

# Vouchers for reproductive health care services in Kenya and Uganda



## APPROACHES SUPPORTED BY FINANCIAL COOPERATION

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## List of Abbreviations

AFD	Agence Française de Développement
ANC	Antenatal Care
BMGF	Bill and Melinda Gates Foundation
GoK	Government of Kenya
GPOBA	Global Partnership on Output-based Aid
MDG	Millennium Development Goal
NCAPD	National Coordinating Agency for Populations and Development
NHIF	National Hospital Insurance Fund
OBA	Output-based approaches
PWC	PriceWaterhouseCoopers Limited International
RH	Reproductive Health
STI	Sexually transmitted infections
VMA	Voucher Management Agency

## **1. Context: current challenges in reaching MDG 4 and 5**

According to national measures of maternal and reproductive health, Kenya and Uganda are at serious risk for not achieving the 2015 Millennium Development Goals regarding child and maternal health (MDG 4 and 5). Kenya saw an 8% decrease in skilled birth attendance from 1989 to 2003, from 50% to 42%, while Uganda's 2006 rate of 43% is an increase from 38% in 1988.<sup>1</sup> The need for other reproductive health services, such as family planning, testing and treatment for sexually transmitted infections (STIs) is also apparent. The fertility rate is 4.8 births per woman in Kenya and 6.4 in Uganda, compared to the world average of 2.5.<sup>2</sup> In addition, gender-based violence is underreported, with few victims receiving adequate treatment.

In order to improve the MDG indicators, access for reproductive health services needs to be expanded rapidly, particularly for the poor and underserved. The existing health systems in Kenya and Uganda, particularly the health financing structures, are currently not in a position to address this challenge sufficiently. In Kenya only a fraction of the budget for reproductive health in 2005 was spent on services, due to implementation problems, such as poor financial planning and weak procurement processes.<sup>4</sup> In Uganda, per capita health expenditures are below the minimum recommended for basic health services and problems of inequity and provider fragmentation have also been reported.<sup>5,6</sup>

One of the primary challenges in addressing these problems is identifying the most appropriate and efficient financing strategy to translate monies from governments and donors into the provision of health services and improvements in health status. Supply-side strategies, where monies are typically granted to government agencies to support the provision of health inputs (e.g. human resources, supplies, pharmaceuticals, buildings), have been criticized for having less than optimal allocative efficiency and are often not oriented to the current levels of demand for health services. Moreover, supply-side approaches have ignored demand-side barriers to health care consumption, such as inadequate knowledge of the importance of specific health services and the inability to pay for health services, including the travel and opportunity costs associated with health care treatment.<sup>7,8</sup> Perhaps most importantly, supply-side financing mechanisms provide little incentive for providers to perform at their best and attract clients to their services.

## **2. Objectives**

Ultimately, long-term health financing strategies are needed for Kenya and Uganda that are equitable, sustainable, and appropriately designed for the region's population. However, experience from high-income countries demonstrates that this is a gradual process. Intermediate approaches are thus needed to introduce and pilot elements of a long-term health

financing system, while addressing MDG 4 and 5 in the short term. An intermediate financing approach should aim to:

- raise revenue and allocate resources efficiently,
- focus on outputs instead of inputs by means of retrospective payment,
- guarantee payment to providers,
- improve the quality of services through competition and quality monitoring,
- harness the capacity of the private sector to complement the public sector,
- raise awareness of the importance of priority health interventions,
- include a system for fraud detection, and
- target services to the poor.

An intermediate approach that includes these features can introduce governments and health providers to concepts and mechanisms for long term health financing, such as national or social health insurance models. Another important feature of an intermediate approach is that the general population will also become familiar with the concept of insurance to protect themselves financially from consequences of poor health.

### **3. Demand-side financing and vouchers**

Demand-side financing systems shift purchasing power from governments and donors to consumers while addressing other demand-side barriers, and thus stimulating demand for health services.<sup>9</sup> Demand-side financing systems are often referred to as “output-based approaches” (OBA), where providers are paid for the **outputs** they generate, such as the number of services provided, rather than funding inputs like salaries and supplies.

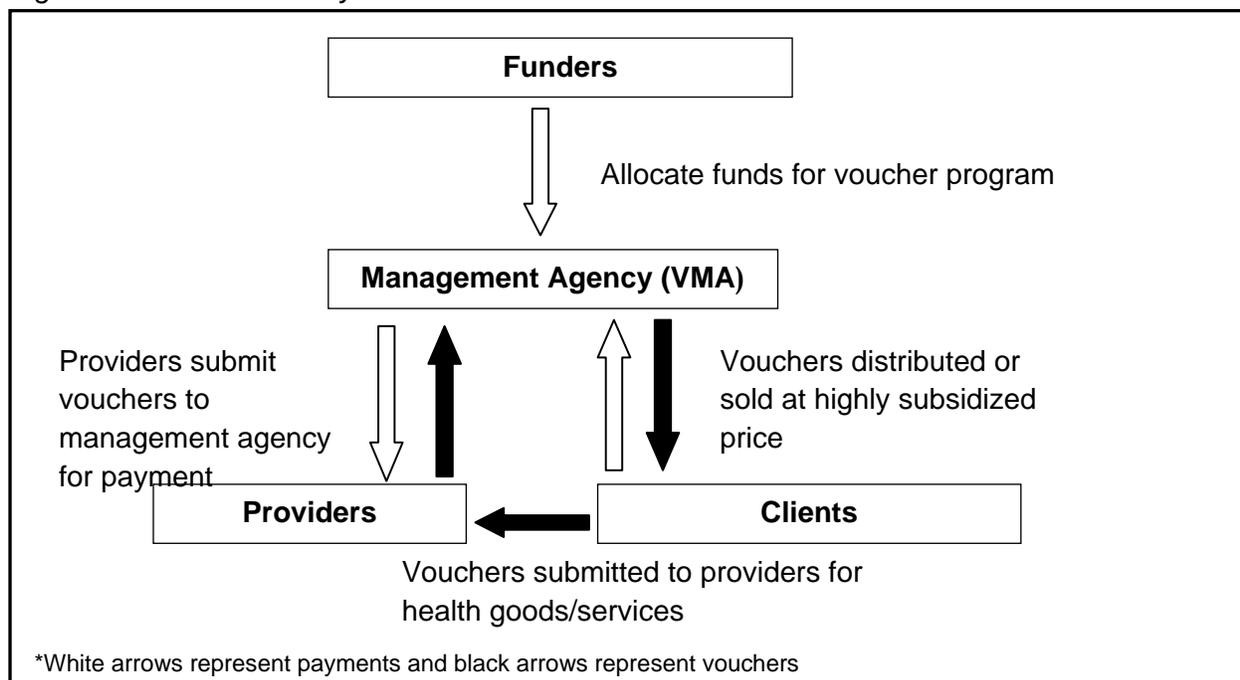
Voucher programs are one form of output-based health care that date back to the mid-1960s, when programs in Taiwan and Korea used voucher programs for long-term and permanent family planning services.<sup>10</sup> Voucher programs give a portable economic subsidy to those in need of health goods/services by distributing or selling vouchers to clients at subsidized prices (in Kenya and Uganda mainly poor women are targeted). Clients are then empowered to choose their provider for specific health goods/services without further payment by clients at the point of use.

With German Financial Cooperation through KfW Entwicklungsbank (KfW), reproductive health voucher programs began in Kenya in 2005 and Uganda in 2006. Kenya’s program focused on safe motherhood services and long-term family planning methods. In Uganda, the voucher program started with STI diagnosis and treatment and later added safe motherhood services.

Typically, voucher programs involve four primary actors: (1) the funders, which may be governments and/or donors; (2) the voucher management agency (VMA) that administers the program; (3) the providers of health care goods and/or services; and (4) the clients or voucher

recipients in need of health care. Figure 1 details the flow of vouchers and monies between the four primary actors.

Figure 1: Basic voucher system structure



The VMA plays a key role in administering voucher programs through:

- accrediting providers,
- contracting providers upon successful accreditation,
- ensuring quality care by means of regular (e.g. quarterly) quality monitoring,
- distributing vouchers to clients, e.g. through community based distributors, which are trained by the VMA,
- marketing and raising awareness of the voucher system to the target population,
- targeting a specific segment of the population, where applicable, and
- processing provider claims and conducting fraud control.

During the contracting process, the VMA selects the providers who can receive and redeem vouchers. Providers may be contracted from both the public and private sector, depending on national policy. Both public and private facilities are contracted in Kenya, while only private facilities are eligible to become voucher clinics in Uganda. One particular advantage of including **private sector** providers is that voucher programs can harness and strengthen the private health care market and thus increase **competition** and client choice. Moreover, this approach

can contribute to increase the number of services provided in areas where no public provider is within close reach.

Voucher providers have to meet minimum quality standards and participate in training in order to be accredited as a voucher facility, thereby improving the **quality** of services in many facilities. All providers are regularly monitored on the quality of services they offer, such as confirming they adhere to hygiene standards.

One feature of voucher programs is that health care subsidies can be **targeted** to specific populations, usually the poor or high-risk individuals. Targeting is accomplished by using individual demographic information or by geographically targeting a low-income and/or high-risk area. When done successfully, targeting improves the **allocative efficiency** of health aid delivery, where health utilization is often underutilized by the very poor and those most in need of services.<sup>11</sup>

In order for voucher programs to be successful, the targeted population needs to be informed about the availability of services and the way vouchers work. Simultaneously, it is often necessary to provide health education to **raise awareness** on important health interventions, such as safe delivery and vaccination services. In order to inform the public about the voucher programs in Kenya and Uganda, advertising campaigns are conducted in voucher areas, including radio ads, print media, community road shows, and door-to-door communication.

Figure 2: Example voucher from Uganda HealthyLife program for STI services



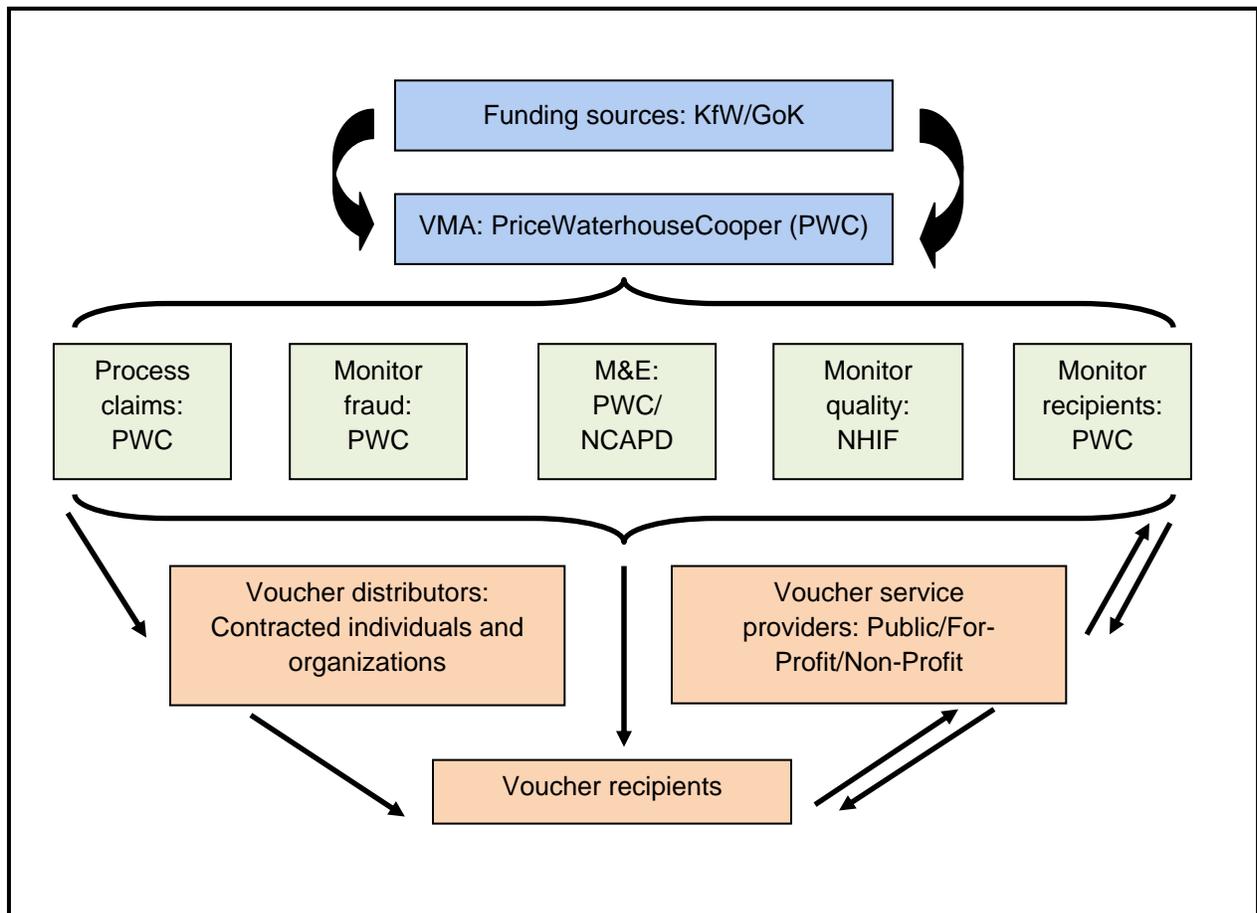
For voucher distribution in Kenya and Uganda, **community-based distributors** sell safe motherhood vouchers to poor pregnant women who are identified using a poverty grading tool. This can include questions on housing, water source, income, and number of meals per day. Tools can be tailored to specific areas such as in Kenya where poverty assessment differs between districts. STI treatment vouchers in Uganda are not targeted at the poor only, and are sold at local drug shops and pharmacies to anyone with STI complaints. A physical paper

voucher has tear-off stubs for each visit to the provider. Figure 2 shows an example of the Uganda STI treatment voucher. By selling vouchers at subsidized prices, voucher programs can generate some **revenue** and familiarize clients with the **concept of pre-payment** for needed health services.

Once services are administered, providers submit their vouchers to the VMA for reimbursement. One of the tasks of the VMA is to set up claims processing software that calculates and monitors services rendered by each provider and automatically processes payments to providers. The claims processing software checks claims for completeness and plausibility according to specified criteria and then flags any suspected false or fraudulent claims.

The VMA, possibly in conjunction with other stakeholders, needs to set reimbursement rates for voucher services, e.g. according to cost analyses and an assessment of the market rates for providers of acceptable quality. Providers are **guaranteed payment** as long as they submit correctly filled claims, the service provided is within the scope of the contract, and no fraud or irregularities are detected. The VMA uses voucher claims data, in addition to facility visits, to monitor the number of services provided and quality of care and detect any potential patterns of **fraud and abuse** of the program.

Figure 3: Organization of the Kenya RH-OBA program



Source: Adapted from Arur et al., 2009

The role of the VMA is more thoroughly described in Figure 3, which details the various ways that the VMA manages voucher programs and relationships with other governmental organizations.<sup>12</sup> Additionally, Table 1 details key characteristics of the voucher programs in Kenya and Uganda.

*Table 1: Characteristics of Vouchers for Health in Kenya and Uganda*

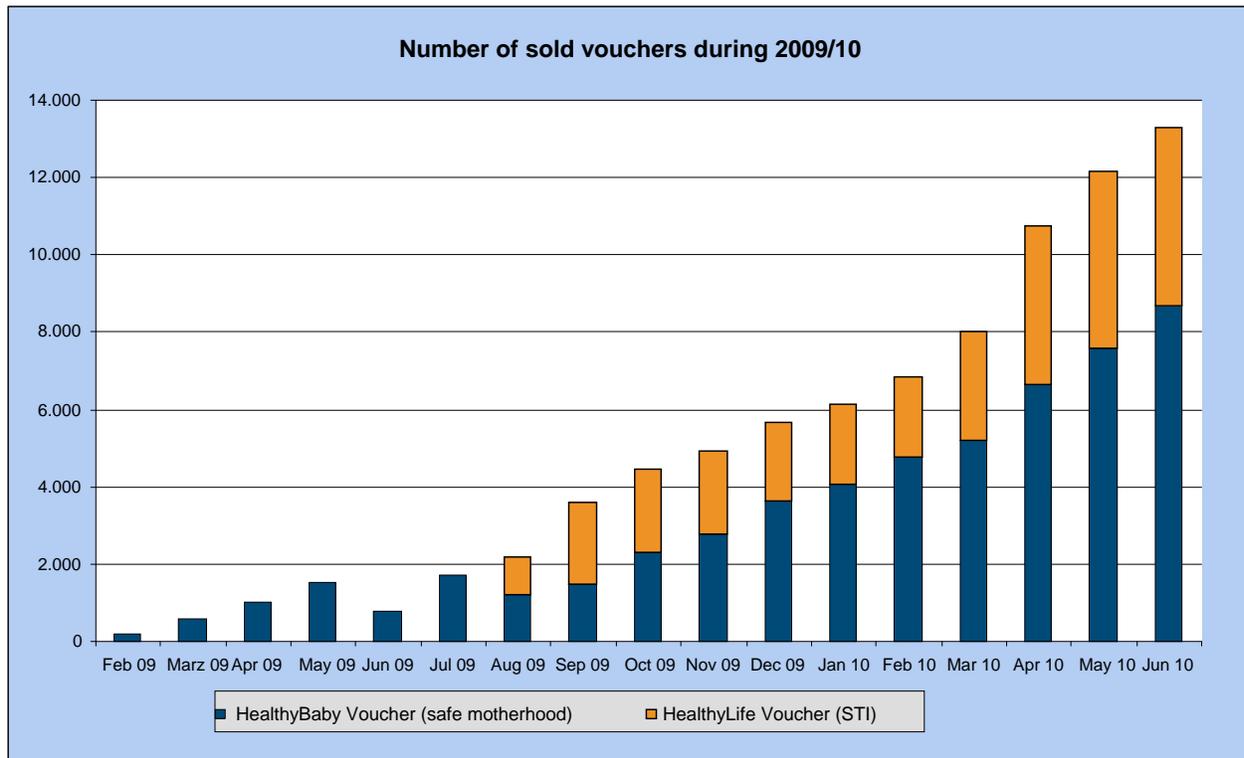
<b>Characteristic</b>	<b>Kenya</b>	<b>Uganda</b>
Voucher services offered	(1) safe motherhood: antenatal care, facility-based deliveries and post-natal care  (2) modern methods of long-term family planning	(1) HealthyLife, testing and treatment for STIs and  (2) HealthyBaby for safe delivery, prenatal and postnatal care.
Program dates	Phase I October 2005 – 2008, Phase II June 2009 – 2012.	July 2006 – 2011 for HealthyLife and 2008-2011 for HealthyBaby
Location	Three (Phase I) / four (Phase II) rural districts; two urban slums	Four districts in western Uganda and expanded to 22 districts in southwestern Uganda in 2008
Partner organizations	Kenya Ministry of Public Health and Sanitation/ Ministry of Medical Services  National Coordinating Agency for Population and Development NCAPD (2006-2011, project management)  Ministry of Public Health and Sanitation (project management, since 2011)	Uganda Ministry of Health  World Bank's Global Partnership on Output-based Aid, GPOBA (co-funded HealthyBaby expansion in 2008)
Voucher management agency	PriceWaterhouseCoopers PWC	Marie Stopes International – Uganda
Program evaluation	Population Council (funded by BMGF)	Population Council (funded by BMGF)
Cost of voucher	Safe motherhood: 200 Ksh, \$2.70 Family planning: 100 Ksh, \$1.35	Safe motherhood: 3000 Ush, \$1.50 STI testing/treatment: 1500 Ush, \$0.75
Voucher reimbursement rates (average)	\$13 for prenatal care \$66 for normal delivery \$276 for complicated delivery (incl. caesarean) \$13 - \$39 for family planning, depending on method	\$25 for a normal delivery including prenatal/postnatal care \$79 for a complicated delivery (incl. caesarean) \$11 for STI testing and treatment

Sources: Information for Table 1 was provided by Bellows et al., 2009 and Bellows and Hamilton, 2009, and <http://rhvouchers.org>.

#### 4. Uptake of vouchers and service provision

The reproductive health voucher program in Uganda officially started in August 2008 and has been extended to last until February 2012. From the program launch until June 2010, approximately 14,000 safe deliveries were provided and almost 30,000 STI treatment episodes were managed, exceeding targets for voucher sales and deliveries.<sup>13</sup> Figure 4 shows the increase in voucher sales for both the safe motherhood and STI program from February 2009 until June 2010.

Figure 4: Sales of Ugandan vouchers



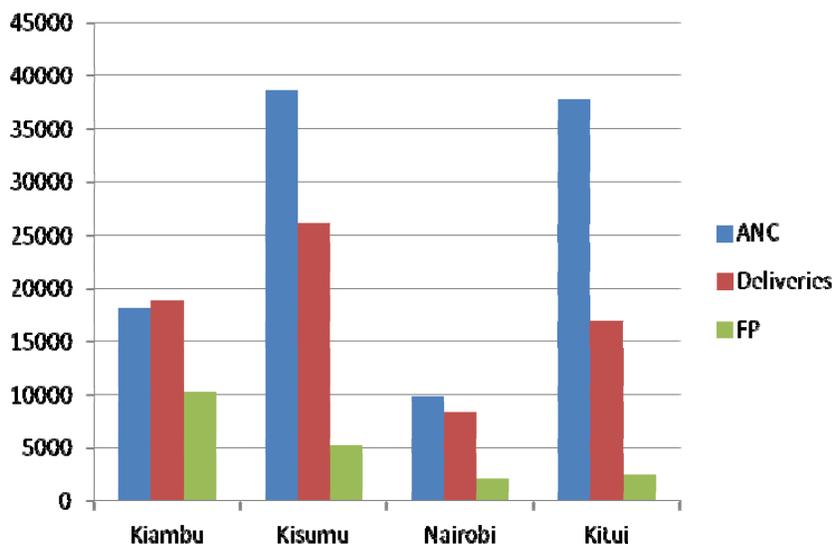
Source: KfW data analysis

In Kenya, the voucher program began in July 2006 and is expected to continue until 2014. In terms of service provision, from July 2006 until March 2011, the Kenya voucher program has provided clients with over 96,000 facility-based deliveries and over 27,000 long-term family planning methods.<sup>14</sup> By the end of phase II, it is expected that the program will have provided over 120,000 deliveries and over 40,000 long-term family planning methods.<sup>15</sup>

The geographic variability of the Kenyan voucher program allows one to examine the uptake of different services by region. Figure 5 shows the July 2007 – December 2010 utilization of different services (ANC, deliveries and family planning) in the four regions the voucher program operated. In all four regions, facility-based deliveries were a relatively consistent service, ranging from 30-41% of all services among the four regions.<sup>16</sup> ANC and family planning services

varied substantially by region, with ANC services ranging from 38% of all services in Kiambu to 66% of all services in Kitui and family planning services from only 4% in Kitui to 22% in Kiambu.<sup>16</sup>

Figure 5: Voucher services provided from July 2007- December 2010, by area



Source: PWC 2007 – 2010 quarterly progress reports

These regional differences in service uptake indicate different levels of demand for certain services and can be due to a variety of factors, such as different levels of knowledge on the importance of ANC, perceived effectiveness of family planning, and geographic distance to providers. For example, in Kitui, clients live far from the providers and delivery services are not as easily planned as ANC services, which would explain the higher percentage of ANC visits in Kitui. Additionally, during 2009 and 2010, mobile services for family planning were used in Kiambu and thus most likely the reason there was a higher uptake of family planning in this region.

## 5. Results and impact of voucher programs

Two recent systematic reviews have examined the existing evidence on voucher programs. Bellows et al., 2011 reviewed evaluations from reproductive health care services voucher programs and Meyer et al., 2011 reviewed evaluations for a broader group of health goods and services voucher programs.<sup>10,17</sup>

### Utilization

By making specific health services free or highly subsidized through vouchers, it is expected that utilization for these services will increase and vouchers would not only serve those who would have otherwise purchased the services without the voucher program. There is strong evidence backing this claim, based on evidence from 16 studies evaluating 13 voucher

programs.<sup>17</sup> Utilization data in Kenya indicate that both assisted deliveries and family planning visits at contracted facilities increased substantially in the first year of the program when combining figures for voucher and non-voucher clients, suggesting the voucher program had a positive impact on overall utilization at contracted facilities.<sup>18</sup> In Uganda, a review of voucher clinics found a greater than 200% increase in STI clients (both voucher and non-voucher), suggesting a utilization increase due to the voucher program.<sup>19</sup> A population-based study found a 15% increase in STI treatment for those with symptoms between 2006 and 2007.<sup>20</sup> However, overall redemption of purchased vouchers will need further attention. In Uganda less than 60% of women who purchased *HealthBaby* voucher also make use of the voucher for a safe institutional delivery (over program duration thus far). Reasons for non-redemption are plenty – such as lack of transport especially at night, cultural and traditional reasons, as well as fear that one may still be required to pay at the point of use.

*Box 1: Kenyan vouchers enable facility-based births*

“Voucher babies in Kenya”, a short documentary about the reproductive health voucher program in Kenya tells the story of Jane, a rural tea worker in Kiambu district in Kenya. Jane purchased a safe delivery voucher for 200 Kenyan Shillings, approximately 3 US dollars. In order to be eligible for the voucher, Jane’s living environment was assessed to verify she was one of 56% Kenyans living under the poverty line. Jane explained that she purchased the voucher to financially protect herself from possible complications of childbirth.

*“The reason that made me go for the voucher is that after my last delivery it took me a long time to recover from the illness that I got. It’s taken a very long time to get the money [for care associated with post-partum complications]. I had to borrow from a friend and up to now I haven’t been able to pay back that sum.”*

With the voucher, Jane was able to choose from one of 17 providers in Kiambu district. She gave birth to a healthy son at Nazareth hospital. Jane said that she intends to purchase a family planning voucher as well.

Source: “Voucher babies in Kenya”, June 2008. Directed by Judith Levold and available at [www.youtube.com/user/OutputBasedAid](http://www.youtube.com/user/OutputBasedAid).

*Targeting*

Evidence suggests that targeting mechanisms in voucher programs have been successful in reaching their intended population.<sup>10,17</sup> A recent study in Kenya shows that voucher clients are poorer than non-voucher clients, indicating vouchers are reaching the intended audience.<sup>21</sup> In Uganda, after the STI voucher service began, fewer women reported “lack of money” as the reason for not seeking STI treatment.<sup>22</sup>

*Quality*

Depending on the goods or services delivered by vouchers, quality measures can take several different forms, such as patient satisfaction surveys, provider competency tests, and diagnostic accuracy. Evidence suggests that most evaluated voucher programs had a positive impact on quality.<sup>10,17</sup> Facilities in both Kenya and Uganda were using voucher revenues to make quality improvements, such as infrastructure enhancements, additional staff, and renewed equipment and supply stocks.<sup>12</sup> Private facilities, in particular, were using voucher monies for additional staffing.

One aspect of quality related to voucher programs for the safe motherhood programs is whether an inappropriate increase in the number of Caesarean sections may be observed due to the financial incentives of providers. This is an indicator which requires close monitoring. In Kenya, initial administrative data for the safe motherhood vouchers showed that the proportion of Caesareans was 16.7% of all voucher deliveries, which is considered acceptable for the population being served and does not raise serious concerns at present.<sup>18</sup> Additionally, when comparing voucher clients to non-voucher clients in the same facilities in Kenya, the Caesarean rates are similar.<sup>16</sup> In Uganda, a Caesarean rate of 15% is also within the recommended range according to the World Health Organization.<sup>23</sup>

*Box 2: Voucher programs improve business and skills for Ugandan providers*

The Ugandan safe motherhood voucher program has improved providers business and their skill sets as well. One clinical officer, Asaf Kamugisha states, "We receive continuous training in safe motherhood skills." Business has also improved for many providers due to the voucher system with one clinical officer stating, "I used to have 20 deliveries a month, but now I have 40."

The combination of training and more attention to patient care results in improved service quality. Additionally, by bringing women who would otherwise give birth at home into the health system, they also have increased access to other health services, such as family planning.

*Source:* Nabusoba I. "Uganda: Baby vouchers give hope for dignified child delivery." *New Vision*, 8 November 2009.

*Knowledge*

Voucher programs have been found to raise awareness about the voucher program and also increase health-related knowledge.<sup>10</sup> In terms of program awareness, the Uganda *HealthyLife* voucher program found that knowledge of the program increased substantially in the first year of the program.<sup>22</sup> Population-based surveys found that the ability of individuals to list two or more STI symptoms increased 18% between the baseline in 2006, when *HealthyLife* began and the endline one year later.<sup>20</sup>

Another important area of knowledge is the extent that providers understand and can effectively operate within a voucher program. In Uganda, a qualitative study of the STI voucher program

found that providers generally had a positive outlook on the voucher program and they anticipated benefiting from increased income from voucher clients, participating in training, and investing in facility infrastructure.<sup>24</sup> However, providers were concerned that the payment and monitoring systems might be administratively cumbersome. Another study of the Uganda STI voucher program found that providers needed training on claims processing in order to better benefit from the voucher program.<sup>19</sup>

### *Health*

Health improvements are difficult to observe because they require rigorous evaluation designs. Even so, several studies have found improvements in health associated with voucher programs.<sup>17</sup> In the Uganda program, there was a demonstrated reduction in the prevalence of syphilis after one year of the *HealthyLife* program, with a greater reduction among those living near voucher–contracted facilities.<sup>20</sup>

## **6. Examining the costs of voucher programs**

Another important outcome of interest is efficiency and whether using competitive contracting and providing a fixed reimbursement rate per voucher results in health facilities that operate more efficiently than programs that provide an input-based budget. In evaluating efficiency, it is necessary to compare the total costs of two competing financing programs in the same country, since health markets vary substantially by country. Thus far, data on whether voucher programs impact efficiency is lacking. One study from Nicaragua compared program costs for STI treatment of high risk groups in a private-sector voucher program to the costs from the public sector and found that the voucher program had higher STI-related costs per patient treated but lower costs per STI cured.<sup>25</sup>

There are two primary cost components to voucher programs, the **costs of the goods and services provided** and the **administrative costs** of setting up and running the program. Due to the high uptake of safe motherhood vouchers, a majority of the costs associated with services in Kenya has been for the safe motherhood program, which makes up 75% of the total service costs.<sup>26</sup> Within the safe motherhood program, 50% of the costs were associated with normal delivery, 34% with Caesarean sections, 9% for normal ANC services, and 8% for treating complications. During phase II of the Kenyan program, the average costs per client was \$119 for safe motherhood services, \$24 for family planning and \$103 per client overall.<sup>15</sup>

In Uganda, between June 2009 and September 2010 approximately \$1.3 million was spent in provider reimbursement for the *HealthyBaby* and *HealthyLife* programs.<sup>13</sup> From May 2006 until May 2008, approximately 15,000 STI voucher patients were seen in 20,000 patient visits with an average cost of \$53 per patient.<sup>15</sup>

Any expense not associated with reimbursing providers for care can be considered an administrative cost. Figure 6 details the administrative cost categories associated with voucher programs, those that are primarily involved in the initial set up of the voucher program and associated administrative costs that continue throughout the length of the program.

Looking at financial reports in Kenya, 20% of the total costs in phase I and 27% of the total costs in phase II were administrative, including VMA costs, voucher distribution, trainings, accreditation, audits, and evaluations.<sup>26</sup> Within the administrative costs for phase II, the largest component is made up of VMA costs, accounting for 33% of total administrative costs, followed by professional consulting services (28%) and costs associated with geographical expansion (17%).<sup>15</sup>

Figure 6: Administrative costs associated with voucher programs

<u>Initial set up costs</u>		<u>Ongoing costs</u>
* Original voucher system design	→	* Program management
* Establishing provider network/accreditation	→	* Training of providers
* Identifying/contracting distributors	→	* Paying distributors
* Develop information systems	→	* Data entry /maintain claims
* Establish evaluation plan	→	* Monitoring / evaluation
* Kick-off marketing/advertising campaign	→	* Continued marketing

In Uganda, administrative costs were high during phase I of the *HealthyLife* program as a majority of program costs were used in the designing of the necessary systems to run the voucher program. A substantial majority of costs were administrative (82%), with more of the total costs going towards claims processing (21%) than for provider reimbursement (18%).<sup>27</sup> Over time, however, these administrative costs appear to drop to more acceptable levels. According to quarterly reports, total administrative costs from April to June 2010 were 17%, the lowest since the program began and recent estimates found an overall administrative cost of 28% for the three year project period.<sup>13,28</sup>

As to be expected, administrative costs in the early stage of a voucher program are high for establishing various systems (provider networks, accreditation, claims processing, monitoring, etc.). These systems are not only needed for the administration of the voucher program but are also building crucial elements needed for the development of long-term financing mechanisms. Thus, the initially high administrative costs in Uganda are not inadequate, where time and monies were spent to develop a claims processing structure, tools for accreditation and quality monitoring as well as development of training modules for providers and media campaigns to educate the public. As expertise and best practices for voucher programs emerge, these administrative costs should be reduced. Additionally, some technological innovations have promising implications for voucher systems, such as phone-based surveys and claims application that could substantially reduce data entry costs.

The need to better evaluate the costs associated with running voucher programs is essential to understanding whether voucher programs generate cost efficiencies through increased competition, particularly by including the private health sector, and having fixed reimbursement prices that encourage providers to become more efficient.

## **7. Continuing challenges**

In order for voucher programs and subsequent long term health financing mechanisms to be successful in the long run, a number of challenges will need further attention.

Given the hopes that voucher programs will improve the efficiency of health care delivery, the percentage of setup and further administrative cost will require further scrutiny. A balance will need to be found between high quality program management as well as affordability in the national context. However, as knowledge and experience grows in this area, these costs should lessen substantially in the future.

At the other end implementation of these programs will also need to be developed further. While voucher programs can be designed to channel subsidies to the poor and disadvantaged parts of the population, reaching the poorest and most remote individuals remains a challenge often for reasons other than just financial ones. In general, the farther it is for a client to reach treatment, the less likely they are to receive it and targeting structures also come at a cost, particularly when individuals' economic background needs to be verified. Further tools could be integrated into output-based aid programs, such as travel reimbursement and nutritional support measures to help ameliorate some of the distance-related barriers, but more solutions to these challenges are needed. This would also help to overcome barriers to using these services and increasing overall redemption rates of vouchers.

If voucher programs – as suggested here – are a means to develop longer term health financing methods, the structures and mechanisms developed as part of these programs will need to be increasingly incorporated into national strategies. Both countries have already shown some degree of ownership, and, in Kenya, the approach has already found entry into national strategies. However, without increasing ownership of these programs by national level stakeholders further, these programs are unlikely to meet their long-term aims.

Before voucher programs and subsequent long-term health financing options can be fully financed in country, donors will need to step in in the interim before these programs can be funded locally. In Uganda, German Financial Cooperation through KfW joined forces with the Global Partnership on Output-based Aid (GPOBA) but more donors will need to buy into these schemes before they can be rolled out on a national scale.

Voucher programs currently under underway as well as new voucher programs will have to be closely monitored and evaluated to learn when voucher programs work most effectively and efficiently, how they should be structured, and how they can best be incorporated into a long term health financing strategy.

## **8. Conclusions and looking toward the future**

The reproductive health voucher programs in Kenya and Uganda funded through German Financial Cooperation have demonstrated that voucher programs can deliver quality reproductive health care. It is clear from early experiences that the output based manner in

which these programs operate sets important incentives for providers to serve and attract clients.

The two programs have set up important primers and tools for later development and elaboration of long-term health financing structures, such as Kenya's current inclusion of vouchers into the national health financing strategy. The preliminary experience also suggests that voucher programs offer the common ground for public and private facilities to complement each other, though more needs to be done at the health system level to maximize this, in particular where public facilities are not formally meant to charge fees.

Based on the early successes of voucher programs in Kenya and Uganda, the German government has mobilized resources through KfW to expand the approach of output-based aid to further geographical and topical areas: In January 2011, a voucher program for reproductive health services was launched in nine operational districts in Cambodia, providing coverage for prenatal care, attended deliveries (including Caesarean sections), postnatal care, and safe abortion and family planning services.<sup>29</sup> In Yemen, planning for KfW funded voucher services for safe motherhood and family planning for poor women is also underway, while in Tanzania the health services covered by the voucher will be extended and the program thereby moving closer to an insurance card. In Cameroon, KfW, jointly with the Agence Française de Développement (AFD), are funding the development of a voucher program for safe motherhood that is not limited to the poor but will be open to all pregnant mothers, which will mainly operate in public facilities. Other organizations have also begun reproductive health voucher programs in recent years throughout Asia and Africa.

In addition to expanding vouchers geographically, voucher programs can take new directions in other aspects of health care financing. For example, vouchers can be incorporated into social franchising programs, where social marketing and quality assurance is done by the franchise and reimbursement is provided by the voucher program.

Above all, vouchers are not meant merely to deliver certain outputs (such as safe deliveries or long term contraception) but they are meant to serve as a catalyst for developing or enhancing long term health financing strategies, such as social health insurance systems. Janisch et al. (2010) discusses how the voucher program in Kenya introduced the essential elements for an insurance system, such as quality assurance, accreditation, reimbursement systems, and claims processing.<sup>18</sup> Individual voucher holders, as well, are becoming familiarized with the concept of insurance, particularly when they purchase vouchers to protect themselves financially from potential complications during childbirth.<sup>30</sup>

## References

1. WHO. Country profiles on maternal and newborn health: Kenya country profile/ Uganda country profile. [http://www.who.int/making\\_pregnancy\\_safer/countries/en](http://www.who.int/making_pregnancy_safer/countries/en), 2010.
2. United Nations. Total fertility by major area, region and country, 1950-2010 (children per woman). World Population Prospects: The 2010 Revision, CD-ROM Edition: United Nations, Department of Economic and Social Affairs, Population Division 2011.
3. Kenya National Bureau of Statistics (KNBS) and ICF Macro. Kenya Demographic and Health Survey 2008-09. Calverton, Maryland, 2010.
4. Glenngård A; Maina, TM. Reversing the trend of weak policy implementation in the Kenyan health sector? – a study of budget allocation and spending of health resources versus set priorities. *Health Research Policy and Systems* 2007; 5(3): 1-9.
5. IndexMundi. Uganda - health expenditure per capita. <http://www.indexmundi.com/facts/uganda/health-expenditure-per-capita>, 2011.
6. Zikusooka CM; Kyomuhang R; Orem, JN; Tumwine, M. Is health care financing in Uganda equitable? *African Health Sciences* 2009; 9 (Special Issue 2): 52-58.
7. Ensor T; Cooper, S. Overcoming barriers to health service access: influencing the demand side. *Health Policy and Planning* 2004; 19(2): 69-79.
8. Standing H. Understanding the 'demand side' in service delivery. In: Studies IfD, ed. University of Sussex, UK: DFID Health Systems Resource Center, 2004.
9. Ensor T. Consumer-led demand side financing in health and education and its relevance for low and middle income countries. *International Journal of Health Planning and Management* 2004; 19: 267-285.
10. Bellows NM; Bellows BW; Warren, C. The use of vouchers for reproductive health services in developing countries: systematic review. *Tropical Medicine and International Health* 2011; 16(1): 84-96.
11. Gorter A; Sandiford, P; Rojas, Z; Salvetto, M. Competitive voucher schemes for health: background paper. Instituto CentroAmericano de la Salud ICAS, 2003.
12. Arur A; Gitonga, N; O'Hanlon, B; Kundu, F; Senkaali, M; Ssemujju, R. Insights from innovations: lessons from designing and implementing family planning/reproductive health voucher programs in Kenya and Uganda. Bethesda, MD: Private Sector Partnerships – One project, Abt Associates Inc, 2009.
13. MSIU. Reproductive health voucher project for provision of safe delivery and STD management services in South and Western Uganda: annual report June 2009 – July 2010: Marie Stopes International, Uganda, 2010.
14. Gorter A. Analysis of Kenyan voucher claims data from July 2006 until March 2011. In: EPOS, ed, 2011.
15. Gorter A. Annex 5 – reimbursement for services, financing and costing tables and budget notes. EPOS, 2011.
16. PriceWaterhouseCoopers. Reproductive health OBA programme Kenya voucher management agency quarterly reports 2006 - 2010, 2011.
17. Meyer C; Bellows N; Campbell, M; Potts M. 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, 2011.

18. Janisch, CP; Albrecht, M; Wolfschuetz, A; Kundu, F; Klein, S. Vouchers for health: a demand side output-based aid approach to reproductive health services in Kenya. *Global Public Health* 2010; 5(6): 578-594.
19. Lowe, R; Bellows, BW. Output-based aid to treat sexually-transmitted infections in Southwestern Uganda: a study of the impact of the program on participating clinics. University of California, Berkeley, School of Public Health: Venture Strategies for Health and Development, 2007.
20. Bellows WB. Dissertation: Social and structural determinants of prevalence and treatment of sexually transmitted infections in Southwestern Uganda. University of California, 2009.
21. Abuya T; Obare, F; Warren, C; Njuki, R; Bellows, B; Askew, I. The impact of the reproductive health vouchers program in Kenya on out-of-pocket expenditures on services. Kenya Obstetrical and Gynaecological Society (KOGS) 35th Annual Scientific Conference, 2011.
22. VSHD. Evaluation of output-based aid (OBA) in Uganda: impact of contracted facilities and social marketed vouchers on knowledge, utilization and prevalence of sexually transmitted infections (STIs) 2006-2007. Berkeley, California: Venture Strategies for Health and Development, 2008.
23. Kilonzo M, Senauer, K; Switlick-Prosem, K; Eichler, R. Paying for Performance: The Reproductive Output Based Aid Program in Kenya. Bethesda, Maryland: Health Systems 20/20 project. Abt Associates Inc., 2009.
24. Bartels U. Market potentials and risks for health care providers in an output-based voucher scheme for treatment of sexually transmitted diseases (STDs) in Mbarara district, Uganda: Ruprecht-Karls University 2005.
25. Borghi, J; Gorter, A; Sandiford, P; Segura, Z. The cost-effectiveness of a competitive voucher scheme to reduce sexually transmitted infections in high-risk groups in Nicaragua. . *Health Policy and Planning* 2005; 20(5): 222-231.
26. Gorter, A. Analysis of data of the OBA programme – presented in graphics. OBA-RH programme Kenya: EPOS, 2011.
27. Bellows, B; Hamilton, M; Kundu, F. Vouchers for health: increasing utilization of facility-based family planning and safe motherhood services in Kenya. P4P Case Study. Bethesda, Maryland: Health Systems 20/20 project. Abt Associates Inc., 2009.
28. Mazzilli, C. OBA Programme cost analysis in study districts over 3 years, 2011.
29. EPOS. Cambodia: voucher launch. [http://www.epos-usa.com/Cambodia-Voucher-Launch.388.98.html?&tx\\_ttnews\[tt\\_news\]=765&tx\\_ttnews\[backPid\]=366&cHash=87d62621d](http://www.epos-usa.com/Cambodia-Voucher-Launch.388.98.html?&tx_ttnews[tt_news]=765&tx_ttnews[backPid]=366&cHash=87d62621d): EPOS Health Management, 2011.
30. Morgan, L. More choices for women: vouchers for reproductive health services in Kenya and Uganda. <http://www.rbfhealth.org/rbfhealth/library/doc/493/more-choices-women-vouchers-reproductive-health-services-kenya-and-uganda>: World Bank, 2011.