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BIRTH OF AN IDEA

VOUCHERS FOR MATERNAL HEALTHCARE IN INDIA

By

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Abbreviations

ANM: Auxiliary Nurse Mid-wife

ASHA: Accredited Social Health Activist

AWW: *Anganwadi* Worker

BPL: Below Poverty Line

CAGR: Compound Annual Growth Rate

CDMO: Chief District Medical Officer

HDI: Human Development Index

IUD: Intrauterine Device

MDG: Millennium Development Goal

MMR: Maternal Mortality Ratio

RCH: Reproductive and Child Healthcare

Rs : Indian Rupees

SBA: Skilled Birth Attendant

SRS: Sample Registration Survey

TBA: Traditional Birth Attendant

WHO: World Health Organization

Definition

$$\text{Maternal Mortality Ratio (MMR)} = \frac{\text{Number of maternal deaths to women } (15-49 \text{ yrs}) \; x \; 1{,}00{,}000}{\text{Number of live births to women } (15-49 \text{ yrs})}$$

Abstract

Vouchers are used extensively for the provision of services such as education and healthcare across the globe. Vouchers entail numerous potential benefits such as freedom of choice, better targeting of vulnerable populations and improved quality and cost effectiveness of service delivery through provider competition.

In the field of maternal healthcare services, vouchers present an excellent mechanism by which to overcome the financial, knowledge and socio-cultural barriers that prevent women in low resource settings from seeking institutionalized health care. In India, inadequate public infrastructure and expensive private medical services contributed to over 56,000 maternal deaths in 2010.

This paper profiles voucher schemes implemented for maternal healthcare within India and discusses some of the challenges faced by these programmes. Suggestions have been made in the hope that these can be incorporated within the policy framework of both existing and future voucher schemes for improved maternal healthcare.

Introduction

Several factors motivated me to write this paper. Firstly, being a student of Economics, I was intrigued by the concept, the underlying economic theory and the varied applications of vouchers in the provision of goods and services. Secondly, the recently released report on MDGs for 2013 indicated that progress on the fifth goal of improving maternal health was substantial albeit fell short of the levels required to meet the target of reducing MMR by 75 percent by 2015. This encouraged me to study the potential of voucher schemes (implemented in conjunction with supply side interventions) as a means to accelerate the progress in maternal health outcomes. Thirdly, there exists a pressing need to formulate strategies specific to the Indian context that can enhance the efficacy of voucher schemes in maternal healthcare.

The first section of the paper presents a brief overview of different mechanisms that can be used for the distribution of essential goods and services such as education and healthcare. There is special focus on vouchers as an example of quasi market mechanisms. This is followed by a summary of the historical use of vouchers in delivering goods and services, roles of participating actors, prevailing models of implementation, and the potential benefits of voucher schemes.

The next section contains statistics on maternal health outcomes. The inadequacies of public infrastructure and potential of private sector in the provision of healthcare in India are described, followed by profiles of various maternal healthcare voucher schemes in tabular format (including location, time frame, participating agencies and incentives involved).

The final section of this paper discusses some crucial challenges faced by voucher schemes in India and makes recommendations for overcoming them, in the hope that this paper may inform future initiatives in maternal healthcare.

Purpose of the paper

The main objectives of the paper are:

a) To profile maternal healthcare voucher schemes implemented in India;
b) To highlight some of the crucial challenges and hurdles faced by these schemes;
c) To suggest relevant strategies for enhancing the efficacy of such schemes.

Vouchers – An Overview

Quasi markets and vouchers

Alternative mechanisms for the provision of essential goods and services have long been the subject matter of debate amongst development economists, policy makers and political philosophers - to name a few. Three possible mechanisms include pure market provision, State funded monopolies and quasi markets.

In the case of pure markets, delivery of goods and services involves consumers choosing between competing profit-maximizing providers while funding their purchases through private resources. Here, the consumers are empowered through choice while competition between providers drives innovation, quality improvements and cost efficiency. However, reliance on private resources to fund purchases can lead to inequalities in consumption by exclusion of individuals with limited monetary means.

On the other hand, the system of State provision involves establishing networks of facilities funded and operated by the government that seek to expand access to essential commodities. However, budgets for these facilities are directly allocated by the concerned authorities and are generally less responsive to changes in quantity and quality such that financial incentives to cut costs and improve customer care are absent (Gauri, 2001).

The third mechanism of quasi markets occupies the middle ground. This mechanism combines production of commodities by players operating in a competitive environment (a characteristic of pure market mechanisms) with the State financing purchases by the consumer at the point of use (a characteristic of State provision). Employing a term used by Albert Hirschman (1970), quasi markets confer the 'power of exit' to the underprivileged and vulnerable.

Key distinguishing features of the aforementioned mechanisms are summarized in Table1.

Mechanism	Providers	Financing
Pure market	Competing private firms	Private resources of consumer
State provision	State funded institutions	State funds (services offered at free or subsidized rates)
Quasi market	Competing private firms	State funds (reimbursements to private providers)

Table 1: Mechanisms for distribution of goods and services

Birth of an Idea

Vouchers are a classic example of quasi markets and are defined by Pearson (2001) as transfers of purchasing power to specified groups for delivering defined goods and services. The emergence of vouchers as a means to improve access to basic commodities is not a recent phenomenon.

The concept can be traced back to Thomas Paine's proposal in *Rights of Man* (1791) which argued that England should provide an allowance to each student, for a period of six years, to finance education at a school of their choice. This principle also finds mention in John Stuart Mill's classic essay 'On Liberty' where he remarked,

> "If the government would make up its mind to require for every child a good education, it might save itself the trouble of providing one. It might leave to parents to obtain the education where and how they pleased, and content itself with helping to pay the school fees of the poorer classes of children, and defraying the entire school expenses of those who have no one else to pay for them." (Mill, 1869)

More recently, vouchers were brought to the forefront in the contemporary debate on education by Milton Friedman who advocated their use in his seminal work, 'Capitalism and freedom' (Friedman, 1962).

Historical Use

Vouchers are flexible tools that have been used to stimulate demand for a multitude of goods and services in developed and developing nations alike. Following are a few wide-ranging instances of their use in education, nutrition, healthcare, housing and entrepreneurial training:

a) School choice voucher program, Chile
This scheme was initiated in 1980 under which public funds followed the pupil to selected schools and a relatively unregulated, decentralized and competitive market in primary and secondary education was developed (Bravo et al., 2010).

b) The Supplemental Nutrition Assistance Program (SNAP),USA
This scheme was administered by United States Department of Agriculture (USDA) to tackle hunger and improve health outcomes by transfer of electronic benefits which are used like cash, to purchase food at authorized stores. In 2012, the programme covered 47.5 million Americans in the elderly, disabled and low income population segments (Hartline-Grafton, 2013).

c) Family Planning Program, Taiwan
It was one of the earliest schemes in healthcare which used coupons for promoting the use of contraceptionby subsidizing IUD insertion and sterilization operationsatprivateclinics(Cernada and Chow, 1969).

d) Housing Choice Vouchers, USA
It assists the elderly, disabled and low-income families in renting or purchasing housing in the private market. A subsidy is paid to the landlord directly and any difference between the actual rent and subsidy amount is covered by the family (Kutty, 2005).

e) Voucher Program for Training and Business Development Services, Kenya
This scheme used vouchers to boost the skills, productivity and growth of micro and small-scale enterprises in Kenya's *Jua Kali*sector. These vouchers facilitated firms' access to private providersof training and business services (Riley and Steel, 1999).

Participating Actors

Implementation of voucher schemes involves extensive coordination between multiple agencies and stakeholders. The main participating actors in these schemes are:

a) Principal: The organization (private donors, government, international institutions)that finances the voucher program.

b) Voucher Management Agency (VMA): The organization which implements the program. Its functions include contracting service providers, formulating marketing and distribution strategies for vouchers, processing claims and collection of data for monitoring the scheme.

c) NGOs and community level workers: They are instrumental in the implementation process at the grassroots level, especially in voucher programs for healthcare. In some schemes, NGOs trained community-level health workers, conducted meetings to collect records and paid remuneration to health workers while also facilitating community mobilization efforts. In addition, community health workers mapped beneficiary households, distributed vouchers, generated awareness, arranged transportation and even accompanied beneficiaries to accredited facilities.

d) Agents: Accredited private or not-for-profit facilities which provide goods and services in exchange for redeemable vouchers.

e) Holders/voucher recipients: Intended beneficiaries who are identified based on geographic, demographic or socio-economic criteria.

Models of implementation

Traditionally, voucher schemes have been *explicit*, that is, they involved the distribution of coupons, cards or stamps which are handed over to private providers by the beneficiaries in exchange for a defined set of goods and services. In the next stage, service providers submit these vouchers and other relevant documents (such as delivery records in case of vouchers in maternal health) to the voucher management agency for reimbursement. The real and monetary flows in such voucher programs have been illustrated in Diagram 1.

As nations develop comprehensive databases of citizens' details and assign unique identification numbers to them, virtual vouchers can replace physical coupons for enabling access to goods and services delivered by private facilities (Valkama and Bailey, 2001).

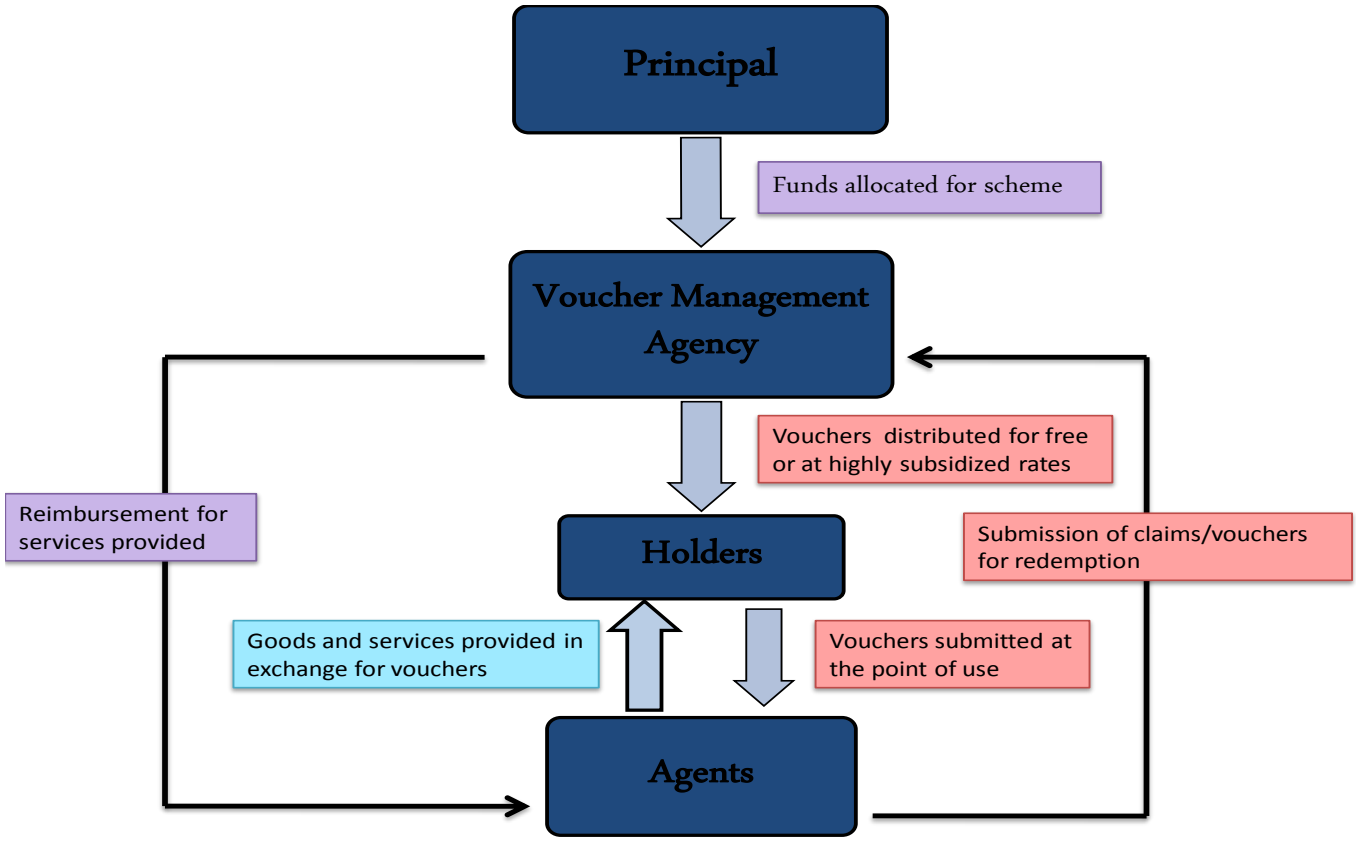


Diagram 1: Model for Explicit Voucher Schemes

Implicit voucher schemes are another approach where 'the money follows the user'. Here, the target population is conferred with rights to access vital services such as education and healthcare for free or at subsidized rates from competing empanelled providers. Private providers are remunerated by the State based on the number of voucher beneficiaries enrolled and serviced by them. Examples include the open enrolment programs in schools introduced in Sweden in 1992(Sahlgren, 2010) and Chile in 1980 (Gauri, 1998).

Potential benefits

The growing interest in vouchers as means of improving welfare outcomes has been driven and sustained by their numerous benefits. To begin with, vouchers present an opportunity to funding agencies to invest in developing countries in a manner that involves purchase of outputs by financing demand, rather than purchase of inputs through supply side subsidies that can introduce market distortions (Sandifordet al., 2002).

Further, vouchers incentivize the consumption of socially desirable and welfare-enhancing commodities by the target population through the 'nudge effect'. This paper sets out potential benefits of voucher programmes for the demand and supply side of markets.

The demand side

a) Concentrated targeting

Vouchers enable the State and funding agencies to direct their finances and efforts towards specific vulnerable and impoverished groups such as sex workers, indigenous populations, illiterate pregnant women, to name a few, who may be difficult to reach otherwise through supply side interventions(World Bank, 2005).

b) Increased consumption

Vouchers encourage the utilization of under-consumed services such as maternal and child healthcare (Ahmed and Khan, 2010), family planning methods, detection and treatment of Sexually Transmitted Infections (Borghi et al., 2005) and insecticide-treated bed nets (Mulligan et al., 2008).

Voucher programs achieve this by removing financial and knowledge barriers faced by the target beneficiaries. Moreover, implementation of voucher schemes is complemented with appropriate Behavior Change Communication strategies in order to erode socio-cultural norms that hinder the use of some services.

c) User choice

Libertarians deem user choice and freedom to be intrinsically desirable and utility-promoting. Thus, the freedom to choose and switch between service providers contributes to an individual's welfare by allowing greater scope for autonomous action (Le Grand, 2011).

However, voucher schemes must offer sufficient provider alternatives to beneficiaries and grant them the flexibility to switch providers in case of dissatisfaction for this benefit to be fully realized, as well as provide information about competing suppliers to facilitate informed decision-making.

The supply side

a) Improved quality

Voucher schemes incentivize providers to improve their quality in multiple ways. First, providers are motivated to fulfill benchmark quality standards required for accreditation and empanelment under the scheme. Second, competition in the market implies that providers continually improve their quality and adopt innovative strategies so as to attract greater volumes of voucher recipients. Third, contracts between the VMA and service providers can include training of staff and monitoring mechanisms for improving and maintaining quality standards. These factors in turn lead to delivery of higher quality goods and services, the benefits of which are realized by voucher as well as non-voucher consumers (Gorter et al., 2003).

b) Efficiency gains

Introducing market forces and competition amongst providers can create incentives to deliver those commodities at minimum cost as comparatively inefficient firms which

supply goods or services of inferior quality or at higher costs would be driven out of the market (O'Neill, 1977).

c) Reinvestment and capacity building

Providers who witness greater revenue flows as a result of increased demand of voucher goods and services can reinvest their funds to expand their facilities, purchase new technologies and hire more workers. This was observed in Kenya where the vouchers benefited patients directly and furthermore led to greater investment in the private healthcare sector (Bellows et al., 2010).

To summarize, voucher programmes effectively reach out to the hitherto excluded, high-risk and impoverished populations, increase their utilization of welfare-improving commodities and enable them to exercise choice between competing providers. Given certain favourable market conditions such as ease of entry and exit, sufficiently high degree of competition and availability of information to assess providers, voucher schemes can also lead to greater cost effectiveness and improved quality of essential goods and services.

Vouchers for Maternal healthcare in India

Vital Statistics

In 2010, an estimated 2, 87, 000 maternal deaths occurred across the globe with two countries accounting for a third of these deaths. The two countries were India which witnessed 56,000 maternal deaths (19 percent of the global burden) and Nigeria with 40, 000 maternal deaths (14 percent of the global burden; MMEIG, 2012).WHO statistics show that complications arising in pregnancy and child birth, most of which could have easily been prevented, resulted in the death of nearly 800 women everyday in 2012 with developing nations accounting for 99 percent of all such maternal deaths.

Assessing the situation in India, the Human Development Report 2013 ranks the country an abysmal 136 on the Human Development Index and reveals its MMR for 2010 to be 200 deaths per 1,00,000 live births. In this respect, there has been a marked improvement in maternal health in India, with MMR decreasing from an alarming high of 600 in 1990 to 200 in 2010.However, a comparison of India's maternal health outcomes to those of Sweden (MMR of 4) or closer home to Sri Lanka (MMR of 35) and China (MMR of 37), makes it abundantly clear that India faces an arduous task if it wants to achieve similar levels in maternal care and the MDG target of reducing maternal mortality by three quarters to 109 till 2015.

Delving deeper into maternal mortality in India, data for 2001-03 reveals that ante- and post-partum haemorrhage (38 percent), sepsis (11 percent) and abortion (8 percent) were the leading causes behind maternal deaths. Unfortunately, these deaths could have been avoided as medical solutions to such complications are well developed. Improved access to emergency obstetric services could have prevented deaths arising from haemorrhage while access to ANC, PNC and safe abortion practices could have prevented maternal deaths caused by sepsis, obstructed labour and unsafe abortions (Centre for Global Health Research, 2009).

The inadequacy of public investment in healthcare is reflected in the disturbing data from the Rural Health Statistics for 2012-2013 which shows that many Primary Health Centres (PHCs) lack basic facilities such as labour rooms (34 percent) and regular water supply (13 percent). The situation is more alarming in some regions like Jharkhand where the shortfall in PHCs is the highest at 66 percent with 59 percent of PHCs having no electricity connection. The data also reveals that Community Health Centres (CHCs) are experiencing a critical shortage of 69.7 percent in specialists with a shortfall of 74.9 percent of surgeons, 65.1percent of obstetricians and gynaecologists and 79.8 percent of paediatricians based on the requirement of existing CHCs(Government of India, 2013).

Plagued by poor physical infrastructure and shortage of specialists and support staff, most existing public healthcare facilities in India are ill-equipped to tackle the challenge of improving indicators of maternal health rapidly and effectively, clearly highlighting the pressing need to increase public investment in maternal healthcare. Here, it also becomes essential to assess the role the private sector can play in the provision of RCH services.

The private sector

Potential

Hanson and Berman (1998) show that despite public investments in the healthcare sector, private provision is significant and sometimes dominant in the delivery of services for both urban and rural populations in many developing nations. Even families from lower socio-economic strata choose private providers for services such as antenatal care, institutional delivery and hospitalization, financed through out-of-pocket (OOP) expenditures, indicating that the private sector can play a pivotal role in areas where state provision of healthcare is limited or of poor quality (Bhatia and Gorter, 2007).

The potential for roping in the private sector can be highlighted by the fact that the Indian healthcare industry is estimated to be worth US$ 40 billion and expected to grow at an average CAGR of 21 percent for the next ten years, reaching an estimated US$ 280 billion by 2020 (KPMG and ASSOCHAM, 2011).

Furthermore, rapid expansion of the private sector in healthcare can be fuelled by capturing the benefits of Foreign Direct Investment (FDI). Foreign investors can be attracted by the growth factors visible for this industry, namely: a large and expanding population; rising per capita incomes; greater awareness of health issues and India's potential as a destination for medical tourism. In addition, India's policy on FDI is liberal for hospitals, allowing FDI up to 100 percent through the automatic route. (Kacchap, 2010) Infact over the past five years alone, Private Equity funds invested over US$ 2 billion in the healthcare and life science sector in India, with the country receiving US$ 1030.05 million for hospital and diagnostic centres from April 2000 up to April 2011 (Sarvamangal, 2013).

Barriers

In India, access to private healthcare is greatly inhibited with services like caesarean delivery costing as high as Rs 15,000 and upwards in urban areas. The combined effect of inadequate public infrastructure and financial barriers to private healthcare for underprivileged pregnant women is that only 52.7 percent of deliveries in India take place in the presence of SBAs as compared to China (99.1 percent) and Sri Lanka (98.5 percent). This poses grave implications for maternal health outcomes (UNFPA country profiles).

Other barriers which have constrained utilization of RCH services include lack of awareness about where and when to seek care, distance to the nearest facility, allocation of resources for maternal health within the household and traditional customs preferring home births over institutional deliveries (Jehan et al.,2012).

Demand side financing

Demand side financing tools such as conditional cash transfers and vouchers are an innovative way to tap the potential of private infrastructure for delivering maternal healthcare services to intended beneficiaries. In India, conditional cash transfers are being used to incentivize and empower women to shift from home to institutional births in one of the largest cash transfer schemes of the world in terms of number of beneficiaries– *Janani Suraksha Yojana.* Under this scheme, women in rural areas receive Rs 1400 and those in urban areas receive Rs 1000 for delivering at public hospitals or accredited private facilities in States that have been assigned as 'high priority' on the basis of indicators of maternal and child healthcare. However, the scheme

faces many challenges. Women complained that the cash benefits received are inadequate to cover the additional costs incurred on medicines, transportation and pregnancy complications. Moreover, systemic delays in disbursal of cash benefits and receiving lesser than the assigned cash transfer have been frequently reported (Government of India, 2011).

On the other hand, the use of vouchers paves the way for a cashless mechanism to deliver an entire package of RCH goods and services at public and private facilities. Vouchers are extensively used in the delivery of safe motherhood services across the globe andmost of these schemes cover a well defined set of goods and services including:

a) Ante Natal Checkups (ANCs) with diagnostic tests;
b) Iron and folic acid tablets and Tetanus Toxoid injection;
c) Delivery services (normal, caesarian and complicated);
d) Essential new born care with immunization;
e) Post Natal Checkups (PNCs) which can include pills, breast feeding and family planning counseling; and,
f) Transport expenditure.

Maternal Vouchers in India

India has initiated multiple programs to harness the private sector's potential for delivering healthcare by establishing public –private partnerships and implementing voucher schemes with the objective of increasing equity in access to quality healthcare. Both explicit and implicit forms of vouchers have been employed in the delivery of RCH services.

On the explicit front, the *Sambhav* scheme, Reproductive and Child Health (RCH) program in Kolkata, Young Infant Health Insurance Scheme in Andhra Pradesh and the transportation for pregnant women voucher scheme in West Bengaldistributed physical vouchers to beneficiaries (see image 1 and 2 in Appendix). On the implicit front, schemes such as *Janani Sahyogi Yojana, Thayi Bhagya, Janani SuvidhaYojana* and *Ayushmati* have directly reimbursed private providers after submission of proof of services provided.

Most voucher schemes have been targeted specifically at women from BPL households and have been full cost vouchers, i.e. covering the entire cost of services provided with no 'top-up' facility. The reimbursement rates of the benefits package have been fixed, with private providers not allowed to impose additional charges onto the beneficiary. The schemes have also provided financial incentives to ASHAs, AWWs, ANMs and other community health workers in recognition of the fundamental role they play in promoting good practices in maternal health care at the grassroots level.

The potential of these schemes to facilitate institutional care on a large scale can be illustrated through the following observations. For instance, *Saubhagyawati Surakshit Matretev Yojana* in Uttar Pradesh empanelled 133 providers, facilitated nearly 4000 deliveries and conducted 700 caesarean sections within three months of its initiation (Government of Uttar Pradesh, 2010). *Chiranjeevi Yojana* in Gujarat assisted 1,31,329 deliveries and the reported MMR under the scheme was found to be twenty times lower than the rate expected based on the State's MMR (Acharya and McNamee,2009). Another scheme *Sambhav* enabled 12,500 deliveries, 47,600 ANC and 10,300 PNC visits in private healthcare facilities spread across Uttar Pradesh, Uttarakhand and Jharkhand.

Table 2 of this paper summarizes important details of various voucher programs that are aimed at maternal healthcare in India (in both explicit and implicit forms).

S.No.	Scheme	Location and scale	Time frame	Agencies	Incentives
1	Chiranjeevi Yojana	Pilot in five districts of Gujarat (Banaskantha, Dahod, Kutch, Panchmahals, and Sabarkantha). Scaled up to the entire State in 2007.	Pilot launched in five districts in December 2005-ongoing.	State Government of Gujarat. Consultations with SEWA Rural Jhagadia, IIM Ahmedabad and Federation of Obstetric and Gynaecological Societies of India (FOGSI)	Free institutional delivery for BPL women with free food and medicines post delivery. Rs 200 as transport subsidy Rs 50 to attendant Rs 1,79,500 to private providers for every 100 deliveries (including caesarean sections and complicated deliveries) with advance of Rs 20,000 Rs 65,900 to private practioners delivering in public facilities for 100 deliveries
2	Sambhav Voucher Scheme	Uttar Pradesh (seven blocks in Agra, 368 urban slums in Kanpur Nagar) Uttarakhand (two blocks in Haridwar) Jharkhand (two blocks in Gumla)	2006 - 2012	United States Agency for International Development (USAID), State Innovations in Family Planning Services Agency (SIFPSA) in Uttar Pradesh, Uttarakhand Health and Family Welfare Society and Jharkhand Health Society. IFPS Technical Assistance Project (ITAP) by Futures Group India.	Cashless package to BPL families. Recognized private providers reimbursed Rs 3,200 for normal delivery Rs 5,500 for caesarean section Rs 2,000 for any complications Rs 450 for 3 ANCs and tests Rs 100 for 2 PNC visits Rs 2000 for infant health Rs 1500 for sterilization Rs 300 for IUDs Remuneration to ASHAs for promoting services, travel expenses
3	Janani Suvidha Yojana	Haryana (urban slums in eight districts- Panchkula, Gurgaon, Yamuna Nagar, Narnaul, Kurukshetra, Rewari, Bhiwani and Sonipat)	Launched in 2006	Funding by Department of Health, Haryana. Implementation through District NGOs.	Cashless Antenatal, Natal and Postnatal services for ALL pregnant women in urban slums. Private providers were reimbursed Rs 500 for normal delivery Rs 1500-2000 for caesarean delivery Rs 200 per visit for ANC,PNC Rs 10,000 as quarterly honorarium to Surveillance Officer and Rs 200 per field visit for 4-6 visits per

					month Rs 135 to SAKHI per case with Rs 200 for referral transport in case of sick newborns and pregnancy complications.
4	MAMTA scheme	National Capital Territory of Delhi	Launched in 2008, ongoing	Fully funded by Government of India	BPL/SC/ST pregnant women who are residents of Delhi and above 19 years of age with not more than one living child entitled to free services. ASHA/ANM reimbursed Rs 100 per delivery facilitated. Private providers (MAMTA Friendly Hospitals) are reimbursed Rs 4, 00, 000 for package of 100 deliveries including: Rs 1000 for normal delivery Rs 5000 for caesarean section Rs 100 for each ANC and PNC Rs 1000 for medicines, immunization for new born
5	ThayiBhagya Scheme	Karnataka (six districts of Gulbarga, Bidar, Raichur, Koppal, Bijapur and Bagalkot and Chamarajanagar)	2009	State Government of Karnataka	Cashless treatment (ANC, delivery and PNC) for BPL women in registered private hospitals for first two live births. ANC cards distributed for identification. Private providers reimbursed Rs 3, 00,000 for 100 deliveries including normal, complicated caesarian and forceps deliveries. Rs 3000 per delivery includes: Rs 250 for transport Rs 75 for accompanying person Rs 30, 000 advance for participation in the scheme. Rs 1, 50, 000 for every 100 deliveries for Government hospitals. Rs 1500 per delivery includes: Rs 300 for doctor Rs 200 for assisting nurse staff Rs 100 for cleaning staff
6	CINI-LIP (Local Initiatives Programme)	Kolkata (10 municipal wards)	3 year pilot project initiated in 1999.	Funding from Bill & Melinda Gates Foundation. Implemented by Child in Need Institute - CINI	CINI beneficiaries entitled to 2 visits to private physician for family planning services, antenatal and postnatal care, reproductive health care. Free essential drugs at CINI health posts in slums.

				ASHA	Rs 15 for 2 visits as voucher reimbursement to private practitioners.
7	Saubhagyavati Surakshit Matretev Yojana	Uttar Pradesh	Launched in 2008	State Government of Uttar Pradesh	Access to safe motherhood services (Ante Natal, Post Natal, neonatal care and family planning) for BPL women in rural and urban areas Rs 1,85,000 paid for every batch of 100 deliveries conducted by nursing homes for women from BPL families.
8	Sarv Swasthya Mission	Jharkhand	2008	State Government of Jharkhand with technical support from International Labour Organization (ILO) and contributions from TATA industrial Group.	Amongst other subsidies, BPL families are given maternity vouchers for diagnosis, medicines and safe delivery.
9	Janani Sahyogi Yojana	Madhya Pradesh (initiated in all 48 districts)	In operation since 2006	State Government of Madhya Pradesh	Access to delivery and newborn care services to BPL women in private facilities. Motivation charges of Rs 200 to ASHAs, AWWs Private providers received Rs 1200 for normal delivery Rs 5500 for caesarean section Rs 750 for blood transfusio Rs 50 for baby warmer Rs 50 for pediatrician visit
10	Young Infant Health Insurance Scheme	Andhra Pradesh	2006	State Government of Andhra Pradesh	Three vouchers of Rs 50 each valid till three months after delivery entitle SC/ST families to get emergency treatment for infants in private facilities.

11	Ayushmati Scheme	West Bengal (11 districts in first phase)	2007	State Government of West Bengal	Cashless normal or caesarian delivery and Comprehensive Emergency Obstetric Care to pregnant women from BPL, SC/ST families.Hypothermia kit for neonatal care and referral transport reimbursement. Private providers reimbursed on capitation payment basis with fixed rate of Rs 3200 per delivery in batches of 100 cases.
12	Subsidized Emergency Transportation Service for Pregnant Women under BPL/SC/ST and Sick Neonatal Children	West Bengal (rural areas)	2010	Health and Family Welfare Department, Government of West Bengal	Pregnant women from BPL/SC/ST families (irrespective of age and number of children) residing in rural areas given 3 vouchers(in the form of a booklet) for free transport to health facility for delivery, for returning home after discharge and to referral centre in case of complications after the third ANC. Transport operators managed through Nishchay Yan (district based ambulance network) are reimbursed Rs 150 for travel upto 10 km Rs 250 for 10-20 km Rs 350 for 20-30 km Rs 450 for more than 30 km

Table 2: Voucher schemes for RCH in India

Neighbouring Schemes

Pakistan's *Sehat* Voucher Scheme was implemented in *DG Khan* District in 2008. Under the pilot, women purchased vouchers at highly subsidized rates entitling them to reproductive health and family planning services at private providers exclusively managed by the Greenstar Social Marketing network. The programme led to increased utilization of ANC (21.6 percent), institutional delivery (22.1 percent) and postpartum care (35.4 percent) within a one year period (Jehan et al., 2012). Moreover, every voucher recipient encouraged 3 to 4 pregnant women to deliver in the presence of SBAs, reflecting positive spillover effects (Bashir et al., 2009).

Bangladesh initiated its Maternal Health Voucher Scheme in 2007 and covered 46 *upazilas.* The benefits package in this scheme included a payment of US$ 31 for buying nutritious food and a gift box containing baby soap, towel, baby clothing and nutritious drink powder over and above ANC, delivery and PNC services (Ahmed and Khan, 2010). Under this program, 36.6 percent more women delivered in the presence of SBAs, 18.8 percent more women had institutional births and 16 percent more women had at least one ANC (Jehan et al., 2012).The program reported increased equity in access to health care and client satisfaction with services as well.

Challenges faced and possible solutions

My findings while researching this topic have illustrated that voucher schemes in maternal healthcare in India have faced a set of challenges that can severely undermine the objectives of the programme if not properly addressed. It is imperative to incorporate safeguards which can tackle these challenges within the policy design and framework if we are to combat the high rates of maternal mortality in India. The challenges faced by these programs are:

a) Social hierarchy and traditional customs

b) Sustaining provider interest

c) Overservicing

d) Cream-skimming by service providers

e) Determining eligibility in the absence of documentary proof

f) Providing meaningful choice

In the following sections of the paper, each of the aforementioned challenges is discussed separately along with recommendations that can be integrated within the policy design to overcome them. It is hoped that these suggestions can inform future voucher schemes in maternal and child healthcare so that they may realize their full potential.

Social hierarchy and traditional customs

Long standing beliefs and socio-cultural norms amongst communities have preferred home births with the help of traditional birth attendants or '*dais*' over institutional delivery. For women in these communities, low social status, the lack of decision making power within the household, low levels of literacy and limitations of financial resources prevent them from seeking institutional healthcare.

In an inquiry and social audit conducted for revealing the underlying causes of maternal mortality, the lack of decision making power of the deceased women was apparent. For instance, in the Purulia district of West Bengal, it was observed that it was the husband and 'others' who made decisions regarding when and where to seek formal care for 95 percent cases involving maternal deaths. Moreover, out of the families which delayed or did not seek insitutional care, 29 percent believed that the woman was not sick enough and 13 percent felt that the complications could be resolved through traditional practices. Beliefs like a woman should eat less as she approaches delivery are prevalent amongst these communities posing difficult obstacles to improvements in maternal health (UNICEF, 2008).

An effective method for breaking these socio-cultural barriers and debunking prevalent myths and superstitions would be through continuous engagement of community-level health workerswith these households. ASHAs and AWWs play a pivotal role in convincing families of

the benefits of formal care and can bring about significant changes in the health seeking behaviour of families. Recognizing the crucial role played by these community health workers, schemes must provide sufficient financial incentives to motivate them. These incentives can be determined through a consultative process which assigns a fixed rate of remuneration for each delivery facilitated by the worker. Routine meetings between the VMA officials, participating local NGOs and health workers can be held to review the performance of community health workers and discuss novel strategies for encouraging institutional delivery amongst poor pregant women. A sense of ownership towards the scheme can be developed amongst the local populace if the VMA makes efforts to engage respected and influential persons within the community such as school teachers or the *sarpanch* to propogate the scheme's benefits. Awareness generation through street plays, counseling, village meetings, advertisements on radio and TV can also increase the utilization of RCH services.

A good practicefor reducing the preference for home births would be the training and inclusion of TBAs within the scheme. These traditional midwives have long established connections and influence within the community along with a perverse incentive to prevent families from seeking formal care. An innovative strategyis to provide financial incentives to *dais* for encouraging pregnant women to seek skilled care and accompanying them to medical facilitieswhich also compensates these TBAs for the consequent loss in wages.

Sustaining provider interest

Private providers empanelled under the schemes have voiced concerns regarding the reimbursement rates fixed for the services delivered. It is a common sentiment amongst them that the rates do not cover the costs involved and do not offer a significant profit margin to the provider.

This presents a real challenge since new providers would be reluctant to participate, existing providers may choose to exit from the scheme or impose additional charges on the voucher holders or give poorer quality of care to voucher beneficiares as compared to non voucher holders who pay market rates.For example, providers interviewed under *Chiranjeevi Yojana* percieved the scheme as part of their CSR efforts or as means of establishing reputation and gaining experience if they were new in practice rather than a mainstream business strategy. Only 56 gynaecologists and obstetricians out of 200 in Surat district of Gujarat registered for the scheme, reflecting the need to design better pricing policies (Acharya and McNamee,2009).
An evaluation of *Janani Sahyogi Yojana* in Madhya Pradesh revealed similar outcomes with 60 percent of the heads at health facilities demanding substantial increases in reimbursement rates and 46 percent of facilities even charging beneficiaries for some services(Ravindran, 2011).

Hence, igniting and sustaining provider interest is of crucial importance if voucher schemes are to realize their main objectives of enabling user choice, expanding access to services and incentivizing improvements in quality and efficiency through provider competititon.
A few recommendations for encouraging active participation in the scheme are:

a) Reimbursement rates should be set in a participatory manner through exhaustive consultation with multiple stakeholders.

b) Contracts signed between the VMA and service provider should include clauses that call for revision of rates in case of significant rises in the cost of inputs.

c) The compensation packages should be designed in a manner that covers other costs incurred by private providers such as fees of consulting specialists and medicines prescribed.

d) The VMA could also determine an optimal number of providers for the scheme such that each facility has the potential to attract enough clients to compensate for lower than market reimbursement rates if it is to incentivize active participation. The rationale behind this is that private providers would be more willing to accept compensation at rates below market levels if it sees opportunities for increased and more stable client and revenue flows.

e) Private nursing homes in rural areas can also be motivated to participate if some supply side components such as free training of staff are included in the design of the scheme.

f) The program's framework should also include an efficient reimbursement mechanism so that claims submitted by the private facilities can be processed and the funds tranferred in a time-bound and transparent manner. One method which was used under Sambhav Voucher Scheme was the payment of an advance amount (Rs 15, 000) to accredited facilities at the time of signing the MoU. Reimbursements were made whenever the claims submitted crossed a specified threshold (Rs 10, 000) and this efficient system instilled confidence in the scheme amongst providers (IFPS ITAP, 2012).Alternatively, an electronic provider payment mechanism may be adopted to reduce cumbersome bureaucratic paperwork.

Overservicing or 'provider induced demand'

Overservicing is a phenomenon in which facilities attempt to provide more expensive services to a client even if his/her medical condition does not require it. It is termed as 'provider induced demand' since it is the private facility which advises the client to undertake unnecessary procedures to boost its revenue flows and hence profits.

Instances of this provider moral hazard were observed in voucher schmemes where differences in the reimbursement rates and profit margins for performing normal and caesarian deliveries led to an increase in surgical intervention. Private facilities had a perverse incentive to conduct caesarean sections even in cases where a normal delivery was possible and safe. For instance, it was reported that nearly one in every two women underwent caesarean surgery over nine months during *Janani Suvidha Yojana* in Madhya Pradesh, an alarming rate when compared to WHO's recommendation that no more than 15 percent of deliveries be conducted through C-sections(Ghatwai, 2010).

The Government of Gujarat devised a method to overcome this challenge in its *Chiranjeevi* scheme by assigning a compensation of Rs 1795 per delivery irrespective of type (normal or caesarian), thereby eliminating the rate differentials and perverse financial incentives involved. This figure of Rs 1795 per delivery was estimated assuming that 15 out of 100 deliveries would face complications implying higher costs to providers (Bhat et al.,2009).

An alternative method was employed by *Sambhav* Voucher scheme where normal and caesarian deliveries were reimbursed at different rates but were fixed in a manner that allowed for higher profits to be earned for a normal delivery than for a caesarian, thus removing the incentives to undertake unneccesary surgical interventions. In addition to this, the VMA can also conduct frequent investigations into a sample of claims submitted by the providers in order to assess if the caesarian cases really required the surgical interventions or not.

Cream skimming and handling of emergencies

Cream skimming by providers has been a major cause of concern for VMAs wherein private facilities cater to low-cost cases and refer the more expensive complicated cases to other facilities or public hospitals.This is a consequence of providers' perception that the reimbursement rates established under the scheme do not cover the cost of handling complications adequately. For instance, under *Chiranjeevi Yojana*, the rate of Rs 1795 per delivery was estimated assuming a 7 percent incidence of complications requiring caesarean section. However, empanelled private providers considered it to be an unrealistically low estimate and claimed that they received as many as 30 complicated cases out of every 100 deliveries.This can severely limit the scheme's main objective of reducing maternal mortality if pregant women facing complications are caught in a chain of referrals with increasing costs and further delays in receiving institutional care.

One way to ensure that complicated pregnancies are not turned away is by setting up a corpus of funds for financing additional expeditures incurred by private providers when handling emergency cases. The scheme should also consider establishing awell functioning referral system amongst empanelled private providers and public facilities so that families do not get trapped in a chain of referalls from one facility to another, saving precious time and financial resources. In addition to this, reimbursement rates can be revised to better reflect the costs incurred by providers in emergency cases such as the fees for hiring consulting specialists.

Determining Eligibility

Schemes targeting pregnant women from BPL/SC/ST families would require them to furnish documentation proofs in order to avail benefits under the programme. In the case of the MAMTA scheme in Delhi, the eligibility is determined after showing a birth certificate and residential proof along with BPL/SC/ST card. These requirements could potentially exclude pregnant women from poor migrant families who do not have these documents but are nonetheless in need of formal care. This challenge was also faced under *Chiranjeevi Yojana* where migrant families residing in Surat were not deemed eligible under the scheme.

In order to tackle this problem, schemes can conduct geographical targeting in unauthorised colonies, J.J. (*Jhughi Jhopri*) clusters and slums in order to physically identify low-income migrant households with the help of poverty grading tools and asset-based means testing. In case a pregnant woman arrives at a health facility without the pre-requisite documents, an official such as the CDMO can be given the mandate of determining eligibility under the scheme instead of providers outrightly refusing her free treatment.

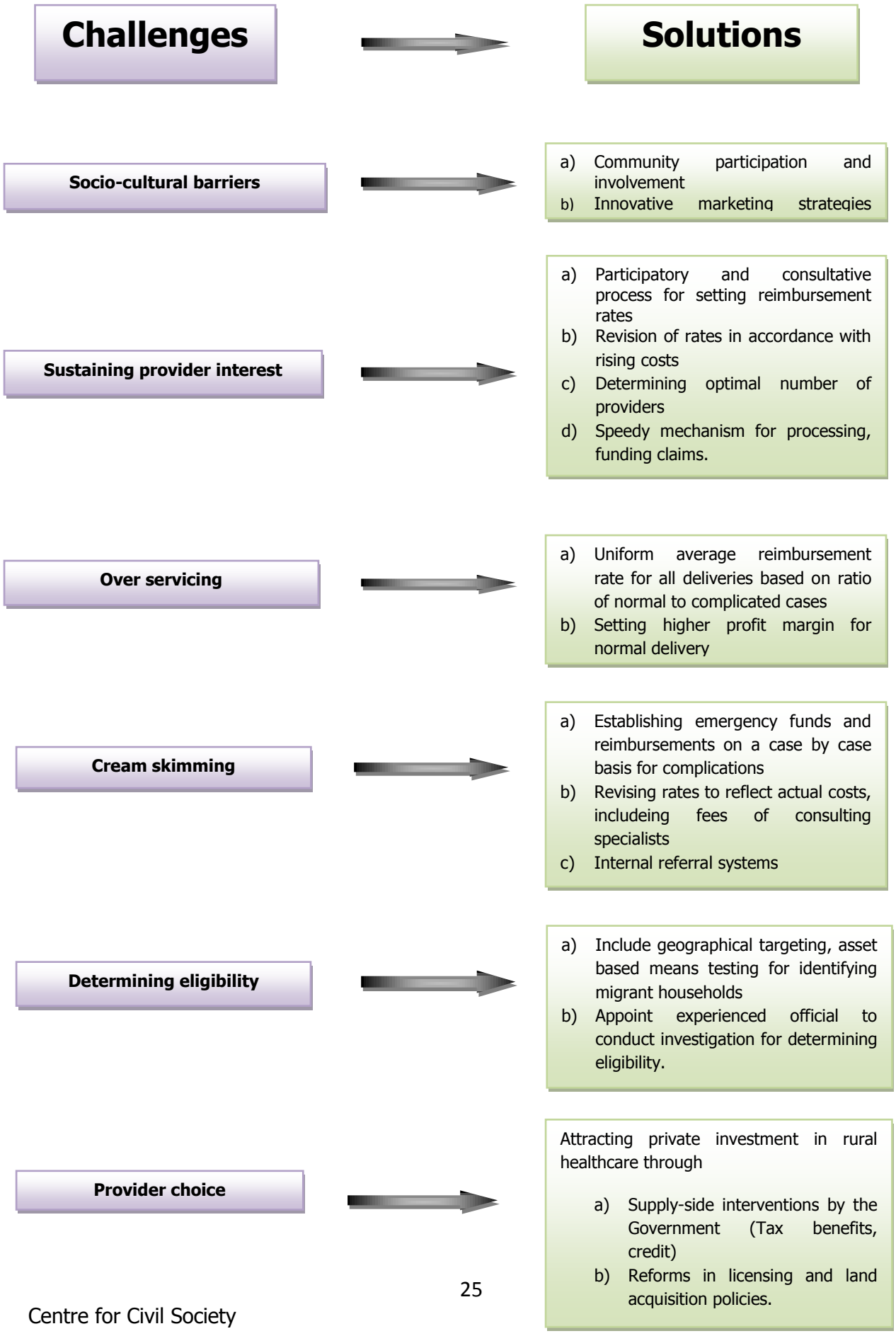
Providing meaningful choice

Another cause for concern may be the lack of meaningful choice in selecting providers for poor women. Even though 70 percent of total healthcare delivery in India is through the private sector, it is concentrated in capital cities and Tier I cities (ICC and PwC, 2012). Thus, inadequate presence of private facilities in rural areas which meet the minimum quality benchmarks can result in voucher holders having little choice but to go to public facilities with limited and often overburdened infrastructure. For instance, only 9 percent of registered providers in Madhya Pradesh's *Janani Sahyogi Yojana* were located in rural areas based on an evaluation of six districts in 2007-08 (Ravindran,2011) implying the need to attract private investment in healthcare in rural areas. The government can consider providing supply side incentives to attract private investment in rural healthcare through tax benefits, reduced loan interest rates, transparent land acquisition and licensing policies and other similar interventions. Private providers can also be encouraged to adopt sustainable and commercially viable business models such as the cross-subsidy tiered pricing model used by the LifeSpring Hospital Chain which has set up small facilities with 20-25 beds in Andhra Pradesh to provide maternal healthcare services to poor women (Donika et al., 2009).

Counterfeiting – A few preventive steps

An additional problem which may arise under programmes distributing physical coupons or cards to the intended beneficiaries is the counterfeiting of vouchers. These forged vouchers may be used by families not eligible for the scheme or by providers seeking reimbursements for 'ghost clients'. One way to prevent counterfeiting is to utilize software which tallies claims with vouchers distributed based on unique codes printed on vouchers. Community health workers can also maintain a record with details of voucher beneficiaries to verify claims submitted by providers. Alternative measures to counter this challenge include the use of holographic stickers and watermarks as was done in the *Sambhav* scheme in India or mandating providers to submit blood tests and other samples while submitting claims. For instance, Pakistan's *Sehat* scheme required providers to submit clients' partographs and also set up an internal monitoring mechanism to verify a random sample of claims submitted (Bashir et al., 2009).

A summary of the challenges faced and possible solutions to each has been presented in the diagram below.



Conclusions

This paper has endeavoured to highlight the potential of vouchers in the field of maternal healthcare in India, given the context of high MMR, strained public infrastructure, expected robust growth in private healthcare and high private medical costs. I advocate the implementation of these schemes in conjunction with efforts to revamp health infrastructure on the supply side in order to accelerate progress on the fifth MDG of reducing maternal mortality by three quarters by 2015. As discussed in the paper, numerous voucher programmes for RCH services were launched in India which either distributed physical coupons to eligible women or 'contracted out' healthcare services to private providers. These schemes have attempted to make institutional care a cashless service for pregnant women from impoverished families in order to promote equity in health outcomes. Evaluation reports from some well-documented voucher schemes indicate significant increases in the uptake of safe motherhood services by removing the overlapping knowledge, financial and social barriers faced by these women. However, if voucher schemes are to realize their objectives, challenges posed by cultural and gender norms, discouraged providers, cream-skimming, over-servicing and exclusion of migrants need to be addressed at the initial stage of policy design itself. Enhancing community involvement in the scheme, establishing inclusive and participatory mechanisms for determining reimbursement rates for private providers and health workers, setting aside emergency funds for dealing with complicated cases, undertaking surveys for physical identification and enrolment of the migrant poor under the scheme and complementing vouchers with supply side incentives to private providers and expansion of public health infrastructure are a few suggestions for improving the efficacy of voucher schemes. Having said this, there is much research yet to be conducted in this field. Comprehensive analyses of cost effectiveness and degree of provider competition present in these voucher programmes are some exciting directions for future research on vouchers in maternal healthcare in India.

Appendix

Image 1: Sambhav coupon for free institutional delivery.

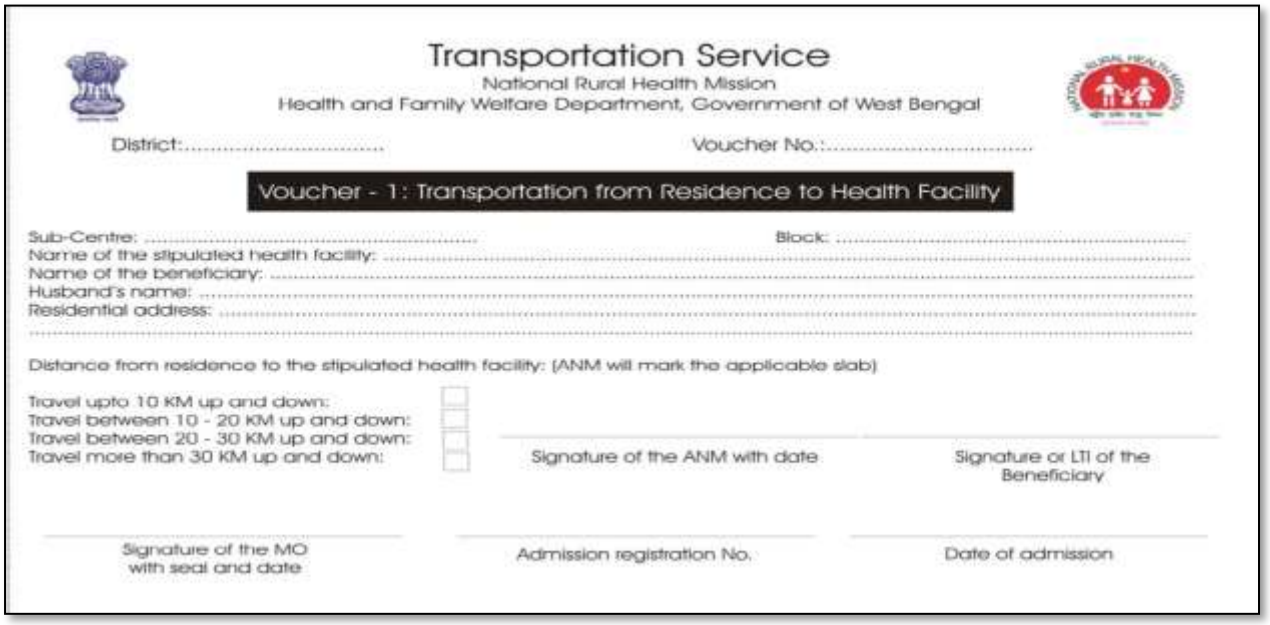


Image 2: One of the three vouchers provided in West Bengal's transport voucher scheme.

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