# Using Vouchers for Paying for Performance and Reaching the Poor: the Kenyan Safe Motherhood Initiative

Ben Bellows<sup>1</sup>, Francis Kundu<sup>2</sup>, Richard Muga<sup>2</sup>, Julia Walsh<sup>1</sup>, Malcolm Potts<sup>1</sup>, Claus Janisch<sup>3</sup>

<sup>1</sup>University of California, Berkeley (USA)

<sup>2</sup>National Coordinating Agency for Population and Development (Kenya)

<sup>3</sup>KfW Extern (Germany)

## **ABSTRACT**

BACKGROUND: The Government of Kenya is embarking on a performance-based reproductive health program that incentivizes access to women's healthcare. Unattended delivery is the greatest risk factor for maternal mortality and morbidity and in Kenya only 42 percent of all births are assisted by a health professional. The World Health Organization estimates in Kenya more than 400 women per 100,000 live births die during or immediately after delivery. The most effective means to reduce that awful figure is an incentivized Safe Motherhood package of antenatal services and attended delivery by a qualified health worker. The Kenya National Coordinating Agency for Population and Development (NCAPD) is implementing a three year output-based aid (OBA) program in the rural districts of Kisumu, Kitui, and Kiambu as well as the Nairobi informal settlements of Viwandani and Korogocho, representing a population of approximately three million.

METHODS: Under the new output-based aid initiative, women purchase a package of family planning, prenatal and delivery care and rape crisis counseling and treatment. However, final reimbursement on each type of service only occurs after a specific health goal is achieved; *i.e.* the obstetric delivery by a skilled health professional or successful implant of an intra-uterine device by an accredited provider. The provider must demonstrate that the patient received the health service prior to final payment. Voucher use tracks both reimbursement and quality control.

FINDINGS: By the end of 2006, the voucher programme had been launched in all project sites. The selection of districts now covers rural areas (Kisumu, Kitui), pre-urban areas (Kiambu), and urban slums (Korogocho, Viwandani). Sales have gone up rapidly, leading to 42,198 vouchers sold by the end of June 2007, of which more than 69 % were for safe motherhood services (30 % for family planning services, and less than 1 % for GVRS). A total of 19,153 vouchers had been processed by the end of June 2007, representing a reimbursement value of about 1,492,779 Euro.

SIGNIFICANCE: The OBA project is expected to contribute to a reduction of both the maternal and infant mortality rates. More importantly, the lessons learnt are expected to contribute to the development of a National Social Health Insurance Scheme. The OBA

project will be an integral part of the Sector Wide Approach (SWAP) in Healthcare Kenya.

#### BACKGROUND

The Government of Kenya is embarking on a performance-based reproductive health program that links government's keen interest in removing barriers to women's health with incentives to reward services delivered. Across Kenya, only 42 percent of all births are assisted by a health professional. Unattended delivery is the greatest risk factor for maternal mortality and morbidity. The World Health Organization estimates in Kenya more than 400 women per 100,000 live births die during or immediately after delivery. The most effective means to reduce that awful figure is a Safe Motherhood package of antenatal services and attended delivery by a qualified health worker. A new performance-based voucher program, launched in June 2006, is one promising mechanism to reward healthcare providers for delivering Safe Motherhood services.

Under the same initiative, other vouchers are marketed to subsidize patient demand for clinical family planning. The Kenya National Coordinating Agency for Population and Development (NCAPD) is implementing the program in the rural districts of Kisumu (Nyanza province), Kitui (Eastern province) and Kiambu (Central province) as well as the Nairobi informal settlements of Viwandani and Korogocho, representing a population of approximately three million. Planned as a three year pilot, PriceWaterhouseCoopers was selected to coordinate the day-to-day operations including claims payment and fraud control. Each participating clinic and hospital is required to submit prompt reports on patient treatment. Voucher use tracks both reimbursement and quality control.

The Safe Motherhood voucher is performance-based incentive system since the women purchase a package of prenatal and delivery care, but final reimbursement only occurs after a specific health goal is achieved; *i.e.*, the obstetric delivery by a skilled health professional. The provider must demonstrate that the patient received antenatal and delivery care prior to final payment. The family planning and rape recovery vouchers subsidize service delivery for one visit; therefore they are not a performance-based incentive payment scheme.

## How the system works

High cost inhibits many pregnant women from using high quality services for antenatal and delivery services. The Safe Motherhood voucher subsidizes the cost to the patient while providing incentives for high quality.

#### **DEMAND**

# Marketing and Client eligibility

The initiative uses posters, brochures, banners, radio productions, branded T-shirts and caps for marketing. Clients' eligibility is determined at the distribution point using a participatory poverty grading tool developed by Marie Stopes International (MSI). The

tool is specific for individual communities since it depends on a local scale of poverty for its grading system. Each client answers questions about following: housing, access to health services, water sources and sanitation, cooking fuel, daily income, number of meals per day, security, garbage disposal, and rent/land ownership.

A client who is judged to be poor can purchase Safe Motherhood and family planning vouchers. A patient pays Kshs 200/= (US\$2.80) for a Safe Motherhood voucher, Kshs 100/= (US\$1.40) for a family planning voucher and nothing for the gender violence voucher. Before the voucher program, women usually paid a TBA about Kshs 1,200/= (US\$17) for a home delivery. Private services were much more expensive and government hospitals have limited staff and supplies so that the expectant women must pay additional fees to cover these shortfalls. The vouchers, coded with the patient's basic demographic information entitle the patient to service at any accredited provider.

During the first six months of the program in 2006, accredited facilities experienced an increase in utilization compared to the same period in the previous year. Client exit interviews indicate that were it not for the voucher scheme, they would have delivered at home or with a traditional birth attendant (TBA) and would not have visited these health facilities previously considered unaffordable.

## **SUPPLY**

#### Reimbursement Levels:

The performance-based voucher program rewards antenatal clinics and hospitals when low-income women receive antenatal care and deliver under the watchful care of an approved healthcare provider.

After successfully administering four ANC visits, participating providers file a claim for 1,000 Kshs, a scheme designed to incentivize ANC uptake and prepare the woman to deliver in an accredited health facility. After the obstetric delivery, the healthcare facility files a claim for reimbursement at the following rates:

Service	Kshs	US \$
Caesarian Section	21,000	292
Normal Delivery	5,000	70
Surgical contraception	3,000	42
Implants	2,000	28
IUCD	1,000	14

#### Accreditation:

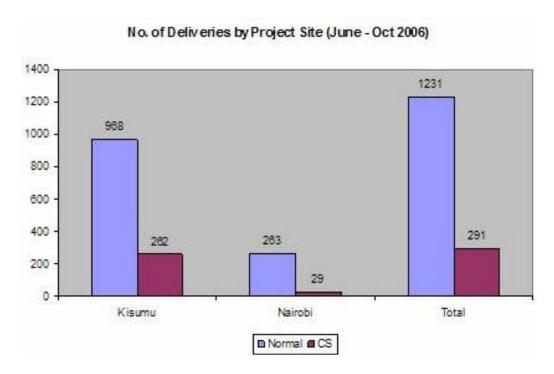
Health professionals are required to register with their corresponding professional health councils e.g. Kenya Medical and Dental Practitioners Board, The Nursing Council (both part of the Ministry of Health). The councils are responsible for accreditation and disciplinary action. For the voucher programs, the accreditation of health facilities is done by the National Health Insurance Fund (NHIF) in conjunction with a technical committee on accreditation and quality assurance that is chaired by the Division of

Reproductive Health in the Ministry of Health. NCAPD, as the management agency, reserves the final right to admit providers to the scheme.

# Incentive for high quality service

Accredited providers are reimbursed following four ANC visits and after delivery. Healthcare facilities have several incentives for providing high quality antenatal and obstetric care: 1) with the ANC, payment is contingent on adherence to treatment guidelines – verified through on-site checks, patient interviews and mystery clients; 2) with the delivery, payment is contingent on a delivery free of untreated complications; 3) if the pregnant woman perceives that the antenatal care is high quality, she continues to visit the ANC provider; 4) women will inform others about who is the high quality provider. Successful providers will be able to increase his/her payments as a result of the increase in clients.

The reimbursement schedule seems to provide an incentive to perform caesarean sections. To date, C-sections are fewer than 15% in Nairobi while more than 26% in Kisumu (see graph below). This proportion must be carefully followed in the future to ensure that unnecessary C-sections are not occurring. A ceiling on c-sections may be imposed at facilities or program-wide if it becomes clear that providers are conducting non-emergency surgeries.



# Why use performance based vouchers?:

There are four reasons to combine vouchers and performance-based contracting in Kenyan women's health services:

- the poor are unable to afford high quality treatment without a targeted subsidy,
- critical reproductive health services are under-utilized in the general population,
- current providers have little incentive to give quality service, and

 women's health programs can be efficiently managed under competitive market mechanisms to stimulate patient demand and improve high quality supply of healthcare.

Although the number of available providers may be limited in the short run, the performance incentives have the potential to induce a supply side response in the longer term. As the program grows and unaffiliated providers take note of the potential to increase their patient turnover and bottom line, additional facilities can be admitted to the program conditional on satisfying the accreditation requirements, participating in ongoing quality assurance, and agreeing to the reimbursement schedule.

The program will ultimately succeed or fail with prompt claims processing and strong patient demand for services. Providers must be able to run their services with clearly defined rules and rewards. Monitoring must be transparent with prompt incentives for proper service provision and penalties for fraud or mismanagement.

Although information asymmetries certainly exist in developing country healthcare markets, women in need of services have a strong incentive to learn where the best providers are located. When health services for family planning, perinatal care, and rape recovery are needed, poor women want to be treated well and are prepared to find a provider capable of cost-effectively meeting their needs.

## **Preliminary results**

The program was launched in June 2006. Utilization of voucher-supported services has increased each month at the voucher-accepting clinics and hospitals.

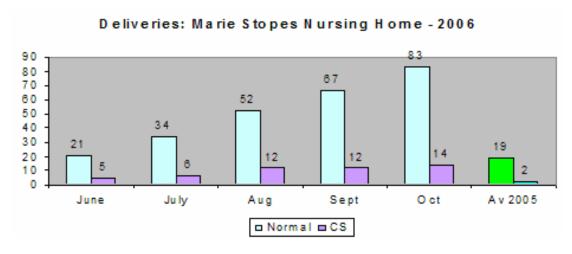
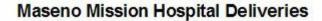
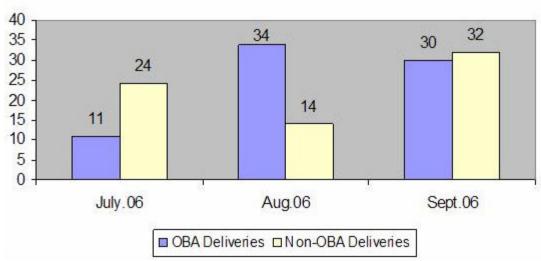


Figure 1: Marie Stopes Nursing Home is one of eight performance-based providers in Kisumu district. Monthly voucher utilization has steadily increased since program launch in June and every month has seen more deliveries under the voucher scheme compared to the average monthly deliveries throughout 2005.





In Kisumu district, 17 voucher distributors sold 2000 Safe Motherhood vouchers between launch and early October. Based on the first months of the program working with the voucher service providers, several challenges and successes have emerged:

- **Reimbursement Levels**: While the public providers and faith based organizations (mission hospitals) are satisfied with the reimbursement rates, the private facilities are pressing for rate increases. In Kisumu, the ubiquity of the OBA project has set up the minimum market price for all safe motherhood services. All the facilities that can have revised their charges to match the OBA set costs.
- **Service Quality**: The quality of services being accessed by the voucher clients is good. Facilities that had poor quality services in the past are also making an effort to improve in order to attract more clients. Some facilities are even trying to market themselves in the community beyond the marketing offered by the voucher program.

The program will be modified as lessons are learned. For instance, one hospital is considering the construction of a waiting facility for women who are about to give birth. This will help to avoid emergencies where expectant mothers suffer unnecessary complications or even risk death because of delays reaching the facility. Government facilities are eager to change longstanding cost-sharing policies with the new voucher profits. Authority is being sought from Ministry of Health to allow voucher funds to be used in activities that would enhance service quality e.g. hiring nurses.

June to October 2006	Voucher sales	<b>Deliveries performed</b>	
	Safe Motherhood	Normal	Caesarian
Kisumu	2,033	986	262
Nairobi	464	263	29

Between June and October, the majority of reimbursements were for the Safe Motherhood voucher. As of October, \$77,800 in claims has been paid on total value of performed deliveries \$145,524.

# Performance-based vouchers: a promising alternative

The performance-based voucher strategy complements rather than competes against currently available maternal services putting the financial wherewithal in the hands of the chronically underserved patients, letting them decide which service provider can best meet their needs.

The Safe Motherhood voucher is performance-based since payment occurs only after the observable health goal is achieved. In the Kenya voucher program, it is the successful ANC service provision and delivery of a new baby. The voucher incentivizes the safe delivery for the poorest women from socioeconomic groups at greatest risk of maternal complications and death. These women can now enter the health marketplace and purchase desired services from the preferred provider.

The Marie Stopes poverty assessment tool decreases the misclassification in measurement of SES, in which screening procedures are less than 100% sensitive and specific mistakenly giving high-income women the voucher (false positives) and wrongly keeping low-income women from participating in the program (false negatives).

Pay-for-performance voucher schemes are rare in the literature. In the 1960s the Korean and Taiwanese governments contracted private physicians for voluntary sterilization and IUD insertion and provided voucher subsidies to low-income patients that were redeemable at government and private facilities. Much like the Kenyan women, the low-income women in East Asia were at risk of unwanted health outcomes, in their case, pregnancy. There were negative health outcomes for untreated women (largely complications during pregnancy termination or delivery and quality of life concerns) but the program payments did not reimburse providers for those hard to observe non-events or, to put it another way, it did not offer a bonus for patients who experienced additional months or years free of unwanted pregnancies.

The distinction in the incentive structures is marked. The Kenya program offers payment after the observable outcome, a series of four ANC visits and a second payment after a high quality delivery. The East Asian programs offered providers payment for patient use of preventive family planning. Pregnancy prevention is not hard logistically to reimburse but the incentive structure was on the immediate service output, not health outcomes (like with the delivery) or follow-up visits (like with the ANC component).

Other programs have used vouchers to supply inputs and many other programs have contracted for specific health services but few have combined the targeting and choice of vouchers with performance contracting of healthcare providers.