Creating the Conditions for Scaling Up the Integration of Reproductive Health Services for Men in Health and Family Welfare Centers in Bangladesh

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April 2008

This study is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement No. HRN-A-00-98-00012-00 and Subproject number AI05.45A. The contents are the

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EXECUTIVE SUMMARY

An operations research (OR) study, supported by the Population Council's Frontiers in Reproductive Health (FRONTIERS) Program, had showed that reproductive health services for men could be feasibly and acceptably integrated within the Health and Family Welfare Centres (HFWC) in Bangladesh, which have been primarily women-centered health facilities (NIPORT et al. 2004). Given these findings, this follow-on study was implemented to create the conditions for scaling up the model through identifying and piloting the operational details to consider when taking the intervention to scale. The Directorate General of Family Planning (DGFP), in collaboration with the Institute of Child and Mother Health (ICMH), scaled up the intervention in 40 HFWCs selected from four districts of Dhaka division.

The scale-up activities were carried out in three phases. The first was a preparatory phase, consisting of a review and revision of the teaching and communication materials developed during the original OR project, which included incorporating the systematic screening instrument to identify clients' unmet needs during the registration process. In the second phase, the revised model was introduced into 40 HFWCs. Activities included orienting program managers, supervisors, and field workers, creating a cadre of master trainers, and providing theoretical, practical, and refresher training to service providers on case management for reproductive tract and sexually transmitted infections (RTIs and STIs). To make people aware of the availability of RTI/STI services, 463 group meetings were conducted at the community level. The third phase entailed assessing the feasibility of scaling up this revised model through analysis of service statistics, exit interviews with clients, and observation of client-provider interactions. Throughout the process, cost data were collected and analyzed.

A total of 26 master trainers were trained and 110 service providers successfully completed the training on counseling and treating RTIs/STIs using the syndromic management approach. The results revealed significant improvements in the trainees' knowledge and competence in the management of RTI/STI clients. For example, the proportion of providers who knew how to treat urethral discharge nearly tripled following the training (increasing from 36% to 96%). The refresher training was vital for retaining providers' skills and clarifying their questions, and is strongly recommended for any scale-up process.

As was demonstrated in the pilot OR project, adding services for men increased utilization of the facilities by both men and women. During the six-month scaling up period, approximately 30 percent more clients received services from the 40 HFWCs. Of the adult clients (those over age 14, comprising 71% of clients) attending the clinic, 17 percent were males. The monthly average number of adult male clients visiting increased from 41 to 55 per HFWC over this period; similarly, the average number of adult female clients also increased from 200 to 263 per month at each HFWC.

Approximately 82 percent of adult clients (96% of the men and 79% of the women) visited the HFWCs for general health care. More females received family planning and reproductive health services than males (10% versus 2%). During the scale-up period, service providers diagnosed and treated 1,862 RTI/STI clients, 14 percent of them men. Condom distribution gradually increased over time in areas where the condom supply was regular, but declined where the supply was irregular (condoms were out of stock for almost three months).

The systematic screening instrument, a method developed by FRONTIERS to identify clients' unmet needs, was introduced during the scale-up. In nine percent of cases, systematic screening helped identify one or more unmet needs, most commonly general health care services, followed by RTI/STI treatment and family planning. In most cases, providers were able to administer the additional services during the same visit. However, providers' compliance with the screening procedure varied, with providers following the screening procedures correctly in one-third of the consultations observed. During the initial stages of scale-up, closer supportive supervision and encouragement from senior officials, such as a letter from DGFP, could strengthen compliance.

Exit interviews with clients and observations of client-provider interactions revealed a satisfactory quality of services overall, measured in terms of providers' focusing on the clients' needs, asking the right questions about their problems and service needs, including appropriate questions for RTI /STI clients, and correctly following syndromic management protocols. Most of the clients interviewed were satisfied with the services they had received.

These findings suggest that this model of service delivery and training could be scaled up countrywide, preferably in stages. No major operational difficulties occurred during the expansion, although a substantial amount of time was initially spent on planning and working out programmatic details, especially those related to providing theoretical and practical training. To ensure compliance with systematic screening by all providers, we recommend instituting supportive supervision, especially during the early stages of expansion. In addition, it is advisable to hold clinical training in a facility where many RTI/STI cases are treated (such as a district hospital).

It is estimated that about US$2.7 million would be required to expand this model nationwide, which represents a cost of approximately US$5,888 to introduce these interventions in a single upazila (sub-district) during the first year and $3,780 in the subsequent year.

ACKNOWLEDGEMENTS

This study was a collaborative effort by the Directorate General of Family Planning, the Ministry of Health and Family Welfare, the Institute of Child and Mother Health, and the Population Council's FRONTIERS program. The authors would like to acknowledge the contribution of 39 SACMOs, 43 FWVs, 40 FPIs, and over 180 field workers and their supervisors in implementing the interventions. The enthusiastic involvement of the program staff contributed to the study's success.

The authors would like to thank Mr. Akmal Hossain Azad, former Director General, for his personal attention and for allocating additional drugs for the treatment of RTI/STI and other clients. Special thanks are due to Dr. Jafar Ahmad Hakim, Dr. Ashraf Ali, Dr. Syeda Tazneen Waris, Dr. Giasuddin, Dr. AQM Rezaul Karim, Dr. AKM Nurul Hakim, and Dr. Fahmida for their active participation in the implementation and monitoring of the project activities.

We also thank Dr. Iffat Ara, Dr. Nusrat Zaman, Dr. Laila Parveen Banu, Dr. Saiful Islam, Dr. Chinu Rani, Dr. Md. Ali, and Dr. Wahid for their dedicated work as consultants in raining the service providers and monitoring project activities.

We are grateful to the Population Council staff who provided enormous technical support for this scale-up effort, without which this study could not have been accomplished within the specified timeframe.

Finally, we are highly indebted to the United States Agency for International Development (USAID) for their financial support of the FRONTIERS Program.

ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
DDS	Drug and Dietary Service
DGFP	Directorate General of Family Planning
ECP	Emergency Contraceptive Pill
FP	Family Planning
FPI	Family Planning Inspector
FWA	Family Welfare Assistant
FWV	Family Welfare Visitor
HFWC	Health and Family Welfare Center
ICMH	Institute of Child and Mother Health
IEC	Information Education Communication
MOHFW	Ministry of Health and Family Welfare
MCH-FP	Maternal and Child Health Family Planning
MT	Master Trainer
NIPORT	National Institute of Population Research and Training
PMC	Project Management Committee
RH	Reproductive Health
RTI	Reproductive Tract Infection
SACMO	Sub-Assistant Community Medical Officer
STI	Sexually Transmitted Infection
SSI	Systematic Screening Instrument

BACKGROUND

Bangladeshi men are generally unaware of issues affecting their reproductive health (Hussain et al. 1996; Population Council 1996; Rob et al. 2002; Hossain et al. 2004). Most of them have little or no knowledge of the symptoms, transmission and prevention of reproductive tract infections (RTIs) and sexually transmitted infections (STIs). Furthermore, most men do not have access to quality reproductive health care services (Piet-Pelon and Rob 1997; Khan et al. 1996). In rural areas, existing service delivery systems generally do not cater to the needs of men. Findings from the 2004 Bangladesh Demographic and Health Survey indicate that only 60 percent of ever-married women and 82 percent of currently married men have heard of HIV/AIDS, and only 24 percent reported that they had talked with their spouses about HIV/AIDS. Moreover, approximately 94 percent of ever-married women and 82 percent of married men did not know of any STIs other than HIV/AIDS (NIPORT, Mitra and Associates and ORC Macro 2004).

Men have substantial reproductive health needs that have not been addressed in the context of the current government health care delivery system in Bangladesh. Studies reveal that men suffer from various reproductive health problems (Piet-Pelon, Rob, and Khan 2000; Sabir et al. 2004). Nevertheless, they do not use the service provided by health facilities; most men do not use public health facilities even for general health care. They are largely ignorant of preventive measures and postpone seeking medical care for chronic health conditions, often resorting to self-medication for acute illness (Piet-Pelon, Rob, and Khan 2000). This is also the case with STIs, which if untreated cause short-term morbidities as well as long-term consequences, including maternal deaths and cancers. In Bangladesh, these problems are not adequately addressed at the lowest-level government service delivery outlets, which provide health service to the majority of rural inhabitants.

From 2000 to 2003, the FRONTIERS program supported a pilot operations research (OR) study to examine whether the rural Health and Family Welfare Centers (HFWCs) could be used to provide reproductive health services, including family planning (FP) and RTI/STI services, to men. This study was collaboratively implemented by FRONTIERS, the Directorate General of Family Planning (DGFP), and the National Institute of Population Research and Training (NIPORT). The findings showed that men have substantial need for RH services, that service providers can be trained to provide RTI/STI services, and that men use these services if they are aware of them. The study also showed that services for men could easily be integrated in HFWCs without adversely affecting services for women and children. In response to these encouraging findings, the Ministry of Health and Family Welfare (MOHFW) approved the expansion of family planning and reproductive health services for men to 150 HFWCs and asked FRONTIERS and USAID to provide technical and financial support during the expansion phase (see Appendix A).

RATIONALE

In Bangladesh, there are approximately 4,000 functional HFWCs, located in rural areas, to provide health care services. These centers are staffed by one Family Welfare Visitor (FWV) and one Sub-Assistant Community Medical Officer (SACMO). In most cases, SACMOs are males who provide general health care services to clients. FWVs are females and provide services to women and children. In addition to general health care, FWVs provide antenatal care, postnatal care, and contraceptive services, which are usually not provided by SACMOs. Both male and female field workers are deployed at the community level to distribute health and family planning commodities and conduct behavioral change communication (BCC) activities.

Although the job descriptions of SACMOs and FWVs include provision of RTI/STI services, they are not considered an important component of service delivery, particularly for males, and most service providers are not trained to diagnose and manage RTI/STI cases. Over the years, creating awareness on RTIs/STIs, their diagnosis, and treatment for both males and females, has been ignored.

During implementation of the pilot OR study, no major operational problems were observed, largely because the services were introduced in only eight HFWCs and adequate attention and resources were provided during implementation. However, the operational and systems-level adjustments associated with scaling up these strengthened services to a large number of HFWCs were not known, and so FRONTIERS supported this follow-on study with the goal of creating the conditions for scaling up and documenting and addressing any operational issues that occurred. The DGFP, in collaboration with the Institute of Child and Mother Health (ICMH), introduced the services for men in 40 HFWCs, with the assumption that capacity building for service providers and sensitization of program staff would create a favorable environment for subsequent national-level scale-up. This report describes experiences from this limited scale-up process, the operational problems addressed, and lessons learned, including the financial requirements for national-level scale-up.

OBJECTIVES

The goal of the project was to create the conditions for scaling up the model for integrating male-oriented FP/RH services at HFWCs to the national level. The specific objectives were to:

- Increase access to FP and RH services for men at HFWCs.
- Document the experiences of introducing the service model into 40 HFWCs.
- Identify programmatic and operational issues in the scale-up process.
- Build the capacity of the DGFP to introduce the intervention at the national level
- Undertake a cost analysis for scaling up the model and its financial implication for the national program.

IMPLEMENTATION PROCESS

The following activities were conducted through a three-phase process:

- Orienting program managers, field workers, and their supervisors.
- Reviewing and developing teaching and information, education, and communication (IEC) materials, including a training manual, transparency sheets, a leaflet, a brochure, a flipchart, and posters.
- Training a cadre of Master Trainers.
- Providing competency-based training to service providers, including theoretical, practical, and refresher training.
- Developing a register book incorporating systematic screening.
- Conducting community awareness building activities through group meetings.

The project was completed in three phases. During the first three months, all preparatory activities, such as formation of a Project Management Committee, selection of HFWCs, collection of baseline information, development of teaching and IEC materials and of a register book incorporating systematic screening, and orientation of program managers, supervisors, and field workers, were completed.

During the second phase, theoretical and practical training on RTIs/STIs was conducted for service providers. Service providers received refresher training after eight weeks of practical training. Group meetings were conducted to increase the awareness of rural communities about the availability of services from HFWCs. RTI/STI services using the syndromic approach were made available at the clinics.

During the last three months of the project, an evaluation was conducted using analysis of service statistics, client exit interviews, and observation of client-provider interactions. Dissemination of the findings also took place during this phase. Throughout the implementation process, cost data were collected and analyzed.

PHASE I: PREPARATORY ACTIVITIES

Formation of Project Management Committee

At the beginning of this scale-up project, a Project Management Committee (PMC) was formed, consisting of members from the DGFP, ICMH, NIPORT, and FRONTIERS. The Director General, DGFP was selected as the Chairperson of the PMC, and the Principal Investigator of the project served as Member Secretary. The PMC acted as a policymaking body and provided advice on programmatic issues. The PMC purposively selected four districts and two upazilas (sub-districts) from each selected district in which to introduce the scale-up model.

The PMC formed a committee to set the criteria for purposively selecting HFWCs. Criteria included: having an upgraded functioning infrastructure, presence of FWVs and SACMOs, presence of a Family Planning Inspector (FPI), and easy access to the center by supervisors for routine monitoring. A total of 40 HFWCs, five from each of the eight upazilas, were selected (Table 1).

Table 1: Distribution of HFWCs by district and upazila

Name of district	Name of upazila	Name of HFWC
Gazipur	Sreepur	Gosinga, Barmi, Telihati, Gazipur , Prahalladpur
	Kaligonj	Baktarpur, Bahadurshadi, Jamalpur, Nagori , Jangalia
Mymensingh	Bhaluka	Meduari, Bhoradoba, Rajoi, Habirbari, Birunia
	Muktagacha	Bashati, Baragram, Tarati, Dulla , Kashimpur
Munshigonj	Sreenagar	Rarikhal, Hashara, Bhagyakul, Birtara, Patabhog
	Shirajdikhan	Keyain, Rajanagar, Malkhanagar, Madhyapara, Boiragadi
Faridpur	Modhukhali	Jahapur, Kamarkhali, Dumain, Magchami, Bagat
	Bhanga	Nurullagonj, Kaoulibera, Kalamridha, Tujarpur, Chandra

Orientation of program managers

An orientation meeting was held to inform program managers of the DGFP and the selected districts and upazilas about the project activities. The 41 participants were selected from those officials who were expected to implement and monitor the activities at the upazila level. The officials included the deputy director of Family Planning, the assistant director of Clinical Contraception, the Medical Officer for MCH-FP, the Upazila Family Planning Officer, the regional supervisor, and medical officers, as well as representatives from DGFP, ICMH, and FRONTIERS.

The workshop participants were divided into four groups and each group was asked to discuss the following issues:

- How can male participation in FP and RH be increased?
- Who can help to increase men's awareness of FP and RH issues, and how to ensure their involvement?
- What are the obstacles that hinder men's access to services from the HFWCs, and how can they be removed?
- What can be done to provide quality FP and RH care to males at HFWCs?

The participants identified several issues that had discouraged men from receiving services from the HFWC. The three most important obstacles were:

- Men were not adequately informed about the services available at HFWCs;
- Lack of initiative by the service providers to encourage men to seek services;
- Image of service facilities as women-only clinics.

Other barriers included weak counseling skills, lack of privacy in examination rooms, lack of skilled providers, and inadequate drug supplies. The participants also identified weak supervision of providers as barriers for smooth functioning of the centers. They suggested several ways to increase male participation (Box 1).

Box 1: Participants' recommendations on improving male participation

- Orient service providers about men's RH needs
- Orient local leaders, imams, teachers, and journalists to encourage men to use services from HFWCs
- Inform men about their roles and responsibilities in FP/RH through mass media
- Display relevant IEC materials at HFWCs
- Strengthen health education sessions at the community level
- Redefine the roles and responsibilities of FPIs and SACMOs to include addressing male RH issues
- Ensure an adequate and continuous supply of essential drugs
- Improve overall quality of care, including privacy and counseling
- Strengthen supervision and monitoring systems to ensure availability of providers at the clinics.

Orientation of field workers and supervisors

A one-day orientation program for field workers and their supervisors was held at each Upazila Health Complex to inform them about their responsibilities in implementing the program, including increasing men's awareness about RH, promoting services, and distributing IEC materials. A total of 224 field workers and their supervisors attended the orientation meetings and participated in discussions about RTI/ STIs, gender, male involvement, birth spacing, and the dual role of condoms. Pre- and post- training tests were administered to assess the change in participants' knowledge after the orientation. This information was not collected at four upazilas because of a misunderstanding about the process, but comparison of the pre-and post-test scores from the other four upazilas showed that the orientation had dispelled a number of misperceptions, while considerably improving participants' knowledge. For example, prior to the orientation sessions 81 percent of the participants knew that condoms can prevent both STIs and pregnancy; this knowledge increased to 100 percent after the orientation.

Review and modification of teaching and IEC materials from the pilot project

Officials from the DGFP and experts from 11 national and international organizations reviewed existing IEC and teaching materials, as well as the materials developed for the pilot OR project. Two consultation meetings were organized for the review, and ICMH organized three separate in-house meetings to finalize the materials. Participants approved the following teaching and IEC materials:

- A training manual for service providers
- A flip chart on sexual health
- Four types of posters
- A leaflet on male responsibilities
- A brochure on dual protection from condoms.

Integration of systematic screening in the registration form

DGFP supplies client registers to allow service providers to record selected information about each client. In the existing registration system, there is no opportunity to identify the client's unmet needs, and though clients generally get the services they request, providers do not attempt to identify and meet additional health care needs.

Systematic screening, a technique developed by FRONTIERS, uses a simple form to identify a client's unmet need for FP and other RH services and to provide the required services, when possible, during the same visit or make a referral. The method has been successfully used in many countries and has been shown to increase utilization of clinic services, and hence the cost-effectiveness of providing services. Registration forms were modified to include a systematic screening instrument (Appendix B). Experiences with the modified register were not fully satisfactory, however. Most service providers completed the modified register correctly, identified unmet needs for other services, and provided the services during the same visit. However, some providers viewed screening as additional work and did not complete the form regularly, suggesting the need for stronger supervision during larger scale-up efforts. Encouragement from senior officials, such as a letter from the DGFP, could also help strengthen compliance.

Collection of baseline service statistics

Service statistics were collected from participating HFWCs by officials from ICMH and DGFP. A structured checklist was used to collect the relevant information, which included available drugs, supply status of drugs, the number of male and female clients who received services during the months of May-July, 2006, contraceptive supplies, and major problems.

PHASE II: INTRODUCTION OF MODEL TO SCALE-UP CLINICS

Training of Master Trainers

To build capacity within the DGFP, a group of 26 Master Trainers (MTs) was trained using the model developed during the pilot OR project through a three-day training course. The trainers were selected from ICMH, the District Hospital, the Upazila Health Complex, and the DGFP, and the facilitators were from DGFP, ICMH and FRONTIERS. The training of trainers was designed to achieve two objectives: i) training on the topics included in the provider's training manual; ii) and training on conducting sessions and using the training and counseling materials provided. The first two days of training were devoted to the topics in the training manual and on the third day participants were divided into groups and assigned a topic for presentation to demonstrate their skills. Facilitators and participants provided feedback at the end of each presentation. On completion of the training, the MTs were given a set of transparencies to ensure the uniformity of the subsequent training of service providers.

Changes in MTs' knowledge were assessed using questions selected from the topics discussed in the training sessions. Comparison of pre- and post-training tests shows that the participants had a fair knowledge of most issues before the training, and nearly universal knowledge following the training (Table 2).

Table 2: Comparison of knowledge of Master Trainers on selected issues before and after training

Participants know that:	Number of respondents provided correct answers	
	Pre-test	Post-test
Condom can prevent STIs and pregnancy	21	26
STIs increase the risk of acquiring HIV/AIDS	17	26
Syndromic management of RTI/STI	1	25
When first dose of ECP should be taken	15	25
What does safe sex mean?	20	26
STI is not the primary cause of vaginal discharge	7	26
STIs can be prevented by regular condom use	21	26
Risk of STI increases with multiple partners	21	26
Married women and healthy partners are not free from risk of STI	18	24
Washing genitalia after sex does not remove STI infection	21	26
N	**22**	**26**

Training for providers themselves followed the model developed and tested during the pilot project. It was carried out in three parts: theoretical, practical (hands-on), and refresher training. The theoretical training was provided to SACMOs, FWVs and FPIs while hands-on training was provided only to SACMOs and FWVs. The theoretical training was organized at the upazila level, while the practical training was conducted in Dhaka.

Box 2: Contents of training

- Contraceptive methods including emergency contraceptive pill
- HIV/AIDS
- RTIs/STIs
- Counseling
- Syndromic management of RTIs/STIs
- Systematic screening instrument

Theoretical training: A two-day theoretical training program was organized simultaneously in the eight upazilas. A total of 110 participants attended the theoretical training, which was conducted by 3-4 MTs from the respective district and upazila. The contents of the theoretical training program are given in Box 2. All MTs utilized the transparencies given to them during their training.

Pre- and post-tests results indicated significant improvement in providers' knowledge about RTIs/STIs and their management. For example, knowledge on the treatment of urethral discharge increased from 36 percent before the training to 96 percent after the training (Table 3). Observers from DGFP, ICMH, and the Population Council monitored the quality of theoretical training program using a checklist in terms of organization and coverage of technical issues. The organizational aspects of the training, such as time, training space, accommodation, availability of an overhead projector, power supply, and punctuality of the participants and the resource persons were adequate in all upazilas. The technical quality of training program was evaluated through the clarity of presentation, the MT's preparation, the information provided, time allocated for open discussion, interactions during the session, and the MT's ability to answer the questions. In some instances, the MTs did not allocate adequate time for open discussions, and were unable to answer trainee's questions. In such cases, the monitors assisted the MTs in clarifying issues.

Table 3: Comparison of pre- and post- tests knowledge of service providers

	% who gave correct answers	
	Pre-test	**Post-test**
Oral pills cannot prevent STIs	78	98
ECP does not cause abortion	84	97
Premarital sex increases risk of acquiring STI	93	99
Vulval itching is not caused only by STIs	62	**76**
HIV infected mother can transmit HIV to child	94	95
Hepatitis/HIV can be transmitted during breast feeding	51	88
Gonorrhea- or Chlamydia-infected mother can infect child during delivery	90	99
Partners need to be treated if infected with STI	89	100
Treatment for syphilis	61	77
Treatment of urethral discharge	36	96
N	**106**	**110**

Hands-on training: To equip service providers with skills in identifying and treating RTI/STI cases, competency-based hands-on or practical training was organized at a tertiary hospital six weeks after the classroom-based training. The service providers were trained in the skin and venereal disease and gynecology departments of Narayanganj, a 200-bed hospital, for three consecutive days. Eighty-two participants attended the hands-on training in four batches, with participants discussing and reviewing cases during and after the clinical classes.

At the hospital, consultants from the skin and venereal disease and Ob-Gyn departments conducted the classes and supervised the practical sessions. Service providers were shown how to take a history from a client, how to conduct physical examinations, and how to use a flowchart to diagnose and treat RTI/STI cases, using the modified WHO approach to syndromic management. In addition, they were given information on contraceptive methods, birth spacing, emergency contraceptive pills (ECP), male sterilization, danger signs in pregnancy, the importance of antenatal and postpartum care, and correct condom use. Pre- and post-training tests revealed significant improvements in the trainees' knowledge after the training (Table 4).

Table 4: Results from pre-post training of service providers at the hands-on-training

Participants' knowledge	Percentage given correct responses	
	Pre-test	**Post-test**
Names of all syndromes	45	99
Three signs and symptoms of urethral discharge syndrome	43	82
Three signs and symptoms of vaginal discharge syndrome	49	79
One route of STI/HIV transmission	84	94
One way of STI/HIV prevention	85	94
How to collect information from RTI/STI patient	62	93
Complete physical examination of STI patient	13	71
Component of 4Cs*	52	93
Primary causes of vaginal discharge	77	84
How to follow flowchart for genital ulcer syndrome	10	96
Complete treatment of vaginal discharge syndrome	37	94
N	**82**	**82**

*4Cs= counsel for compliance for treatment, counsel for prevention, condom demonstration for correct use, and contract tracing and treatment

During the hands-on training, each participant was able to examine an average of three clients presenting with genital ulcers, urethral discharge, vaginal discharge, or lower abdominal pain. Clients with scrotal swelling and inguinal buboes were not found during the practical training. In the evening, participants discussed the cases they had observed during the training sessions and viewed PowerPoint presentations on related issues. The service providers found this teaching approach an effective way to improve their skills.

Refresher training: Service providers attended a two-day refresher training course two months after the practical training. The primary objective of this training was to share providers' experiences in using the syndromic approach, using the screening instrument, and providing STI/RTI services to clients, and to discuss problems encountered and how to address them. During both the pilot OR project and the scale-up project, refresher training proved to be critical for improving providers' competence, and it is strongly recommended for the national-level scale-up.

Group meetings at the community level

Group meetings were organized at the community level to increase awareness about the availability of health care services for males at the selected HFWCs. Several topics were discussed, including signs and symptoms of male and female RTIs/STIs, danger signs of pregnancy, gender issues, birth spacing, and dual protection with condoms. To facilitate the discussions, leaflets and brochures were distributed containing information on the partner's roles in improving reproductive health, advantages and disadvantages of condom use for dual protection, and information about the specific services available for men at the HFWCs.

A total of 463 group meetings were conducted during the first two months. Separate group meetings were arranged for men and women. These group meetings were conducted by service providers, field workers, and their supervisors, ICMH staff, and upazila level supervisors. On several occasions FRONTIERS staff also attended these meetings to assess the contents and quality of the discussions. A simple reporting format was used to collect information on the number of persons attending, topics covered, and number of leaflets distributed during each session. Facilitators submitted the completed forms to ICMH after conducting each group meeting.

Analysis of the reporting forms revealed that a total of 12,198 persons, almost equally distributed between men (6,199) and women (6,009), attended the meetings. An average of 27 participants attended each meeting, including community leaders, social workers, teachers, NGO workers, and health staff. Approximately 13,000 brochures and 20,000 leaflets were distributed in the project areas.

In general, people expressed positive reactions to these meetings. Participants were curious about the causes and consequences of RTIs/STIs, family planning methods and types of services available from HFWC. The questions most frequently asked included the following:

- How much money will be needed for the treatment?
- Is medicine available from the clinic?
- Can treatment for other diseases, such as diarrhea and typhoid, be obtained from HFWCs?
- What is no-scalpel vasectomy?
- Is there any side effect following vasectomy and tubectomy operations?
- What is the meaning of dual protection of condoms?
- Is infertility treatment available from HFWC?
- What is the optimal interval between two children?

Drug supply

DGFP officials supported project activities by ensuring the supply of drugs for RTI/STI management and providing additional drugs for the increased client load. In two installments, the DGFP supplied 96 units of Ciprofloxacin (500mg), 1,449 of Doxycycline (100mg), 714 of Erythromycin (500mg), 1,344 of Metronidazole (400mg), and 48 of Fluconazole (150mg) to each HFWC for the treatment of RTI/STI clients. The total cost of the drugs supplied to the 40 HFWCs was approximately Taka 350,000 (US$5,200). In addition, two more Drug and Dietary Supply (DDS) kits were provided to accommodate the increase in clientele. The supply of drugs was not uniform over the scale-up period due to the government's approval process. This needs to be considered carefully for any large-scale service expansion in Bangladesh. A list of drugs supplied in the DDS kit is shown in Appendix C.

PHASE III: EVALUATION

The scale-up was evaluated through analysis of service statistics, client exit interviews, and observation of client-provider interactions to assess quality of services.

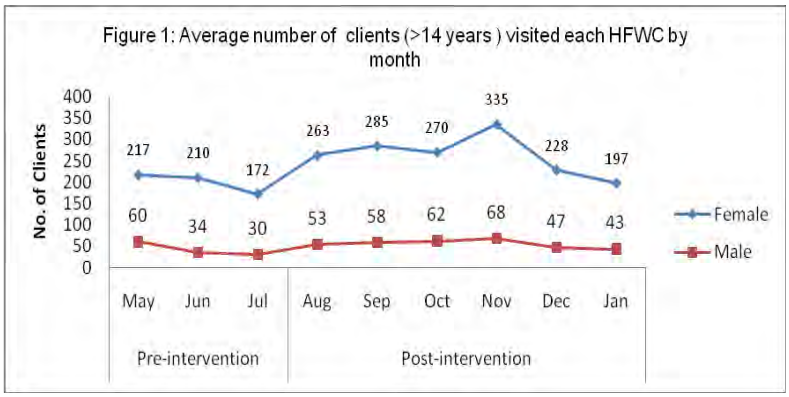
Number and age of clients: A total of 109,056 clients visited the 40 HFWCs for health care during the six-month scale-up period. About 71 percent of the clients were older than age 14. Among these, 17 percent were males and the remaining 83 percent were females (Table 5).

Purpose of visit: Table 5 shows that approximately 82 percent of adult males and females visited HFWCs for general health care. In addition, 9 percent of the clients visited for FP services, 5 percent for ANC, and 3 percent for RTIs/STIs and other RH problems.

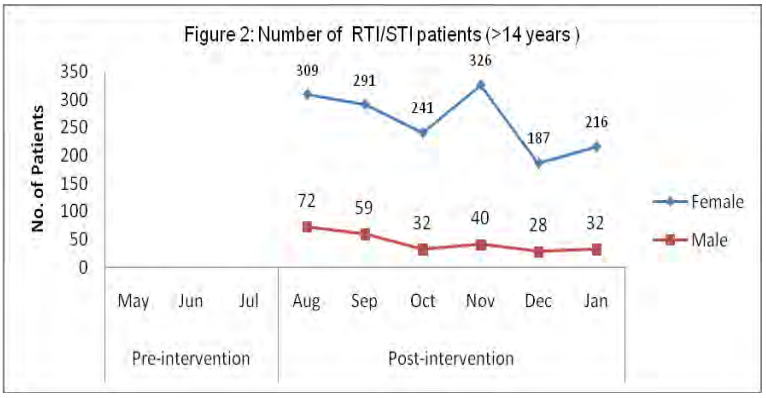
Table 5: Distribution of clients by age and purpose of visit

Age and purpose of visit	Clients age (all ages)			Clients (>14 years)		
	Male	Female	Total	Male	Female	Total
Total clients attended	27128	81928	109056	13200	63100	76300
Age distribution						
0-14	50	22	29	-	-	-
15-24	10	15	14	17	17	17
25-34	13	36	30	26	46	43
35-44	12	17	16	25	22	22
45+	16	12	13	33	15	18
Total	**100**	**100**	**100**	**100**	**100**	**100**
Purpose of visit						
General health care	51	64	61	96	80	82
ANC	-	5	4	-	6	5
PNC	-	1	0.8	-	1	1
Child health care	48	20	27	0.4	0.2	0.3
FP services	1	8	6	2	10	9
RTI/STI	0.9	2	1	2	2	2
Other RH care	0.1	0.6	0.4	0.3	0.8	0.6
Total	**100**	**100**	**100**	**100**	**100**	**100**

Monthly trends in client visits: The total number of clients visiting HFWCs appears to have increased significantly following the intervention[1]. Over a three-month period before the intervention, a monthly average of 86 men and 263 women received services from each facility. These figures increased to 113 males and 341 females during the six-month intervention period, an increase on average of 105 clients per month per facility, or a 30 percent increase. A similar increase (of 32%) was observed among adult clients (those over age 14) (see Figure 1), in which the monthly average of male adult clients per HFWC increased from 41 to 55, and the average of female adult clients increased from 200 to 263 per month, giving a total increase of 77 adult clients per facility per month.



The increase in female clients may have been due to the synergistic effects of the interventions. After November 2006, there was a gradual decrease of both male and female clients due to a shortage of drugs, as the DGFP needed about two months to process and distribute the drugs after November 2006. This indicates that a regular supply of medicine is required to sustain the number of clients seeking services from HFWCs.



Number of RTI/STI clients: Before the intervention, HFWCs did not perform diagnosis, treatment, or reporting on STI/RTI cases. Service providers maintained statistics only on the counseling provided to men and women presenting with RTI/STI cases. Therefore, no information was available about the number of RTI/STI cases diagnosed and treated at the selected HFWCs. Records on RTI/STI management began after the introduction of the modified registration form that included systematic screening. According to service statistics, a total of 1,862 RTI/STI clients were diagnosed and treated during the six-month intervention period. Of these, 14 percent were men. Figure 2 shows the number of RTI/STI cases diagnosed and treated during the scale-up. Providers also diagnosed and treated 29 clients who were less than 15 years old for urethral/vaginal discharges; most of these were females. As with the number of general-care clients, the number of RTI/STI clients also decreased after the November 2006 due to the shortage of medicine.

[1] It should noted that these changes may have been influenced by seasonal variations, which is not possible to control for with the limited trend data available. However, the average increase is sufficiently large to suggest that some increase has probably occurred.

Condom distribution: There was a shortage of condoms for three months during the scale-up period in some areas, which directly affected program activities. Where the condom supply was regular (in 18 HFWCs), condom distribution increased from 680 to 763 per month. Where the condom supply was irregular, the monthly distribution decreased from 945 to 757.

Systematic screening to identify unmet needs: Incorporating systematic screening into the client registration form helped to identify a total of 12,800 unmet needs – 1,600 among males and 11,200 among females. Analysis of the client's registration forms revealed that about nine percent of adult males and 15 percent of adult females were identified as having an unmet need for services other than their primary reason for seeking care. Some of them had unmet need for more than one services.

More than half of the additional service needs identified were for general health care (Table 6). Eight percent of men and six percent of women had an unmet need for RTI/STI or other RH services. Further, 6 percent of men and 20 percent of women had unmet needs for FP services. Interestingly, one quarter of the men identified an unmet need for child health care.

Table 6: Percent distribution of unmet needs by type of services identified among adult clients*

	Sex of the patients		
Reasons	**Male**	**Female**	**Total**
General health care	63	53	54
FP services	6	20	18
ANC	-	13	11
Child health care	23	4	7
RTI/STIs	6	5	5
PNC	-	3	3
Other RH care	1	3	2
N	**1,600**	**11,200**	**12,800**

* Multiple responses

Almost all (99 percent) additional service needs identified by systematic screening were provided to the clients during the same visit; only 1 percent of the clients were referred to another facility for treatment. These results are encouraging and confirmed that the introduction of systematic screening can increase service utilization provided at health facilities. At the national level, instituting systematic screening that increased service delivery by these proportions could lead to approximately 300,000 additional services being provided per month.

Compliance with systematic screening varied. During 262 monitoring visits, two-thirds of the providers were observed to be using the systematic screening forms during the consultations. However, these were only completed correctly in about half of these consultations, meaning that the systematic screening instrument was only used correctly in about one third of all cases. For the providers who did not perform the screening systematically, most of them viewed the process as an additional burden, which needs to be addressed during the next stage of expansion.

Clint characteristics and perceptions of services received

In addition to service statistics, researchers conducted exit interviews with clients to obtain their opinion about the quality of services they received at participating HFWCs. Two physicians interviewed 200 clients from eight HFWCs. The background characteristics of the clients are presented in Table 7. Most clients were in their thirties, with men being older, one fifth was illiterate and 90 percent were married. Family planning was prevalent in this sample.

The commonest reasons for visiting the HFWCs were for common cold / fever (30%) and for a child's illness (20%). Twelve percent of women and three percent of men visited the HFWC for RTI/STI management, and while no men came to HFWCs for family planning services before the intervention, five percent of male clients and 15 percent of female clients came for FP services during the intervention. This suggests that targeted interventions can help increase men's involvement in couple's reproductive health.

The vast majority of clients expressed positive views of the service they received in terms of provider behavior, time given, treatment provided, cleanliness of the facilities, and services received, and said that they planned to seek care from the clinic in the future or to recommend the clinic to other clients (Table 8).

Table 7: Socio-demographic characteristics of the clients (percent)

Characteristics	Male	Female	Total
Age			
15-24	19	18	19
25-34	25	45	37
35-44	27	30	29
45-54	14	6	9
>54	14	2	7
Mean age	38	31	34
Education			
Illiterate	16	24	21
I-V	17	36	29
VI-X	53	39	45
X+	14	2	7
Mean years of schooling	7	5	6
Marital status			
Married	82	97	91
Unmarried	18	3	9
Currently using FP	52	65	60
N	**77**	**123**	**200**

Table 8: Clients' experiences of selected service delivery issues (Percent)

Issues	Male	Female	Total
Service provider was available	99	92	94
Provided enough time for treatment	82	80	80
Greeted patients	83	76	79
Requested to take seat	84	75	78
Provided answer to queries	97	97	97
Discuss the problems of patient	77	75	76
Screened for other services	100	66	79
Advised for a follow-up visit	57	59	59
Received expected services	61	61	61
Received medicine	55	51	53
Received condom from clinics	18	11	14
Received poster on RTI/STI services	64	35	46
Interested to visit clinics in future	99	96	97
Suggest others to visit the facility	95	89	92
N	**77**	**123**	**200**

Provider competence

Client-provider interactions were observed to assess the competence of service providers as a result of the training provided. Two physicians who were involved with the theoretical training observed interactions between male providers (SACMOs) and 24 clients (seven men and 17 women) from eight HFWCs (Table 9). The providers greeted all the clients and asked them to take a seat. Most of the service providers collected information on name, age, occupation, marital history and number of children, and asked appropriate questions about the client's reason for visiting and individual needs.

Table 9: Provider enquired about:

	Number
History of onset of problems	24
Duration of onset	24
Reasons for visit	21
Encouraged to describe problem in detail	18
Progression of illness	16
Number of children	15
Contraceptive use	14
Pregnancy status (female)	13/17
Present medication	12
Lactational status	11
Past illness	10
Drug sensitivity	5
N	24

However, the quality of providers' examination procedures still needs further improvement (Table 10). Providers failed to follow the required procedures for general physical examinations in more than half of the cases, and checked blood pressure, temperature, and signs of anemia in only about one-third. It is important to note that as 17 out of 24 cases observed were female, and the providers were all male, this may have contributed to the relatively low compliance.

Table 10: Content of examination

Examined	Number
Pulse	9
Anemia	9
Temperature	9
Blood pressure	9
Weight	8
Local examination	8
Obtained consent before examination	8
Diagnosed for RTI/STI	6
Explained before examination	2
N	**24**

Service providers provided information to clients correctly. In most cases, the providers asked relevant questions about RTI/STIs. For example, nearly all clients were asked whether they were sexually active and half were asked about their sexual partners. Providers collected a complete general and sexual history for RTI/STI checkups. Of the 24 cases observed, six were suspected RTI/STI cases. These were treated using the proper protocols for syndromic management and all six clients were prescribed the appropriate drugs. Most providers in these cases ensured privacy and counseled the six clients on compliance with treatment, though only three RTI/STI clients received counseling on prevention, and contacting partners, and only one demonstrated correct condom use. The providers' performance during the RTI/STI checkups indicates that the competency-based training on syndromic management was effective and was applied correctly during the expansion. Thus, this approach would be appropriate for a sub-national- or national-level scale-up.

Monitoring visits

Eleven monitors from ICMH and DFGP conducted a total of 262 monitoring visits to the 40 participating HFWCs. The monitors completed a checklist during their visit to record information on the clinics, such as opening times, the presence of service providers, the flow of male clients, availability of IEC and counseling materials, number of clients served, number of condom distributed, and availability of drugs and medicines. The monitors noted whether service providers were performing systematic screening and also observed whether supervisors were visiting the centers, and if so, what measures they undertook to overcome programmatic problems.

The monitors found service providers at the workplace in two-thirds of the centers. The reasons for staff not being present at one third of the facilities include providing services at the satellite sessions, attending official meetings, sickness, and posting to another facility. Male clients were present in 45 percent of the visits to HFWCs; posters were visible in 67 percent; leaflets, brochures, and flipcharts were available in 67 percent. The monitors reported shortages of drugs and FP commodities in some centers during certain months. They also reported a lack of supervision and monitoring from the immediate supervisors. Close monitoring of the implementation process will be required at the time of replication at the national level.

COST OF SCALE-UP

The costs of training, development of teaching materials, printing of the IEC materials, and staff salaries were collected and analyzed to estimate the costs of scaling up the interventions. The unit costs for activities from the pilot project were used as base data for projecting scale-up costs. Many of the expenses incurred in this limited scale-up will not recur in national expansion.

For instance, orientation of national-level managers will not need to be done, travel expenses for district- and thana-level managers will not be needed, and per diems for participants will be at the lower government-mandated rates. Thus the unit cost for orienting mangers would be cut in half – from taka 2,050 in this limited scale-up to taka 1,035 in a national roll-out (Appendix D). An estimated 528 program managers from 4,300 HFWCs would need to be oriented during the expansion phase.

A similar reduction could be expected in the training of about 24,080 FWAs and FPIs that staff the 4,300 HFWCs, mainly due to adherence to the TA and DA rules of the Government of Bangladesh. Further, costs during this study reflect efforts to monitor training sessions for FWAs and FPIs to identify problems that might hinder the expansion. During a countrywide expansion such extensive monitoring will not be required and routine monitoring visits will be sufficient; this will reduce training monitoring costs by nearly 50 percent. We estimate that during the scale-up, the per-unit cost for training of the providers will diminish from taka 6,980 to taka 5,280 (a 24% reduction – see Appendix D). For preparation of the national-level cadre of Master Trainers, a total of 1,392 participants will be required, so costs will not diminish for that activity.

We estimate that a total of 8,600 service providers (two from each HFWC) need to receive all three phases of training (theoretical, practical, and refresher) during the expansion phase. They could be trained at the district headquarters, which will eliminate the cost for transport to and lodging in Dhaka. This will reduce the training cost significantly. Using government rates, we project a unit cost of taka 5,400 (1,200 for theoretical, 2,500 for practical and 1,700 for refresher training) per participant.

As the IEC materials have already been developed, tested, and adapted, the only cost for materials will be for reproduction. Approximately 46 taka was spent to print the new register after including systematic screening questions. These register lasted for six months. Thus, a register which could cover the entire year would cost around 92 taka or an expense of 8 taka per month.

The cost of the community group meetings was taka 200 per meeting. In each HFWC area, 12 group meetings were conducted during present study and found sufficient to cover the areas. Thus, for awareness raising activities taka 2,400 per year per HFWC will be required.

After the intervention, an average of seven STI/RTI clients were served per month at each HFWC, with taka 188 spent on medications for each client. Taking this as a national average, we expect that 30,100 STI/RTI clients will be served monthly at the 4,300 HFWCs. Thus, approximately taka 67,905,600 ($970,080) will be required to treat all new RTI/STI patients every month.
The intervention resulted in an additional 105 clients monthly per facility at a cost of taka 7 each for drugs and other consumable materials. With the expansion to all 4,300 HFWCs, we can project an additional 451,500 clients every month nationally. Serving these new clients will add a monthly cost of taka 3,160,500 ($45,150), or $541,800 annually.

Table 11 below gives the per-unit cost of rolling out this intervention nationwide to 4,300 HFWCs, based on the costs derived from this study. The total cost of scaling up can be divided into fixed, one-time costs (for orienting program mangers and training providers) and recurrent costs that will be required every year. The latter category includes community meetings, reproduction of IEC materials, and costs for drugs and other clinic items. Thus, in the first year, taking fixed and recurrent costs together will require a total of taka 191,231,969 ($2,730,000). In the subsequent year, costs will diminish to taka 122,782,200 ($1,750,000). This represents approximately $5,888 per upazila in the first year and $3,780 in subsequent years. It is important to point it out that these expenditures have the potential to allow the HFWCs to serve an additional 361,200 STI/RTI clients and 5,418,000 additional clients for all services per year. This increase in coverage would come at a fairly low price (taka 21 or $0.3) per additional client.

Table 11 Estimated cost for integrating RTI/STI services at the HFWCs

	Category	40 HFWCs			National level replication		
		Unit	Unit cost	Total cost	Total unit	Unit cost	Total cost
FIXED COST							
A.	**Orientation**						
	Orientation of program managers	41	2050	84030	528	1035	546480
	Orientation of FPIs & FWAs	224	870	194918	24080	430	10354400
B.	**Capacity building**						
	a) Training of Master Trainers	26	2726	70875	1392	2726	3794538
	b) Training of service providers						
	Theoretical training	110	2400	264038	8600	1200	10320000
	Hand-on-training	82	2785	228334	8600	2450	21070000
	Refresher hand-on-training	82	1795	147170	8600	1630	14018000
C.	**Printing of teaching materials**						
	Transparency sheets	35	455	15925	464	455	211120
	Training Manuals	215	284	61045	1392	284	395231
	Flipcharts	100	900	90000	8600	900	7740000
Total fixed cost							68449769
RECURRENT COST PER YEAR							
D.	**Printing of IEC materials****						
	Binding posters	100	75	7500	8600	75	645000
	Loose posters	8000	3	22560	215000	3	606300
	Leaflets	150000	1	150000	2580000	1	2580000
	Brochures	40000	2	80000	1290000	2	2386500
E.	**Printing of register book**	505	46	23230*	4300	8	412800
F.	**Awareness raising group meeting**	480	200	96000**	51600	200	10320000
G.	**Extra drugs for RTI/STIs patients**	1862	188	350056*	30100	188	67905600
H.	**Extra drugs for additional clients**	25394	7	177758*	451500	7	37926000
Total recurrent cost							122782200
	TOTAL (A+B+C+D+E+F+G+H)						191,231,969
	US DOLLAR (1USD=70 taka)						2,731,885

* No. of patient and cost refer to 6 months

** Cost for the year

DISCUSSION AND CONCLUSIONS

Findings from the limited scale-up of the model for integrating male-oriented and RTI/STI services developed during the pilot OR study show that the expansion was feasible and effective, and indicate that the model could be cost-effectively scaled up at the national level. The study reconfirmed the positive findings observed during the pilot project and demonstrated that scaling up the intervention will benefit both male and female clients and that HFWCs are appropriate settings for providing RTI/STI services in rural areas. Although the focus of the interventions was to provide RTI/STI services to men, service statistics suggest a substantial increase in the total number of male and female clients is possible, due to the synergistic effects of the interventions. Although the majority of clients sought general health care, this model furnishes services for RTI/STI clients who otherwise would probably not consult a qualified provider. These findings indicate that scaling up the intervention nationwide will increase the utilization of services at the HFWCs and decrease the cost of treatment per client.

Documentation of the scale-up process showed that the Government can provide the additional drugs required for treating the larger volume of clients. In this study, drugs needed for the treatment of RTIs/STIs and additional general care clients were mobilized from the regular supply system. However, the procurement and distribution of drugs is a lengthy process in the government system, and the distribution of drugs was not uniform during the study period. In addition, several contraceptive methods, including condoms, were not available for three months in some of the upazilas. The availability of medicines encourages clients to seek service from the HFWCs, and service utilization clearly declined if drugs were not available. Therefore, any nationwide scale-up should include arrangements to ensure the delivery of additional drugs. At present, the government is committed to providing medicines free of cost. However, the increased client volume from bringing in new service seekers or identifying multiple needs may demand a substantial increase in the budget for medicines and supplies, and whether clients would be prepared to meet a proportion of these costs needs to be researched.

Training a large number of service providers will be a critical component for the expansion. Classroom-based training is not enough; providers also need practical training, opportunities to observe and examine patients to improve their diagnosis and treatment skills, and refresh their knowledge and skills periodically. This study demonstrated that the training model developed under the pilot project, with some modifications, is sufficient to address the theoretical and practical training needs of providers. We suggest that the model be adopted and used during the scale-up to the national level. We found no significant operational problems, except the requirement of a hospital where enough RTI/STI clients are available; during expansion, the practical training could be organized at district level hospitals. However, ensuring appropriate attention to the trainees requires considerable planning and commitment of facilitators and other resource persons at the hospital. It might be appropriate to train providers in batches, as it would be impossible to train all providers simultaneously.

In the existing system there is no scope for identifying clients' unmet needs for other services. Introduction of the systematic screening instrument (SSI) revealed that about 9 percent of men and 15 percent of women had unmet needs for services other than their primary reasons for seeking care. Many have more than one unmet need. The scale-up study showed that it was easy

to operationalize the modified registration form including systematic screening, and that screening could add an estimated 300,000 additional services if implemented in all the HFWCs. However, only one-third of clients were correctly screened for unmet needs. This suggests that the modified SSI should be incorporated into the client registration form, but attention is needed to improve provider compliance with the systematic screening procedure; supportive supervision is critical, at least during the initial stages of the scale-up.

The Ministry of Health and Family Welfare has asked NIPORT to scale up the intervention in 100 more HFWCs, and they have allocated a budget for the scale-up. We expect that after successful implementation of this first phase, the intervention will be expanded in the entire country.

LESSONS LEARNED AND RECOMMENDATIONS

- The model developed during the pilot project poses no major operational problems and can be implemented in HFWCs. Service providers can learn and apply knowledge on diagnosing and treating RTIs/STIs using the syndromic approach. We recommend expanding services for men and services for RTI/STI to all HFWCs. The expansion could be done in phases, beginning, for example, with one division and using lessons learned to adapt the intervention for wider implementation.

- Planning and implementing a public-sector intervention requires a significant time commitment to accommodate procedures for approval, policy adoption, development of official orders, and follow-up the implementation process. Furthermore, mobilization of public resources is slow due to lengthy procurement procedures. Those planning scale-ups at the national or sub-national level need to budget adequate time for planning and execution.

- Registration of HFWC clients is not systematic. The information recorded in registers is often incomplete and inconsistent. Compilation of information at the HFWC level is a complex process, as the service providers have to keep a number of register books for a variety of services. An integrated registration book, such as the one developed and tested in this study, would help service providers to identify clients during follow-up visits and to compile service statistics. Inclusion of the systematic screening instrument in the register would help service providers to identify and address clients' unmet needs and increase service utilization. However, this would require adequate training on maintaining the register and close monitoring during the initial period of implementation.

- Service providers have limited knowledge about RTI/STI management and need hands-on training at a referral hospital. Hands-on training requires the participants to spend more time at the hospital to examine a sufficient number of cases. Though this type of training raises some operational problems, it can be managed effectively by proper planning and phased expansion.

- When DGFP was involved in monitoring providers' activities, compliance with systematic screening was better. This suggests the need for a close supportive supervisory role for DGFP during the scale-up.

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APPENDIX A: LETTER

Secretary
Ministry of Health & Family Welfare
Govt. of the People's Republic of Bangladesh

D.O.No:MOHFW Prog-2/NIPORT-11/02/ 242 Date:20-11-2002.

Dear Mr.Khan,

It is indeed a great pleasure for me to note that NIPORT has done a good deal of Operation Research activities on "Integration of Reproductive Health Services for Men in Union Health and Family Welfare Centres" and successfully held the lay long dissemination workshop on 24 October, 2002.

2. I would like to thank you as DG of NIPORT for this commendable job. It is expected that the recommendations of this workshop on operations research will be a new addition to the efforts for rejuvenating the Reproductive Health Services Programme. This is also likely to facilitate the access of men to reproductive health services at union level service delivery points alongwith the ongoing government female focused RH care delivery system. At this point I would like to request you to upscale the Operations Research activities concerning 100-150 " Union Health and Family Welfare Centres"

With Regards

Yours Sincerely

(M. Fazlur Rahman)

Mr. A.R.Khan,
Director General,
NIPORT,Azimpur.
Dhaka.

প্রয়োজনীয় কার্যার্থে প্রেরিত হলো :-
পরিচালক (গবেষণা)
পরিচালক (প্রশিক্ষন)
পরিচালক (প্রশাসন)

Mr. Alam

APPENDIX B: SYSTEMATIC SCREENING FORM

DAILY SERVICE REGISTER FOR HFWC (Will be filled in by field service provider)

Name of service provider:_____ Designation:_____

Name of H&FWC:_____ Ward no:_____ Union:_____ Upazila:_____ District:_____

						PROBE for NEED of OTHER SERVICES and OUTCOME																							
Serial no.	Date	Name of client and Name of village	Age	Sex M/F	**REASON FOR CLINIC VISIT (Fill in from number 1-12)**	General health care 1*		ANC 2		PNC 3		Child health care 4		Vaccination/TT 5		MR 6		FP method 7		FP side effect 8		V/P discharge/Burning urination 9		Genital ulcer 10		Inguinal /scrotal swelling/pain 11		Other RH care 12**		Diagnosis	Medicine provided/ REMARK	Service charge ***
						Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome	Need	Outcome			

Outcome: 1 Service provided 2 Appointment fixed 3 Referred

FORM will be completed for both males and females

*__General health care__: All problems such as fever, cough, arthritis, pain, diarrhea, boils, injury, headache, etc. except RH problems

**__Other RH problems__: Uterine prolapsed, penile problems, lower abdominal pain, pain during intercourse, sexual performance anxiety, premature ejaculation, importance/erectile dysfunction, less sexual urge, genital itching, etc.

***__Service charge__: Where applicable

APPENDIX C: CONTENTS OF DDS KIT

Items	Unit
Tablet Ferrous sulphate	2000 pieces
Vitamin B complex tablets	500 pieces
Tablet Albendazole	50 pieces
Tablet Hyoscine 10mg	100 pieces
Tablet Histacin 4mg	200 pieces
Tablet paracetamol 500mg	500 pieces
Tablet Metronidazole 400mg	500 pieces
Tablet Ergometrine 125mg	30 pieces
Tablet Salbutamol 4mg	30 pieces
Tablet Aminophyline 100mg	50 pieces
Tablet Diazepam 5mg	50 pieces
Tablet Cotrimoxazole 120mg	300 pieces
Tablet Cotrimoxazole 480mg	500 pieces
Capsule Amoxycillin 250mg	500 pieces
Capsule Tetracycline 250mg	500 pieces
Capsule Doxycycline 100mg	50 pieces
Tablet Antacid	250 pieces
Syrup Amoxycillin 60ml	20 bottle
Suspension Cotrimoxazole 60ml	20 bottle
Pediatric drop Amoxycillin 10ml	10 bottle
Syrup Paracetamol 60ml	20 bottle
Eye ointment Chloramphenicol 5ml	5 tubes
Skin ointment Neomycin 10gm	5 tubes
Whitfield 1kg jar	1 jar
Benzyle benjoite lotion 450ml bottle	2 bottles
Transparent plastic envelop	200 pieces
Packaging Box	1 box

APPENDIX D: DETAILED COST FOR INTRODUCTION OF RTI/STI SERVICES AT HFWCs

Orientation of the program managers for 40 HFWC		**Cost during expansion**	**Unit cost during scaling up**	**Actual need/not needed during expansion**	**Needed during nationwide expansion**	**Estimated unit cot during expansion**
	Unit wise calculation	Total				
RESOURCE PERSON COST FOR HALF DAY	11RPx900	9900		Needed	9900	
PARTICIPANTS TA	27x900	24300		Not needed		
PARTICIPANTS PER DIEM	27Px900	24300		70% needed	17010	
STATIONARY	total	14530		Needed	14530	
FOOD/MEAL	50Px200	10000		Not needed	Included in per diem	
VENUE	1/2 DALY	1000		Needed	1000	
COST FOR PM ORIENTATION (41 persons)		**84030**	**2050**		**42440**	**1035**
ORIENTATION OF FPI AND FWA						
	Unit wise calculation	Total				
RESOURCE PERSON COST FOR 2 DAYS	450x39	17550		Needed	17550	
PARTICIPANTS TA/PERDIEM	300x224	67200		200/person	44800	
STATIONARY	Total	68401		100/person	22400	
DGFP CONSULTANT	1x2000	2000		Not needed		
TRANSPORT/CAR RENT	Total	10017		Not needed		
MESSENGER	Total	3200		Not needed		
FOOD/MEAL		Included in per diem			Included in per diem	
VENUE	Total	8000		1000/Upazila	1000/upazila	
MONITORING COST	Total	18550		50% needed	9275	
COST FOR FPI, FWA ORIENTATION (224 persons)		**194918**	**870**		**92170**	**430**
COST FOR TRAINING MASTER TRAINERS		**70875**	**2726**			**2726**
THEORETICAL TRAINING	Unit wise calculation					
RESOURCE PERSON COST	6300X8	50400		450x4x2	3600	
TRAINING COST PARTICIPANTS	123X697	85850		300x3daysx123	110700	
SUPPLIES	1000X8	8000		50% needed	4000	
FOOD		1700		Included in per diem		
LOGISTICS (Pen, pencil, etc.)		53640		100x123	12300	
TRANSPORT		26116		Not needed		
MONITORING COST		32432		50% needed	16216	
MESSENGER		3400		Not needed		
COMPUTER		2500		Not needed		
TOTAL COST FOR THEORETICAL TRAINING (123 persons)		**264038**	**2400**		**146416**	**1194**

Orientation of the program managers for 40 HFWC		Cost during expansion	Unit cost during scaling up	Actual need/not needed during expansion	Needed during nationwide expansion	Estimated unit cot during expansion
HANDS ON TRAINING OF THE PROVIDERS	Unit wise calculation					
RESOURCE PERSON COST	38X450	17100		Needed	17100	
TRAINEE COST	82X1979	162300		Needed	162300	
SUPPLIES	1500X4	6000		Needed	6000	
LOGISTICS		6894		Needed	6894	
TRANSPORT		27740		Not needed		
MONITORING COST		7650		Needed	7650	
SUPPORT STAFF		650		Needed	650	
TOTAL COST FOR 1ST PRACTICAL TRAINING (82 persons)		**228334**	**2785**		**200594**	**2446**
REFRESHER HANDS-ON TRAINING OF SERVICE PROVIDERS	Unit wise calculation					
RESOURCE PERSON COST		5850		Needed	5850	
CONSULTANT COST		4000		Needed	4000	
TRAINEE COST	80X112350X80	112350		Needed	112350	
LOGISTICS		4720		Needed	4720	
TRANSPORT		16900		Not needed		
MONITORING COST		3150		Needed	3150	
SUPPORT STAFF		200		Needed	200	
TOTAL COST FOR 2ND PRACTICAL TRAINING (80 persons)		**147170**	**1795**		**130270**	**1628**