



Systematic Review of Structural and Implementation Issues of Voucher Programs

Analysis of 40 Voucher Programs

In-depth Analysis of 20 Programs

Report

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Abbreviations

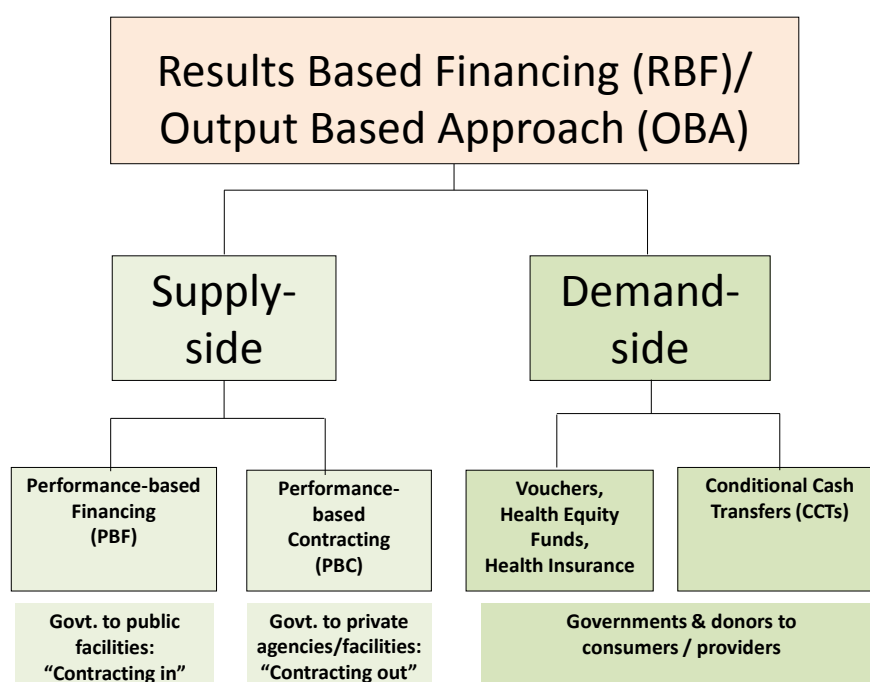
ANC	Antenatal Care
BPL	Below Poverty Line
BTC	Belgian Technical Cooperation
CCT	Conditional Cash Transfer
CHF	Community Health Fund
DSF	Demand-side Financing
FBO	Faith Based Organization
FP	Family Planning
GBV	Gender Based Violence
GNI	Gross National Income
HC	Health Centre
HEF	Health Equity Fund
HI	Health Insurance
ICAS	Instituto CentroAmericano de la Salud
KfW	Kreditanstalt Für Wiederaufbau (German Development Bank)
LAPM	Long Acting and Permanent Methods
M&E	Monitoring and Evaluation
MIS	Management and Information System
MNCH	Maternal Newborn and Child Health Services
MOH	Ministry of Health
MOU	Memorandum of Understanding
MSI	Marie Stopes International
NGO	Non-Governmental Organization
NHIF	National Health Insurance Fund
OBA	Output-based Approach
OCSC	Obstetric Care State Certificate (name voucher in Armenia)
P4P	Pay-for-Performance
PBC	Performance-based Contracting
PBF	Performance-based Financing
PPP	Public Private Partnerships
PS	Private Sector
PSI	Population Services International
PwC	PricewaterhouseCoopers
QA	Quality Assurance
RBF	Results-based Financing
RTI	Reproductive Tract Infections
SF	Social Franchise
SFO	Social Franchise Organization
SHI	Social Health Insurance
SMH	Safe Motherhood
SRH	Sexual and Reproductive Health
STIs	Sexually Transmitted Infections
SW	Sex worker
SWAp	Sector-wide approach
TB DOTS	Tuberculosis Direct Observed Treatment Short-course
VMA	Voucher Management Agency
VP	Voucher Program

1. Background

1.1 Introduction

Developing countries face serious challenges in meeting public expectations of their health services. There remains a huge gap and often the poor do not receive the most basic health services. During the last decade much effort has been invested in searching for alternative financing models where payments and other incentives are linked to outputs. The umbrella term for these approaches is results-based financing (RBF) and there has been much debate about the definitions of this and other terms such as output-based aid (OBA) and pay-for-performance, neatly summarized by Philip Musgrove at the World Bank¹. Figure 1 provides an outline of the chief supply and demand-side approaches within RBF.

Figure 1: Supply and Demand-side Approaches in RBF



Adapted from: *Building Strong Health Systems: The promise and reality of Performance-based Financing*, by J Naimoli, Global Health Initiative Launch team, USAID, Africa SOTA, December 8, 2010

There are two principal ways in which the funds flow in RBF:

- **Demand-side approaches:** the purchasing power is transferred to the client (thus, such approaches are sometimes known as ‘client-led’). Providers are paid according to the number of clients or clearly defined performance they succeed in attracting or achieving. The key defining feature of client-led financing is the direct link between the intended beneficiary, the desired output and the payment. Examples of client-led RBF approaches include voucher programs, social health insurance and conditional cash transfers. In Conditional Cash Transfers (CCT), the incentive is paid directly to the beneficiary upon complying with the stated conditions, which often relate to utilization of specific health or education services (widely used for safe motherhood services in south Asia)
- **Supply-side approaches:** providers are encouraged to improve performance through performance-based contracts (this is also known as a ‘provider-led’ approach). Contracts set out in detail the arrangements with service providers to serve specific groups or to treat specific conditions. Supply-

¹ Please see the following documents and sites for a review of the terminology used: Musgrove, P, *Financial and Other Rewards for Good Performance or Results: A Guided Tour of Concepts and Terms and a Short Glossary of RBF* (<http://www.rbfhealth.org>); Vouchers, evaluating reproductive health vouchers globally (<http://www.rhvouchers.org/>); Global Partnership on Output-Based Aid (GPOBA) (<http://www.gpoba.org/gpoba/>); Health systems 20/20 (<http://www.healthsystems2020.org/section/topics/p4p>); Results-Based Financing (RBF) for Health (<http://www.rbfhealth.org/rbfhealth/>)

side RBFs refer principally to “contracting in or out” where the contract clearly articulates quality-adjusted volume of services or performance targets to be reached.

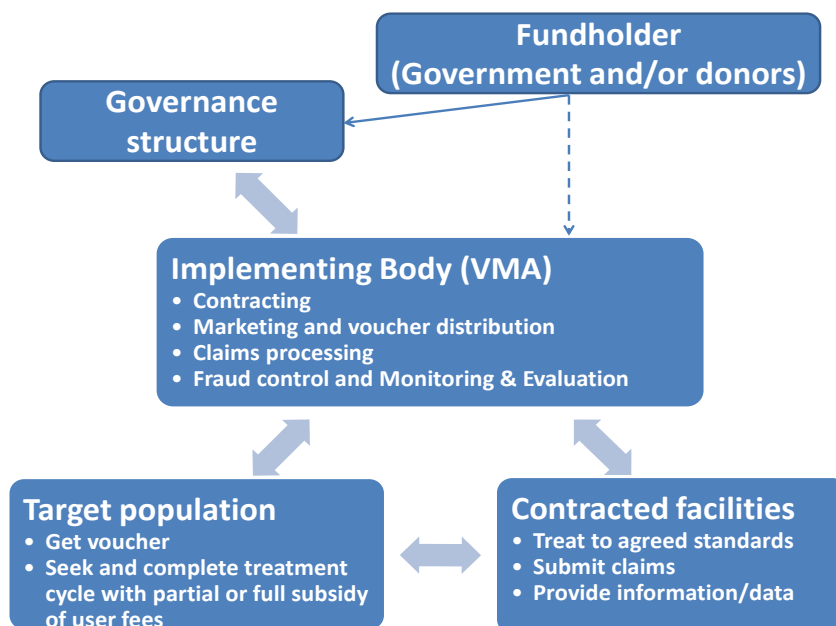
While in supply-side RBF, only two parties are involved (the government or managing agent and the service provider), in demand-side RBF a third party, either the client or client representative, is involved. In both demand-side and supply-side approaches, the relationship between the government (or managing agent) and the provider is governed by a contract or Memorandum of Understanding (MOU). It is the contract or MOU that specifies how outputs or performance are linked to provider reimbursement payments.

One promising approach under the RBF umbrella is vouchers for public health goods and services. Vouchers are commonly used to promote priority health services targeted at underserved and/or marginalized populations and are redeemable for a clearly defined service package at accredited or approved health facilities. The majority of voucher programs have been designed to increase access to sexual and reproductive health (SRH) services for new users who, in the absence of the voucher, would not have sought care. Three main phases can be identified in the growth of voucher programs in low-income countries:

- The oldest programs started in 1964 and 1965 in Taiwan and Korea and successfully increased the use of family planning. These programs lasted over 25 years until fertility had reached replacement levels and family planning was included in the national health insurance schemes;
- A small number of pilot voucher schemes were developed in the 1990s in China, India, Indonesia, Kenya and Nicaragua. These mostly lasted 3 to 5 years, but some continued through the following decade (Nicaragua and Kenya);
- The past decade saw a surge in interest when the development of voucher programs started in earnest (Armenia, Cambodia, India, Kenya, Myanmar, Madagascar, Pakistan, Sierra Leone, Uganda, Vietnam etc.), and this has continued. All programs provide sexual and reproductive health (SRH) services, mostly safe motherhood and family planning services;

Currently there is a further proliferation of new voucher programs being designed, financed and supported by a wide range of international agencies and governments in different parts of the world. At present there are over 30 active voucher programs that we have been able to identify.

Figure 2: Key characteristics of voucher programs



Although there are many variations in the structure and implementation arrangements of voucher programs, they share a number of important characteristics (figure 2 above):

- Funding agency – vouchers are a mechanism for ‘purchasing’ high priority services (usually involving the subsidization of service costs for targeted populations). Voucher programs therefore require a funding agency that is either a government or donor agency.
- Governance structure that oversees the program, this is often a steering committee of project advisory group, with representatives from Government, donor and other stakeholders.
- Voucher management - whether through a third party agency or directly through the government system. Voucher management agencies (VMAs) are responsible for, inter alia:
 - Contracting of service providers
 - Marketing
 - Voucher distribution and targeting
 - Claims processing
 - Fraud control
 - Monitoring and evaluation
- Contracted facilities – under a voucher program, service providers are contracted (or agree) to provide a defined service to a specific population group and must undertake to:
 - Treat to agreed standards
 - Submit claims
 - Provide information and data
- Clients – without sufficient clients the contracted facilities will not be interested to participate as they will not be able to claim for the cost of the services provided. Under voucher programs, clients:
 - Seek and qualify for a voucher, based on their need
 - Seek and complete treatment cycle with partial or full subsidy of service cost

1.2 Why were vouchers developed

Voucher schemes have been developed with a range of objectives in mind and these objectives differ according to who originated and/or financed the voucher program. These objectives are examined in detail in section 4 of this review.

The early voucher programs were developed as a solution to a recognized public health issue (i.e. lowering fertility in Taiwan and Korea, reducing STIs in sex workers and preventing HIV transmission in Nicaragua). However, donors such as the German Development Bank (KfW) often have a wider agenda – and in the last decade this was about a specific attempt to introduce skills into the health financing arena for social health insurance (accreditation, claims processing, purchasing of services, and so on). Most voucher programs usually address a combination of the objectives below:

- To accelerate the use of priority services, for example Safe Motherhood (SMH) Services, Family Planning (FP) services, treatment of Sexually Transmitted Infections (STIs) services and abortion;
- To target and reach underserved and marginalized populations with priority services (e.g. India, Cambodia, Nicaragua);
- To provide priority services through contracting of private sector facilities (e.g. Gujarat, Delhi, Armenia, Indonesia, Taiwan, Korea);
- To introduce social health insurance skills into the health financing arena (e.g. KfW-funded voucher programs in Kenya, Cambodia, Uganda);

Voucher programs are also often designed, introduced and expanded in stages. For instance, the Nicaraguan SRH voucher services for adolescents was introduced after a highly successful pilot in which vouchers provided STI services to sex workers, noting that both populations are often underserved. Similarly, organizations in Kenya and Madagascar adopted the voucher approach with the explicit objective of increasing utilization of SRH services among young people. In India, several voucher programs have been developed based on the example of a highly successful program for safe motherhood services in Gujarat, where the Ministry of Health contracts private doctors in rural areas to fill gaps in public sector provision.

Other reasons for developing voucher programs have included the piloting of the voucher approach (Bangladesh, Cambodia, China, India, Pakistan), enabling monitoring and tracking of payments (Korea, Taiwan), curbing informal payments (Armenia), and reducing inequity (China, India). An overriding goal of many voucher programs, but one which is not always explicitly stated, is that of preventing catastrophic out-of-pocket payments on health.

While all voucher programs aim to increase utilization of SRH health services, often targeting specific groups or specific services, most of these programs also use the voucher approach as a mechanism or tool to facilitate service delivery contracting with private providers. The interest in contracting private providers through voucher programs can be seen as addressing the following objectives:

- Meeting demand where there is insufficient public sector capacity (e.g. in India and Indonesia)
- Building public private partnerships (USAID in India)
- Increasing utilization among groups which have a preference for private facilities (both non-profit and for-profit) such as sex workers and adolescents
- Introducing social health insurance skills (contracting of private providers as in the KfW-funded schemes)
- Regulating the private sector: particularly curbing informal payments as in Armenia where this is an explicit objective of the program; and, as a mechanism for monitoring and paying for services provided through the private sector as in Taiwan and Korea²

As stated above, a number of voucher schemes funded by KfW were introduced with the explicit objective of introducing social health insurance (SHI) skills into the market, thus preparing the way for a move towards SHI as the principal means of subsidizing health care for those who cannot afford it.

In the case of the new KfW-funded voucher scheme in Tanzania, the voucher is used to enroll poor pregnant women and their families in one of two health insurance schemes and to motivate them to continue participating. The vouchers, which are given to women at ANC, can be exchanged immediately for insurance cards which enable the pregnant woman to enroll in the National Health Insurance Fund (NHIF), providing her with free access to a wide range of services for up to three months after the baby is delivered. It also enables the woman to enroll her family in the Community Health Fund (CHF) for one year.

In the case of the Social Franchise Organizations (SFO), vouchers are generally introduced to enable the poor to access specific services at health facilities belonging to the Social Franchise (SF) networks. This has potential benefits for the franchisees as well as the facilities in terms of increased client numbers and may motivate them to remain in the network.

Private providers in SF networks need an income, as they do not generally receive supply-side financing. Their usual clientele are the near poor and middle-income groups who pay out-of-pocket for services. If vouchers enable providers to increase the volume of clients, thus using any spare capacity, this should lead to increased efficiencies and lower costs of service provision. This in theory enables the SFOs to lower their fees, making services more accessible to poorer sections of the population. Vouchers (often paid for by donor agencies) assist SFOs to build strong provider networks with more clients and more attractive prices, creating a virtuous cycle. It is therefore not surprising that SFOs are increasingly interested in vouchers, illustrated by the proliferation of new voucher schemes in social franchising networks. For the donors, the two key advantages of this approach are: quality of care in SF provider networks is closely monitored and maintained as part of the franchise contract, and the VMA is able to contract with a franchisor rather than with each and every franchisee provider, thus lowering transaction costs.

1.3 Evidence of impact

Recent reviews of the evidence of voucher programs' impact by Bellows et al (2011) and Meyer et al (2011) show that there is robust evidence that vouchers increase utilization of health services, and 'modest'

²In reviews of the Taiwan and Korea voucher programs four reasons are given for the use of vouchers: to provide a subsidy to women; to link the contracted clinics; to facilitate claims processing, and to monitor the performance of the field workers, health facilities, and the FP seeking behaviour of the beneficiaries.

evidence that voucher programs both improve the quality of service provision and effectively target resources to specific populations. There were very few studies on the impact of vouchers on health status or efficiency; however, in both Uganda and Nicaragua a reduction in STI prevalence associated with the voucher programs was found³.

Later research findings⁴ from voucher schemes for SRH in Bangladesh and Pakistan showed similar results, indicating that vouchers can reduce inequity in access to health care through increasing demand more among the poor than the non-poor. Preliminary results of the Population Council's evaluation of five voucher schemes in Bangladesh, Cambodia, Kenya, Uganda and Tanzania also show positive results on utilization and equity⁵.

Currently there is a proliferation of new voucher programs being designed, financed and supported by a wide range of international agencies and governments in different parts of the world. Examples include new voucher programs in Cambodia, Cameroon, India, Laos, Madagascar, Malawi, Pakistan, Tanzania, Vietnam and Zambia. Given the growing interest in what works and does not work in voucher programs, we present a systematic review of the many different configurations of voucher programs' structure and implementation arrangements. In this report, we examine key differences across voucher schemes in five key categories: (1) general design principles; (2) management and governance, (3) benefits and client policies; (4) provider and reimbursement policies; and (5) implementation issues such as marketing, training, voucher distribution, claims processing, M&E and fraud control.

³ Bellows N, Bellows B., Warren C. The use of vouchers for reproductive health services in developing countries: a systematic review; *Tropical Medicine and International Health*, 2011 Jan; 16(1):84-96. Meyer C, Bellows N, Campbell M, Potts M (2011), *The Impact of Vouchers on the Use and Quality of Health Goods and Services in Developing Countries: A systematic review*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. ISBN: 978-1-907345-10-4.

⁴S. Ahmed, M. M. Khan, Is demand-side financing equity enhancing? Lessons from a maternal health voucher scheme in Bangladesh. *Social Science and Medicine* 2011 May;72(10):1704-10. Nguyen HTH, Hatt L, Islam M, Sloan NL, Chowdhury J, Schmidt J-O, Hossain A., Wang H, Encouraging Maternal Health Service Utilization: An Evaluation of the Bangladesh Voucher Program, *Social Science & Medicine* (2012), doi: 10.1016/j.socscimed.2011.11.030. S. Agha, Changes in the proportion of facility-based deliveries and related maternal health services among the poor in rural Jhang, Pakistan: results from a demand-side financing intervention, *International Journal for Equity in Health* 2011, 10:57. S. Agha, Impact of a maternal health voucher scheme on institutional delivery among low income women in Pakistan, *Reproductive Health* 2011, 8:10.

⁵Bellows et al, Increase in facility-based deliveries associated with launch of an output-based maternal health voucher program among residents of informal settlements in Nairobi, Kenya, *Health Policy and Planning* 2012;1–9 doi:10.1093/heapol/czs030. Obare et al, Community-level impact of the reproductive health vouchers programme on service utilization in Kenya, *Health Policy and Planning* 2012;1–11, doi:10.1093/heapol/czs033. Obare et al, Assessing socio-economic inequality in service utilization in the context of the reproductive health vouchers program in Kenya, submitted to *Health Policy and Planning*.

2. Methodology

The objective of the review was to analyze the different structural and implementation arrangements for voucher programs for SRH services, looking at what works and in what context. Given this objective, we conducted a systematic review of the published and grey literature, sought key experts for additional unpublished references and compiled a list of all voucher programs that provide access to SRH services. We then developed the following inclusion and exclusion criteria for the review:

- The inclusion of voucher programs which do not use *a physical voucher*, but which function in all other respects as a voucher program (e.g. targeting the poor through the use of Below Poverty Line, BPL, cards in India);
- The exclusion of programs that use vouchers for goods (condoms, pills, insecticide treated bed nets to prevent malaria) as opposed to services. Structural and implementation arrangements differ considerably between voucher programs for goods and voucher programs for services. Voucher programs for goods function more like social marketing programs;
- The exclusion of those voucher programs that are operating in high income countries⁶;
- The exclusion of programs where there is no reimbursement to the facility or provider. These include programs where a voucher is only used as a marketing tool to attract clients to a facility, where vouchers are used for referral services between health facilities only, or where vouchers are used for research (tracking of clients, data collection etc.). It also excludes programs where vouchers are given to women in exchange for a conditional cash transfer (i.e. a CCT) with no provider payment;
- The inclusion of those voucher programs which started distribution of vouchers before 28 February 2011. The cut-off date for the review was June 2011 and a period of at least three months of operation was considered necessary in order to look at the functioning of a particular program.

The aforementioned review by Bellows et al. (2011) identified 13 voucher programs, all providing SRH services in developing countries. The review by Meyer et al. (2011) identified 43 voucher programs (including the 13 programs of Bellows) and included programs for goods (e.g. bed nets). Of the 43, a total of 21 programs fit the criteria for our systematic review, which also identified 19 additional programs giving a total of 40.

Our chosen methodology comprised the following steps to gather information on program design and function:

- Conducted a literature review (April 2011-December 2011). This was similar to the review by Meyer but with some adjustment of keywords and databases. As programs were identified, additional searches were conducted to obtain more detailed information related to context, structure and implementation. These articles' bibliographies were also reviewed for relevant references to additional articles and reports.
- Sourced information from key contacts (April 2011-December 2011) who were useful both in identifying new programs and in providing program descriptions, such as reports, program tools and templates (e.g. contracts, operational manuals, registration forms, vouchers), newsletters and other relevant documents describing the workings of the voucher programs. For example, the voucher program in Armenia – the Obstetric Care State Certificate program – had not previously been identified due to the use of the word 'certificate' as opposed to 'voucher' but was subsequently identified through a key contact
- Extracted relevant information was organized in an Excel table. A categorized list of references is available at the end of this report. It is worth mentioning that this review included a wide range of grey literature from key contacts and websites, including project reports, emails and other unpublished material.

⁶Most countries where a program was identified had a Gross National Income (GNI) below US\$ 1,400 in 2010 with the exception of Armenia (3,200 US\$). The GNI of China, Korea, Indonesia and Taiwan was also higher than US\$ 1,400 in 2010, but at the time of implementation this was much lower. GNI per capita of low-income country in 2010 is less than 1,006 US\$; lower-middle income country 1,006 US\$-3,975 US\$, upper middle income: \$3,976 - \$12,275; high income, \$12,276 or more (World Bank: <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD>).

One limitation of the literature search is that it could not identify programs for which little or no information has been published in scientific papers and journals, newsletters or on websites. Several schemes were, however, identified through key contacts; mostly smaller voucher schemes that were developed to complement a larger social franchise project, and mostly for family planning services. The vouchers in these schemes tend to function more as a marketing tool, whereby the voucher scheme fully or partially subsidizes the cost of FP services for clients unable to pay.

Another limitation of the literature search is the fact that some programs do not use the term 'voucher', but instead use alternatives such as 'certificate' in Armenia, or 'health card' in Cambodia, or assign the program a particular name, often in a local language. For example, in India the project names often do not include the word 'voucher' at all (e.g. the Janani Suvidha Yojana scheme in Haryana, the Chiranjeevi Yojana Scheme in Gujarat and the Mamta Scheme in Delhi). Furthermore, some of these programs do not use a physical voucher but instead use the Below Poverty Line or BPL card⁷ as a pre-existing means testing tool. We attempted to search the literature databases using the words 'certificate', 'insurance card' and 'health card' but these searches turned up too many results.

To counteract these limitations, we searched the documentation for further references, and networked extensively with key contacts (including donors, program staff and social franchise organizations) to identify smaller programs as well as those programs where an alternative term was used to 'voucher'. In practice, we therefore relied heavily on word of mouth and it is possible that other smaller schemes have been missed⁸. This was also the case for the Meyer review where half of the programs (12 of the 24) in the final review were identified through an expanded search: review of citations of studies included, expert suggestions, and an expanded search on program-specific terms.

In total 40 voucher programs were identified in this systematic review. Information was extracted on each program and placed in one of 5 major categories related to structure and function of the programs:

1. **General Aspects:** an overview of objectives, timeframe and financing;
2. **Management and Governance:** structural aspects related to management of voucher programs including governance, managing entity, role and participation of government, contracting mechanisms, and so on;
3. **Benefits and clients:** structural aspects related to benefit and client policies such as what services can be provided in exchange for the vouchers; whether vouchers are sold or free; and who receives them and how this group is targeted;
4. **Providers and Reimbursement:** structural aspects related to provider identification, competition between providers, selection and contracting, issues related to price of services and reimbursement to the providers;
5. **Implementation arrangements:** marketing, training, voucher distribution, claims processing, monitoring and evaluation, and fraud control.

We performed a broad analysis of the 40 voucher programs, looking at why, when and by whom the schemes were developed. We also looked at geographical coverage, type of services provided, type of providers contracted, target populations, and type of Voucher Management Agency (VMA) and its relation with the contracted providers.

We then undertook an in-depth analysis of 20 programs for which we could obtain sufficiently detailed information. This in-depth analysis looks at the major differences between voucher programs in each of the aforementioned 5 categories, including relevant changes over time (i.e. changes in pricing, management, etc.), and a discussion on why program designers chose particular design and implementation characteristics in a given context and how these characteristics may have affected program

⁷Below Poverty Line is an economic benchmark and poverty threshold used by the government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid.

⁸Dr Anna Gorter has, however, been collecting data and documentation on voucher programs since 2002 (Gorter AC, Sandiford P, Rojas Z, Salvetto M 2003 *Competitive Voucher Schemes for Health. Background Paper*, ICAS/Private Sector Advisory Unit of The World Bank Group, Washington, DC) and has found that the best way to identify such data is often through word of mouth: key persons, conferences, meetings, during country visits, as well as citations in publications on voucher programs already identified. She was also one of the peer reviewers on the Meyer review.

implementation. We also considered elements that were missing in the programs that could have improved efficiency or effectiveness of the programs.

The final section summarizes the key findings and sets out a discussion of lessons learned. While the findings and comments in this last section of the report are largely based on the structural review, they also draw from the experience of the authors in designing and evaluating voucher programs.

Table 1: Details of the first twenty programs of the 40 analyzed voucher programs (is continued)

	Country	Initiated by	Years*	Reason to use vouchers	Services	Type providers	Type VMA	Size VP	In 20
1	Armenia	Government	2008-ong.	Curb informal payments	SMH, Child diseases	public (few), private	Government	Large	yes
2	Bangladesh 1	Government/donorSWAp	2006-ong.	Increase use priority services	SMH	all three, most public	Gov./WHO	Large	yes
3	Bangladesh 2	Research centre - ICDDR,B	2006-2008	Research	SMH	only private	University	Small	no
4	Bangladesh 3	Intern. NGO - Popcouncil	2007-2008	Research	SMH	all three sectors	NGO	Small	yes
5	Bangladesh 4	Social Franchise - MSI	2007-2010	Increase use priority services	SMH	all three sectors	SFO	Small	no
6	Cambodia 1	Donor - BTC	2007-2010	Expand HEF to Health Centres	SMH	only public	NGO	Small	yes
7	Cambodia 2	UN organisation - UNFPA	2008-2010	Expand HEF to Health Centres	SMH, FP, SA, STI	only public	NGO	Small	no
8	Cambodia 3	Donor - USAID	2009-ong.	Expand HEF to Health Centres	SMH	only public	NGO	Small	no
9	Cambodia 4	Donor - KfW	2011-ong.	Introduce social HI skills	SMH, FP, SA	all three sectors	Private/NGO	Large	yes
10	Cambodia 5	Social Franchise - MSI	2010-ong.	Increase use at trained facilities	FP	all three sectors	SFO	Small	no
11	China 1	Government/World Bank	1998-2001	Increase use priority services	SMH, Child diseases	only public	Gov./Project	Medium	no
12	China 2	Government/World Bank	2005-2007	Increase use priority services	SMH, RTIs	only public	Gov./Project	Small	no
13	India-Agra, UP	Donor - USAID/State Gov.	2007-ong.	Contract PS/build PPP	SMH, FP, STI/RTI	only private	Government	Small	yes
14	India-Kanpur, UP	Donor - USAID/State Gov.	2008-ong.	Contract PS/build PPP	SMH, FP, STI/RTI	NGO and private	NGO	Medium	no
15	India-Jharkhand	Donor - USAID	2009-2011	Contract PS/build PPP	FP	only private	NGO	Small	no
16	India-Uttarakhand	Donor - USAID/State Gov.	2007-ong.	Contract PS/build PPP	SMH, FP	NGO and private	Government	Medium	no
17	India-Gujarat	State Government	2005-ong.	Contract PS/lim. public capacity	SMH	only private	Government	Large	yes
18	India-Rajasthan	Local NGO	2003-2006	Contract PS/lim. public capacity	SMH	only private	NGO	Small	no
19	India-Kolkata	Donor (Gates)/NGO	1999-2003	Contract PS/lim. public capacity	SMH, FP, STI/RTI, CD	only private	NGO	Small	no
20	India-Delhi	State Government	2008-ong.	Contract PS/lim. public capacity	SMH	only private	Government	Medium	yes

*-2011: active up to December 2011, Ong (on-going): will continue in 2012. CD in row 19: Child Disease. PS means Private Sector. Shaded rows in the table are active programs. VP=Voucher program. "Size VP" indicates the annual budget in three categories large (greater than \$1 million), medium (\$250,000 to \$1 million), and small (less than \$250,000). The last column indicates if the voucher program had sufficient information to be included in the detailed analysis of twenty voucher programs.

Table 2: Details of the second group of twenty programs of the 40 analyzed voucher programs

	Country	Initiated by	Years*	Reason to use vouchers	Services	Type providers	Type VMA	Size VP	In 20
21	India-Haryana	State Government	2006-2011	Contract PS/lim. public capacity	SMH	only private	NGO	Small	no
22	Indonesia	Government/World Bank	1998-2004	Contract PS/lim. public capacity	SMH, FP	only private	Gov./Project	Medium	no
23	Kenya 1	Donor - KfW	2006-ong.	Introduce social HI skills	SMH, FP, GBV	all three sectors	Private	Large	yes
24	Kenya 2	Intern. NGO - Popcouncil	1997-2010	Contract PS/preference target pop	SRH care for youth	public (few), private	NGO	Small	no
25	Korea	Government	1964-~1985	Contract PS/facilitate M&E	FP	public (few), private	Government	Large	yes
26	Madagascar	Social Franchise - PSI	2005-ong.	Increase use by poor at SF clinics	SRH care for youth	only private (SF)	SFO	Small	no
27	Myanmar	Social Franchise - PSI	2005-ong.	Increase use by poor at SF clinics	FP, STIs	only private (SF)	SFO	Small	no
28	Nicaragua-SW	Local NGO	1996-2009	Contract PS/preference target pop	STIs	all three sectors	NGO	Small	yes
29	Nicaragua-adol	Local NGO	2000-2005	Contract PS/preference target pop	SRH care for youth	all three sectors	NGO	Small	yes
30	Nicaragua-CervCa	Local NGO	1999-2009	Contract PS/preference target pop	Cervical Cancer scr.	all three sectors	NGO	Small	yes
31	Pakistan (MSI)	Social Franchise - MSI	2008-ong.	Increase use by poor at SF clinics	FP	only private (SF)	SFO	Small	yes
32	Pakistan-DG Khan	Social Franchise - PSI	2008-2009	Increase use by poor at SF clinics	SMH	only private (SF)	SFO	Small	yes
33	Pakistan-Jhang	Social Franchise - PSI	2009-ong.	Increase use by poor at SF clinics	SMH	public (few), private	SFO	Small	yes
34	Pakistan-Charsadd	Donor-KfW (PSI impl.)	2010-2011	Introduce social HI skills	SMH	public (few), private	SFO	Small	no
35	Pakistan-Sehat S. C	Local Government	2009-ong.	Contract PS/lim. public capacity	SMH	public (few), private	Private	Small	no
36	Sierra Leone	Social Franchise - MSI	2009-ong.	Increase use by poor at SF clinics	SMH, FP	NGO and private	SFO	Small	yes
37	Taiwan	Government	1964-~1985	Contract PS/facilitate M&E	FP	public (few), private	Government	Large	yes
38	Uganda (KfW)	Donor-KfW (MSI impl.)	2006-ong.	Introduce social HI skills	STIs, SMH, FP	NGO and private	SFO	Large	yes
39	Uganda (University)	Makerere University	2009-2011	Research	SMH	all three sectors	University	Small	yes
40	Vietnam-SW	Int. NGO-Pathfinder	2009-2009	Contract PS/preference target pop	STI	only private	Government	Small	no

*-2011: active up to December 2011, Ong (on-going): will continue in 2012. CD in row 19: Child Disease. PS means Private Sector. Shaded rows in the table are active programs. VP=Voucher program. "Size VP" indicates the annual budget in three categories large (greater than \$1 million), medium (\$250,000 to \$1 million), and small (less than \$250,000). The last column indicates if the voucher program had sufficient information to be included in the detailed analysis of twenty voucher programs.

3. An overview of 40 voucher programs

In this section we present an analysis of the 40 voucher programs, with an overview of where the programs were or are currently being implemented, the principal objective for the program, type of originating organization, program size, years of operation, type and number of services provided, type of contracted provider, type of VMA and the relation between the VMA and providers.

3.1 Location and who initiated the voucher programs

Table 3 shows the number of voucher programs in different countries and regions. The vast majority of the voucher programs are in Asia (31 out of 40). In Asia, India leads with 9 voucher programs, several of which are government initiated and run, followed by Pakistan (5), Cambodia (5) and Bangladesh (4). Six voucher programs are in Africa (including two of the larger, donor-funded programs in Uganda and Kenya). Only 3 of the 40 voucher programs identified were in Latin America, all of which were in Nicaragua, which remains the poorest country in the region, after Haiti.

Table 3: Number of voucher programs in each region and country

Regions	Voucher programs	Countries
Latin America	3	Nicaragua (3)
Africa	6	Kenya (2), Uganda (2), Sierra Leone, Madagascar
Asia	31	
• West Asia	1	Armenia
• South Asia	18	India (9), Pakistan (5), Bangladesh (4)
• East Asia and Pacific	12	Cambodia (5), China (2), Indonesia, Korea, Myanmar, Taiwan, Vietnam
All	40	

Table 4 presents an overview of the type of organization that initiated the voucher program. Over a quarter were started by a donor directly engaged with government, mostly in Asia with two financed by KfW in Africa. An equal number were initiated by governments (including state governments in India), all of which are in Asia. Four of these were set up in close collaboration with donors. Outside Asia, the voucher programs have mostly been started by Social Franchising Organizations (SFOs), Non-Governmental Organizations (NGOs) and research institutes, usually with donor support.

Table 4: Type of organization that initiated the voucher program

Initiated by	Voucher programs	Observation
Donor	11	9 in Asia and 2 in Africa
Government	11	all in Asia, 4 in collaboration with donors
Social Franchise org.	8	6 in Asia, 2 in Africa
NGO (international and local)	7	3 in Asia, 1 in Africa, 3 in Latin-America
Research institute	2	1 in Asia (Bangladesh), 1 in Africa (Uganda)
UNFPA	1	1 in Asia (Cambodia)
All	40	

In Africa, six voucher programs were identified. Two were initiated by KfW in Kenya and Uganda, and two were started by international SFOs: Marie Stopes International (MSI) in Sierra Leone, and Population Services International (PSI) in Madagascar. One was initiated by an international NGO (Population Council) in Kenya providing SRH services to young people, and one was set up and managed by Makerere University in Uganda as a research project testing the voucher approach as a means to increase access to safe delivery

services. It is interesting to note that none of the voucher programs in Africa was initiated by a government and only the KfW-funded voucher program in Kenya is supported significantly by the Government of Kenya (through governance, monitoring by Ministry of Health and more recently also financial contributions from Ministry of Finance).

In South Asia, while the Social Franchisers dominate in Pakistan, in Bangladesh it is the Government and in India, a mix of government, donors and NGOs.

The voucher programs in Armenia, Korea and Taiwan were initiated by the government and have been national in scale. In China and Indonesia the World Bank was the main impetus for the development of voucher pilots, working closely with the government. Three voucher programs in Cambodia were initiated directly by donors, one by an SFO and one by UNFPA. In Myanmar an SFO (PSI) took the initiative and in Vietnam an international NGO (Pathfinder).

The voucher programs in Nicaragua were all initiated by a local NGO and targeted specific population groups (e.g. sex workers). While conditional cash transfer programs are flourishing in Latin America, vouchers do not feature as an important social health protection mechanism. Given that many countries in the region have developed social health insurance for all or large parts of their population, it is possible that vouchers are not considered relevant for increasing access to services for the poor.

3.2 Size, growth and popularity of the voucher approach

Eight of the voucher programs can be categorized as 'large' in size with a budget of over US\$1 million per annum. Large voucher programs that are on-going at the time of writing include the KfW-funded voucher programs in Cambodia, Kenya and Uganda, the Armenian Obstetric Care State Certificate (OCSC) program, the Indian state-wide program in Gujarat, and the larger voucher program in Bangladesh (known as the Demand Side Financing or 'DSF program'). The earlier programs in Taiwan and Korea also had very large budgets, which varied significantly from year to year.

Four voucher programs are of medium size (budgets of between US\$250,000 and US\$1 million per year), of which one is finished (Indonesia), and three are on-going in India. Nearly three quarters (28) of the programs are small, with budgets of less than US\$250,000 /year. For details see tables 1 and 2 above.

Only three voucher programs have been implemented countrywide targeting poor populations: Armenia, Taiwan and Korea. One voucher program in India, in the state of Gujarat, is implemented state-wide and targets the BPL population. The DSF program in Bangladesh covers around 10% of upazilas or sub-districts. The large KfW-funded voucher programs target the poor in between 5 and 20 districts depending among other things on how long they have been in operation. Most voucher programs target only a few districts and/or specific population groups.

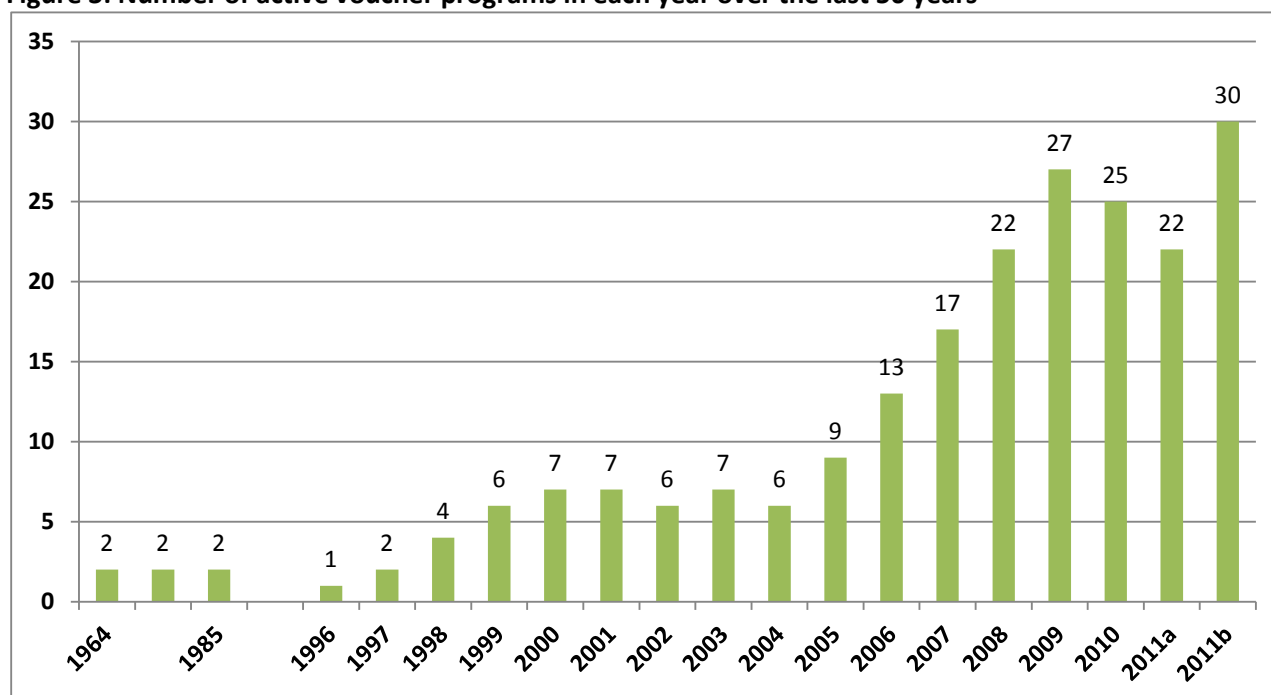
Figure 3 shows the number of voucher programs which are/were active in a particular year. The graph illustrates clearly the huge increase in the number of voucher programs, particularly since 2004. The first two schemes were developed in 1964 (Taiwan, followed by Korea based on experience from Taiwan) with the objective to lower the fertility rate through accelerating the use of family planning. After a small pilot in each country, the voucher programs were quickly scaled nationwide and continued until the mid-1980s when fertility had reached replacement level.

Post-1985 there is a gap of about 10 years when no new voucher programs were started (at least none that were identified by the authors). In 1996 the voucher approach was again used, but between the late 1990s and 2004 only a small number of new voucher programs were initiated (six small voucher programs and two medium-sized World Bank projects in China and Indonesia).

In 2005 the Gujarat voucher scheme (known locally as Chiranjeevi Yojana) was developed by the State Government and quickly scaled up state-wide to become one of the largest voucher programs. This program provides SMH vouchers to poor pregnant women, which can be exchanged for free delivery services from a private provider. In this same year, the number of voucher programs begins to increase and

vouchers are being used by a Social Franchising Organization (PSI) in Madagascar and Myanmar to increase use of SRH services by poor and disadvantaged populations at their franchised clinics.

Figure 3: Number of active voucher programs in each year over the last 50 years



After 2005, the number of new voucher programs increases every year, while the number of voucher programs ceasing operations is relatively low. In 2010, however, four voucher programs ceased operations, while only 2 new programs were opened and this pattern is repeated in early 2011 when 1 new voucher program began and 4 voucher programs closed (2011a). Since March 2011 (i.e. after this review's cut-off in February) around 8 new voucher programs have been developed in 2011, bringing the total number of active voucher programs to 30 in December 2011 (2011b). Twenty-two of these are included in our review of 40 voucher programs.

There are an increasing number of voucher programs in the pipeline for 2012 and recent discussions involving the authors indicate that interest in the voucher approach continues to grow, particularly among the social franchising community, but also from Governments and donors.

3.3 Type and number of services provided

Figures 4 and 5 show the number and type of services provided respectively through the vouchers. Figure 4 clearly shows that voucher programs provide access to only a limited 'basket' of services with most providing only one type of service (26/40), a smaller number (7/40) providing two types of services - often a combination of SMH and FP, and even fewer providing three or four different services.

Figure 4: Number of services offered in 40 voucher programs (VP)

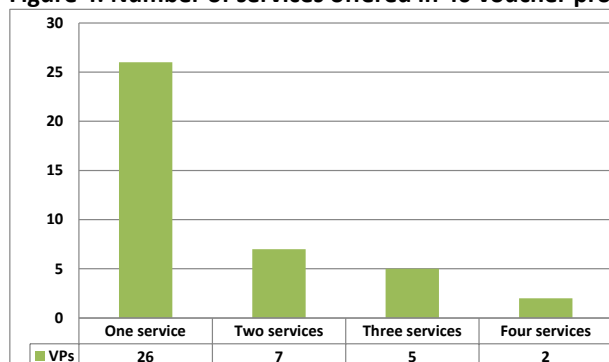
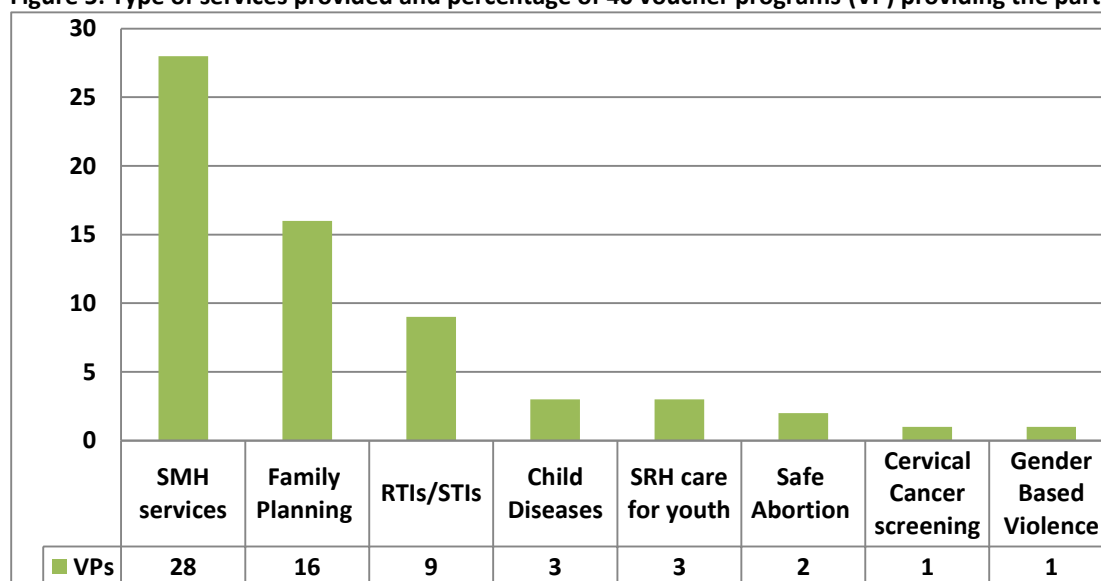


Figure 5 shows that over two-thirds of voucher programs provide safe motherhood (SMH) services, and almost half provide Family Planning (FP) services. Other types of services provided through vouchers include Reproductive Tract Infections (RTI)/STI services, child health, SRH services for young people, safe abortion, cervical cancer screening and services to manage Gender Based Violence (GBV).

In most of the countries with a voucher program there is at least one program providing SMH services. Family Planning services are often combined with SMH services, except for the national-scale FP voucher programs in Taiwan and Korea, or where vouchers are used by SFOs. RTI/STI treatment services are used mostly in combination with SMH and/or FP services, with the exception of two smaller programs for sex workers in Nicaragua and Vietnam. Two older programs included treatment of childhood disease in their services from the start (China 1 and India-Kolkata). Armenia widened the services provided through the SMH certificate to include childhood diseases through a second voucher program (Child Health State Certificate) in early 2011 after the success of the voucher approach with SMH services.

Figure 5: Type of services provided and percentage of 40 voucher programs (VP) providing the particular service



Voucher programs have the potential to increase the use and provision of safe abortion services, which are offered currently through 2 voucher programs, one in Cambodia and a new Marie Stopes Vietnam program (post February 2011). There are also on-going discussions for a voucher program for safe abortion in India. Furthermore, a number of currently active, new and pipeline projects are looking at using vouchers for services such as male circumcision, well-women check-ups, and even the management of chronic diseases as illustrated by the quotation below.

“...vouchers might also help overcome the larger market failure in chronic disease management where individuals are myopic with respect to the consumption of preventative services. Vouchers provide a level of information to the consumer about the services they should be accessing to manage their disease..... the price effect is removed from the consumption decision”⁹.

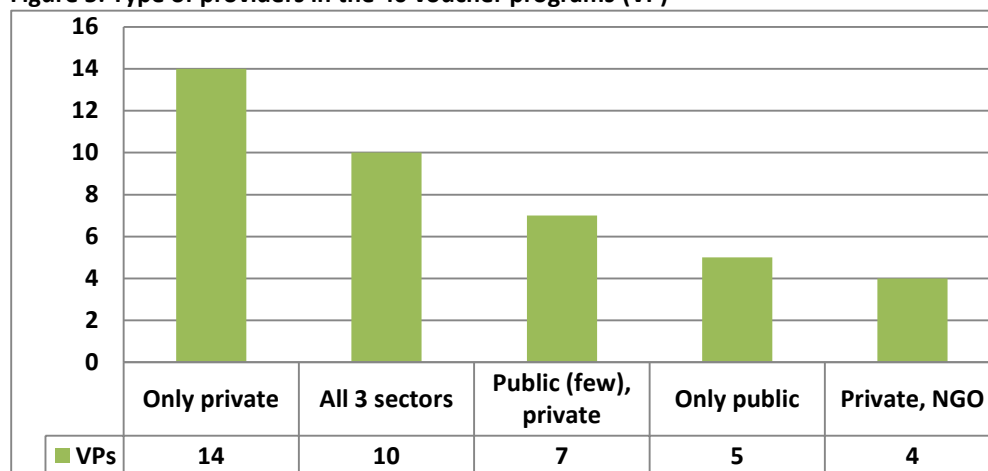
3.4 Type of providers

Figure 5 shows the type of providers participating in voucher programs, i.e. from which sector the providers are contracted: private, NGO (includes facilities managed by faith based organizations or SFOs) and/or public sector.

⁹Watts J. J and Segal L., *Market failure, policy failure and other distortions in chronic disease markets*, BMC Health Services Research 2009, 9:102.

In 14 voucher programs only private sector facilities participate. Half of these are in India where vouchers are used to fill gaps in public provision of priority health services, such as safe delivery. Four programs are implemented by an SFO: in Madagascar, Myanmar and Pakistan (2 programs). The other three are the sex worker program in Vietnam; a research project in Bangladesh that was developed to inform the larger Bangladesh DSF program; and the program in Indonesia that contracted private midwives.

Figure 5: Type of providers in the 40 voucher programs (VP)



There are ten voucher programs which contract or have contracted facilities from all three sectors (public, NGO, and private), made up of the 3 Nicaraguan voucher programs, 3 in Bangladesh, 2 in Cambodia, 1 in Uganda, and 1 in Kenya. There are a number of benefits to contracting from all 3 sectors:

- Enhanced overall capacity. In Nicaragua for example public providers were contracted in more rural areas where few or no NGO or private providers were available, while in the slums of Kenya more private providers are contracted because fewer public providers are situated in the slum areas;
- Increased competition. Where providers from all three sectors are operating in the same geographical area, competition will increase (provided there is sufficient business for each provider to incentivize them to participate);
- Increased choice for the clients. This not only empowers clients, but can also serve to attract more clients to the program, given different client preferences as was seen in the sex worker and adolescents voucher programs in Nicaragua. Furthermore, more providers usually reduces the distance from home to the facility, which is an important barrier to accessing SRH services;
- 'Raising the game' in the public sector. In voucher programs which only contract private-for-profit or NGO providers, discussions on contracting public providers can increase the MOH's interest in the program, enhancing local ownership and possibly sustainability, which is one of the reasons why the KfW-funded voucher program in Uganda is now looking at including public providers. Vouchers can also stimulate public providers to raise the quality and client-friendliness of their services, including improving drugs and other supplies, as seen in Kenya where public providers use voucher reimbursements to buy private supplies in cases of stock-outs so as not to lose voucher clients and conduct outreach activities to attract more FP clients;
- Preparing the way for SHI. Contracting providers from all sectors is good preparation for the introduction of health insurance.

Seven voucher programs provide services through a combination of public and private-for-profit providers, although the number and role of public providers in these programs is limited due to the lack of available public sector facilities. Examples include the large, countrywide programs in Armenia, Korea and Taiwan.

In 5 voucher programs only public service providers were contracted due to: government reluctance to contract other types of provider (3 voucher programs in Cambodia); and/or because no or few private providers were available (2 voucher programs in China). Recently the Ministry of Health (MOH) in Cambodia has agreed that private sector facilities can join the KfW-funded voucher program (to provide

safe abortion and FP services, but not SMH services) but only where they are not involved in dual public/private practice, effectively preventing the majority of them from joining. The large scheme in Bangladesh is able to contract private sector facilities but, due to the very low reimbursement levels, very few have shown any interest in participating.

Four voucher programs (10%) have a combination of NGO and private facilities: two implemented by Marie Stopes (Uganda and Sierra Leone) and two funded by USAID in India.

3.5 Type of VMA

One feature often cited as relevant for effective service delivery is organizational autonomy, including the ability to 'hire and fire'. In voucher programs, there are two levels where autonomy is relevant: at the program policy level between funders and managers, and at the implementation level between managers and service providers. Governments and donors that contract voucher management to a third party have the ability to replace poor performing managing agencies. Conversely, governments that rely on public agencies and civil servants to implement the voucher program may have limited ability to remove under-performing managers. Although replacing agencies carries some risk of losing institutional memory, the risk of losing a management contract can motivate the voucher management agency (VMA) to perform well.

Table 5 shows the type of VMA managing the implementation of the 40 voucher programs. In 12 voucher programs (see also tables 1 and 2), the VMA is a government organization (mostly the Ministry of Health), all of them are in Asia and half of them are large programs (i.e. a budget of US\$ 1 million per annum or more). Four of these voucher programs are implemented nationwide or state-wide (Armenia; Taiwan; Korea; Gujarat, India). All 12 programs managed by the government were considered to be successful, which does suggest that even public sector agencies can find enforceable performance standards.

Furthermore, management by a government entity does not necessarily imply a lack of external technical assistance. The three voucher programs in China and Indonesia were implemented by the Government but in close collaboration with the World Bank country offices, and in the case of Bangladesh the government is assisted by the WHO country office which provides technical assistance and dedicated staff at district and national levels to support voucher distribution and claims processing.

Thirteen voucher programs are being implemented by an NGO, almost all local NGOs, and most of them are small. Ten voucher programs are implemented by a SFO: half by PSI and half by MSI¹⁰. Three voucher programs are managed by a contracted private organization: in the KfW-funded Kenya program this is PricewaterhouseCoopers; in the KfW-funded Cambodia program a consortium of private firms, led by an international consultancy firm that has subcontracted most of the work to a local NGO. In one Pakistan program funded by the local government the VMA is also a consultancy firm. In two cases the VMA was a research institute, one in Bangladesh and one in Uganda.

Table 5: Type of VMA by type of providers for the 40 voucher programs

Type VMA		Type of service providers				
Type	Total no. of voucher programs	Private	Public, NGO, private	Public (few), private	Public	NGO, private
NGO	13	4	4	1	3	1
Government	12	5	1 (mostly public)	3	2	1
SFO	10	4	2	2	-	2
Private	3	-	2	1	-	-

¹⁰ There has been a recent proliferation of small voucher programmes attached to a SF network. The two approaches work well together with the franchise ensuring quality of care through monitoring and branding of services and the voucher acting as a marketing tool as well as targeting subsidies to poorer or underserved client groups.

Research Inst.	2	1	1	-	-	-
Total	40	14	10	7	5	4

The table also shows the relationship between the VMA and the service providers. A common assumption is that the VMA should be an independent third party, in order to ensure transparency, increase efficiency and counteract fraud. In other words, a program managed by a government should not, in theory, work only with public providers, as the direct link between VMA and providers means that it is harder to reinforce contracts, eliminate “bad” providers from the scheme, and prevent fraud or abuse.

There are, however, examples of successful voucher programs where the government provides vouchers that are redeemable at public health facilities. The two pilot voucher programs in China were managed by the government and only contracted public providers; both were considered to be highly successful¹¹. And perhaps the best known example is the large Bangladesh DSF program which provides incentives (instead of reimbursing service provision cost) to mostly public providers¹². Evaluations of this program show that it has succeeded in increasing the use of SMH services among the poor, although the technical assistance and staff provided through WHO also play an important role. However, it is not a classic voucher program in that public facilities in the program area that meet minimum standards for safe delivery service provision are co-opted into the program and cannot be excluded for poor performance. Ideally, facilities join voluntarily and their relationship with the managing agency is governed by a contract that is monitored closely and can be terminated if necessary.

Voucher programs currently being developed in Pakistan and Zambia are considering applying a payment system similar to that used in Performance Based Financing (PBF) programs whereby the level of incentive payments to health staff depends on reaching a set of indicators on quantity and quality of services provided. This has the advantage of explicitly addressing low quality, and also reduces the risk of perverse incentives by requiring a wider attention to general facility quality instead of exclusive focus on outputs linked to the voucher program.

Interestingly in nine programs that are managed by government (Armenia, India, Indonesia, Korea, Taiwan and Vietnam), there is a clear preference for contracting private providers, in some cases combined with a small number of public providers (three programs) or NGO clinics (one program). All of these programs were developed with the explicit aim of contracting private providers (see also tables 1 and 2) although the impetus for working with the private sector varies by the reasons below:

- Curbing informal payments (Armenia);
- Facilitating regulation, monitoring and evaluation (M&E) of contracted private providers (Taiwan and Korea);
- Developing public private partnerships (PPP) or a framework for PPPs as in India;
- Leveraging private sector capacity to fill gaps in public service provision (India, Indonesia);
- Or even due to the preferences of the target population for private sector providers (sex workers in Vietnam).

In the case of the 13 programs managed by NGOs the type of service provider varies according to the specific context, ranging from purely private providers in India to a combination of all three sectors in the Uganda Makerere University Safe Deliveries project and in the Nicaragua voucher programs. Reasons for contracting all three sectors are usually associated with enabling competition between providers in order to drive up quality of care (Nicaragua).

In six of the 10 voucher programs managed by SFOs, the majority if not all of the providers are franchisees. In four voucher programs the SFO contracted its own franchisees as well as providers from other sectors

¹¹ The voucher program implemented in Yunnan was honoured by the Yunnan government with the Science and Technology Award (personal communication with Professor Kaining Zhang, Kunming Medical College, Yunnan, China).

¹² Although the Bangladesh project is able to contract private for profit and non-profit providers in practice there are very few private sector providers as the reimbursement levels are set too low. This is because the public sector facilities are already receiving a budget from the government so the reimbursement acts as an additional incentive to participate rather than reimbursement of the cost of service provision.

(NGO, private). It would be interesting to investigate further the performance of programs combining social franchising and vouchers, in particular looking at the impact on quality of care in voucher programs attached to SFOs if non-franchised facilities are allowed to join the voucher scheme, thus enhancing competition (i.e. facilities that may offer better quality services or be situated closer to the communities which the voucher program serves, but which are not part of the franchise).

Two of the three programs funded by KfW and managed by a private sector organization (Kenya and Cambodia) contract all three provider types, with the objective to build health insurance capacity. It is worth noting that the selection of providers by the managing agency is often related to existing capacity in the target area and the availability, or lack of it, of providers from all three sectors.

3.6 Why do voucher programs cease to exist?

Of the 40 voucher programs in the database, 22 were active as of December 2011. One of the questions raised regarding voucher programs is whether they are sustainable. The findings of the review present little reason to be concerned. Only seven of the 40 programs ceased to continue due to lack of funding, almost all of them initiated in the 1990s. Only one of these seven programs was implemented in the last decade, which was a small pilot project in Vietnam to provide STI services to sex workers. Of the 18 programs that have ceased to exist:

- 5 programs met their original objectives and were no longer necessary: Taiwan, Korea, China 1, China 2 and Indonesia;
- 5 programs were studies or pilots either taken over by or informing new programs: Bangladesh 3, Cambodia 1, Pakistan 1;
- 1 program was incorporated into a Health Equity Fund: Cambodia;
- 7 programs were unable to find new funding: 3 in Nicaragua, 1 in Rajasthan, 1 in Kolkata, 1 in Kenya, and 1 in Vietnam.

4. Findings of the in-depth analysis of 20 voucher programs

In the case of 20 of the 40 voucher programs the review was able to find sufficient information to undertake a more detailed analysis of the structure and implementation arrangements using a framework of analysis based on the 5 aforementioned categories:

1. **general aspects:** the analysis of the 20 programs looks in more detail at financing of the programs, objectives, scaling and changes over time;
2. **management and governance:** a more detailed analysis of management issues such as autonomy and also, where this information was forthcoming, the governance structure;
3. **clients and benefits:** analysis of voucher price, benefits, beneficiaries and targeting;
4. **providers;** in addition to the type of provider, other elements are analyzed, such as role of competition, facility selection, provision of training, supplies and equipment, and the setting of reimbursement rates;
5. **implementation arrangements:** marketing, training, voucher distribution, claims processing, M&E and fraud control.

Fifteen of the 20 programs were initiated after 2000 and of those, 11 distributed their first voucher in the last five years, illustrating the recent rise in interest in vouchers for SRH services, particularly maternity services. Out of the 20 programs, 12 are on-going at the time of writing and/or have intention to enter into additional phases. These include the larger programs in Armenia, Bangladesh, Gujarat, India and the KfW-funded programs in Cambodia, Kenya and Uganda.

For a quick overview Table 6 repeats some details of the 20 voucher programs analyzed in-depth already shown in tables 1 and 2. Those shaded green were still active in December 2011.

Table 6: Details of the 20 voucher programs analyzed in-depth

	Country	Initiated by	Years*	Services	Type providers	Type VMA	Size VP
1	Armenia	Government	2008-ong.	SMH, Child diseases	public (few), private	Government	Large
2	Bangladesh 1	Government/donorSWAp	2006-ong.	SMH	all three, most public	Gov./WHO	Large
3	Bangladesh 3	Intern. NGO - Popcouncil	2007-2008	SMH	all three sectors	NGO	Small
4	Cambodia 1	Donor - BTC	2007-2010	SMH	only public	NGO	Small
5	Cambodia 4	Donor - KfW	2011-ong.	SMH, FP, SA	all three sectors	Private/NGO	Large
6	India-Agra, UP	Donor - USAID/State Gov.	2007-ong.	SMH, FP, STI/RTI	only private	Government	Small
7	India-Gujarat	State Government	2005-ong.	SMH	only private	Government	Large
8	India-Delhi	State Government	2008-ong.	SMH	only private	Government	Medium
9	Kenya 1	Donor - KfW	2006-ong.	SMH, FP, GBV	all three sectors	Private	Large
10	Korea	Government	1964~1985	FP	public (few), private	Government	Large
11	Nicaragua-SW	Local NGO	1996-2009	STIs	all three sectors	NGO	Small
12	Nicaragua-adol	Local NGO	2000-2005	SRH care for youth	all three sectors	NGO	Small
13	Nicaragua-CervCa	Local NGO	1999-2009	Cervical Cancer scr.	all three sectors	NGO	Small
14	Pakistan (MSI)	Social Franchise - MSI	2008-ong.	FP	only private (SF)	SFO	Small
15	Pakistan-DG Khan	Social Franchise - PSI	2008-2009	SMH	only private (SF)	SFO	Small
16	Pakistan-Jhang	Social Franchise - PSI	2009-ong.	SMH	public (few), private	SFO	Small
17	Sierra Leone	Social Franchise - MSI	2009-ong.	SMH, FP	NGO and private	SFO	Small
18	Taiwan	Government	1964~1985	FP	public (few), private	Government	Large
19	Uganda (KfW)	Donor-KfW (MSI impl.)	2006-ong.	STIs, SMH, FP	NGO and private	SFO	Large
20	Uganda (University)	Makerere University	2009-2011	SMH	all three sectors	University	Small

*-2011: active up to December 2011, Ong (on-going): will continue in 2012. Shaded rows in the table are active programs. "Size VP" indicates the annual budget in three categories large (greater than \$1 million), medium (\$250,000 to \$1 million), and small (less than \$250,000).

4.1 General Analysis

In this section we present general characteristics of the 20 voucher programs that were analyzed in-depth. Specifically, we look at why these 20 programs were initiated and by whom, the timeframe and duration, and the scale and financing of the programs. We also examine major changes over time, including overall trends in funding, duration, and scale.

4.1.1 Who initiated and is financing the voucher programs?

Nearly three-quarters (14 out of 20 voucher programs) were initiated by a non-governmental or donor organization. The six voucher programs initiated by governments are Armenia, Taiwan, Korea and the India programs in the states of Gujarat and Delhi, while Bangladesh 1 was jointly initiated by the government and donors within the framework of the sector-wide approach (SWAp)¹³.

Eight of the 20 voucher programs were initiated by an NGO or a social franchising organization (SFO): three programs by Instituto Centroamericano de la Salud (ICAS) in Nicaragua, one by the Population Council in Bangladesh, two by MSI in Pakistan and Sierra Leone, and two by Greenstar in Punjab in Pakistan (the urban pilot in DG Khan District and rural pilot in Jhang district). One program was started by a University; the Makerere University in Uganda.

Donors initiated five of the 20 programs (KfW in Cambodia, Kenya and Uganda, USAID in Uttar Pradesh India, and Belgian Technical Cooperation (BTC) in Cambodia), and the majority of programs (15 of the 20) are or have been financed by donors. Of the six programs that were initiated by governments, half are entirely financed by governments (Armenia and the Indian state government-funded schemes in Gujarat and Delhi) and the early programs in Taiwan and Korea were majority funded by government with some early financial contributions by donors (USAID among others). In Bangladesh, the government provides in-kind contributions through salaried public health staff managing the project while the majority of the funding for reimbursements and incentive payments and cash transfers is via the donor-funded health SWAp.

Of the 14 voucher programs that were initiated by a third party (donors, NGOs/SFOs or a University), the government is or was making either no monetary contribution at all (10 voucher programs) or is providing a small in-kind contribution (3 voucher programs). For instance, in the Greenstar pilot program in Jhang, the government provides vaccines to private sector providers and in the Uganda voucher program the MOH developed technical guidelines for the voucher program. The only example where the government provides a monetary contribution in a program initiated by a non-governmental organization is that of Kenya, where the government pays for the salaries and other costs of the recently formed Project Management Unit (PMU) within the MOH which oversees the program. Furthermore, as evidence emerges of the success of the Kenya program in increasing access to institutional delivery among the target group, the government has allocated funding to co-finance the voucher services in the 2011-12 financial year. This is not to say that donor-funded programs do not involve and work with government. Many of the programs work closely with local government.

4.1.2 Rationale and objectives

In section 1.2, we set out a range of objectives for developing voucher programs and the twenty programs in the in-depth review also reflect these findings. Here we add to the analysis by looking at sub-objectives, and also at why the voucher approach was used in a specific context.

While in all 20 programs the overarching objective is to increase access to SRH services, it is important to highlight the fact that voucher programs are highly context dependent and are often designed to address a range of explicit objectives (often more than one in a single program). Examples drawn from the table include:

¹³ Sector-Wide Approach (SWAp) is an approach to international development that "brings together governments, donors and other stakeholders within any sector. It is characterized by a set of operating principles rather than a specific package of policies or activities.

- Enabling contracting of private providers (see also section 1.2) to leverage private sector capacity to provide health services in areas with poor public provision, widen choice for women and meet health sector policy-related targets and goals (i.e. the Gujarat State program in India, FP programs in Taiwan and Korea);
- Targeting underserved population groups: 13 of the 20 programs use a form of means testing to identify poorer families and sometimes combine it with geographical targeting. Korea later introduced targeting of poor families once the country was nearing replacement fertility and the Nicaragua voucher program for adolescents targeted geographical areas where the poor were known to reside or spend time;
- Marketing of a priority service: the actual voucher or coupon, as well as the voucher distributors are a channel for providing information to women on both the services themselves and the reasons for taking up the services (the Nicaraguan voucher programs, and the Taiwan and Korea FP voucher programs). The marketing power of the voucher – and the direct link to the target group – is a key reason why SFOs have become much more interested in the voucher approach;
- Introducing access to ‘new’ services: this refers to services virtually unknown by the target population and/or not previously accessible by them (i.e. the MSI family planning voucher programs in Pakistan and Sierra Leone which provide access to long-acting methods, cervical cancer screening in Nicaragua, abortion services in Cambodia);
- The research objective of ‘testing the voucher approach’ (Population Council Bangladesh pilot project, Uganda University scheme) and trying ‘innovative health financing approaches’ (Pakistan Greenstar programs);
- Introducing social health insurance skills into the health sector (KfW-funded voucher programs);
- Curbing informal payments: services provided in exchange for vouchers are generally free at the point of service delivery (with the exception of some of the SF voucher programs) and this is made clear in the marketing of the scheme to potential clients, making it harder for facilities to charge ‘informal fees’ (i.e. an explicit objective of the Armenia health certificate program is to curb informal payments among private maternity care providers).

In all 20 voucher programs, the goal is to increase access to SRH services. This is usually achieved through addressing a number of objectives drawn from those listed above, such as leveraging private sector capacity or using vouchers to market a priority service to a specific group.

For instance, the Uganda voucher program has the overall aim to increase access to SRH services, but also uses vouchers to market priority services and to introduce social health insurance skills into the health sector. It does this through distributing vouchers (these are sold at a nominal price) that can be exchanged for free STI diagnosis and treatment (Healthy Life voucher), and safe motherhood services (Healthy Baby voucher) at approved providers and will soon be adding a FP voucher. Healthy Life vouchers are targeted at ‘sexually active people of lower social status’ through loose targeting of poorer geographical areas, and Healthy Baby voucher provide access to safe motherhood services for poor and vulnerable pregnant women using area-based poverty targeting and door-to-door visits, which are also used to inform and educate women about the benefits of ANC, institutional delivery and PNC.

While the early projects (Taiwan and Korea) were about lowering fertility and incentivizing long-term family planning usage in the general population, the focus of recent projects is on reducing maternal and newborn mortality through increasing access to safe (usually institutional) delivery services and newborn care, usually for the poor. Efforts to address barriers to access are further reinforced by the provision within a number of voucher programs of a contribution towards the cost of transport to the facilities (i.e. voucher programs in Bangladesh, Cambodia, India, and Pakistan and Kenya during the third phase).

The design of voucher programs is usually tailored to the wider policy context to address a perceived market failure to meet the objectives of the health sector policy and related strategies and plans. For example, in the Indian policy context of reducing maternal and newborn mortality (as stated in Vision 2010, Reproductive and Child Health II and the Population Policy), the state government of Gujarat introduced the voucher program to address public sector failure to provide obstetric care to poor women in rural areas. The design of the voucher program in Cambodia was adapted to the Government's strong predilection for working with the public sector, only contracting NGO and private providers where public sector capacity is lacking (FP and abortion services). The voucher programs in Taiwan and Korea were part of larger socio-economic reforms that addressed, among other things, the perceived prejudicial effects of the high fertility rate in those countries.

As stated above, the KfW-funded voucher programs (Kenya, Uganda, Cambodia, and Tanzania) have an objective to push forward the agenda for social health insurance by introducing key skills into the market such as accreditation, provider reimbursement and claims processing, and fraud control. In Tanzania, the program is designed primarily as an insurance mechanism to increase access to a basket of services for poor pregnant women and her family. The insurance card functions in the same way as a voucher except that the card provides access to a much wider range of services than is usual in a voucher program.

Whether or not the explicit agenda is to move towards SHI, voucher programs do introduce and build capacity for skills that are critical to SHI. In the Kenya program the original tender for the VMA contract included a key role for the National Hospital Insurance Fund (NHIF) to undertake both accreditation and a quality assurance function since it was already undertaking these tasks for other facilities and organizations. In the KfW-funded voucher program in Yemen¹⁴ one of the three consortium members is a private insurance company which will undertake the claims processing for the program. It will do this at a low cost as a form of corporate social responsibility. A new voucher program in Vietnam managed by MSI has also contracted the national insurance agency to undertake fraud control and verification of service provision. This is an area with potential for further collaboration and synergies, particularly where objectives of the different agencies are aligned.

There has been some discussion among policymakers on expanding vouchers to include additional services such as child health. In Armenia, a second voucher/certificate program for child health services is being implemented since January 2011. In Cambodia, KfW is planning to expand the SRH services with cervical and breast cancer screening and to include other services such as treatment of hypertension, diabetes, and cataracts. Discussions have also been held with WHO STOP Tuberculosis (TB) program on using vouchers to reach contacts of those testing positive for TB and to incentivize adherence to treatment protocols, such as the Tuberculosis Direct Observed Treatment Short-course (TB DOTS).

4.1.3 Level and Trends in funding

It is difficult to say much about the trend in available funding because the programs are quite different in scale and style and the data available on the total and annual financing of voucher programs is rarely available or complete. What is quite stark is that the annual program budgets tend to be either small (for pilot studies or research programs) with an annual budget of, say, under US\$ 250,000, or large programs with budgets in excess of US\$ 1 million per annum. Eight of the 20 programs reviewed in detail can be classified as large programs (see Section 3). Of these, six are still active: Armenia, Bangladesh DSF program, India-Gujarat, Cambodia, Kenya, and Uganda, and two of them (Taiwan and Korea) are no longer in operation. Of the remainder, only 1 program can be considered 'medium' sized (the Delhi state Mamta Program) and the rest are all small. This pattern is reflected in the wider sample of 40 voucher programs.

The small voucher programs reviewed are either scaled-up, inform larger or new voucher programs in other areas (as in Bangladesh, India or Pakistan) or cease where the research is finished or funding has run out.

¹⁴ This programme is currently on-hold due to security and political problems in the country and is therefore not included in the review. The contract was awarded in 2011 and the design phase was at the initial stages when the contract was suspended. It is hoped that this programme will re-start during 2012.

Reasons for cessation of larger voucher programs include reaching objectives, cessation of funding, and policy changes such as the removal of user fees. Taking examples from the wider pool of 40 programs, the voucher programs in China were scaled up after the success of the pilots, and these larger programs then ceased to exist when the Government introduced free services for most of the population (based on a capitation scheme for the provision of mother and child health care). The same is true for the Indonesia program where the vouchers were used to incentivize private midwives to establish practices in rural villages. Once this objective had been achieved, the vouchers were no longer considered necessary.

Based on this finding it would seem that on-going, successful voucher programs require (and indeed have) annual budgets in excess of US\$ 1 million and in some instances more. Exceptions are small or medium voucher programs working in combination with a social franchise or a health equity fund (HEF).

Budgets range from the small-scale, which include the BTC program in Cambodia which had a total budget of around US\$ 43,000 and distributed some 4,890 vouchers over 3.5 years, and the MSI voucher programs which are integrated with larger social franchising programs, to larger-scale programs such as that in Bangladesh which has a budget of some US\$ 6.5 million annually and covers 46 out of 489 sub-districts with a population of 10.36 million. The Bangladesh program distributes approximately 160,000 to 170,000 vouchers to poor pregnant women annually.

Other programs with larger budgets include the Uganda program funded by KfW, World Bank, DFID, and USAID with a total budget of some 5.5 million Euros, and the KfW-funded Kenya voucher program which had a total budget of Euros 16 million during the first five years. The two national, government-run and funded programs (Taiwan and Korea) both had large budgets which varied significantly from year to year. By way of example, the Taiwan program received around US\$ 1.5 million per annum at its height, and the Korea voucher program spent around US\$ 30-40 million in 1986.

Those voucher programs which were initiated by government *or* where government is closely involved in its implementation tend to have larger budgets and a broader geographical spread, i.e. the Bangladesh DSF program, the Taiwan and Korea family planning voucher programs, the KfW-funded voucher program in Kenya where the government is very closely involved, and the Chiranjeevi state-wide institutional delivery voucher program in Gujarat, India. Voucher programs that were initiated by donors or NGOs with the aim of piloting innovative financing approaches to maternal and newborn mortality reduction tend to start small and then be scaled up (Bangladesh, Cambodia, India, Kenya, and Greenstar in Pakistan).

4.1.4 Scaling up, Flexibility & Changes Over Time

Even though voucher programs are not new (with the Taiwan and Korea programs dating back to the 1960s) they are still often referred to as innovative forms of health financing. The 'innovative' label may be due in part to the combination of supply-side and demand-side characteristics of the voucher approach, which is unusual among health financing tools (i.e. the combination of reimbursement payments to providers that can be reinvested in quality improvements, and access to free (or nearly free) services for voucher clients).

Of the voucher programs in the detailed review, a small number had pilot phases (i.e. the Kenya OBA program phase I, and the Gujarat State voucher program in India) and some were pilot studies that went on to inform new voucher programs in the country (i.e. the Population Council managed project in Bangladesh which served to inform the MOH-managed DSF program, the BTC-funded project in Cambodia which informed the design of the KfW-funded voucher program, and the pilot voucher interventions in DH Khan (urban) and Jhang (rural) districts in Punjab in Pakistan which informed a growing number of other Greenstar programs). Given the innovative nature of the approach, it is perhaps surprising that more of the voucher programs did not have explicit pilot phases or projects which were carefully evaluated to inform scale-up.

In India, a growing number of state and local governments have replicated wholesale the Gujarat model whereby private obstetricians are contracted by the government to provide free institutional delivery for

poor women, identified using the Below Poverty Line (BPL) card system. These include Delhi (the Delhi-Mamta scheme), West Bengal (the Ayushman Scheme), Karnataka (the Thayi Bhagya scheme) and Madhya Pradesh (the Janani Sahyogi Yojana scheme). However, some are not as successful as the Gujarat scheme has been. Whereas the Gujarat scheme was designed for a rural population where private doctors had capacity to spare, the Delhi scheme is situated in urban areas where private doctors have less capacity and much higher patient loads. Prices offered by the state government are not sufficiently attractive to keep private providers in the scheme, so many have pulled out, affecting overall program performance¹⁵. A feasibility study or pilot phase may have resulted in a more appropriate design.

Countries which have seen an explicit scaling-up of the voucher approach include Kenya (geographically scaling up in Phase II and III and the addition of transport subsidies in Phase III) and Uganda (which has been extended to include SMH services in addition to STI diagnosis and treatment and has recently started with FP). The KfW-funded voucher program in Cambodia with a first voucher distributed in January 2011 is already planning a Phase II scale-up to include new services in the voucher package and new geographical areas. Hence of these three KfW funded programs, 2 are already in a second or third stage and 1 has planned a second phase. The common criticism of donor-funded programs lacking sustainability is therefore not always correct. The Bangladesh DSF program is also planning to scale up to a larger number of districts.

Not only are voucher programs tailored during their design to the policy environment in which they are to be implemented (see 4.1.2 above), they also have the flexibility to adapt over time to suit changes in the external environment. Thus in Taiwan, after many years of incentivizing long-acting family planning methods and sterilization through vouchers, the total fertility rate was approaching replacement level and consequently the focus of the voucher program changed to one of financing services for the poorest. In the case of the KfW-funded voucher program in Kenya, the success of the first two phases has meant that the voucher scheme is now a flagship program within the government of Kenya's "Kenya Vision 2030: Transforming National Development", which is itself a roadmap for Kenya to join middle income countries. As an important component of the overall health sector strategy, the government will now provide a considerable financial contribution to phase III of the program.

Apart from scaling-up geographically, another important change over time relates to the expansion in the range of services covered. For example, the KfW-funded Uganda voucher program began distributing vouchers for STI services in 2006, after a feasibility study in 2004. In 2008, the program expanded to include SMH services, and since 2010 the program has also provided FP vouchers funded by USAID and more recently the UK's DFID¹⁶. There have also been discussions in other voucher programs about including new services in the voucher packages, such as TB services, child health, care for the elderly, and treatment of chronic conditions. In Armenia, a child health certificate was included in the program from early 2011.

Voucher programs not only react to changes in the external environment but can also push for positive change. This was seen recently in the Kenya voucher program where the Makadara Health Center in Nairobi, which comes under the jurisdiction of the municipality, managed to secure the reimbursement monies from voucher services directly into its own account in 2010, having joined the voucher program in 2006. For the intervening years, funds were paid to the municipality and the health center (HC) board had to apply to the municipality for funds and justify their use. Furthermore the timing of payments to the HC was slow and erratic. Due to lobbying by both the HC board and the VMA (Pricewaterhouse Coopers) it was finally agreed that the HC be allowed to open its own bank account and for the HC board to decide on how to use the funds¹⁷. Since this time the HC has re-invested funds in much needed quality improvements such as the purchase of incubators and lamps, painting and refurbishment of the delivery wards and so on.

¹⁵ The program was evaluated in 2010 (Nandan D et al.) and a series of recommendations were made to improve implementation, including increasing the reimbursement rates and revision of these rates every 2 years.

¹⁶ DFID is providing this funding through USAID which is aimed at the overall Uganda programme of MSI (of which vouchers are a part).

¹⁷ There remain some restrictions on the use of funds, including hiring and firing medical staff, but the HC board is able to use the voucher reimbursement funds to hire guards, cleaner and other non-medical staff.

Summary Box**General Analysis**

- Vouchers are successfully used to address tiered or multiple objectives, such as increased service utilization for a particular service or set of services, leveraging of private sector provision, and targeting of a particular group (i.e. India Gujarat which enables free access by poor pregnant women to private obstetricians for institutional delivery);
- Vouchers provide a means of working with the private sector because they require contracts, and contracts can be used to enable (and if necessary to enforce) monitoring of service provision and tracking of payments. Vouchers are an effective means of regulating private providers, including curbing informal payments (Armenia);
- In the context of scarce or insufficient resources, vouchers can be used to channel subsidies to those most in need, either by governments or donor agencies. Once the systems are set up, voucher programs can be used to channel additional subsidies to clients such as transport subsidies, food and other benefits;
- All donor-funded voucher programs, and many government funded programs have an equity-related objective enhance access to services for the poor. They do this through a combination of mechanisms, most commonly a poverty assessment tool (i.e. Kenya, Cambodia, BPL cards in India). The capacity of vouchers to target a particular population group is an important advantage;
- Programs initiated by donors have often a wider health sector agenda, such as KfW's aim to encourage countries towards the introduction of social health insurance. Vouchers introduce skills for SHI such as accreditation or provider approval, claims processing and also insurance concepts such pre-payment (i.e. the nominal price paid for the voucher itself).
- Existing voucher programs tend to be either large (with a budget of over US\$ 1 million) or small (with a budget of 250,000 or less) with a marked lack of medium-sized programs (3, all in India) indicating that voucher programs are either pilots, research programs or small interventions with limited funding that come to a natural end, or that they are scaled up to become larger programs.
- Voucher programs can and are successfully scaled up; once the systems are in place to manage and implement a voucher program, the management costs amortize over time and new areas and products can be added without the level of the start-up costs. Scaling up of voucher programs has entailed geographic expansion (i.e. Kenya, Uganda, Bangladesh), the widening of the services provided through vouchers (i.e. Armenia Cambodia, Uganda), and/or the replication of what is perceived to be a successful voucher approach in a new area (State governments in India, PSI in Pakistan).
- Voucher programs that are donor-funded are often accused of being un-sustainable. However, the KfW-funded voucher programs in Cambodia, Kenya and Uganda are all in or planning subsequent phases and the Kenya program in particular is demonstrating sustainability with the government taking on a more important role in terms of both governance and funding.
- Not only are voucher programs tailored during their design to the policy environment in which they are to be implemented (i.e. in Cambodia), they also have the flexibility to adapt over time to suit changes in the external environment, as seen in the national Taiwan FP voucher program.
- Voucher programs not only react to changes in the external environment but can also push for positive changes, such as increased financial autonomy for providers, as has been seen in the Kenya voucher program.

4.2 Management and Governance

4.2.1 Management

Table 7 presents the different management arrangements of the 20 programs. In all programs there is an entity or a group of entities charged with the responsibility of managing the voucher program – usually called a Voucher Management Agency (VMA).

Table 7: Management of the 20 selected voucher programs

Management analysis	#	Observation
Number of programs managed by Government	7	Most of these programs were initiated by government, with the exception of the India-Agra program which was initiated by the donor (USAID)
Number of programs managed by private for profit organization	2	Kenya and Cambodia - both funded by KfW: Kenya 1 is managed by PwC; and in the Cambodia program, the VMA is a consortium led by an international consultancy company
Number of programs managed by private not for profit organization	11	These are largely smaller voucher programs initiated by private not for profit organizations with donor financing (5 NGOs, 5 SFOs, 1 University)

In 18 out of the 20 programs the VMA was assigned to either a government or non-government entity, while in just two programs, the VMA was tendered through open competition (Cambodia and Kenya) due to the rules of the donor funding agency.

Seven of the 20 programs are managed by the government. In 6 of these 7 programs, the voucher program was *both* initiated and managed by a government entity (Armenia, Bangladesh 1, India Gujarat, India Delhi-Mamta, Korea and Taiwan) and the India-Agra voucher program was initiated by USAID in consultation with stakeholders but is managed through government structures.

In voucher programs that are managed by government agencies, there is a wide range of different management structures in place, while the voucher programs managed by non-government agencies (either for-profit or not-for profit) tend to have management structures that are much more similar and aligned with the diagram presented in figure 2 (page 5) in Section 1.

In the case of government-run programs, the VMA tasks are usually distributed among different entities. For example, in the India programs, a Project Management Unit or PMU is often formed within the MOH (which may itself be staffed by a parastatal organization) and is responsible for the selection, contracting and payment of the providers, while other departments in charge of mother and child health are responsible for technical standards and protocols, and for managing field workers in their work to provide information to pregnant women and encourage them to use the voucher services. Local NGOs may also be contracted by governments for specific tasks, such as voucher distribution, as in the case of the USAID-financed scheme in India, or means testing of beneficiary groups.

In Armenia, the State Health Agencies reimburse the providers while the MOH is responsible for overall program monitoring. The certificate is distributed to pregnant women when they visit providers for antenatal care. This system functions well because all women are targeted regardless of socio-economic status; the principal objective is to curb informal payments in the largely private maternity hospitals and enable free access to care, rather than to increase institutional delivery rates.

The two programs which are managed by a private-for-profit organization are both financed by donors and in both cases the VMA contract was put out to tender (Cambodia and Kenya) under donor rules. In Kenya, where the VMA is PricewaterhouseCoopers (PwC), specific VMA tasks were subcontracted during the early years of the program including accreditation, quality assurance, development of a poverty targeting tool and marketing. Once in-house capacity had been developed, PwC decided to handle these tasks in-house, including quality assurance to improve efficiency and maximize profits. In Cambodia, VMA tasks are distributed among the different members of the consortium, with most of the tasks that are related to the day-to-day implementation of the program (voucher distribution and claims processing) being the responsibility of the local NGO partner (Action for Health).

In 11 of the 20 programs the VMA is a private not-for-profit organization and in these programs the VMA handles all tasks related to the implementation of the voucher program. Half of these (5 programs) are

social franchising organizations and the number of SFOs managing small voucher programs through their franchising networks is growing fast.

Third party contracting allows the VMA, or head contractor (either a non-government or government agency) to bring in the required skills for implementing the voucher program and, crucially, allows the VMA to cancel that contract for non-performance or other reasons. It can also serve to counteract fraud where an independent agency is contracted to verify service and other data which form the basis of reimbursement payments. It may be easier for a non-government organization (either for-profit or not-for-profit) to contract out specific activities where government procurement regulations are lengthy and protracted (e.g. Cambodia), and where there is little experience of private sector partnerships in government (e.g. Pakistan). However, contracting out also comes with its own risks as seen in the KfW-funded Uganda program where the agency responsible for claims processing went into liquidation and the claims processing software was lost to the voucher program and had to be re-created.

Autonomy, both on behalf of the managing agency and of the providers, is a much-debated topic (see also 3.5 above). Although in theory the process of contracting out the VMA should ensure that the best agency manages the role and allows for the termination of the contract for poor performance, in reality there are often few organizations capable of bidding for and fulfilling this type of contract which requires a wide range of skills (strong financial management, claims processing, fraud control, quality assurance and provider accreditation). There is also the danger of creating monopolies where new organizations find it difficult to enter the market and compete with existing agencies (PwC has held the Kenya voucher program VMA contract for 3 consecutive phases since 2006, and MSI has held the Uganda VMA contract since 2006). This is an area which would benefit from further research.

Provider autonomy to organize and manage services and to spend incentive or reimbursement payments is seen as fundamental to public sector pay-for-performance (P4P)¹⁸ schemes such as those in Burundi or Rwanda¹⁹ where a purchaser/provider split underlies the approach. In voucher programs where private sector providers are contracted either by a government or a non-government VMA, the health service providers are always autonomous. Where a mix of public and private sector providers are contracted there will be different levels of autonomy among participating providers (i.e. public sector providers rarely have the autonomy to hire and fire staff which remains with the ministry, but they may have a degree of autonomy to spend reimbursement payments on quality improvements)²⁰. As mentioned above (see 4.1), voucher programs can also provide a framework within which to push for greater facility autonomy.

As with the contracting out of components of the VMA's tasks, the contracting of providers should enable the VMA to terminate a contract for non-performance. However, in a government managed program such as that in Bangladesh which works largely with public sector providers, the government effectively co-opts all public sector providers in the target area into the program and does not exclude providers on the basis of quality of other criteria. The competition 'for the market' where providers volunteer to join the voucher program to benefit from the potential increased client flow offered by the program is removed when providers are made to join the program and cannot subsequently be excluded for bad performance. It may also lessen the attraction for private providers since the number of providers per head of population will be greater and consequently the potential market smaller.

The type of managing agency necessarily impacts on the way in which the voucher program is managed and implemented. Comparing the KfW funded programs in Kenya and Uganda, a number of differences can be observed: in the PwC-run voucher program in Kenya, the emphasis is on fraud control and efficiency (reducing costs) and less on quality assurance measures, while the MSI-run voucher program in Uganda has a greater focus on the quality of the providers and services. Given that PwC is an accountancy

¹⁸ Often referred to as performance-based financing (PBF) where this applies to public sector

¹⁹ For instance, see *Rwanda: Performance-Based Financing in the Public Sector* by Louis Rusa, Miriam Schneidman, Gyuri Fritsche, and Laurent Musango, which can be found at <http://www.cgdev.org/>.

²⁰ Population Council Kenya, *End of Phase 1 investment analysis of health facilities participating in the OBA program, Kenya*. Document distributed at the Technical Advisory Committee Meeting of the Reproductive Health Vouchers Evaluation project, Mombasa, Kenya, November 7-9, 2011.

company/firm operating in the commercial sector, this has certain logic, while the international NGO MSI is a service provider and an expert franchisor set up to improve the quality of care for women.

4.2.2 Governance Structure

There are many variations in governance structures and functions across voucher programs. Table 8 shows that in the majority of cases (nearly three quarters of the voucher programs) the same agency is responsible for both the governance and management functions.

The majority of programs that are managed by a government entity are also governed by government structures, although these activities may be undertaken by different groups within government and at different levels (i.e. governance at central or provincial level with management devolved to district level). With non-profit VMAs which also undertake the governance function for their programs (this accounts for the majority of them), personnel from headquarters or from existing partner organizations may contribute technical and management guidance, acting in a quasi-independent way (i.e. PSI with Greenstar in Pakistan). It is also worth noting that non-profit VMAs often work closely with local government even if government bodies do not have an official role in governing the program (i.e. the Nicaragua cervical cancer intervention).

Table 8: Governance structure of the 20 selected voucher programs

Governance analysis	#	Observation
No. of voucher programs where the governance and management structures are the same entity	14	Armenia, Bangladesh DSF, India, Korea, Taiwan, Nicaragua (ICAS with donor funding), MSI and Greenstar programs. Hence the majority of the government managed schemes and those linked to SFOs In government managed programs, the governance function is often at central or provincial level with the management at the district level or lower levels i.e. in Gujarat the State Health Directorate oversees the voucher program (governance) while the District Project Management Unit (DPMU) acts as VMA.
No. of voucher programs where the VMA and governance functions are not the same	6	Where a donor agency was involved in the design/set up of a voucher program (or is the principal funding agency) the governance structures are usually different from the VMA function: Bangladesh (Popcouncil), Kenya (KfW), Cambodia (KfW & BTC), India-Agra (USAID) and Uganda (KfW).

Where the same government agency manages and governs the program, the governance role in providing independent guidance and advice, and acting to deter fraud, is consequently lost. However, in Taiwan, Korea and Armenia, the process of introducing the voucher program was accompanied by the development of extensive regulations. To a certain extent this was also true of the Bangladesh MOH voucher program, where the development of the program included a large number of protocols and guidelines which have proved to be a heavy administrative burden for the providers participating in the program. In some programs the government provides *unofficial* oversight, particularly in the larger programs which have (or could potentially have) an impact on national targets (i.e. institutional delivery rates).

Summary Box	Management & Governance
There are many different management structures among the 20 voucher programs reviewed, due largely to the type of initiating agency (i.e. whether government or non-government), and the need for voucher programs to be tailored to the policy environment in which they are designed (i.e. the preference or otherwise of governments for contracting with the private sector).	
There is little experience with tendering out the VMA function in voucher programs (only in Kenya and Cambodia) and the advantages and disadvantages of autonomy at the management level (i.e. the management structure is different from the governance structure) are not well understood. There are, however, a number of examples where VMAs (both government and non-government) are successfully contracting out specific management tasks (voucher distribution, claims processing and verification).	

Where private-for-profit VMAs have an imperative to retain profits, fewer tasks are generally contracted out to third parties (i.e. the PwC-managed voucher program in Kenya) and there is an emphasis on fraud and tight financial controls. In contrast, the VMAs which are in the business of providing services tend to focus on quality of care and marketing (particularly in social franchises).

In terms of autonomy at the provider level, the optimum model is for providers to have autonomy, not only to reinvest voucher payments (on quality improvements, staff incentives and other activities) but also to organize and manage services. While provider autonomy is the norm when private providers are contracted into voucher programs, there are varying degrees of autonomy with public and also non-profit providers which participate in voucher programs. As we have seen in section 4.1 voucher programs can also provide a framework for moving towards greater provider autonomy, at least in terms of reinvesting voucher income.

It is difficult to draw conclusions from the review about ideal governance structures – but in general it is accepted that an independent governance structure is the preferred option. In general, the involvement of donors in the design of a voucher program leads to more effective governance structures. However, even in government-managed voucher schemes it is possible to build into the scheme a system of balances and checks to counteract fraud, although this sometimes places a heavy burden on the facilities (i.e. Bangladesh). In many schemes where the management and governance structures are the same, the programs do benefit from additional technical and management expertise provided by associated (e.g. Pakistan) or independent groups (e.g. WHO in Bangladesh, Population Council in Taiwan and Korea).

4.3 Voucher Benefits and Targeting

Below we describe the benefits conveyed by the vouchers, such as the level of subsidy offered (whether full or partial) and the type of services provided. We also look at additional benefits provided through voucher programs including transport and in-kind benefits such as clothing and food.

4.3.1 Types and number of services provided

All 20 programs issued vouchers for SRH services, with the most common services being safe motherhood (SMH) and FP services (see also table 6). Other SRH services (see below) include diagnosis and treatment of RTIs/STIs, safe abortion, and treatment of gender-based violence.

Safe motherhood services. Fourteen of the 20 voucher programs (70%) provide SMH services. In six of these programs SMH is the sole service, while in eight program other services are also provided, mostly FP, and in one case childhood disease (Armenia). A number of voucher programs include new born care and vaccinations, as well as post-delivery family planning in the package of SMH care.

Family Planning services. Eight (40%) programs provide Family Planning services, mostly in combination with other services such as SMH services as stated above, but in 3 voucher programs FP is/was the only service offered (Korea, Taiwan and the MSI program in Pakistan). This remains an unusual model, and we can surmise that it probably reflects the high start-up and overhead costs of establishing a voucher program relative to the cost of FP services themselves. Seven of the 8 programs provide a choice of Long Acting and Permanent Methods (LAPM), mostly IUD, sterilization and implants and in only one voucher program did the voucher cover a single method (IUDs by MSI-Pakistan). This voucher scheme is linked to a social franchising program which may lower the transaction costs of starting up and managing a voucher scheme. Two voucher programs have offered also short-term methods (Cambodia KfW and Korea) and the Kenya program is also planning to introduce short-term FP in phase III. A new program in Faisalabad, Pakistan launched on the back of a social franchising program managed by Greenstar, promotes access to both post-natal care and family planning among recently delivered women.

RTI/STI services. Three countries (4 programs) have used or are using vouchers as a means to increase access to diagnosis and treatment of RTI/STI (Nicaragua sex worker and adolescent programs; KfW Uganda;

Uttar Pradesh, India). In the Nicaraguan sex worker program, RTI/STI services, including HIV testing, were the only services offered. In the other three programs, RTI/STI services are combined with SMH and/or FP services²¹.

Other services. Two of the pioneering voucher programs in Nicaragua during the 1990s provided alternative SRH services: in one, a package of youth-friendly SRH services was provided to poor adolescents and in another cervical cancer screening. Other types of services provided include vouchers for safe abortion in Cambodia and for treatment of gender based violence in Kenya. Only the Armenian voucher program provides services for childhood diseases (in addition to safe motherhood services) and the KfW scheme in Cambodia is planning to include services for chronic diseases (diabetes, hypertension) and treatment of cataracts.

In the case of the abortion services, experience in Cambodia has shown that vouchers are effective, but a slightly different approach is needed. Vouchers are placed at the clinics and potential clients are informed about the services during the marketing and distribution of the FP vouchers. Each time a client accesses the abortion services one voucher is taken from the small stock and submitted to the VMA for reimbursement. The system is the same for the GBV vouchers in Kenya where clients often feel stigmatized about seeking treatment. There is growing interest in using vouchers to reach and to provide adolescents with access to SRH services and information with two projects in the pipeline: in Zambia (DFID) and Somalia (UNICEF). Furthermore new services are being tested such as male circumcision, which is provided through a voucher scheme managed by MSI in Malawi.

The literature²² states that not every health intervention lends itself well to the voucher approach. Using the literature and authors' own experiences the following criteria were developed:

- Voucher services should relate to a common condition in order to ensure sufficient demand, which in turn ensures sufficient client volume for participating providers;
- Services need to be clearly definable in order to allow for effective contracting and claims processing, i.e. conditions for which the clinical need is largely predictable, with clearly defined criteria for diagnosis and disease severity, as well as tightly defined and agreed management protocols that are common across groups of consumers;
- Related to the point above, vouchers work better if the services can be grouped, like a package of SMH services; a package of adolescent SRH care; or a package of primary health care services;
- Ideally, services will be time limited with a clear start and an end, i.e. pregnancy, delivery and newborn care, male circumcision or abortion. However, vouchers could also cover clients for chronic disease management during a defined period of time, after which the patient is appropriately referred to the corresponding services;
- Acute cases cannot be addressed through the voucher approach because the client needs time to learn about and understand the scheme, receive and use the voucher. This means that accidents or other sudden conditions are not really suitable for vouchers unless the vouchers are kept at the health facility (as for gender-based violence and abortion) and knowledge is widespread in the communities that the services are provided for free;
- The treatment for the intervention needs to be offered (or potentially offered) by multiple providers. Special treatments which can only be offered in referral hospitals do not suit this approach unless the treatment is a referral from a voucher service provided at lower level facilities (such as Caesarean Section or treatment of cervical cancer);
- To justify the costs of voucher distribution and claims processing, interventions should be priority services as defined by the Ministry of Health, currently insufficiently consumed by the target population and which are widely agreed to address important public health problems (e.g. maternal

²¹ In the first phase of the KfW-funded Uganda voucher program only STIs diagnosis and treatment was provided through the vouchers.

²² Jennifer J Watts and Leonie Segal, 'Vouchers for chronic disease care', *Australian Health Review* 2008, Vol 32:3, pp 451-458, August 2008
Lenel, Griffith, *General Ideas for the Implementation of the OBA projects, Review of the KfW Kenya and Uganda voucher scheme*, 2007)

mortality, cancer, high fertility, high health system costs of untreated TB or diabetes patients, and so on).

Summarizing, ideal services for vouchers are those which are related to relatively common conditions, are clearly definable, time limited (with a beginning and an end) and are sufficiently relevant within the health policy framework to justify the costs of voucher distribution and claims processing. In fact all services currently provided through the voucher schemes adhere to these criteria, with the exception of GBV services.

Number of services. To date, the maximum number of services provided in a single voucher scheme, in low income or lower-middle income countries, has been limited to three services, although this is set to increase through the introduction of new services in countries such as Cambodia. In the 20 programs reviewed, nearly three quarters (14 programs or 70%) provide only one type of service, 2 programs (10%) provide two services and 4 programs (20%) provide access to three service types.

Five of the 6 voucher programs initiated by a government provide just one service: SMH services or FP services. Armenia is an exception to this rule having added a certificate for child diseases to the voucher program in early 2011. This is also the case for 8 of the 9 voucher programs initiated by a not-for-profit agency (SFO, NGO or University), the exception being the voucher program in Sierra Leone which provides SMH and FP services through the Healthy Baby and Healthy Life vouchers respectively. Voucher programs initiated by donors have a tendency to have more than one service in the benefit package: of the 5 donor-initiated voucher programs, 4 provide three services (3 KfW funded, 1 USAID), and only the one in Cambodia which was a pilot project initiated by BTC provided one service.

This may reflect the remit of donors to address wider reproductive health concerns (as encapsulated in the MDGs) such as maternal mortality, neonatal mortality, fertility, avoidance of catastrophic health expenditure and so on, whereas governments and NGOs may be more interested in addressing a relevant public health problem using the smallest subsidy possible (i.e. a single service). Donors may also wish to address more than one objective, such as piloting new forms of health financing, introducing public private partnerships or strengthening stewardship capacities of the MOH which can all be addressed using the voucher approach. As well as prioritizing a reduction in maternal and neonatal mortality, the German Development bank KfW, as we have seen, is interested in supporting the introduction of social health insurance skills to the health sector, including accreditation, pricing policies, claims processing, quality assurance, and targeting. One of the attractions of vouchers in this context is that they are flexible and can address a hierarchy of objectives (see 4.1.2) and this in turn lends itself to widening of the voucher package.

Furthermore, there would seem to be a practical upper limit to the number of services in each voucher package or scheme. It is common practice for health promoters to explain to potential voucher clients what the benefit package consists of, what its advantages are and where they can obtain the services. The more services offered in a single scheme, the more complex this process becomes. This complexity spills over into the health facility as was seen in Nicaragua, where the same health facilities were receiving adolescents for SRH services and sex workers for STI services through two different vouchers which led to some confusion, particularly for the claims processing.

As voucher schemes introduce more services they begin to resemble insurance schemes. The KfW-funded scheme in Tanzania could be described as a hybrid voucher-insurance scheme where the voucher is exchanged for enrolment in the National Health Insurance Fund for a defined period (as well as their family's enrolment into the Community Health Fund) with the explicit objective of encouraging them to remain insured after the subsidy ends. The insurance card functions in the same way as a voucher except that the card provides access to a much wider range of services than is usual in a voucher program.

Although not included in this review, it is useful to note that in the US health vouchers are used to provide basic health care to migrants who are usually mobile, following work on farms in remote rural areas where there is often no migrant health center. The migrant farmworkers are given a voucher which is valid for one visit at a range of contracted private providers, but that voucher can be applied to a variety of services,

from simple treatment of a cold to surgical procedures. A pricelist is available defining the costs of each procedure. This is an example of a voucher providing a range of services, which acts like a temporary mini health insurance scheme.

A further example of a voucher which subsidizes access to a wider range of health services comes from Hong Kong. As part of its ongoing healthcare reform, the Hong Kong Government has introduced a voucher scheme, with the aim of encouraging older patients to use primary healthcare services in the private sector, thereby reducing the burden on the overstretched public sector. The program is also considered as a strategy to further develop PPPs in healthcare, which is considered of high political priority. Under the scheme, members of the public aged 70 or above are given five health care vouchers annually worth US\$ 6 each to partially subsidize primary medical care services which they can purchase from the private sector.

Summarizing, even though vouchers are currently used for a limited number of services, they nevertheless have the potential to provide access to a larger package of health services. This mimics the impact of a small social health insurance²³ or health protection scheme for a particular subset of priority services which are currently under-consumed by specific groups. It can also be considered as a precursor of more comprehensive social health insurance which can be targeted to those populations which often fall out of the social health protection net, such as the very poor and other marginalized populations.

4.3.3 Other benefits

Half of the 20 voucher programs paid transport costs in addition to the cost of the health services, almost all of them in Asia where the cost of transport is a significant barrier to the uptake of health services (Bangladesh, Cambodia, India and Pakistan). The only exception is a small voucher program in Uganda implemented by the University of Makerere which researched the effect of transport vouchers combined with SMH vouchers and found that the transport vouchers were largely responsible for the huge increases they saw in the utilization of SMH services. In the Kenya KfW funded voucher program, transport has also been recognized as an important barrier, especially during the night, and payment of transport costs for women living in remote rural areas is under consideration.

Most voucher programs pay for transport and food costs related to referral and hospitalization and two voucher programs provide food for clients when accessing any one of the voucher services (Cambodia KfW and Gujarat, India). Beneficiaries of three voucher programs receive payment of transport and/or food costs through another social health protection mechanism working alongside the vouchers (HEF in Cambodia, and a cash transfer in Bangladesh and India).

Table 9: Characteristics of the 20 selected voucher programs

Other benefits	Yes	Observation
Transport (and food)	10	In 8 voucher programs only transport was paid, no food
Reward for accessing health services (CCT)	3	Bangladesh, Cambodia, Korea

Three voucher programs provide a 'reward' or conditional cash transfer (CCT) to the beneficiary after accessing a particular service. In Bangladesh this is 2,000 Taka in cash and a baby package worth 500 Taka after a delivery attended by skilled staff (total value around US\$ 33). In Cambodia the amounts are 20,000 Riel after delivery and 15,000 Riel after PNC (total value around US\$ 8.50) and in Korea, the beneficiaries received a certain amount of money to compensate for lost wages in the case of sterilization. Later in the Korea program, compensation was also provided for other services, such as tax exemption or lower charges for a delivery.

4.3.4 The voucher

The physical voucher has a number of functions:

²³ Even though no risk-pooling is taking place as the full costs are born by the government or donor.

- It stimulates the use of the health service: providing information about the service, its relevance for the person's health, and where it can be obtained; acting as a type of personal invitation; and it may even empower women to use services²⁴;
- It is 'evidence' for the client and for the clinic that he/she has the right to receive the services for free, thereby helping to prevent informal payments (providers found to be taking informal fees can be sacked);
- It acts as a form for collecting data for monitoring and evaluation; and
- After submission by the service provider it becomes part of the paper trail for the agency processing the claims that the client actually visited the provider and received the services²⁵.

The two voucher programs in India make use of the BPL card system for targeting and no physical voucher is used. The BPL cards function in a very similar way to vouchers in terms of identifying a specific population group (poor people) and acting as evidence that the person is entitled to receive certain benefits (in the case of the voucher program free services). Other aspects of the program (i.e. promotion/marketing of the services, claims processing, M&E) function in much the same way as a voucher program.

Table 10: Characteristics of the 20 selected voucher programs

Characteristics of voucher programs	Yes	Observation
Type of voucher		
Physical voucher	18	All 20 programs, except two
Virtual voucher (BPL card)	2	India (Gujarat and New Delhi)
Price of voucher for client		
Free	15	In 1 voucher program the non-poor pay
Symbolic price	5	KfW-funded programs (Kenya, Uganda), SF programs (MSI in Sierra Leone, Greenstar in Pakistan)

Table 10 shows that only in 5 of the 20 programs a symbolic fee (between US\$ 0.4 and max US\$ 2) is paid for the voucher, regardless of whether the voucher is used, and the services are then free at the point of delivery. This is directly linked to the objective of using the voucher approach to move towards a financing model of social health insurance through the introduction of insurance concepts (i.e. pre-payment) and skills (claims processing, verification and so on). In fact, during monitoring visits in Kenya, pregnant women as well as their husbands have often mentioned that they bought the SMH voucher as 'insurance' in case they needed expensive services, such as a Caesarean Section which they could not afford.

In the KfW-funded voucher program in Cambodia both the voucher and services are free due to the Government's insistence that the poor are unable to pay. The vouchers work alongside the Health Equity Fund projects which also provide free services. In the case of social franchising networks, the franchisers want clients to value their services and therefore paying a symbolic fee for the voucher can increase its value in the eyes of the client and cement an intention to use the services²⁶. They also want to attract future potential clients.

Administrative costs are sometimes mentioned as a reason for not collecting a fee. However in Kenya, the VMA uses the extra income to pay the voucher distributors, which helps to reduce implementation costs. Nevertheless, payment of a symbolic fee for the voucher may also reduce accessibility, unless there is a good exemption mechanism in place for the very poor and other vulnerable groups, such as adolescents. The third phase of the Kenya project will introduce an exemption mechanism at the request of the voucher

²⁴ This is an aspect of voucher programmes which needs further research. See section 5.

²⁵ In the case of 'mobile money' used in some newly developed programs, the provider is paid after sending a SMS message with details of the voucher and a code number which is read after scratching off a panel on the voucher (vouchers have a unique serial number that is linked to the client). In these cases the voucher acts as an electronic rather than a paper trail for the agency processing the claims and transferring the funds.

²⁶ However, these hypotheses remain untested.

distributors who have indicated that even though the fee is low (US\$1 for FP and US\$2 for SMH) there are some who cannot pay²⁷.

In Taiwan, certain services were free (i.e. male sterilization) and the majority were subsidized to a varying degree (i.e. half of the cost of an IUD was covered by the voucher). In Korea most methods were free, but a small contribution was paid for short term methods at the point of delivery.

In almost all voucher programs the voucher is not transferable from one person to another. Only in the Nicaraguan voucher programs for sex workers and adolescents a beneficiary could give the voucher to another person interested in the services. The evaluation compared the two groups: those who received the voucher from a distributor and those with a 'transferred' voucher. The results showed clearly that there was little difference between the health needs of both groups, i.e. level of STIs and/or the frequency of adolescent pregnancies. It was concluded that the ability to transfer vouchers probably helped to reach a wider group of vulnerable clients with priority services.

4.3.5 Targeting

Most of the current schemes address maternal mortality, and therefore target pregnant women (14 of the 20 voucher programs), nearly all of them *poor* pregnant women (13 out of 14). Only Armenia provides SMH services to all women regardless of socio-economic status and this is linked to the fact that the Armenia program is using the voucher approach (health certificates) to provide priority public health services (safe delivery and treatment of childhood diseases) in a context where most of the service providers are in the private sector.

Eight voucher programs target FP services to poor couples of reproductive age; only in Taiwan and Korea all couples were targeted in line with the objective of reducing national fertility levels. Other target populations include sex workers and adolescents in need of SRH services (both in Nicaragua), people in low income areas in need of STIs services (Uganda, India), and older poor rural women at high risk of cervical cancer. In the case of gender based violence services and safe abortion services, all women in a particular voucher area are eligible regardless of socio-economic status.

Table 11 illustrates the different targeting mechanisms used by the 20 programs. Debate is on-going about the relative benefits of means testing, which can be resource intensive (expensive and time consuming) and geographical targeting which is less accurate but with much lower costs²⁸.

Table 11: Targeting characteristics of the 20 voucher programs

Targeting mechanisms	Yes	Observation
Using means testing (MT) with or without other forms of targeting	13	
• Use only means testing (MT)	8	3 in India use a BPL card, 1 in Cambodia use a Poor card, 4 use questionnaires (all 3 programs in Pakistan and the Pop council program in Bangladesh)
• Use MT in combination with geographical targeting (GT)	3	MT using questionnaires; GT in poor areas for FP services in Sierra Leone, for STI services in Uganda (KfW) program and in Bangladesh GT was used in some districts as a pilot
• MT for SMH and FP services and universal targeting for Safe Abortion and GBV	2	KfW funded voucher programs: Cambodia (safe abortion), Kenya (GBV services)
Using only geographical targeting	4	Adolescents, sex workers, and cervical cancer screening programs in Nicaragua. Poor rural areas in Makerere program in Uganda
Using universal targeting	3	Armenia, Taiwan, Korea (Taiwan and Korea at end: MT)

Thirteen of the programs use some form of means testing (poverty assessment questionnaire, poor card or BPL card). Eight programs use only means testing, while five combine it with other forms of targeting such

²⁷ The voucher distributors have stated (in discussion with the authors) that they sometimes pay out of their own pockets when clients really cannot afford even the nominal fee.

²⁸ See for instance, Gwatkin D., The Current State of Knowledge about Targeting Health Programs to Reach the Poor, World bank 2000

as area-based geographical targeting, or universal targeting for specific services. Geographical targeting is thought to be more appropriate for cheaper services such as FP and STI services since the cost to the program of providing free services to those who would otherwise be able to pay is low in comparison with the public health benefit of lower overall STI rates or fertility. Two KfW funded programs combine means testing for the SMH and FP services with universal targeting for services considered to be critical for the population: safe abortion services in Cambodia (high maternal mortality is due in large part to high frequency of unsafe abortions); and GBV recovery services in Kenya (high frequency of GBV, especially among children).

Four voucher programs used geographical targeting of poor areas or prostitution sites as the only targeting mechanism. In Nicaragua, all three voucher programs used geographical targeting, SRH vouchers were distributed to all adolescents present in poor urban areas, STI vouchers to sex workers and their clients at prostitution sites and cervical cancer screening vouchers mostly in rural areas, inviting actively those of older age (30 to 60) and higher parity and therefore at higher risk.

Three voucher programs have used universal targeting with the objective of accelerating the use of the services among the wider population (and in the case of Armenia also to curb informal payments). Taiwan and Korea moved to a system of means testing once the primary objective of replacement fertility had been achieved. This move was some years earlier in Taiwan (1975) when the costs of the FP program became too high and it was decided to subsidize sterilization only for the poor (2/3 of acceptors), but to continue to subsidize the cheaper service (IUD) for all.

Most voucher programs have developed specific questionnaires for means testing, either at the client's house or at a distribution point in the community. The questionnaires mostly comprise around 10 questions on household income, assets, food intake, education and use of health services. This is sometimes followed by a home visit for verification purposes, but generally only when vouchers are sold at distribution points, such as in Kenya and Sierra Leone. The higher the monetary value of the vouchers, the greater the chance that a non-eligible person will try to acquire a voucher by responding to the questions in a dishonest way. Because of rising fraud in the informal settlements of Nairobi, the VMA decided to double check answers to the questionnaire by visiting all potential beneficiaries at home, not only to verify socio-economic status, but also to verify that the person is actually living in the settlement. The population now jokingly says that it is "easier to get a visa for the USA than a voucher".

Some voucher programs have additional targeting requirements, such as having less than 2 children for eligibility in the case of SMH services (Bangladesh and Mamta scheme in Delhi). In Bangladesh the vouchers are supposed to be distributed only to women who are pregnant for the first or second time, and have used family planning prior to the second pregnancy. The objective of this policy is to prevent that vouchers encourage women to have more than 2 children. However, focus group discussions with beneficiaries have shown that women do not consider the cash component of the voucher scheme (around 33 US\$) to be sufficiently generous to incentivize them to have more children. In practice, vouchers are sometimes used by women who have 2 or more live children.

Summary Box

Voucher Benefits and Targeting

All on-going programs provide access to services which are free at the point of delivery and the majority also distribute the vouchers for free (only the KfW-funded programs in Uganda and Kenya and the social franchising programs charge a nominal fee for the voucher). A continuum seems to exist with simple voucher schemes providing access to a single service for a specific group at one end and social health insurance at the other: voucher schemes which provide access to a wider basket of services and where a nominal fee is charged for the voucher at the distribution point (pre-payment) are closer to insurance programs on this continuum. Of the on-going voucher programs, all use some form of targeting to channel resources to a priority group with the exception of the national program in Armenia which uses the voucher approach both to provide access to a priority service for the population through a PPP framework, and to curb informal payments.

The case of Taiwan illustrates how flexible the voucher approach is in adapting to changes in the operating and policy environment. By altering a few aspects of the program, the government could continue to channel resources to priority services but, in the context of rising program costs and decreasing resources, the subsidy continued to reach those less able to pay. The subsidy was reduced or even stopped for the better-off, without major effects on program performance, as was observed in Taiwan (Lin and Huang 1981).

In contexts where a change of health seeking behavior is relevant because populations are unfamiliar or reluctant to use services, vouchers can be used as a marketing tool, providing information and guidance, actively inviting beneficiaries, and in particular cases (e.g. sex workers) vouchers were used to contract those providers for which beneficiaries have a preference. They also serve to collect information for the M&E of the program, and are a fundamental part of the tracking system for effective claims processing.

4.4 Providers

4.4.1 Type of provider by sector

Table 6 at the beginning of chapter 4 looks at the type of providers contracted by sector (public, private for profit or private not-for-profit). Almost three quarters (14/20) of the 20 programs contract providers from two or three sectors. Six contract(ed) providers from just from one sector (Cambodia BTC only contracted providers from the public sector and the remaining programs, all in India or Pakistan, only from the private sector).

The type of providers contracted is closely related to a number of things:

- **Capacity:** voucher programs have to take into account the availability (and capacity) of provider networks in the country or in the geographical area where the program is implemented. For example, in India where insufficient public providers are available in the rural areas or in the informal settlements, the voucher programs contract private providers and similarly in Armenia the majority of maternity centers are privately run. Korea and Taiwan contracted mostly private providers and only a few public facilities due to the limited number of public facilities able to provide the services;
- **Price:** where prices are not sufficiently high to attract private sector providers, they will either be reluctant to join in the first place or to remain in the program. For example in Bangladesh where the level of reimbursement act more as additional incentives in the public sector and do not cover the full (or even marginal) cost of service provision, very few private providers have joined the program (whereas the public sector providers do not have a choice about joining), and in the Delhi-Mamta program, private providers are leaving the program due to a combination of low reimbursement rates and more lucrative business opportunities elsewhere;
- **Government policy and regulations** also play an important role, e.g. in Cambodia where the government is reluctant to work with the private sector. The Uganda KfW program was not able to contract public providers because the Government abolished user fees in 2001 and felt this was not consistent with joining the voucher program. Furthermore public providers in Uganda did not have financial autonomy to invest reimbursements but this has now changed and the government is considering allowing public providers to join the scheme²⁹.

Five of the 20 voucher programs are managed by SFOs, two of them restricting participation in the voucher scheme to members of their own franchise, both in Pakistan (MSI and Greenstar). One program contracts other NGO health facilities (MSI in Sierra Leone) for services which their franchisees cannot provide, and

²⁹ The Ugandan voucher program implemented by Makerere University in 2009 contracted facilities from all 3 sectors and public facilities were allowed to use the reimbursement income. In Kenya some of the providers had problems using the extra income as they were not able to open their own accounts. However, the majority of public providers including hospitals are now able to reinvest the voucher income to improve the quality of services and some have made considerable investments such as building new labour wards.

another contracted a few public providers, possibly to fill a gap in their service provision by the SF network (the Jhang program in Pakistan which provides vouchers in rural areas).

4.4.2 The role of competition

Competition in voucher programs is one the least well understood topics. There are two principal ways in which competition appears in voucher programs:

- Competition between providers to join the program at the accreditation stage (and in some instances to remain in the program when contracts are renewed);
- Competition between providers for the clients, where providers make their facilities more attractive to attract more of the potential voucher clients.

It is not always possible to have multiple providers competing with each other, for example in rural areas or where only providers from a single sector have been contracted. However, providers may still often organize their services so as to convince potential clients of the benefits of using the services – this could be called competition *for* the market (as opposed to *within* the market) and occurs in Kenya for instance. This type of competition is important in voucher programs because most programs address low up-take of priority health services by a specific group. The voucher removes the financial barrier for the client and provides additional income for the provider, which the provider can use³⁰ to adapt services to the perceived needs of potential clients.

There may also be non-financial barriers, such as poor hygiene or ill treatment of poorer clients that prevent clients from using the services and, by adapting services to the needs of the clients, providers should see client numbers and consequently income go up, thus creating a virtuous circle effect. VMAs may need to support participating facilities to understand and act on this effect as part of voucher orientation or training. The client's choice is then not between providers, but between whether to make use of the voucher or not.

Contracting providers from two or three sectors in a voucher program, or more than one provider in a specific geographic area should lead to competition. In theory, the stronger the competition, the more facilities will invest to increase their quality and to make the facility more user-friendly. Important factors when designing a voucher program include the number and spread of providers in an area, and the number of potential voucher clients. If there are few potential voucher clients, there is little stimulus to invest in making the facility more attractive. The same is true where the number of clients is already high and spare capacity to treat more clients is low. The optimum number of providers in a voucher program is the number of providers that will both ensure sufficient capacity for quality service provision, while enabling providers to earn sufficient income through increased client load to attract and keep them in the program. This will be different for different programs and should be addressed in the design phase.

Other factors which affect competition within a particular program are the level of reimbursement rates; where these are too low, private providers will not participate and motivation to improve facilities may be affected in all sectors. Also if the type of service is low-cost such as family planning a much higher volume of clients (when compared with high cost services such as delivery) is necessary to make participation interesting and motivate the provider to improve its services.

Based on the available documentation on each voucher program the level of competition was categorized in three groups (see table 12):

- **Full competition** was defined as: facilities have been contracted from more than one sector or from the private sector but where there are sufficient facilities to ensure choice for clients;
- **Limited competition** was defined as: facilities have been contracted from more than one sector or from the private sector, but there are factors limiting the number of participating facilities and hence choice,

³⁰ This assumes a degree of provider autonomy to reinvest voucher income in quality improvements which is the case for non-government providers and to a varying degree with public sector providers (see section 4.2).

such as low reimbursement rates. Other factors include few providers contracted; geographical limitations; and participating providers are all franchisees;

- **No competition** was defined as: only facilities from one sector are contracted and clients have little or no choice, i.e. are assigned to one facility and are not permitted to access another facility.

Table 12: Rating of competition level of the selected 20 voucher programs

No.	Country	Type provider	Competition	Observation
1	Armenia	public (few), private	yes	-
2	Bangladesh 1	all three, most public	limited	low reimbursement rates
3	Bangladesh 3	all three sectors	limited	few providers contracted
4	Cambodia 1	only public	no	only public providers
5	Cambodia 4	all three sectors	limited	few private providers permitted
6	India-Agra, UP	only private	yes	-
7	India-Gujarat	only private	yes	-
8	India-Delhi	only private	limited	low reimbursement rates
9	Kenya 1	all three sectors	yes	-
10	Korea	public (few), private	yes	-
11	Nicaragua-SW	all three sectors	yes	-
12	Nicaragua-adol	all three sectors	yes	-
13	Nicaragua-CervCa	all three sectors	limited	few providers contracted
14	Pakistan (MSI)	only private (SF)	limited	all franchisees, only 5 facilities/district
15	Pakistan-DG Khan	only private (SF)	limited	all franchisees, relative few clients
16	Pakistan-Jhang	public (few), private (SF)	limited	all franchisees or public, relative few clients
17	Sierra Leone	NGO and private	limited	for FP all franchisees, few voucher clients
18	Taiwan	public (few), private	yes	-
19	Uganda (KfW)	NGO and private	yes	-
20	Uganda (University)	all three sectors	yes	-

Of the 20 programs reviewed, roughly half were judged to be fully competitive and half had limited competition. Competition was limited due to, inter alia:

- Low reimbursement rates, e.g. the large Bangladesh voucher program and the India-Mamta scheme;
- Few providers contracted because voucher program was a pilot, for example the Pop council managed Bangladesh voucher program;
- Restrictions set by government on contracting private and NGO providers, as in the KfW funded Cambodian voucher program;
- All providers are member of the same social franchise, in combination with relatively few clients, such as in Pakistan and Sierra Leone.

Within the group of 20 voucher programs reviewed, only one was judged to have no competition; the BTC-funded program in Cambodia, which contracted only public providers and where clients could only visit the health center nearest to their home.

It should be noted that even in the programs rated as competitive, the level of competition is not uniform across the program; it is often limited in a particular geographical area, such as remote rural areas or informal settlements where there are few providers.

4.4.3 Reimbursement policies

Defining reimbursement rates

The setting of reimbursement rates for the different voucher services is an area which would benefit from research studies. Table 13 presents the different methods for defining reimbursement rates.

In six of the 20 programs the rates were determined by the government, mostly in those programs initiated by governments (Bangladesh, India, Korea and Taiwan) and including the Population council program which served to inform the larger Bangladeshi program.

Table 13: How are reimbursement rates defined?

Method	No.	Observation
By Government	6	The Bangladesh (MOH), Bangladesh (Pop Council), India-Gujarat, India-Mamta, Korea and Taiwan had their rates determined by the government
Cost study and negotiated rates	4	The Armenia voucher program, Nicaragua (adol), Nicaragua (SW) and Uganda (KfW) implemented initial costing study followed by negotiated rates
Market prices	4	The Kenya (KfW), Nicaragua (cervical cancer), Sierra Leone (MSI) and Uganda Makerere University program based their rates on existing market prices
Market price, but discounted	4	India-Agra (USAID), Pakistan (Greenstar) I, Pakistan (Greenstar) II, and Pakistan (MSI) took average of market prices charged to clients and then discounted
Based on rates of other voucher programs	1	The Cambodia (KfW) program set its rates based on prices paid by other voucher programs and current fees
Based on fees	1	Cambodia (BTC) program based rates on existing fees paid in the public sector

As shown in the table, four programs were able to negotiate their own rates after implementing a costing study. Costing studies are complex to design and time consuming to carry out. The costs are different across different types and size of provider, and costing structures in health facilities are rarely transparent (particularly for faith-based and private facilities). Furthermore there are different types of cost such as full costs and marginal costs. In Nicaragua the cost study was part of the first phase of the program which at the time was a research program, and was used as a benchmark for negotiating lower rates. When the second voucher program for adolescents was developed in Nicaragua, it was able to use the same cost study. In the case of Uganda, a costing study was done at the start of the program and prices were then revised annually based on inflation and negotiations with providers.

Of the programs which did not do a costing study, Kenya presents an interesting example of the potential pitfalls. In phase I, rates were set in order to attract the private sector to participate (the Kenya program was the first voucher program to be financed by KfW and as such was considered a pilot in its first phase) and were felt to be high. However, over time, the rates were eroded by inflation and became less and less attractive. After 5 years, the rates were finally revised after complaints and threats from several private providers to leave the project. This illustrates the need to review reimbursement rates at least annually.

Four programs used the market prices, but then offer rates below these prices. In the case of the Agra program in India (USAID-funded) the rate offered was negotiated and set between the public sector fees and the market price resulting in rates some 35%-50% below the market price. The three SFO programs in Pakistan used current market prices as a benchmark and then discount this rate for their franchisees.

Types of reimbursement rate

Provider reimbursement policies differ across programs. In the case of just over half of the programs (11/20) a flat rate is paid to providers for defined services in both public and private facilities, and at all levels. In the nine programs which paid differential rates according to provider type and size, the rates are set in advance for a particular defined service. There is just one example among the 20 programs where the rate is not agreed in advance of the service being provided and that is for managing complications of delivery in the KfW-funded Kenya voucher.

In the three Nicaragua programs, rates were agreed with individual facilities on a case by case basis. In Armenia, the Obstetric Care State Certificate (OCSC) Program paid differential rates based on the level of health facility (primary, secondary, tertiary level), and in the Bangladesh DSF program the government pays the full agreed rate to the few private and NGO participating clinics³¹, but only half of that rate to public facilities, retaining the other half for a so-called 'seed fund'. This fund is used to pay incentives to the field

³¹ As stated elsewhere in the review, this rate is felt to be too low to attract private and NGO providers into the Demand-side financing program.

workers for each woman registered in the program, to pay incentives to facility staff, for procurement of drugs and supplies and for covering emergency referral costs.

In Taiwan the providers continued to charge clients for services and set their own prices, but the subsidy provided to voucher clients through the program was the same for all providers and clients. In Uganda (KfW) the rates for FP and STI vouchers are the same across provider types and levels, but differ for the safe motherhood voucher according to the level of the facility. This reflects the higher and more complex cost structure for delivery services. The Makerere University scheme in Uganda paid different rates to public and private, reflecting their cost structures (i.e. staff costs were already paid by the government in the public facilities which received lower rates). In the Kenya OBA program (KfW), the new rates have moved from a flat rate system for all facilities to a differentiated rate depending on type and level of facility.

In several programs the reimbursements rates are probably close to the facility's marginal costs. In Nicaragua, a costing study estimated the unit cost of outpatient consultations in public, NGO and private-for-profit facilities. The negotiated average rate paid to the voucher service providers was lower than the estimated unit costs and in later years was even lower. Most of this cost reduction was been achieved through the gradual devaluation of the currency, but was also partly due to competitive pressures and effective negotiation. From the outset, providers were prepared to offer services at prices well below their standard rates due to the potential of voucher-bearing clients to fill their clinics, thus providing a steady and reliable income.

In a review of the Agra program in India, Bhat (2007) found that private providers were "attracted to voucher schemes because clients increase their patient volumes and hence revenue". Private providers had considerable spare capacity, so the costs of the extra clients were near the marginal costs.

Analyses conducted by the VMA PwC in Kenya (KfW) revealed that the SMH voucher program generated additional revenue for health facilities and this was re-invested in procuring medical supplies, construction, and renovation and repair of health facilities. For example, one hospital built an additional maternity wing (End of Phase 1 Analyses, PwC). More research is required to determine whether voucher programs across the world are contributing to an improvement in quality of maternal health services but initial assessments have yielded encouraging results³².

Summary Box

Provider Policies in voucher programs

The optimum number of providers in a voucher program is the number of providers that will both ensure quality of service provision for a target population, while enabling providers to earn sufficient income through increased client load to attract and keep them in the program. This will differ from place to place and is an important part of the design process.

The role of competition in voucher programs is one the least well understood areas. Although half of the 20 programs were judged by the authors to have strong competition between providers (defined as facilities contracted from more than one sector or sufficient facilities from a single sector to ensure client choice) this has not been monitored in any detail either through external research or internal program monitoring systems. In theory voucher programs with greater competition between providers should be more effective with lower prices and better quality. However, there are successful examples of programs where only public sector facilities are contracted (or even co-opted), and further investigation is needed to compare and contrast the role of competition between these types of program.

The setting of reimbursement rates is not an exact science and has, until now, relied largely on trial and error. A body of experience is gradually being built up on how best to set the reimbursement rates for

³² In Kenya there is some indication of scaling up and quality improvement by facilities using the voucher revenue, especially FBOs and private sector providers. The public sector providers appear to be improving existing conditions without much scope for scaling up. Irrespective of facility type, medical procurement is a major area of investment, with 60% of the facilities procuring medical equipment using voucher reimbursement revenue (Population Council Kenya, End of Phase 1 investment analysis of health facilities participating in the OBA program, Kenya)

voucher programs but this is an area which requires considerable research and investigation. It is unlikely that one approach will suit all programs and program designs must take account of the following:

- Context - rates paid in other similar programs will influence what is 'acceptable';
- Capacity - spare capacity will influence decisions to participate, as well as what is accepted as 'sufficient' reimbursement;
- Experience and skills of the implementing agency - the government may have little experience of negotiating with private sector providers;
- Specific program objectives - if the principal objective is to contract with the private sector then rates must be set accordingly;
- Differential rates are appropriate for different types of providers (public, private for profit and private not-for-profit) and different levels of the health system (hospital, health center etc.) which have different costing structures;
- Regular review – rates should be regularly reviewed and program managers should be prepared to negotiate with providers, adapting prices to changes in the external and internal environment such as inflation. It is difficult, but not impossible, to reduce rates as has been seen in the Kenya program.

4.5 Implementation issues

4.5.1 Mapping, Selection and contracting of Providers

Mapping & Selection:

In government-run programs which work with public health providers, the usual practice is for all public providers in the target geographic area to join the voucher program. In three programs managed by the government but working largely with private providers, the identification of potential providers was done by MOH officials based on quality criteria or training requirements (Gujarat, Korea, Taiwan). Government policies and strategies will influence the selection of providers, for example in Cambodia the government has prevented private providers with dual public/private practice from joining the program to try and prevent public health workers 'moonlighting' in the private sector, which is a common practice in the country.

Table 14: Criteria for selecting providers

Selection criteria	Yes	Observation
Quality criteria	13 ½	13 programs + Sierra Leone (only for SMH services), quality criteria not always well defined
Member of fractional social franchise	3 ½	All Pakistan programs and in Sierra Leone for FP services
MD has proper training	2	India-Gujarat, Korea
No quality criteria, but MOH defined level of facility (primary to tertiary)	1	Armenia

In 7 of the 20 programs, the potential providers in a particular geographical area were first mapped during a design phase. This was mostly done through a combination of reviewing existing information, open invitations in the media to potential providers, and/or mapping visits to the target areas. In the 3 KfW-funded programs in Cambodia, Kenya and Uganda, potential providers were mapped, and then quality was assessed by the VMA. Only those facilities which met defined quality criteria received an invitation to participate in the program. In fact, most voucher programs select providers based on quality criteria (see table 14). Where information is incomplete about what types of providers are working in which areas, and

what level, capacity, and quality of care is provided, this is probably the optimum approach to mapping and selecting providers for a voucher program.

In the case of social franchising networks the usual practice is to automatically invite all franchisees in a particular geographical area since the quality is already assured through the franchise. However, in Sierra Leone, MSI also accredited private facilities to provide those services which their franchisees were not able to provide (SMH services).

In 2 voucher programs in Nicaragua (adolescents and sex worker programs) interviews with target populations identified the most appropriate providers. Those providers which were interested and met the quality criteria were then selected and contracted.

None of the countries in the detailed review have the capacity for full accreditation and instead use a simplified system of 'provider approval', based on agreed quality criteria. In practice, rigorous selection procedures and on-going quality monitoring of both public and private providers in voucher programs are sometimes lacking. For example, in two voucher programs the only selection criteria used were the level of staff training at the facility (Gujarat, Korea), and in the Armenia voucher program no quality criteria were used, but the MOH defined which facilities were categorized at which level (primary, secondary and tertiary). An advantage of linking voucher programs and social franchising networks is that the franchised facilities are approved and closely monitored for quality.

Vouchers represent an excellent opportunity to introduce and improve accreditation processes and to assist in developing capacity to measure and maintain the quality of health services and providers, particularly in the private and NGO/FBO sectors.

Contracting

In all voucher programs an agreement is signed between the VMA and the provider. In 12 voucher programs this is called a contract, and in the other 8 voucher programs this is a memorandum of understanding (MoU) or written agreement. The content in general concerns a description of the types of services to be provided, the payment schedules and issues related to monitoring, evaluation, fraud control and disputes. Medical protocols and quality criteria are often included. Guidance on how facilities can use the reimbursement income may form part of the agreement, as well as requirements for training, up-dating of skills and capacity building during the contract life.

An example of good contracting can be found in the Nicaragua voucher programs where there was a strong emphasis on quality in the contracts. This succeeded in improving the technical quality of the services, as well as client friendliness since the contracts required providers to participate in trainings and to follow medical protocols organized and developed by the voucher program. This was reinforced by strict monitoring and feedback to providers on the findings.

However, Nicaragua is a case apart and the opportunities presented by the contracting process are not generally used to the maximum, particularly around issues of quality. Poor contracting (i.e. lack of detail) and poor enforcement of contracts are often responsible for less than optimal performance.

For example in the Gujarat program in India, evaluations have shown that private providers often refer complicated cases to the public facilities in order to maximize their income, which is based on an average, flat rate per 100 deliveries for both normal and complicated deliveries. Once providers have reached the number of expected caesarean sections (8 percent) on which the rate is based, some providers then refer complicated cases to public facilities, even when this is not in the interest of the beneficiaries. Evaluations have also found that the monitoring system is very weak at the state and district levels, with a focus primarily on the number of practitioners approved (termed 'empanelled' in India) and the number of deliveries assisted. It was recommended that the terms of the contract between the government and the private providers need to be revised with the introduction of performance appraisal, measures to improve monitoring and feedback mechanisms, and the development of a referral model to make the scheme more effective (PhD Thesis Prabal Singh, 2008).

In the KfW funded program in Kenya the contracts with providers are detailed with regard to the level of expected quality of care. However, no agency has been contracted to implement a comprehensive quality assurance process and this is not done by the VMA. In most programs quality assurance is not well developed (see below) and hence the opportunities provided by the contracts cannot be taken to their full advantage. There are therefore two aspects to good contracting: the underlying design of the program where stakeholders have agreed on how the program will be implemented; and the contract itself which is a mechanism for setting out in detail and enforcing these agreements.

Benefits for providers (training, supplies and equipment)

In 13 of the 20 voucher programs technical training was provided to providers through the program: the pilot program in Bangladesh, the USAID scheme in India, Uganda (both programs), Korea, Taiwan and the three voucher schemes in Nicaragua. Training is also provided in all 4 voucher programs implemented by SFOs, although this is mainly on the voucher approach since technical training is already provided through the franchise. The types of training include new techniques in long term family planning (Korea and Taiwan), technical training on specific aspects of FP and STIs and on pap smears (Nicaragua), and on improving client friendliness (Nicaragua) aimed at specific vulnerable groups such as sex workers and adolescents. Seven of programs did not provide technical training, but all provided orientation on how the voucher approach works.

In just over half the programs (11 of the 20), some supplies were provided, such as vaccines and vitamins for pregnant women (SMH programs), medicines for STI treatment (Nicaragua) and BCC materials. In nine programs no supplies were provided to the providers. In most FP programs, FP supplies could be bought at favorable or subsidized prices. In Taiwan equipment was provided for mini-laparotomy for sterilization kits.

Summary Box

Mapping, Selection, Contracting and Training of Providers

Where information is incomplete about what types of providers are working in which areas, and what level, capacity and quality of care is provided, the optimum approach to mapping and selecting providers is a combination of synthesizing existing data and information from different parties (government ministries, donors working in the area and others), open invitation to potential facilities in the media, and physical mapping and assessment (including technical capacity) of providers through visits to the area.

Contracting is critical in voucher program design and implementation and much could be done both to develop sound contracts and to use contracting to enforce quality standards and regulate providers more carefully. Examples of good practice exist (i.e. Nicaragua), as does the knowledge of how to contract, and this should become a core component of all future voucher program designs.

Just over half of the programs provided some form of technical training for service providers, and all provided orientation on the voucher approach. SFOs provide training as part of the franchise package and voucher service providers benefit from this if part of a franchise network.

4.5.2 Marketing and distribution of vouchers

Marketing: Most programs (16/20) organized an information campaign at the start, using mass media, posters, leaflets, or existing channels such as pre-organized community events (table 15). Three quarters of programs continued generating awareness about the vouchers through community gatherings and one third (7/20) also continued the information campaign. One program in Nicaragua had to abandon the mass media campaign after complaints by sex workers that the public would link vouchers to prostitution, making it more difficult to hide their profession from family members when using the voucher. A small number of programs (4/20) did not employ any marketing strategies prior to program implementation, preferring instead to make direct contacts with their target group members.

Generally, awareness creation campaigns were initiated through mass media campaigns (TV, movies, videos, radio, print), community sensitization/gatherings (public meetings, ceremonies, health /outreach

workers), distribution of posters and leaflets and door-to-door campaigns. Half of the programs used mass media, mostly at the start of the program. Taiwan and Korea used mass media over the whole period, as part of the overall objective to reduce fertility.

Table 15: Information campaigns in the 20 selected voucher programs

	Country	Campaign at start	Campaigns continued?	Community gatherings
1	Armenia	Yes	No	No
2	Bangladesh 1 (MOH)	Yes, Union DSF committee responsible for publicizing, use existent channels	No	Yes
3	Bangladesh 3 (Pop council)	Yes, Community Support Groups: drama shows, rafle draws, educational sessions	Yes, whole project period	Yes
4	Cambodia 1 (BTC)	Yes, local radio	No	Yes
5	Cambodia 4 (KfW)	Yes, local media	No	Yes
6	India-Agra in UP (USAID)	Yes, branding of nursing homes, light signs, posters, leaflets	No	Yes
7	India-Gujarat	Yes, using Gramsabhas (local leaders)	No	Yes
8	India-Delhi	No	No	Yes
9	Kenya 1 (KfW)	Yes, only during the start of phase 1, local radio	No	Yes
10	Korea	Yes, use of mass media (radio, print, movies), public meetings, field workers, mothers clubs	Yes, although less intensive	Yes
11	Nicaragua (SW)	Yes, but aborted at request of sex workers	No	No
12	Nicaragua (adol)	No	No	No
13	Nicaragua (cervical cancer)	Yes, TV, radio, newspapers, megaphones, TV, posters, leaflets at markets and health centers	No	Yes
14	Pakistan (MSI)	Yes, ceremony for brand launch, community meetings, distribution of clock or calendar to first 500 clients	Yes posters, wall paintings	Yes
15	Pakistan-DG Khan (Greenstar)	No, only interpersonal communication through door to door visits	No	No
16	Pakistan-Jhang (Greenstar)	No, only interpersonal communication through door to door visits	No	No
17	Sierra Leone (MSI)	Yes, radio talk shows, posters, leaflets	Yes, radio	Yes
18	Taiwan	Yes, extensive use mass/ print media, group education on FP at schools, factories, parents meetings, women's ass., farmers clubs	Yes, media, group education	Yes
19	Uganda-KfW	Yes, big radio blitz, radio talk shows, mobile cinema, posters, leaflets	Yes, radio, posters	Yes
20	Uganda (University)	Yes, radio talk show, mobile film vans, posters, also transporters used to disseminate information	Yes, through transporters	Yes

Community gatherings emerged as the most popular audience for marketing strategies, 15/20 programs employed some form of communal discussion and these ranged from meetings with community leaders (Gujarat, India), through visiting market places (KfW Kenya) to organizing discussions with women's groups (MSI, Pakistan). Only five programs did not use community gatherings as a means of providing information to beneficiaries: two in Nicaragua, two in Pakistan (Greenstar) and the one in Armenia.

Person-to-person or word-of-mouth marketing emerged as the optimum medium of reaching the target population group; all but one program (19/20) utilized this strategy. In the case of the KfW program in Kenya, person-to-person marketing was not used (i.e. visiting the houses or approaching everyone in the target population), but word-of-mouth promotion was used through local village leaders. Instead, the voucher distributors get in contact with village leaders and inform them of when and where they will be visiting their areas to sell vouchers. However, in later phases of the Kenya voucher program, the voucher distributors have begun to visit women in their homes to verify that they live in the program target area (particularly relevant for the slum areas included in the project).

Provision of information on vouchers is a key ingredient in determining success of a program. Consequently a number of voucher programs opted to use marketing channels deemed suitable for reaching target group members in a fast, flexible and cost-effective way. The choice and intensity of the

marketing strategies were determined by availability of resources and largely to existing local context (social and political environment).

Distribution of vouchers

For voucher distribution, the majority of countries (16 out of 20) used existing health staff or trained community workers to distribute vouchers. Four countries specifically trained local people to become 'voucher promoters'. For example, KfW Cambodia and KfW Kenya trained local people to distribute vouchers, MSI Sierra Leone used local people as marketing agents and the Uganda KfW program trained locals to become 'community based distributors' to go door-to-door to sell the vouchers and provide information to prospective clients.

Typically, voucher schemes either hire distributors on a full time basis (6/20); on a commission basis (3/20) or the vouchers are distributed by health or community workers as part of their routine activities (11/20). In ten programs the final payment (be it salary, commission or incentives) is either wholly or partially related to performance: in 7 programs this is the number of vouchers distributed, in one program the payment is directly related to the number of vouchers distributed as well as the number used (KfW-Cambodia), and in 2 programs (Taiwan and Korea) an incentive was given for each FP acceptor.

In some countries (KfW-Kenya and BTC-Cambodia) the mode of payment to the distributors had to be changed after initial problems. For example, in Kenya the program originally paid distributors on a commission basis for each voucher sold. This resulted in NGO distributors also selling to the non-poor, i.e. disregarding the selection criteria of clients, in order to maximize sales. This commission-based payment created a perverse incentive for the distributors and has now been changed to a stipend-based payment. Another illustration of the challenges in voucher distribution is in the BTC funded program in Cambodia where village health volunteers were tasked with distributing vouchers on top of their already heavy workloads, without any compensation or incentives. This led to voucher distribution being ignored compared to their other 'paid' tasks.

Summary Box

Marketing and Distribution of vouchers

Certain features of marketing in VPs have been shown to be effective in a number of ways. These include the importance of field workers to distribute vouchers and to supervise providers. Door to door visits for voucher distribution (i.e. MSI Pakistan program, Cambodia KfW) provide the additional opportunities to inform clients about services and key health messages, to undertake means testing and can also play an important part in fraud control mechanisms of a voucher program. Similarly, field supervision of service providers is a useful anti-fraud mechanism.

Although 4 programs specifically trained field workers for this task, a further 16 used existing networks of health staff and field and community workers. Half of the programs included a performance incentive based on the number of vouchers distributed and/or used, and in three cases this formed the basis for the whole payment.

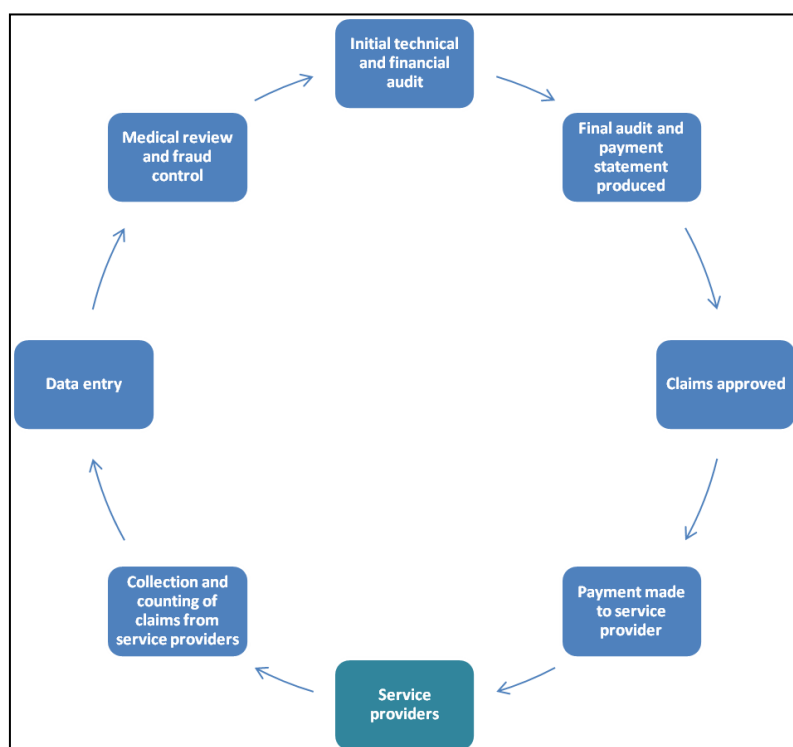
Marketing is a key ingredient in determining the success of a voucher program and as such it is important that marketing channels should be those that are suitable for reaching the target in fast, flexible and economic ways, particularly where resources for marketing are limited, which is often the case. Marketing can have an important effect on the uptake of services and as such voucher programs need to investigate and build synergies with existing initiatives.

4.5.3 Claims, Monitoring & Evaluation, Fraud Control & Quality Assurance

The Claims Process: The client purchases or receives, and subsequently uses the voucher; the service provider authenticates the voucher, provides the services and initiates the claims process by submitting the claim to the VMA. The VMA usually runs a variety of checks to ensure that the voucher is genuine, that the service provided is covered by the program and that the treatment was correct (see figure 6 below).

Checks and balances to prevent fraud include authenticating records of vouchers presented for reimbursement against the serial number of vouchers distributed, and following back a sample of vouchers to the beneficiaries to verify that the services were actually provided. According to most program documentation, once verification has taken place, providers should be reimbursed within (a maximum of) 30 days. However, in practice this is not always the case and administrative issues are frequently cited as delaying payments. This is a critical process for voucher programs as late payments can lead to providers pulling out of the program. In some programs (4/20) an initial advance is given and providers are then subsequently paid on a monthly basis.

Figure 6: Voucher claims processing



The mode of payment varies across the programs: cheques, bank transfers and cash transfer are fairly common, sometimes in combination. In almost all programs payment is done on a monthly basis, only in a research study in Bangladesh, payment was twice a year.

In some newly developed programs (e.g. in Madagascar and Zambia), mobile money transfers are being tested whereby the provider sends relevant information as a phone message and the computer software automatically responds by transferring a certain amount depending on the type of service and provider. In these programs, verification of services is after payment. If fraud or errors occur in the information sent (e.g. the wrong code for type of service provided), the usual measures are taken.

Most programs (except those without a physical voucher) use the voucher itself, together with a medical form, as the principal claims form.

Monitoring & Evaluation

As described above a physical voucher has a number of useful functions, including serving as an M&E and anti-fraud tool. The voucher can be used to collect information for improved monitoring: through the serial numbers vouchers can be traced throughout the system, from the moment the voucher is printed, given to distributors, distributed to the client, presented to the clinic, submitted for payment, and processed in the management and information system (MIS). This system is useful to prevent fraud, as it serves as proof that the client actually visited the clinic and received particular services.

Regular and on-going monitoring is a crucial aspect of quality control. Most voucher programs collect data for monitoring and evaluation purposes on a daily basis. Data are then used for feed-back on the performance of the voucher distributors, field workers (where there is no physical voucher) and/or health providers on a regular basis (see Table 16). Monitoring and evaluation is almost always done internally by the VMA; only in one program in Pakistan (MSI) are data collected by an external agency. In the Bangladesh voucher program where the tasks of a VMA are dispersed throughout the public health management system, this is done by DSF organizers posted at the district level and paid for by WHO, and they are overseen by national DSF coordinator based in the national DSF cell. The frequency of data collection varies across the 20 programs. Table 16 below illustrates how frequently data is collected.

Table 16: Frequency of reporting in 20 programs

Frequency	No.	Comment
Monthly	9	Bangladesh (MOH), India (all 3), Korea, 2 Pakistan (Greenstar), Taiwan and Uganda University
Quarterly	2	Cambodia (KfW) and Kenya (KfW) programs report on a quarterly basis to MOH and donor
Both	1	The KfW Uganda program had both monthly and quarterly updates
According to need	3	The 3 programs in Nicaragua collected data on a daily basis. Data were used for immediate feedback for improved management, for research and to report to donors
Annually	1	The program in Cambodia (BTC) reported annually the number of vouchers distributed and used
Other	4	M&E in Armenia is part of the regular HMIS. Bangladesh (PC) reported at the end of the research. Information regarding frequency was unavailable for Sierra Leone (MSI) and Pakistan (MSI)

Some eleven of the twenty voucher programs reported the results of the voucher program to their Ministries of Health, sometimes combined with reporting to donors. In 9/20 programs the reports were produced for the various donors.

Fraud Control & Quality Assurance

Anti-fraud measures tend to vary from one voucher program to another. Schemes operated by MOH structures or by NGOs generally have rules in place to guide the conduct of all employees and can apply these rules to deal with reported unprofessional conduct in the voucher program as in other areas.

Voucher schemes have a reputation for attracting a higher level of fraud than other, input-based approaches. Given that voucher programs entail the circulation of cash in the form of reimbursement payments, it is critical that management agencies promote an organizational culture that will not tolerate fraud or corruption and communicates this clearly to distributors and providers. Providers should know that they will be removed from the voucher program for any fraudulent activity and this should be done publicly to deter other providers from following the same course of action.

The most important types of fraud and unethical provider behaviour which have emerged to date, in different voucher programs include:

- Providers purchasing vouchers and seeking reimbursement for fictitious clients;
 - Distributors form an alliance with providers without provision of actual services;
 - Clients form an illegal alliance with providers to claim voucher reimbursement without service provision;
 - Providers hands in false claims;
 - Institutions treating complications inflate complication treatment or hand in false claims;
 - Forgery of vouchers;
 - Provider asks for money from voucher holders;
 - Provider rejects voucher clients.
- It is important to have a robust fraud detection system and these usually include, as a minimum: verification of services provided (ideally through a third party), an effective claims processing system, and a robust financial audit process. Most programs verify that the services have actually been provided through the revision of medical records or claims (8 programs), or by interviewing clients (7

programs). In three programs there was no verification of services and for two programs no information was obtained (see table 17). All programs developed their own information systems, and none of the programs has a monitoring system in place with software capable of detecting changes in trends (such as a sudden increase in claims from a single provider or at a particular time) which would assist in detecting fraud. Voucher programs would benefit from a generic information system using open access software, which can be adapted to local circumstances and information needs. Where the vouchers are kept at the facility (for abortion and GBV services), fraud control is more complicated and can only be done through medical record review and careful monitoring of the frequency of the claims (in case of fraud, irregularities are often seen in the number of claims during certain days, or from particular clinics).

Table 17: Verification of services, monitoring & evaluation of perceived and technical quality

#	Country	Verification of services provided	Perceived quality	Technical Quality
1	Armenia	Visits to facilities and interviews with clients	Yes, client interviews	Yes
2	Bangladesh (MOH)	Visits to facilities and interviews with clients	Occasionally	No
3	Bangladesh (Pop council)	No	Yes, client interviews	Yes
4	Cambodia (BTC)	20% of clients interviewed (at home)	No	No
5	Cambodia (KfW)	5%-10% of clients interviewed (at home)	Yes, client interviews	by MOH
6	India-Agra, UP (USAID)	5% of medical records checked	Yes, surveys by ASHAs	Yes, by VMA
7	India-Gujarat	No	No	Yes, when pilot in 5 districts, after scaling not properly done
8	India-Delhi (Mamta)	7% of medical records checked at district level, 2% at state level	No information	No information
9	Kenya 1 (KfW)	Claims are scrutinized by medical staff, spot checks in clinics, some limited record review	Occasional exit interviews	Yes, at start by NHIF, later by MOH technical working group
10	Korea	No	No	No
11	Nicaragua (SW)	All medical records reviewed	10% clients at prostitution sites	Medical record review
12	Nicaragua (adol)	All medical records reviewed	Mystery clients	Medical record review
13	Nicaragua (cerv.cancer)	All medical records reviewed and PAP smears	No	External QA of reading PAP slides
14	Pakistan (MSI)	Annual audit of 30% of providers	Client interviews	Observation done by MSI internal QA team
15	Pakistan -DG Khan	10% of clients interviewed (at home)	No information	QA visits by Greenstar teams quarterly
16	Pakistan-Jhang)	LQAS (Lot Quality Assurance Sampling) approach to verify services	No information	QA visits by project quality assurance officer monthly
17	Sierra Leone (MSI)	No information	No information	No information
18	Taiwan	5% of clients interviewed (at home)	No	No
19	Uganda	Medical records reviewed	Follow up study. QA visits	Quality audits
20	Uganda University	No information	Baseline and end-line Studies	Quality audits through regular supervisory visits

A robust monitoring and evaluation system can measure both perceived and technical quality. However, with the exception of those voucher programs which are developed by SFOs, quality assurance is generally not well developed, even in countries such as Kenya where the voucher program is entering its third phase. This is probably to do with both the cost of QA and the importance placed on quality by the VMA. As can be seen from table 17, about half of the programs have (or had) monitoring systems in place to measure perceived quality (i.e. how the clients or beneficiaries viewed the quality of services), including a program in Nicaragua which conducted interviews at prostitution sites. Common mechanisms include client interviews and mystery clients and some programs also undertake one-off qualitative studies using focus group discussions and other tried and tested methods. Fourteen of the 20 programs had some system in place for monitoring the technical quality service provision and, as might be expected, social franchising organizations are particularly strong in this area.

Summary Box

Claims, M&E, Fraud Control & Quality Assurance

Claims processing is still done manually in the 20 selected programs. Some new programs are

experimenting with 'mobile money' and verification of services after payment.

Data collection, almost always done internally by the VMA, is carried out on a daily basis and this information is used to feed back to participating providers and distributors. The design of voucher programs greatly facilitates monitoring through the distribution of vouchers with serial numbers and the processing of claims (with checks and balances to counteract fraud and inaccurate claims) submitted by providers.

Most programs verify if services have actually been provided, mostly through interviews with a sample of clients or medical record review. None has a system in place with software designed to detect changes in trends (such as a sudden increase in claims from a single provider or at a particular time). Voucher programs would benefit from one generic information system based on open access software, which can be adapted to the different needs of programs.

Regular and on-going monitoring is a crucial aspect of quality control and can measure both perceived and technical quality. However, with the exception of those voucher programs which are developed by SFOs, quality assurance is generally not well developed, even in countries such as Kenya where the voucher program is entering its third phase. This is not specific to voucher programs but is a feature of health systems in general, and in particular public private partnerships where insufficient emphasis is placed by governments on the quality of services provided through the private sector.

Over time, voucher reimbursement payments should lead to an improvement in quality as providers compete to attract potential clients by investing in increased quality. In Kenya, providers have used voucher revenue to make their facilities more attractive (i.e. painting, curtains, kitchens) and even to hire non-medical staff such as cleaners and gardeners. They buy medical equipment for improved diagnosis and treatment with voucher payments and in some cases have used the funds to expand facilities so as to be able to treat more voucher clients: new theatres, more beds and even new maternity wards.

5. Lessons learnt, discussion and conclusions

In analyzing the data and information gathered through the review, two outcomes stood out among the findings: first, the large and growing number of voucher programs; and second, the wide range of different structures within the voucher programs.

Not only did the authors identify many more voucher programs than they had originally envisaged, there is also a growing number of new programs in the pipeline, currently being planned or designed (i.e. in Yemen funded by KfW, in Somalia funded by UNICEF and in Zambia funded by DFID). Most existing voucher programs are in Asia, but the number of programs in Africa is also growing fast. An important reason for this increase may lie in the currently dwindling financial resources available to support health service delivery in low-income countries. With only 4 years remaining to reach the MDG targets, vouchers can enable governments and donors to target resources at underserved groups (sex workers, adolescents or the rural poor) and at increasing utilization of specific under-consumed public health services, such as STIs, FP and institutional deliveries (Meyer, C. et al 2011). Vouchers also provide an opportunity to leverage the resources (both financial and manpower) of the private sector. This is illustrated in the review of 40 voucher programs; with the exception of Armenia, all *on-going* voucher programs target the vouchers at specific population groups and the large majority of these programs (i.e. 38 of the 40 programs) provide access for the target group to a defined package of services (between 1 and 3 different service types), most often safe motherhood and family planning services. In addition, more than three quarters of the programs contract private sector providers of some form (for-profit or not-for-profit), with India leading the field.

While voucher programs are increasing in number in Asia and Africa, Latin America remains the exception with no on-going voucher programs at the time of writing³³. This may be because structures such as social safety net programs are already in place in these countries which enable access to services for underserved segments of the population (in the form of social health insurance, social pensions and other programs).

While the authors found that the objectives of adopting the voucher approach did not differ greatly (see 5.1 below), the ways in which voucher programs were, and continue to be, structured to meet those objectives do vary in terms of their size, management and contracting arrangements, distribution strategies, and benefits for clients. There are also, however, a number of similarities such as the level of reimbursement for services across the different programs, the reimbursement mechanisms and claims processing systems.

In this last section, we summarize the principal findings from the structural review (how do programs differ in structural terms) and try to tease out how these differences impact on the achievement of program objectives. We also look at some of the key issues that are often raised by detractors of voucher schemes (flexibility, appropriateness and sustainability) and finally present a list of the lessons learned. We do this by looking at what is successful (and less successful) about voucher programs (the lessons that can be drawn out) through the lens of an operational and structural analysis of the 40 programs.

5.1 Key Findings from the Review

In this section we present the key findings from Section 4 on the detailed review of 20 voucher programs, informed by the wider review presented in Section 3, and highlight the key learning points.

5.1.1 Structural issues

Why are voucher programs developed?

Voucher schemes have been developed with a range of objectives in mind and these objectives differ according to who originates and finances the voucher program. However, the review shows that all of the

³³ During the detailed review process, the authors did not identify any voucher programs currently operating in Latin America but would be pleased to hear from anyone who does know of examples in this region.

voucher programs share the common objective of increasing utilization of a priority service, sometimes for the general population, but mostly by poor, disadvantaged or under-served groups. It is also true to say that vouchers which enable access to services as opposed to products (i.e. insecticide treated bed nets), have been used overwhelmingly in the field of sexual and reproductive health care (all of the 40 programs in the wider review provided access to a SRH service, while some also provided access to treatment of childhood diseases). In addition, the majority of the programs enable contracting of the private sector (18 of 20 programs in the detailed review contract private sector providers and of these 11 contract both public and private providers to a varying degree³⁴).

Looking at the range of objectives of the voucher programs under review, the following observations can be made:

- Vouchers are successfully used to address *tiered or multiple objectives*, such as increased service utilization for a particular service or set of services, leveraging of private sector provision, and targeting of a particular group (i.e. India Gujarat which enables free access by poor pregnant women to private obstetricians for institutional delivery);
- Vouchers provide a means of working with the private sector because they require contracts, and contracts can be used to enable (and to enforce) monitoring of service provision and tracking of payments. Voucher programs are an effective means of regulating private providers, including curbing informal payments and this is often expressed in their objectives (i.e. Armenia);
- All donor-funded voucher programs, and many government funded programs have an equity-related objective to enhance access to services by the poor. Targeting of services is by a combination of mechanisms, most commonly a poverty assessment tool (i.e. Kenya, Cambodia, BPL cards in India) and geographical targeting of poorer areas. The capacity of vouchers to target a particular population group is an important advantage. In the context of scarce or insufficient resources, vouchers can be used to channel subsidies to those most in need, either by governments or donor agencies. Once the systems are set up, voucher programs can be used to channel additional subsidies to clients such as transport subsidies, food and other benefits, or additional services;
- Programs initiated by donors have often a wider health sector agenda, such as KfW's aim to encourage countries towards the introduction of social health insurance. Vouchers introduce skills for SHI such as accreditation or provider approval, claims processing and also insurance concepts such pre-payment (i.e. the nominal price paid for the voucher itself).

Observations on Size and Scaling-up

- Existing voucher programs tend to be either large (with a budget of over US\$ 1 million) or small (with a budget of 250,000 or less) with a marked lack of medium-sized programs (3, all in India) indicating that voucher programs are either pilots, research programs or small interventions with limited funding that come to a natural end, or that they are scaled up to become larger programs.
- Voucher programs can be, and are, successfully scaled up; once the systems are in place to manage and implement a voucher program, the management costs amortize over time and new areas and products can be added without the same high level of start-up costs. Scaling up of voucher programs has entailed geographic expansion (i.e. Kenya, Uganda, Bangladesh), the widening of the services provided through the voucher (i.e. Armenia, Cambodia, Uganda), and/or the replication of what is perceived to be a successful voucher approach in a new area (State governments in India, PSI in Pakistan).
- Voucher programs that are donor-funded are often accused of being un-sustainable. However, the KfW-funded voucher programs in Cambodia, Kenya and Uganda are all in or planning subsequent phases and the Kenya program in particular is demonstrating sustainability with the government taking on a more important role in terms of both governance and funding.

³⁴ Even more stark, 34 of 40 programs in the wider review contract private sector providers and of these 16 contract both public and private providers to a varying degree.

- Not only are voucher programs tailored during their design to the policy environment in which they are to be implemented (i.e. in Cambodia), they also have the flexibility to adapt over time to suit changes in the external environment, as seen in the national Taiwan FP voucher program.
- Voucher programs not only react to changes in the external environment but can also push for positive changes, such as increased financial autonomy for providers, as has been seen in the Kenya voucher program.

Management & Governance

There is a wide range of different management structures in place, largely related to the type of initiating agency (i.e. whether government or non-government), and the need for voucher programs to be tailored to the policy environment in which they are implemented (i.e. the preference or otherwise of governments for contracting with different sectors). Management arrangements are particularly varied in government run programs. The following observations can be drawn from the review:

- Private-for-profit providers usually have management and financial autonomy to hire/fire staff and to reinvest surpluses. Public providers have a varying degree of autonomy, rarely embracing the freedom to hire/fire medical staff at will, but sometimes including the ability to spend voucher reimbursements as they wish and to hire/fire *non-medical* staff (i.e. public facilities in the Kenya voucher program learned how to overcome bureaucratic hurdles and use the revenue to attract more clients). With private-not-for-profit providers, the level of autonomy is much higher than it is in the public sector, although the analysis is less clear and depends on whether facilities are faith-based, local or international NGOs, and whether they are part of a larger network of facilities (such as with PSI or MSI).
- There is no doubt that the optimum arrangement for participating providers is to have autonomy to spend voucher reimbursements on quality improvements, staff incentives and other activities. Without this level of autonomy, the supply-side response whereby providers use reimbursements to improve quality in a virtuous cycle to attract new clients is limited³⁵. Autonomy to hire and fire staff enables providers to ensure that the whole team is oriented towards the goals or objectives of the facility (and hopefully also the voucher program) but we have not seen this level of autonomy among public sector providers in the current review³⁶.
- However, the issue of management autonomy at the VMA level (the freedom to make contracts, including the autonomy to hire and fire facilities through termination of the contract) is less well understood and would benefit from further study. In government-owned and managed programs the management structure is often more complex and multi-layered, as seen in section 4.2.1, with the attendant consequences for reduced transparency and accountability. In theory it is possible for government-owned programs to have the autonomy to hire and fire the management entity (VMA). In the review, we did not find such an example although there is a small new program in Pakistan where the government has contracted a private sector VMA (Sehat Sahulat), leaving the government the option to change the VMA, i.e. fire the current one and contract a new one. Nevertheless, there are examples of governments which have discontinued contracts with health facilities due to fraud or high prices (i.e. Armenia, Taiwan) and many instances of programs initiated and managed by non-profit organizations which have fired facilities or discontinued contracts due to fraud or non-compliance with the guidelines.
- There is little experience in voucher programs with tendering out the VMA function (only in Kenya and Cambodia where this was part of the donor regulations), but there are a number of examples where

³⁵ There are, however, examples such as the Kenya program where public sector providers have participated in the voucher scheme for many years with very little access to reimbursement payments.

³⁶ In supply-side PBF interventions such as those in the Great Lakes region, there is a level of autonomy to use incentives at the facility's discretion, including to hire and fire and this has been shown to have a positive impact on quality. See Basinga P, Gertler PJ, Binagwaho A et al.. *Effect on maternal and child health services in Rwanda of payment to primary health-care providers for performance: an impact evaluation*. The Lancet 377: 1421–8, 2011.

VMAs (both government and non-government) are successfully contracting out specific management tasks (voucher distribution, claims processing and verification). Contracting out key functions such as data verification or quality assurance strengthens fraud control and avoids the temptation to under-invest in the quality of services (i.e. training or supervision). Private-for-profit VMAs, particularly those in the financial sector such as accountancy firms, have an imperative to retain profits and therefore fewer tasks tend to be contracted out and there is an emphasis on fraud and tight financial controls (i.e. PwC which manages the KfW-funded program in Kenya). VMAs which are also service providers (i.e. MSI and PSI) generally have a greater focus on quality of care, particularly in social franchises. None of the VMAs in the detailed review which were/are also NGOs contracted out management functions to third parties. However, in the newer voucher programs (not included in the review) some NGOs have contracted specialized companies to implement claims processing using mobile technology for funds transfer.

- It is difficult to draw conclusions from the review about ideal governance structures – but it is generally accepted that an independent governance structure is the preferred option. The review shows that the involvement of donors in the design of a voucher program tends to lead to more independent governance structures. However, even in government-managed voucher schemes it is possible to build into the scheme a system of balances and checks to counteract fraud, although this sometimes places a heavy burden on the facilities (i.e. Bangladesh). In many schemes where the management and governance structures are the same, the programs do benefit from additional technical and management expertise provided by associated or independent groups (Pakistan) and this can act as a form of external guidance in terms of flagging up concerns.

What services are provided through Voucher programs and why?

All of the voucher programs in the wider review provide (or have provided in the past) access to reproductive health services of some form. These include safe motherhood (70 percent) and family planning (40 percent) services which are the most common, STI services (23 percent), as well as diagnosis and treatment of cervical cancer in Nicaragua, abortion services in Cambodia and GBV recovery services in the Kenya program.

As well as geographical extension and widening of the range of SRH services, recent discussions have also focused on the potential to use vouchers for general health services although this remains highly unusual; of the existing programs, only the Armenia program currently provides services for childhood diseases³⁷, in addition to SMH services. The KfW scheme in Cambodia is planning to include voucher services for chronic diseases (diabetes, hypertension) and treatment of cataracts, illustrating that the perceived scope of voucher programs is widening. Below we summarize the analysis of the number and types of services provided, and look at what significance this has for the approach in general:

- There would seem to be a practical upper limit to the number of services in each voucher package or scheme (see section 4.3.1). Overall, voucher programs provide access to a limited number of services with the majority of programs (70 percent) providing access to just one service (although this may be a composite service as in the case of safe motherhood which may include ANC, safe delivery and treatment of complications, and sometimes even neonatal care and FP). In low income or lower-middle income countries, the maximum number of services provided in a single voucher scheme is three, although this is set to increase through the introduction of new services in countries such as Cambodia.
- Voucher programs initiated by donors have a tendency to cover more than one service in the benefit package (4 of the 5 donor-initiated programs, including all of the KfW-funded programs, provide three services, which may reflect the remit of donors to address wider reproductive health and poverty-related challenges (as encapsulated in the MDGs). Governments and NGOs on the other hand may be

³⁷ The two China voucher programs in the wider review of 40 programs also provided treatment of childhood diseases in their schemes but are not on-going.

more interested in addressing a relevant public health problem using the smallest subsidy possible (i.e. a single service).

- As voucher schemes introduce more services, they begin to resemble insurance schemes. A continuum seems to exist with simple schemes providing access to a single service for a specific group at one end, and social health insurance at the other. Voucher schemes, such in Tanzania, which provide access to a wider basket of services for a defined period of time, for a beneficiary as well as his or her family, are closer to insurance programs on this continuum. The Tanzania program which could be called a hybrid voucher/insurance intervention, also has the explicit objective of encouraging the beneficiaries (poor pregnant women and their families) to remain insured at their own (albeit heavily subsidized) cost after the project ends. This is an approach for countries with functioning national social health insurance schemes, and where vouchers would enable these schemes to better target underserved groups.
- Other benefits include transport, food and in-kind benefits such as clothing or baby packages. Half of the 20 voucher programs contribute to the cost of transport for beneficiaries, all of them except one in Asia where the cost of transport is a significant barrier to the uptake of health services. One of the on-going programs in Africa in the detailed review is considering introducing partial reimbursements for transport costs (Kenya).

Pricing and Targeting in Voucher Programs

Vouchers are a means of addressing some of the financial barriers to accessing services, and also a mechanism for channeling resources to specific groups. As such, the pricing and targeting structures are critical components of voucher programs. Below we distil some of the lessons from the structural review:

- All *on-going* programs provide access to services which are free at the point of delivery, and the majority also distribute the vouchers for free. Only the KfW-funded programs in Uganda and Kenya, as well as some of the social franchising programs, charge a nominal fee for the voucher and this is linked to the insurance concept of pre-payment. Commercial autonomy of the VMA is also a factor in charging a small fee which may be used, as in Kenya, to pay voucher distributors.
- There are many reasons why voucher programs provide access to free services but possibly *the* most important reason is to provide women, as well as other beneficiaries, with the certainty that there will be no additional or informal charges, no matter what services she needs. In this case, the physical vouchers are 'evidence' for the woman and the facility that the services should be provided free at the point of delivery, and so help to tackle informal payments (Armenia) and to protect against potential catastrophic health costs, such as those associated with the treatment of complications of delivery³⁸.
- The use of a substitute mechanism, such as a BPL card (India) in place of a physical voucher does not make much difference in terms of effectiveness or targeting and data collection. For abortion and GBV services, vouchers are placed at the facility for submitting to the claims processing agency, due to the stigmatization which often accompanies women accessing both types of service.
- Of the *on-going* voucher programs, all use some form of targeting to channel resources to a priority group with the exception of the national program in Armenia which uses the voucher approach both to provide access to a priority service for the population as a whole through a PPP framework, and to curb informal payments.
- All donor-funded voucher programs and the majority of the government-managed programs have an equity objective to increase access specifically for the poor or a sub-set of the poor (i.e. poor pregnant women, or poor adolescents at risk of STIs). Targeting mechanisms include means testing (used in 13 programs either alone or in combination with other methods), geographical or area based targeting (4 programs), and universal targeting (3 programs).
- Voucher programs need to achieve a balance between the costs of different targeting mechanisms and the accuracy of the resulting data, with door-to-door means testing of all prospective clients highly

³⁸ This has been seen in Kenya when the program investigated the number of vouchers purchased but not actually used. Women are buying the safe motherhood voucher as an 'insurance' against potential future costs of delivery.

resource intensive, while also producing more accurate results. The chosen approach should also depend on the availability and accuracy of existing socio-economic data on the target beneficiary population. A broad range of literature exists on this topic³⁹ which spans sectors other than just health. Operational research could usefully apply this literature to voucher program implementation in order to come up with best (or at least 'good') practice to inform future programming.

Which Types of Facilities are being Contracted by Voucher Programs and Why?

Voucher programs contract providers from three broad sectors: government (including both ministry of health and municipal facilities); not-for-profit (encompassing a wide range of FBO, local and international NGO facility types); and, private commercial facilities (which are not a homogenous group). While the reasons for different types of providers joining a voucher program can be explained reasonably clearly, the role of competition in voucher programs is one the least well understood areas. The following observations can be made from the review about the mix of providers and the role of competition between them:

- Three quarters of 20 programs have the ability to contract providers from two or three sectors. Where providers are contracted from a single sector, this is overwhelmingly from the private sector, illustrating the role voucher programs have played and continue to play in enabling PPPs and serving as PPP frameworks for governments in the absence of a wider PPP policy.
- The type of provider in a voucher program is related to:
 - Availability and capacity of providers - what networks exist and what capacity do they have to join the scheme?
 - Pricing strategies - where there are low reimbursement prices, as in the Bangladesh DSF Program, and/or a lack of spare capacity as in the Delhi-Mamta program, private providers do not, or only reluctantly, join the voucher program;
 - Government policies and strategies - governments may not wish to contract with the private sector as in Cambodia, where the program only contracts private providers where the government cannot provide this service and/or where public sector health workers are not engaging in dual practice. We have seen that policies around user fees also impact on the participation of public sector providers in voucher programs as in Uganda where the government felt that the program was inconsistent with its policy to abolish user fees⁴⁰
- There are two principal ways in which competition works in voucher programs: among providers to join the program at the approval process (and to a lesser extent to remain in the program at contract renewal stage); and competition among providers to attract clients into their facilities. In areas where there are few providers (rural areas for instance) providers may compete *for* the market as opposed to *within* the market, adapting their services to suit the needs of potential clients. This is an important aspect of voucher programs and has been seen in Kenya and Nicaragua. Both the availability and the capacity of providers to join a voucher program largely define the level of competition that will prevail and these areas need to be investigated during the design of any new program and monitored on an on-going basis.
- In theory the more competition in a voucher program, the greater the impetus to align services with clients' wishes through investing reimbursement payments. Linked to this, there is a common assumption that voucher programs should be developed only in areas where there is competition between providers. There are, however, examples such as in Gujarat in India, where voucher programs are working successfully in rural or hard-to-reach areas where there are few providers from a single

³⁹ Gwatkin D.R. *The current state of knowledge about targeting health programs to reach the poor*, February 2000 can be found at: <http://siteresources.worldbank.org/INTPAH/Resources/Publications/Recent-Papers/targeting.pdf> and Besley T., and Kanbur R, *The Principles of Targeting*, Policy Research and External Affairs Working Paper No. 385. World Bank, March 1990.

⁴⁰ However, the Government of Uganda is now considering allowing public sector facilities to join the program given the widespread practice of informal payments in the public sector and the success of the voucher program in serving specific underserved groups (i.e. poor pregnant women).

sector (often private) that have spare capacity to treat voucher clients. It is not known whether these programs would function better if competition were introduced into the mix. For instance, in the Gujarat approach the quality of care was judged to be sub-optimal in a number of evaluations. This is largely a factor of poor contracting, along with poor monitoring and enforcing of those contracts. The question is: ‘would quality improve if competition existed between providers for this business?’, and this issue would benefit from further research.

- The optimum number of providers in a voucher program is the number of providers that will both ensure sufficient capacity for quality service provision, while enabling providers to earn sufficient income through increased client load to attract and keep them in the program. This will differ from place to place and is a critical component of the design process.
- There are successful examples of programs where all public sector facilities are contracted (or even co-opted) in the program areas, and further investigation is needed to compare and contrast the role of competition in these types of program.

What we know about Setting Reimbursement Rates

This is one of the least well understood areas of voucher program design and implementation. A body of experience is gradually being built up on how best to set the reimbursement rates for voucher programs but this is an area which requires considerable further research and investigation. It is unlikely that one approach will suit all programs. From the review it is apparent that there is a range of different methods and approaches used in setting reimbursement rates, including (often in combination) costing studies, analysis of market prices, facility-based negotiations, and by review of rates in other voucher or similar programs.

From the review of voucher programs, as well as the experience of the authors in designing and evaluating a number of voucher programs, the following lessons can be drawn:

- Costing studies are complex to design and time consuming to carry out and do not always take account of the varied costing structures in different types of facilities, which are often not transparent, particularly in not-for-profit facilities. They can provide a useful basis from which to negotiate with providers (i.e. Uganda), but need to be regularly up-dated to take account of inflation and other external factors which influence costs.
- Negotiating with the facilities is critical to voucher program design; when costing studies form the basis for setting reimbursement rates, those rates are still negotiated with providers. This generates ‘buy-in’ from providers and leads to lower rates since providers will be attracted to voucher programs due to their potential to attract additional clients. In Nicaragua, providers were prepared to offer services at prices well below their standard fee rates due to the potential of voucher-bearing clients to fill their clinics, use excess capacity, and provide a steady and reliable income.
- Reimbursement rates can reflect (or try to reflect) the *whole cost* of providing the service (i.e. including fixed and variable costs), they can be based on *marginal costs* (i.e. the cost of providing one additional service), or can be based on price schedules and *user fees* (i.e. the market). In government-run programs, such as in Bangladesh, the reimbursement rate may only make a contribution towards the cost of providing the service since these costs are otherwise covered through fixed budget contributions. In this case, the reimbursement acts more like an incentive. In the Gujarat program, the rates were set with the specific objective of contracting private providers and therefore had to be negotiated with them to ensure adequate participation, i.e. rates need to reflect the objectives of the overall program.
- For most recently designed programs, reimbursement rates are set according to market prices, and then negotiated downwards (often up to 30 percent). Rates also need to be adjusted regularly (say, annually) to take account of changes in the external environment such as inflationary pressures or policy changes on user fees. A key to success is to re-negotiate rates on a regular basis as more information becomes available.

- Reimbursement rates in voucher programs are nearly always agreed in advance of services being provided and the rates are almost always a flat rate. This means a set price for a particular service such as a normal delivery, and this price is always the same regardless of the time spent on the delivery or type of medicines provided. Several programs set one rate for normal delivery and another rate for a C-section but in Gujarat, India, an average rate is agreed per 100 deliveries, on the assumption that private gynecologists will perform C-sections for 7 percent of deliveries. This has led to some private providers referring clients onto the public hospitals for treatment of complications to save costs.
- Many voucher programs pay, or are moving to a system of paying, differential reimbursement rates according to the type of provider (public, private, NGO/FBO) and levels within the health system (hospital, health center and so on). Although more onerous to design, this is a truer reflection of the different costing structures.

It is unlikely that one approach will suit all programs and program designs must take account of the following:

- *Context* - rates paid in other similar programs will influence what is 'acceptable';
- *Capacity* - spare capacity will influence decisions to participate, as well as what is accepted as 'sufficient' reimbursement;
- *Experience and skills of the implementing agency* - the government may have little experience of negotiating with private sector providers;
- *Specific program objectives* - if the principal objective is to contract with the private sector then rates must be set accordingly;
- *Regular review* – rates should be regularly reviewed and program managers should be prepared to negotiate with providers, adapting prices to changes in the external and internal environment such as inflation. It is difficult, but not impossible, to reduce rates as has been seen in the Kenya program.

5.1.2 Implementation Issues

Provider contracting

Contracting is critical in voucher program design and implementation and much can be done both to develop sound contracts and to use contracting to enforce quality standards and regulate providers more effectively. Poor contracting (i.e. lack of detail) and poor enforcement of contracts are often responsible for less than optimal performance of voucher programs, particularly regarding quality of care. However, examples of good practice do exist (i.e. Nicaragua) as does the knowledge of how to contract, and this should be built into the design of future voucher programs. Used properly, contracts are an effective tool for:

- Moving towards greater regulation of private sector providers: private providers have to open their doors to monitoring visits by VMAs and transparency can be enforced through careful monitoring and verification, particularly in terms of charging informal fees;
- Clearly setting out expected quality standards and protocols and acting as the basis for enforcing those standards;
- Mitigating against fraudulent practice; providers can be expelled from the program for fraud and their contracts not renewed due to malpractice;
- Bringing managing agencies (often governments) and providers from different sectors to the negotiating table and serving as a mechanism for discussing and agreeing pricing of key services.

Provider Approval, Quality Assurance and Fraud control

Although accreditation is often talked about as a critical component of voucher programing, none of the countries in the detailed review were using full accreditation and instead use a simplified system of

‘provider approval’, based on agreed quality criteria. However, the use of agreed quality criteria for selection of providers is also very weak in government managed programs, many of which (i.e. Bangladesh DSF), simply co-opt public providers operating in the program area, although functionality is usually checked (e.g. capacity for Emergency Obstetric Care). Despite this, vouchers do represent an excellent opportunity to introduce and strengthen approval (and even accreditation) processes, and to assist in developing capacity to measure and maintain the quality of health services and providers, particularly in the private and NGO/FBO sectors. Voucher schemes which are started as adjuncts to social franchising programs benefit from much stronger provider approval systems, but this is wholly within the non-government sector (for-profit or not-for-profit). There is potential for these skills to be shared with government-run programs.

With the exception of those voucher programs that are developed by SFOs, quality assurance is generally not well developed, even in countries such as Kenya where the voucher program is entering its third phase. This is probably to do with both the costs of QA and the importance placed on quality by the VMA relative to other program components. There remains great potential, however, for voucher programs to build capacity for QA both internally and with their government partners.

Voucher schemes have a reputation for attracting a higher level of fraud than other, input-based approaches. However, fraud is a reality in any system where cash is circulating and even in western social health insurance programs such as that in Germany, a certain level of fraud is seen. A body of knowledge has built up concerning how to counteract fraud including the following minimum measures: verification of services provided (ideally through a third party), a robust monitoring system with software designed to detect changes in trends (such as a sudden increase in claims for a single provider or at a particular time), a claims processing system with both clinical and financial checks and balances (i.e. revision of medical records and authenticating records of vouchers presented for reimbursement against the serial number of vouchers distributed), and a rigorous annual financial audit process.

Voucher Distribution and Marketing

Certain features of marketing in voucher programs have been shown to be effective. These include the importance of field workers to distribute vouchers and to supervise providers. Door-to-door visits for voucher distribution are used by most of the programs with a few exceptions (i.e. Armenia, Kenya KfW) as they are a powerful marketing tool, providing the opportunity to inform clients about services and key health messages and to undertake means testing. Household visits can also play an important part in fraud control mechanisms, as can field supervision of service providers.

Six of the twenty programs hired field workers on a full-time basis, and only three on a commission basis, while eleven programs integrated voucher distribution into the existing roles of community-based workers. Half of the programs included a performance incentive based on the number of vouchers distributed and/or used and in three cases this formed the basis for the whole payment (Cambodia KfW, Uganda KfW, Sierra Leone). Performance-based payments can lead to perverse incentives to distribute more vouchers than needed (including to those outside the target group as occurred in Kenya) and this needs to be closely monitored.

Marketing is a key ingredient in determining the success of a voucher program and as such it is important that marketing channels should be those that are suitable for reaching the target in fast, flexible and economic ways, particularly where resources for marketing are limited, which is often the case. Marketing can have an important effect on the uptake of services (e.g. Uganda-KfW where marketing played an important role in increasing the use of STI vouchers) and as such voucher programs need to investigate and build synergies with existing initiatives.

M&E and Claims Processing

Claims processing is very similar from program to program and is the system through which providers are reimbursed for the services provided. The system usually comprises a series of financial, administrative and clinical checks to ensure that the right services were provided to eligible clients in the appropriate way.

Poor and inefficient claims processing can bring a voucher program to a halt (i.e. in Uganda in the first phase) and can result in a high level of fraud and in providers pulling out of the program (for late payments).

In the majority of voucher programs reviewed, reimbursement payments are meant to be made within a maximum period of 30 days following verification of services. In practice, late payments are often cited by providers as the source of dissatisfaction (Bangladesh) and can lead to providers threatening to pull out of the program (Kenya-KfW). While the most common form of payment is by cash, cheque or bank transfer (providers *must* have a bank account to participate), new voucher programs are experimenting with mobile money transfers (as in recently designed Zambia adolescent RH voucher program financed by DFID).

Regular and on-going monitoring is a crucial aspect of quality control. Most voucher programs collect data for monitoring and evaluation purposes on a daily basis and this is used to feed back to participating providers and distributors. Monitoring and evaluation is almost always done internally by the VMA; only in one program in Pakistan (MSI) are data collected by an external agency. The design of voucher programs greatly facilitates monitoring through the distribution of vouchers with serial numbers and the processing of claims (with checks and balances to counteract fraud and inaccurate claims) submitted by providers.

5.2 Sustainability, flexibility and appropriateness of the Voucher Approach

In this section we look at the possible reasons behind the proliferation of voucher programs over the last 5-7 years, and tackle some of the often-cited criticisms of voucher programs, that they are unsustainable and set up parallel systems to government services.

5.2.1 Sustainability of the Approach

'Sustainability' usually refers to both *financial* and *institutional* sustainability. It is often said that voucher programs are not sustainable, and it is true that the majority of programs entail the subsidization of the costs of service provision, either by a donor organization or by a government. In terms of financial sustainability, there are no fully sustainable program approaches which have succeeded to date in increasing access to basic health services for the poor and other underserved groups, to the authors' knowledge. In terms of institutional sustainability, there are examples of voucher programs which are (or were) on-going for many years and which were a fully integrated component of the country's health service delivery system (Taiwan, Korea, Bangladesh DSF).

Of the wider review of 40 voucher programs (see Section 3) only 7 programs ceased to operate due to lack of funding, almost all of them initiated in the 1990s. All programs initiated by governments during the last decade are still on-going and most are being scaled up; evidence that the approach is considered useful. Those voucher programs which were initiated by government *or* where government is closely involved in its implementation tend to have larger budgets and a broader geographical spread, such as the Bangladesh DSF program, the Taiwan and Korea FP programs, and the KfW-funded program in Kenya where the government is increasingly involved in the management and governance of the program⁴¹. The Kenya program, despite being donor-funded, is making considerable headway towards institutional sustainability and is attracting a larger portion of government funding during Phase 3.

Voucher programs that were initiated by donors or NGOs with the aim of piloting innovative financing approaches to maternal and newborn mortality reduction tend to start small and then be scaled up, or produce research results that inform new, larger programs (i.e. programs in Bangladesh, Cambodia, India, Kenya, Pakistan and Uganda). The donor funded voucher programs in Kenya and Uganda are among the most sustainable models currently in operation. Both programs began distributing vouchers more than five years ago in 2006; the Kenya program is entering its third phase, expanding geographically to new areas and is now benefiting from a sizeable financial contribution by the government, while the Uganda program has expanded to include new services (STI, SMH and FP) and has attracted new donors (USAID in addition

⁴¹ The government of Kenya is financing the Project Management Unit in the Ministry of Health which is staffed by four people.

to the original donors WB/GPOBA and KfW). The KfW-funded program in Cambodia which began in 2010 is already developing a second phase and is planning the expansion of SRH services to include cervical and breast cancer screening and to include other services in the voucher package such as treatment of hypertension, diabetes, and cataracts. These programs aim to introduce and build knowledge and skills for social health insurance using the voucher approach and, in the longer-term, support a move towards the introduction of SHI as in the KfW-funded Tanzania program (see 5.1 above). Sustainability is a fundamental part of the design process from the outset.

Voucher programs have endured because they have been shown to reach their objectives. The early programs in Korea and Taiwan both accelerated the reduction of fertility such that they have been described in many papers as among the world's most successful FP programs (Trewinnard K.1998, Sun TH 1987, Robey 1987). In China the programs were successful in bringing poor mothers and children into primary health care, significantly reducing health inequities in access to maternal and child health services, and improving the health status of the poorest people (MOH China 2003). Voucher schemes for SRH in Asia (Bangladesh, Pakistan and particularly in India), showed similar results, indicating that vouchers can reduce inequities in access to health care through increasing demand more among the poor than the non-poor. The small programs in the nineties successfully targeted highly disadvantaged populations (such as sex workers, young people and slum dwellers) and preliminary results of the Population Council's evaluation of five voucher schemes in Bangladesh, Cambodia, Kenya, Uganda and Tanzania also show positive results on utilization and equity⁴².

5.2.2 Flexibility and Appropriateness of the approach

The review has shown that vouchers are highly flexible in a number of ways:

- The structure of voucher programs can be adapted during the design process to the policy and operating environment of the country in which they will operate (see section 4.1.2). Within the basic voucher approach, this has led to a variety of management and governance structures and practices, a range of pricing policies, and different implementation arrangements in terms of contracting, voucher distribution, marketing and so on;
- As they progress, voucher programs can adapt to *changes* in the policy and operating environment, including changes in policies on user fees, levels of provider autonomy, willingness of the government to contract with private providers and so on (see section 4.1.4) ; and
- Vouchers work well with supply-side approaches (results-based supply-side approaches such as P4P or PBF as practiced in Rwanda and Burundi and/or input-based approaches to strengthen supply such as social franchising, and investments in training, infrastructure and equipment). They also work well with other demand-side approaches (such as conditional cash transfers and social health insurance interventions).

The case of Taiwan illustrates how flexible the voucher approach is in adapting to changes in the operating and policy environment. By altering a few aspects the program, the government could continue to channel resources to priority services but, in the context of rising program costs and decreasing resources, the subsidy continued to reach those less able to pay. As the country moved towards replacement fertility levels, the program moved to subsidizing the poorest and was eventually discontinued (Lin and Huang 1981).

On the ground voucher programs can overcome issues such as lack of autonomy to sign contracts or to use voucher revenue in public health facilities, shortages of health service providers (i.e. in rural areas), and absence of PPP frameworks and policies. Once voucher systems are set up and functioning, they can be

⁴²Bellows et al, Increase in facility-based deliveries associated with launch of an output-based maternal health voucher program among residents of informal settlements in Nairobi, Kenya, accepted for publication by *Health Policy and Planning*. Obare et al, Assessing socio-economic inequality in service utilization in the context of the reproductive health vouchers program in Kenya, submitted to *Health Policy and Planning*.

expanded and adapted at low cost to address new or emerging challenges such as transport to the facilities (some half of the voucher programs reviewed included a transport subsidy), food to improve the nutritional status of women (in Kenya the voucher program works with the WFP to provide nutritional supplements to pregnant women) and other benefits. When potential beneficiaries are unfamiliar with or reluctant to use services vouchers can reinforce information and marketing campaigns.

While vouchers work well with other approaches, it is sometimes difficult to draw sharp lines between vouchers and other health financing instruments, for example between conditional cash transfers and vouchers, or between incentive payments to providers and vouchers. For example, in the case of the Bangladesh DSF program the voucher includes a CCT for the mother when she has a delivery attended by a skilled birth attendant, while the reimbursements to service providers are set very low and act more like an incentive than a form of cost recovery. This reflects the existing funding structure in the public health system in Bangladesh where public health facilities receive fixed cost budgets and is typical of voucher programs which operate in public health systems. In such cases, the reimbursement acts more like an incentive payment to providers to increase those services provided through the voucher program. The KfW-funded program in Cambodia also provides a small cash payment to women but reimburses providers the full cost of the services. Evaluations of such programs need to disentangle the effects of the cash transfer from the voucher reimbursement and could usefully form the subject of future research efforts.

There are synergies from combining vouchers with SF operations in that vouchers can enable the poor to access priority services at health facilities belonging to a SF network, while franchise operations work to improve and ensure quality of care of the services provided through the vouchers. Vouchers also help SFOs to build stronger provider networks with more clients and more attractive prices, creating a virtuous circle effect. For donors and/or governments, there are two principal advantages: the quality of care in SF provider networks is closely monitored and maintained by the franchisor⁴³; and a VMA is able to contract with a franchisor rather than individual facilities, thus lowering transaction costs.

As evidence emerges of the impact of voucher programs on different program aspects such as quality and equity, new voucher programs are being designed which address those findings and which experiment with new approaches. For example, a new DFID-funded voucher program in Zambia is combining vouchers with the pilot PBF program that will pay incentives to public providers. This not only contributes to the harmonization of health financing approaches, but also addresses the risk of perverse incentives which may cause providers to focus on voucher services to the detriment of other health services (see section 3.5).

Whereas the programs themselves differ one from another, much can be done to standardize the process of designing them. Experience in designing, implementing and evaluating voucher programs, together with the reviews that have been undertaken mean that lessons can be highlighted; certain configurations work better in a particular context and we have attempted to set these out below in Section 5.3.

5.3 Lessons Learned for Voucher Program Design

What this and previous reviews have shown is that voucher schemes are a means to channel scarce financial resources to those groups identified as having priority needs, or to those services identified as having a public health imperative (i.e. STI diagnosis and treatment, FP, institutional deliveries, and so on). In addition to targeting scarce resources, voucher schemes address market and government failure to provide public health services to specific population groups. Important examples include uptake of SRH services among adolescents, cervical cancer screening for older, poor rural women, institutional deliveries among poor women, and gaps in service provision in rural areas. Vouchers represent an opportunity to leverage the capacity of the private sector to address these gaps, thereby contributing towards meeting national objectives such as MDGs 4 & 5. Furthermore, voucher programs generally appear to be more sustainable than is often thought.

⁴³ Poor quality assurance is often cited as a criticism of voucher program managing agents although there is no reason why this should be so if the VMA places a focus on quality in its contracts and agreements with providers and then closely monitors this aspect of service provision.

As illustrated in figure 2 in section 1.1 above, all voucher programs have a number of key features: they provide either highly subsidized or free access to specific health services; services are free at the point of delivery⁴⁴ to avoid unknown and informal charges (only in the early scheme in Taiwan did clients have to make a co-payment to the provider); providers are reimbursed retrospectively for (a varying degree of) the costs through a system of claims processing, which is itself a key component of a robust monitoring and evaluation system to counteract fraud and malpractice. Furthermore, all of the *on-going* voucher programs, with the exception of the health certificate program in Armenia, include the targeting of subsidies to a specific population group, such as poor pregnant women and their families.

From the review, however, it is clear that not all voucher programs are set up in the same way and in fact some differ greatly from others. As we have seen, context and objectives largely define both the structure and implementation arrangements of a voucher program. This means that simply reproducing one successful voucher scheme in another location without adapting to context is unlikely to work as was seen when the Chiranjeevi scheme in Gujarat was replicated in the Mamta scheme in Delhi.

While there may be no overall 'blueprint' for what voucher programs should look like, it is possible to identify certain lessons for voucher program development and design⁴⁵:

- **Vouchers provide an excellent framework within which to target resources to vulnerable groups (poor pregnant women, rural older women and so on)** and almost all programs in the review use some form of targeting (means testing and/or geographical targeting); only 1 of the on-going programs provides services to all potential beneficiaries, and this is related to the objective to curb informal payments in the private sector (Armenia)
- To justify the costs of voucher distribution and claims processing, **interventions should be priority services as defined by the Ministry of Health, which are currently insufficiently consumed by the target population, while relevant to solve important population health problems** (e.g. maternal mortality, cancer, high fertility, high health system costs of untreated diabetes patients and so on).
- Ideally, **voucher services are those which are related to relatively common conditions, are clearly definable, time limited (with a beginning and an end) and are sufficiently relevant within the health policy framework to justify the costs of voucher distribution and claims processing**. In fact all services currently provided through the voucher schemes in the detailed review of 20 programs adhere to these criteria⁴⁶.
- Services which do *not* suit the voucher approach include acute cases (accidents or other sudden conditions) as the patient needs time to learn of and understand the scheme, receive and use the voucher⁴⁷, and special treatments which can only be offered in referral hospitals (unless the treatment is a referral from a voucher service provided at lower level facilities such as a C-Section or treatment for cervical cancer).
- **Vouchers work better if the services can be grouped**, like a package of SMH services; a package of adolescent SRH care; or a package of primary health care services. This lends itself to marketing and information campaigns. It is important to define clearly for both clients and providers exactly what falls within the package and what is not covered by the voucher.

⁴⁴ If any fee is to be paid, this is nearly always at the point of voucher distribution and not at the point of service delivery. The only exceptions are some smaller voucher programs operated by SFOs such as PSI where the vouchers enable clients to use the services at a discounted rate. However, in these cases, the vouchers act more as marketing tools.

⁴⁵ Options Consultancy Services is developing, with funding from MSI, a Quick Guide to Voucher Programs intended for Programme Managers which will be available in May 2012. Part of this guide is available through the Population Council RH Voucher Evaluation site at: <http://www.rhvouchers.org/rhv/resources/vouchers-quick-reference-guide>. Contact c.grainger@options.co.uk for further information.

⁴⁶ With the possible exception of GBV services which are only provided in one program in Kenya and have not taken off.

⁴⁷ Vouchers for services such as gender-based violence will only work where the vouchers are kept at the health facility and where knowledge is widespread in the community that the services are available and free.

- Based on our findings it would seem that **on-going, successful voucher programs require (and indeed have) annual budgets in excess of US\$ 1 million** and in some instances more. Exceptions are small or medium voucher programs working in combination with a social franchise or health equity funds (HEF). It is, however, better to start small (pilot or small geographical area) and then to scale up. This allows program managers to refine the design, address challenges in the policy and operating environment, and build capacity over time among key stakeholders, particularly in government.
- The issue of **management autonomy should be discussed and addressed during the design process**. There are two levels where management autonomy is relevant: at the program management level between funders and managers, and at the implementation level between managers and service providers. Ideally, a government or donor should be able to replace the VMA in case of fraud or mismanagement, and independent governance structures should be in place to ensure the program is in line with government policies and strategies. However, this would not seem to be a prerequisite for successful voucher programming since we did not see a single example across the twenty programs. There were, however, a number of examples in the study where a private VMA (for-profit and non-profit) terminated contracts with health facilities for poor performance, and a smaller number of similar examples from government run programs.
- **Some level of facility autonomy at the provider level is important** (and beneficial) for the voucher approach to work effectively. This enables providers to reinvest voucher payments to improve service quality, to attract a great proportion of voucher clients and to maintain their interest in staying with the program. Public providers have the least autonomy, but seem over time to be able to learn how to overcome bureaucratic hurdles to spend voucher revenue. The VMA can play an important role in supporting this process as in Kenya.
- **The Design process must address the question of the optimum number of providers** and whether the scheme can contract providers from different sectors. A balance should be sought between contracting sufficient providers to ensure adequate access for the target group, ensuring sufficient potential client flow for each provider, and enabling competition between them for the business. However, from the review, competition between providers would not seem to be a prerequisite for success.
- **Health providers of successful programs can come from all sectors and indeed the most successful programs contract providers from all three** (public, private for profit and non-profit). Usually the context will define the type of providers which can be contracted by a new program. Where providers are from a single sector, this is mostly the private sector, illustrating the role vouchers play in Public-Private Partnerships. Programs with only public providers have also been shown to be successful although, in such cases, providers rarely have a choice over whether to participate.
- **There seems to be a practical upper limit to the number of services offered by a voucher program**. The majority of programs provide access to just one service, with a maximum of four, although this is set to increase with the introduction of new services in countries such as Cambodia. A continuum seems to exist with simple voucher programs providing access to a single service for a specific group at one end, and programs which resemble social health insurance interventions at the other, i.e. programs which give access to a wider basket of services for a defined period of time, for a beneficiary as well as his or her family as in the KfW-funded program in Tanzania.
- **Provider approval & accreditation, QA and contracting of providers are all powerful tools to regulate providers and improve their quality**, not only of private, but also public providers. In most programs reviewed, however, these tools were/are not used to their full capacity, probably reflecting the limitations of the VMA. Technical assistance can help to overcome these challenges as a body of experience and knowledge has built up on how to undertake these tasks. Good program governance should also play a role (see above).
- **Marketing is key in voucher programs** and needs to be carefully developed during a design phase. While mass media is very effective, it can also be expensive. The role of door-to-door distributors and

community-based workers is key in the implementation of any voucher program both to provide key health messages and to advertise the program.

- **New programs should investigate the potential for smart and mobile technology,** for transferring funds, to facilitate claims processing and for program monitoring and evaluation purposes.

Key Contacts

Country	Key contact	Involvement key contact with voucher program
Armenia	Tigran Avetisyan	DrPH candidate Boston University. Involved in an initial evaluation of the reproductive health voucher system in Armenia
Bangladesh	Mahad Ibrahim	Technical advisor Pop Council's voucher evaluation program. Provided advice on claims processing system of the large Bangladeshi voucher program
Bangladesh	Moshiur Rahman	Manager at Pop Council Bangladesh, involved in evaluation of voucher programs implemented by Pop Council and the large one implemented by MOH
Cambodia	Chanlida Heng	Worked at RHAC, was involved in USAID funded program
Cambodia	Chhorn Sao	Program manager NGO (RHAC) implementing a voucher program financed by USAID
Cambodia	Christophe Grundmann	University Research Co. (URC), Chief of Party, involved in Health Equity Funds
Cambodia	Dirk Horemans	Head BTC-Cambodia, involved in BTC funded program
Cambodia	Marcel Reyners	Technical Advisor KfW/funded voucher program
China	Kaining Zhang	Professor at Kunming Medical College, Yunnan, was involved in evaluation of voucher program in Yunnan
China	Maowei Liu	Managed World Bank project which used vouchers
India-USAID	S. Vijay Paul	Project Management Specialist, USAID-India, involved in USAID funded voucher programs
Madagascar	Caitlin Mazzilli	Technical advisor MSI voucher program Madagascar
Nicaragua	Zoyla Segura	Program manager NGO (ICAS). Involved in implementation of the 3 voucher programs
Pakistan-Greenstar	Sohail Agha	Manager PSI, involved in Greenstar voucher programs
Sierra Leone	Manty Tarawalli	Involved in MSI/MSSL voucher program
Uganda-KfW	Anna MacKay	Involved in KfW-funded program implemented by MSI

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