and agreed with the Director of Hospitals and Clinics, and piloted. The main objective while designing the instruments for the follow-up survey was to allow comparisons with the baseline survey findings, so many parts were kept the same as in the baseline survey. However, a few new questions were added and some were modified to make sure that particular issues are included that may have been highlighted during the course of the HII.

Household questionnaire

This was administered to all households in the selected sites (two per hospital) by trained interviewers. It collected information about household demographics, including socio-economic status, about use and experience of the hospital during the year before the survey by household members (including children), about perceptions of the available service and priorities for service improvement, and about acceptability of aspects of the HII, including official user charges.

Questionnaires for patients (outdoor and indoor patients)

These instruments asked about current and immediate past experience of the hospital service, including aspects such as waiting time, availability of staff, consultation time, privacy, availability of medicines, unofficial payments, behaviour of staff, and satisfaction with the encounter and service received.

Focused institutional review and structured interview with hospital administrator

The Institutional Review schedule recorded important aspects of present apparent hospital operation, including such things as cleanliness, privacy arrangements, staffing levels and bed occupancy. Some new sections

were added to allow collection of data and service providers' opinion about some key components of HII such as training, quality assurance, management committees, hospital waste management, and infra structure development. Part of this information was available from within the HII and was gathered by a record review and discussion with the HII team at HLSP. The rest was collected through direct observation of the health facility, review of hospital records and interviews with the hospital administrator and members of different committees

Focus group guides

These were guides for the facilitator and recorder about the topic areas for discussion. The topics included were based on the preliminary analysis of the quantitative data, with the key findings being used as the starting points for discussion. Topic areas included perceptions about the hospital services and reasons behind them, concerns about some key areas as they emerged in the quantitative analysis, and recommendations for improving services and their management.

Training and data collection

Two data collection teams were recruited. Each team consisted of six interviewers and two supervisors. Efforts were made to involve the same people who took part in data collection for the baseline HII survey (or one of the CIET SDS surveys). However, some of the interviewers were new. This provided a good mix for the field work and also served the purpose of capacity building to conduct such exercises in future. Recruitment and training of the teams was done in Sylhet. Two Bangladeshi field coordinators (the same persons who fulfilled this role in the baseline HII survey) were responsible for recruiting and training the teams. Training over three days was organized to familiarize the field teams with the instruments, including a field practice. Data collection took place over a period of 10 days, including the community household survey, the interviews with hospital patients and institutional review of the hospitals. The interviews with administrators were conducted by the same field coordinators who had conducted these in the baseline survey.

Focus group discussions were held after the preliminary analysis of the quantitative data. Focus groups of women and men separately in each of the sample sites were

facilitated and recorded by the field collection team supervisors, with support from the field coordinator.

Data entry

Data entry took place in Dhaka and was programmed using the Epi Info software package. Local coders and data entry operators were recruited and trained (again recruiting from among those who undertook coding and data entry for the CIET HPSP surveys and the baseline HII survey). Data from the household and patient interviews were entered twice and validated before further logical checks and data cleaning. For the focus groups the reports were first translated and then coding themes were developed to code the responses and discussion. The data was then entered using a format designed in the Epi Info software package.

Data analysis

Preliminary data analysis was done in Dhaka immediately after completion of data entry and cleaning. For basic descriptive frequencies and univariate analysis of associations, the Epi Info software package was used, with the strength of associations tested using the Mantel-Haenszel chi-square procedure and stratification to examine confounding and effect-modification. For analysis of multiple response questions, the SPSS package was used. Detailed final analysis was completed outside Bangladesh, to produce the final draft report.

Results

The findings described here essentially focus on a description of key areas related to HII implementation. These also include service components that may not be a part of HII, but have direct implication for the outcomes of interest: use, experience and satisfaction with services of the hospitals. Detailed tabulations of indicators measured in the household and hospital interviews are given in Annex 3

Vulnerable Household

A household is vulnerable if it has any two of:

- > Poor occupation of the household head
- > Monthly income upto 1000 taka or less
- > Poor household construction (Katcha house)

Very Vulnerable Household

A household is vulnerable if it has:

- > Poor occupation of the household head
- > Monthly income upto 1000 taka or less
- > Poor household construction (Katcha house)

Characteristics of the respondents

Household sample

There were a total of 1230 households visited: 608 (49%) in urban and 622 (51%) in periurban sites related to the five pilot hospitals. Figure 1 compares the sample characteristics of the baseline and follow-up survey showing very little difference between the two samples.

In the follow-up survey most of the household heads were male (93%; 1146), the proportion being similar in both urban and periurban sites. Most of the respondents were female (76%; 931), 73% in urban and 79% in periurban sites. The commonest relation of the respondent to the household head was wife (57%; 699). Just over half the household heads were reported to be literate (58%; 714). Literacy was more common in urban households (64% vs 52%)

The main occupation of the household head was sales/business (34%; 408), followed by unskilled labour including agricultural labour (25%; 301), skilled labour (20%; 248), and non-executive office jobs (11%; 132). More than three quarters of the households (77%; 947) reported a monthly income of 5000 Taka or less. One out of every ten households reported a monthly income of 1000 Taka or less (10%; 123), the proportion being higher in periurban sites than in urban (13% v/s 7%).

Nearly a quarter (280; 23%) of the households lived in good housing (pucca structure). The proportion was higher in urban than in periurban areas (30% v/s 16%). Very few houses (72; 6%) lived in poorest housing (katcha-2), the proportion being lower in urban areas (4% v/s 8%).

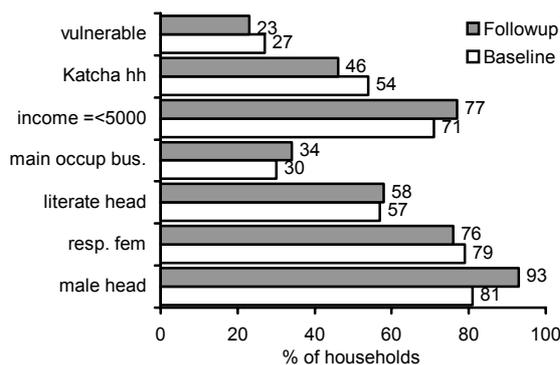


Figure 1: Household sample characteristics

A combined vulnerability index was constructed from the information about type of household construction, household monthly income, and type of occupation of household head. A household was defined as vulnerable if it had any two of the three factors and very vulnerable if it had all the three factors. Using these criteria slightly less than a quarter of the household (23%; 283/1234) were vulnerable and just 3% (41/1234) were categorized as vulnerable. The proportion of vulnerable households in the follow-up survey is slightly lower than that in the baseline survey (figure 1).

Hospital Outdoor patients

A total of 318 outpatients were interviewed at these five participating hospitals. Among these 105 were interviewed at Sylhet medical college hospital, 50 in Sylhet district hospital, 56 each at Sunamganj and Moulvi Bazar district hospitals and 51 in Hobiganj district hospital. Figure 2 shows a comparative characteristics of the outpatients interviewed in the baseline and follow-up surveys.

Except for some variation in the age composition (more children included in the follow-up survey) and a random variation in the proportion who own the house in which they live (proportion higher in the baseline) most of other characteristics are similar between the two surveys making sound ground for comparison of key outcomes of interests.

Hospital Indoor patients

A total of 294 inpatients was interviewed at five participating hospitals. Among these 99 were interviewed at Sylhet medical college hospital, 38 in Sylhet district hospital, 51 in Sunamganj, 56 in Moulvi Bazar, and 50 in Hobiganj district hospital. Note the smaller number of inpatients interviewed at Sylhet district hospital. These were all the inpatients that were found in the hospital on the day of survey. This is an indication of the low bed occupancy and utilization of this hospital. Figure 3 compares the characteristics of the inpatients between baseline and follow-up surveys. It is interesting to note that more people from outside the respective towns of the hospital visited for inpatient care than those for outpatient. The inpatient sample shows differences between baseline and follow-up surveys in proportions of females, literacy of the respondents, town of residence and housing.

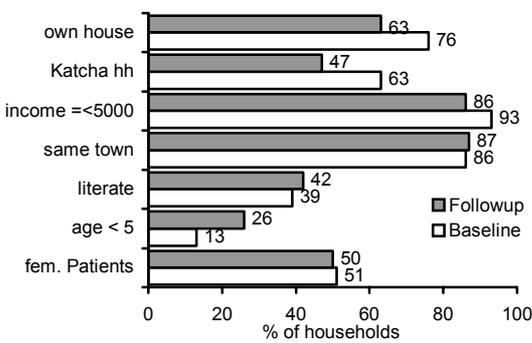


Figure 2: Sample characteristics: hospital outpatients

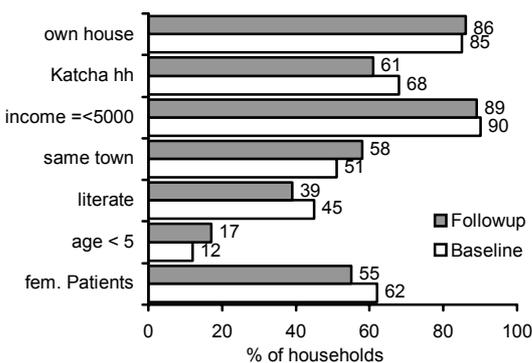


Figure 3: Sample characteristics: hospital inpatients

Knowledge and opinion about the hospitals

As in the baseline survey virtually all the households had heard of their local district hospital. However, for the Sylhet district hospital, unlike the baseline survey where only 83% (195/236) of the periurban households had heard of it, in the follow-up survey 96% (235/245) of the periurban households reported they had heard of the hospital. Thus a periurban household in the follow-up survey is much more likely to have heard of the Sylhet district hospital compared with one in the baseline survey⁶.

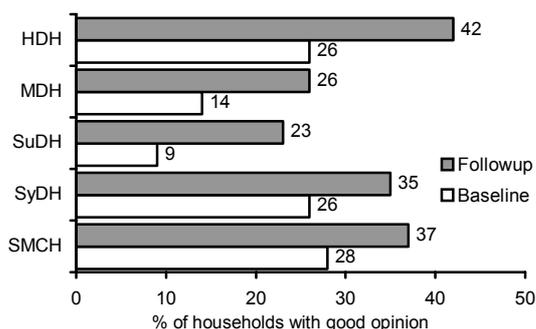


Figure 4: Opinion of households about hospitals

The government claims to collect people's opinion through surveys like these. However, actually what happens is that those who conduct the survey use this information to present their work in a nice way, take heavy salaries and praise. But in the end nothing happens for the people- no treatment no medicines - what's the use of giving an opinion?
Male focus group, periurban Sylhet

When asked for their opinion about the medical college hospital, nearly four out of every ten households (37%; 178/479) had a good opinion about it. Nearly a third of the households (32%; 392/1228) regarded their respective district hospital as good in the follow-up survey (figure 4). The proportion was higher for Hobiganj (42%; 103/244) and lowest in Sunamganj (23%; 57/248).

A household in the follow-up survey was significantly more likely to have a good opinion about the medical college hospital compared with a household in the baseline survey⁷. The difference between surveys was, however, mainly in households with poor housing (ketch 1 & 2)⁸ and among male respondents⁹.

Overall, a household in the follow-up survey was significantly more likely to have a good opinion about their district hospital compared with one in the baseline¹⁰. The difference between surveys was more pronounced in households with literate heads where a household in the follow-up survey was more than twice

⁶ Among periurban communities in Sylhet district, 235/246 households had heard of the district hospital compared with 195/236 in the baseline; OR weighted for sex of the household head 3.76, 95% CI 1.85-7.62

⁷ 178/446 households in follow-up survey had a good opinion about medical college hospital compared with 140/446 in the baseline; OR weighted for ownership of house 1.40, 95% CI 1.06-1.85

⁸ Among households with poor housing (katcha-1 & 2), 81/193 households in follow-up survey had a good opinion about medical college hospital compared with 64/246 in the baseline; OR 2.06, 95% CI 1.34-3.16

⁹ Among households with male respondents, 45/116 households in follow-up survey had a good opinion about medical college hospital compared with 13/95 in the baseline; OR 3.45, 95% CI 1.62-7.43

¹⁰ 392/1228 households in follow-up survey had a good opinion about their respective district hospital compared with 237/1149 in the baseline; OR weighted for hincome upto 1000 taka v/s more than 1000 take 1.73, 95% CI 1.43-2.09

as likely to have a good opinion about their respective district hospital compared with in the baseline¹¹.

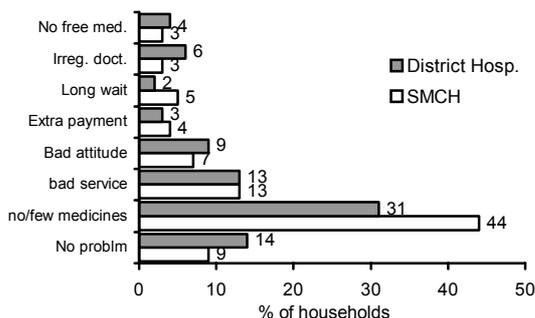


Figure 5: Main problems with the hospitals



Figure 7: No problem with district hospital



Figure 7: No problem with district hospital

Figure 5 shows the main problems mentioned by respondents with the district and medical college hospitals. Non-availability of medicines was still the main problem (44%; 191/439 for the medical college hospital and 31%; 301/972 for district hospitals).

Relatively fewer householders mentioned bad attitude of staff as the main problem in the follow-up survey (figure 6). For both district and medical college hospitals a household in the follow up survey was less likely to report bad attitude as the main problem compared with a household in the baseline^{12, 13}. Among district hospitals the effect was mainly for the Hobiganj district hospital¹⁴ and for male respondents¹⁵.

There has also been some shift in the proportion of households who reported that there was no problem with the district hospitals (figure 7). A household in the follow-up survey was two and a half times more likely to report no problem with the district hospital compared with a household in the baseline¹⁶.

Willingness to pay for the services in district hospitals

Overall, eight out of every ten households (80% 957/1202) indicated their willingness to pay for outpatient and 66% (790/1201) showed willingness to pay for inpatient services of the district hospitals. A declining trend is apparent for the willingness of the households to pay for services of the district hospitals. A

¹¹ Among households with their heads literate, 258/712 households in follow-up survey had a good opinion about their respective district hospital compared with 139/655 in the baseline; OR 2.11, 95% CI 1.64-2.71

¹² 31/437 households in the follow up survey reported bad attitude of staff as the main problem with medical college hospital compared with 56/461 in the baseline; OR weighted for type of house (katcha v/s pucca/semi pucca) 0.54, 95% CI 0.34-0.86

¹³ 89/947 households in the follow up survey reported bad attitude of staff as the main problem with the district hospitals compared with 112/771 in the baseline; OR weighted for district & sex of the respondent 0.62, 95% CI 0.45-0.84

¹⁴ In Hobiganj, 10/223 households in the follow up survey reported bad attitude of staff as the main problem with medical college hospital compares with 34/190 in the baseline; OR 0.22, 95% CI 0.10-0.47

¹⁵ Among households with male respondents, 16/241 households in the follow up survey reported bad attitude of staff as the main problem with medical college hospital compares with 34/175 in the baseline; OR 0.29, 95% CI 0.15-0.58

¹⁶ 136/972 households in the follow-up survey mentioned no problem with the district hospital compared with 67/1139 in the baseline; OR weighted for household income (upto 1000 taka or less v/s more than 1000) 2.51 95% CI 1.85-3.42

household in the follow-up survey was less likely to be willing to pay for the outpatient¹⁷ and inpatient¹⁸ services compared with one in the baseline. The decline in willingness to pay for outpatient services was mainly in Sunamganj district¹⁹ and among households with male heads²⁰. The decline in willingness to pay for inpatient services was more pronounced in Moulvi Bazar²¹ and Sunamganj²² districts and in households with male heads²³.

Illness and use of health facilities by the households

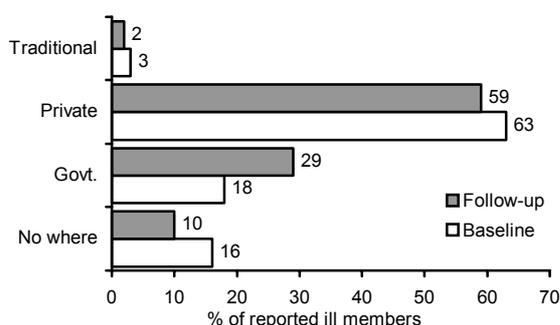


Figure 8: Choice of health facility in the event of illness by the households

Over half the households (52%; 637/1230) reported at least one member ill in the last month. Information was available on 771 household members from the 637 households who reported any member ill during the last one month. Over half of these were female (52%; 389/742). More than a quarter of the reported ill members were under five children (27%; 203/742) and slightly more than a fifth were 5-14 years of age (22%; 165/742). The remaining 51% (374/742) were aged 15 years or more. These reported age patterns are more or less similar to those reported in the baseline survey.

One out of every ten ill household members (10%; 74/771) was not taken anywhere for care. The proportion of females among these who were not taken anywhere was higher than males (64%; 47/74).

Figure 8 compares the choice of health facility among the baseline and the follow-up survey. For more than a quarter (27%; 222/771) of the ill household members a

¹⁷ 957/1202 households in the follow-up survey showed their willingness to pay for outpatient services compared with 1046/1132 in the baseline. OR weighted for household income (upto 5000 taka or less v/s more than 5000 taka) 0.33, 95% CI 0.02-0.27

¹⁸ 790/1201 households in the follow-up survey showed their willingness to pay for inpatient services compared with 1024/1131 in the baseline. OR weighted for household income (upto 5000 taka or less v/s more than 5000 taka) 0.21, 95% CI 0.16-0.26

¹⁹ In Sonamganj district 216/248 households in the follow-up survey showed their willingness to pay for outpatient services compared with 198/201 in the baseline. OR 0.10, 95% CI 0.02-0.36

²⁰ Among households with male heads, 892/1121 households in the follow-up survey showed their willingness to pay for outpatient services compared with 1046/1132 in the baseline. OR 0.27, 95% CI 0.20-0.37

²¹ In Moulavi Bazar district 187/254 households in the follow-up survey showed their willingness to pay for inpatient services compared with 202/205 in the baseline. OR 0.04, 95% CI 0.01-0.14

²² In Sonamganj district 194/248 households in the follow-up survey showed their willingness to pay for inpatient services compared with 197/201 in the baseline. OR 0.07, 95% CI 0.02-0.22

²³ Among households with male heads, 195/288 households in the follow-up survey showed their willingness to pay for inpatient services compared with 227/239 in the baseline. OR 0.11, 95% CI 0.06-0.22

Table 2: Use of different health facilities by the households for outpatient services

Health facility	Baseline	Follow-up
SOMCH	33%	34%
District hospital	15%	20%
Private facilities	71%	71%
Traditional	24%	20%

government health facility was considered as the first choice. More than half of the ill members (59%; 458/771) were taken to private health care providers/facilities. Very few (2%; 17/771) were taken to traditional or religious healers. Almost all (97%; 215/222) of those who went to a government health facility chose either their district hospital or medical college hospital. This proportion is similar to the baseline survey (96%; 170/178). There is an increase in the use of government health facilities and a decline in the use of private health facilities in the follow-up survey compared with the baseline (figure 8). Since virtually all the cases visited the district or medical college hospital, this essentially reflects an increase in their use.

Table 3: Use of different health facilities by the households for inpatient services

Health facility	Baseline	Follow-up
SOMCH	9%	14%
District hospital	5%	7%
Private facilities	2%	3%
Traditional	-	-

Besides asking about the choice of health facility and ascertaining the preferences in an open way in relation to the event of illness, householders were also asked directly about the use of different types of health facilities during a specified period of time (tables 2 & 3).

A household in the follow-up survey is 38% more likely to have a member visiting the district hospital as an outpatient (Figure 9) during the last three months²⁴ and 44% more likely to have a member visiting as inpatient (Figure 10) during the last one year²⁵ in comparison to the baseline survey. This ties in with the findings about choice of facility in the event of illness as mentioned above. The increase for outpatient visits was more pronounced among households with a female respondent, where a household in the follow-up survey was 70% more likely to report any member visiting as an outpatient to the district hospital²⁶. This could be because it is mainly females who are responsible for taking care of the health needs of the family. Males spend most of their day time outside the house and are less aware of household members visiting health facilities, especially for minor illnesses. Male respondents could be under-reporting health facility visits.

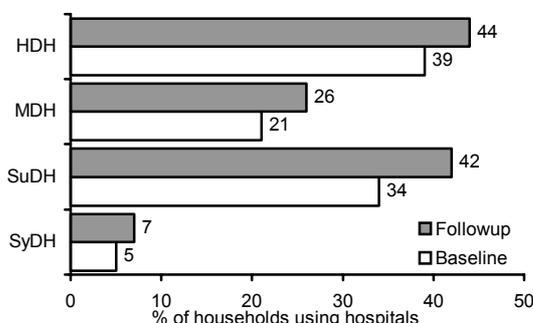


Figure 9: Use of district hospitals for outpatient services

²⁴ 241/1224 households in the follow-up survey reported to have at least one household member visiting district hospital as an outpatient during last three months compared with 166/1148 in the baseline; OR weighted for districts 1.38, 95% CI 1.10-1.73

²⁵ 85/1223 households in the follow-up survey reported to have at least one household member visiting district hospital as an inpatient during last one year compared with 54/1147 in the baseline; OR weighted for districts 1.44, 95% CI 1.01-2.06

²⁶ Among households with female respondents, 191/926 households in the follow-up survey reported to have at least one household member visiting as an outpatient, the district hospital during last three months compared with 120/905 in the baseline; OR 1.70, 95% CI 1.31-2.20

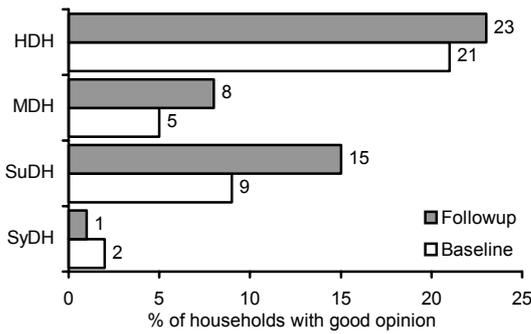


Figure 10: Use of district hospitals for inpatient services

The proportion of households using the outpatient services of the medical college hospital remained more or less the same. However, use of inpatient services increased with a household in the follow-up survey being 51% more likely to report a member visiting the medical college hospital as an inpatient during the last one year compared with the baseline²⁷.

Nearly three quarters (71%; 863/1224) of households had a member who used private medical care as an outpatient in the last three months; and 3% (39/1225) had a member admitted to a private facility in the last year. The proportion using outpatient private health care was the same as in the baseline survey (71%; 620/1149 for outpatient and 2%; 19/1149 for inpatient). In summary, the use of government outpatient facilities has increased while use of government inpatient facilities and all private facilities has remained the same.

The proportion of households reporting a member visiting a traditional or religious healer or shrines for a health problem was lower in the follow-up survey than in the baseline survey. Also among those who reported such a visit, the proportion of those who did not visit any conventional medical care has also gone down. Thus a household in the follow-up survey was less likely to report *not* visiting conventional medical care facility following a visit to traditional healer compared with a similar household in the baseline survey²⁸. The difference was more pronounced in urban communities²⁹, among households with income more than 5000 taka per month³⁰ and in households living in pucca or semi-pucca houses³¹, all representing a population with better socio-economic conditions.

²⁷ 66/479 households in the follow-up survey reported to have at least one household member visiting medical college hospital as an inpatient during last one year compared with 46/494 in the baseline; OR weighted for districts 1.51, 95% CI 1.01-2.25

²⁸ 88/249 households who reported any member visiting traditional religious healer, reported not to visit any conventional medical care facility for the same problem compared with 162/271 households in the baseline; OR weighted for urban/periurban communities, 0.39, 95% CI 0.27-0.56

²⁹ In urban communities, 26/108 households in the follow-up survey, who reported any member visiting traditional religious healer, reported not to visit any conventional medical care facility for the same problem compared with 49/84 households in the baseline; OR 0.23, 95% CI 0.12-0.44

³⁰ Among households having income more than 5000 taka per month, 73/203 households in the follow-up survey, who reported any member visiting traditional religious healer, reported not to visit any conventional medical care facility for the same problem compared with 143/213 in the baseline; OR 0.27, 95% CI 0.18-0.42

³¹ Among households living in pucca or semi-pucca houses, 42/132 households in the follow-up survey, who reported any member visiting traditional religious healer, reported not to visit any conventional medical care facility for the same problem compared with 62/93 in the baseline; OR 0.23, 95% CI 0.13-0.43

Use and experience of the hospital services

Table 4: Patient turnover at the hospitals

	Ave. daily OPD visits	Ave. monthly admissions
SOMCH	1600	1800
SyDH	230	130
SuDH	251	1000
MDH	188	900
HDH	250	1200

Information was collected about 374 household members who had visited the outpatient departments of the district or medical college hospitals during last three months and 162 who were admitted to the same hospitals as an inpatient during the past one year. In addition some 318 patients were interviewed at these hospitals immediately after they had used the outpatient services and another 294 in different wards as inpatient to get first hand information about their experience of these services.

At the household level, respondents were asked about their use and experience of their respective district hospital. In Sylhet district, households were also asked about the use and experience of the medical college hospital in addition to district hospital. Similar to the baseline survey, the majority of contacts reported from Sylhet households were with the medical college hospital (91%; 152/166 for outpatient visits and 96%; 69/73 for inpatient visits). The information obtained from hospital administrations during institutional review also verifies this fact. showing that the district hospital in Sylhet is being used more as a referral post for the medical college hospital (see table 4).

Table 5: Age and sex distribution of household members and hospital patients visiting hospitals

	Outpatient		Inpatient	
	hh (n=370)	Hosp. (n=318)	hh (n=162)	Hosp. (n=294)
Female	56%	50%	48%	55%
< 5	31%	26%	24%	17%
5-14	20%	15%	14%	8%
>14	49%	59%	62%	75%

*hh=household, hosp.=Hospital

Table 6: Source of information about the experience at the hospitals (Follow-up survey)

	Outpatient		Inpatient	
	hh (n=372)	Hosp. (n=318)	hh (n=160)	Hosp. (n=279)
Self	29%	54%	22%	48%
Spouse	9%	0.3%	14%	8%
Parents	51%	36%	42%	27%
Other relatives	11%	9.7%	22%	17%

*hh=household, hosp.=Hospital

Demographic pattern

Table 5 shows the age and sex distribution of the household members and the patients interviewed at the hospitals in the follow-up survey. The majority of patients were in the age group 15 years and above. To get the best quality of information about health visits, efforts were made either to interview the member/patient directly or to interview their parents or spouses (table 6).

Health reasons for visiting the hospital

Most of the household reported outpatients (88%; 315/359), went for treatment of an illness or injury. The proportion was even higher for hospital interviewed outpatients at 97% (308/317).

Among household reported inpatients, most were admitted for treatment of illness (72%; 116/162) followed by pregnancy/delivery (15%; 25/162) and accidents or injury (13%; 21/162). Among hospital inpatients 70% (224/292) of the patients interviewed were there for the treatment of an illness, 20% (30/292) for injury/accident and 10% (30/292) for delivery.

Referral to hospital services

More than three quarters of the household outpatients (77%; 288/374) visited the outpatient department. The remainder visited the emergency room. Among household inpatients three quarters (75%; 122/162) were admitted as an emergency; only a quarter were first seen in OPD and then admitted. Among hospital inpatients 63% (185/294) were admitted as an emergency.

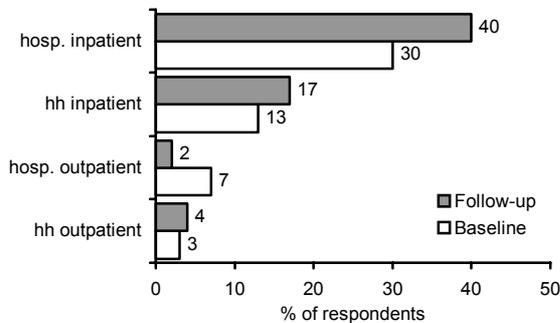


Figure 11: Proportion of patients referred to the hospital

Only 4% (16/374) of the household outpatients and 17% (27/132) of inpatients were referred to the hospital. Among hospital outpatients interviewed directly, only 2% were referred. Figure 11 compares the referral of patients in the follow-up and baseline surveys. The overall proportion for referral was higher for hospital inpatients (40%; 116/287) both in the baseline as well as follow-up survey. However, a hospital inpatient in the follow-up survey was 56% more likely to be referred to the hospital compared to one in the baseline survey³². The change between surveys is more pronounced for the Medical college hospital than the district hospitals³³.

The most common reason given for visiting the hospitals rather than other sources of health care is more facilities followed by the low cost associated with the treatment (see table 7).

Table 7: Reasons for choosing the hospital instead of any other facility (Follow-up survey)

Reason	Outpatient		Inpatient	
	hh (346)	Hosp. (308)	hh (125)	Hosp. (178)
Less cost	51%	47%	34%	37%
Nearby	16%	16%	9%	10%
More facilities	30%	51%	52%	56%
No other option	3%	1%	5%	-

Despite a somewhat improved situation for referral in the Sylhet medical college hospital inpatients, the practice of directly approaching these hospitals shows no overall change from the baseline. There is a high rate of reporting to the emergency room, which is indicative of the preference of people to these hospitals in acute medical emergencies when there is probably no other choice. Thus people make their own decision to go directly to these hospitals bypassing lower level facilities. As discussed with the HII management team at HLSP, referral linkages and support have been one of the weaker components of the HII with no intervention directly or indirectly targeting referral to participating hospitals. Hence it was not expected that there would be any improvement in the referral situation.

³² 116/287 hospital inpatients in the follow-up survey reported to be referred to the hospital compared with 89/308 in the baseline; OR weighted for household income (upto 1000 taka or less v/s more than 1000) 1.56 95% CI 1.10-2.21

³³ Among patients at medical college hospital, 58/92 inpatients in the follow-up survey reported to be referred to the hospital compared with 38/104 in the baseline; OR 2.96 95% CI 1.58-5.57

Management and administrative aspects of hospital services

The Hospital Improvement Initiative has focused on improving the patient management component of hospital service delivery providing administrative training and supervision support through hospital management committees, and system development to improve patient flows and reduce wastage of time both for the client and the service provider. There are some positive trends that indicate an impact of these interventions.

Use of agents to secure admission

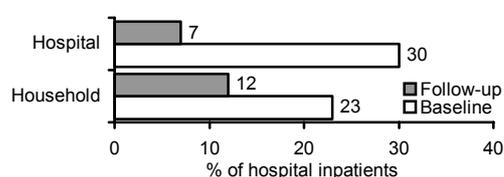


Figure 12: Use of agent to secure admission

Nearly one tenth of the household reported inpatients (12%; 18/156) reported using a source or agent to secure admission in the hospital. This proportion was lower in the follow-up survey compared with the baseline (23%; 32/138) with a household inpatient twice more likely to get admission directly without using a source or agent in the follow-up survey compared with the baseline survey³⁴. The change between the two surveys was more pronounced in households with a female respondent³⁵.

A similar trend was seen in the hospital interviewed inpatients, where the majority (93%) secured admission directly without using any source or paying any agent. A hospital inpatient in the follow-up survey was much more likely to report getting admission without any agent or source than in the baseline survey³⁶ (see figure 12). This change was more pronounced among patients at district hospitals than in medical college hospital³⁷. Although not directly included as a part of the HII intervention, a consistent trend in both the household and hospital inpatients indicates improvement in the hospital admission system to become more convenient for clients and prevent their suffering extortion by agents and brokers.

³⁴ 138/156 household inpatients in the follow-up survey secured admission directly without using source or agent compared with 106/138 in the baseline; OR weighted for type of house 2.00, 95% CI 1.05-3.78

³⁵ Among households with female respondents, 108/119 household inpatients in the follow-up survey secured admission directly without using source or agent compared with 77/104 in the baseline; OR 3.44, 95% CI 1.51-7.97

³⁶ 272/293 hospital inpatients in the follow-up survey reported to secure admission directly compared with 212/301 in the baseline; OR weighted for literacy of respondent, 5.24 95% CI 3.11-8.83

³⁷ Among inpatients interviewed at district hospitals, 185/194 in the follow-up survey reported to secure admission directly compared with 137/198 in the baseline; OR 9.15 95% CI 4.18-20.66

Waiting and consultation times

Waiting time for outpatients

Nearly a third of the hospital outdoor patients mentioned that they had to wait for five minutes or less for registration. The mean waiting time for registration was 12 minutes, shorter than that reported in the baseline (18 minutes) A patient in the follow-up survey is 68% more likely to be registered in five minutes or less compared with one in the baseline³⁸. The effect was stronger in the Moulvi Bazar³⁹ and Sylhet⁴⁰ district hospitals (Figure 13).

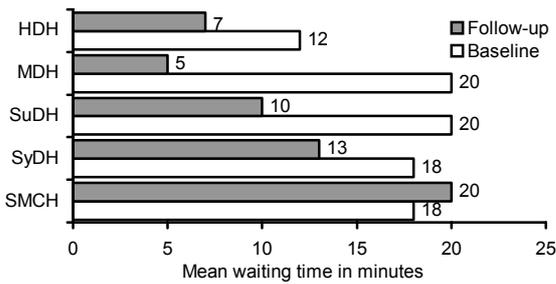


Figure 13: Mean waiting time for registration: Hospital outpatients

We have to wait 2-3 hours to see the doctor. It seems simple to say, but in reality it's tough.
Male focus group, urban Sunamganj

Six out of every ten hospital outpatients (60%; 190/311) in the follow-up survey reported being seen by the doctor within 15 minutes. The mean waiting time to be seen by the doctor was 22 minutes which is shorter than that in the baseline (32 minutes). A hospital outpatient in the follow-up survey is almost twice as likely to be seen by the doctor within 15 minutes compared with one in the baseline⁴¹. However, this effect is not uniform in all the hospitals (figure 14). Thus the effect is mainly in Moulvi Bazar⁴² and Sunamganj⁴³ district hospitals. The situation is the opposite in Hobiganj district hospital where a patient in the follow-up survey is less likely to be seen by the doctor within fifteen minute compared with a patient in the baseline⁴⁴. For the medical college hospital there seems to be a slight decrease in the waiting time but it was not significant⁴⁵.

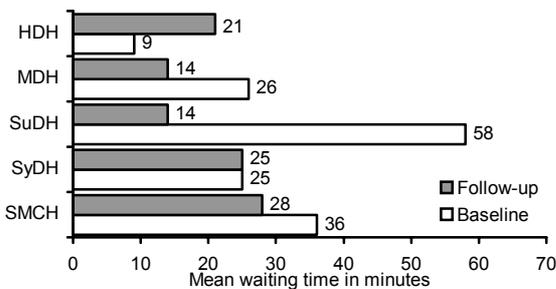


Figure 14: Mean waiting time to be seen by a doctor: Hospital outpatients

³⁸ 191/308 hospital outpatients in the follow-up survey reported not to wait for more than five minutes for registration compared with 136/291 in the baseline; OR weighted for household income (upto 1000 or less v/s more than 1000) 1.68, 95% CI 1.20-2.35.

³⁹ In Moulavi Bazar district hospital, 46/55 hospital outpatients in the follow-up survey reported not to wait for more than five minutes for registration compared with 17/50 in the baseline; OR 9.92 95% CI 3.58-28.30

⁴⁰ In Sylhet district hospital, 32/49 hospital outpatients in the follow-up survey reported not to wait for more than five minutes for registration compared with 19/48 in the baseline; OR 2.87 95% CI 1.16-7.22

⁴¹ 190/311 hospital outpatients reported to be seen by the doctor within 15 minutes compared with 125/294 in the baseline; OR weighted for household income (upto 1000 or less v/s more than 1000) 1.99 95% CI 1.42-2.78

⁴² In Moulavi bazaar district, 44/56 hospital outpatients reported to be seen by the doctor within 15 minutes compared with 23/52 in the baseline; OR 4.62 95% CI 1.83-11.85

⁴³ In Sunamganj district, 42/55 hospital outpatients reported to be seen by the doctor within 15 minutes compared with 9/50 in the baseline; OR 14.72 95% CI 5.14-43.74

⁴⁴ In Hobiganj district 31/51 hospital outpatients reported to be seen by the doctor within 15 minutes compared with 44/51 in the baseline; OR 0.25 95% CI 0.08-0.72

⁴⁵ At medical college hospital, 44/100 hospital outpatients reported to be seen by the doctor within 15 minutes compared with 33/93 in the baseline; OR 1.43 95% CI 0.76-2.68

Attendance by doctor/health worker and consultation time for outpatients

All the household members visiting the outpatient reported they were seen by a doctor. Although two thirds of the female patients (66%; 135/370) were seen by a male doctor, the likelihood of being seen by a female doctor was higher for females than males⁴⁶.

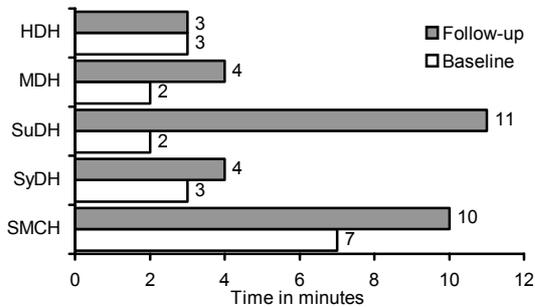


Figure 15: Mean consultation time with a doctor

Among hospital outdoor patients, almost all (98%; 311/318) were seen by a doctor, the doctor being male in majority of the cases (80%; 250/311). A third of the patients (33%; 102/311) reported that the doctor also examined them.

Overall 45% (139/310) of the hospital outpatients reported that their consultation time was more than five minutes. The mean consultation time was 7 minutes; this is longer than that reported in the baseline (4 minutes). A hospital outpatient in the follow-up survey was more than twice as likely to report a consultation time of five minutes or more compared with a patient in the baseline⁴⁷. Figure 15 compares the mean consultation time reported by outpatients during the baseline and follow-up survey at the different hospitals.

All the hospitals show an improvement in the time given by the doctor to the patient, the effect being more marked in the Medical college and Sunamganj district hospitals whereas in Hobiganj the consultation time remained the same.

Nearly four out of every ten patients (42%; 138/309) mentioned that the doctor explained to them about their problem.

Table 8: OPD duration and doctors' availability on the day of follow-up survey at district hospitals

	SyDH	SuDH	MDH	HDH
# of Doctors	5	3	4	4
OPD duration*	195	220	210	210
# of Patients	229	67	67	96
Ave time/ patient	4	10	13	9

Attendance by the doctor, waiting and consultation time especially in the outpatient department are linked to the patient load and staff availability. Observation made at different district hospitals during the institutional review on the day of the survey correlates well with the information obtained from patients during their interview (see table 8). It was observed that in almost all the hospitals, the full official timings for OPD are not utilized. Staff usually come late and leave early. This reduces the effective time available for patients. To

⁴⁶ 69/204 female patients were seen by female doctor v/s 27/162 males, OR 2.56, 95% CI 1.49-4.40

⁴⁷ 139/310 hospital outpatients in the follow-up survey reported a consultation time of five minutes or more with the doctor compared with 75/290 in the baseline; OR weighted for sex of the patient 2.31 95% CI 1.64-3.27

improve further the waiting and consultation times, efforts should be made to ensure that OPD times are used to their full extent.

Attendance by doctor/health worker and frequency of visits for inpatients

Six out of every ten patients (60%; 172/289) reported that had to wait one hour or less to be seen by a doctor after admission (Figure 16). The situation seems to be better than what it was in the baseline as a hospital inpatient in the follow-up survey was 54% more likely not to wait for more than an hour to be seen by the doctor compared with one in the baseline survey⁴⁸. The effect was stronger in the Sunamganj⁴⁹ and medical college hospital⁵⁰, among those who reported to live in a rented house⁵¹ and among those who went directly to the hospital⁵² rather than referred.

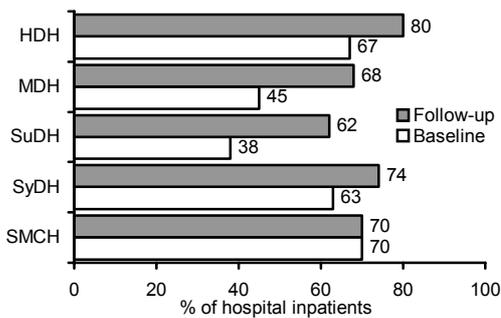


Figure 16: Proportion of patients seen within an hour of admission by a doctor

All except three (99%; 291/294) of the patients reported that they are visited at least once a day by the doctor. This is a marked change from baseline where 79% (244/308) reported to be seen at least once while 20% mentioned that they were not visited by a doctor daily. In fact there was a high likelihood of patients being visited more than once a day with six out of every ten patients (62%; 156/294) reporting so. A hospital inpatient in the follow-up survey was almost two and a half times more likely to be visited more than once by a doctor compared with one in the baseline. A sharp contrast was seen on this frequency of visit by doctor at Moulvi Bazar district hospital where 55 out of 56 patients reported that they were visited more than once compared to the baseline status where only 9 out of 52 patients reported the same⁵³. Nearly seven out of every ten patients (69%; 204/294) reported that the doctor explained to them

⁴⁸ 172/289 hospital inpatients in the follow-up survey reported not to wait for more than an hour to be seen by the doctor compared with 145/303 in the baseline; OR weighted for household income (1000 taka or less v/s more) 1.54 95% CI 1.10-2.15

⁴⁹ Among inpatients interviewed at Sunamganj hospital, 34/51 in the follow-up survey reported not to wait for more than an hour to be seen by the doctor compared with 23/53 in the baseline; OR 2.61 95% CI 1.09-6.33

⁵⁰ Among inpatients interviewed at medical college hospital 69/96 in the follow-up survey reported not to wait for more than an hour to be seen by the doctor compared with 56/101 in the baseline; OR 2.05 95% CI 1.08-3.19

⁵¹ Among hospital inpatients living in the rented houses 33/40 in the follow-up survey reported not to wait for more than an hour to be seen by the doctor compared with 21/44 in the baseline; OR 5.16 95% CI 1.69-16.29

⁵² Among hospital inpatients going directly to the hospital (without referral) 106/168 in the follow-up survey reported not to wait for more than an hour to be seen by the doctor compared with 94/213 in the baseline; OR 2.16 95% CI 1.40-3.35

⁵³ OR 262.78 95% CI 30.75-5906.26

about their problem. This is more or less the same as in baseline (71%; 198/281).

Bed availability

For two million population of our district, we only have a 50 bed hospital which has recently been upgraded to 100 beds. But this is not enough. There should be at least 500 beds in the district hospital. It should have modern equipment and more ambulances.
Male focus group, urban Sunamganj

Five of the 154 household reported inpatients reported they did not get a bed during their stay in the hospital. Nearly three quarters of the patients (74%; 114/154) reported to receive a bed on the same day while a tenth (10%; 16/154) got it on next day. Some 13% (19/154) had to wait for two or more days to get the bed. These proportions are very similar to those in the baseline survey.

Among hospital interviewed inpatients only 3% (8/294) were found without a proper bed at the time of interview. This proportion is lower than in the baseline (7%; 20/305). Among those who had a bed, three quarters (76%; 219/294) said they got it on the day of admission. The proportion as expected was highest for Sylhet district hospital where all but one patient got a bed on the day of admission (97%; 37/38). Sylhet Medical college hospital had the lowest proportion of patients getting a bed on the day of admission (59%; 57/97). This probably reflects the high turn over and overload of patients.

Table 9: Bed occupancy at district hospitals

	Available	Occupied
SyDH	110	71
SuDH	100	117
MDH	80	105
HDH	73	71

It is good to see that despite a shortage of beds in relation to the number of admissions the hospitals are able to provide a bed to almost all the inpatients. In fact the information from institutional reviews suggests that except for Sylhet district hospital, the administration is probably putting up extra beds for admissions over and above the allotted number (table 9).

No one pays attention to the patient, If we don't contact staff ourselves, they wouldn't be bothered to even ask why we are there.
Male focus group, peri-urban, Sunamganj

Number of attendants staying with the patients

They don't pay attention to lonely patients. When doctors see some good number of attendants it keeps them under pressure to provide care.
Male focus group, urban Molavi Bazar

Among household indoor patients more than half reported having two or more attendants with them during their stay in the hospital. A household inpatient in the follow-up survey was *more* likely to report more than two attendants with him in the hospital compared with one in the baseline⁵⁴. Among hospital inpatients 23%

⁵⁴ 87/162 household inpatients in the follow-up survey reported to have two or more attendants with them in the hospital compared with 51/142 in the baseline; OR weighted for age of the patient 2.04, 95% CI 1.28-3.24

Box 1: FGD deliberations on the issue of too many attendants and visitors

Reasons for having more attendants

- To call staff on duty at the time of need
- For buying food and medicines from outside that are not available from hospital
- For toilet and bathing needs
- To give food and medicines on time
- Because nurses and doctors do not provide adequate care
- For social/psychological support

Problems arising from too many visitors

- Disturbs privacy and sleep of other patients
- Creates problem for staff to perform their duties
- Can be a risk to serious patients
- Makes hospital dirty

What needs to be done by the hospital

- Staff should be more caring and promptly response in time.
- More staff nurses to ensure their availability at the time of need
- All services such as medicines, food, lab and x-ray to be made available within the hospital.
- Hospital administration and staff should tell patients properly not to bring too many attendants

(69/294) reported having two or more attendants staying with them in the hospital.

The issue of too many attendants is closely linked to the quality of care and attention that patients receive during their stay in the hospital. This was reflected very strongly during focus group discussions in the communities (box 1). It is obvious that people feel that their relatives, especially when inpatients, do not receive adequate care and attention from the hospital staff. Hence they regard it as necessary to have people accompanying the patients in the hospital.

It is important to note that participants in all the focus groups agreed that having too many attendants could pose problems both for staff and patients. They mentioned problems such as difficulties for staff in fulfilling their duties, disturbance especially to the privacy of other patients, risk to seriously ill patients and the hospital becoming dirty, all resulting from too many attendants. Realization of these problems could be a positive factor as this could be used to convince people not to take too many attendants with them to the hospital. However, this conviction would only happen if there were visible improvements in the quality of care as suggested by focus group participants (box 1).

The patient or attending person should sign an agreement to keep to a limited number of attendants as per rules of the hospital.
Male focus group, urban, Moulvi Bazar

Duration of stay in the hospital

Slightly more than half of the household reported inpatients (53%; 85/162) reported a stay of five days or less in the hospital. About a quarter (26%; 43/162) reported staying for 6-10 days while about a fifth (21%; 34/162) reported staying for more than 10 days. The mean duration of stay in the hospital for household indoor patients was 7 days, somewhat lower than in the baseline (8 days).

Slightly more than half of the inpatients (52%; 151/293) reported being in the hospital for five days or less with 17% (51/293) reporting being in the hospital for more than 10 days. Table 10 compares the duration of inpatient stay in different hospitals. More patients in Sylhet district hospital stayed for more than 10 days. This could be related to the underutilization of the Sylhet district hospital with a low turnover of new patients. With more vacant beds available, management may tend to keep patients in the hospital longer.

Table 10: Duration of stay(in days) for hospital inpatients (Follow-up survey)

	SMCH (n=99)	SyDH (n=38)	SuDH (n=51)	MDH (n=55)	HDH (n=50)
< 3	6%	21%	20%	15%	12%
3-5	34%	21%	31%	55%	50%
6-10	40%	7%	29%	28%	30%
>10	20%	42%	2%	2%	8%

Follow-up and referral arrangements

Nearly a third of household reported outpatients (29%; 108/373) reported visiting another health facility following their hospital visit for the same health problem. This proportion has not changed much since the baseline survey (32%; 100/310). Again similar to the baseline, most of these patients (86%; 93/108) reported visiting a private health facility. A third of the hospital outpatients (33%; 101/311) were advised to come back to the hospital by the consulting doctor. It is encouraging that more than three quarters of the patients (78%; 242/310) mentioned that they would come back to the hospital if their condition did not improve. However, there was no association between patients' willingness to come back and advice for follow-up indicating the inadequacy of the counseling and motivation by the attending staff regarding follow-up.

Nearly every third household inpatient (29%; 46/160) reported visiting another health facility following their hospital stay for the same health problem. Again the proportion is not much different from that in the baseline (34%; 48/142). Most of these patients (84%; 38/84) reported visiting a private health facility. Among hospital inpatients 17% (49/293) reported that they had been referred for treatment or investigation to some other facility. Most of these were referred to a private facility (80% 39/49). A quarter (25%) of the inpatients at the medical college hospital reported such referral and 22 of these were made to a private facility. It is not clear why most of these patients were referred to a private facility. A possible explanation could be that even a hospital like Sylhet medical college which is a teaching hospital may not have all the necessary facilities to deal with certain complex cases and require patients to be referred to other facilities.

Awareness about HII among patients

Very few patients mentioned that they had heard anything about the HII (6%; 18/318 outpatients and 6%; 17/291 inpatients). About a third of outpatients (31%; 99/318) and a fifth of inpatients (20%; 59/294) had noticed some change in the hospitals during last three years.

Prescription and receipt of medicines

When medicines are not available, it's of no use thinking about other things.
Male FGD, Urban Sylhet

The hospital improvement initiative did not provide any support to improve medicine supplies and availability at the participating hospitals. However, lack of availability of medicine continues to be a key concern for people using these hospitals and is one of the major reasons for their dissatisfaction with the services. The findings from both the household and the outpatient surveys indicate deterioration in the availability of medicines.

Experience of the outpatients

Virtually all (96%; 358/374) the household members reporting visits to outpatient departments reported getting a prescription. However, only 8% (28/358) reported they received all the prescribed medicines from the facility. About half (51%; 182) reported receiving some of the prescribed medicines and 41% (147) mentioned that they did not receive any medicine from the hospital. The situation seems to have worsened since the baseline. Thus, a household outpatient in the follow-up survey was less likely to have received all the prescribed medicines compared with one in the baseline survey⁵⁵. This change in the surveys was more pronounced among members from households with illiterate heads⁵⁶ and those living in katcha houses⁵⁷ which are indicative of their low socio-economic status. Most of the patients who did not get the medicines (95%; 312/329) reported buying them from and outside pharmacy or drug shop.

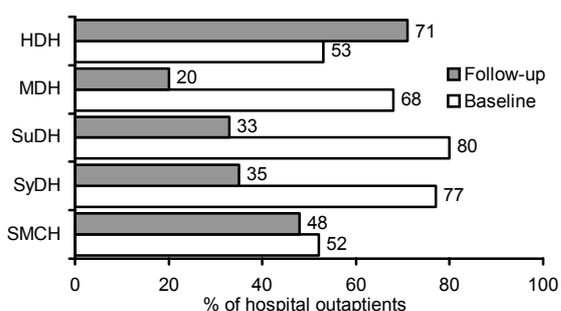


Figure 17: Proportion of hospital outpatients receiving all prescribed medicines

Almost all the hospital interviewed outpatients (98%; 304/311) received a prescription. Four out of ten (42%; 181/283) said they got all the prescribed medicines from the hospital. A hospital outpatient in the follow-up survey was less likely to get all the medicines from the hospital compared with one in the baseline⁵⁸ (see figure 17). The likelihood of not getting all the medicines was

⁵⁵ 28/357 household outpatients in the follow-up survey reported to have received all the medicines compared with 48/292 in the baseline; OR weighted for hospitals 0.48, 95% CI 0.29-0.80

⁵⁶ Among household with illiterate heads, 9/175 household outpatients in the follow-up survey reported to have received all the medicines compared with 29/139 in the baseline; OR 0.21, 95% CI 0.09-0.48

⁵⁷ Among households having katcha housing structure (katcha 1-2) 12/185 household outpatients in the follow-up survey reported to have received all the medicines compared with 36/182 in the baseline; OR 0.28, 95% CI 0.13-0.59

⁵⁸ 127/304 hospital outpatients in the follow-up survey reported to get all the prescribed medicines from the hospital compared with 181/283 in the baseline; OR weighted for hospitals 0.43 95% CI 0.31-0.59

higher in the district hospitals⁵⁹ and among patients having a monthly income of 5000 taka or less⁶⁰. The high proportion of outpatients reporting they got all the prescribed medicines from the hospital in the baseline survey was rather surprising (given the low proportion who got all medicines among household reported outpatients) and unexplained. This high proportion was not replicated in the follow-up survey (Figure 17).

Experience of inpatients

Nearly all the inpatients (93%; 273/294) reported that they were prescribed medicines by the doctor. Among these, only 6% (16/273) reported they received *all* the medicines from the hospital. This situation is almost the same as in the baseline where 7% (19/263) reported getting all the prescribed medicines. About half of the patients (51%; 137/273) reported that they received *some* of the prescribed medicines from the hospital while 44% (120/273) said they did not receive any of the prescribed medicines from the hospital.

Expenditures of hospital patients

Travel costs

Nine out of ten of hospital outpatients (91%; 288/316) said they paid a travel costs to reach the hospital. The mean cost of travel was Taka 34/-. Among hospital inpatients almost all (98%; 283/290) paid for their travel, with a mean travel cost of Taka 366/-.

Loss of earning

Three out of ten outpatients and four out of ten inpatients said they or their accompanying persons had to take out time from money earning work to attend the hospital. Average amount of earning lost for outpatient was Taka 98/- while that for inpatients was Taka 339/day.

⁵⁹ Among district hospitals, 80/205 hospital outpatients in the follow-up survey reported to get all the prescribed medicines from the hospital compared with 137/198 in the baseline; OR 0.28 95% CI 0.18-0.44

⁶⁰ Among patients having income upto 5000 taka or less, 14/45 hospital outpatients in the follow-up survey reported to get all the medicines from the hospital compared with 16/20 in baseline; OR 0.11 95% CI 0.03-0.46

Table 11: Mean costs for outpatient registration v/s official registration fee

	Mean cost (Tk.)	Official cost (Tk.)
SOMCH	5.6	5.0
SyDH	4.1	4.0
SuDH	5.0	4.40
MDH	4.0	4.0
HDH	4.8	4.0

Table 12: Mean admission fee paid by the patients v/s official admission fee

	Mean fee (Tk.)	Official fee (Tk.)
SOMCH	12	5.0
SyDH	7	5.0
SuDH	11	5.50
MDH	12.5	4.0
HDH	10	4.0

Registration/admission fee

Most of the outpatients reported paying the registration fee (94%; 291/311). Table 11 shows the mean amount of registration fee paid by the patients at each hospital against the official registration fee reported by the hospital administration during institutional review. Mean reported registration costs for SOMCH, Sunamganj and Hobiganj district hospitals are slightly higher than their official fees as some patients reported paying more than the official charges.

Among inpatients 84% (234/280) reported paying an admission fee. Table 12 shows the mean amount of admission fee paid by the patients against the official admission fee for respective hospital. Again the mean cost paid was higher for all the hospitals than the officially reported charges. This is again an indication that some patients are paying more than the official charges for admission.

Daily bed/cabin charges

Most of the patients (94%; 271/288) reported not paying any bed charges during their stay in the hospital. Even at the medical college hospital where the administration reported a daily bed charge of Taka 25 for an ordinary bed, only eight out of 99 inpatients reported paying any bed charges. The reported mean amount paid by these eight patients was Taka 231 which is much higher than the official charges. Only one patient at Moulvi Bazar and three at Hobiganj district hospitals reported paying daily bed charges during their stay in the hospital.

Food

Most of the inpatients (92%; 268/291) reported not paying for food that they received from the hospital. This complies with the hospital policy to provide free food to the inpatients. For the few inpatients who did pay for food (23/291), the mean amount paid was Taka 39/day. Most of these patients (17/23) were from the medical college hospital.

Medicines

All the hospitals officially reported not charging for the medicines that they supplied to the patients. The data from the patients comply with this information. Almost all the outpatients (99%; 290/294) and inpatients (100%;

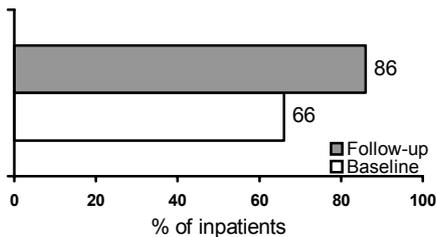


Figure 18: Proportion of inpatients paying for medicines from outside

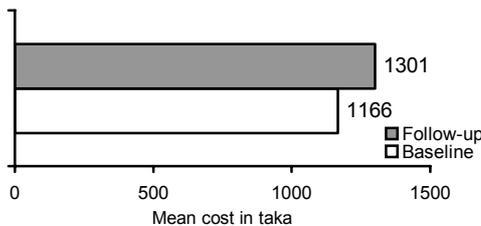


Figure 19: Mean cost of medicines from outside

292/293) who received medicines from the hospital did not pay for these medicines. Only four outpatients and one inpatient reported making some payments for medicines that they received from the hospital. The mean amount paid by the four outpatients was Taka 50/- while the only inpatient paying for medicines from the hospital paid taka 112/-. The proportion of outpatients who paid for medicines from the hospital is lower than in the baseline survey (6%; 18/311).

Non availability of medicines is reflected in the cost which hospital patients incurred to buy medicines from outside. Hospital inpatients were asked if they spent anything to buy medicines from out side. Most of the inpatients (86%) reported paying for medicines from outside. The mean amount spent was Taka 1301/-. Figure 18 compares the proportions of patients who reported paying for medicines from outside the hospital in the baseline and follow-up surveys. Figure 19 shows a similar comparison for inpatients' mean expenditures on medicines from outside. Both the proportion paying and the mean amount paid were higher in the follow-up survey. A patient in the follow-up survey was more likely to spend on medicines from outside compared with one in the baseline⁶¹. This change was more pronounced in patients from households with incomes less than 1000 taka⁶². A similar change was seen among patients who came directly to the hospital rather than referred⁶³.

Extra-payments

None of the outpatients and only 5% (15/294) of the inpatients reported making any extra payment when asked directly. The issue of extra payments, however, is more complex to measure than just asking directly about any extra payment. Although they did not report making any extra payment, it was evident that some patients paid more than the official user charges. This could be an awareness issue as patients might not realize they are paying more than the official rate. One way to reduce extra payments and increase system transparency could be to make people aware about which services they are

⁶¹ 248/289 inpatients in the follow-up survey reported to spent on medicines from outside compared with 202/307 in the baseline; OR weighted against referral (direct v/s referred)

⁶² Among patient from household with monthly income upto 1000 taka or less , 55/56 inpatients in the follow-up survey reported to spent on medicines from outside compared with 74/122 in the baseline.

⁶³ Among inpatients who were admitted directly to the hospital without referral 146/169 in the follow-up survey reported to spent on medicines from outside compared with 129/217 in the baseline; OR 4.33 95% CI 2.50-7.55.

required to pay for and how much they are required to pay. Although only a few patients reported paying extra, it could still be important for hospital managers to introduce measures to curb these practices. This could be something to be picked up in conjunction with the possible new official user charges.

Cleanliness and waste management

Improving hospital waste management is a major component of the HII, with a combination of interventions. These include construction of central waste disposal pits for different types of waste in each hospital, provision of colour coded bins in the outdoor and indoor departments, and training of virtually all the staff members on aspects of maintaining proper cleanliness and how to deal with different types of hospital wastes.

Observation at institutional review

As a part of the institutional review of the hospitals, the field coordinators observed the level of cleanliness in the outpatients and inpatient departments. In order to reduce subjectivity and any observer variation, the same coordinators who made this observation in the baseline were involved in the follow-up survey. These observations were made in the waiting area, consultation and examination rooms in the OPD and around beds and operation theatres in the inpatient departments. A considerable improvement was observed at all hospitals in the level of cleanliness. It was especially noted that different colour coded bins were placed both in OPD and wards at suitable places easily accessible to patients, their attendants, and staff. Posters explaining the use of different bins were also observed at prominent places in many areas.

Hospital waste management has been a great success. I feel that this is something that is sustainable and has really improved the hospital cleanliness and environment.
RMO Incharge, District Hospital

We don't get a clean bedside pot until and unless we pay tips to the cleaner.
Male focus group, periurban Hobiganj

The hospital is clean enough, no need to do anything more. They should pay attention to other problems like medicines.
Female focus group, periurban, Sunamganj

Patients' satisfaction with cleanliness

Hospital outpatients and inpatients were asked about their satisfaction with the cleanliness in the hospital. Among hospital outpatients nine out of ten patients (91%; 282/311) were satisfied with cleanliness in the consultation/examination room. The proportion satisfied was higher than that in the baseline (Figure 20); a patient in the follow-up survey was significantly more likely to

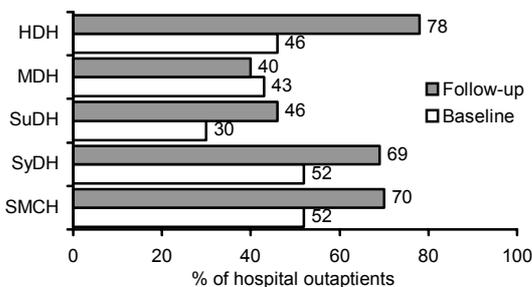


Figure 20: Satisfaction of hospital outpatients with cleanliness

Box 2: FGD deliberations on cleanliness

Suggested improvements

- Frequent cleaning of floor/toilets with antiseptics/anti-smell spray
- Bins for spitting and garbage disposal
- Frequent cleaning of beds and seats
- Outside premises should be clean
- Better supervision and monitoring of staff
- Training /awareness of staff
- More cleaning staff
- People should be conscious themselves
- Guide/educate people

Perceived role of users

- Should not spit pan and throw garbage here and there but use bins
- Should themselves be clean
- Keep patient's bed, clothes and surrounding area clean
- Avoid bringing children to the hospital and take them out of the hospital for washing and toilet needs
- Should tell and encourage each other to maintain cleanliness

Key messages

- *Stay clean; cleanliness prevents diseases*
- *Cleanliness is the part of faith*
- *You are here to see your patient not to become a patient so keep the hospital clean*
- *No spitting when walking please; use a bin*
- *Keep yourself clean and advise others to do so*

Means of communication

- Hospital staff specially doctors and nurses should tell
- Display boards/posters in the hospital with key messages and instructions
- Use media such as newspaper, TV
- Special awareness campaigns

We are here to see your patient not to become a patient so we need to keep the hospital clean

Female focus group, urban Hobiganj

be satisfied with the cleanliness compared with one in the baseline⁶⁴.

Among household reported inpatients, six out of ten (61%; 99/162) were satisfied with cleanliness in the OPD. The proportion was higher than in the baseline survey; a household inpatient in the follow-up survey was two and a half times more likely to be satisfied with the hospital cleanliness than in the baseline⁶⁵.

Among hospital interviewed inpatients six out of ten (61%; 180/294) were satisfied with the cleanliness in the ward. A hospital patient in the follow-up survey was more likely to be satisfied with the cleanliness compared with one in the baseline⁶⁶.

Community focus groups helped to identify areas for further improvements in cleanliness (box 2). Most of these recommendations are already part of hospital routines at least in theory. It is also good to see that HII interventions as apart of quality control and waste management are targeting these areas. In some groups people suggested appointing more staff to be responsible for cleaning but in most of the groups they emphasized better training, supervision and monitoring of the existing staff.

In some focus groups, participants recognised the responsibility of hospital users to help maintain cleanliness of the hospitals. They especially made mention of spitting pan and throwing down garbage by patients and their attendants, and strongly recommended that people use hospitals bins for this purpose. They were of view that people need guidance and education to fulfill their role in helping to keep hospital clean.

Most of the groups said doctors and nurses should help people to understand their responsibility at the time of admission. In some groups participants suggested putting up display boards with key messages on cleanliness as well as directions. In some groups they also suggested using the media such as local newspaper and television to disseminate these messages.

⁶⁴ 282/311 hospital outpatients reported their satisfaction with cleanliness in the consultation/examination room compared with 239/290 in the baseline; OR weighted for literacy of the respondent 1.97 95% CI 1.21-3.22

⁶⁵ 99/162 household inpatients in the follow-up survey were satisfied with hospital cleanliness compared with 50/140 in the baseline; OR weighted for sex of the household head 2.60, 95% CI 1.62-4.18

⁶⁶ 180/294 hospital inpatients in the follow-up survey showed their satisfaction with the cleanliness in the ward compared with 157/307 in the baseline; OR weighted for literacy of the respondent 1.44 95% CI 1.04-2.00

Management of central waste disposal pits

Although central waste disposal pits were found to be functional in all the hospitals, their management needs some attention especially at Hobiganj and Moulvi Bazar district hospital. There it was observed that staff who were responsible for putting the waste into the pits were not doing it carefully. Waste material was observed lying around the pits instead of being in the pits. The disposal of waste into the pits may need better monitoring.

It was also observed in all the hospitals that the pits did not have any barrier or instructions to prevent access of people other than staff responsible for handling the waste. Thus in Sylhet district hospital, some one, probably a child, had blocked the inlet of the pit for sharp wastes with a stone and damaged it. It may be useful to either put some barrier around these pits or to put a cautionary note warning people about the risks of tampering with them.

Disposal of waste from the central pit is a concern in all the hospitals. The pits have a capacity to take care of the waste for two years. They were designed on the assumption that the waste would decompose with time and hence the pits practically would never fill. However, this is not happening and hence there is an issue about what will happen after they become full. The RMO and Civil Surgeon at Hobiganj reported that the way pits have been designed makes it very difficult to clean them. There is no exit given for toxic gases and hence there is a perceived danger of asphyxiation or poisoning of anyone who tries to clean the pit, so no one is willing to try to do this.

At Sunamganj district Hospital the RMO mentioned that they do not feel any immediate need to take care of the wastes from central pit as it has capacity for next two years. However, when asked as to whether they had any plans for what to do after two years, he said there were no plans and he was waiting for HII directives and advice on this matter.

At the Medical College Hospital the director mentioned that they were trying to develop a link with the local municipality to remove the waste from the central pit. However, they had not developed much cooperation so far.

Privacy

The HII placed a lot of emphasis on improving the conditions of privacy for both indoor and outdoor patients. This includes both hardware support such as provision of screens, construction of brick partitions in the ward and even construction of separate units such as labour room in some hospitals. In addition there has been behavioural change communication (BCC) training of service providers particularly doctors and nurses about practices to ensure privacy.

Provider's practices to ensure privacy

Table 13: Status of key elements related to privacy in OPD

Privacy element	Follow-up	Baseline
<i>During consultation</i>		
Door open [†]	76%	93%
Other patients in room	40%	54%
Use of screen	24%	23%
<i>During examination</i>		
Door open [†]	77%	94%
Other patients in room	26%	49%
Use of screen	26%	12%

Elements related to privacy among hospital outdoor patients have shown an improvement from the baseline. Table 13 compares some key indicators related to privacy between the baseline and follow-up survey. An outpatient in the follow-up survey was less likely to report that the door of the consultation room was open or there were other patients in the room during consultation and examination. The improvement in ensuring that the door to the consultation room is closed during consultation is more apparent in the district hospitals⁶⁷. The use of screen by the doctors and nurse is a useful indicator to check privacy practices for the hospital inpatients. Most of the hospital inpatients reported the use of screen by doctors (95%; 279/293) and nurses (96%; 281/294). A hospital inpatient in the follow-up survey was much more likely to report the use of a screen by the doctors⁶⁸ and nurses⁶⁹ during examination compared with an inpatient in the baseline survey.

Would someone ensure that medical sales representatives do not stay in the doctor's room. They are always occupying the room and stay there even when the doctor is seeing the patient.
Male focus group, urban Sunamganj

Patient's satisfaction with privacy

Improvements in the elements of privacy practices are translated into an increased satisfaction of outpatients with privacy. Nearly three quarters of hospital outpatients (72%; 222/310) were satisfied with the

⁶⁷ Among district hospitals 163/211 hospital outpatients in the follow-up survey mentioned that the door of the consultation room was open during consultation with doctor compared with 197/201 in the baseline; OR 0.07 95% CI 0.02-0.35

⁶⁸ 279/293 hospital inpatients in the follow-up survey reported the use of screen by the doctors during examination compared with 260/304 in the baseline; OR weighted for literacy of the respondent 3.08 95% CI 1.64-5.76

⁶⁹ 281/294 hospital inpatients in the follow-up survey reported the use of screen by the nurses during examination compared with 263/305 in the baseline; OR weighted for literacy of the respondent 3.16 95% CI 1.66-6.01

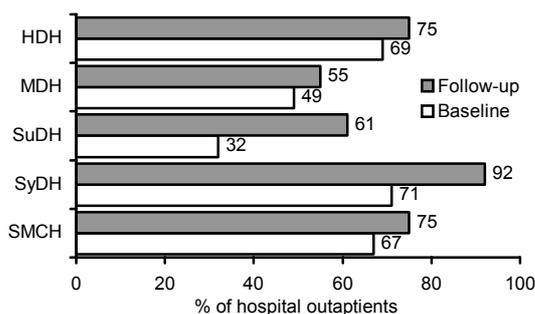


Figure 21: Satisfaction of hospital outpatients with privacy

privacy of their consultation with the doctor. A patient in the follow-up survey was significantly more likely to be satisfied with the privacy during the consultation compared with one in the baseline⁷⁰. Figure 21 shows the change in the level of satisfaction with privacy for different hospitals.

Inpatients were less satisfied with privacy arrangements than outpatients. Among household inpatients about two thirds (68%; 110/162) were satisfied with the privacy arrangements during their stay in the hospital. A household inpatient in the follow-up survey was significantly more likely to be satisfied with the hospital privacy arrangements compared with one in the baseline⁷¹.

Less than half of the hospital inpatients (44%; 130/293) were satisfied with the privacy they had in the hospital. The proportion was higher in Hobiganj (58%; 29/50) and Sylhet district hospitals (22/38) and lowest in Moulvi Bazar district hospital (23%; 13/56). There was no difference in the level of satisfaction between the follow-up and baseline survey (44%; 135/305).

Box 3: People’s perceptions about adequate privacy (FGDs)

Outpatient

- Male doctor for male and female for female patients
- Separate room for consultation and examination
- No other person in the room
- In case female doctor not available a female nurse should be present for female patients particularly during examination
- Use of screen
- Special care to ensure privacy for pregnant women

Inpatient

- Screen/curtain/high walls around each bed
- Separate wards for male and female patients
- Male visitors and un-necessary male staff should not be allowed in the female wards
- More space between two adjacent beds
- For examination/dressing patient should be taken to a separate room

Although there has been some improvement in people’s satisfaction with privacy arrangements, the practices of key privacy elements especially during consultation and examination still require more attention and emphasis. These actual practices have shown little change between the baseline and follow-up. Observations made during institutional review confirmed failures in privacy practices. For example, in most of the hospital OPDs, other patients were noted to be in the room with the patient during consultation, without the use of any screen. Also rooms were observed to be open giving a clear view to all those who were outside, of what was happening inside. In some places especially the medical college hospital when doors were closed, this was more to prevent a crowd of patients entering the doctor’s room than to ensure privacy.

The HII has provided hardware to ensure that screens are available in the outpatient departments and this was indeed observed during the visits to the district and medical college hospitals. However, ensuring the actual use of screens will require more intense behavioural

⁷⁰ 222/310 hospital outpatients in the follow-up survey showed satisfaction with privacy compared with 169/288 in the baseline; OR weighted for sex of the patient 1.74, 95% CI 1.24-2.45

⁷¹ 110/162 household inpatients in the follow-up survey were satisfied with privacy compared with 78/141 in the baseline; OR weighted for sex of the inpatient, 1.69, 95% CI 1.05-2.70

change communication with the providers. This is borne out by the sorts of suggestions made by the community focus groups to improve people's satisfaction with privacy arrangements (box 3). Most of the pre-requisites described by group participants are linked to the providers' practices and privacy arrangements that should be routinely observed as a part of patient care. These do not require any additional resources except some behavioural change on part of the service providers. Linking specific components of HII to the suggestions made by the focus groups could help to improve people's satisfaction with privacy arrangements at these hospitals.

Doctors and nurses should protect the dignity and respect of our mothers and sisters. It's their duty.
Male focus group, periurban Hobiganj

Hospital Management should stop excessive attendants and visitors in the hospital to ensure privacy.
Female focus group, Sunamganj

Almost all the focus groups were of the view that additional privacy arrangements were needed for women as compared to those for men. These included:

- Strict restrictions on males entering female wards or using female toilets
- Strict supervision and security around female wards
- Separate examination room for women
- Availability of female doctors for women
- Separation of maternity ward from general female wards

Problems for women using the hospitals

When I went to see the doctor at the district hospital he said "I am not your servant that I must see you in a good way."
Female focus group, periurban Hobiganj

Participants in all the focus groups were of the view that women face particular problems using the services of the district and medical college hospitals. The most common problem identified was non-availability of female doctors so that women are often seen by a male doctor even during pregnancy and delivery. Because of this they are unable to explain specific problems clearly to the male doctor. Another problem that was identified was long waiting times. People suggested that standing in long queues could be less problematic for men than women. Women in their focus groups especially mentioned that they are neglected by the hospital staff in comparison with male patients. They also mentioned that non-availability of medicines caused more problems for them as it was difficult for them to buy medicines from outside. Box 4 list some suggestions made by focus groups to help make women feel more comfortable in using the hospital services.

Box 4: Suggestions to help women feel more comfortable in using hospitals

- Female doctors to see female patients
- Staff respectful to the women
- Better privacy
- Ensure availability of medicines
- Someone to guide and inform women about different facilities

Satisfaction with hospital staff

The Hospital Improvement Initiative has focused on improving the patient management component of hospital service delivery. As a part of its quality control intervention, there is a strong focus on staff's communication and dealing with patients. The intervention includes a comprehensive training on communication and behaviour change as a part of quality control, followed by supervisory support through a quality assurance team. To assess the impact of these interventions patients were asked about their satisfaction with different staff members as a part of their experience at the hospitals.

Registration clerk

Eight out of every ten household reported outpatients (82%; 304/371) were satisfied with the way the registration clerk treated them. This proportion was the same as in the baseline survey (83%; 255/306). Some 15% (54/371) reported bad attitude as the problem with the registration clerk. In the baseline survey this proportion was slightly lower (12%; 36/304).

Among hospital interviewed outpatients, 94% (292/311) were satisfied with the registration clerk. This was more or less the same as in the baseline (89%; 257/288). Satisfaction was related to patients' waiting time for registration. A hospital outpatient who waited for five minutes or less was much more likely to be satisfied with the registration clerk than one who had to wait longer⁷². The effect was more profound in the district hospitals⁷³.

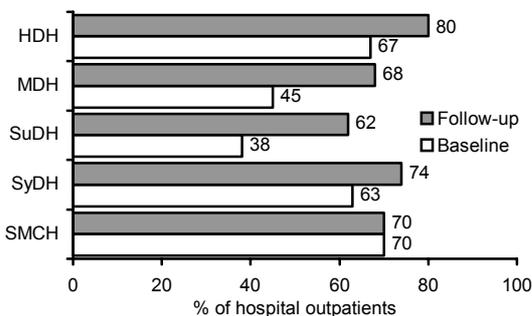


Figure 22: Satisfaction of hospital outpatients with the doctor

Doctor/health worker

Experience of outpatients

A slightly higher proportion of household (62%; 230/371) outpatients in the follow-up survey were satisfied with the way the doctor treated them, compared

⁷² 310/325 hospital outpatients who waited for five minutes or less for registration were satisfied with registration clerk compared with 234/269 who had to wait for more than five minutes; OR weighted for literacy of the respondent, 2.82, 95% CI 1.50-5.29

⁷³ Among patients at district hospitals, 235/243 outpatients who waited for five minutes or less for registration were satisfied with registration clerk compared with 139/163 who had to wait for more than five minutes; OR 5.07 95% CI 2.08-12.75

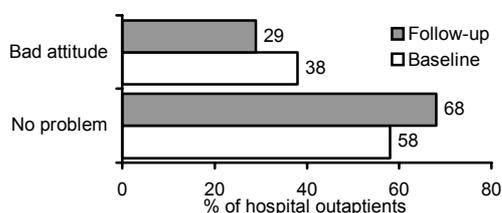


Figure 23: Main problems with doctor as mentioned by hospital outpatients

with the baseline (57%; 174/306). Among hospital outpatients, 70% (219/311) were satisfied with the doctor. A hospital outpatient in the follow-up survey was more likely to be satisfied with the doctor than in the baseline survey (Figure 22)⁷⁴. The improvement in satisfaction between baseline and follow-up was more pronounced in cases where the doctor used a screen during consultation⁷⁵ and when patients got all the medicines from the hospital⁷⁶. Fewer patients in the follow-up survey (29%; 91/311) mentioned bad attitude when asked openly about any problem with the way doctor treated them, compared with the baseline (38%; 108/287) (Figure 23).

Experience of the inpatients

Three quarters of household reported inpatients (74%; 119/161) were satisfied with the way doctor treated them. A household inpatient in the follow-up survey was 69% more likely to be satisfied with the doctor compared with one in the baseline survey⁷⁷. Nearly eight out of ten hospital inpatients (79%; 231/294) were satisfied with the way doctor treated them. A hospital inpatient in the follow-up survey was 75% more likely to be satisfied with the way doctor treated him/her compared with the baseline⁷⁸.

When asked about any problem with the doctor, 14% (40/285) of the hospital inpatients mentioned bad attitude as the problem. Both household and hospital inpatients in the follow-up survey were less likely to mention bad attitude of doctors as the problem compared with those in the baseline^{79, 80}.

⁷⁴ 219/311 hospital outpatients in the follow-up survey showed their satisfaction with doctors compared with 168/289 in the baseline; OR weighted for consultation time (two minutes or less v/s more) 1.43 95% CI 1.01-2.04

⁷⁵ Among cases when doctor used a screen during consultation, 67/99 hospital outpatients in the follow-up survey showed their satisfaction with doctors compared with 8/38 in the baseline; OR 7.85 95% CI 2.88-21.29

⁷⁶ Among outpatients who got all medicines from the hospital, 104/127 hospital outpatients in the follow-up survey showed their satisfaction with doctors compared with 105/180 in the baseline; OR 3.23 95% CI 1.81-5.79

⁷⁷ 119/161 household inpatients in the follow-up survey were satisfied with the way doctor treated them compared with 85/142 in the baseline; OR weighted for sex of the household head 1.69, 95% CI 1.02-2.79

⁷⁸ 231/294 hospital inpatients in the follow-up survey reported to be satisfied with the doctor compared with 197/301 in the baseline; OR weighted for waiting time for doctor (within 24 hrs v/s more than 24 hrs) 1.75 95% CI 1.20-2.55

⁷⁹ 40/285 hospital inpatients in the follow-up survey mentioned bad attitude as the problem with the doctor compared with 84/299 in the follow-up survey; OR weighted for waiting time for doctor (within 24 hr v/s more) 0.46; 95% CI 0.30-0.71

Nurses

Two thirds of the household reported inpatients (65%; 104/161) were satisfied with the way nurse treated them, the proportion being slightly higher than the baseline (58%; 82/142). Also fewer people mentioned attitude of the nurses as a problem (31% in the follow-up v/s 43% in the baseline).

Eight out of ten hospital inpatients (80%; 236/294) were satisfied with the way nurses treated them. A hospital inpatient in the follow-up survey was 58% more likely to report satisfaction with nurse compared with one in the baseline⁸¹. When asked about problem with the nurse, 22% (63/291) of the patients mentioned bad attitude as the problem. The proportion was lower than in the baseline (28%; 87/308).

Cleaners

The cleaners think themselves as King of the hospital. Nurses, ayas, they don't pay attention even if someone is dying.
Male focus group, periurban Hobiganj

Most household inpatients (89%; 144/162) were satisfied with the way the cleaners treated them. A household inpatient in the follow-up survey was more likely to be satisfied with the cleaner's behaviour compared with one in the baseline⁸². Also fewer inpatients mentioned bad attitude as the problem with the cleaner⁸³.

Among hospital inpatients 96% (187/195) were satisfied with the way cleaner treated them. A hospital inpatient in the follow-up survey was more likely to be satisfied with the cleaner compared with one in the baseline survey⁸⁴, especially in the district hospitals⁸⁵. Only 9% (27/286) of the hospital inpatients mentioned bad attitude of the cleaners as a problem, less than in the baseline survey⁸⁶.

⁸⁰ 33/161 household inpatient in the follow-up survey mentioned attitude of the doctor as a problem compared with 52/142 in the baseline; OR weighted for sex of the household head 0.49, 95% CI 0.29-0.83

⁸¹ 236/294 hospital inpatients in the follow-up survey showed their satisfaction with nurse compared with one in the baseline; OR weighted for literacy of the respondent 1.58 95% CI 1.07-2.32

⁸² 144/162 household inpatients in the follow-up survey were satisfied with the way cleaner treated them compared with 87/142 in the baseline; OR weighted for sex of the household head 4.77, 95% CI 2.63-8.65

⁸³ 19/159 household inpatient in the follow-up survey mentioned attitude of the cleaner a problem compared with 48/140 in the baseline; OR weighted for hospitals 0.28, 95% CI 0.15-0.50

⁸⁴ 266/294 hospital inpatients in the follow-up survey reported satisfaction with cleaner compared with 233/306 in the baseline; OR weighted for sex of the inpatient 2.97 95% CI 1.86-4.76

⁸⁵ Among district hospital inpatients, 187/195 showed their satisfaction with the cleaner in the follow-up survey compared with 161/202 in the baseline; OR 5.95 95% CI 2.57-14.31

⁸⁶ 27/286 hospital inpatients in the follow-up survey mentioned bad attitude of cleaner as a problem compared with 80/305 in the baseline; OR 0.29 95 % 0.18-0.48.

Overall satisfaction with hospital services

Outpatients

Overall six out of ten hospital outpatients (60%; 187/310) were satisfied with services they received at the hospital. *An outpatient in the follow-up survey was 55% more likely to be overall satisfied with the services compared with one in the baseline*⁸⁷. Figure 24 shows overall satisfaction of hospital outpatients with the services of their hospitals. The change was more pronounced at Hobiganj district hospital⁸⁸. At Moulvi Bazar hospital the situation was the opposite when fewer patients reported satisfaction with hospital services than in the baseline.

The improvement in level of satisfaction in the follow-up survey was also more pronounced among female patients⁸⁹, among those patients who reported the use of a screen by the doctor during the consultation⁹⁰, among those who were also satisfied with the cleanliness⁹¹, and among those to whom doctor explained the problem⁹².

Inpatients

Figure 25 shows the inpatients' satisfaction with services at different hospitals in the baseline and follow-up surveys. Overall six out of every ten hospital inpatients (59%; 173/293) were satisfied with services they received at the respective hospital. The proportion was higher than in the baseline survey. However, the change was not significant⁹³.

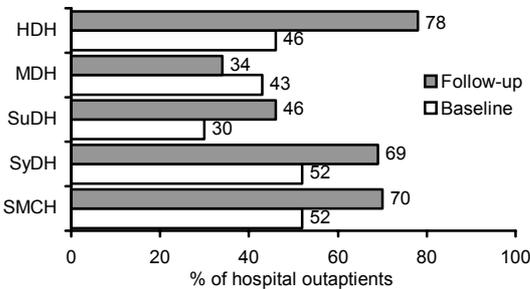


Figure 24: Overall satisfaction of hospital outpatients with hospital services

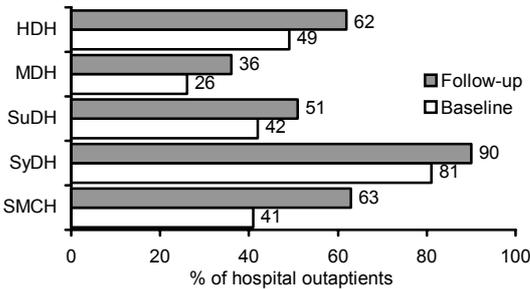


Figure 25: Overall satisfaction of hospital inpatients with hospital services

⁸⁷ 187/310 hospital outpatients in the follow-up survey showed their satisfaction with the outpatient services compared with 131/288 in the baseline; OR weighted for satisfaction with doctor; 1.55 95% CI 1.05-2.29

⁸⁸ At Hobiganj district hospital, 39/50 hospital outpatients in the follow-up survey showed their satisfaction with the outpatient services compared with 23/50 in the baseline; OR 4.16 95% CI 1.59-11.06

⁸⁹ Among female hospital outpatients, 100/154 in the follow-up survey showed their satisfaction with the outpatient services compared with 62/148 in the baseline; OR 2.57 95% CI 1.56-4.22

⁹⁰ Among hospital outpatients who reported use of screen during consultation, 54/175 in the follow-up survey showed their satisfaction with the outpatient services compared with 23/62 in the baseline; OR 4.36 95% CI 1.98-9.67

⁹¹ Among hospital outpatients satisfied with cleanliness, 184/281 in the follow-up survey showed their satisfaction with the outpatient services compared with 117/237 in the baseline; OR 1.95 95% CI 1.34-2.83

⁹² Among hospital outpatients whom doctor explained the problem, 104/130 in the follow-up survey showed their satisfaction with the outpatient services compared with 63/115 in the baseline; OR 3.30 95% CI 1.80-6.09

⁹³ 173/293 hospital inpatients were satisfied with hospital services in the follow-up survey compared with 134/295 in the baseline; OR weighted for satisfaction with doctor, 1.34 95% CI 0.91 1.98

Institutional perspective and service providers' views

Although the major focus of the community based user's survey has been to get the users' perspective about hospital services, we also documented service providers' views about the way the HII intervention has worked.

Management capacity development

This aspect of the hospital improvement initiative aims to help the hospital management to develop skills to sustain the systems established by the effort of the HII project. Interventions include development of management protocols for ensuring quality of services, training of staff members and refresher courses and establishment of support structures such as hospital management committees and quality assurance teams.

Quality assurance protocols

All the hospitals were found to have standard quality assurance protocols and they were made available to the CIET field coordinators for review during their visits to these hospitals. Almost all the hospital incharges rated these tools as effective in improving the quality of different service components at the hospitals.

Training of staff members

Training has been an important and integral component of the management development programme of the HII. Staff members at all the hospitals have received training and refresher courses on different aspects of hospital service management. These trainings started soon after beginning the pilot in Sylhet division and finished by the end of 2001. For instance:

- All members of the management committee (six at the medical college and five each at the district hospitals) have received management training comprising several modules on hospital management. The training is intended to facilitate team work for hospital management and aid in identification and resolution of management problems and issues helping in decision making.
- All the staff members at the medical college and district hospitals including members of the quality assurance teams at these hospitals have received training on quality assurance. For this purpose an

The training imparted through HII has very useful for staff especially for quality assurance. The training manuals and protocols are simple and can be easily followed.
(RMO Incharge, District Hospital)

initial TOT was organized with identification of a team of master trainers from within each hospital. These in turn conducted trainings for other hospital staff members in their respective hospitals. The training module for quality assurance has been developed in consultation with the hospital staff members to develop interest and ownership and is based on practicable tips to ensure quality is service delivery. Different modules of this training include infection control, hand washing practices, waste management and communication.

- All the cleaners and sweepers have received special training on aspects of cleanliness, different procedures for ensuring a clean environment and handling waste including use of colour coded bins.
- Members of the hospital administration at the medical college hospital have received training on financial management. This training is an important step in developing a computerized financial and accounting system at the hospital.
- All the members of the management committees at the different hospitals and some other key members have received training on basic computer skills. The idea is to promote computer literacy and use of computers for documentation and record keeping. However, it still needs to be backed up by provision of hardware such as computers and other accessories.

All these trainings are now being backed up by regular refresher courses to sustain the knowledge and skills and ensure appropriate practices during service delivery.

One problem for the field data collection was a general lack of documentation about training and other HII related activities kept at the hospital level. Although the central HII team had sent copies of reports and training records to the individual hospitals, the CIET team faced difficulty in collecting objective process information from the hospitals about the number of trainings and people trained at each hospital and the schedule for these trainings.

Hospital Management Committee

As a part of the HII intervention, management committees were formed at all the participating hospitals. Each committee consists of 5-6 members.

Information collected on the functioning of these committees revealed a variation between hospitals. For

Box 5: Issues discussed during management committee meetings

- Staff strength and filling of vacant posts
- Duties and performance of staff
- Repair and maintenance
- Equipment and supplies procurement
- Cleanliness and waste management
- Ensuring bed occupancy
- Behavioural change communication with patients

The management committee has been able to control visitors' influx during working hours from 8.00 am to 2.30 pm, helping the staff to perform their duties in a peaceful environment.
Hospital Director

The main success has been clinical quality assurance. This includes ensuring availability of staff at the clinics, including professors. In the inpatient department, we have ensured that professors and others do their rounds regularly.
Hospital Director

Box 6: Recommendations for making management committee more effective

- Delegation of authority and autonomy to make decisions, including hiring and firing authority
- More financial decentralization
- Ensuring availability of members by inducting more members with distribution of specific responsibilities
- Involve and include civil society representatives like local professionals, journalists, philanthropists and public representatives
- Availability of logistics such as stationery and secretarial assistance
- Frequent and regular meetings,
- Some incentives for the committee members for extra responsibility

instance, when asked about meetings of the committee, SOMCH, and Sunamganj and Hobiganj district hospitals reported a meeting during last three months. In Moulvi Bazar district hospital, the last meeting was held about a year ago while at Sylhet district hospital the committee met only once soon after its formation. The meetings of the committees were irregular at all the hospitals. The main reasons identified for this were frequent transfers of some members and non-availability of others. However, all hospitals did have a good documentation of these meetings of the committees in the form of minutes. Box 5 lists the type of issues that were discussed in the last meetings of the committee in each hospital.

When asked about major achievements by the management committee, the director of the medical college hospital mentioned that the committee was trying to facilitate matters. The main success has been clinical quality assurance. This includes ensuring availability of staff at the clinics including professors and time management. In the inpatient department, it has been ensured that professors and other staff do their rounds regularly. Security measures have been improved in the inpatient department. Thus influx of visitors is controlled during working hours from 8.00 a.m. to 02.30 p.m. helping the staff to perform their duties in a peaceful environment. According to the RMO at Sunamganj district hospital increasing the bed strength from 50 to 100 was their biggest achievement. At Moulavi Bazaar the hospital management committee was able to deal successfully, with the repair and management of the hospital ambulance, while at Hobiganj hospital achievement was better maintenance of cleanliness and hospital waste management. At Sylhet district hospital the RMO incharge mentioned that the committee initially focused on improving hospital bed occupancy, however, not much could be done as the committee was not working effectively.

Except for Sylhet district hospital, the hospital managements were satisfied with the way the committee has worked so far. Box 6 lists recommendations made by the service providers at different hospitals to make the management committee more effective. The most common recommendation made was delegation of authority and powers to the management committee, especially financial authority. At the district hospitals people also recommended ensuring availability of committee members by filling vacant posts.

Box 7: Mechanisms for quality assurance at different hospitals

Medical College Hospital

- Weekly clinical meetings
- Seminars on different topics
- Contract basis employment of Class I and II workers
- Better monitoring and supervision through quality assurance team

Sylhet district hospital

- Training of staff on standard protocols
- Regular meetings with staff to discuss problems and identify solutions
- Regular monitoring of protocol compliance by supervisors.

Sunamganj district hospital

- Through Quality assurance team the overall quality of the services is supervised and ensures

Moulavi Bazar District Hospital

- Provision of training to the staff through HII
- Regular meeting of quality assurance team to review the situation and discuss issues
- Protocols and guidelines available for quality assurance and followed

Hobiganj District Hospital

- Through Quality assurance team

Box 8: Infrastructure development through HII at different hospitals

Medical College Hospital

Waste disposal pits – Four
Fire escape stairs – Three
Ward renovation – Five wards
Minor repair

Sylhet district hospital

Toilets renovated with fittings replaced
Total renovation of operating rooms
Total renovation of water supply system
Central waste disposal pits (Three types)

Sunamganj District Hospital

Expansion of Administration bloc,
Construction of brick wall partition between beds,
Construction of nursing counters in some wards
Central waste disposal pits
Construction of a new labour room

Moulavi Bazaar District Hospital

Construction of two new labour rooms,
Construction of brick wall partition between beds,
Central Waste disposal pits

Hobiganj District Hospital

Expansion of administrative block
Construction of brick wall partition between beds.

Quality assurance team

To look after the technical aspects of hospital services delivery and ensure quality of services, a quality assurance team has been established at each hospital. Hospital management at all the hospitals identified the quality assurance component of HII as an important mechanism for quality assurance (Box 7).

There was a mixed response about achievements made by the quality assurance team at different hospitals. For instance, at the medical college hospital, the hospital director was able to identify several specific aspects of service quality that have improved due to the efforts of the quality assurance team. These included improvement in the quality of service provided at outpatient clinics, better time management by staff (including professors) who come on time and stay for the full duration of clinics, better waste management and cleanliness, and control on visitors especially during morning hours. Among district hospitals the waste management component seems to have a high visibility and impact and was mentioned everywhere as an achievement of the quality assurance efforts. Other achievements included improved infection control and hygiene.

Overall management at the Medical college hospital and Moulvi Bazar hospital were satisfied with the working of the quality assurance team. However, at the remaining hospitals it was felt the quality assurance teams needed to be fully functional before an opinion could be formed about their effectiveness. Problems similar to those for management committees were identified for the working of the quality assurance teams at these hospitals.

Infrastructure development

The major emphasis of the HII has been to improve the technical aspects of service delivery through the management development component, but where necessary HII also provided support to improve hospital physical infra-structure as an aid to the technical component. Box 8 lists the information obtained from the hospital administration as a part of the institutional review on physical infrastructure development at each hospital. Again the waste management activities in the form of central waste disposal pits were highlighted at all the hospitals.

Less successful aspects of the HII

Hospital management at the different hospitals also identified areas which they thought had not worked so well for the HII. The most common problem mentioned was the quality of some of the basic medical equipment supplied via the Crown Agents procurement organisation. Items had arrived damaged and had had to be repaired. Overall hospital managers were less happy with this aspect of the HII.

The hospital management at the medical college and Sylhet district hospitals also identified the communication component as an aspect of the HII that has not produced the desired results. According to them the main reason for this is the typical attitude of providers and clients towards government services which is not easy to change. They also mentioned lack of motivation and incentives as reason for lack of success. However, respondents were of the view that with more training and good supervision matters could improve.

Sustainability concerns

It was encouraging to see the positive attitudes of management at all the hospitals about sustainability of the initiatives launched through the HII. Most of them considered that the interventions were designed in such a way as to become a part of hospital routine with the passage of time. However, they did mention concerns about the shortage of staff and sustaining of trained human resources due to frequent transfers (box 9). Most of these issues relate to policy level decisions at the ministry and directorate level. Managers recommended that vacant posts should be filled and trained persons should not be transferred from the hospitals. They noted that interest and motivation of staff would be a key factor for sustaining the initiative over time.

Box 9: Sustainability concerns for HII expressed at different hospitals

Medical College Hospital

Vacant posts

Over load of patients; they have about 700 beds but are serving on an average about 1100 patients

Limited authority and power to act

Limited financial resources specially for repair and maintenance

Difficult to control class III and Class IV staff

Sylhet District Hospital

Continuation of logistic support for all the functions

Availability of staff for constitutions and continuation of different committees

Maintaining skills – would need refresher trainings

Sunamganj District hospital

None, except availability of staff

Moulavi Bazaar District hospital

Vacant posts, transfer of manpower

Hobiganj District hospital

None

The HII interventions are sustainable and can easily be absorbed in the mainstream of the health system. We have already rolled the programme into another division.

Line director Hospitals, DGHS

Advisory Committee – Community views

Box 10: Perceived benefits from advisory committee (FGDs)

- Ensure better facilities to the patients
- Would help improve service quality and management
- Better monitoring of hospital services and supplies
- People would have a useful channel to communicate their problems
- Representation of civil society in hospital management

Service quality will improve if there is an advisory committee.

Male focus group, Periurban, Sylhet

People would find a place to tell their problems.

Male focus group, periurban Sunamganj

This will increase accountability of hospital authority.

Male FGD, Urban Sylhet

There should be a rolling membership to the advisory committee. If people stay for long they may become corrupt.

Male FGD, Urban Sylhet

Community focus groups of men and women both appreciated the idea of an advisory committee for the hospitals to support the management committee. They thought people would be happy to get involved with such a committee. Box 10 lists some benefits as perceived by community members from such a committee.

To inform more people about the advisory committee, focus group participants suggested that members of the committee or public representatives should organize regular meetings with community members. Other suggestions included making public announcements, using media such as radio, TV or local newspapers, and putting up posters or boards to display membership and contact details for the members of the advisory committee.

The most important role identified by the majority of the groups was serving as a watch dog to keep an eye on the quality of services, and receipt and distribution of supplies, especially medicines. For this they suggested that the committee members should make surprise visits and make observations. Based on their monitoring they would advise the hospital management committee to take necessary actions. The next perceived important function was to serve as a channel of communication. The committee would contact people to identify their problems as well as people contact the committee to report concerns. Suggested channels for effective communication for people to inform the advisory committee about their problems are listed in box 11.

Text box 11: Channels for people to communicate with committee (FGDs)

- Establish an office centre where people could contact. One person should be appointed to be present there 24 hr.
- Put up a complaint/suggestion box
- Direct meeting with committee members

Policy perspective – Line director's view

It is encouraging to see that the HII initiative has been able to involve and obtain full policy support the directorate of health services, especially the line director hospital services. A discussion with the line director and his team revealed their deep involvement in the implementation of the initiative. The team was well aware about different administrative and technical aspects of the programme implementation, having a complete updated knowledge of its progress. This is indicative of their interest and involvement. They mentioned that the lessons learnt from the initiative in Sylhet division are being reviewed and incorporated in the future national strategies for hospital services improvements throughout Bangladesh. They identified hospital waste management as one such area where the model developed through HII has been approved to be replicated in other hospitals nationally. The line director and his team were keen to know about the findings from the community users' survey to see the impact of the initiative from clients' perspective. In fact they suggested that a similar benchmarking should be carried out in Chittagong division where the HII initiative has been extended recently.

Conclusions and recommendations

The Hospital Improvement initiative has now completed its three years of implementation. The programme has now been extended into another division of Bangladesh. The follow-up community based users' survey has provided an opportunity to assess progress so far in comparison with the baseline status. It will also be useful to consider the findings in relation to the process indicators for different components that have been documented in other reports.

There is no formal control group (of hospitals without the HII) for this comparison of baseline and follow-up surveys. Conclusions about the cause of any changes between baseline and follow-up therefore have to be guarded. One source of variation between the surveys was reduced by visiting the same communities for the baseline and follow-up surveys. During the period between the baseline survey (late 1999) and the follow-up survey (beginning of 2003), there is evidence from three cycles of the nationally representative CIET service delivery survey (SDS) about public perceptions, use and experience of government health and family planning services (including hospitals). Data collection for the first SDS took place in early 1999, for the second SDS in late 2000 and for the third SDS in early 2003. Thus the changes described in the follow-up HII survey can be placed in the context of what was happening in the country generally.

In the follow-up HII survey there is evidence of improvements of public perceptions about the hospitals and increased satisfaction of patients attending the hospitals with several aspects of their experience. Over the period between baseline and follow-up surveys, evidence from the SDS cycles indicates that public perceptions about government health and planning services in general became *less positive* and there was *no improvement* in the satisfaction of patients. Most of the positive changes found in the follow-up HII survey are against the national trend (or even the trend in Sylhet generally), making it more likely that they are indeed the result of the HII programme itself.

The improvement in patient perceptions and reported experience was not uniform across all aspects of service provision. The areas where improvements in patient perceptions were most evident are those where the HII

programme placed particular emphasis and where those involved felt they had made a difference. There were some issues about the hospital services where the HII programme did not place emphasis, or could not make changes for one reason or another; the experience and perceptions of patients did not improve in these areas. This pattern suggests that documented improvements might indeed be due to the HII programme. It also provides a basis for recommending areas where the future HII programme could be strengthened.

Programme successes

The comparison of follow-up and baseline user surveys has identified areas where the HII initiative has been able to make an impact in terms of patient experience and perceptions.

- Public opinion and knowledge about the hospitals has improved. For example, more people knew about the Sylhet district hospital in the follow-up compared with the baseline. The improved perception about these hospitals is in contrast to an overall worse public perception of government health and family planning services between 1999 and 2003 shown in the SDS cycles.
- More people in communities near the hospitals reported using government services (mainly the hospitals) for treatment in the follow-up survey compared with the baseline. The SDS cycles have found no such increase in use of government facilities nationally.
- Hospital waste management has emerged as a strong, visible component of the HII, well recognized by the hospital managements. While some of this is “behind the scenes” and not apparent to patients, there has been an impact on overall cleanliness in the hospitals and patients have noticed this and are more satisfied with cleanliness.
- Better administration and management has apparently improved patient flows and the way patients are dealt with, in both outpatient and inpatient departments. Patients are waiting significantly shorter times for registration and to be seen by doctor in almost all the hospitals. Outpatients see the doctor (or other provider) for a longer consultation than previously. The admission process has apparently improved so that more people are admitted directly without having to use an agent or other intermediary to secure

admission. Inpatients are seen by a doctor sooner and have more frequent visits from a doctor.

- Except for Sylhet district hospital, there continues to be a high turn over of patients, which is a particular burden for inpatient care. Despite a shortage of beds in relation to the number of admissions the hospitals are managing to provide beds for almost all the inpatients. In fact, the hospital administrations are probably putting up extra beds as bed occupancy rates are over 100%.
- More patients reported that basic privacy practices were followed and more were satisfied with privacy in the follow-up survey compared with the baseline. However, many patients are still not accorded even basic privacy and many remain dissatisfied with privacy in their contact with the hospitals. There is room for much more improvement in privacy experienced by the patients, but this will require a change in attitude and behaviour of the service providers and it will take time and effort to bring this about.
- Patients attending the hospitals in the HII programme were more satisfied with the way they were treated by the providers in the follow-up survey. Fewer patients in the follow-up survey mentioned that they had any problem with the staff members or complained of bad staff attitude. At the same time, the SDS cycles across the country have not documented any improved satisfaction of patients with the way they were treated by providers in government health facilities.
- The follow-up survey demonstrated that patients in the HII programme hospitals were more satisfied overall with the care they received, especially if they used outpatient services. Again, the national SDS cycles have not documented any increase in overall satisfaction among people who used government services for treatment between 1999 and 2003.
- The HII programme has been able to establish a good basis for skills development through its extensive management training activities. Hospital managers and staff are highly appreciative of the training programmes and the standard protocols that have been developed and provided to all the HII hospitals.
- The establishment of management committees and quality assurance teams has been recognized in the hospitals and centrally as an important step in strengthening local capacity to deal with management issues and make independent decisions. At the same time it promotes an environment of transparency and

accountability as important decisions are made by a team rather than by individuals.

- Targeted infrastructure development (repairs, renovations and new construction) to support specific service delivery components has been a popular element of the HII programme. Hospital managers reported that this has improved the efficiency of services.
- Active involvement of policy makers in the line directorate of hospital services and managers in all the hospitals has been important to the success of the initiative. There is a sense of ownership among hospital managers who are optimistic about the sustainability of the initiative. There is also willingness among policy makers to learn from the experience and incorporate positive aspects into national policies.

Areas for future improvement

The follow-up survey has also helped to identify areas where the programme was less successful and which could be potential areas for focus as the HII rolls out into other areas of the country.

- Although the HII intended to improve the referral systems to the hospitals, in practice this proved difficult because the hospitals were not given clear roles, there were staffing shortages, and there were no clear guidelines about fees and exemptions. It is not surprising, therefore, that people continue to go to these hospitals directly, bypassing lower level facilities. This contributes to the heavy pressure on the hospital services, often with conditions that should be managed in primary care facilities. In the next phase of the HII, it may be worth rethinking interventions to strengthen referral linkages between government health facilities.
- The full time of official outpatient sessions is not effectively used, as medical staff often come late and leave early, reducing the effective time available to see patients. Waiting times have been reduced and consultation times have increased but further improvement could be made if the full complement of staff attended the full sessions. Monitoring and supervision through management committees might help, but it will be important to discuss the problem and seek solutions together with the medical staff concerned.

- Inpatients continue to have too many attendants with them and the problem has in fact worsened since the baseline survey. Participants in focus groups reported patients need attendants to ensure their quality of care. However, people do recognize that too many attendants pose a problem for efficient running of the wards, and this could be a basis for a behaviour change communication strategy. Such a strategy would need to be coupled with improved care and attention for patients, and publicizing the improvements, so that people no longer feel the need to have multiple attendants staying with each inpatient.
- Lack of availability of medicines continues to be a major concern raised by users of the hospitals. There has been an apparent deterioration in the availability of medicines between the baseline and follow-up surveys. This reduced availability of medicines reflects the national situation documented in the SDS cycles. Factors related to availability of medicines include timeliness and adequacy of supply of medicines to the hospitals, prescription patterns of the providers, and leakage of hospital medicines to outside facilities. Problems in *some* of these areas could be addressed by effective hospital management. The HII initiative to date has not focused on the issue of medicines availability but it may be useful to consider some management interventions around this in the future programme.
- Data on costs suggest some people pay more than official fees, although they rarely reported making extra payments when directly asked about this. Patients may not always know when they are paying more than they should officially pay. Making people aware of which services they are required to pay for and how much would increase transparency and reduce the opportunities for extracting unofficial payments from patients. Attention to this issue could be part of the future HII programme.
- Although patients are now more satisfied with privacy arrangements, the actual privacy practices especially during consultation and examination in the outpatient department still leave a lot to be desired. Screens may be present but in many cases they are not used. Further work with providers is needed to support them in changing behaviour in line with guidelines. This could make use of suggestions about privacy from patients in focus groups.
- Hospital waste management has been a successful component of the initiative. However, the

management of central waste disposal pits needs more attention. The staff who are responsible for putting the waste into the pits need more training and supervision. Sustainable arrangements for disposal of waste from the central pit also need to be explored.

- Managers in all the hospitals complained about the quality and type of supplies and equipment purchased and provided as a part of the initiative. The reasons for this problem are not clear but some discussion between the central HII management and the hospital managers would be useful to clarify the issues and seek solutions.
- Hospital managers, particularly at the medical college hospital and Sylhet district hospital, were dissatisfied with staff communication with each other and with patients. According to them the problem lies in the attitude of providers and clients about government services, which is not easy to change. They also mentioned lack of motivation and incentives for staff as reasons for lack of success in the area of provider-client relations. They suggested the situation could improve with more training and good supervision.
- Under utilization of Sylhet district hospital remains an issue. Essentially, the district hospital serves as an outpatient referral post for the medical college hospital. The district hospital is covered by the medical college hospital management but there seems to be little coordination to distribute the patient load between the two facilities. Better utilization of Sylhet district hospital could reduce the client burden of the medical college hospital and improve efficiency of both facilities.
- Hospital managers identified lack of documentation about HII activities and lack of policy guidelines as a problem. Apparently not all materials sent from the central HII team were available in the hospitals when the field teams visited. It could be important to help hospital managers to develop systems for storing documentation about the HII, and perhaps to increase policy documents sent out to hospitals, while being clear that written policies are not useful unless they can be implemented.