Achieving Equitable Access to Maternal Health Services through Voucher Schemes

The Uttarakhand Experience

June 2010

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Abbreviations

AIDS	acquired immune deficiency syndrome
ANHA	Agra Nursing Homes Association
ANM	auxiliary nurse midwife
ANC	antenatal care
ASHA	accredited social health activist
BOR	bed occupancy rate
BPL	below poverty line
CHC	community health center
CINI	Children in Need Instititute
CMO	chief medical office
EPI	expanded program of immunization
FP	family planning
Hb	hemoglobin
HIV	human immunodeficiency virus
ICDS	Integrated Child Development Scheme
IFA	iron and folic acid
IFPS	Innovations in Family Planning Services (project)
IIPS	International Institute for Population Sciences
ITAP	IFPS Technical Assistance Project
IUCD	intrauterine contraceptive device
JSY	Janani Suraksha Yojana
MIS	management information system
MO	medical officer
MWRA	married women of reproductive age
NFHS	National Family Health Survey
NGO	nongovernmental organization NICU Neonatal Intensive Care Unit
NRHM	National Rural Health Mission
NIRPHAD	Naujhil Integrated Rural Project for Health and Development
NSS	National Sample Survey Ob/Gyn Obstetrician/gynecologist
PAG	Project Advisory Group
PHC	primary healthcare center
PMU	Program Management Unit
PNC	post-natal care PPP public-private partnership
RCH	reproductive and child health
RH	reproductive health RTI reproductive tract infection
SES	socioeconomic status
SIFPSA	State Innovations in Family Planning Services Project Agency
SNMC	Sarojini Naidu Medical College
STI	sexually transmitted infection
TT	tetanus toxoid
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
USAID	United States Agency for International Development
VDRL	Veneral Diseases Research Laboratory Test
VMU	Voucher Management Unit
WR	Wasserman reaction

Introduction / Purpose

USAID/India is providing financial and technical support to pilot public-private partnerships (PPPs) that aim to improve family planning (FP) and maternal and neonatal health (MNH) outcomes in India, particularly among the poor. The purpose of this pilot study was to determine whether distribution of vouchers that entitle holders to services free-of-charge are feasible and effective in increasing utilization of FP and MNH services among poor beneficiaries.

A general model for the pilot voucher schemes was developed by the Innovations in Family Planning Services (IFPS) Project (ITAP/Delhi). The voucher scheme was designed to provide low-income people with a set of coupons to obtain free RCH services from designated providers. The providers are reimbursed on a previously agreed fee schedule and are monitored to ensure high-quality service provision. Voucher schemes based on this model were implemented as pilots in Agra and Kanpur Nagar, Uttar Pradesh; and Hardwar, Uttarakhand.

The intention of this report is to share information on the Haridwar Voucher Scheme to inform the scale-up and design of other voucher schemes in India and other low- and middle-income countries. The report's findings highlight the importance of evidence-based planning; designing a model that meets the health needs of the target population and the interests and incentives of various stakeholders; and developing and reinforcing synergies that optimally draw on the comparative strengths of public and private sector health systems.

Background

The Government of India (GOI) has a long history of attention to population policy and services delivery. The GoI adopted the world's first formal population policy in 1952, seeking to reduce India's birth rate "… to the extent necessary to stabilize the population at a level consistent with the requirements of the national economy." Successive five year plans provided the policy framework, strategies and funding for development of a nationwide health care infrastructure and human resources for health needed to achieve national demographic and reproductive health objectives. In addition, the GOI articulated strategies for improving health services and outcomes through development of public–private partnership (PPP) models in collaboration with IFPS (ITAP/Delhi). These initiatives have helped to expand access to RCH services, improve service quality, and promote sustainability to ensure long-term availability of RCH services. In southern India, these strategies have succeeded to the point that some states have achieved replacement level fertility. The northern states have not experienced the same level of success -- TFR, unmet need for FP and maternal and child mortality have remained high. To reinvigorate RCH services in the north, the GOI and the states of UP and UK worked with the IFPS II (ITAP/Delhi) Project to develop, test and document voucher schemes to increase access to and use of integrated reproductive health services.

Uttarakhand was carved out of Uttar Pradesh in 2002. The state has three distinct regions: the upper Himalayas, mid Himalayas and the foothills and plains. Accessibility to health services is an area of concern in the Himalayan regions where the public sector is weak, the private sector presence is negligible and the terrain is difficult. The state is marked by severe poverty, low use of RCH services and under performing government health systems. There are numerous vacant positions in the health department and availability of trained staff is a continuing problem. At the time of baseline data collection for the Haridwar voucher scheme, only 23 of the 1525 sub centers had all of the basic equipment required. Nearly half of the sanctioned posts for male medical officers and 40 percent for lady medical officers were vacant. As a result, health service utilization tended to be very low.

The population of **Haridwar District** is 1.44 million with a decadal growth rate of 26.3 (1991-2001) and accounts for 17 percent of the state's population (Census 2001). Haridwar has extreme inequalities in access to health care between rural and urban areas and across SES groups. In 2001, Haridwar had a TFR of 4.1, the highest in the state and higher than the national average. In a state with scattered population (average density of 159), Haridwar had a density of 612 persons per square kilometer, the highest in the state. Only 31 percent of women delivered in institutions and 42.7 percent had attended deliveries; 54.5 percent received no ANC and only 7.9 percent received a full complement of ANC services. More than a quarter of women (26.4 percent) had an unmet need for family planning.

Study methodology for voucher scheme evaluation

The project team collected and reviewed secondary information from (1) published and unpublished literature on approaches to reach the poor and demand-side approaches; (2) statistical studies of demographic and health indicators for Haridwar, UK, and India; and (3) project documents, meeting notes, service statistics, and other records. In addition, the team collected primary data through focus group discussions; home visits and interviews with beneficiaries and stakeholders; and interviews and observational tours of private health facilities in the Haridwar District in June 2010. Last, the team reviewed the results ofbaseline and endline surveys, client satisfaction surveys and medical audits.

Pre-implementation phase for the voucher scheme

Introduction

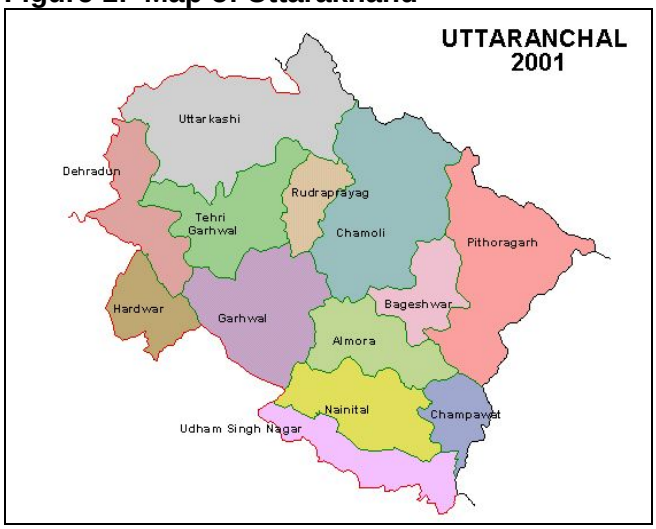
In 2004, the ITAP project team prepared a concept paper on PPPs. The paper defined various partnership models that included as one objective the improvement of access to and quality of health services. The concept paper was used as one input during the formulation of the National RCH-II Program Implementation Plan. To build broader consensus and a concrete plan for PPP implementation to achieve FP/RCH objectives in the state of Uttarakhand, ITAP carried out a performance review of public health units to measure the annual improvement in performance. Two variables - sterilization and institutional deliveries – were selected for analysis. Sterilization performance in Imlikheda block had increased marginally between 2003-04 and 2006-07 but Bahadrabad block had shown a 40 percent improvement as seen in Table 1. There remained an unmet need for sterilizations in Hardwar district.

Table 1: Sterilization and institutional deliveries in two blocks of Hardwar over three years

Block name	2003-04	2004-05	2005-06	Difference in performance between 2003-04 and 2005-06
Imlikheda BPHC	331	227	347	+16
Bahadrabad BPHC	609	908	875	+266
Imlikheda BPHC	337	503	488	+151
Bahadrabad BPHC	246	200	239	- 7

Rural health institutions in Imlikheda had increased institutional deliveries from 337 to 488 but Bahadrabad suffered a slight decline during the same period. These 727 deliveries accounted for only 6.26 percent of the estimated births in the two blocks. The low use of institutional deliveries was likely due to the non-availability of service providers with the required skills, the absence of female medical officers and the cultural norms prevailing in the district.

Figure 1: Map of Uttarakhand



A one day consultation workshop was held in Haridwar with district and block level officials interacting with public and private providers in the state. The purpose was to bring all potential partnering agencies in the health sector together to discuss the future and scope of PPPs, specifically with reference to Haridwar. It also aimed to create awareness and understanding among the group on the different PPP models, innovations and their scope in the delivery of family planning and reproductive health services.

The August 2006 workshop for the first time created awareness about meaningful ways to bring together the public and private sectors in partnership for common good. More specifically, it discussed demand side financing and the voucher scheme to enable Government and donors to purchase outputs rather than inputs while also offering beneficiaries a choice of provider**.** The meeting concluded with a consensus on the need and utility of PPPs in the delivery of FP and RCH services. The group decided to pilot a voucher scheme in two blocks of Hardwar namely, Imlikheda and Bahadrabad.

A second meeting was held in October 2006 for the private providers willing to join the scheme. The group adopted a package of services and a set of specific open ended services based on the predetermined cost of the agreed to services. The providers also agreed to an accreditation process to ensure quality of services.

Preparation of the Haridwar Voucher Scheme Proposal

Based on review of studies and subsequent discussions with potential stakeholders, ITAP provided technical assistance to UAHFW to prepare a formal proposal to pilot a voucher scheme in the Haridwar District. The voucher scheme would establish a less expensive, more effective and more acceptable solution suited to the needs of BPL families in the two selected blocks. The proposed goal of the scheme was: *To reduce inequities in RCH services among the rural poor (BPL) population by: (1)introducing 'demand side financing' and (2) creating an innovative strategy that would provide access to critical RCH services to BPL families.*

Roles and selection of service providers

Hardwar and neighboring Roorkee provided a large pool of service providers that the project could partner with to achieve the public health goals. This combination provided clients with a range of service providers to choose from and also ensured a healthy competitive environment where private facilities competed for contracts on the basis of price, quality, and location. Nursing homes that responded were evaluated on the basis of quality standards. The nursing homes that agreed to participate and were found suitable later signed Letters of Agreement with the CMO, thereby agreeing to terms and conditions of the project.

Services and Pricing

A consultative process was initiated in the two blocks and their adjoining towns of Roorkee and Haridwa. The providers opted for providing client specific services from a predetermined list of services. These services were individually costed and the same was applied (see Table 1) to specific services provided to the clients under the voucher scheme. Based on the negotiations with the selected private providers in the presence of representatives from the Directorate of Health and Family Welfare, Uttarakhand, the following prices were fixed for each of the services:.

Table 1: Service -Cost fixed by Private and Government Service Providers

Service package	Cost	Remarks
ANC (minimum 3 visits, inclusive of TT and IFA provided by government)	**Rs. 100**	Cost remains same if the visits exceed three visits
Routine lab investigation	**Rs. 500**	Hb, Urine, VDRL, Blood Sugar, HIV and will be conducted by qualified pathologist
Normal delivery	**Rs. 2200**	Inclusive of medicine, stay, routine stomach wash, oxygen but not food
Ultrasound	**Rs. 150 per examination**	
PNC	**Rs. 100**	Expected to be two visits inclusive BCG, Polio, pills, condoms and counseling
IUD	**Rs. 100**	multi load supplied by government
Sterilization **Ligation**	**Rs. 1500** **Rs. 2000**	For ligation instrument will be provided by Govt.
Complication during ANC period	**Rs. 500**	If OPD service is required and it includes stay and medicine
Delivery- caesarian **With Ecclampsia** **With PPH**	**Rs. 8000** **Rs. 8000 + 2000** **Rs. 8000+ 1000**	All services are inclusive of medicine and stay but if blood is required cost will be Rs. 500 / bottle with replacement if replacement is not found govt. would provide help
Child care RDS Phototherapy Neonatal complication Incubator cost	 **Rs. 2500** **Rs. 1000** **Rs. 500** **Rs. 500/day**	 2-7 days hospital stay 2-5 days

Cases requiring tertiary care were referred to higher institutions. Travel costs were reimbursed by government. Medicines were provided by government sector

Setting quality standards

The first tasks at hand was setting accreditation standards and review of potential private facilities. Public health standards, as laid out by the Uttarakhand government, were reviewed and essential requirements for providing reproductive health services were identified. Based on these data, ITAP developed the essential quality standards used for accrediting private nursing homes. The accreditation was done by a team of professionals from the District Quality Assurance Group. The DQAG was comprised of a surgeon, anesthetist, and an obstetrician who visited the private nursing homes to physically verify the required standards. The main criteria included the presence of a 5 bedded in

patient facility with a qualified in house gynecologist, an anesthetist and a pediatrician on call. During the accreditation process, most nursing homes were found to be clean and well equipped with the required man power. However there were gaps in certain areas such as waste management and infection prevention. The DQAG team decided that the capacity of the nursing homes could be strengthened on these issues as part of their association with the voucher scheme.

Management information systems and reporting

Once services and quality standards were identified and developed, ITAP set out to develop an MIS system. The MIS system was designed to track the distribution of vouchers at each level as well as use of vouchers for each service by provider, by month, bsex of newborn and whether the infant was born alive or dead. The unit would then compile information from the nursing homes to develop (1) a block-wise report of beneficiaries for different services, (2) a report of total beneficiaries for different services for each private nursing home, and (3) a consolidated report on the number of beneficiaries accessing each service.

Role of ASHAa

ASHAs, a new category of voluntary health personnel developed under the National Rural Health Mission (NRHM), are women who have completed at least eight grades of education and are interested in providing motivation and support services to BPL women. The ASHAs under the voucher scheme were paid performance-based incentives. The ASHAs were to

- Develop a map of their villages to identify BPL households and pregnant women;
- Raise awareness of the voucher scheme benefits and provide information on the nursing home providers and facilities to pregnant women;
- Encourage eligible women to use voucher services;
- Prepare a micro-plan for the timing of health system inputs during a women's pregnancy;
- Distribute the appropriate voucher at each point in a woman's pregnancy;
- Arrange transportation and accompany beneficiaries to the nursing home on the day of delivery;
- Work in collaboration with other partners such as elected representatives, community-based organizations, Integrated Child Development Scheme (ICDS) workers and ANMs; and
- Provide feedback to the NGOs on the quality of services.

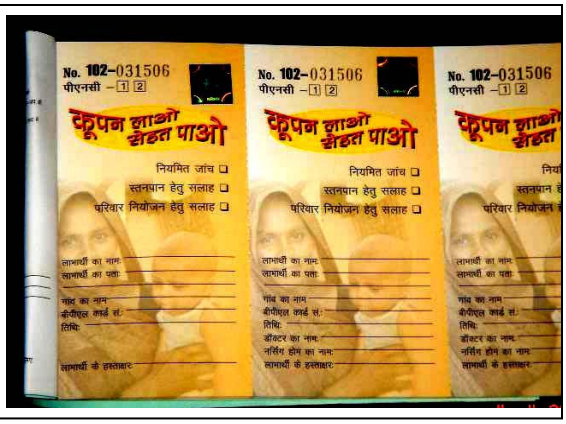
Design of the "Jachcha Bachcha" Card and voucher coupons

Each ASHA provided a "Jachcha Bachcha" card—or patient-held record of FP/RCH information and services—to each beneficiary. The card contained a record of (1) the outreach contacts made by the ASHAs; (2) ANC and PNC visit notes regarding findings from physical and laboratory examinations with ANMs or doctors at government and private facilities; (3) the date, place, and type of delivery; (4) the sex and birthweight of the newborn; (5) maternal and child immunizations; and (6) a growth chart to be completed by Anganwadi workers (Constella Futures, 2007b). ITAP/Delhi designed and pretested with ASHAs a patient record for the voucher scheme. The pretest, conducted in February 2007, provided important feedback for the improvement of terminology and layout of the card.

ITAP/Delhi also provided technical assistance in the design of the voucher booklets and coupons. A voucher booklet was created for each type of service, and the picture on the voucher coupons indicated the type of service covered (see Figure 2). Booklets were distributed to the ASHAs by the voucher management unit during their orientation. Each voucher had three parts─one to be retained by the ASHA, the second to be retained by the nursing home, and the third to be provided to the VMU with

the nursing home's claims for reimbursement. To prevent counterfeiting and misuse, holographic stickers and watermarks were added to each voucher. In addition, a unique eight-digit code was assigned to each voucher, enabling the VMU to identify duplicate vouchers. The numbering of the vouchers also corresponds to the district and block where the vouchers are distributed. The vouchers are completed with the names of the client, the ASHA who distributed the voucher and the NH that provided the service. The addresses of the panel of eligible nursing homes and the VMU are provided on the back of each voucher for easy reference.

Figure 2: Design of the Voucher coupons



Identification of BPL families

The project design called for ASHAs to receive lists of the BPL populations to enable them to follow up with the target groups. However the lists were not uniformly available. One of the major issues was the BPL card itself. In the initial phases of the project, the team found that the majority of the really poor did not have BPL cards and decided that Pradhan certification would be accepted. This too resulted in issues and the team ultimately decided that only a card holder would receive services.

Awareness generation and disbursement of vouchers

The team developed a communication strategy to create awareness about the scheme, motivate beneficiaries to use family planning, generate demand for high-quality FP and RCH services, and maximize use of institutional delivery benefits by those making one or more ANC visits. To inform the strategy, ITAP/Delhi had previously contracted a research firm to conduct (1) focus group discussions to identify issues important to potential beneficiaries and (2) interviews with physicians to determine use of services and beneficiary needs. The discussions focused on villagers' attitudes and practices related to ANC, delivery, and PNC. Their responses included the following: (1) physicians are too far from the village and their RCH services are too expensive, (2) antenatal midwives are primarily a resource for child health services such as immunizations, and (3) alternative providers (e.g. traditional healers) who come to the household and charge lower fees are used when care is needed during pregnancy. In comparison, the physicians interviewed indicated that less literate women came to them only in an emergency and often did not follow their advice regarding maternal or child care. These physicians indicated that for the voucher scheme to be successful, additional emphasis should be placed on providing information, education, and communication to households through household visits, pictoral displays, and materials (for women with low levels of literacy) and via radio and television (Algorithm, May 10, 2007).

The findings suggested that BPL women would respond to messages of comfortable and stress-free delivery and that their husbands and elderly women in the same households would respond to information that a delivery in a nursing home would increase the probability of a safe delivery. The communication strategy included development of a strong brand, "SAMBHA," which suggested that obtaining high-quality healthcare through use of the vouchers is "possible." ASHAs distributed leaflets detailing the voucher services and addresses of approved nursing homes. Posters outlining the voucher services and lighted "glow" signs were displayed at the entrance of each nursing home.

Development of a branding logo

Figure 3: Voucher Scheme Branding Logo

ITAP conducted qualitative research with men and women between the ages of 18 and 45 in four villages of Agra District in UP to select the most appropriate branding design for the voucher scheme. The focus groups preferred the design shown in Figure3, as it suggested to respondents that good health and other benefits were related to a family with two children. Furthermore, the flower and five bright colors suggested a feeling of happiness. In addition, the five colors in the branding logo could be used for the five vouchers associated with the five stages of pregnancy.

Implementation of the Voucher Scheme

The Scheme was formally launched in May 2007, in the presence of the health minister and the health secretary. It was a proud moment when the first "voucher baby" was delivered.

Output evaluation

A primary motivation for the launch of any pilot initiative is to learn from the processes. To understand what works and what does not and to comprehend and document the extent to which the results envisaged were achieved. The evaluation of the pilot intervention included a rapid assessment; client satisfaction surveys carried out in the field by a combined team of representatives from the department of Health – Uttarakhand, State Health Resource Centre, ITAP and USAID; a medical audit; and pre- and post-tests. The findings of these exercises are as follows:

Rapid assessment

A rapid assessment of the voucher scheme piloted in the two blocks of Hardwar district was carried out by a joint team comprised of representatives of UAHFWS, Directorate of Health, USAID and ITAP. The objectives of the assessment were to:

- Review implementation of the voucher scheme vis-à-vis the objectives of the scheme.
- Assess the strengths and challenges of the private nursing homes in delivering services in the VS.
- Identify facilitating factors and barriers faced by BPL clients when accessing services via the VS
- Understand the experiences of the clients who utilized services

Methodology: The study team developed and used a set of checklists to evaluate the private nursing homes, the PMU including the DPMU and DGUS. The study team divided into 2-member teams and visited each participating nursing home. Using the checklists, they reviewed the facility and records and interviewed both the doctors and clients present at the clinic at the time of visit. This was followed by visits to 2 villages to interview one ASHA and two beneficiaries who had accessed services from the same nursing home in each village.

Findings:

Program Management Unit

- The CMO was heading the VMU – supported by DPM and the NGO- DGUS.
- The role of the DPM was not clearly defined resulting in limited participation.
- Financial records were well maintained.
- The turn around time for redemption of submitted claims was long at over 2 months.
- The flow of funds from the state to the district was irregular.
- Amounts more than Rs.30,000 required the DM's approval.
- The interaction between DPMU and NGO was limited.
- There were few monitoring visits made by the DPMU/CMO and were not recorded.

Voucher Management Unit - NGO – Dharam Gramin Utthan Samiti

- VMU functions included voucher distribution, reports collection and compilation, verification of claims and compilation, field level interactions with ASHAs and monthly meetings.
- The staff was multi- tasking as BC, MIS Manager.
- Monthly performance records were well maintained.
- Financial records were well maintained.
- Voucher distribution to blocks was not systematic- initially block coding was mixed up, resupply system for vouchers was erratic and there was a poor tracking system.
- The poor performance of Bahadrabad was attributed to a lack of ownership at the block level.
- The NGO's field level presence in Bahadrabad was nearly absent.
- The client satisfaction records were well maintained but needed to be cross verified.

Nursing Home's Assessment

1. Staffing

- All nursing homes had full time gynaecologists. The paediatrician/anesthetist were on call.
- OT assistant ws on call.
- The nursing staff was not formally qualified, but trained in clinics.

2. Infrastructure

- Bed strength was adequate.
- The OPD waiting area in Seema Nursing Home was inadequate.
- Labour rooms and OT were well equipped.
- Happy Family Nursing Home – OT did not have an A/C, all essential equipment except for a laproscope was available and functional.
- Only Prem Nursing Home was equipped with a Laproscope.
- Neonatal services equipment was present in all nursing homes. However, Happy Family was still referring clients for neonatal care

3. Service Delivery Issues

- OPD timings were uniform for all patients
- There was patient drop out of from ANC to delivery and thereafter for PNC services. Transport costs were an issue. JSY money for the beneficiary in government hospitals was a major barrier to accessing services at the private clinics.
- There was very poor uptake of FP services as they were not cost effective for the clinics.
- Preet Nursing did sterilizations only with caesarean sections.
- Waste management protocols were not being followed
- Availability of blood was an issue
- Availability of IFA and contraceptive supplies were irregular and inadequate
- Patient records were poorly maintained
- Glow signs were available at all but Seema Nursing Home. No other materials were available

4. Private Provider's Perspective

- The providers were satisfied with the scheme and would like to continue
- Clinics have the infrastructure and resources to handle the added patient load.
- Seema Nursing home – Patients who were earlier paying are now coming with vouchers, so they had no added patient load
- Reimbursements were occasionally delayed but overall they were satisfied

5. Feed back from the Clients at the Clinic

- Patients were satisfied with the services and the scheme
- The attitudes of doctors and staff were reported to be good.
- Normal delivery cases were discharged in less than 12 hrs at times
- Paediatrician visits were made only in cases of a sick newborn
- BCG was not given during hospitalisation
- PNC usually occurred only in cases of caesarean section or complicated deliveries

6. Feed back from the Clients

- Their knowledge about the voucher scheme is limited
- They were not aware of all the services or providers available
- The ASHAs usually selected the private clinic for the cliniet
- There were no issues about accessing services as transport was arranged by ASHAs
- Satisfied with the quality of services received
- There was a large drop out for PNC and FP services as clients did not perceive a need for them

7. Feed back from the ASHA

- They are satisfied with the voucher scheme
- The vouchers and registers are available but not updated regularly
- The vouchers resupply system was not uniform and regular
- They were trained on the voucher scheme but have gaps in understanding
- Monthly meetings and reviews with ASHAs were not conducted
- ASHAs in Bahadrabad were not aware of the NGO's role and had never met the block coordinators
- They were satisfied with services provided by the private clinics
- They were concerned about client drop out– opting for delivery in public health facility or at home
- FP services uptake is low as there is no perceived need by the ASHAs and clients. Their orientation and motivation was influenced by JSY incentives

Recommendations

- Coordination between DPMU and DGUS needs to be strengthened
- The monitoring role of the DPMU needs to be defined
- Financial flow from state to district and VMU to nursing homes should be regular and timely
- Microplans for field visits of block coordinators to be submitted to DPMU
- Training for ASHAs on the voucher scheme and demand creation for FP is needed
- BCC activities to be launched to improve service utilization.
- Nursing homes to be oriented to record keeping and MIS
- Training of nursing home staff on waste management and infection prevention
- Alternate mechanisms for FP service delivery to be explored

Client satisfaction survey

The goal of this study was to assess the beneficiaries' level of satisfaction with the services they received under the voucher scheme and to identify the factors that contributed to beneficiary satisfaction levels.

Objectives:

- Assess client perceptions of voucher access and availability
- Identify problems obtaining vouchers from the ASHAs
- Assess quality, availability and accessibility of services provided to the beneficiaries under VS
- Identify discriminatory practices faced by voucher patients compared to private patients
- Determine whether beneficiaries paid additional fees, either monetary or non-monetary for services covered under the voucher scheme
- Identify other problems faced by beneficiaries in accessing services covered under the VS

Study design / methodology

The study followed a mix-design approach, i.e. qualitative and quantitative tools were used for the study. Information was collected from those individuals who had utilized services under the voucher system in the two blocks studied. Table 2 presents the block-wise sample of beneficiaries covered by the study.

Table 2: Study sample by service and block

	Bhadarabad	Imlikheda	Hardwar
Pregnancy Care	98	118	216
Delivery & Neo-natal care	89	103	192
Post delivery Care	43	61	104
Family planning service	23	8	31
Total N	**137**	**142**	**279**

The research team interviewed 320 beneficiaries in Haridwar using a quantitative questionnaire. The interview schedule consisted of questions on awareness of the voucher system; the services available under the voucher scheme, types of services utilized, quality of services utilized by health facility for ANC, delivery, PNC and family planning.

The qualitative component of the survey involved in-depth interviews (IDIs) with beneficiaries to gain detailed understanding of issues mentioned by beneficiaries. These one-on-one interactions provided diagnostic insights into the actual level of customer satisfaction.

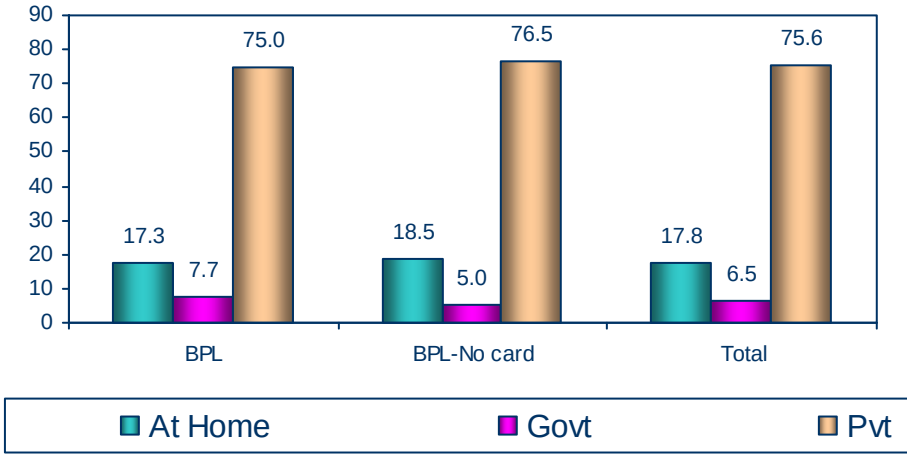
The questionnaires were pre-tested prior to the beginning of data collection. Interviewers were trained using the finalized questionnaires. To ensure data quality, the field supervisor observed interviewers throughout the course of fieldwork through spot checks and observation; back checks; re-interviews and re-visits to minimize non-response

Findings

The study team found that overall slightly less than 50 percent of respondents knew about the voucher scheme. When respondents were asked about the place of delivery of their last child, 76 percent stated

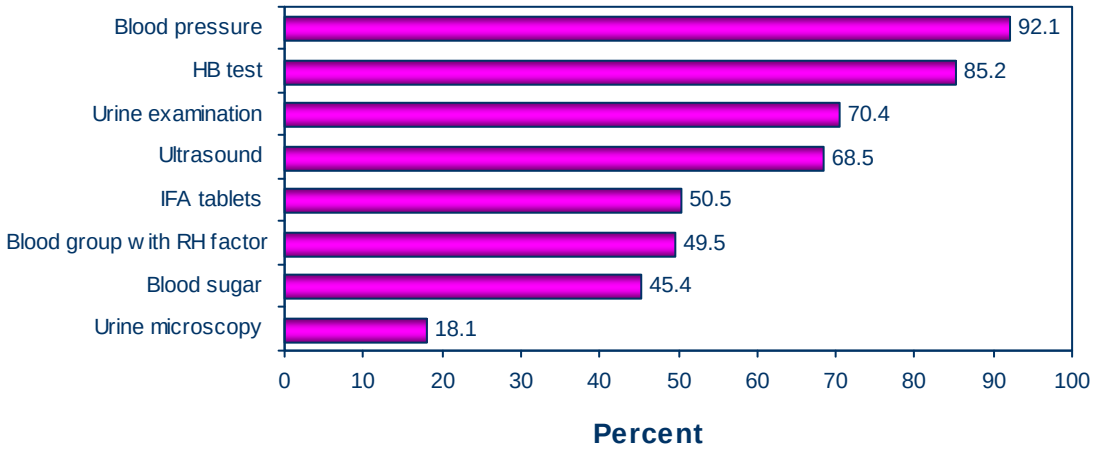
that their last child was born in a private hospital versus 7 percent who attended a government hospital and 18 percent who delivered at home. See Graph 1.

Graph 1: Percent distribution of respondents by place of birth of last child

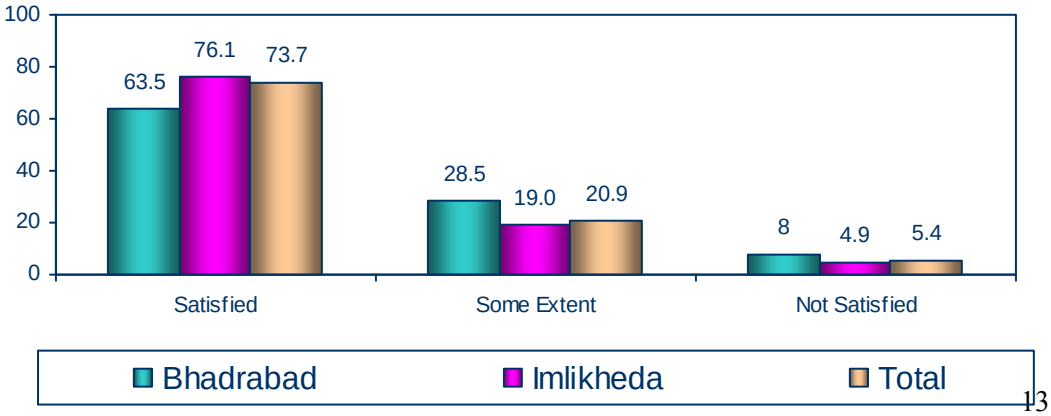


Graph 2 shows that only fifty-one percent of women received IFA tablets although 92 percent had their blood pressure checked. Overall, women were very satisfied with the care they received with 74 percent satisfied and 21 percent somewhat satisfied. See Graph 3. The same pattern was observed when satisfaction was measured by location and service type..

Graph 2: Percent distribution of clients by ANC Diagnostics

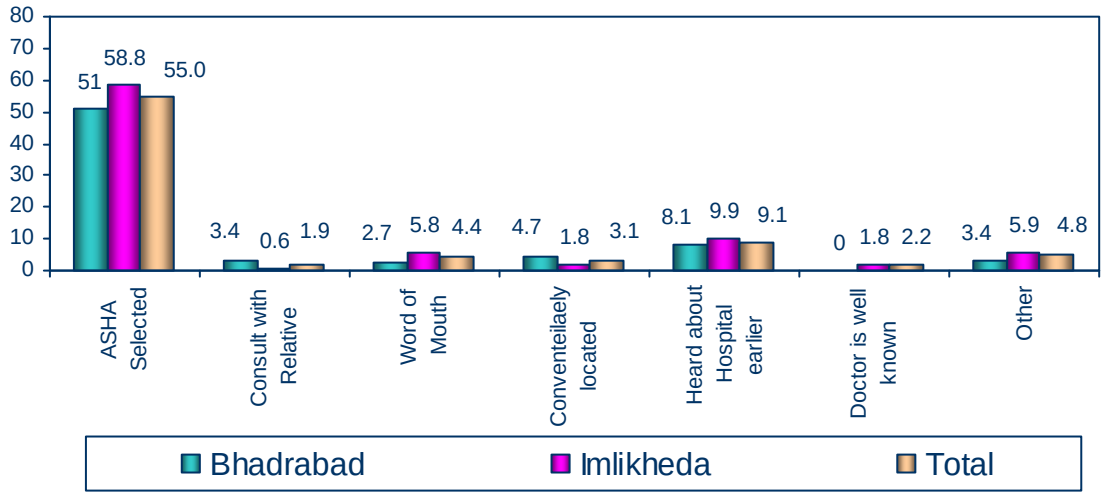


Graph 3: Level of satisfaction



When women were asked why they visited the last hospital, they overwhelmingly said it was because the ASHA took them there. See Graph 4. These findings demonstrate the importance of the ASHA in successful implementation of the scheme.

Graph 4: Reason for visiting the last hospital



Medical audit

The goal of the medical audit was to assess the quality of clinical services and identify areas for improvement in all the nursing homes recruited for the pilot project. Specific objectives were to:

- Assess the quality of delivery cases- including normal vaginal; cesarean and complicated deliveries
- Analyze the indications for cesarean cases and quality of care in these cases
- Evaluate causes of maternal and neo-natal deaths that have occurred in voucher beneficiaries
- Identify gaps and recommend changes at each facility to improve quality of services

Methodology

Futures Group developed the audit tool in conjunction with a government appointed consultant. The tool has six parts: (1) case details, women's characteristics, status at the time of admission, delivery index and essential newborn care; (2) caesarean section, obstetric hemorrhage, pre-eclampsia, obstructed labor, uterine rupture, other complications and newborn; (3) diagnosis, quality of care, appropriateness of management protocol and documentation of the case; (4) Scoring of MA forms; (5) verbal autopsy tool for neonatal death; and (6) verbal autopsy tool for maternal death.

Sampling

The sampling framework was created by listing all voucher beneficiaries who received delivery related services in the seven accredited nursing homes. Delivery related services were broken out by three service types, i.e. normal delivery without complications; caesarian delivery without complications; and delivery complications (PPH/eclampsia) in normal/caesarean cases for each nursing home. The audit covered cases delivered from May 2007 to April 2008. A random sample stratified by hospital and type of service was chosen. The audit team, comprised of a senior gynecologist, pediatrician, gynecologist, district quality assurance team member, public health expert and data operator, gathered and input the relevant data at each hospital. Data was analyzed using Epinfo. A summary of key findings follows.

Findings

The team audited and analyzed 216 cases: 134 normal deliveries, 65 cesarean sections, and 52 complicated cases. Of these, 6 neonatal deaths and 1 maternal death were recorded in the 13 month study period.

The WHO accepted rate of caesarean section is 10 to 15 percent of deliveries. However, the C-section rates were much higher in the study hospitals. This was most likely due to (1) referrals from government hospitals due to lack of supplies and gynecology surgeons; (2) ASHAs bringing complicated cases to private nursing homes rather than government hospitals; and (3) women who had not received ANC coming in for deliveries that were often complicated. In all probability, these women would not have sought care in the absence of such a scheme. It can be presumed that the number of women receiving emergency care were the same women who were at risk of suffering severe morbidity or mortality. While these cases are legitimate, the high rates of c-sections still warrant monitoring.

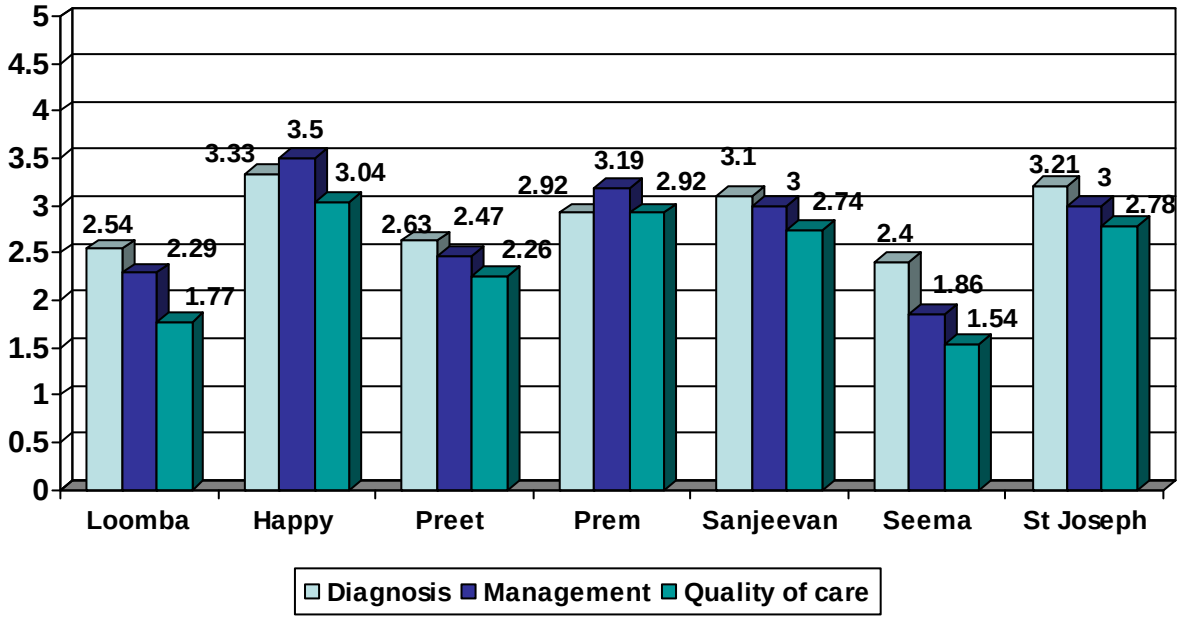
The audit team found that documentation was incomplete in all the nursing homes. When documentation was missing, the team carried out verbal auditing. Documentation of complicated deliveries was most often present. However, physicians assumed that no documentation was needed on normal deliveries.

The quality of care for normal deliveries was found to be adequate in all of the nursing homes and resulted in good outcomes. However, some hospitals did not follow protocols for active management of the 3rd stage of labor.

The program management unit also undertook a random verification of all the beneficiaries who received services under the voucher scheme. They found that most of them were satisfied with the services they had received and felt that the scheme had been a windfall.

Graph 5 shows the scores for diagnosis, appropriateness of case management and quality of care by facility. Scores above 2.5 were considered acceptable. Only one nursing home exhibited serious issues with case management and quality. A second scored low on quality of care. Overall, the scores show that the nursing homes are delivering good quality care that is appropriate for the case at hand.

Graph 5: Diagnosis, appropriateness of management and quality of care by facility



Impact assessment (pre- and post-test)

The goal of this study was to assess the availability and utilization of reproductive and child health care services in Imlikheda and Bahadrabad. The survey covered 1,200 households from each block, 1,087 currently married women aged 15-49 years from Imlikheda and 1,036 from Bahadrabad; 1,007 children below 5 years from Imlikheda and 959 from Bahadrabad.

Questionnaires: The survey used three types of questionnaires: the Household Questionnaire, the Woman's Questionnaire, and the Child's Questionnaire. The questionnaires were bilingual, with questions in both Hindi and English.

The Household Questionnaire listed all usual residents in each sample household plus any visitors who stayed in the household the night before the interview. For each listed person, the survey collected basic information on age, sex, and marital status, relationship to the head of the household, education, and occupation. Information was also collected on the usual place where household members go for treatment when they get sick, the main source of drinking water, type of toilet facility, source of lightning, type of cooking fuel used, religion of the household head, caste/tribe of the household head, ownership of a house, ownership of agricultural land, ownership of livestock, and ownership of other selected items. The information on age, sex, and marital status of household members was used to identify eligible respondents for the Woman's Questionnaire.

The Woman's Questionnaire collected information from currently married women aged 15-49 who were usual residents of the sample household or visitors who stayed in the sample household the night before the interview. The questionnaire covered details of the respondent's background, knowledge and use of family planning, reproductive health services, media exposure and interpersonal communication, and HIV/AIDS and other sexually transmitted infections.

The Child Questionnaire collected information about children below 5 years, such as immunization status, prevalence of childhood illnesses, treatment seeking etc.

Survey and sample design: The baseline survey was designed to provide estimates for key parameters at the block level (only rural areas). In order to obtain reliable estimates, a sample size of 1,200 households was fixed per block.

Sample Selection: A two stage sampling procedure was adopted. In the first stage, 40 villages (primary sampling units - PSUs) were selected using the probability proportional to size (PPS) methodology. In case of small villages having less than 50 households link villages were provided and villages having more than 300 households were segmented, and two segments were selected for household listing and interviews. All the households in the selected village were listed and grouped into households having a child below 5 years (stratum 1) and not having a child below 5 years (stratum 2). In the second stage 25 households were selected (15 from stratum 1 and 10 households from stratum 2) using circular systematically with a random start, for administering the questionnaire.

Sample Implementation: A total of 80 PSUs were selected, 40 per block. Of the 1,200 households selected in Imlikheda block, interviews were completed in 1,144 households, i.e., a household response rate of 95.7 percent. Similarly the household response rate in Bahadrabad was 95.8 percent. The woman's response rate was 91.7 and 92.1 percent respectively, and the response rate

for children below 5 years of age was 92.6 and 93.7 percent respectively in Imlikheda and Bahadrabad blocks respectively.

Impact assessment (post-test)

The goal of the post-test was to assess voucher scheme utilization in Imlikheda and Bahadrabad**.**

Questionnaires:
The survey used two questionnaires: the Household Questionnaire and the Woman's Questionnaire. The Child's Questionnaire was incorporated into the Women's Questionnaire. The tools covered the following: background information on household members, household assets, antenatal and natal care, child care and immunization, media exposure and interpersonal communication and voucher scheme beneficiaries information.

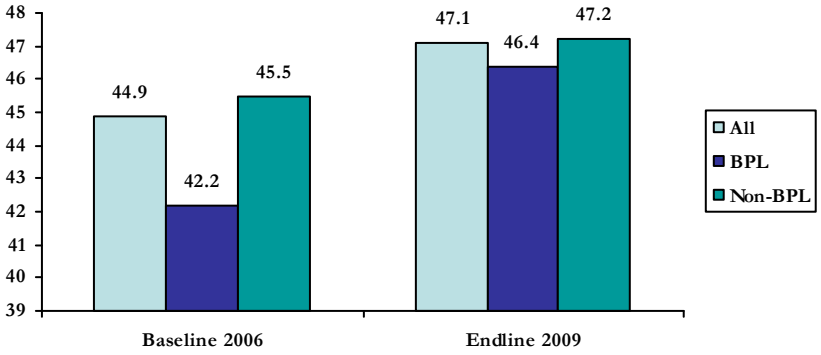
Survey and sample design

The same survey and sampling design was used. A sample of 1500 households from two voucher blocks including a 10 percent non-response error was selected using the PPS sampling procedure. Sixty PSUs were selected and 25 households in each PSU were covered. All eligible who had delivered since January 2007 in the selected households were interviewed.

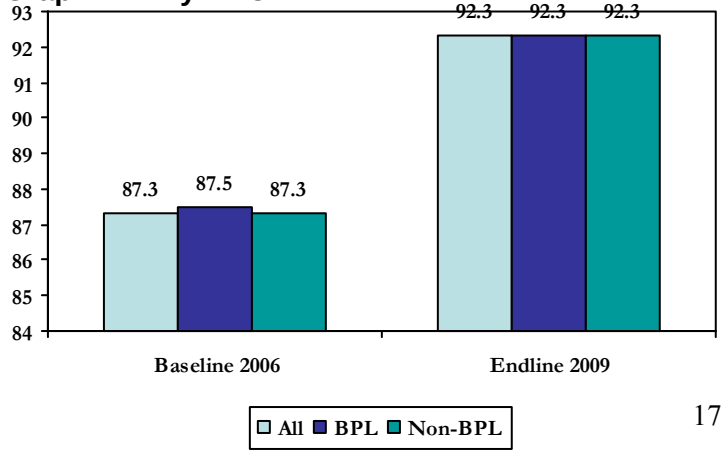
Findings

Key pre- and post-test comparisons are illustrated in graphs 6 through 9.

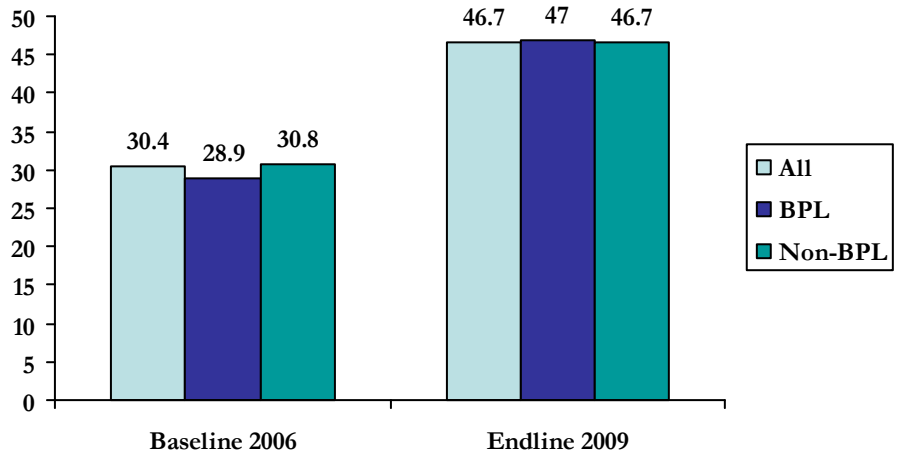
Graph 6: CPR – any method



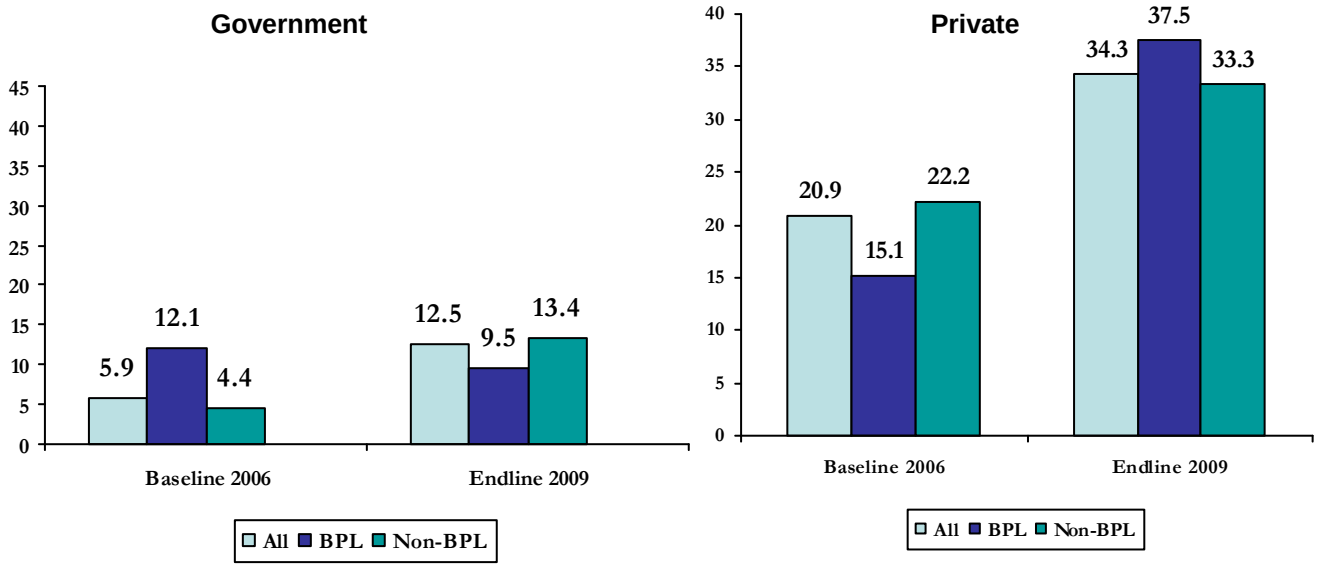
Graph 7: Any ANC



Graph 8: Percent of women delivering in an institutional



Graph 9: Place of delivery



CPR increased by 2.1 percent for all respondents with the BPL population increasing by 4.2 percent. The percentage of women who received at least one ANC visit increased 5 percent to 92.3 percent for all respondents. The percentages of all women delivering in an institution increased by 16.3 percent while the percentage of BPL women increased by 18.1 percent. The increases were seen in both government and private facilities. However, the percent of BPL women who delivered in an institution decreased in government hospitals and went up dramatically in private nursing homes. Overall the voucher scheme appeared to have had a positive impact across all respondents. Because the GOI introduced the JSY scheme during the voucher pilot, it was not possible to determine causality.

Discussion

The evaluation shows clearly that the voucher scheme met its goals and objectives. When we examine the program we see that a lot has been achieved. However, a lot is yet to be accomplished as we up-

scale to other parts of the state. Reflection on the activities and processes bring forth certain factors that can be perceived as hindrances to effective growth of the pilot initiative

Identification

If we keep the project goal of providing quality services to BPL populations in mind one of the major hindrances is the process of BPL identification. In the absence of a fool proof mechanism of BPL identification, government proposed that the certification of the Pradhan would be considered valid. This too revealed its own set of problems. Local community politics became the ground for Pradhan certification in many cases. This resulted in people who were eligible for the services being deprived of the same in the absence of 'any proof' of their evident poverty. Additionally, neither the ASHAs nor the PNHs were comfortable providing free services to populations that could afford the same. Subsequently health cards were also issued by the government to the BPL population and were to be considered as the basis for accessing services. But since the process of printing and distribution is expansive and takes time, this has also not served as an effective alternative.

Cost of travel

While the voucher scheme compensated the cost of services, it was surprising to see that the cost of travel was also a consideration for most beneficiaries. This worry along with the traditional belief that pregnancy is considered "natural" and therefore requires no special care has led to reduced demand for available services. Beneficiaries often go to hospitals only in cases of dire emergencies, when the family saw this as the only alternative. These beliefs are even stronger in cases of checkups before delivery. Even family planning utilization is often determined by religious thoughts and probable misconceptions that prevent populations from committing "blasphemy". It is important to note that the person/persons most effected by the situation (be it the pregnant woman, or the eligible couple) are not the main decision makers. Society at large and the extended family in particular decide whether medical intervention is required. These are an interesting and essential set of observations as very often lack of money is passed off as the only reason for not seeking care. The voucher scheme has thus provided an opportunity to study the diverse hindrances in accessing health care and has additionally provided a platform to find mechanisms to address the same.

Quality services

While accessing services is one side of the axis the other is the availability of quality services. From the inception of the scheme, care was taken that the nursing homes selected met quality standards. Although in most cases the clients were satisfied with the services that have been provided to them and the care that has enabled them to overcome the crisis, there are instances where there has been an absence of this sense of satisfaction. Occasional instances of charging for services or prescribing medicines / toiletries that may not be essential resulted in a tarnished reputation for some of the nursing homes. A mishap or bad reputation finds much faster inroads into communities than favorable news. Care needs to be taken to further strengthen quality assurance mechanisms to either be capable of justifying costs or ensuring that beneficiaries do not incur unnecessary costs instances.

Choice of PNHs

The voucher scheme also intended to study the factors that affected the choice of the hospital. Although it was the prerogative of the beneficiaries to choose which PNH they wanted to attend, the preference of the ASHA played a major role in their choice. The ASHAs had past experiences of success or failure

linked to each nursing home and that influenced the choice made by the client. Although this is not a barrier to health care, it might result in communities believing that the ASHA has a vested interest, which could limit participation in the voucher scheme. However the voucher scheme has provided the ASHAs with an increased sense of competence because they are able to provide a concrete solution to most of the BPL patients that they encounter. This compared to the earlier situation where they had only advice to give makes them feel greatly empowered and therefore enthusiastic towards the scheme.

Inherent Opportunities

Once a client reaches the nursing home the contact opportunity should not be lost. Since many factors influence whether the clients reach the facilities, providers should use each opportunity to counsel and advise the beneficiary about appropriate health seeking behavior. Similarly, in case of emergencies, there should be a cross referral system to pass the client on to another NH that might be better suited to handle the situation. Such a system would prevent cases where BPLs were referred to external agencies and had to spend significant amounts of money. An internal referral would not only strengthen service quality within the voucher scheme but would also maintain a good reputation for the program.

Medical Officer In Charge

The cooperation of the government in the success of any PPP model can be seen very vividly in the voucher scheme. One of the blocks has a MOIC who is very closely linked and takes deep interest in the project. He acts as a mentor to all the ASHAs and thus also their agent for problem redressal. This block when compared to Bahadrabad is doing remarkably well. The reasons often quoted for this vast difference in the performance is the engagement and involvement of the MOIC.

PNHs association

Though the nursing homes only receive cost reimbursement for the services provided, the association with a PPP model seems to be one of the salient reasons for them to join the scheme. Discussions with the PNHs revealed that most of them had joined the scheme for avenues of "social service". However, most also confessed to benefitting from an increase in case load after the initiation of the scheme. This, along with a later stage appears to have been one of the reasons for the PNHs to join the program.

Scale-Up

The efficient rapport that has been established with the government has facilitated the movement and the reputation of the program. Given the positive experiences with the voucher scheme implementation in Uttarakhand and the increasing demand for delivery services in public health facilities, the state government decided to scale up the voucher system to four districts, namely, Dehradun, Uddham Singh Nagar, Nainital and Almora. These districts along with Haridwar account for nearly half the population of the state. These districts also have private sector health facilities. The voucher scheme is being implemented primarily for the BPL populations in the rural areas and urban slums. At this point, it covers approximately 60 percent of eligible women.