Vouchers to Improve Access by the Poor to Reproductive Health Services

Design and Early Implementation Experience of a Pilot Voucher Scheme in Agra District, Uttar Pradesh, India

November 2008
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The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development, the U.S. Government, the Government of India, the State Innovations in Family Planning Services Project Agency, or the Innovations in Family Planning Services Technical Assistance Project/Delhi.
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EXECUTIVE SUMMARY

In India, the U.S. Agency for International Development (USAID) is providing financial and technical support to develop public-private partnerships to expand access to family planning and reproductive child health (FP/RCH) services among the poor. As part of this work, the USAID-funded Innovations in Family Planning Services Technical Assistance Project (ITAP/Delhi) developed a model for a voucher scheme to enable women below the poverty line (BPL) to use FP/RCH services offered by collaborating private providers. This model is being pilot-tested in Agra District, Uttar Pradesh, to determine whether it is feasible and effective. The Agra Voucher Scheme is managed by the State Innovations in Family Planning Services Agency, a parastatal agency.

This report summarizes the findings of a study by the USAID | Health Policy Initiative, Task Order 1, project team to document the administrative, political, and technical steps taken during the design, planning, and early implementation phases of the scheme. Because the study covered only the first nine months of operation, it is not an evaluation but rather a detailed description of the process of designing the voucher scheme and a summary of client use of RH services during this period. The research team collected information through reviewing pilot project documents, surveys, and other reports, as well as conducting interviews and focus group discussions with beneficiaries, providers, and program managers during November 2007. The team documented innovations that had already been introduced, as well as “lessons learned” regarding ways to improve implementation.

The purpose of this report is to share information about the Agra Voucher Scheme to inform the 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.

The Agra Voucher Scheme was launched in January 2007. Nongovernmental organizations (NGOs) implemented the activities in six blocks, and the Medical Officer In-Charge of the Primary Health Center implemented activities in one block. The initial effort included (1) the training and supervision of accredited social health activists (ASHAs) by the NGOs managing block-level activities and technical inputs from ITAP; (2) the design of the patient-held record and vouchers; (3) the development of a marketing and communication strategy; (4) the design and installation of management information systems for the NGOs, the Voucher Management Unit (VMU), and the district Chief Medical Officer’s office in Agra; and (5) the exploration of the feasibility of accrediting rural, block-level health facilities to address issues of transportation availability and time costs to increase access to voucher services by women in the more remote rural areas of the district.

Many poor women have benefited from the voucher scheme and used vouchers for FP/RCH services. The project records on the levels of use, by month and type of benefit from March–December 2007, indicated that the scheme’s monthly outputs increased significantly from March–October but declined from October–December 2007 as a result of delays in the review and renewal of NGO contracts. Implementation of the scheme has been dynamic and challenging, as it has brought together public and private providers to deliver high-quality healthcare services to BPL families. Field visits have revealed innumerable stories of women who became motivated and were assisted by ASHAs to seek antenatal care, institutional deliveries, and post-natal care (see Box 1). These beneficiaries were extremely happy with the services provided by the private providers. The Agra Voucher Scheme rightly emphasizes ensuring that nursing homes accredited to provide services and receive reimbursement from the scheme are achieving a minimum level of quality. A notable accomplishment of the pilot scheme has been the adaptation of the National Accreditation Board for Hospitals and Health Providers’ guidelines to be more
appropriate for nursing homes with 5–10 beds. Finally, evidence that private providers find participation in the Agra Voucher Scheme advantageous includes increases in the use and estimated revenues of the participating nursing homes and requests of other nursing homes in Agra to be accredited to participate in the voucher scheme.

The efforts of the VMU, and those providing technical assistance to the pilot project, were integral to the successful design and launch of the Agra Voucher Scheme and increased use of the FP/RCH package of covered services. In addition, the involvement of all stakeholders has helped to address the implementation challenges that have arisen thus far.

“Lessons learned” from the design and early implementation experiences of the Agra Voucher Scheme reveal some recommended actions to improve implementation. The following actions could be taken without altering the original design of the scheme:

- Increase the number of VMU staff.
- Contract with a new NGO to resume activities in three blocks.
- Provide ASHAs with refresher training on FP/RCH clinical subjects and on ways to improve communication with and motivation of the BPL household members.
- Select additional block-level nursing homes to participate in the voucher scheme, especially in rural areas distant from Agra City.
- Encourage the Sarojini Naidu Medical College to (1) draft treatment protocols (including discharge counseling for mother/infant care), training modules for nursing home staff, and clinical audit procedures; (2) review accreditation guidelines and scoring criteria and draft a written manual to formalize accreditation procedures and scoring; and (3) determine whether two levels of accreditation should be adopted and make recommendations to the VMU and Project Advisory Group.

The following actions could also be taken but would require additions or modifications to the original design of the scheme but would improve achievement of the scheme’s objectives or increase efficiency:

- Provide BPL families with information on different schemes [Janani Suraksha Yojana (JSY) and voucher] and on panel of nursing homes and empower them to make decisions regarding the selection of hospitals and schemes.
- Develop a system whereby Pradhan letters provide a unique code for the beneficiary that will permit evaluation of the extent to which individual beneficiaries use the complete set of voucher benefits.
- Examine how the addition of telephone/radio and transportation inputs can be arranged to increase use in more remote rural areas.
- Provide nursing home staff with orientation and training on effective communication skills with BPL clients, as well as with video and print information, education, and communication materials appropriate for illiterate or poorly educated women.
• Develop financial and quality assurance mechanisms to ensure pediatrician examination and counseling for every newborn.

• Create a “corpus fund” funded by USAID or another donor to pay for services and treatment provided to BPL clients that are not covered under the current vouchers, such as blood and other treatment needed for complicated deliveries.

• Explore whether additional funds can be leveraged from the governments of India or Uttar Pradesh or a donor to add intermittent prophylaxis of malaria and provision of bednets to the voucher package.  

• Develop mechanisms to build synergies among the voucher scheme and the National Rural Health Mission (NRHM) and JSY, and introduce these in at least one block.

• Evaluate the financial and non-monetary incentives of the voucher scheme and NRHM regarding how they influence the behaviors of ASHAs, auxiliary nurse midwives, and nursing homes and ultimately affect the outputs and outcomes achieved under the pilot scheme. Determine whether alternative incentive payments under the voucher scheme might increase use of the entire benefit package.

• Review the management information system for the voucher scheme to determine its adequacy for monitoring and evaluation purposes, including its adequacy for assessing the cost-effectiveness of the voucher scheme compared with government or other alternatives (see Appendix E).

• Undertake an assessment to estimate the number of neonatal and maternal deaths being averted to highlight and measure the effectiveness of the scheme.

• Motivate nursing homes to increase their involvement in providing family planning services.

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1 Focus group participants in two villages in the Agra District indicated that malaria is among their most important health problems (Algorithm, 2007). Intermittent malaria prophylaxis and bednets are part of the World Health Organization’s Focused Antenatal Care package.
## ABBREVIATIONS

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

Purpose of the Study

USAID/India is providing financial and technical support to pilot public-private partnerships (PPPs) that aim to improve family planning and reproductive child health (FP/RCH) outcomes in India, particularly among the poor. The USAID-funded Innovations in Family Planning Services (IFPS) Technical Assistance Project (ITAP/Delhi) developed a generic model for the voucher scheme in 2005. This model is being pilot-tested in Agra District of Uttar Pradesh (UP) to determine whether the distribution of vouchers that entitle holders to FP/RCH services free of charge is feasible and effective in increasing use of these services among poor beneficiaries. The pilot-test is managed by the State Innovations in Family Planning Services Agency (SIFPSA), a parastatal agency based in UP.

This report summarizes the findings of a study conducted by the USAID | Health Policy Initiative, Task Order 1, project team to document the administrative, political, and technical steps taken during the design, planning, and early implementation phases of the Agra Voucher Scheme. Because the study covered only the first nine months of operation, it is not an evaluation but rather a detailed description of the process of designing and implementing the voucher scheme and a summary of client use of reproductive health (RH) services during the initial nine-month period. While collecting field data, the team was also able to document “lessons learned” to identify ways to improve implementation.

The purpose of this report is to share information about the Agra Voucher Scheme to inform the 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 on the Policy and Social Context of the Scheme

Both the government of India and the state of Uttar Pradesh have strong policies favoring attainment of replacement-level fertility and major reductions in maternal and child mortality. The UP government also seeks to reduce unmet need for family planning. The governments of India and UP have adopted strategies to promote public-private partnerships in order to strengthen the public health sector and improve reproductive and child health. From 1992–2008, the IFPS project, a joint endeavor of the government of India and USAID/India, forged linkages between public and private agencies to expand the reach of RCH services. Examples of private sector partnerships in the IFPS project include subsidized sales of contraceptives, involvement of the corporate sector, capacity building of private providers, and organizing of special campaigns with private sector health providers. These initiatives have helped to expand access to RCH services, improve service quality, and promote sustainability to ensure long-term availability of RCH services.

Under IFPS, 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.

In the Agra District of UP, contraceptive use is considerably lower among women in the lowest economic groups and those in rural areas, compared with more affluent and urban women. Low-income and rural women are also less likely to obtain antenatal care, especially from a physician or auxiliary nurse midwife, and to give birth in a public or private facility. For example, a survey in the Agra District found
that 81 percent of women in the poorest wealth quintile gave birth at home, compared with 31 percent of the women in the highest wealth quintile (Constella Futures, 2007a). The survey identified four barriers to increasing use of FP/RH services: (1) insufficient access to information about FP/RH alternatives and the benefits and risks associated with these alternatives, (2) the low quality of FP/RH services, (3) the high monetary costs of receiving these services, and (4) the high time costs to access services in a public facility with the capacity to provide FP/RCH services (Constella Futures 2007a).

Study Methodology

The project team collected and reviewed secondary information from (1) published and unpublished literature on approaches to reach the poor, especially through demand-side approaches; (2) statistical studies of demographic and health indicators for Agra, UP, 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 at the village, block, district, state, and national levels; and interviews and observational tours of public and private health facilities in the Agra District in November 2007 (see Table 1). Appendix A lists the key persons interviewed and other study participants.

Table 1. Agra Voucher Scheme Documentation Study—Interviews, November 2007

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Location</th>
<th>Interviewees/Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akola, Bichpuri, Khandauli</td>
<td>Village/Block</td>
<td>Beneficiaries (24), households below the poverty line (8), auxiliary nurse midwives (6),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>accredited social health activists (35), primary health care facilities and medical officers (3), Pradhan (1)</td>
</tr>
<tr>
<td>Nongovernmental organizations</td>
<td>Village/Block</td>
<td>Naujhil Integrated Rural Project for Health and Development (3)</td>
</tr>
<tr>
<td>Voucher Scheme Nursing Homes</td>
<td>Agra City</td>
<td>President of Agra Nursing Homes Association (1), Ob/Gyn (2), Pediatrician (1), Surgeon (1), Nursing home facilities (3)</td>
</tr>
<tr>
<td>Non-Scheme Hospitals</td>
<td>Agra City</td>
<td>Merrygold Hospital (1), Private Hospital Neonatal Intensive Care Unit (1), Pediatrician (1)</td>
</tr>
<tr>
<td>Sarojini Naidu Medical College</td>
<td>Agra City</td>
<td>Dean (1), Sarojini Naidu Medical College Hospital: Laboratory, Maternity Ward, Neonatal Intensive Care Unit, Ob/Gyn clinic</td>
</tr>
<tr>
<td>District Government</td>
<td>Agra City</td>
<td>District Magistrate (1), Chief Medical Officer (CMO) (1)</td>
</tr>
<tr>
<td>District Innovations in Family Planning Services Project Agency</td>
<td>Agra City</td>
<td>Program Management Unit/Voucher Management Unit Manager (1)</td>
</tr>
<tr>
<td>State Innovations in Family Planning Services Project Agency</td>
<td>Lucknow</td>
<td>General Manager (1), Assistant Manager (1)</td>
</tr>
<tr>
<td>IFPS/ITAP/Lucknow</td>
<td>Lucknow</td>
<td>State-level Coordinator and Staff (5)</td>
</tr>
<tr>
<td>ITAP/Delhi</td>
<td>Delhi</td>
<td>Director (1) and Staff (3)</td>
</tr>
<tr>
<td>National Institute of Health and Family Welfare</td>
<td>Delhi</td>
<td>Director (1)</td>
</tr>
</tbody>
</table>

2 Copies of the interview guides are available upon request from the Health Policy Initiative.
Organization of the Report

Section II details the steps taken during the design, planning, and early implementation phases of the Agra Voucher Scheme. Section III presents the outputs of and lessons learned from the first nine months of pilot activities, as well as recommended modifications within and/or to the scheme’s original design. Appendix B provides background information on the FP/RCH policy objectives and strategies of the governments of India and Uttar Pradesh, USAID/India’s support for FP/RCH, and how health financing can reach the poor or address the needs of the poor. Appendix C focuses on the FP/RCH situation in the Agra District and explains how it influenced the design and early implementation experiences of the Agra Voucher Scheme.

II. AGRA VOUCHER SCHEME DEVELOPMENT

Design and Preparatory Phase

The design, planning, and preparatory phase of the Agra Voucher Scheme took place between the summer of 2005 and the end of 2006. The actors and their roles and the decisions and activities undertaken during this period are described below. These activities were crucial in launching and subsequently implementing the voucher scheme.

Stakeholder consultation

The ITAP project team prepared a concept paper on PPPs in 2004. 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 UP, ITAP and SIFPSA organized a one-day workshop in Lucknow on December 8, 2005. The workshop was attended by 80 participants from the chamber of commerce, corporate sector, faith-based organizations, nongovernmental organizations (NGOs), private physicians, nursing homes, professional associations, public sector officials, representatives of the local medical college, and social service organizations such as the Lions and Rotary. The workshop objectives were to (1) review the FP/RCH situation in Agra and UP, (2) create awareness and understanding of various PPP models and their potential scope to deliver high-quality FP/RCH services, (3) identify PPP models of most interest to participants, and (4) identify individuals and groups among the participants who would be most interested in participating in a pilot PPP effort in the Agra District.

Several workshop participants expressed interest in participating in partnership efforts:

- Two public health facilities, a community health center (CHC) in Fatehabad, and an urban health post at Loha Mandi were interested in functioning under a “contracting out” model.
- The Agra Nursing Homes’ Association (ANHA) indicated a keen interest in partnering with the government health system.
- The principal of Sarojini Naidu Medical College (SNMC) in Agra expressed interest and the ability of the college to provide leadership for a PPP effort.

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3 A survey of private providers in the Agra District (ORG Centre for Social Research, 2006) found that while 80 percent of urban and 100 percent of rural private providers would be willing to collaborate with the government in providing medical and/or diagnostic services, more than 90 percent had no current association with the public sector.
The workshop concluded with a general consensus on the utility of and the need to develop PPPs to improve access to and the quality of FP/RCH services in the Agra District.

**Preparation of the Agra Voucher Scheme Proposal**

Following the Agra workshop, SIFPSA, ITAP, and the government of UP reached a consensus that one key PPP approach most likely to improve FP/RCH indicators would be the provision of targeted demand-side vouchers to households below the poverty line (BPL). With the vouchers, beneficiaries would be able to obtain FP/RCH services from a cadre of interested and qualified private sector providers.

ITAP carried out several background studies that provided an evidence base to inform the design of the Agra Voucher Scheme:

- Analysis of the Reproductive Health Indicator Survey, 2003 and 2005, to understand trends and levels of use of RCH services by socioeconomic quintiles in UP (Winfrey, 2006).
- Analysis of the National Sample Survey, 60th Round, to estimate household expenditures for RCH services and identify disparities by income quintile, residence (urban/rural), caste, and religion (Winfrey et al., 2006).
- Survey of private sector facilities to identify private health providers in the Agra District and analysis of their capacity and service use (ORG Centre for Social Research, 2006).
- Review of literature on existing voucher scheme models in India to understand their purpose, design, overall strengths and limitations, and how these strengths could be incorporated or weaknesses could be avoided in the ITAP voucher scheme design.

In addition, representatives of ITAP and the United Nations Population Fund visited Gujarat to learn about “Chiranjeevi Yojana,” a voucher scheme and PPP effort launched by the state government to lower maternal and child mortality rates by increasing institutional deliveries among BPL women. In this voucher scheme, beneficiaries are eligible to receive free services in the benefit package from any one of a cadre of private nursing homes or private hospitals by showing their BPL card at the time of service. The package of services includes antenatal care (ANC); ultrasounds; delivery; medicines; and reimbursement of transportation costs, dai services, and blood transfusion in the case of complicated deliveries. Other voucher schemes studied by ITAP included (1) a voucher scheme implemented by the Children in Need Institute (CINI-ASHA) that provided subsidized primary healthcare center services to slum dwellers in Kolkata through a referral network of qualified private doctors practicing in the vicinity of slums and (2) a voucher scheme implemented by Sewa Mandir (NGO) in Rajasthan that provides a package of maternal and child health services.

While ITAP’s overall review of “Chiranjeevi Joyna” identified several positive aspects for replication, the project also identified some areas for improvement. Recommended actions included:

- Ensuring accreditation of the private providers;
- Developing mechanisms for quality assurance;
- Negotiating the reimbursement package in consultation with the private providers;
- Developing marketing and information, education, and communication strategies to generate a demand among BPL women for the package of voucher services; and
- Ensuring that reimbursement rates covered costs such as the fees of consulting anesthesists and pediatricians, medicines, and/or hospitalization of premature infants.

Based on a review of these studies and subsequent discussions with potential stakeholders, ITAP prepared a formal proposal to pilot a voucher scheme in the Agra District. The proposal stated:
The primary goal of this intervention is to reduce inequalities in reproductive health services among the rural population. To achieve this, affordable, accessible, and high-quality reproductive and child health and family planning services will be provided to BPL families in the rural areas of six selected blocks, through accredited private facilities using a voucher distribution system (Constella Futures, 2006).

The proposal also included (1) the rationale for piloting a PPP scheme, (2) linkages with Janani Suraksha Yojana (JSY), (3) analysis of the health needs and public sector health capacity (facilities and clinical personnel) by block in the Agra District, (4) selection of blocks for the pilot intervention and an estimation of the service requirements within each block, (5) identification of key stakeholders for implementation of the scheme and their respective roles and responsibilities, and (6) steps to be completed in a pre-implementation phase. After some discussion, the Project Advisory Committee of SIFPSA decided to pilot the scheme in the Agra District. Subsequently, SIFPSA organized a one-day meeting with the ANHA, SNMC, and ITAP to (1) bring on board all potential partners, (2) clarify the roles and responsibilities of each stakeholder, (3) discuss the business value and social responsibility aspects of the scheme for the nursing homes, and (4) review the various tasks that would be required before implementation could begin.

**Formation of voucher scheme management and oversight bodies**

The nodal agency for the Agra Voucher Scheme is the Additional Director of Health, government of UP, with local oversight for the voucher pilots delegated to the Chief Medical Officer (CMO). The CMO in the Agra District chairs the Voucher Management Unit (VMU) that provides day-to-day management of the Agra Voucher Scheme. The VMU

- Coordinates the pre-implementation and implementation steps,
- Manages the relationships (administrative and financial) with all implementing stakeholders,
- Establishes linkages with the government system,
- Establishes systems for ensuring the quality of services delivered,
- Enhances use of services by the targeted clients and continued participation of private service providers, and
- Collects and analyzes data for monitoring and evaluation purposes.

SIFPSA/Lucknow provides management oversight of the VMU. ITAP provides technical assistance for the voucher scheme. Specific funds were identified within the SIFPSA and ITAP budgets for the Agra voucher pilot program. A Project Advisory Group (PAG), comprising all local stakeholders and chaired by the Additional Executive Director of SIFPSA, was formed to meet quarterly to review progress of the pilot project and address issues of common interest.

For effective implementation and coordination among stakeholders, the VMU consulted with each stakeholder (e.g. NGOs, nursing homes, and the SNMC) to determine their respective roles and responsibilities (see Figure 1 and Appendix D). These agreements became formal memoranda of understanding.

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4 The JSY initiative, under the National Rural Health Mission (NRHM) and entirely financed by the central government, links the provision of cash assistance with use of ANC during pregnancy, institutional delivery, and immediate post-partum visits in a government health center. Motivation of households to use these services is coordinated by the accredited social health activist, who receives payments linked to performance.

5 Initially, it was proposed that the SNMC take the role of the nodal agency. However, it was later determined that for purposes of sustainability, scale-up, and linkage of the voucher approach to the NRHM, the nodal point would be the government of UP and that the SNMC would play a technical role (Iyer, 2006).
Selection of pilot sites and beneficiary population

In August 2006, six blocks (Akola, Bichpuri, Barauli Ahir, Etmadpur, Fatehabad, and Khandauli) in the Agra District were identified as pilot sites for the voucher scheme (see Figure 2). Criteria for selection of these blocks included proximity to Agra City where most of the private nursing homes are located, proportion of the households below the poverty line, and poor FP/RCH indicators. The Shamsabad block (bordering on Baurauli Ahir and Fatehabad) was added in January 2007 to increase the coverage of the scheme. Because SIFPSA did not have an NGO program in Shamsabad, the Medical Officer In-Charge of the Shamsabad primary healthcare center (PHC) distributes the vouchers to accredited social health activists (ASHAs), who distribute these to beneficiaries. The officer pays the ASHAs incentives according to the JSY scheme. The decision to add Shamsabad provides an opportunity to test the Agra voucher model with management of block-level activities by a public sector institution rather than an NGO.
All BPL households in the seven blocks are entitled to use the FP/RCH vouchers. Among the BPL population, the primary target group is married women of reproductive age (15–49 years old), pregnant women, and newborns up to 1 year old. A secondary target group includes men. Proof of eligibility is a BPL card. If a poor household does not have a card, eligibility can be established through issuance of a certificate signed by the ASHA, Pradhan, NGO supervisor, and NGO Assistant Project Coordinator or Project Coordinator. Certification requires the Pradhan and/or NGO to check that the household is on the government of UP’s list of BPL households and/or to examine the physical state of the household and well-being of its members.

**Roles and selection of service providers**

The voucher scheme was introduced to the private providers during the stakeholders’ consultation in December 2005. Ten private providers registered as ANHA members were selected based on criteria such as an expression of interest in participating in the pilot, their location on peripheral areas of Agra City, and an evaluation by the accreditation team. The principal roles for the nursing homes in the voucher scheme are to provide voucher services to BPL clients, meet and maintain clinical quality standards, and develop and maintain information systems and provide periodic reports to the VMU.

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6 BPL cards were distributed in UP within four years of the start of the voucher scheme. Initially, it was assumed that a household’s presentation of the BPL card would be sufficient proof of eligibility for services. However, a survey of households in the Agra District found that fewer than 4 percent of households claimed to have a BPL card (Constella Futures, 2007a). The government of UP has decided to re-survey the state’s population and use these survey results to issue new BPL cards. There are additional reasons for conducting a re-survey: the temporary nature of extreme poverty, rapid population growth of the district (over 30 percent over the decade from 1990 to 2000), rapid economic growth and valuation of land prices with differential impacts on urban and rural populations, and questions as to whether the previous survey had visited and identified poor households distant from roads.
Definition of the benefit package and negotiation of reimbursement

The package of services provided for a voucher was selected based on capacity to meet the FP/RCH needs of beneficiary households, as well as the nursing homes’ willingness and qualifications to provide the services at a negotiated price. The final package, decided in August 2006, includes three ANC visits, institutional delivery, two post-natal care (PNC) visits, FP counseling and methods, diagnosis tests, and treatment of reproductive tract infections (RTIs)/sexually transmitted infections (STIs) (see Box 2). The package also includes the expanded program of immunization (EPI) and tetanus toxoid (TT) immunizations, condoms, and oral pills from government supplies provided to the nursing homes. In addition, nursing homes pay Rs. 250 to each woman (post-delivery) to cover her transportation costs and those of the ASHA who accompanies her.

Box 2. Vouchers and Services Covered, Agra District

| Voucher 1: ANC—three visits (ANC check-up, TT injection, IFA tablets, nutritional advice) |
| Voucher 2: Deliveries (normal, caesarean, and complicated) |
| Voucher 3: PNC (two check-ups, breastfeeding counseling) |
| Voucher 4: Family planning (pills, condoms, intrauterine contraceptive devices (IUCDs), and male/female sterilization) |
| Voucher 5: RTI/STI (check-ups, treatment, partner counseling) |
| Diagnostic Tests: pregnancy test, hemoglobin (Hb) test, blood group with Rh factor, blood sugar, urine examination, WR VDRL (Wasserman reaction/Venereal Diseases Research Laboratory) test, ultrasound |

After determining the package of services, reimbursement amounts had to be negotiated with the selected nursing homes. Pricing schedules from government and private sector facilities were collected to inform the negotiating parties. The final set of negotiated prices for the voucher scheme constituted only 13 to 87 percent of the weighted average rates reported to be charged by the ANHA nursing homes (see Table 2). To reach agreement on these lower prices, it was essential to limit the number of participating private providers to ensure that each private facility would be likely to get sufficient additional clients to offset their concerns about providing services at lower than market prices. The then Principal of the SNMC, a well-known and highly respected community medicine specialist, was a key figure in organizing meetings with ANHA members, wherein they could raise concerns related to reimbursement levels, especially in view of their continued practices as providers to the paying public.

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7 The Executive Director of SIFPSA at that time, also an advisor to the then Chief Minister of UP, was interested in having the vouchers cover additional family health benefits. This interest paralleled the government of UP’s discussions and studies related to pilot testing health insurance. However, a decision was made not to include additional health services in the voucher pilot, as these services were outside the FP/RH mission of SIFPSA.

8 Nursing homes strongly prefer that all BPL and private clients be tested for HIV and Hepatitis B. However, funds for these tests were not included in the voucher scheme because the National AIDS Council’s policy is that HIV testing cannot be performed without proper counseling and follow-up. The Ob/Gyn clinic at the SNMC does provide voluntary HIV counseling and testing, but information was not readily available during the field visits to determine whether voucher recipients use these free services.

9 Among the ANHA members, there was a significant variation in reported fees prior to the scheme. Those reporting lower than the negotiated voucher scheme rates would have had an incentive to increase the volume of services provided to voucher scheme recipients. Furthermore, a study by the ORG Centre for Social Research (2006) reported average fees for nursing homes in the Agra market area to be, on the whole, lower than those of the ANHA subset. This observation holds true even when data only for nursing homes in the Agra market with use equal to or above those of the ANHA nursing homes is analyzed. Thus, SIFPSA and ITAP may wish to review the reimbursement structure in view of the availability of this more extensive data set and establish reimbursement rates in line with the structural and procedural quality of the nursing homes providing services.
Table 2. Voucher Services, ANHA and Negotiated Prices, Agra District

<table>
<thead>
<tr>
<th>Service</th>
<th>Weighted Average Fees of ANHA Facilities$^1$</th>
<th>ANHA Facility Fee Range</th>
<th>Agra Voucher Scheme Negotiated Prices$^2$</th>
<th>Negotiated Fees as % of ANHA Weighted Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FP services:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IUCD insertion Sterilization (female)</td>
<td>Rs. 329</td>
<td>Rs. 0–2,000 Rs. 700–7,000</td>
<td>Rs. 100 * Rs. 1,000</td>
<td>30.4% 55.9%</td>
</tr>
<tr>
<td><strong>ANC:</strong> ANC visit including IFA tablets, nutritional counseling, and TT injections as needed</td>
<td>Rs. 188/visit Rs. 7/TT shot Rs. 10/IFA strip</td>
<td>Rs. 50–700/visit</td>
<td>Rs. 25 per visit * IFA and TT provided free-of-charge from CMO.</td>
<td>13.3%</td>
</tr>
<tr>
<td>Normal delivery: supervised delivery, medicines, 3 days of hospitalization, and pediatrician fee</td>
<td>Rs. 1723</td>
<td>Rs. 800–5000</td>
<td>Rs. 1,500 for package</td>
<td>87.1%</td>
</tr>
<tr>
<td><strong>Complicated delivery:</strong> supervised delivery, medicines, 5–6 days of hospitalization, pediatrician fee</td>
<td>Rs. 6,406–6651</td>
<td>Rs. 1,500–15,000</td>
<td>Rs. 3,500 for package</td>
<td>53.7%</td>
</tr>
<tr>
<td><strong>Caesarean delivery:</strong> supervised delivery, medicines, 5–6 days hospitalization, anesthetist and pediatrician fees</td>
<td>Rs. 5,880</td>
<td>Rs. 3,500–10,000</td>
<td>Rs. 5,000 for package</td>
<td>85.0%</td>
</tr>
<tr>
<td><strong>PNC:</strong> PNC visits, with breastfeeding and FP counseling</td>
<td>Rs. 106</td>
<td>Rs. 50–250</td>
<td>Rs. 25 per visit</td>
<td>23.6%</td>
</tr>
<tr>
<td><strong>Other:</strong> Ultrasound examination RTI/STI treatment Laboratory tests Blood transfusions</td>
<td>Rs. 206</td>
<td>Rs. 100–5,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * FP and ANC supplies provided free of charge from the District CMO. Laboratory tests provided by the SNMC include Hb level, blood group and Rh factor, urinalysis, and VDRL. Sources: † Authors’ calculations based on price/service information reported by 8–9 of the ANHA facilities. Weighted averages reported due to wide ranges of reported prices and use; ‡ Memorandum of understanding between the CMO and nursing home (uniform format).

**Quality assurance**

In addition to playing a key role in mediating the negotiation of reimbursement rates for the voucher services, the SNMC—with input from ITAP—played an important role in developing accreditation guidelines and evaluating nursing homes against the accreditation criteria. The SNMC reviewed and adapted government and private sector hospital accreditation standards to be more appropriate for 5–10 bedded nursing homes. The accreditation checklist primarily requires the examination of structural

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$^1$ Government guidelines exist for the quality assessment of 30 bedded CHCs and 100 bedded district hospitals. Private sector guidelines include those of the National Accreditation Board for Hospitals and Healthcare Providers, August 2006.
dimensions of quality (e.g., availability of written procedures, existence of quality assurance committees, or availability of specific pieces of equipment). All of the information is summarized under five areas: (1) obstetric facilities/equipment and personnel, (2) pediatric facilities/equipment and personnel, (3) display of services, (4) transportation facilities, and (5) hygiene and record keeping. A facility can receive a maximum score of “20” for each area, with a total possible score of “100.” A nursing home is judged to have adequate quality for accreditation in the voucher scheme if it receives a score of 75 out of 100. The SNMC shared and finalized these standards in consultation with the ANHA and its members and other experts and stakeholders. College staff visited the 10 ANHA nursing homes for accreditation between December 2006 and January 2007. The SNMC is responsible for developing working definitions and treatment protocols for each service in the voucher package, providing clinical training to nursing home staff, and creating a methodology for conducting clinical audits of the performance of voucher services by participating nursing homes.

**Implementation Phase**

The Agra Voucher Scheme was launched on January 24, 2007.

**NGO roles and block-level activities**

SIFPSA contracted with two NGO partners to manage voucher scheme activities in blocks where they were already implementing SIFPSA activities. The VMU manages day-to-day oversight of the NGOs. Primary responsibilities of the NGOs include training ASHAs about the voucher scheme; conducting monthly meetings with ASHAs to distribute vouchers, collect records, and pay incentives appropriate to reported levels of performance; and reporting to the VMU on aggregate, block-level performance. In March 2007, ITAP held a training-of-trainers course for the NGOs and distributed an ASHA training module to provide them with the knowledge and skills needed to train ASHAs about their role in the voucher scheme. ITAP also prepared and distributed to the NGOs a software program to facilitate tracking of the NGOs’ distribution of vouchers.

**ASHA roles and training**

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. During the design of the voucher scheme, it was decided that ASHAs, instead of NGO volunteers, would mobilize and motivate women from BPL families to use voucher benefits. This process will facilitate later mainstreaming of the voucher scheme within the NRHM.

Under the voucher scheme, the ASHAs are 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 a nursing home on the day of delivery;

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11 In the pilot blocks, some villages are more densely populated by Scheduled Castes that tend to be more poor and illiterate, and less motivated to use FP and RCH services than the general population. In these villages, it may be difficult to find and recruit women with the required ASHA qualifications and thus these areas may not be receiving voucher scheme benefits.
• Work in collaboration with other partners such as elected representatives, community-based organizations, Integrated Child Development Scheme (ICDS) workers and auxiliary nurse midwives (ANMs); and
• Provide feedback to the NGOs on the quality of services.

The ASHAs under the voucher scheme are paid performance-based incentives, which differ slightly from the incentives paid to ASHAs under the JSY (see Table 3).

Table 3. ASHA Responsibilities, Training, and Payment: JSY vs. Agra Voucher Scheme

<table>
<thead>
<tr>
<th>ASHA</th>
<th>JSY</th>
<th>Agra Voucher Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities</td>
<td>Motivate use of RCH services Accompany women to the PHCs Support EPI and polio activities</td>
<td>Publicize the voucher scheme Provide information on nursing home providers and facilities Motivate use of voucher services Prepare micro-plan to be used on expected day of delivery Arrange transportation to nursing home Provide feedback to the NGOs Work in collaboration with other development partners (e.g. CBOs, ANMs, ICDS workers, elected representatives)</td>
</tr>
<tr>
<td>Training—clinical</td>
<td>Public Sector</td>
<td>Public Sector</td>
</tr>
<tr>
<td>Training—vouchers</td>
<td>n/a</td>
<td>NGO</td>
</tr>
<tr>
<td>Supervision</td>
<td>ANMs under CMO</td>
<td>NGOs under VMU/CMO</td>
</tr>
<tr>
<td>Incentives— Institutional Delivery</td>
<td>Rs. 600</td>
<td>Rs. 350</td>
</tr>
<tr>
<td>Travel</td>
<td>(Rs. 150)</td>
<td>(Rs. 150, ASHA+beneficiary)</td>
</tr>
<tr>
<td>Lodging and meals</td>
<td>(Rs. 200)</td>
<td>(Rs. 200)</td>
</tr>
<tr>
<td>Honorarium/Loss of wages</td>
<td>(Rs. 250)</td>
<td>Rs. 250</td>
</tr>
<tr>
<td>IUCD Referral</td>
<td>Rs. 50</td>
<td>Rs. 50</td>
</tr>
<tr>
<td>EPI</td>
<td>Rs. 150/session</td>
<td>None</td>
</tr>
<tr>
<td>Pulse Polio</td>
<td>Rs. 50/day</td>
<td>None</td>
</tr>
<tr>
<td>Household Visits</td>
<td>None</td>
<td>Rs. 200/month</td>
</tr>
<tr>
<td>Meeting/Transport</td>
<td>None</td>
<td>Rs. 125/month</td>
</tr>
</tbody>
</table>

Under the JSY, the Medical Officer In-Charge of the PHC provides training to ASHAs, covering clinical and communication skills needed to build the ASHAs’ overall capacity to perform. ITAP developed an additional training module to prepare ASHAs for participating in the Agra Voucher Scheme. The module covers (1) how to identify BPL households in their villages, (2) the process for obtaining a Pradhan certificate in lieu of a BPL card, (3) descriptions of services in the voucher service package and how to distribute vouchers for each service, and (4) ways to inform BPL households about the scheme and to motivate them to use the complete package of voucher services. Using this module, NGOs conducted the training for ASHAs in March 2007. A participatory approach was taken, employing role plays and using training aids such as dummy vouchers, empty and filled management information system (MIS) formats, copies of “Jachcha Bachcha” cards, and guidelines for ASHAs and handbills with the addresses of all the hospitals accredited.
Design of the “Jachcha Bachcha” card

Each ASHA provides a “Jachcha Bachcha” card—or patient-held record of FP/RCH information and services—to each beneficiary. The card contains 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.

Design of the vouchers

ITAP/Delhi also assisted with 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. Each voucher has 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, an 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 addresses of the panel of eligible nursing homes and the VMU are provided on the back of each voucher for easy reference (see Figure 3). After the branding research, subsequent printings of the vouchers included the voucher scheme logo. NGOs distribute the voucher booklets to the ASHAs during their weekly meetings. ASHAs complete the vouchers with the names of the client, the ASHA who is distributing the voucher, and the nursing home that is providing the service.

Voucher distribution and reimbursement

SIFPSA’s Program Management Unit oversees the Voucher Management Unit, which plays the central role in the distribution and payment of vouchers (see Figure 4). The VMU supplies the vouchers to the NGOs based on their requests. Due to lag times for printing, the unit has asked that NGOs request new vouchers when they have distributed 75 percent of their existing stock. The organizations send to SIFPSA quarterly statements of progress and expenditure, which are reviewed and paid if found satisfactory. Nursing homes receive an initial payment of Rs. 15,000. When their services to voucher clients equal Rs. 10,000, they submit their claims to the VMU and receive reimbursement for the approved claims. The NGOs and nursing homes have indicated that the voucher scheme requires a considerable amount of additional paperwork.

12 During the pretest, the ASHAs expressed some concern that beneficiaries might lose the card or forget to bring it to ANC and PNC visits or institutional deliveries.
**Development of a communication strategy**

An important innovation in the Agra Voucher Scheme was the development of 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 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) ANMs are primarily a resource for child health services such as immunizations, and (3) alternative providers (e.g., Hakims, Vaid, “jholla chaap doctor”) 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 when they were 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 positively to information that a delivery in a nursing home would likely increase the probability of a safe delivery. The communication strategy included development of a strong brand, “SAMBHA,” which suggests that obtaining high-quality healthcare through use of the vouchers is “possible.” ASHAs distribute leaflets detailing the voucher services and addresses of approved nursing homes. Posters outlining the voucher services and lighted “glow” signs are displayed at the entrance of each nursing home. In January 2008, ITAP reviewed the communication strategy and materials for the voucher scheme.
Development of a branding logo

ITAP conducted qualitative research with men and women between the ages of 18 and 45 in four villages of Agra District to select the most appropriate branding design for the voucher scheme. The focus groups preferred the design shown in Figure 5, 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. The branding logo was included on subsequent printings of the vouchers as well as on the lighted “glow” signs on display at the entrance of each accredited nursing home.

In addition to providing useful information for the branding, the research yielded insight into how potential or current beneficiaries perceived the voucher scheme early in the implementation period. Respondents viewed an ASHA as a new type of village-level worker who raises awareness of family planning and accompanies women to health facilities for treatment. However, respondents were less clear about the link between ASHAs and the distribution of vouchers and the benefits of the voucher program. Some respondents mentioned that similar coupons should be introduced to cover other medical treatments for children and men, health clinics should be available at the village level to address all types of health concerns, and/or the ASHAs should have the information and inputs necessary to address other health concerns.

Design of management information systems

ITAP/Delhi designed data entry and management information systems for the NGOs and VMU to meet the voucher scheme’s monitoring and evaluation needs. Nine data entry forms were designed and are intended to track the distribution of vouchers to the NGOs, ASHAs, and beneficiaries, as well as use of vouchers for each service distinguished by provider and by month (see Figure 6 and Appendix D). The forms have since been modified to yield important additional information. For example, the VMU recently adapted the form summarizing the monthly services by a specific nursing home (Form F) to include information on the sex of each newborn and whether the infant was born alive or dead. The unit further compiles information from the NGOs and 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. While there is not yet a clinical audit system, nursing home physicians also complete paper records about all care provided to each beneficiary (case sheet), as well as information related to each delivery (discharge sheet).

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13 Results of the research were presented to ITAP on August 20, 2007.
14 Problems mentioned were arthritis, cold and cough, dengue, dental pain, malaria, malnutrition, tuberculosis, and typhoid.
15 The NGOs and SIFPSA indicated that they had difficulty using the software provided because it was not sufficiently supported by their computer hardware. Data entry software was not created for the nursing homes.
III. LESSONS LEARNED FROM EARLY IMPLEMENTATION

The major objective in designing and implementing a pilot effort is to learn what works and does not work and to use this information to make changes and innovations that improve the achievement of outputs and outcomes of the activity. The previous section documents the accomplishments of SIFPSA, ITAP, and other stakeholders in the design, preparation, and early implementation of the Agra Voucher Scheme. The first nine months of implementation of the pilot have provided information about (1) the advantages of the initial design; (2) how the scheme might be improved (based on the suggestions of beneficiaries, providers, and/or project management); and (3) innovations that have already been made in the initial design or implementation arrangements. While it is too soon to conduct an evaluation of the pilot scheme, this chapter documents some initial lessons learned from early implementation that may be useful for those adopting voucher schemes elsewhere in India or other countries.
Output Achievement to Date

The Agra Voucher Scheme started recording use in March 2007; records by month and type of benefit were available through December 2007 for this review. These records indicate that the monthly output of the scheme increased significantly for all services from March through October 2007. During the field visits, the beneficiaries interviewed said they were very satisfied with the services they had received. However, while output increased during March through October, the trend did not continue; output levels for services—particularly those associated with ANC visits—declined between October and December 2007 (see Figure 7). Reasons for the decline are being explored, but it is likely that the end of the contract with one NGO in September 2007 and the temporary cessation in provision of field activities by the second contracted NGO in December 2007 have contributed to the decline in service use, given the NGOs’ key role in distributing vouchers and financial incentive payments to ASHAs.

Figure 7. Use Levels, Agra Voucher Scheme

The proposal for the Agra Voucher Scheme estimated levels of possible output for the first year based on the size of the target population, coverage targets, and the desired number of each voucher to be used per beneficiary. Based on existing data, the BPL population was estimated to be 30 percent of the rural women in the project area. The total number of births was derived from the crude birth rate for rural UP, which is 30 births per 1,000 population. The service delivery targets were set higher than the state-wide levels that were reported in the 2005-06 National Family Health Survey (IIPS and Macro International, 2007). For example, while the NFHS found that 22 percent of rural women in UP had three or more ANC visits, the targets were set at 30 percent of BPL women in the first year of the voucher scheme and 45 percent for the second year. Similarly, 17.5 percent of deliveries among rural women were in institutions, according to the NFHS, while the targets for institutional births were set at 25 percent for the first year and 35 percent for the second year.

Within the first nine months of implementation, the voucher scheme had achieved a high proportion of the targeted number of ANC visits and exceeded the targeted number of ANC-related diagnostic tests (e.g., VDRL and ultrasound). Based on the number of diagnostic tests, about 62 percent of the ANC visits
were first visits, with the remainder either repeat visits or first visits without diagnostic tests. During the first nine months, the voucher scheme covered a higher proportion of complicated and/or caesarean section deliveries than normal deliveries. There were five ANC visits for every delivery, suggesting that many of the women who accessed the ANC services either did not use or have not yet used the voucher delivery benefit. It is encouraging to see that even though a low percentage of women were expected to use the PNC benefit, nearly half of the targeted number received PNC benefits by September 2007. Expected output levels for provision of FP services (i.e., IUCD insertion or sterilization) were based on existing norms; however, performance against these output indicators has also been very low (see Table 4). Possible approaches that may increase use of the services in the benefit package are discussed below.

Table 4: Expected vs. Actual Outputs, March–December 2007, Agra Voucher Scheme

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of Clients Expected During 1st Year</th>
<th>Number of Clients Served During March–December 2007</th>
<th>Percent of 1st Year’s Expected Clients Served During March–December 2007**</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC</td>
<td>9,717</td>
<td>7,090</td>
<td>73.0</td>
</tr>
<tr>
<td>WR VDRL</td>
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<td>4,394</td>
<td>135.7</td>
</tr>
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<td>Ultrasound</td>
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</tr>
<tr>
<td>Delivery—Complicated</td>
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<td>294</td>
<td>72.6</td>
</tr>
<tr>
<td>Delivery—Caesarean</td>
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<td>251</td>
<td>93.0</td>
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<tr>
<td>Total Deliveries</td>
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<td>52.8</td>
</tr>
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<td>Transport Allowance*</td>
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</tr>
<tr>
<td>PNC</td>
<td>810</td>
<td>750</td>
<td>92.6</td>
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<tr>
<td>Sterilizations</td>
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<td>177</td>
<td>18.2</td>
</tr>
<tr>
<td>IUCD</td>
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<td>42</td>
<td>8.7</td>
</tr>
<tr>
<td>RTI/STI</td>
<td>3,239</td>
<td>1,493</td>
<td>46.1</td>
</tr>
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</table>

Notes: * The transport allowance was initiated after the start of the voucher scheme—thus the difference in the number of total deliveries and the number of transport allowance payments. ** Since this column represents the targets for the first year, any percent greater than 75 is on track to meet or exceed the annual target.

Sources: 1 Constella Futures, October 2006; 2 MIS statistics, Agra Voucher Scheme.

A study of private facilities in the Agra District (ORG Centre for Health Research, 2006) found that fewer than 30 and 10 percent of urban and rural private facilities, respectively, had the on-site capacity to perform hemoglobin, routine urine, VDRL, and HIV/Elisa tests. Sixty percent of urban private facilities and 46 percent of rural ones had the capacity for pregnancy testing. Given this low capacity within nursing homes to perform the tests included in the voucher scheme, some of the tests that were claimed to be done by nursing homes must have been performed by the SNMC or by private laboratories. The MIS of the voucher scheme should be strengthened to determine that, in fact, the diagnostic tests were actually performed (e.g., through submission of claims from private laboratories with the nursing home claims for ANC services).

The higher proportion of complicated or caesarean section deliveries may reflect greater demand for a supervised delivery at a nursing home if households expect that the pregnant woman may face problems during delivery. Alternatively, the higher percent of complicated or caesarean deliveries may reflect supply-side factors, as has been observed in countries with reimbursement based on the number and type of cases.

The Health Management Information System for the voucher scheme is only partially able to identify whether beneficiaries use all of the services in the benefit package. Specifically, BPL households with cards or in the database can be identified by their BPL number. Beneficiaries who qualify by presentation of a Pradhan’s letter do not have a numeric code through which the service use records can be linked.

Explanations for this include lack of transportation, time costs of being away from the household, and/or delivery in a public institution in order to receive the JSY incentive payment.
Access and Non-Monetary Barriers

One factor that may prohibit or delay a BPL household’s decision to use FP/RCH services is monetary cost. Numerous women interviewed during field visits reported having incurred substantial debt to pay for an institutional delivery and that the loans often came with exorbitant rates of interest (see Box 3).

Box 3. Institutional Deliveries without Debt
Abha, a 25-year-old married woman living in the Khandauli block had her first delivery in a private hospital by caesarean section in 2005. Her family had to borrow Rs. 20,000 at an interest rate of 5 percent per month to pay for the physicians’ and hospitalization charges. Abha’s husband is a day laborer with low wages, and they are still paying this debt. Abha recently delivered her second child by caesarean section using a voucher at one of the approved nursing homes. She was happy with the care provided and relieved that no additional debt resulted from the delivery.

While the voucher scheme provided a solution to the problem of the high cost of institutional deliveries, other non-monetary factors that influence rural women’s use of voucher benefits were recognized as implementation progressed. These factors are more traditional beliefs and practices, illiteracy or low levels of literacy, limited awareness of the value and availability of services, and limited access to transportation and/or long travel distances. A baseline survey found that 63 percent of rural women in the Agra District were illiterate in comparison to 45 and 37 percent of women living in urban slum and non-slum areas, respectively (Constella Futures, 2007a). Furthermore, only 53 percent of rural women in the Agra District reported seeing or hearing an FP/RCH message from any source during the previous three months, compared with more than 85 percent of women residing in urban slum and non-slum areas. Finally, the survey found that the average time for any woman to travel to the nearest source for institutional delivery was 84 minutes in rural areas, compared with 11 minutes in urban areas (see Figure 8). One or all of these non-monetary differences between rural and urban slum and non-slum women may influence a rural household’s use of voucher benefits. The importance of these non-monetary factors should be considered in the design of future voucher schemes.
The VMU and PAG have recognized the importance of improving access to information on FP/RCH topics. Options under consideration include (1) the provision of refresher training to ASHAs on FP/RCH topics and ways to improve communication with beneficiary households, (2) the provision of print educational materials designed to be understood by illiterate or poorly educated women for distribution by the nursing homes during ANC visits and at discharge following delivery, and (3) development of audio-visuals on FP/RCH topics that could be shown in the nursing home waiting rooms.

Several innovations have and are being developed to address the issue of distance between remote rural villages and the current panel of nursing homes. The PAG has decided to add new homes to the scheme, emphasizing homes located within the rural blocks. However, meeting both rural access and quality criteria will be challenging. For example, out of the 5,322 private health facilities identified in a study of private providers in the Agra District, only 362 facilities were found to have the capacity for in-patient care. Among these facilities, more than three-fourths existed in urban areas and the rest (N = 91) in rural areas. The same study found considerable variation among the health facilities in terms of the range, quality, and cost of services. Private health facilities in urban areas, compared with those in rural areas, are generally better in terms of service, infrastructure, and facilities (ORG Centre for Social Research, 2006).

To address instances where block-level nursing homes may not have the capacity to meet current accreditation requirements, the VMU and SNMC are considering developing two levels of nursing home accreditation. One level would accredit a home for the provision of ANC, normal deliveries, PNC, and FP voucher services. A second level of nursing home would also be accredited to provide complicated and caesarean section deliveries. Mechanisms for improving communication and transportation between the first-level, rural block nursing homes and the second level of homes have yet to be defined. However, ASHAs have developed innovations to address issues of limited transportation in rural areas; they are
working with local private providers of transportation services to arrange for beneficiaries to travel to/from nursing home providers (see Box 4).

**Box 4. ASHAs Finding Solutions to Transportation Barriers**

Lack of transportation remains a barrier for rural households even when there is appreciation of the health value of the voucher services. ASHAs have arranged transportation for groups of 3–4 women for ANC and PNC visits by pooling money to hire an auto rickshaw. Other ASHAs have devised solutions to the transportation problem for women in labor by arranging for “Tempo” (mini truck) drivers to take women to the nursing homes for institutional deliveries (e.g., when a woman goes into labor in the night or if her family is not able to arrange transport). One ASHA explained with pride, “Hum tempo wale ko phone kar dete hai” (we telephone the tempo drivers).

**Efficiency**

The efficiency of a voucher scheme relates to both allocation and technical quality. Allocative efficiency, or whether the scheme is investing in measures most likely to result in the desired outcomes, can be assessed by whether the benefit package includes all of the important components for reducing maternal and infant mortality and improving maternal and infant health. Allocative efficiency could be improved through greater emphasis on improving ASHA and nursing home staff counseling on family planning, breastfeeding, and maternal and infant nutrition. ASHAs, like the ANMs, could be trained to monitor the weight gain of pregnant women and growth of infants. In cases where there is insufficient weight gain, additional food supplementation could be sought from the Anganwadis under the ICDS, as well as support from other government welfare schemes. If additional funds can be raised, it is recommended that the package of voucher services be expanded to cover neonatal intensive care and hospitalization of emergency cases during the perinatal period.

Technical efficiency can be assessed by determining whether a specified result was achieved through the most cost-effective means. In the case of the voucher scheme, technical inefficiency on the demand side would exist if there were significant problems with the mechanism of targeting voucher distribution to BPL households. Until the government of UP re-surveys the population and re-issues new BPL cards, there will not be consistent criteria applied for voucher eligibility for the recipients obtaining Pradhan certificates. However, Pradhans, NGOs, and ASHAs have been careful in issuing certificates to BPL families. Few instances of leakage to the non-BPL population have been reported; the VMU immediately took corrective measures on a case-by-case basis.

Technical efficiency of the scheme could be improved through re-organization of the provision of FP benefits by nursing homes. For example, one nursing home visited by the team has a large number of beds and multiple operating theatres, including one with advanced equipment for obstetric and gynecological procedures. This facility, with the capacity to handle a large number of sterilization operations, might be able to capture “economies of scale” (i.e., lower costs per procedure) if the NGOs/ASHAs mobilized BPL beneficiaries interested in IUCD insertion or sterilization services to attend specific “FP days” each month at this and similarly equipped facilities.

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20 Nursing homes mentioned that the amount included in the payment per sterilization was not sufficient for the services of the anesthetist. Contracting with an anesthetist on a given day for a large number of procedures may reduce or eliminate this disincentive for nursing homes to provide the sterilization benefit.
Incentives and Compensation

The Agra Voucher Scheme encourages beneficiaries to use FP/RCH services by providing vouchers that allow women to obtain services from private sector providers free-of-charge. In addition to non-monetary factors, lower use of the package of voucher services can occur because beneficiaries may choose between the voucher scheme transportation payment of Rs. 250 after delivery or the JSY incentives of Rs. 500 for a home delivery or Rs. 1,400 for an institutional delivery (see Box 5). Evaluation of the influence of various factors on households’ choices to use voucher scheme or JSY benefits, including the weight they assign to the differential in payments post delivery, requires further study.

Box 5. Different Options, Incentives, and Choices

Sudha, a beneficiary from a BPL household in the Bichpuri block, indicated that she had used vouchers for three ANC visits and that she was extremely happy with the services she had received from the nursing home. However, she has decided to have her delivery at a public institution, as the Rs. 1,400 incentive under JSY will provide more financial support for her family. Thus, in this case, even though Sudha did not use all of the services in the benefit package, she did receive good-quality ANC with a trained provider and will have an institutional delivery—a primary objective of the JSY and voucher system.

While the Agra Voucher Scheme provides a financial payment to ASHAs to visit households, the amount of the payment is not contingent on the number of households visited—only the payment to accompany a woman to a nursing home for an institutional delivery is performance-based. Some ASHAs interviewed mentioned that while they accompany beneficiaries to nursing homes for all services (e.g., ANC), they only receive compensation for the transportation costs incurred in bringing beneficiaries to the nursing homes for deliveries. In some cases, the ASHAs encourage the women to pool payment transportation expenses to obtain ANC services. Other ASHAs reported that they incur net expenditures for transportation to the nursing homes for ANC.

Providers also receive compensation for providing voucher services to BPL women. One might question why payment of the voucher fees, many below market rates, would attract private providers to participate in the voucher scheme. Bhat (1999) found that the majority of private physicians surveyed in Gujarat indicated that they faced fluctuations in their patient load and cash flows. At the same time, these private providers said that it was difficult to compete for patients in environments with shortages of well-trained clinical staff and pressures to upgrade their technologies. Bhat and others (2007) found that private providers are attracted to voucher schemes because the voucher clients increase their patient volumes and hence revenue. These factors may influence the decision of Agra nursing homes to participate in the voucher scheme, because (1) Agra Voucher Scheme reimbursement levels for normal and caesarean deliveries are approximately equal to the market rates, (2) estimated additional demand and revenue from voucher scheme patients is substantial, and (3) other nursing homes in the Agra District are spontaneously asking to be accredited to participate in the scheme (see Box 6).

21 In some cases, ANMs report the home deliveries they assist with as institutional deliveries, pay households Rs. 1,000, and retain as payment Rs. 400 of the JSY incentive. ANMs may also retain Rs. 400 for assisting with deliveries in a public sector health institution.

22 Forty-eight percent of the physicians surveyed reported seeing fewer than 5 patients per day and another 19 percent reported seeing from 6–15 patients per day (Bhat, 1999).

23 A study of private facilities in the Agra District found that a significant proportion of private facilities lacked key structural facilities (e.g., water, back-up power, operating theatres, etc.) (ORG Centre for Social Research, 2006).

24 Bhat and others (2007a) used a simulation model to determine that revenue to private providers who opted to receive a flat rate per delivery under a voucher scheme (such as under “Chiranjeevi Yojana”) would be greater than that of physicians who opted not to participate in the scheme.
Box 6. Utilization/Revenue Implications of the Agra Voucher Scheme

One study of private health providers in Agra District found that facilities with 1 to 20 plus beds had occupancy rates below 17 percent (ORG Centre for Social Research, 2006). These occupancy rates translate into estimates of the average bed-days per month from eight at the smallest facilities to more than 30 at the larger facilities. Based on the total number and specific types of voucher deliveries provided in September 2007, and assuming each nursing home in the scheme provides the same number of deliveries, then an estimated 11 normal, 4 complicated, and 4 caesarean section deliveries were conducted per month at each nursing home under the Agra Voucher Scheme for July–September 2007. Assuming an average length of stay of one day for a normal delivery and three days for a complicated delivery or caesarean section, then the average number of bed-days per nursing home in the scheme is 35 days. These estimated additional bed-days are added to estimates of the existing number of bed-days to provide a new total bed-days and calculate new bed occupancy rates ranging from 94.7 per cent in the smallest nursing home to 10.8 percent in the largest nursing home. This analysis suggests that the smallest nursing homes can best achieve economies of scale and significantly increase their revenue by participating in the voucher scheme. Program managers need to ensure that the small nursing homes with fewer than seven beds do not increase their share of voucher deliveries beyond their maximum occupancy rate and/or capacity to provide high-quality care.

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<td>5.0%</td>
<td>30</td>
<td>35</td>
<td>65</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Source: ORG Centre for Social Research, 2006, and authors’ own calculations

Quality Assurance

The Agra Voucher Scheme emphasizes ensuring a minimum level of service quality by requiring that the nursing homes be accredited before they can receive reimbursement from the scheme. A notable accomplishment of the pilot scheme has been the adaptation of Indian hospital accreditation guidelines to make them more appropriate for small nursing homes with 5–10 beds. While scoring of the accreditation guidelines would appear straightforward, teams comprising different SNMC physicians were found to score the same attributes of nursing homes in different ways that could affect the homes’ final numerical scores. Therefore, a quality assurance framework is essential to ensure consistency and fairness in the accreditation process.

25 A survey of private health facilities in Agra District found that only 10 percent of the urban facilities had blood storage capabilities and less than 1 percent had blood-banking capability (ORG Centre for Social Research, 2006). Rural facilities had “nil” capacity. Nevertheless, 76 and 22 percent of the same urban and rural private health facilities, respectively, reported carrying out blood transfusions. This information is one example from the survey of how structural aspects of quality in private facilities in the Agra District prohibit making assumptions about whether any particular facility can provide a given quality of care.
scores and potentially the selection of one home over another with equal facilities. The scoring weights for each of the five categories need to be revised. For example, the same weight of 20 points is assigned both to whether the nursing home has a listing of its services visibly posted and to an assessment of all aspects of human resources and equipment related to obstetric services at any nursing home. Finally, even though evaluation teams sometimes indicated on the accreditation form that a specific home could be accredited if improvements were made, on only one form did the evaluation team specify in writing what specific changes would be required for accreditation.

The SNMC could strengthen the process of accreditation by drafting a written manual that formalizes accreditation procedures and scoring. Determination of whether there will be two levels of accreditation criteria and scores in order to permit accreditation of block-level rural nursing homes remains to be made. If adopted, the criteria and scoring weights for the lower tier of nursing home facilities will need to be developed.

In addition, the SNMC could take other actions to improve the quality of services provided by nursing homes:

- Review the accreditation guidelines to determine if the required number of personnel and structural inputs should be revised in view of the increased volume of patients due to the voucher scheme.
- Draft treatment protocols for each voucher service, including infection control measures.
- Create training programs for nursing home physicians and their clinical staff (many of whom have not received formal training), according to the treatment protocols; this training would be required annually to remain certified to provide voucher services.
- Develop clinical audit procedures for periodic review of “Jachcha Baccha” cards, patient records held at the nursing homes, and discharge summary forms to determine whether appropriate care was provided to voucher beneficiaries.

There are other ways that processes under the voucher scheme might be altered to reinforce provision of care according to treatment guidelines. For example, initially the payment for the pediatrician’s consultation was included in the negotiated delivery fee under the voucher system to ensure high-quality newborn care. However, to ensure a pediatrician’s consultation for every newborn, the VMU should negotiate with nursing homes to provide the pediatrician’s report for each newborn in order for the full delivery reimbursement to be made. The quality of other voucher services could be improved through making reimbursements more performance-based, including requiring the nursing homes to provide lab results or a bill from laboratories conducting diagnostic tests. Finally, physicians and/or nursing staff of nursing homes should be provided with training and appropriate information, education, and communication materials to improve counseling for post-delivery care and FP promotion.

**Coordination with the Public Sector**

The Agra Voucher Scheme was explicitly designed as a public-private partnership. Specific inputs of the public sector to the voucher scheme include (1) use of ASHAs as the village-level interface with BPL

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26 For example, one team provided a score of “16/20” for the transportation category when no vehicle was present at the NH facility whereas a different team at a different facility provided a score of “15/20” when an ambulance was available.

27 The Principal of the SNMC suggested that he might assist the CMO and VMU with periodic review of deliveries performed to determine if correct decisions are made with respect to conduct of caesarean sections.
households, as is the case in JSY; (2) official leadership of the VMU by the CMO\(^{28}\); (3) provision of contraceptives, IFA tablets, and vaccines from government stores at the district level; and (4) provision of blood transfusions and Neonatal Intensive Care Unit (NICU) services by the SNMC.

Public sector providers at the block level had positive reactions toward the voucher scheme. For example, the Medical Officer In-Charge of the PHC in Bichpuri block said, “… the voucher [scheme] is very good in helping poor people in the villages get good-quality services.” He also suggested that government facilities should be improved in order to provide better quality FP/RH services. The Medical Officer In-Charge of the PHC in Khandauli block went a step further to say, “… [the implementation of the] voucher scheme can create a healthy competition between public and private facilities and compel the public sector to improve their services delivery.”

However, the benefits of public-private collaboration have to be put into the context of limited human resources and funding for the public health sector in India. For example, one challenge for the voucher scheme has been the frequent turnover of government officials at the district level. Since the conceptualization of the voucher scheme, there have been two District Magistrates, three CMOs, four principals of the SNMC, five changes in SIFPSA leadership, and a decision not to renew the contract for one of the two block-level NGOs. These changes have required ongoing orientation of the new public and private stakeholders to the voucher scheme, contributing to delays in program planning and implementation.

Other challenges have related to insufficient IFA tablet supplies and financing for blood transfusions in the case of complicated deliveries for both public sector and PPP efforts. These shortages have affected the quality of the voucher services and some villagers’ confidence in the voucher scheme.

The SNMC suggested that blood transfusions and NICU or perinatal in-patient care should also be treated as voucher services and that the college should receive some financial assistance to meet the costs of providing these services to voucher beneficiaries. The VMU and PAG are considering a “corpus fund” to be held by the VMU to provide payment for special cases where the cost of care is not covered under the current vouchers.

Finally, there are “missed opportunities” for the voucher scheme to collaborate with other public sector programs at the village and block levels that aim to improve maternal and infant health outcomes. Specifically, the voucher scheme could develop mechanisms to link with ANMs and Anganwadi workers. Examples of potential linkages include (1) efforts to identify mothers who have not gained sufficient weight during pregnancy and providing food supplementation from the ICDS and/or (2) training for ANMs to facilitate the early identification of problems such as pre-eclampsia and the provision of special vouchers to facilitate their referral of such cases to a nursing home for treatment and follow-up. Interviews at the village and block levels could be conducted with beneficiaries and public and private providers in order to identify ways to improve coordination and any training needs and/or follow-up.

**Project Leadership, Management, and Organization**

Over the first nine months of implementation, the scheme has evolved to respond to realities in the field. The VMU Manager and implementing stakeholders have regularly reviewed progress and used feedback from beneficiaries, ASHAs, and private providers to improve the design and implementation processes. The stakeholders associated with the voucher scheme have had their initial skepticism turn into a sense of

\(^{28}\) The CMO officially chairs the VMU to ensure that the district government and the government of UP are aware of the design and significant developments under the voucher scheme.
ownership and pride in the scheme’s accomplishments. Dr. Deoki Nandan, the Principal of SNMC at the
time of the initial design, and current Director of the National Institute of Health and Family Welfare,
said, “…through the [Agra Voucher Scheme] implementation, we have been able to demonstrate
negativity turning to positivity.”

The efforts of VMU, SIFPSA, and ITAP were central to the design and launch of the voucher scheme and
the increase in use of benefits. However, a constraint has been that the VMU only comprises a Manager
and a half-time Finance/MIS officer. In addition to managing the voucher scheme, the VMU Manager
oversees several other SIFPSA initiatives in the Agra District. This low level of staffing limits the extent
to which particular management functions are performed (e.g., supervisory visits to observe NGOs’
management of block-level activities or to follow up on provider and patient disputes). Since the initiation
of block-level activities, one NGO has been coordinating activities efficiently and effectively. This NGO
has provided a high level of support to ASHAs and the beneficiaries in the three blocks where they work.
Staff of this NGO reported that about 85 percent of the ASHAs are working extremely hard to make the
services accessible to BPL families.

Since the launch of the voucher scheme, the PAG has met in June and November 2007. In the future, its
members will be tasked to find solutions to the policy, operational procedures, staffing, and financing
challenges facing the Agra Voucher Scheme in its final year of pilot implementation.

Recommendations

The above discussion of “lessons learned” identified several areas where future action will or could be
taken by the Agra Voucher Scheme during the current pilot phase. These suggestions are organized and
presented below in two groups: (2) those related to the original design of the voucher scheme and (2)
those that were not part of the original design.

The following actions could improve implementation of the Agra Voucher Scheme without altering the
original design:

- Increase the number of VMU staff.
- Contract with a new NGO to resume activities in three blocks.
- Provide ASHAs with refresher training on FP/RCH clinical subjects and on ways to improve

communication with and motivation of the BPL household members.
- Select additional block-level nursing homes to participate in the voucher scheme, especially in

rural areas distant from Agra City.
- Motivate the SNMC to (1) draft treatment protocols (including discharge counseling for

mother/infant care), training modules for nursing home staff, and clinical audit procedures; (2)
review accreditation guidelines and scoring criteria and draft a written manual to formalize
accreditation procedures and scoring; and (3) determine whether two levels of accreditation
should be adopted and make recommendations to the VMU and PAG.

The following additional actions could improve implementation of the scheme but would require adapting
the original design:

- Provide BPL families with information on different schemes (JSY and voucher) and on the panel
of nursing homes and empower them to make decisions regarding the selection of hospitals and schemes.
• Develop a system whereby Pradhan letters provide a unique code for the beneficiary that will permit evaluation of the extent to which individual beneficiaries use the complete set of voucher benefits.

• Examine how the addition of telephone/radio and transportation inputs can be arranged to increase use in more remote rural areas.

• Provide nursing home staff with orientation and training on effective communication skills with BPL clients, as well as with video and print information, education, and communication materials appropriate for illiterate or poorly educated women. Training on FP counseling and materials on FP methods are especially needed.

• Develop financial and quality assurance mechanisms to ensure pediatrician examination and counseling for every newborn.

• Create a “corpus fund” funded by USAID or another donor to pay for services and treatment provided to BPL clients who are not covered under the current vouchers, such as blood and other treatment needed for complicated deliveries.

• Explore whether additional funds can be leveraged from the governments of India or UP or a donor to add intermittent prophylaxis of malaria and provision of bednets to the voucher package.29

• Develop mechanisms to build synergies among the voucher scheme and NRHM and JSY and introduce these in at least one block.

• Evaluate the financial and non-monetary incentives of the voucher scheme and NRHM regarding how they influence the behaviors of ASHAs, ANMs, and nursing homes and ultimately affect the outputs and outcomes achieved under the pilot scheme. Determine whether alternative incentive payments under the voucher scheme might increase use of the entire benefit package.

• Review the MIS for the voucher scheme to determine its adequacy for monitoring and evaluation purposes, including its adequacy for assessing the cost-effectiveness of the voucher scheme compared with government services or other alternatives (see Appendix D).

• Undertake an assessment to estimate the number of neonatal and maternal deaths being averted to highlight and measure the effectiveness of the scheme.

• Motivate nursing homes to increase their involvement in providing family planning services.

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29 Focus group participants in two villages in the Agra District indicated that malaria is among their most important health problems (Algorithm, 2007). Intermittent malaria prophylaxis and bed-nets are part of the World Health Organization’s Focused Antenatal Care package.
APPENDIX A: LIST OF PERSONS CONTACTED

Government of India

Mr. B. S. Verma—Primary Healthcare Center/Bickpuri, Agra District
Dr. Ashok Kumar—Primary Healthcare Center/Khandauli, Agra District
Dr. Mukesh Kumar—Medical Officer, Primary Healthcare Center/Bichpuri, Agra District
Mr. Mukesh Kumar Meshram—Collector and District Magistrate, Agra
Dr. Deoki Nandan—Director, National Institute of Health and Family Welfare
Dr. N. C. Prajapati—Principal, Sarojini Naidu Medical College, Agra
Mr. Shashi Bhusan Sharma—Pradhan, Patholi/Bichpuri, Agra District
Dr. C. B. Singh—Primary Healthcare Center/Bichpuri, Agra District
Dr. Hari—Chief Medical Officer/Agra
Dr. Gautam—Deputy Chief Medical Officer/Agra

USAID/India

Ms. Sheena Chhabra
Dr. Loveleen Johri
Ms. Monique Mosolf

Focus Groups (Akola, Bichpuri)

ASHAs—35
Beneficiaries—24

ITAP

Mr. Nitin Datta—State Operation Research Advisor, ITAP/Lucknow
Ms. Shuvi Sharma—Manager/Social Marketing and Franchising, ITAP/Delhi
Dr. Subhha Swaroop—Consultant, ITAP/Lucknow
Mr. Pramod Kumar Tripathi—Manager/Capacity Building, ITAP/Lucknow
Ms. Geetali Trivedi—Program Officer II, Johns Hopkins University/Center for Communication Programs and ITAP/Lucknow

NGOs/Private Sector, Agra District

Dr. Puneeta Asopa—Ob/Gyn, Asopa Hospital, Agra
Dilip Sharma—Assistant Project Coordinator/Bichpuri, Naujhil Integrated Rural Project for Health and Development (NIRPHAD)
Pratap Bhan—Assistant Project Coordinator/Akola, NIRPHAD
B.R. Yadav—Project Coordinator, NIRPHAD
Dr. Sunil Sharma—Surgeon, Navdeep Nursing

SIFPSA

Dr. S. Krishnaswamy—General Manager/Private Sector, SIFPSA/Lucknow
Dr. Sreelata—Deputy General Manager, SIFPSA/Lucknow
Ms. Humaira Bin Salma—Executive Secretary, District Innovations in Family Planning Services Agency
APPENDIX B: FP AND RCH STRATEGIES IN UTTAR PRADESH

Government FP and RCH Policies and Strategies

India has a long history of paying attention to population policy and services delivery. The government of India 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” (UNESCAP, n.d., p. 1) Successive five-year plans provided the policy framework and funding for development of a nationwide healthcare infrastructure and human resources for health. The Family Planning Program, renamed the Family Welfare Program in 1978, gradually expanded its range of services to include immunization, antenatal and delivery care, preventive and curative healthcare, and most recently, RH services. Until 1996, India’s national population program was driven by a centralized planning approach that assigned FP use targets to state governments that, in turn, assigned state targets to district governments, facilities, and providers. After 1996, the national program shifted to a “target free” approach emphasizing “…the commitment of government toward voluntary and informed choice and consent of citizens while availing of reproductive healthcare services, and continuation of the target free approach in administering family planning services” (UNESCAP, n.d., p. 2).

The government of India has articulated its commitment to achievement of the Millennium Development Goals,30 the National Population Policy 2000, the National Health Policy 2002, and the National Rural Health Mission 2005. These documents contain several national demographic and/or health objectives. State-specific demographic and health objectives for UP are provided in the Population Policy for UP (2000) (see Table B-1). The governments of India and UP have many of the same strategies to achieve their population health objectives, including

- Free and compulsory education up to age 14;
- Promotion of delayed marriage for girls;
- Universal access to FP information and services;
- Promotion of greater choice in FP methods;
- Provision of delivery assistance by trained personnel;
- Improvement and expansion of health infrastructure;
- Strengthening of district health systems, including decentralization of planning and administration of services delivery; and
- Reduction of regional imbalances.

The improvement of information systems (e.g., complete registration of births and deaths) is considered essential to provide a comprehensive evidence base on which to support the development of health policies and interventions (IIPS and Macro International, 2007).

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30 The government of India’s specific population health commitments in support of the Millennium Development Goals include the following: stabilize the size of the population by reducing the total fertility rate from 3.0 to 2.1 births per woman of reproductive age by 2010; reduce the infant mortality rate from 60 to 30 infant deaths per 1,000 live births between 1998 and 2010; reduce the maternal mortality ratio from 389 to 100 maternal deaths per 100,000 live births between 1998 and 2010; achieve universal immunization; and prevent infectious diseases, including HIV.
Table B-1. Government of India and UP’s Population Health Objectives

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Area</th>
<th>1998/9</th>
<th>2010/11</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fertility Rate</td>
<td>India</td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UP</td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Mortality Ratio</td>
<td>India</td>
<td>100</td>
<td>394</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>UP</td>
<td>707</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>India</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UP</td>
<td>85</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>Under 5 Mortality Rate</td>
<td>India</td>
<td>125</td>
<td>94</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>UP</td>
<td>56%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Unmet Need for FP</td>
<td>India</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UP</td>
<td>56%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Contraceptive Prevalence Rate (modern methods)</td>
<td>India</td>
<td>65%</td>
<td>64%</td>
<td>84%</td>
</tr>
<tr>
<td></td>
<td>UP</td>
<td>22%</td>
<td>46%</td>
<td>52%</td>
</tr>
</tbody>
</table>


Given India’s size and diversity, it is a challenge to translate these policies into action at the state, district, and block levels. Despite India’s substantial progress in poverty reduction, there remain disparities in human and economic development indicators at district, state, and national levels. Bringing about further improvement in human development outcomes poses particular challenges in the Indian context due to the division of responsibility laid out by the Constitution, wherein public health is a state responsibility while population policy and family planning are jointly managed by the central and state governments.

The governments of India and UP have also articulated strategies to improving health services and outcomes through model PPPs to complement efforts to strengthen the public health sector and improve RCH indicators. PPPs can tap the strengths of the Indian private allopathic sector (e.g., Western medicine with many health workers and facilities) and the private traditional sector (e.g., community trust, geographic proximity, and lower charges). Potentially, PPPs can increase access to and the equity and efficiency of essential health services, increase provider choice, and improve the quality of care. PPP strategies use both demand-side (e.g., vouchers) and supply-side (e.g., contracting-out) approaches. All the state governments have included PPPs among their strategies to achieve FP and RCH goals.

To help achieve India’s RCH objectives, particularly improving access for the poor, India has designed a multi-year development program, the Reproductive and Child Health II (RCH-II) program, which receives financing from the government of India and donors. Under the program, each state is responsible for developing its program implementation plan, a sector-wide approach is used for planning and financing RCH-II initiatives, and payments to states are explicitly linked to performance.

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31 In 1972, India’s population was estimated at 553 million, with 50–55 percent living below the national poverty line. By 2001, India’s population was estimated at 1,028 million, with 26 percent living below the national poverty line (IIPS and Macro International, 2007).
USAID Support to Improve FP and RCH in Uttar Pradesh

In September 1992, the IFPS-I project was established as a joint endeavor of the government of India and USAID/India. The project’s primary goal was to assist the government of UP in reducing the rate of population growth to a level consistent with its social and economic objectives and to serve as a catalyst for reorienting and revitalizing the country’s FP services. IFPS-I components focused on (1) strengthening public sector services, (2) innovations with NGOs and employer-based groups, (3) contraceptive social marketing, and (4) research and evaluation. By the end of phase one, IFPS-I project activities had expanded from 6 to 38 districts of UP. The second phase, IFPS-II (2004–2008), began in October 2004, and activities include

- Development of behavior change communication and marketing approaches to increase the demand for RCH services;
- Provision of integrated RCH services through PPP models;\(^{32}\)
- Strengthening public sector capacity to manage public and private sector provision of RCH services through appropriate policies, monitoring, evaluation, and quality assurance; and
- Leveraging increased financial resources from the government and other development partners in order to scale up and sustain IFPS innovations.

SIFPSA, a registered autonomous society, manages the project’s service activities and funding and is able to work with both the government of UP and private/nongovernmental organizations to achieve project goals. IFPS/ITAP/Delhi provide technical assistance and expert inputs to (1) incorporate best practices in RCH in design, implementation, and documentation of PPP models; (2) form linkages with Indian technical organizations to strengthen India’s capacity for international quality technical assistance; (3) develop the capacity of the governments of India and UP to enter into partnerships with the private sector; (4) incorporate sustainability considerations and replication strategies into the models and systems from the outset; and (5) bring successful pilot models to scale through leveraging public, private, and other donor resources.

IFPS/ITAP developed a generic model for the voucher scheme. Four pilot schemes based on this model are now being implemented in UP and Uttarakhand (see Table B-2).

Table B-2. Features of the Pilot FP/RCH Voucher Schemes in India

<table>
<thead>
<tr>
<th>District</th>
<th>Province Location</th>
<th>Supporting Agencies</th>
<th>Voucher Management</th>
<th>Block Activities</th>
<th>Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agra</td>
<td>UP 7 rural blocks</td>
<td>USAID SIFPSA</td>
<td>District Innovations in Family Planning Services Project Agency</td>
<td>NGO ASHA</td>
<td>Private nursing home</td>
</tr>
</tbody>
</table>

\(^{32}\) PPP options being piloted under IFPS-II include development of networked franchises; social marketing; voucher programs; partnerships/involvement with the corporate sector, professional associations, NGOs, and social clubs (e.g., Rotary); capacity building of private providers, pharmacists, and informal providers; organization of special campaigns with private sector providers; and development of health insurance.
<table>
<thead>
<tr>
<th>Location</th>
<th>Region</th>
<th>Block Type</th>
<th>Organization/Project/Trust</th>
<th>NGOS</th>
<th>Healthcare Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahraich UP</td>
<td>1 rural block</td>
<td></td>
<td>World Bank Health Systems Development Project</td>
<td>NGO ASHA</td>
<td>Primary healthcare center (1) Community health center (2)</td>
</tr>
<tr>
<td>Kanpur Nagar</td>
<td>UP urban slums</td>
<td></td>
<td>USAID SIFPSA</td>
<td>NGO</td>
<td>Private nursing home</td>
</tr>
<tr>
<td>Haridwar</td>
<td>Uttarakhand 2 rural blocks</td>
<td></td>
<td>USAID ITAP Uttarakhand Health &amp; Family Welfare Society</td>
<td>Director Program Management Unit &amp; NGO</td>
<td>Private nursing home</td>
</tr>
</tbody>
</table>

### Utilizing Health Financing to Increase Use of FP and RCH Services by the Poor

Arguments related to the positive correlation of improvements in human capital and macroeconomic growth (Bloom and Canning, 2001) as well as public good can be made for allocating public financing and/or services disproportionately to the poorer members of a society. One can measure the extent to which public financing for health is pro-poor by examining the proportion of public spending for health by income quintile. If the proportion of spending is greater than 40 percent for the lowest two income quintiles, then it is said to be “pro-poor.” Alternatively, if the proportion of spending is higher than 40 percent for the wealthiest two income quintiles, then spending is said to be “pro-rich.”

Several mechanisms help to direct public health expenditure to the poor—and generally involve either additional funds or the improved targeting of existing funds. Demand-side financing methods that involve degrees of targeting include the provision of (1) unrestricted additional income (unconditional cash transfers), (2) additional income contingent on demonstrated use of specific services (conditional cash transfers), and (3) exemptions/waivers/vouchers that entitle the recipient to a specific set of services without financial payment. Supply-side financing methods involve orienting public spending to health services with public good/externalities (e.g., communicable disease control); to institutions more likely to be used by the poor (e.g., primary health institutions); and/or to geographic areas where the poor reside (e.g., rural areas). In all cases, successful targeting requires information-proxy measures about the income or expenditures of individuals and/or communities in order to reduce “leakage” of program benefits to the non-poor.

#### Demand-side financing

In the case of low FP/RCH use due to the high cost of services and/or transport to services (relative to other demands for household income), FP/RCH use may increase with the provision of coupons/vouchers for free/subsidized services (conditional transfer) and/or additional income (unconditional transfer). Analysis of data from the National Sample Survey 60th Round (2006) for UP strongly suggests that income and time costs influence UP households’ decisions about whether to deliver their children at home.

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33 Public good arguments can be made for providing public financing for health services where incomplete or asymmetric information or externalities cause private consumption to be lower than is optimal from a public perspective. Public good arguments are often used to support arguments for public financing/subsidization of health education, FP services, and immunizations.
or in the public or private sector as well as the amount that families pay per delivery (Winfrey et al., 2006) (see Box 1).

**Box 1. Mean and Median Household Payments per Delivery, by Income Quintile, Residence, and Place of Delivery, UP, 2006**

In 2006, more than 90 percent of UP households made some payment at the time of delivery. Median payments were Rs. 400, 1,284, and 2,962 for deliveries in the home, a public sector facility, and a private sector facility, respectively. The median payment per delivery for rural and urban households was Rs. 450 and 800, respectively. Only the highest income quintile had median expenditures per delivery of about Rs. 1,500, with the remaining quintiles’ median expenditures ranging from Rs. 350 to 500—suggesting that households in all quintiles but the highest quintile elect home deliveries either because of the high monetary and/or time costs. Estimated mean expenditures were higher than median expenditures for every income quintile and for both rural and urban households (see Figure 1). This suggests that some deliveries—most likely those with complications and caesarean sections—result in the use of a public or private facility and thus higher household expenditure.

**Vouchers**

Globally, competitive voucher schemes are increasingly being recognized as an effective means to enhance the use of public health goods. A voucher is a demand-side financing mechanism, whereby a provided coupon or other token entitles the recipient to a pre-defined set of free or highly subsidized

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34 In 1995, Nicaragua implemented a competitive voucher scheme with sex workers and other high-risk groups with the objective of increasing the testing and treatment of sexually transmitted infections. This scheme promoted several health reforms including competition for and targeted use of public subsidies, contracting private providers, accreditation and quality assurance (HLSP, 2004). In 2004, the Tanzania National Voucher Scheme provided vouchers to pregnant women attending ANC clinics that could be exchanged for highly subsidized insecticide treated bednets and a free insecticide treatment kit sold by private retailers. In addition to lowering the incidence of malaria among pregnant women and their newborn infants, the program contributed to improved pregnancy outcomes through higher antenatal care coverage (Megesa et al., 2005).
goods or services. In the case of health services, vouchers can cover goods and services such as doctor’s consultations, laboratory tests, and/or drugs.

Advantages of a voucher scheme may include

- Targeting a specific segment of the population with specific services/subsidy in order to achieve a desired health behavior,
- Reducing price constraints that reduce the consumption of a specific set of health services,
- Increasing the recipient’s choice by permitting use of private as well as public providers,
- Increasing use of the private sector’s capacity by providing public goods, and
- Increasing the efficiency and quality of service provision through increased competition and performance-based financing.

Disadvantages of a voucher scheme may include

- Incomplete coverage for all health needs or for all of the uninsured population,
- Insufficient reimbursement to either provide a significant subsidy for the poor and/or encourage private providers to accept vouchers as payments in full,
- Potential for misuse/abuse through voucher re-sale by the recipient household and/or counterfeiting,
- Risk that changes in political priorities may be more easily be translated into budget cuts in voucher programs without large recipient and provider constituencies, and
- Need for supply-side capacity close to the household to provide covered services.

It is unclear whether voucher schemes have higher or lower administrative costs than other demand-side subsidies for health services for the poor (World Bank, 2005).
APPENDIX C: THE FP AND RCH SITUATION IN AGRA DISTRICT

This appendix provides information on FP/RCH indicators of need and their determinants, the geographic and financial availability and quality of FP/RCH services, and rates of service use in the Agra District. This information helps to describe the context of the Agra District that influenced the design of the voucher scheme, the lessons learned during early implementation, and the extent to which these lessons may be appropriate for other areas of UP and India.

Demographic and Socioeconomic Indicators

The Agra District is 4,027 sq. km. and located 205 km. from Delhi. The city of Agra was the capital of the Mughal Empire, is the third largest city in UP, and is still a major crossroads in India. The Agra District is divided into six tehsils, 15 blocks, and 904 villages. The primary occupation for households is agriculture, followed by industry, including small and medium enterprises.

The population of the Agra District at 3.6 million is 2.2 percent of the population of UP and 0.3 percent of the population of India. The percent of the Agra population under 5 years, under 15 years, women of reproductive age, and in the scheduled castes are nearly the same as for UP and India. However, along other dimensions, the demographic and socioeconomic conditions of the Agra population are distinctly different from UP and in some cases from India. For example, ratios of males to females are higher in Agra than in UP or India, whether comparing the childhood ratio or the adult ratio.35 The proportion of girls married by age 18 years (54%) is lower than for UP or India. Forty-three percent of Agra’s population is urban, compared with 21 percent for UP and 28 percent for India. Male and female literacy rates in Agra District—75 and 48 percent respectively—are higher than literacy rates for UP but similar to literacy rates for India. Finally, if using type of housing as a proxy measure of wealth, the population of the Agra District is wealthier than the population of UP or India.36

FP and RCH Outcomes

Fertility levels as well as maternal and child mortality rates are higher for UP than for India as a whole, supporting the government of India’s decision to target resources to UP as one of the priority NRHM states (see Table C-1).

Table C-1. Reproductive and Child Health Outcomes in Uttar Pradesh and India

<table>
<thead>
<tr>
<th></th>
<th>Uttar Pradesh</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fertility Rate</td>
<td>2.95</td>
<td>2.7</td>
</tr>
<tr>
<td>Maternal Mortality Ratio</td>
<td>517</td>
<td>301</td>
</tr>
<tr>
<td>Perinatal Mortality Rate</td>
<td>59.5</td>
<td>48.5</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>73</td>
<td>57.0</td>
</tr>
<tr>
<td>Child Mortality Rate</td>
<td>25.6</td>
<td>18.4</td>
</tr>
</tbody>
</table>


35 Insufficient information is available in the sources consulted to determine to what extent these ratios are skewed because of preference for male children, net in-migration of male children for education, net in-migration male adults for employment opportunities, or net out-migration of educated women through marriage outside of the district.
36 Specifically, the ratio of pucca houses to kaacha houses is 6.5 for Agra District compared with 1.0 for UP and 3.4 for India. A pucca house is defined as being constructed of manufactured materials, including a roof and a floor. A kaacha house is made of mud, including the floor.
Measures of FP and RCH outcomes specific for the Agra District are not available from the sources consulted. Because average measures of the proximate determinants for fertility and health outcomes for the Agra population are better than those for UP and India, it is reasonable to assume that average measures of fertility and health outcomes in Agra are likely better than for UP and India. Nevertheless, data related to the use of services support a finding that fertility and RCH outcomes for the rural and poor population of the Agra District are likely significantly less favorable than for more wealthy and/or urban dwellers.

**FP and RCH Use by Income and Rural and Urban Residence**

**Family planning use**

Use of any modern spacing method or any modern FP method aggregated and by income\(^3\) quintile is similar for the Agra District and for UP as a whole. Considering only rates of use for the Agra District (Constella Futures, 2007a), the data indicate that use of modern spacing and any modern FP method varies by income and residence. Specifically, 3.5 and 21.8 percent of the lowest income quintile of married women of reproductive age (MWRA), ages 15–49, use any modern spacing method or any modern FP method, respectively, compared with 16.4 and 42.3 percent of the highest income quintile (see Figure C-1).\(^3\) The data also suggest that there are barriers other than income that reduce the use of FP methods by rural women, because their use is much lower than the rates of women residing in urban slum areas who could also be assumed to be poor. The barriers that may affect rural women’s use include (1) lower rates of literacy and understanding about modern FP methods, (2) lower probability of exposure to any FP/RH message from any media source, \(^3\) and (3) reduced access to FP supplies of pills or condoms and/or to opportunities for the insertion of an IUCD and follow-up of complications.\(^\)\(^4\)

\(^3\) References to income quintile of households in this report are based on estimates of household income computed from information collected in the survey about the household’s assets.

\(^3\) Improving the use of modern spacing methods is critical to reducing infant mortality. The National Family Health Survey (NFHS-3) for India found that 48 percent of currently married women were in one or more categories of higher risk for infant death and, of these, that the highest risks were for women who became pregnant before age 18 and/or for whom spacing between births was less than 24 months.

\(^3\) Fifty-three percent of rural women report exposure to an FP/RH message from any source, compared with more than 85 percent of both women living in urban slum and non-slum areas (Constella Futures, 2007a).

\(^4\) Pills and condom resupplies are available in villages only from ASHAs and ANMs. Women who accept pills or condoms receive only a month’s supply at their first visit. The monthly meetings of the ASHAs with ANMs or NGOs at which they are provided with re-supply of temporary FP methods may not occur at times when women in their village need resupplies. Opportunities for IUCD insertion and complication follow-up would be only one time per week at a public facility where the quality of infection control is low.
A survey of Agra District (Constella Futures, 2007a) found that 79.8 percent of all women reported receiving some form of ANC. Use and the quality of ANC were higher for higher income quintiles and for urban compared with rural women. Sixty-nine percent of women in the lowest income quintile reported receiving any ANC care and, of those women, only 9.3 percent received and consumed adequate IFA tablets and only 12.1 percent reported an ANC consultation with a doctor or auxiliary nurse midwife (see Figure C-2). In comparison, 93.1 percent of women in the highest income quintile reported receiving any ANC and, of those women, 36.4 percent received and consumed adequate IFA tablets and 57.2 percent had a consultation with a medical officer (MO) or an ANM. However, factors other than income may influence ANC use and quality of ANC services, as the differences are greater between rural and urban women than between the women living in urban slum and non-slum areas.

41 Seventy percent of these women reported a visit with an allopathic (medical) or traditional provider as well as receiving IFA tablets and TT injections. An additional 20 percent of the women surveyed did not consult any practitioner but did receive IFA tablets and/or a TT injection.
In the Agra District, less than 10 percent of pregnant women in any income quintile or location deliver in a public sector facility, although use of public sector facilities increases with income. The correlation of income with place of delivery is more striking with respect to deliveries at home compared with those at a private facility. Four in five (81%) of women in the lowest income quintile reported delivering at home, compared with 15 percent at a private facility (see Figure C-3). In contrast, 31 percent of women in the highest income quintile reported delivering at home, compared with 64 in a private facility (Constella Futures, 2007a).
Factors that may affect a household’s decision to have a supervised delivery in a public or private sector facility include the perceived need for delivery assistance from an ANM or physician; the monetary costs associated with assistance from a traditional birth attendant, ANM, or physician; and the time costs of delivery outside the home. Perceptions of the need for delivery assistance could be correlated with education, advice provided during ANC visits, and prior delivery experience. Analysis of data from the National Sample Survey 60th Round (2006) for UP found that household expenditures for deliveries in private sector facilities are much higher than either deliveries in the home or public sector facilities (Winfrey et al., 2006). In the Agra District, factors other than income appear to play an independent role in determining the place of delivery, as 25 percent of women in rural areas versus 49 percent of women in urban slum areas deliver in a private facility. Non-monetary factors that may influence use of institutional delivery services are higher time costs and reduced access to public transportation. The time needed for urban women from either slum or non-slum areas of the Agra District to reach a public or private facility with the capability of performing deliveries is an average of 11 minutes. In contrast, rural women are 84 minutes from any facility with this capacity (Constella Futures, 2007a).

More than 90 percent of households made some payment at the time of delivery, and median payments were Rs. 400, 1,284, and 2,962 for deliveries in the home, a public sector facility, and a private sector facility, respectively. The median payment per delivery for rural and urban households was Rs. 450 and 800, respectively. Only the highest income quintile had median expenditures per delivery of about Rs. 1,500, with the remaining quintiles’ median expenditures ranging from Rs. 350 to 500. Estimated mean expenditures were higher than median expenditures for every income quintile and for both rural and urban households. The higher mean expenditures suggest that a proportion of deliveries, most likely complicated or caesarean sections, result in the use of a public or private facility and thus higher household expenditure.
Implications for the Agra Voucher Scheme

These findings reveal four barriers to increasing households’ use of FP/RCH services: (1) insufficient access to information about FP/RCH alternatives and their associated benefits and risks; (2) insufficient access to, use of, and the low quality of ANC services; (3) the high monetary costs of receiving institutional delivery services, especially from private providers; and (4) the high time costs for rural women to access a facility with the capacity to provide delivery assistance. The following sections will demonstrate how the Agra Voucher Scheme has developed and continues to create innovate approaches to these challenges in order to increase use of FP/RCH services and outcomes among the rural poor.
APPENDIX D: STAKEHOLDERS’ ROLES AND RESPONSIBILITIES, AGRA VOUCHER SCHEME

<table>
<thead>
<tr>
<th>Institution</th>
<th>Roles/Responsibilities</th>
</tr>
</thead>
</table>
| **NGOs**             | 1. Train ASHAs on voucher schemes.  
                        2. Conduct monthly meetings for ASHAs to distribute vouchers, collect ASHA records, and make ASHA incentive payments.  
                        3. Implement a voucher tracking information system.                                                                                                                                                               |
| **ASHAs**            | 1. Publicize the voucher scheme by conducting meetings with married women.  
                        2. Provide necessary information to pregnant women from BPL families on facilities and benefits.  
                        3. Encourage use of voucher scheme services.  
                        4. Prepare micro-plans for pregnant women to be used on expected day of delivery.  
                        5. Arrange transport on the day of delivery.  
                        6. Conduct interviews with women on their satisfaction levels with voucher scheme services.  
                        7. Provide feedback to management on the quality of services.  
                        8. Maintain records to show voucher scheme performance.  
                        9. Work in collaboration with other partners, such as elected representatives, community-based organizations, ICDS workers, and ANMs.                                                                     |
| **Nursing Homes**    | 1. Provide a package of voucher services while maintaining quality standards and equity.  
                        2. Conduct exit interviews of clients to understand their satisfaction levels with services.  
                        3. Keep in place open and transparent systems for flow of financial resources.  
                        4. Maintain information systems and submit periodic reports.  
                        5. Identify the training needs of staff and inform the VMU.                                                                                                                                                  |
| **SNMC**             | 1. Establish structural, human resources, equipment, and procedural standards essential for the accreditation of nursing homes to participate in the voucher scheme.  
                        2. Conduct on-site inspections of the nursing homes for purposes of evaluating against accreditation standards.  
                        3. Conduct training programs for staff of accredited institutes on quality standards and standard protocols.  
                        4. Establish measures to conduct medical audits of care provided by accredited nursing homes.  
                        5. Conduct periodic medical audits of nursing homes providing care to voucher patients.  
                        6. Provide clinical NICU services to referred infants born prematurely with very low birth weight or other development problems at birth.  
                        7. Provide blood for transfusion purposes in the event of low hemoglobin or blood loss during delivery.                                                                                               |
| **District CMO & SIFPSA PMU/VMU** | 1. Constitute a PAG and hold meetings of group members at periodic intervals.  
                        2. Establish criteria to identify BPL families.  
                        3. Establish and maintain information systems to track vouchers, manage reimbursement for services and payment for subcontracts, and facilitate monitoring and evaluation of the schemes.  
                        4. Establish a performance-based disbursement system for ASHAs as per the guidelines issued under the NRHM.  
                        5. Conduct demand-generation mass media campaigns for vouchers.  
                        6. Provide day-to-day, innovative problem-solving during initial piloting of the scheme.  
                        7. Provide feedback to stakeholders. |
8. Conduct periodic quality audits of the accredited facilities to ensure quality of services and de-list facilities with poor performance.

**ITAP**

1. Conduct a market survey to finalize the design of the brand name and logo.
2. Design NGO and PMU/VMU systems for financial management and monitoring and evaluation purposes.

**PAG**

1. Meet bi-monthly to update members on the progress of the project.
2. Discuss the achievements as well as problems faced and resolve any outstanding issues.
3. Review and monitor progress and ensure that high-quality services are being provided to the BPL population.
4. Make mid-course changes, as required.
# APPENDIX E: MIS RECORDS AND INFORMATION, AGRA VOUCHER SCHEME

<table>
<thead>
<tr>
<th>Name</th>
<th>Information</th>
<th>Origin &amp; Recipient</th>
<th>Date Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. PMU Voucher Issuing Record</td>
<td>Vouchers distributed by the VMU to each NGO Project Coordinator. Identifies vouchers to each block and tracking ID numbers.</td>
<td>VMU &gt; NGO</td>
<td>7th</td>
</tr>
<tr>
<td>B. (in Hindi)</td>
<td>Report by the NGO Project Coordinator to the VMU of the vouchers distributed by block and tracking ID numbers.</td>
<td>NGO &gt; VMU</td>
<td>10th</td>
</tr>
<tr>
<td>C. (in Hindi)</td>
<td>ASHA code</td>
<td>NGOs &gt; NGO</td>
<td>Updated 6th</td>
</tr>
<tr>
<td>D. (in Hindi)</td>
<td>Vouchers distributed by the NGO block supervisor to each ASHA and tracking ID numbers.</td>
<td>NGOs &gt; NGO</td>
<td>25th</td>
</tr>
<tr>
<td>E. (in Hindi)</td>
<td>Vouchers distributed by a single ASHA to beneficiaries in her villages. This form is retained by the ASHA and documents her name; the name, age, sex, and spouse’s name of each beneficiary; the voucher numbers and names of the nursing homes providing the specific voucher service. This record is checked by the NGO block supervisor associated with the area in which the ASHAs works.</td>
<td>ASHAs, with review by NGO block supervisors</td>
<td>25th</td>
</tr>
<tr>
<td>F. Record of Services Provided to BPL Families in Private Nursing Homes</td>
<td>Date, name of beneficiary/spouse, sex, BPL number, voucher number, type of services provided. If delivery, sex of newborn and alive or stillbirth.</td>
<td>Nursing Home &gt; VMU</td>
<td>25th</td>
</tr>
<tr>
<td>G. PMU Monthly Block-wise Report of Total Beneficiaries for Different Services</td>
<td>Summary of specific services provided by block and per month.</td>
<td>VMU &gt; CMO</td>
<td>7th</td>
</tr>
<tr>
<td>H. PMU Monthly Private Nursing Home-wise Report of Total Beneficiaries and Amount Paid for Services</td>
<td>Summary of specific services provided by nursing home and per month.</td>
<td>VMU &gt; CMO</td>
<td>7th</td>
</tr>
<tr>
<td>I. PMU Consolidated Monthly Report</td>
<td>Summary of specific services provided in district, reimbursement per service, and amount paid.</td>
<td>VMU &gt; CMO &amp; VMU &gt; SIFPSA</td>
<td>42</td>
</tr>
</tbody>
</table>
**APPENDIX F: AGRA VOUCHER SCHEME—FUTURE ACTIONS FOR PILOT PHASE**

<table>
<thead>
<tr>
<th>Access/Use</th>
<th>Modifications to Initial Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add block-level nursing homes in rural areas.</td>
<td>ITAP to examine how telephone/radio and transportation may be arranged to increase access/use in rural areas.</td>
</tr>
<tr>
<td>NGOs w/ITAP input provide ASHAs w/refresher training on clinical subjects and how to motivate BPL households to use voucher services.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of Complete Benefit Package/Incentives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PAG to develop financial and quality assurance mechanisms to ensure provision of the pediatrician’s consultation for every newborn.</td>
<td>ITAP to provide nursing homes with training in communications and video/print materials to encourage use of the complete package of voucher services.</td>
</tr>
<tr>
<td></td>
<td>PAG to create a “corpus fund” for SNMC services and treatment.</td>
</tr>
<tr>
<td></td>
<td>ITAP to review structure of voucher incentives to BPLs, ASHAs, and nursing homes to increase use of complete benefit package.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SIFPSA to add staff to the VMU.</td>
<td>SIFPSA and ITAP to develop staffing and financing plan for VMU to the end of the pilot phase.</td>
</tr>
<tr>
<td>VMU to identify and contract w/new NGO to continue activities in three blocks.</td>
<td>VMU to develop unique codes for pradhan letters to enable tracking of BPL beneficiaries without BP cards.</td>
</tr>
<tr>
<td></td>
<td>ITAP to review MIS to ensure adequate monitoring and evaluation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SNMC to complete development of treatment protocols, training materials for nursing home staff, and clinical audit criteria and procedures.</td>
<td>PAG to create a “corpus fund” to finance SNMC inputs (e.g., blood transfusions) and NICU treatment.</td>
</tr>
<tr>
<td>SNMC to review accreditation guidelines and scoring criteria.</td>
<td>PAG to explore availability of additional funds for intermittent malaria prophylaxis and bed-nets.</td>
</tr>
<tr>
<td>SNMC to develop criteria to allow for two levels of nursing home accreditation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale-Up</th>
<th></th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Determine cost and cost-effectiveness of the voucher scheme compared with existing or alternative approaches.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Explore options to build synergies between NRHM, JSY, and the voucher scheme.</td>
</tr>
</tbody>
</table>
REFERENCES


OTHER RESOURCES


