BMZ Federal Ministry for Economic Cooperation and Development

Future-Makers. Building the future. Let's join forces.

Vouchers: making motherhood safer for Kenya's poorest women

A publication in the German Health Practice Collection

Published by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

kfw ENTWICKLUNGSBANK

In cooperation with:

Ministry of Public Health and Sanitation, Kenya

Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
APHRC	African Population and Health Research Center
BMZ	Federal Ministry for Economic Cooperation and Development, Germany
DHMT	District Health Management Team
EPOS	EPOS Health Management
FBO	Faith-based organization
FP	Family planning
GBV	Gender Based Violence
GDC	German Development Cooperation (comprising BMZ, GIZ and KfW)
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit GmbH
GVRC	Gender Violence Recovery Centre
HAKI	Health for All Kenyans through Innovation
HIV	Human Immunodeficiency Virus
IFC	International Finance Corporation
KDHS	Kenya Demographic and Health Survey
KfW	KfW Entwicklungsbank
KOGS	Kenya Obstetrical and Gynaecological Society
KSh	Kenya shillings
MDG	Millennium Development Goal
MoH	Ministry of Health, Kenya
MoMS	Ministry of Medical Services, Kenya
MoPHS	Ministry of Public Health and Sanitation, Kenya
MMR	Maternal Mortality Ratio
NCAPD	National Coordinating Agency for Population and Development
NGO	Non-governmental organization
NHIF	National Hospital Insurance Fund
NSHI	National Social Health Insurance
OBA	Output Based Aid
PMU	Programme Management Unit
PWC	Pricewaterhouse Coopers
UN	United Nations
UNFPA	United Nations Population Fund
VMA	Voucher Management Agency
WHO	World Health Organization

Vouchers: making motherhood safer for Kenya's poorest women

Germany's contribution to the achievement of MDG5 in Kenya

Acknowledgements

Germany's Federal Ministry for Economic Cooperation and Development (BMZ) would like to thank Kenya's Ministry of Health for providing leadership for their collaborative work towards MDG5 and for the development and implementation of a voucher scheme designed to reach the country's poorest women with reproductive health care.

BMZ would also like to thank all those who contributed to the preparation of this report. Special thanks are due to:

- Piet Kleffman, Cynthia Macharia, Michael Wicke, Lucy Nakibuka of KfW in Kenya
- Heide Richter-Airijoki, Patricia Odero, Atia Hossain, Irene Omogi of GIZ in Kenya
- Staff of the Voucher Management Agency at PWC headquarters in Nairobi and in the field
- Shahnaz Sharif, Director of Public Health and Sanitation, Ministry of Health, Nairobi
- Charlotte Warren and Timothy Abuya of the Population Council, Nairobi
- Donika Dimovska of Results for Development and Guy Stallworthy of the Bill and Melissa Gates Foundation for their valuable independent peer reviews of this report
- Anna von Roenne, Managing Editor of the German Health Practice Collection, for reviewing drafts and coordinating the whole production process
- Sue Armstrong, for researching and writing this publication

BMZ is especially grateful to the women beneficiaries of the OBA programme whose personal stories have greatly enriched the narrative of this report.

German Health Practice Collection

Objective

In 2004, experts working for German Development Cooperation (GDC) and its international and country-level partners around the world launched the German HIV Practice Collection and, in 2010, expanded it into the German Health Practice Collection (GPHC). From the start, the objective has been to share good practices and lessons learnt from BMZ-supported initiatives in health and social protection. The process of defining good practice, documenting it and learning from its peer review is as important as the resulting publications.

Process

Managers of GDC-supported initiatives propose promising ones to the Managing Editor of the GHPC at ghpc@giz.de. An editorial board of health experts representing GDC organizations at their head offices and in partner countries select those they deem most worthy of write-up for publication. Professional writers then visit selected programme or project sites and work closely with the national, local and GDC partners primarily responsible for developing and implementing the programmes or projects. Independent, international peer-reviewers with relevant expertise then assess whether the documented approach represents 'good or promising practice', based on eight criteria:

- Effectiveness
- Transferability
- Participatory and empowering approach
- Gender awareness
- Quality of monitoring and evaluation
- Innovation
- Comparative cost-effectiveness
- Sustainability

Only approaches meeting most of the criteria are approved for publication.

Publications

All publications in the GHPC describe approaches in enough detail to allow for their replication or adaptation in different contexts. Written in plain language, they aim to appeal to a wide range of readers and not only specialists. They direct readers to more detailed and technical resources, including tools for practitioners. Available in full long versions and summarized short versions, they can be read online, downloaded or ordered in hard copy.

Get involved

Do you know of promising practices? If so, we are always keen to hear from colleagues who are responding to challenges in the fields of health and social protection. You can go to our website to find, rate and comment on all of our existing publications, and also to learn about future publications now being proposed or in process of write-up and peer review. Our website can be found at www.german-practice-collection.org. For more information, please contact the Managing Editor at ghpc@giz.de.

Executive Summary

Of the eight Millennium Development Goals (MDGs) drawn up at the summit of world leaders in 2000, least progress has been made towards achieving MDG5, which set countries a target of reducing maternal mortality by 75% between 1990 and 2015. In some countries, including Kenya, the maternal mortality ratio (MMR) has actually increased over recent years, driven partly by high levels of HIV. Kenya's MMR today is 488 per 100,000 live births, meaning that a woman has a lifetime risk of dying as a result of pregnancy of one in 38, compared with one in 11,100 for a woman in Germany.

The German government has a long history of support for reproductive health in Kenya, and after much discussion about how best to achieve progress in reducing maternal deaths, the two governments decided on a voucher programme to try to reach Kenya's most disadvantaged women with reproductive health care. This report describes the programme, which was launched in 2006 with funding and technical assistance from KfW Entwicklungsbank and is now jointly funded by the Kenyan government.

Voucher programmes are part of what is known as "output-based aid" (OBA), a "demand side" approach to health financing that is attracting growing interest across the developing world. The principle behind such programmes is that women below a certain poverty threshold are sold vouchers at heavily subsidized rates that entitle them to go for certain specified services to accredited health facilities. On submission of the voucher and an invoice for their services, healthcare providers are reimbursed by the funding agency, and can decide for themselves how to use the income to support services. In the more traditional "supply side" model of healthcare financing, health services are centrally planned and funds are invested in building and maintaining hospitals and clinics that frequently fail to reach the people they are supposed to serve. With demand side financing approaches, funds are invested in the client rather than the facility.

A voucher scheme like that in Kenya empowers the woman in that she can – at least theoretically – choose which facility to attend from a number of accredited institutions, and change her provider if she is unhappy with the services. Unlike supply side financing, this approach introduces competition between facilities, which gives them an incentive to improve quality in order to attract clients. It is important to note, however, that a voucher scheme can only be established where there is at least a basic health infrastructure already in place, and direct investment in capacity building and strengthening of existing health services are an essential complement to OBA. The report also describes briefly the important role played by GIZ in this respect.

Kenya's voucher programme currently operates in six sites countrywide and covers a population of approximately 400,000 women. It covers three specific services – maternity care, family planning and care for survivors of gender-based violence – each with its own voucher. The 'safe motherhood' voucher costs 200 Ksh (approximately EUR 1.80), the family planning voucher 100 Ksh, and the one for gender based violence is free to the client.

The programme is run by a voucher management agency (VMA) answerable to a special unit within the Ministry of Health (MoH)[1] and guided by a steering committee. A field manager for each of the project sites supervises a team of voucher distributors whose job is to sensitize the general public and recruit clients. The field manager also liaises with health facilities identified and accredited by the VMA to provide services. To ensure maximum coverage of the target population and enhance the opportunity for choice, the programme recruits service providers from all sectors – public, private, non-governmental organizations (NGOs) and faith-based organizations (FBOs).

There are plans to extend the voucher scheme to further sites. However, this should not be seen as a stand-alone programme, but as part of a wider vision for Kenya's health services based on a national social health insurance (NSHI) scheme.

The voucher programme incorporates many of the key features of a health insurance scheme, such as systems for

[1] Since the formation of the coalition government in 2008, Kenya's Ministry of Health has been divided into two entities – the Ministry of Medical Services (MoMS), and the Ministry of Public Health and Sanitation (MoPHS), which is responsible for the voucher programme. For simplicity sake, the shortened term 'Ministry of Health' (MoH) is used throughout this document, and should be understood to refer to MoPHS. MoMS and MoPHS are expected to merge in 2012 as part of the planned devolution of government under the new constitution.

accreditation and quality assurance of facilities, and for registering clients, processing claims and combating fraud. For this reason it is being closely watched as a stepping stone towards a nationwide health insurance scheme, which is being seriously considered following a comprehensive review of financing options for the health services undertaken by the MoH in 2009 with support from the former GTZ (now GIZ)[2] and The World Bank. Observers are interested to see how the voucher scheme is managed and key decisions made; how well service providers cope with the administrative requirements of making claims; what is involved in working with all sectors (public, private, FBOs and NGOs); how reimbursement rates are worked out; and, importantly what users feel about the system.

This report – which has been peer reviewed – covers the first two phases of the voucher programme, and draws lessons from experience thus far that will help inform the development of a nationwide programme of health insurance aimed at providing Kenya's citizens with a comprehensive package of care.

Table 1. Phases of the voucher scheme	
phase I	October 2005-October 2008
phase II	November 2008-October 2011
phase III	since November 2011

>> Source: Voucher programme material

[2] The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH was formed on 1 January 2011. It brings together the long-standing expertise of the Deutscher Entwicklungsdienst (DED) gGmbH (German development service), the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH (German technical cooperation) and InWEnt – Capacity Building International, Germany. For further information, go to www.giz.de.

Motherhood: still a game of chance

Box 1. Kenya Fact File	
Population:	39.4 million
Proportion of people living in urban areas:	21%
Population growth rate:	2.8%
Proportion of the population aged below 15 years:	45%
Total fertility rate:	4.6 births per woman (2.9 urban; 5.2 rural)
Gross national income per capita:	US$790
Population living below poverty line (unable to meet essential needs):	45.9%
Life expectancy at birth:	58.9 years
Maternal mortality ratio:	488 per 100,000 live births
Infant mortality rate:	52 per 1000 births
Under-5 mortality rate:	74 per 1000 live births
HIV prevalence among adults aged 15-49:	6.3% (8% women; 4.3% men)
Population with access to clean, safe water:	63% (Urban: 91%; rural: 54%)
Population with access to sanitation:	24.3% have access to improved toilet facilities that are not shared with other households. 14.5% have no toilet facilities at all.

>> Sources: Kenya National Bureau of Statistics (KNBS), 2010; The World Bank, 2011.

Of all the public health indicators, maternal mortality shows the biggest disparity between rich and poor worldwide. In 2008, the last year for which global data have been analysed, an estimated 358,000 women throughout the world died as a result of pregnancy or childbirth complications, 99% of them in developing countries. Nearly 60% – or 204,000 – of these maternal deaths were in sub-Saharan Africa alone, which is home to less than 14% of the world's people. A woman in this region has a lifetime risk of dying as a result of pregnancy of one in 31, compared with one in 4,300 for a woman in the developed world (WHO, 2010).

In Kenya, the lifetime risk of maternal death is one in 38, and the maternal mortality ratio (MMR), which measures the number of maternal deaths per 100,000 live births, is estimated at 488 (KNBS 2010). By contrast, the MMR in Germany in 2008 was 7, and the lifetime risk of maternal death was one in 11,100 (UNICEF, 2011).

In 1987, three UN agencies – the World Health Organization (WHO), The World Bank and UNFPA – launched the global Safe Motherhood Initiative with a conference in Nairobi called to alert the world to the hidden tragedy of maternal death, which claimed the lives of half a million women a year. According to UNFPA, up to 40% of pregnant women may develop complications, often without warning, before, during or just after childbirth, and for around 15% of all pregnant women the complications may be life-threatening: the survival of mother and child depends on access to quality maternity services that can detect and manage such cases (MoH and UNFPA, 2004). In much of the developing world, however, the provision of quality maternal health care is grossly inadequate, and nearly 25 years since the start of the Safe Motherhood campaign, women continue to die most commonly from haemorrhage, infection leading to sepsis, hypertensive disorders of pregnancy (eclampsia), obstructed labour, and abortion-related complications.

Up to 40% of pregnant women may develop complications, often without warning, and for around 15% of pregnant women the complications are life-threatening

Behind the immediate medical causes of death, however, is a complex web of socioeconomic and cultural factors that increase a woman's chance of an adverse outcome of pregnancy (WHO, 2009). Those who die are overwhelmingly the poor and marginalized – women with low status in society and often within their own families too. They are most likely to be undernourished and ill-educated, to be married and start having children young – often before their bodies are fully mature – and to have little control over their own reproductive health. In some communities, for example, a woman cannot use contraception or seek medical care, even in cases of difficult labour, without her husband's permission. Having babies too young, too old, too often and too close together all increase the risk of complications and death. Living without access to clean water and sanitation, and with little understanding of the principles of hygiene, also increases risk.

By the time of the International Population and Development Conference in Cairo, Egypt, in 1994, safe motherhood conferences had been held in every region of the world and safe motherhood principles had been adopted as core components of reproductive health. Nevertheless, at the turn of the millennium complications of pregnancy and childbirth were still the leading cause of death and disability among women of childbearing age in the developing world (Maine and Rosenfield, 1999); renewing commitment to the cause of reproductive health became a key challenge at the Millennium Summit of world leaders in 2000. One of the eight Millennium Development Goals decided at the Summit, MDG5, set countries a target of reducing the level of MMR recorded in 1990 by three-quarters by 2015, and achieving universal access to reproductive health by the same date.

Globally, meeting the target of MDG5 would require an annual reduction in the number of maternal deaths per 100,000 live births of 5.5%. However, MMR declined by only 2.3% per year in the world up to 2008, and by just 1.7% in sub-Saharan Africa. A 2010 review of the millennium development goals concludes that MDG5 has seen the least progress of any of the MDGs towards meeting its targets. In six African countries, including Kenya, MMR actually increased between 1990 and 2008, driven partly by high levels of HIV infection. In this region, up to 9% of all maternal deaths are believed to be due to HIV/AIDS (Wilmoth et al., 2010; Hulton et al., 2010).

This report looks at the contribution of German Development Cooperation (GDC) towards Kenya's effort to meet its obligations under MDG5. It focuses on a programme set up in 2005, with funding and technical assistance from KfW Entwicklungsbank (KfW), Germany's financial cooperation agency, to increase the access of Kenya's poorest women to reproductive health care through the provision of prepaid vouchers that entitle them to a range of basic services. It also describes the complementary role played by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany's technical cooperation agency, in building and strengthening the capacity of the reproductive health services to meet the people's needs.

MDG5 has seen the least progress of any of the MDGs towards meeting its targets.

Since the survival of babies during their first year of life is strongly affected by the health and survival of their mothers, activities that promote reproductive health care also help Kenya to meet its obligations under MDG4. These are to reduce infant mortality by two-thirds between 1990 and 2015 – from 60 to 20 deaths per 1000 live births.

Reproductive Health in Kenya

For the great majority of women in Kenya who have no medical insurance, pregnancy is a time of anxiety about how they will pay for routine health care, and what will happen if they develop complications. Will their families cope with the burden of costs, or will they themselves die in childbirth as they have seen friends and neighbours die who were unable to afford care?

In 1989 the Kenyan government introduced user fees for health care to help finance the health services. But recognizing the burden this imposed on a predominantly poor population, the government revised the policy in 2002, removing fees altogether from primary care facilities such as health centres and dispensaries and replacing them with a nominal registration charge of 20 KSh (approximately EUR 0.18)[3] and 10 KSh respectively for using such facilities.

However, treasury support for health facilities proved inadequate and as they ran short of vital supplies and drugs, clients found themselves having to pay. "Out of pocket" expenses are today the single biggest source of funding for Kenya's health care system, accounting for about 36% of the health budget. The MoH and the donor community each contribute about 30%, but donors channel almost all funding directly to programmes and projects according to their own priorities, rather than through the government health budget. A small proportion of health financing comes from the National Hospital Insurance Fund (NHIF), a public insurance scheme to which everyone in formal employment in Kenya is obliged to belong, and from private health insurance schemes. In 2009, government spending on health was 6.2% of the total government budget – well below the target of 15% set for African Union countries by the Abuja Declaration of 2001 (MoH, 2010).

Under present circumstances, a woman giving birth in a public health facility faces costs ranging typically from 1,000-5,000 KSh (approximately EUR 9-45) for a normal delivery, to 10,000-12,000 KSh (EUR 90-107) for a Caesarean section. But the quality of services, except for in a few select hospitals in major cities, is very poor. Health centres frequently ask women to bring their own rubber gloves, cotton wool, pads and other supplies for giving birth and to buy any drugs they require from local pharmacies, because the facility is out of stock.

But the most serious shortage as far as safe motherhood is concerned is in skilled personnel. Kenya has a shortfall of at least 35,000 nurses (MoH, 2010), and there are only 230 registered and perhaps 200 non-registered obstetrician/gynaecologists for a population of 39.4 million (Anyangu-Amu, 2010; KOGS 2011). The standard recommended by WHO is one such specialist per 3,600 births. Staff shortages are particularly serious in the more remote and underdeveloped areas of the country where professional people are least keen to work, live and bring up their families. At present, three-quarters of all gynaecologists are deployed in just five major urban areas – Nairobi, Mombasa, Kisumu, Nakuru and Eldoret. And the situation is similar with general physicians: in 2000, more than 80% of all Kenya's doctors were working in urban centres where less than 20% of the population then lived (KOGS, 2011).

The situation is exacerbated by the fact that, despite much high-level discussion of the issues, reproductive health has been a low priority in government spending on health – a situation which has only recently begun to change. Because childbearing is a normal process it has tended to be neglected by the health services, which are orientated towards treating disease. However, in 2007 Kenya's Ministry of Health formally adopted the country's first ever National Reproductive Health Policy. Shortly thereafter, maternity services, which had not been covered by the NHIF, were included among the benefits of the insurance scheme.

In much of sub-Saharan Africa, health spending has been heavily dominated by HIV, which has tended to overshadow other important health issues. "Reproductive health in Kenya has had a lost decade because of HIV," comments Dr Samuel Thenya of Nairobi Women's Hospital. Family planning in particular has been undermined. The Family Planning Association of Kenya – a network of facilities and community-level distributors of contraceptives that was the second biggest provider of family planning in the country after the government, and a shining example in the region in the 1990s – gradually disintegrated as funding was squeezed and is having to be rebuilt under the new name of Family Health Options.

> "Reproductive health in Kenya has had a lost decade because of HIV"
>
> Dr Samuel Thenya

[3] Exchange rates fluctuate constantly. These are the rates on 10 February 2012 given on http://www.oanda.com/currency/converter/

What the figures show

According to the latest Kenya Demographic and Health Survey (KDHS) (KNBS, 2010), around one quarter of women who would like to prevent or delay pregnancy are not using contraception, either because they lack knowledge about family planning or access to services, or for social, religious or cultural reasons. About the same proportion of pregnancies are unwanted or mis-timed. Family planning use is highly correlated with education, being highest, at 60%, among women with some secondary education and lowest, at 14%, among those who have never been to school.

In 2009, the total fertility rate – or number of children a woman would be expected to bear in her lifetime – was 4.6. This was down from 4.9 at the time of the previous KDHS in 2003, but still a cause for concern as Kenya's is a predominantly young population, with three fifths of people below the age of 25 years, and economic growth failing to keep pace with population growth of 2.8% a year.

The survey shows also that the proportion of births that take place in a health facility is 43%, slightly higher than in 2003 (40%), and that nearly 93% of pregnant women visited a health professional at least once for antenatal care for the most recent birth. Data also show however that less than half of mothers go for all four antenatal checkups, or receive any postnatal care at all (EPOS, 2011). The number of babies dying within a year of birth declined from 77 per 1000 live births in 2003 to 52 by the time of the 2009 survey, though maternal deaths showed an increase, from 414 per 100,000 live births in 2003 to 488 in 2009 (KNBS, 2010).

> The number of babies dying declined, though maternal deaths showed an increase.

According to a report from the Center for Reproductive Rights (2010), more than a third of these maternal deaths are the result of complications of abortion, which is heavily restricted by law in Kenya and therefore performed most commonly by backstreet abortionists or desperate women themselves. Every year around 21,000 women are hospitalized for abortion-related complications. But those who die have typically avoided seeking health care because of stigma and fear of arrest and prosecution, or because they simply could not afford the cost.

Box 2. Almost twice as likely to die: prospects for pregnant women in Nairobi's shantytowns

A study of maternal mortality in Korogocho and Viwandani informal settlements carried out by the Nairobi-based African Population and Health Research Center (APHRC) estimated that MMR for the period from January 2003 to December 2005 was 706. This compared with the national MMR of 414, according to the KDHS of 2003. Only about one in five of the women whose deaths the research team investigated had been delivered by a health professional. And less than a quarter had delivered in a health facility, though the majority had sought emergency care towards the end, and died in a hospital or clinic. According to figures from the Central Bureau of Statistics cited in the APHRC report, "nearly a quarter of Kenyan women have started childbearing by the age of 20 and this proportion is doubled for women living in urban informal settlements" (Ziraba et al., 2009).

>> For women living in Nairobi's shantytowns, the risk of maternal death is almost twice as high as the country average.

Vouchers: Targeting the poorest women

German Development Cooperation (GDC), on behalf of BMZ, has a long history of support for the health sector in Kenya and, as reviews of progress towards the MDGs showed that maternal health is seriously lagging behind, the two governments, after much discussion of the various options, decided on a voucher scheme to try to reach the country's poorest and most disadvantaged women with reproductive health care. Launched in 2006 with funding from KfW the scheme is today jointly funded by the Kenyan government. Moreover, it has been designated a health sector flagship project of "Vision 2030", another goal-setting exercise whose aim is to make Kenya "a globally competitive and prosperous country with a high quality of life by 2030" (MoH, 2010).

Vouchers for reproductive health are not a new idea[4]. They were introduced in Taiwan and Korea in the mid 1960s to encourage the use of contraception and, since the 1990s, at least eleven more programmes have been set up in countries as diverse as Bangladesh, Nicaragua, Indonesia and China to promote equal access to some aspect of reproductive health care. These programmes are part of what is known as "output-based aid" (OBA), a "demand side" approach to health financing that is attracting growing interest today. The principle behind such programmes is that women below a certain poverty threshold are sold vouchers at heavily subsidized rates which entitle them to go for certain specified services to accredited health facilities.

With 'demand side' financing, funds are invested in the client rather than the facility.

On submission of the voucher and an invoice for their services, healthcare providers are reimbursed by the funding agency, and can decide for themselves how to use the income to support services. In the more traditional "supply side" model of healthcare financing, health services are centrally planned and funds are invested in building and maintaining hospitals and clinics that frequently fail to reach the people they are supposed to serve. With demand side financing approaches, funds are invested in the client rather than the facility. In the case of OBA, as it is currently implemented in various parts of the world, funds are directed towards a specific group of people or towards specific medical conditions.

A voucher scheme like that in Kenya empowers the woman in that she can – at least theoretically – choose which facility to attend from a number of accredited institutions, and change her provider if she is unhappy with the services. Unlike supply side financing, this approach introduces competition between facilities, which gives them an incentive to improve quality in order to attract clients. It is important to note, however, that a voucher scheme can only be established where there is at least a basic health infrastructure already in place, and direct investment in capacity-building and strengthening of existing facilities is an essential complement to OBA.

A voucher scheme can only be established where there is at least a basic health infrastructure already in place.

In Kenya, the voucher scheme covers three specific services – maternity care, family planning, and care for survivors of gender based violence (GBV). It was launched initially in five sites across Kenya, with the aim of expanding to reach eventually three million women countrywide (*see Table 2*). Baseline studies suggest there are around 400,000 poor women of reproductive age in the intervention area as constituted at the end of phase II in October 2011, and that about 75,000 births can be expected each year. (EPOS, 2011)

[4] See the systematic review of Bellows et al. (2011).

Table 2. Voucher project sites			
Project site	Characteristics	Total population	% of population poor
Kiambu (Central Province)	Rural, suburban and metropolitan	744,010	31.1
Kisumu (Nyanza Province)	Rural and suburban	504,359	64.6
Kitui (Eastern Province)	Very rural, few health facilities and widely scattered	515,422	58.3
Nairobi (Korogocho & Viwandani shantytowns	Urban and metropolitan	250,000	approx 75%
Kilifi (Coast Province) [5]	Largely rural, scattered health facilities	679,245	69.0

>> Sources: Kenya National Bureau of Statistics (KNBS), 2010; The World Bank, 2011.

How is the programme managed?

The day-to-day running of Kenya's programme is carried out by the voucher management agency (VMA) – at present the independent consultancy Pricewaterhouse Coopers (PWC) – which is answerable to a programme management unit within the MoH. The VMA is guided by a steering committee, comprised of representatives of government ministries involved in the project, KfW, and the NHIF. Technical assistance is currently provided by EPOS Health Management, a consultancy based in Germany, which also plays a key role in supporting the programme management unit (PMU) within the ministry.

The VMA's functions include programme design, marketing and distribution of the vouchers, contracting of health facilities to provide services, continuous monitoring of quality, and reimbursement of claims.

The vouchers

In designing the vouchers, the VMA took care to ensure that they are not only attractive and recognisable as a brand, but that they are as fraud-proof as possible also. "We had to make sure they couldn't be duplicated in the market overnight," explains Mwakali Mwango of Pricewaterhouse Coopers. The VMA uses the services of a printer accredited by the government to produce bank notes and cheques to print vouchers that include a watermark, holograms and specially coded serial numbers.

There is a different voucher for each service:

Kadi ya uzaaji ("safe motherhood voucher") costs 200 KSh (approximately EUR 1.80) and entitles the client to antenatal care (a maximum of 4 clinic appointments); institutional delivery of her baby, including treatment for complications and Caesarean section if required; and postpartum care up to 6 weeks.

Kadi ya jamii is for family planning (FP) and costs 100 KSh. It covers a single consultation for a long-term FP method – insertion of an inter-uterine contraceptive device (IUCD) or a contraceptive implant; bilateral tubal ligation (sterilisation) for a woman; or a vasectomy for her partner.

Kadi ya salama is for care of survivors of gender based violence (GBV). This voucher is free of charge, and covers examination and all necessary tests, as well as psychosocial treatment for people who have suffered sexual violence.

The VMA produces a range of publicity materials and the voucher scheme is promoted through churches, village level meetings, schools – "wherever there are suitable gatherings of people to whom we can talk about vouchers," says

[5] Kilifi joined the programme in mid 2011.

>> The vouchers incorporate a hologram and watermark that make them virtually impossible to forge.

Ms Mwango. In some locations the scheme is advertised on radio and in other media, and all accredited health facilities have posters on the walls advising clients about who is eligible for vouchers and how and where they can get them.

A key feature of the project is flexibility, with procedures being adapted to local conditions. In Nairobi's shantytowns, for example, poverty is so pervasive that the distributors are anxious to avoid being overwhelmed by demand, so they prefer to sensitize and recruit clients by talking to people in their own homes and small groups rather than in mass gatherings. However, this example of the flexibility of Kenya's voucher programme also illustrates one of its biggest ethical and emotional challenges: deciding who, amongst a sea of needy people, should benefit and who should be left out. As the testimony of those working on the frontline shows, it is a challenge that has not yet been satisfactorily resolved.

Box 3. HIV positive, pregnant and alone – Irene's story

Walking along a narrow alleyway in Nairobi's Korogocho district and trying to avoid stepping in the open drains, we duck through a rough wooden door into a small dark room. A flimsy cotton curtain screens off the bed that fills most of the room. Perched on the edge is a young woman cradling a fretful baby. Her child is sick with diarrhoea, explains the young mother.

Irene is a voucher client from the shantytown. When the distributors first met her she was in a state of despair and felt trapped by her life. The family has no regular income and struggles to find two meals a day. Water costs them 2 KSh (less than EUR 0.02) for a 20 litre jerry can, and a visit to the communal toilet 5 KSh, while a shower costs 5 KSh for cold water and 10 KSh for hot. Because it is costly and unsafe for a woman to go out to the toilet alone at night, many people resort to using paper bags instead, and fling their faeces out of the door. The shantytowns are notorious for their "flying toilets" says field manager, Linda Atieno.

Having been through secondary school, Irene had wanted to train as a nurse, she told the voucher distributors. But her mother, who was struggling to raise her family alone, had forced her to marry an older man whom she hoped would help support them all. He was an unfaithful and abusive husband, so the young woman, still a teenager at the time, left him. But she was forced by her angry mother to return to him and soon became pregnant.

During routine tests at her first antenatal appointment, Irene was astonished to discover she was HIV positive. When she told her husband he deserted her. Her 'safe motherhood' voucher covered the cost of antiretroviral treatment and a Caesarean section to prevent transmission of the virus from mother to child, and Irene spent a week in hospital after delivery. But she has been too fearful to tell her mother of her HIV status and lives alone with the secret.

>> Voucher distributor Violet Auma explains how the safe motherhood voucher works to a new client in Miwani, near Kisumu.

Voucher distribution

Each project site has a field manager employed by the VMA whose job is to supervise and support a team of about 20 voucher distributors each, and to liaise with accredited health facilities to ensure the smooth running of the scheme at the frontline. The field managers are people like Linda Atieno, a former marketing executive with a social science degree, and Dorothy Wavinya, a former nurse. Both had experience working with people and a keen sense of social justice – essential qualities for a job which entails daily confrontation with extreme need. "I love my job absolutely," comments Ms Atieno. "Seeing how what you do really has an impact on someone's life motivates me."

Working with them in the field are around 80 voucher distributors whose job is to sensitise and recruit clients. When the scheme was first launched, distribution was carried out by community-based groups working on commission. But it soon became apparent that this system was open to abuse. The pressure to sell vouchers to earn commission was heavy, and it was often hard to resist entreaties from poor friends and neighbours to join the scheme even if they were not strictly eligible. This was an almost inevitable consequence of a small-scale programme that must set limits on who can benefit, even if those limits seem arbitrary and unfair to those left out who are equally needy. To solve the immediate problem, the system was changed such that distributors are today recruited, trained and employed directly by the VMA on salaries rather than commission.

The distributors have monthly targets and spend their days out in the community recruiting clients, who are advised during promotional talks to attend a central meeting place – typically a school or chief's camp – on a specified day to explore their eligibility. The distributors use a questionnaire originally designed as a poverty identification tool by Marie Stopes International. Because the characteristics of poverty are so different from one place to the next – between an urban shantytown and a remote rural area, for example – the questionnaire is adapted to local circumstances. Typically, it takes the type of housing, rent or land ownership, number of children in the family, what kind of fuel the family uses, where they get their water from, access to sanitation, how often they eat, and family income as the key indicators of a woman's socio-economic status.

Eliminating fraudulent applications is a constant challenge. A woman whose housing standards do not meet the criteria, or who may be extremely poor but who lives outside the catchment area of the scheme may borrow a friend's house for the distributor's visit, or ask a pregnant friend to obtain a voucher on her behalf, for example. "It happens almost every day," said one distributor. "We realise when they can't answer simple questions correctly, like what colour toothbrush they use. And sometimes we ask a woman to put on a pair of shoes we find in the house to see if they fit her." Recognising that most such cases are motivated by very real desperation, the distributors are trained to be diplomatic rather than confrontational. Typically they will tell a woman caught cheating that they will come back another day to speak to her, which usually resolves the issue.

Combating fraud is a responsibility of the field manager also, and besides checking regularly the voucher registration records of the distributors, they do spot checks of clients in hospitals and clinics. "If I see a mother in the hospital with disposable nappies and good baby clothes, I get suspicious and have to investigate," says Dorothy Wavinya in Kisumu. The field managers have an OBA monitor in each facility, and ask the staff generally to advise them if they think someone who is ineligible is using a voucher. On occasion clients have been asked to repay the bill for services, but this is rare, says the VMA's Julius Kitheka. "I think word has gone out that you don't mess with the system. If you cheat, you will be caught." The scheme is designed so that voucher distributors have no contact with service providers, and service providers are not involved at all in handing out vouchers (except for those for gender based violence, as described later). This ensures that the opportunity for collusion between clients, distributors and service providers is virtually eliminated.

Box 4. The distributors: an inherently stressful job

Korogocho, on Nairobi's north-eastern edge and right beside one of the city's main rubbish dumps, is home to around 200,000 people packed into 1.5 sq km. The name "Korogocho" means "crowded shoulder to shoulder" in Swahili. This is the territory covered by Mary, Mildred and Edwin, who work together to raise awareness of the voucher scheme and recruit new clients. In this labyrinth of narrow alleyways where the struggle for survival is acute, security is an issue and the three move around together always, and sell vouchers only from a central point to avoid carrying money. In other sites, where distributors typically work alone, the local chief will sometimes appoint someone to accompany a female distributor, if he feels the environment is unsafe.

The distributors have been well trained by the VMA to handle whatever the day brings, but their work with and for the poor is inherently stressful. Most days they are out in the community for 7-8 hours without a break for refreshments. "How can we sit and eat when the people we work with are hungry?" they ask. They have found people scavenging for food in the rubbish dumps that line the streets of the neighbourhood, and mothers feeding their babies water to ease their hunger because there is nothing else in the home.

Occasionally, when a pregnant woman cannot afford even the 200 KSh for a voucher, the distributors may reach into their own pockets – though this is rare, they say. Another source of stress is the fact that while the voucher scheme has a fixed catchment area, poverty knows no geographical boundaries and there is constant resentment from poor women from neighbouring districts. It is hard to witness their struggle to pay health care bills and their fear of developing pregnancy complications that may cripple their families financially, and be unable to help, say the distributors.

>> Field manager Linda Atieno with voucher distributors Edwin Nasio, Mary Mulandi and Mildred Osumba in Korogocho.

Peer support is essential to coping with stress, and once a week all distributors meet with their field managers to share problems and advice as a group. But the field manager is available at any time to support and advise a distributor who needs help.

>> All accredited health facilities help to raise awareness of the voucher programme by advertising the service and explaining the programme to clients who enquire.

The Service Providers

The VMA, with the help of a technical committee, is responsible for identifying and accrediting health facilities to provide the services to clients. In order to be accredited, a facility must be able to meet a specified minimum standard of care, and is assessed on its infrastructure, staffing levels, equipment and supplies. Health centres and dispensaries that are not equipped to handle emergency deliveries must have a referral mechanism in place to a hospital or clinic that can manage such cases.

Over many years of working with the health sector in Kenya, the GDC – today represented by GIZ and KfW – has been encouraging partnership with the private sector, and a voice for commercial and not-for-profit service providers in policy and decision-making within the Ministry of Health. This has been crucial in creating an enabling environment for the OBA voucher programme to work with both public and private health providers in order to achieve as good coverage of the population as possible. By the end of phase II in October 2011, the voucher programme had a total of 87 service providers – 47 from the public sector, 19 private health facilities, 15 run by faith-based organizations (FBOs) and 6 by non-governmental organizations (NGOs).

> Staff turnover is high, especially among doctors, and the labour ward frequently operates with half the number of staff needed.

Newly accredited facilities are given training by the VMA in how to manage the voucher scheme – the philosophy, working principles and claiming process – and are advised also about the latest clinical practices and policies, national and international, regarding maternity care, family planning and gender based violence. The effectiveness of the programme also relies on the District Health Management Teams (DHMTs) of the Ministry of Health, who are responsible for supporting all health facilities, public and private, within their areas and who offer on-the-job training to build and refresh the professional skills of the healthcare workforce.

Reproductive health is a key part of the DHMTs' mandate, so there is mutual benefit in having close links with the voucher programme. "OBA helps the facilities for which they're responsible to have some reliable cash flow," explains Boniface Mbuthia of the VMA. "So whereas before they would have difficulty raising funds for the activities within their facilities, OBA comes in and helps them meet their priority needs – it helps them finance improvements." Here too, there is synergy between the different agencies of German Development Cooperation, since GIZ works directly with DHMTs to build their capacity through management training for competence and mentoring schemes, and provision of equipment and supplies for family planning in some districts.

Staffing of facilities is a constant challenge, particularly in public facilities where health personnel are centrally recruited and deployed by the Ministry of Health. The situation in Nyanza Provincial General Hospital in Kisumu is typical. It is the referral hospital for the whole Province and the only institution with an intensive care unit. Staff turnover is high, especially among doctors, says the chief nursing officer, and the labour ward frequently operates with around half the number of staff needed.

The technical committee of the voucher programme carries out an annual review of all accredited service providers to ensure standards are maintained. It is the field managers' duty to visit the providers regularly to see that recommendations of the technical committee have been acted on, to double check the paperwork regarding voucher claims, and to ensure that the staff responsible for processing claims are up-to-date with their skills and have not been replaced by someone new who needs training. Field managers also talk to clients accessing services to find out about their personal experiences: How long did they wait to be seen? Were they asked to pay for anything? Were they treated courteously?

Besides these on-the-spot interviews with clients, the VMA also conducts systematic client satisfaction surveys every year, for which they visit women in their own homes. The purpose is to hear the concerns of clients when they have had time to reflect, and are not under any pressure from service providers to hide dissatisfaction. These surveys often correlate surprisingly closely with the quality reviews of the technical committee, says Mr Mbuthia of the VMA, which gives feedback to the service providers. "This helps facilities appreciate that they are being watched, and that they need to be actively engaged in improving quality."

Reimbursement

To be reimbursed for services provided, health facilities submit to the VMA a detailed invoice along with the voucher handed over by the client. There were some problems at the beginning, says the VMA. Public health facilities, in particular, were not used to having to account for their activities to a third party and support their claims with documentation. Common grumbles were that the paperwork was an added burden. But as they began to see the benefits of the scheme in real income, complaints diminished. Today, the task of making claims falls typically to a medical officer or nurse in a health centre or dispensary, while the bigger facilities, like hospitals, usually employ a clerk specifically to take care of the documentation and follow up payments.

"In the beginning, with a new health facility, we are a little bit lenient to let them learn; we will even take incomplete claims back to them to ask for the information," says Mr Mbuthia. "But later on when we feel they know the rules, we don't let them off because it might even be a sign of fraud." The field manager periodically checks the service providers' records on site to see that everything is in order, and documentation is checked carefully once it reaches the VMA. Invoices are also reviewed by independent medical experts to ensure that treatment for childbirth complications, for example, is justified. The rigorous checking has resulted in at least two service providers having their contracts terminated for suspected fraud.

In the early days of the OBA voucher scheme, the reimbursement rates for services given were negotiated with each health facilities, up to a certain ceiling. However, this was cumbersome and costly, so flat rates for each service category were set by the steering committee, as in Table 3:

Table 3. Voucher reimbursement rates for services provided.

	KShs	EUR (approx.)
Caesarian Section (+ANC)	20,700	190
Normal Delivery (+ANC)	4,950	45
ANC	975	9
Surgical Contraception (tubal ligation, vasectomy)	2,925	26.50
Implants	1,950	17.50
IUCD	975	9
Gender violence	No limit	
Complications	No limit	

>> Source: Reproductive Health Vouchers (2011)

>> Lumumba clinic has invested some of its OBA income in new blankets, bed linen and curtains for the maternity ward.

But while flat rates for services encourage efficiency and a new cost-awareness, particularly in public health facilities funded by the state, they are also one of the main sources of friction. Private health facilities complain that certain procedures they consider routine are not covered by the vouchers. Ultrasound scans are a common example, says Mr Kitheka of the VMA. "Everyone wants to see their babies on screen! But according to the programme there are only certain medical indications for performing scans – like bleeding, for instance."

Service providers are unhappy too that rates are rarely reviewed, allowing inflation to eat away at their income. According to the director of a faith-based clinic in Korogocho, rubber gloves have gone up from 120 KSh to 450 KSh for a pack of 100, and cotton wool from 80 KSh to 250 KSh since reimbursement rates were set. Complaints received by the VMA are fed back to the steering committee, which agreed on revised rates in November 2011. However the lack of direct lines of communication is also seen as a frustration by some, who feel their voices are not easily heard, and a very small number of service providers – three in addition to the two suspected of fraud – have dropped out of the programme (EPOS, 2011).

> Investments have an impact way beyond the voucher scheme as all users of the health services benefit from improvements in quality.

Nevertheless, the voucher scheme remains attractive to private and NGO service providers for a number of reasons: it widens their markets, drawing in clients who would not otherwise be able to afford private health care; and it provides a reliable and predictable income stream that gives them the confidence to invest in their services. For some private facilities the scheme has been a lifeline (*see Box 5*).

The predictability of payment is appreciated by all service providers, public and private alike. The nurse in charge of the postnatal ward at Nyanza Provincial General Hospital in Kisumu, for example, describes how, before the voucher programme began, beds would frequently be occupied for days longer than necessary by patients who could not pay the fees, and whom the hospital was therefore unable to discharge. The waiver system that the hospital operates for the very poorest patients is a cumbersome process involving overstretched social workers. "It was a big headache," says the nurse. "OBA has streamlined payment and made a big difference."

According to a mid-term review of the voucher programme carried out by EPOS, reimbursement rates are sometimes below the 'real' cost of a procedure. But where a voucher programme enables a facility that was underutilised to operate at greater, or even full capacity, efficiency savings can be made that alter the cost equation (Bed occupancy in private facilities, for instance, is on average under 50% (MoH, 2010)). And there are myriad examples of new investment in services made possible by voucher income. One of the strengths of the programme, being a demand side financing approach, is that service providers, who know better than any central authority such as the MoH or indeed the donor, KfW, what their needs and priorities are, can decide for themselves how to spend their voucher income. And because it encourages competition with other service providers to attract clients, there is an inherent incentive to invest in quality.

Since joining the programme in 2008, the Provide International Centre – one of the oldest health facilities in Korogocho – has engaged five new staff members, including a medical officer and a security guard. It has replaced rickety old benches with modern labour couches, and bought new equipment for the delivery ward as well as a new engine for its ambulance. The Lumumba Health Centre in Kisumu has extensively refurbished its facilities, with new curtains round beds in the maternity ward, new bed linen and blankets, delivery couches, and a suction machine for clearing the lungs of newborn babies. And it has renovated the toilets and showers, invested in a water tank and an incinerator for waste disposal, and repainted the health centre, among a wealth of other improvements. Lumumba has also invested in tea-making facilities for its staff – a small expenditure that

can have a big impact on the morale of staff who frequently work long shifts without a break. To ease congestion and attract more clients, Nyanza Hospital has built a whole new maternity wing, partly funded by voucher income. Such investments, of course, have an impact way beyond the voucher scheme as all users of the health services benefit from improvements in quality.

Box 5. Vouchers help new groups of clients to access health care in private clinics

In 1994, Patrick Waiganjo opened Jahmii Kipawa Medical Centre, a private clinic in Korogocho to serve the community in which he was born and lived before winning a scholarship to train as a clinical officer[6]. There were no public health facilities nearby that he could work with when he returned to his community. But although he kept profit margins pared to the bone, he struggled to keep the clinic going, and operated below capacity because many sick people still could not afford the fees. "When you come to work and there are no clients, it's very hard," he says from behind the desk in his tiny cramped office down a busy side street in Korogocho. "Morale has really improved since we joined the voucher scheme." Mr Waiganjo took out a loan to upgrade the clinic to meet the requirements for accreditation. The medical centre was originally for out-patients only, so he created four small wards for in-patients, and installed electricity and running water. He bought good furniture and made sure the delivery room was properly equipped. Since being accredited to the voucher programme, he has been able to buy the building he used to rent, to employ additional nurses and to pay for the services of two locum doctors who attend the clinic regularly. Recently, Mr Waiganjo bought a computer with access to the internet so that staff can keep up to date with information and international trends in reproductive health care.

Antenatal clinics are held weekly, and there is an average of two deliveries daily. Pregnant women receive necessary prophylaxis such as tetanus and BCG injections, and are routinely tested for HIV. Infection rates are high in the shanty-town, says Sylvia Macharia, the nurse in charge, running her finger down her client register. "See here, there are six today. We see HIV almost every day."

On the day of our visit, 19-year-old Asha is resting in the postnatal ward with her baby boy born a few days earlier. After a normal delivery, Asha suffered a postpartum haemorrhage without warning, and must stay a while in the clinic for observation. In the room next door a young woman lies in a huddle with her face to the wall. She is 15 years old and pregnant, but her baby is not due for a few months. The girl was admitted with bleeding, and claims her mother beat her up.

>> The Jahmii Centre is one of few health facilities in the shanty-town, where nearly half the women start childbearing as teenagers. This 19 year-old mother suffered a postpartum haemorrhage.

In a large room beyond the wards, 18 women sit waiting for antenatal care, listening meanwhile to a talk from a nurse about how to care for their babies after birth, and the importance of family planning. All are aware of the unpredictability of pregnancy and the threat of crippling expenses, or death, if complications arise. How many of the women know someone who has died in pregnancy or childbirth among their families or friends? Five of the 18 raise their hands. "You are at peace with a voucher," says one, shaking her head at her memories.

[6] In Kenya, Clinical Officers have similar basic training to doctors, but it is shorter – typically three years study, followed by a year's internship in a hospital. They are qualified to carry out many of the tasks performed by doctors, including diagnosis and treatment of medical conditions, prescribing, routine obstetric care, and registration of births and deaths. There is a special focus in training on primary care and community health, and they also learn Health Service Management. Being less costly to train and employ, and being often more ready to work in remote communities than doctors, Clinical Officers are described as "the backbone" of the health system in many African countries.

>> Despite having bought a safe motherhood voucher, Christina Akinyi did not use it because she lives far from an accredited facility and could not afford transport.

Results

The voucher scheme was launched with a budget of 6.58 million Euros from KfW for the first three year phase. It entered the second phase in November 2008 with another 10.5 million Euros from KfW, and 9 million KSh (EUR 80,520) from the Kenyan Ministry of Health, which has allocated a further 54 million KSh (EUR 483,110) from its budget for phase III, starting November 2011.

Because of the limited number of project sites it is difficult to assess the impact the programme might have had on maternal and neonatal mortality. However there is strong evidence that the voucher scheme has been effective at reaching poor women and has increased their access to reproductive health services, and that among service providers, capacity and quality have improved significantly.

Safe motherhood

A review of the programme in the journal Global Public Health (Janisch et al., 2010) found that in its first eighteen months, sales of vouchers for safe motherhood for all sites together were double what had been projected in the original plans. In the tight-packed shantytowns of Nairobi, where reaching the poor with information and voucher distribution activities is easier than in the more remote rural areas, voucher sales were more than three times the targeted figure.

Data from selected health facilities also showed an increase in professionally assisted births (among both voucher and non-voucher clients) of 57% overall. Again, the data for Nairobi were particularly striking, with accredited facilities providing labour care for an additional 1,766 women with vouchers, over and above the roughly 300 non-voucher clients they would normally see in the same time period (Janisch et al., 2010).

This dramatic increase in professionally attended births in Nairobi compares with 8% in the mixed urban/rural district of Kisumu and 125% in the very rural district of Kitui – a reminder that access is a complex issue influenced by many different factors. Here, the personal experiences of women give an indication of the kind of barriers to access they can face, even with a voucher. A mother of three, two toddlers and a newborn, explained how women living in the communities that provide seasonal labour to the sugar cane plantations in rural Kisumu are cut off without public transport and must hitch a lift, typically on laden cane lorries, to reach a clinic. When she herself went into labour, she was taken to hospital by the wife of the plantation owner, but found the cost of transport deducted from her husband's salary. Others, particularly single women, living in shantytowns where security is an issue say they fear to leave their homes if they go into labour at night.

A mid-term review conducted by EPOS in March 2011 estimated on the basis of trends thus far that, by the end of phase II (October 2011), the programme would have provided services for 124,000 pregnant women – more than one quarter of the women expected to give birth up to that time in the project sites. The review projected that the number of assisted births would have doubled from an average of 2,000 per month at the end of phase I, to 4,000 a month by the end of phase II. It found also that in phase II, nearly 60,000 safe motherhood vouchers had been sold up to March 2011, despite a hiatus between November 2008 and June 2009, when voucher sales were suspended while the problems with the distribution system described earlier were resolved.

In 2009 a further benefit was added to the safe motherhood voucher: clients became eligible for a food handout of 7.5 kg of fortified flour and a litre of cooking oil per month. Distributed through the World Food Programme, the handouts were financed by a 6 million Euro grant from the German government as a contribution towards fighting the famine that was gripping the country. Channelling these funds through the OBA scheme was a strategic decision to ensure that benefit was targeted at a very vulnerable group – poor

pregnant and lactating mothers in largely urban settings, who tended to be neglected by the international relief programmes focussing on arid and semi-arid areas. The handouts are likely to have been a stimulus to voucher sales as well as to the uptake of services, since the food is distributed by the health facilities throughout pregnancy and during the postnatal period. Indeed data show a considerable increase in demand for antenatal care following the introduction of food handouts, to reach an average of about 70% of vouchers sold in phase II (EPOS, 2011).

There is anecdotal evidence too that the feeding programme has had an impact on the health of mothers and babies, with several service providers reporting that low-birth weight among babies is not as common as it was before food distribution began. This has important implications for the long-term, since babies who are underweight at birth are at a disadvantage throughout life: they are at increased risk of dying soon after birth, and those who survive are more likely than normal weight babies to suffer from stunted growth as children and heart disease and diabetes as adults (IFRC, 2011). However, the future of food handouts is uncertain as current funding is due to end in 2012.

> Babies who are underweight at birth are at a disadvantage throughout life.

The EPOS review found that overall, 76% of the safe motherhood vouchers sold in phase I were used for professionally attended childbirth. It was not clear from the available data what proportion of the remaining 24% were used for antenatal care only and what proportion were not used at all. But data for phase II showed that by the end of March 2011, 47% of the vouchers sold thus far had been used for antenatal care and 59% for professionally attended childbirth. Again, the experiences of people on the frontline offer valuable insights into how the voucher programme is working. Adam Mohamud, who runs the Provide International Centre in Korogocho, says that before joining the scheme his health centre saw a high proportion of obstetric emergency cases, with women coming only when they got into difficulties. Too often they arrived too late for his centre to be able to help, and had to be referred to hospital in the centre's ambulance, for which they could rarely pay. "Deaths used to be high here," says Mr Mohamud. "Those related to complications have definitely reduced." Though the centre charged only 50 KSh for antenatal care, many women could not afford the fee, so did not attend the clinics where early signs of complications might have been picked up and treated.

Eunita Owino, the nursing officer in charge of Lumumba Clinic in Kisumu says that deliveries have gone up from around 30-40 per month to around 70, of which two thirds are typically voucher clients. In Nyanza Hospital too, a high proportion of women accessing the antenatal and maternity services are voucher clients who would not usually have attended the hospital, says the chief nurse.

Family Planning

Besides the health and social benefits of contraception to the individual user, family planning also has an important role to play in reducing maternal deaths by limiting unwanted and untimely births. The unmet need for family planning and its often tragic consequences is illustrated by a study of maternal deaths in the two Nairobi shantytowns covered by the voucher scheme: it found that abortion was the biggest single killer of pregnant women, accounting for 31% of deaths between 2003 and 2005 (Ziraba et al., 2009).

At present, vouchers for family planning cover only long-term methods – hormonal implants, IUCDs, sterilisation and vasectomy. The mid-term review by EPOS found that women who had bought family planning vouchers in phase I were slow to use them – by May 2009, only 48% of the 25,746 vouchers sold up to November 2008 had been used. Possible reasons include inadequate counselling of clients by service providers, stock-outs of supplies, and long queues at some family planning outlets that are a disincentive to clients. According to voucher distributors on the frontline, myths and misconceptions about long-term contraceptive methods are common and also serve to undermine the willingness of clients to go for services. Such myths include the idea that IUCDs will stop a woman enjoying sex, or conversely that they will encourage promiscuity; that her partner will be able to feel the device; and that hormonal implants in the upper arm will pop out spontaneously, or make a woman too weak to work. Younger women who have not yet completed their families may also be inhibited by the idea of long-term contraception, which is less well understood than other methods.

>> The family planning voucher entitles a woman or her partner to some form of long term contraception for 100 KSh, a fraction of the usual charges for these procedures.

However, there has been a dramatic increase in the use of the vouchers in phase II. Whereas in the last year of phase I, around 350 voucher clients a month accessed family planning services, the average for the six months from October 2010 to March 2011 was more than 1000 clients a month. In March alone, more than 2000 clients were provided with long-term contraception, and the EPOS review team projected that by the end of phase II, the uptake of services would be around 226% of the targeted figure.

The increase in use of family planning vouchers is "basically the result of an improved response from public facilities in the provision of long term family planning methods," says the review. "The public facilities in Kiambu, Kisumu and Nairobi and also recently in Kitui have started outreach work to the communities, inviting women to come on a particular day of the week to obtain implants at the health facility, whereby the facility assures the clients that staff and supplies will be readily available. This approach was taken over from the public facilities in Kiambu which started implementing outreach work last year when they saw how it was done by the NGOs and realized they could do outreach work themselves. The good experience was transferred through an exchange meeting of PWC field managers."

Here again GIZ has helped create an enabling environment for the voucher programme by working with the District Health Management Teams to increase their capacity to provide family planning services. GIZ's input includes training and mentoring of health staff and addressing such issues as management of supplies and equipment, setting up referral systems to health facilities able to provide long-term contraception, and running community awareness campaigns.

Gender based violence

Gender based violence (GBV) is widespread in Kenya, but for a myriad reasons – including the stigma, shame and fear surrounding the act – it is massively under-reported and hard data are scarce. To try to gauge the extent of the problem, the Kenya Demographic and Health Survey (KDHS), for only the second time in its history, included questions on gender based violence in 2009 which revealed that 45% of women aged 15-49 years had experienced either physical or sexual violence at some time in their lives; that nearly one in four had experienced physical violence in the 12 months up to the survey; and that for 12% of the women, first intercourse had been forced against their will.

The KDHS also looked at attitudes towards wife beating and found that over half of married women questioned (53%) believed such an act was justified under certain circumstances, ranging from if a wife burnt the food, argued with her husband or went out without telling him, to neglect of the children or refusal to have sex. Interestingly, a lesser proportion of men (44%) believed there was ever justification for hitting a wife. "The normalisation of violence is what I find most worrying," says Wangechi Grace, executive director of the Gender Violence Recovery Centre (GVRC) in Nairobi (*see Box 6*). "When we go out to give educational talks in the community, people will say in surprise: 'You mean this is violence?' A lot of things are just seen as part of life."

> "The normalisation of violence is what I find most worrying."
>
> Wangechi Grace

In 2006 the government passed The Sexual Offences Act, largely as a result of lobbying by the GVRC. But it was the paroxysms of violence that gripped Kenya following the disputed general elections of 2007 that really began to challenge perceptions and shake up the status quo. The 2008 report from the Commission of Inquiry into Post-Election Violence said: "The Commission heard tales of family members being forced to stand by and witness their mothers, fathers, sisters, brothers, and little children being raped, killed, and maimed; innocent victims contracting HIV/AIDS after being sexually assaulted because the breakdown of law and order and the deteriorating security situation kept them from accessing medical care soon enough to prevent

>> Very few cases of gender based violence are reported because of fear and shame, but also because too many people think violence is just part of everyday life.

it; husbands abandoning their wives who had been defiled; and the inevitable psychological burden of powerlessness and hopelessness that left individuals who had experienced sexual violence feeling alone, isolated, and unable to cope, not just for one moment in time but possibly forever." (Waki, 2008)

Over 80% of the survivors who told their stories to investigators said they did not report the incidents – about one third of them because their attackers had been police officers, and nearly half because they did not believe from past experience that anything would be done about it. Some said they feared being attacked again, and others that they kept silent because they could not bear to relive the trauma.

Unwillingness to report gender violence is one of the reasons why this component of the voucher scheme has had limited impact compared to safe motherhood and family planning. By March 2011 GBV vouchers had achieved 29% of the target set for phase II, and the EPOS review projected that by the end of phase II services would have been provided to 1000 survivors or gender violence.

Because of the special characteristics and acute sensitivity of GBV, vouchers for this are handled somewhat differently from vouchers for the other components of reproductive health. They are free of charge and are not distributed to clients in advance but are held by service providers, who use them to claim for reimbursement of health care costs after a client has been for services. All that is required is for the client to sign the voucher, which is then attached to the invoice submitted to the VMA. Thus, anyone who seeks health care for gender violence at an accredited facility, and who comes from one of the sites covered by the programme, is eligible for free treatment.

Raising awareness of the issues and encouraging people to seek help are important tasks of the field managers and their distributors. People often feel that reporting to the police is the only option when they have been assaulted, says Dorothy Wavinya, field Manager in Kisumu. Her area includes the cane fields of Miwani, where sexual assaults on women going out alone, to fetch firewood for example, are common. "But we advise them that health care and trauma counselling are the first priority, and they can even choose not to report to the police if they don't want to." Ms Mavinga believes that if people understand that sensitive health care is available, attitudes will begin to change.

However, the capacity of health facilities to provide such services is limited – a fact that became particularly apparent when there was a surge in demand during the post-election violence of 2008. Gender violence has always been a special focus in GIZ's reproductive health work with the Kenyan government. But whereas the main effort has traditionally been directed towards eliminating female genital mutilation, since the 2008 crisis it has been redirected towards building capacity to handle the wider issue of gender based violence. GIZ helped with the revision of the National Guidelines on Management of Sexual Violence, based on a needs assessment – the Hospital Preparedness Study. Besides advising on policy, it helps also with training and mentoring staff, setting standards, and establishing efficient referral systems between facilities. A key partner in this work is the Gender Violence Recovery Centre of Nairobi Women's Hospital, which has pioneered the provision of sensitive health care to women affected by violence.

Box 6. Nairobi Women's Hospital: a centre of excellence

Until very recently, the Gender Violence Recovery Centre (GVRC) was the only facility that provided free medical and psychosocial support to survivors of gender based violence in East and Central Africa. The GVRC is a charitable trust of Nairobi Women's Hospital, which was set up by Dr Samuel Thenya, an obstetrician/gynaecologist, in 2001. Dr Thenya was working in a Nairobi hospital when a woman who had been raped sought help. But because she was unable to pay, the woman was denied treatment until Dr Thenya, disturbed by her plight, paid the fees from his own pocket. The case stuck in his mind and sometime later he quit his job to set up his own Rape Centre. Over the years this has evolved into the Nairobi Women's Hospital, a private general hospital that today provides a wide range of medical services to men as well as women.

The GVRC is an integral part of the hospital and remains a referral centre for the specialist management of survivors of violence from all over Kenya. It is a "one stop shop": besides specialist medical care and trauma counselling, it has dedicated laboratories that can provide forensic evidence and reports that are admissible in court – a service appreciated by the police who have only one police surgeon for Nairobi and its environs. The GVRC has linkages with organizations offering shelter homes, and will accompany a client to a shelter after consultation, and it has the services of an advocate who provides legal advice to clients.

>> In 2001, Dr Samuel Thenya set up the Nairobi Women's Hospital, whose original purpose was to care for survivors of gender based violence.

Since opening its doors, the GVRC has provided services to more than 19,000 survivors of gender violence, of whom 57% were women, 35% young girls, 3% men and 5% young boys. As executive director Wangechi Grace notes, "This is only a drop in the ocean of need," and the GVRC is opening similar clinics in other parts of the country as well as acting as a 'centre of excellence' that provides a role model and training in the management of gender violence for other health facilities.

At present only about 5% of the centre's clients are covered by vouchers, since the hospital is outside the catchment area of the programme and can only benefit if voucher clients are referred from other accredited facilities within the catchment. However, when the GVRC was overstretched during the post-election crisis, GIZ – which is not normally a funding agency – stepped in as a 'donor of last resort' and today contributes around 15-20% towards the centre's costs, as well as providing technical assistance as required.

Besides curative services, the GVRC spends about 20% of its budget on advocacy and prevention, which include outreach to schools and community groups, media campaigns, and lobbying of politicians and law makers. "In due course we want to rebalance this so that we spend about 40% of our budget on prevention," says Wangechi Grace.

The cost of services

In the initial budget, approximately 31% of funds were allocated for management services, to include the costs of international consultancy and design and development of the programme. By May 2008, management overheads excluding the start-up costs, were 11% of expenditure (Janisch, 2009), and voucher service reimbursement accounted for 89% of expenditure. The mid-term review of phase II found that by March 2011, 4.26 million Euros had been spent, of which 76% went to reimbursement of voucher services, 18% for the VMA's overheads, 3% for voucher distribution, and 3% for monitoring and evaluation, quality assurance and training. By the end of phase II, however, the VMA's costs were projected to come down to around 15% of expenditure as the number of clients accessing services increased (EPOS, 2011). By comparison, the administration costs of the NHIF are 45% of its income from contributions (MoMS & IFC, 2011).

It is important to point out that the management costs incurred by the voucher scheme include a number of key activities – for example, identification of the poor, accreditation of health care providers, and quality monitoring – that should be covered by national programmes, but are done so inadequately, inefficiently or not at all. As the relevant government agencies build the capacity to fulfil these responsibilities, the voucher programme's overheads will be reduced.

The data show that in phase II, safe motherhood accounted for 89.5% of service delivery expenditure, compared with 9.8% for family planning, and 0.7% for gender based violence. These percentages translated into an average programme expenditure per client of 74 Euros for safe motherhood, 19 Euros for family planning and 21 Euros for gender based violence, which included a proportion of administration and other general programme expenses. Concerns that service providers might perform Caesarean sections unnecessarily in order to increase their income appear to be unfounded: analysis of vouchers used for safe motherhood in the first mid-term review showed a Caesarean rate of 16.7% of births, which was considered appropriate for the population served – and, importantly, was similar to the rate of Caesareans among non-voucher mothers delivered at the same health facilities (KfW, 2011).

Lessons learnt

GDC's work on reproductive health in Kenya has provided many valuable lessons. Among them are the following:

Reproductive health is often a low priority in mainstream health services and requires special advocacy. Because pregnancy and childbirth are natural processes, they are often neglected by national health services which, in much of the developing world, still tend to be disease-orientated. This is borne out by the fact that among the eight MDGs, the one that has seen least progress globally is MDG5 which relates to maternal mortality. When pregnancy or labour complications arise, a woman's survival depends on access to professional medical care. Reducing maternal mortality requires special commitment to ensuring those services are in place.

There is no single 'best way' of financing a country's health services, and the aim should be a mix of financing mechanisms that complement and enhance one another. A voucher scheme can only be established where there is an existing health infrastructure; therefore 'supply side' investment in health services, including capacity-building and strengthening of existing facilities, are essential complements to OBA. In Kenya the activities of GIZ and KfW in reproductive health are clearly complementary, and there is scope to enhance the synergy between them still further.

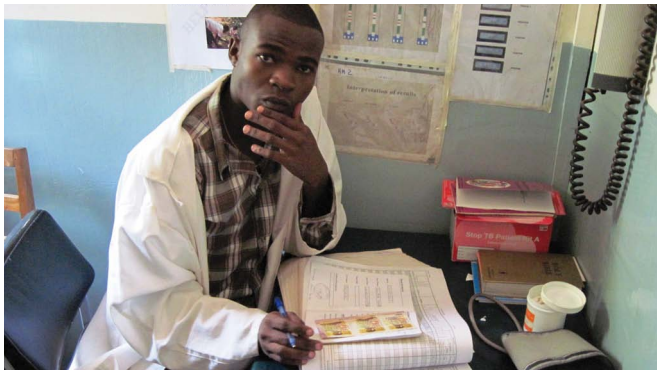
The involvement of health care providers from all sectors – public, private, NGO, FBO – has many benefits for an OBA voucher programme. Private and not-for-profit health facilities often operate in places where there are no public services, so involvement of all sectors helps achieve maximum coverage of the target population. In principle, a mix of providers offers clients choice, although this is not always possible where facilities are scarce. Generally speaking, 'choice' is still an unfamiliar concept: most women go to the same clinic to deliver as they do for ANC. Competition between health facilities encourages investment in services and tends to drive up quality, so the greater the competition the better. For their part, private facilities benefit from inclusion in an OBA programme in that it expands their market, bringing them clients who could not otherwise afford their fees and allowing them to operate at greater capacity. Moreover, it gives them a relatively reliable income stream, which encourages them to invest in improvements to services.

Service providers know best what their needs are, and should always have autonomy in how they spend their income from OBA. The health facilities enrolled in Kenya's OBA programme show great diversity in how they invest their income, which serves to underline the limitations of over-centralised decision-making in health care. The fact that it is in their interests to invest in improvements to their services, coupled with the clear expectations of the programme regarding quality standards, should be enough to ensure that health facilities do not misspend their money.

Voucher distributors should be salaried employees of the OBA programme rather than working on commission. In Kenya, voucher distributors are given targets for the recruitment of clients but, importantly, their remuneration does not depend on how many new clients they bring in. A commission system was used in the early stages of the programme, but it soon became apparent that this was open to abuse: it put pressure on distributors to cut corners in the screening process of new clients in order to increase numbers.

Working on the frontline with people whose lives are a struggle to survive is inherently stressful. Maintaining professional boundaries when faced constantly with other people's distress is difficult, so for field managers and voucher distributors who interact every day with people whose needs are great, there is a very real threat of burnout. The weekly meetings of the field teams are essential not just for exchanging information and advice, but for providing a forum for peer support. The fact that a field manager can be contacted any time by a voucher distributor is another important antidote to the build-up of stress. However, programme managers should look critically at whether the way the programme is designed is contributing also to stress of its frontline workers, and if so, they should see what can be done to modify the design.

The avoidance of fraud should be a constant imperative, with anti-fraud measures build into every aspect of an OBA programme. In Kenya it starts at the bottom with the checking of clients' personal details by the voucher distributors through home visits, and continues up the chain to include spot checks by field managers, the appointment of an OBA representative within health facilities, and re-checking of claims by medical experts at the level of the VMA. The fact that voucher distributors and service providers have no contact is also a deliberate way to limit the possibility of collusion.



>> In due course electronic vouchers might relieve record keepers of much of the work of data entry by hand.

Looking ahead

The start of a new phase offers opportunities to review what has gone before and to make changes that will enhance the programme for the future. Phase III, which started in November 2011, is likely to see digital technology used to carry out many of the operations currently done by hand. Paper vouchers, for example, might be replaced with some kind of 'swipe' card that will carry all personal information about a client, including a unique identifier, and that can be read electronically. This will eliminate much duplication of effort in data entry: at present a client's personal details have to be copied at a number of stages by hand. In future too, field managers might be able to keep track of and contact their voucher distributors using mobile phone technology.

> The programme will confront the issue of those who are too poor to pay even the highly subsidized fee for vouchers.

In phase III the programme will confront the issue of those who are too poor to pay even the highly subsidized fee for vouchers. EPOS reviewers recommend introducing a waiver system, but details are still to be worked out. The programme will be considering how to resolve the problem of voucher clients for whom distance from health facilities and inability to pay the transport costs remain serious barriers to care (The provision of a transport voucher for women who live far from health facilities is one suggestion.). It will also explore the options for maintaining food hand-outs to pregnant women, which evidence suggests are an incentive for seeking care and have a positive impact on the health of mothers and babies.

As they enter the new phase, programme managers are looking at the idea of linking safe motherhood and family planning in a single voucher, at a cost of 250 Ksh (EUR 2.20), to encourage the uptake of contraception services. Recognising that gender based violence services need to be strengthened, the EPOS review has recommended that every accredited health facility is to be given training in managing such cases – either as a first point of contact with a formal referral system in place, or as a provider of full services. More needs to be done also to promote the services – to raise awareness in the community that gender violence is a crime, and that help is available – and EPOS recommends that a new marketing strategy be developed for phase III.

Part of a wider vision

There are plans to expand the voucher scheme to new sites. Ultimately, however, this should not be seen as a stand-alone programme, but as part of a wider vision for Kenya's health services – a position that is important for the sustainability of the programme should donor funding be withdrawn at some point.

In 2003, the Ministry of Health sought technical assistance from the former GTZ (now GIZ) and WHO to develop plans for a national social health insurance (NSHI) scheme to finance health care for its citizens. The NSHI Bill, developed over the course of six joint missions of experts from both organizations, was passed by parliament in 2004, but President Mwai Kibaki declined to ratify it, arguing that it failed to provide a credible road map for implementation or convincing evidence that it was affordable. Moving from a supply side system of financing, to one in which health services are paid for from insurance premiums on the basis of services delivered, is a radical shift. It involves role changes for many key players, including the Ministry of Health, and the President believed Kenya was not ready.

The voucher programme, which was set up soon after the collapse of the first NSHI Bill, incorporates many of the key features of a health insurance scheme, such as systems for

accreditation and quality assurance of facilities, and for registering clients, processing claims and combating fraud. For this reason it is being closely watched as a stepping stone towards a nationwide health insurance scheme, which is being seriously considered once again following a comprehensive review of financing options for the health services undertaken by the Ministry of Health in 2009, strongly supported again by the former GTZ and The World Bank.

Observers are interested to see how the voucher scheme is managed and key decisions made; how well service providers cope with the administrative requirements of making claims; what is involved in working with all sectors (public, private, FBO and NGO); how reimbursement rates are worked out; and, importantly what users feel about the system. As health and population specialist with KfW in Germany, Dirk Müller, explains: "For insurance you need trust in the system, and that's what we are trying to create with the voucher system. The women tell their neighbours, 'Look, the system really works. You pay for the voucher before, and when you go to the hospital you don't have to pay for anything.' Because that's what they fear – that they buy insurance but when they go to the facility they still have to pay for things like drugs and gauze, because they aren't there. We avoid that with the voucher scheme because, crucially, the facility will only get reimbursed for what it provides to the customer."

> "For insurance you need trust in the system, and that's what we are trying to create with the voucher system."
>
> Dirk Müller

While the voucher programme has important lessons for the government in moving towards social health insurance, it is not a directly transferable model, and the MoH is planning a three year project to test ideas presented in the draft Healthcare Financing Strategy and to provide evidence for decision-making. Health for All Kenyans through Innovation (HAKI) is to be implemented by GIZ, with co-funding from KfW, UK's Department for International Development and The World Bank and support from the Kenyan government. A key concern for any financing mechanism for health care is that it eliminates, as far as possible, the barriers to access of the poorest households, and HAKI will test two approaches: one in which insurance premiums are paid on behalf of the poor by a third party; and another in which there is a waiver mechanism, giving selected families access to services for free.

It is not clear at this stage how the voucher programme will fit into the picture as the new health care financing strategy is put into practise. But some of those involved in the restructuring of the health services suggest there might always be a need for a programme dedicated to ensuring access to services of the poorest households, who too often find themselves excluded, and that the voucher scheme might continue to cover certain services alongside a national health insurance scheme.

"You could argue that even with health insurance there could be an additional need for vouchers because they accelerate accessibility to certain services," says Piet Kleffman. "That is one of their main purposes at present – as a fast-track method towards MDGs 5 and 4." A further purpose is to underline the importance of sexual and reproductive health, and to make sure that all components of it – including family planning and care for survivors of gender based violence – are covered if and when health insurance is introduced, and are not allowed to become marginalised again by mainstream services.

Peer review

This report has been reviewed by Donika Dimovska, coordinator of the Center for Health Market Innovations at the Results for Development Institute, Washington DC, and Guy Stallworthy, senior programme officer at the Bill and Melinda Gates Foundation. The independent reviewers were asked to assess the programme, as described here, according to the eight criteria of "good practice" that are standard requirements for inclusion in the German Health Practice Collection. Their comments can be summarized as follows:

Effectiveness

The approach shows promise of being "highly effective" at increasing use of reproductive health services by poor women. But to be brought to scale and realise its full potential the voucher scheme must be integrated with other health financing mechanisms, as planned. The increases in institutional deliveries achieved thus far are impressive, and the family planning component of the scheme answers the need to try to prevent unwanted pregnancies that lead to unsafe abortion and many maternal deaths.

Transferability

The report describes the voucher programme in sufficient detail, with illustrative examples, for policy-makers or implementers in other countries to "readily understand what they would have to do to replicate the model". Adapting the model to local circumstances is essential, however, and reviews of voucher programmes in other developing countries can also offer useful insights.

Participatory and empowering approach

The voucher approach to health financing is inherently participatory and empowering. The high level of involvement of the voucher distributors in Kenya is particularly noteworthy.

Gender sensitivity

Kenya's voucher scheme is inherently gender sensitive in that it focuses on some of the more extreme areas of gender-based inequity in health systems – maternal health, family planning and gender-based violence.

Quality of monitoring and evaluation. The approach appears to have a solid monitoring and evaluation plan.

Innovation

Voucher programmes exist already in a number of developing countries, all with their own characteristics. The management system, participation of the private sector, and addition of food handouts are innovative characteristics of Kenya's approach. One reviewer commented: "The programme described seems to make a major contribution to our understanding and evidence regarding what remains an under-utilised and innovative approach".

Cost effectiveness

This is difficult to assess from the data available. The costs per patient appear to be relatively high at present, but would likely come down as the programme expands and achieves economies of scale.

Sustainability

This depends on continuing commitment from donors during the expansion of the programme and its integration with wider reforms of the health sector such as the development of a national health insurance scheme, and on the ability of the Kenya government to support it in the long run.

References

Anyangu-Amu S (2010). *Kenya: Shortage of Skills for Reproductive Health*. Inter Press Service.

Bellows N, Bellows B, Warren C (2011). The use of vouchers for reproductive health services in developing countries: systematic review. *Tropical Medicine and International Health*. 16(1): 84-89.

Center for Reproductive Rights (2010). *In Harm's Way: the impact of Kenya's restrictive abortion law*. New York.

EPOS Health Management (2011). *Development of the Health Sector (SWAp) Programme – Reproductive Health Voucher Scheme (Output Based Approach): Mid Term Review*. Nairobi. A review undertaken on behalf of KfW and the Kenya National Coordination Agency for Population and Development.

Hulton L, Murray S, Thomas D (2008). *Evidence Towards MDG 5: A Working Paper.* London: Options Consultancy Services Ltd.

International Federation of Red Cross and Red Crescent Societies (IFRC). 2011. Stunted lives: the disaster of undernutrition. In: *World Disasters Report 2011*. Geneva: 36-38.

Janisch CP et al. (2010). Vouchers for health: A demand side output-based aid approach to reproductive health services in Kenya. *Global Public Health*, 5(6): 578-94

Kenya National Bureau of Statistics (KNBS) and ICF Macro (2010). *Kenya Demographic and Health Survey 2008-09*. Calverton, Maryland: KNBS and ICF Macro.

Kenya Obstetrical and Gynaecological Society (KOGS) (2011). Personal communication.

KfW (2011). *Vouchers for reproductive health care services in Kenya and Uganda: approaches funded by KfW German Development Bank.* In draft.

Maine D, Rosenfield A (1999). The Safe Motherhood Initiative: Why Has It Stalled? *American Journal of Public Health*, 89(4): 480-482

Ministry of Health and UNFPA Kenya (2004). *Needs Assessment of Obstetric Fistula in Kenya*. Nairobi.

Ministry of Health (2010). *Accessible and Affordable Quality Healthcare Services in Kenya: Financing Options for Universal Coverage*. Nairobi.

Ministry of Medical Services and International Finance Corporation (2011). *Strategic Review of the National Hospital Insurance Fund - Kenya*. Nairobi.

National Coordinating Agency for Population and Development (NCAPD) (2005). *Kilifi: District Strategic Plan 2005-2010*. Nairobi.

Reproductive Health Voucher (2011). *Kenya: Reproductive Health Output-Based Aid (OBA) Program*. Population Council. Available at: http://www.rhvouchers.org/rhv/country-voucher-program-profiles/kenya/59-reproductive-health-output-based-aid-oba-voucher?layout=blog (last accessed 10 February 2012).

The World Bank (2011). *The World Development Indicators 2011: Kenya country data*. Washington DC.

UNICEF (2011). UNICEF country data, Germany. Available at: http://www.unicef.org/infobycountry/germany_statistics.html (last accessed 10 February 2012).

Waki P, McFadyen GA, Kambale P (2008). *Report of Commission of Inquiry into Post-Election Violence*. Nairobi, Government of Kenya.

Wilmoth J et al. (2010). Maternal deaths drop by one-third from 1990-2008: a United Nations analysis. *Bulletin of the World Health Organization*, 88: 718.

World Health Organization (2009). P*opulation Dynamics and Reducing Maternal Mortality*. Available at: http://www.un.org/esa/population/publications/PopAspectsMDG/09_WHO.pdf (last accessed 10 February 2012).

World Health Organization (WHO) (2010). *Trends in Maternal Mortality: 1990-2008. Estimates developed by WHO, UNICEF, UNFPA and The World Bank*. Geneva.

Ziraba AK et al. (2009). Maternal mortality in the informal settlements of Nairobi city: what do we know? *Reproductive Health, 6(6): 1-8.*

Published by
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

German Health Practice Collection

Programme to Foster Innovation, Learning and Evidence
in HIV and Health Programmes of German Development Cooperation (PROFILE)

Dag-Hammarskjöld-Weg 1 - 5
65726 Eschborn, Germany
T +49 6196 79 - 0
F +49 6196 79 - 1115

ghpc@giz.de
www.german-practice-collection.org

In cooperation with
Ministry of Public Health and Sanitation, Republic of Kenya

Writer
Sue Armstrong

Design
www.golzundfritz.com

Photographs

As at: March 2012

GIZ is responsible for the content of this publication.

On behalf of
Federal Ministry for Economic Cooperation and Development (BMZ);
Division of Health and Population Policies

Addresses of the BMZ offices

Bonn Office
Dahlmannstraße 4
53113 Bonn, Germany
T +49 228 99 535 - 0
F +49 228 99 535 - 3500

Berlin Office
Stresemannstraße 94
10963 Berlin, Germany
T +49 30 18 535 - 0
F +49 30 18 535 - 2501

poststelle@bmz.bund.de
www.bmz.de