# **STRUGGLING TO THRIVE:** HOW KENYA'S LOW-INCOME FAMILIES (TRY TO) PAY FOR HEALTHCARE

**MARCH 2016**

FSD Kenya
Financial Sector Deepening

**Struggling to thrive:** How Kenya's low-income families (try to) pay for healthcare

By
Julie Zollmann and Nirmala Ravishankar

March 2016

FSD Kenya
Financial Sector Deepening

The Kenya Financial Sector Deepening (FSD) programme was established in early 2005 to support the development of financial markets in Kenya as a means to stimulate wealth creation and reduce poverty. Working in partnership with the financial services industry, the programme's goal is to expand access to financial services among lower income households and smaller enterprises. It operates as an independent trust under the supervision of professional trustees, KPMG Kenya, with policy guidance from a Programme Investment Committee (PIC). Current funders include the UK's Department for International Development (DFID), the Swedish International Development Agency (SIDA), and the Bill and Melinda Gates Foundation.

Government of Kenya

UKaid
from the British people

EMBASSY OF SWEDEN
Nairobi

BILL & MELINDA GATES foundation

# Table of contents

# Abbreviations

| | |
|---|---|
| **ABCE** | Access, Bottlenecks, Costs and Efficiency |
| **FSD Kenya** | Financial Sector Deepening Kenya |
| **GoK** | Government of Kenya |
| **IHME** | Institute for Health Metrics and Evaluation |
| **KDHS** | Kenya Demographic and Health Survey |
| **KHHEUS** | Kenya Household Health Expenditure and Utilisation Survey |
| **KSh** | Kenya Shilling |
| **MDG** | Millennium Development Goals |
| **MMR** | Maternal mortality rate |
| **MOH** | Ministry of Health |
| **NHIF** | National Hospital Insurance Fund |
| **OOP** | Out of pocket |
| **PETS** | Public Expenditure Tracking Survey |
| **SHOPS** | Strengthening Health Outcomes through the Private Sector |
| **UHC** | Universal health coverage |
| **USD** | United States Dollar |

# ACKNOWLEDGEMENTS

This work is the culmination of the contributions and inputs of many individuals and institutions sharing their data, insights, and expertise. First and foremost, we would like to thank Paul Gubbins from FSD Kenya and Joel Lehmann from Infospective Research Limited for their technical inputs and moral support. We are grateful to the Ministry of Health and the USAID-funded Health Policy Project for giving us access to the Kenya Household Health Expenditure and Utilization Survey data. We interviewed several key health sector stakeholders to understand the status of ongoing discussions about health financing policy in Kenya; we thank them for generously sharing their time and ideas with us. This report benefited immensely from the comments we received from Miles Bredin, Edwine Barasa, and Amolo Ng'weno.

Much of this work builds on the Kenya Financial Diaries study, which was made possible by FSD Kenya and the Bill & Melinda Gates Foundation. That research was carried out by a dedicated team of researchers at Digital Divide Data who also provided input and feedback on drafts of this report.

# EXECUTIVE SUMMARY

Kenya has made great strides in improving key health outcomes for its population over the course of the last decade. To further accelerate these improvements, the Government of Kenya (GoK) has put in place policies such as abolishing user fees at public dispensaries and health centres, removing charges for maternal health services at all public healthcare facilities, and working to dramatically expand national health insurance coverage. **Despite these advances, the reality is that the direct and indirect costs of healthcare remain an important barrier to access and, in turn, better health for Kenya's low-income groups.**

This paper explores the nature of the healthcare financing challenge for poor Kenyan households, drawing primarily on Kenya Financial Diaries, a new and in-depth study of the financial lives of low-income Kenyans (Bankable Frontier Associates and Digital Divide Data, 2014). The Diaries study, implemented in 2012–13 by Financial Sector Deepening Kenya (FSD Kenya), carefully tracked 298 Kenyan households for a year, in five areas of the country, and documented their incomes, expenditures, and financing behaviours. Through the study, we can see how often the poor seek healthcare, how much they pay for it, how they raise money to finance healthcare spending, how they perceive their health risks, and whether the costs of health services deter them from seeking access. We synthesise the key insights that emerge from the Diaries on these questions and combine them with the latest evidence on healthcare utilisation and expenditure from other contemporary quantitative and qualitative studies to provide a comprehensive account of how the poor access and pay for healthcare in Kenya. In presenting this, we use the stories of the families who participated in the Diaries study to illustrate key findings and to enrich our understanding of how scarcity shapes the way poor people manage their healthcare.

**The cost of accessing healthcare challenges Kenyans in the bottom two wealth quintiles.** We start by comparing the latest estimates of how much the poor spend directly on healthcare in Kenya. Evidence from the Diaries and from recent surveys of households and patients conducted in 2013 shows that small out-of-pocket (OOP) health payments, typically for outpatient services, are frequent. The average Kenyan, including both adults and children, visits a health provider about three times per year according to the 2013 Kenya Household Health Expenditure and Utilization Survey (KHHEUS), conducted by the Ministry of Health (MOH). Amongst the poor households that are the focus of the Diaries study, we observed one paid visit per person per year. The median OOP payment for an outpatient visit ranged between 20 and 50 Kenya shillings (KSh), which translates to USD 0.24 to USD 0.59 US dollars (USD)[1], across the surveys we looked at, including the KHHEUS, a patient exit survey by the Institute for Health Metrics and Evaluation (IHME, 2014), and a survey by Intermedia (Intermedia Financial Inclusion Insights, 2015).

These low estimates of the median spend for an outpatient visit are in part reflective of the fact that since the early 2000s, the GoK has introduced several policies either capping or waiving user fees for priority services, the latest being the 2013 policy abolishing all user fees at government-owned primary care facilities. While these policies aim to enable poor Kenyans to seek free services at public facilities, it is worth remembering that public health centres and dispensaries, where services are now free, accounted for 40 per cent of outpatient visits in the KHHEUS. Indeed, a majority of outpatient services in the country are still consumed at secondary and tertiary care facilities in the public sector, as well as at private facilities, all of which still charge their patients for health services. Moreover, even when accessing free services at primary care facilities, families often have to pay for transportation as well as prescribed drugs and tests that are not available at the facility. When one excludes free visits from the sample, the median cost of an outpatient visit ranges from KSh 100 (USD 1.20) in the IHME survey to KSh 450 (USD 5.3) in the Intermedia study. Similarly, the Diaries, which picked up more readily on paid visits, estimated a median cost per outpatient visit of KSh 400 (USD 4.70). **The government's efforts to eliminate user fees have not solved the cost problem, since a large number of visits continue to take place at private facilities, and stock outages often force the poor to purchase drugs from private pharmacies.**

**While at first glance spending figures might seem low, these costs constitute a significant financial barrier to healthcare access in a country where 43 per cent of the population lives below the poverty line**[2]. This is especially true since the experience of large healthcare costs is not infrequent. In the Diaries sample, nine per cent of households spent more than the equivalent of an entire month's income on healthcare over the course of the one-year study. The Diaries show that such high spending on healthcare is often the consequence of the poor quality of services, which results in patients

[1] Throughout this paper, we use the average exchange rate for the fiscal year 2012–13 from the Kenya National Bureau of Statistics, which was 85 KSh to 1 USD.

[2] This is based on the international poverty threshold of consumption below USD 1.25 a day (World Bank, 2015).

not getting a proper diagnosis or the right treatment in a timely fashion. Not only do repeated visits to health providers and additional tests and drugs increase the total cost of healthcare for the family, but prolonged illness also carries high opportunity costs in terms of lost income.

**And for many families, this high spending is the direct consequence of hospitalisations, for which the financing question is not if the household will experience the event, but when.** From the Diaries, we see that for a family of five, there is a 15 per cent chance that at least one member of the household will be hospitalised in the course of a year. In other words, they can expect that a household member will be admitted about once every six or seven years. According to the KHHEUS, approximately 11.6 per cent of households experienced at least one hospitalisation in the year preceding the survey, and Kenyan households spent an average of KSh1,504 (USD 18) for inpatient services in a year. But these costs are not so evenly spread: instead, low-income families must quickly find large lump sums when a hospitalisation occurs. For KHHEUS households experiencing a hospitalisation, the average OOP spend in a year was KSh12,935 (USD 152). The KHHEUS also reported that 6 per cent of Kenyan households experienced catastrophic health spending; in other words, their health spending in a year was high enough to push them into poverty.

**High healthcare costs result in foregone and incomplete care.** What we observe people spending on healthcare is a function of what they are willing and able to pay within their budget constraints. This does not reflect the total cost of the care that was needed. The costs of healthcare both deter people from seeking care when they fall sick and prevent them from completing full courses of treatment. Nearly 38 per cent of Diaries households delayed or forwent needed healthcare at some stage during the study, mostly because they did not have available enough money to fully fund the cost of care. Similarly, the KHHEUS estimates that 13 per cent of individuals forewent care in 2013; the household level estimate would be much higher. The Diaries also highlighted many cases in which low-income Kenyans had found the money needed to visit a provider when they fell ill, but did not then have enough to finance the necessary drugs or tests prescribed. They would postpone or forgo these follow-ups or cut their treatment period, buying only a portion of the prescribed medication. The fact that many do not receive the care they need suggests that our estimates of healthcare spending underestimate the true cost of the country's healthcare needs: in reality, many people are under-spending on care.

### Next, we explore how Kenyans finance health spending.

**Kenyans rely on their own savings and family networks to pay for healthcare.** Unsurprisingly, we find that the first place Kenyans turn to pay for healthcare is cash, either directly from their incomes or from liquid savings. When costs escalate beyond the few hundred shillings that might be kept in liquid savings, new sources of financing must be sought. Here, resources in the form of remittances or gifts from relatives and friends become important. While low-income Kenyans tend to save quite a lot – at the end of the study the median Diaries household held about 129 per cent of its average monthly income in financial assets– only a small share of the typical family's savings was held in purely liquid savings instruments. Therefore, even when the family had money 'saved', for example in a *chama* or savings club, it was not available for immediate use for things like healthcare. Further, the Diaries remind us that low-income families already have tight budgets: every shilling spent on healthcare involves a trade-off with other important budget items like children's education, capital for businesses, and basic expenditures like food and rent.

**Both families' own financing and funds from social networks outrank insurance in terms of health financing at the household level.** While 17 per cent of Kenyans reported having some form of insurance in the KHHEUS (2013), coverage in the lowest wealth quintile was only three per cent. The FinAccess survey 2013 found that only 29 per cent of urban and 11 per cent of rural adults had any kind of insurance, with health cover from the government-owned National Hospital Insurance Fund (NHIF) being the most prevalent (FSD Kenya and Central Bank of Kenya, 2013). However, the low uptake of insurance among the poor does not appear to stem from individuals underestimating their risk exposure: when asked about the likelihood of a wide range of risks, Diaries respondents ranked needing outpatient care or hospitalisation as very likely. Nor is the low rate of coverage the consequence of a lack of knowledge or appreciation of the value of insurance: while only 15 per cent of households in the Diaries sample had insurance at any point during the study, nearly everyone had heard of NHIF. About 30 per cent of Diaries households had actually had NHIF cover at some stage in their lives, and most of them thought it was a very good thing. When asked, 92 per cent of respondents in this low-income group said they would recommend NHIF to others.

So why then is insurance uptake so low? Predictably, lack of affordability emerged as one of the key reasons for poor households not subscribing to insurance products. Other reasons include complicated registration processes, poor experiences using the NHIF product, unclear and incomplete patterns of coverage, and the perception that NHIF caters to formal sector members at the expense of others. Insurance is only a partial – and certainly not the only – health financing solution for the poor in Kenya, and it comes with its own financing challenges.

**What does all of this tell us about how we can reduce the financial barriers to health access?** We highlight a number of implications and opportunities to improve health financing for the poor, emanating from three key realities:

1. The poor have an income sufficiency problem.
2. The poor have a liquidity problem.
3. Poor quality care compounds the costs of serving the poor.

Solving the healthcare finance problem for the poor is no easy task. But, we do believe this research points to a number of ideas that could help tackle what is a very big and complex challenge in Kenya.

### Insurers

- **Minimise premium costs and the share of that cost paid directly by the poor.** This may mean more limited benefits packages and also subsidy.
- **Consider social network financing of premiums.** Governments need not be the only ones subsidising insurance premiums.
- **Provide immediate and enduring value**. Insurance for future, possible needs, rather than today's inevitabilities is not very appealing for cash-strapped consumers. Insurance, however, can work to provide immediate value to subscribers in ways that are good for all.
- **Align premium payments with cash flow patterns.** New mobile platforms and payments innovations enable flexible payment options, which insurers ought to harness to make it easier for low-income clients to initiate and maintain their coverage.

### Financial service providers (also including insurers)

- **Consider blended financing products.** Insurance and savings have limited appeal on their own. Credit and social network financing are also important. What might be particularly helpful is helping the poor aggregate funding from many small pots to meet a health financing need quickly and seamlessly.
- **Point of service financing—a role for credit?** If financing can be available on demand, when people need it most, it may be more appealing than insurance, which takes money from today's budget to pay for an uncertain tomorrow.
- **Social network financing.** Friends and family already play an important role in helping the poor afford larger healthcare costs. Weaknesses in social-network financing can be shored up with innovative financing mechanisms.
- **Provide financing to healthcare facilities.** Facilities themselves could use some help coping with cash-flow crunches, especially when insurance reimbursement and funder delays interrupt smooth operations.

### Health service providers

- **Partner with financial service providers.** Rather than turning away patients, accepting non-payment, or attempting to manage client credit on their own, facilities may partner with financial service providers to relieve some of these burdens – for themselves and for clients.
- **Enabling experiential learning.** Each visit is an opportunity to help patients better understand their health and the health system, empowering them to navigate their health needs with greater efficiency and confidence.

### Government

- **Build on incentives for healthcare quality.** Keeping costs low will necessarily involve patients receiving the right care the first time as much as possible.
- **SMS-based accreditation checks.** A system for SMS-based accreditation checking could help Kenyan patients choose qualified providers, ensuring that more of their health spending is channelled towards legitimate, and hopefully better quality, providers.
- **Expand and leverage cash transfers.** More can potentially be done to leverage cash transfer programmes for better health insurance coverage and health outcomes.

### Development partners

- **Improve measurement of health spending and utilisation.** Development partners can play an important role in addressing these gaps and improving the quality of available data to help facilitate important health finance decision-making.
- **Learning on new models.** Development partners can continue to help with experimentation and learning around new kinds of financing models – directly in the health sector, but also with financial service providers.

Chapter 1

# INTRODUCTION

A mother administers medicine to her child: Only 3 per cent of individuals in the country's bottom wealth quintile currently have the luxury of health insurance.

Making healthcare affordable to all Kenyans is a key goal for the current administration. One of its most popular policies, enacted in June 2013, barely three months after President Kenyatta took office, abolished user fees for all services at government-owned health centres and dispensaries that offer primary care, as well as user fees for maternal care services at all government facilities. These twin, user-fee policies have been welcomed by health sector stakeholders, and early evaluations by the Ministry of Health (MOH) show that, despite implementation challenges, they have gone a long way towards putting health services within the financial reach of the poor (MOH, 2015; Health Policy Project, unpublished). But this is just the start: the Government of Kenya (GoK) and development partners view the removal of user fees for primary care and maternal health services as the first step in moving Kenya towards the goal of universal health coverage (UHC). Indeed, key health-sector stakeholders are currently developing a health-financing strategy for Kenya to achieve UHC by 2030. So, it seems timely to step back and ask: What do we know about how Kenya's poor pay for healthcare? What kind of services do they pay for? How often do they pay? How much do they pay? How do they raise the funds to pay for healthcare? And what kind of impact does it have on their finances?

In this paper, we synthesise insights from a wide range of studies on healthcare utilisation and spending, and from the in-depth Financial Diaries study undertaken by Financial Sector Deepening Kenya (FSD Kenya), to paint a detailed picture of healthcare consumption amongst Kenya's poor (Bankable Frontier Associates and Digital Divide Data, 2014). Together these studies suggest that even with policies that have reduced the costs of accessing primary care and priority health services in the public sector, serious financial barriers continue to prevent poor Kenyans from getting the care they need. For starters, primary care facilities in the public sector – where user fees have been eliminated – account for only 40 per cent of outpatient visits, according to the Kenya Household Health Expenditure and Utilization Survey (KHHEUS) of 2013 (MOH, 2014).

Remaining outpatient services are being accessed at public hospitals and private facilities, which still entail user charges. Furthermore, the survey shows that while a fifth of Kenyans have insurance that helps them defray the costs of hospitalisations, the rest have to pay for these typically expensive services entirely out of their own pockets. Only 3 per cent of individuals in the country's bottom wealth quintile currently have the luxury of health insurance. Out-of-pocket (OOP) health payments prevent a large number of Kenyans from

getting the healthcare they need and drive some into poverty. Addressing this problem requires us to understand the nature of the healthcare costs through both data and the real-life experiences of poor Kenyans.

Take, for example, the case of Isaac and Monicah[3], one of the 298 families participating in the Kenya Financial Diaries study. At the beginning of the study, Monicah had just delivered her third baby, and she was suffering from an illness that made it hard for her to keep food down. She went to her local public dispensary, to clinics, and to the public referral hospital on numerous occasions, each of which sent her away, saying nothing was wrong. After exhausting their own funds to finance her care, the family started getting help from relatives and friends to pay for more tests and more hospital admissions. Isaac sold an important money-making asset – a rental house – to get extra money for Monicah's care. Meanwhile, she kept getting sicker and sicker. The hospital would insist on admitting her, but each time she would have to wait until they could pull together the funds. Eventually, after months of missed opportunities, the doctors told her she had a tumour in her throat, requiring surgery that would cost KSh23,000. They had no way to come up with the funds, and Monicah soon died. Funds from friends and family came gushing in to cater for the funeral expenses. Isaac was bitter. Where were those funds when they could have saved her life?

Unable to care for his children while working as a fisherman, Isaac sent them to stay with different relatives. He was not only broke, but depressed, alone, and was himself sick; exhibiting symptoms of tuberculosis, and in addressing his own illness, he experienced another set of inconclusive and unhelpful interactions with medical facilities. Isaac found himself sleeping on the street, sometimes bunking up with friends while he tried to get back on his feet and into a position where he might rent a home for himself and his children.

So, many things had gone wrong. A quick, correct diagnosis would have meant far lower medical expenses, and Monicah might have received treatment while the tumour was still at an early stage. If the social network had been responsive when Monicah needed surgery, the treatment might have saved her life and kept the mother of three small children around to care for them for many years ahead. The sale of the rental house compounded Isaac's poverty and made the wake of Monica's death more difficult for the entire family. At the same time, had the hospital provided surgery to every patient like Monicah, without assurance of compensation, it wouldn't be able to cover its costs and sustain its operations.

Monicah and Isaac's story was not dissimilar to those of many other Financial Diaries families who faced challenges with buying healthcare. They struggled to come up with the money they needed to go to a health facility when they were sick, to follow up with diagnostic tests suggested by providers, to complete full courses of prescribed treatment, and to find the cash to pay for urgently needed care when they were hospitalised. Monicah's tragedy begged us to look closely at how study respondents sought and paid for care and to think deeply about how things might be different. How might we end up with more happy health endings?

Below, we briefly discuss the data sources we have drawn upon for this analysis before taking a closer look at the health financing context in Kenya. We then dig into an extensive analysis, triangulating existing data sources, to shed light on how low-income Kenyans finance healthcare and what financial barriers remain to helping the poor achieve better health outcomes. We conclude with implications for lowering these financial barriers to health for low-income Kenyans and offer some ideas for how future studies of health spending might more fully capture the nuanced and complex realities that this analysis unveils.

## 1.1 DATA SOURCES

To understand how poor Kenyans consume and pay for healthcare, we synthesised findings from one primary data source – the Kenya Financial Diaries project commissioned by FSD Kenya – with a variety of secondary data sources.

### Primary data source: the Kenya Financial Diaries project

The Kenya Financial Diaries project attempted to track in detail the cash flows of 298 low-income households over the course of a year, from August/September 2012 to August/September 2013, through bi-weekly visits to households by a team of dedicated researchers (Bankable Frontier Associates and Digital Divide Data, 2014). This very detailed cash-flow data is supplemented by information collected during each visit on whether household members were forgoing medical care. When households experienced major events like a hospitalisation or a death, the project collected detailed information on what had happened and how the expenses related to the event were managed. Each visit, researchers recorded journal entries on families' circumstances, including specific health and other challenges, creating a rich image of how families coped with the challenges and opportunities they faced over the course of the study year. While the sample is small relative to the other large datasets we will reference, the Diaries offer great depth on the experiences of participating households, enabling us to look at many old topics and familiar trends with new eyes.

The intensity of data collection that the Diaries methodology uses makes it logistically difficult to select a nationally representative sample. Instead, the project selected five broad areas of the country, all with varying livelihood conditions:

- **Nairobi:** Kenya's major metropolis, where there are high concentrations of low-income people in a number of informal settlements that were included in the study;
- **Mombasa:** another important urban centre with an important port and

3 We have assigned pseudonyms to all Diaries respondents to protect their privacy.

trading economy alongside high levels of poverty in the slightly inland communities;

- **Makueni:** a rural area that experiences frequent drought and food insecurity;
- **Eldoret:** an important agricultural trading hub, surrounded by farming communities; and
- **Vihiga:** a rural area in Western Kenya, comprised mainly of smallholder farmers and small-scale traders.

Within each area, the study selected households to achieve diversity along key dimensions such as household structure, main livelihood strategy, and basic financial inclusion status. The aim was to reach quotas of national prevalence on these key variables. Similar to the population as a whole, the study was comprised of 69 per cent rural and 31 per cent urban households.[4] The project focused on low-income families: median monthly household income in the study was KSh 7,120 (USD 84), and on a consumption basis, 72 per cent of study households were living on less than USD 2 per person per day.[5]

## 1.2 SECONDARY DATA SOURCES

While the Diaries study provides rich accounts of the income and expenditure patterns of poor households in Kenya over the course of an entire year, the sample is not nationally representative. Throughout this paper, we compare insights from the Diaries study with results from recent nationally representative household surveys and other studies that provide a fuller picture of how Kenya's low-income families seek and finance healthcare. Key secondary data sources that we reference extensively in this report are:

### Kenya household health expenditure and utilisation survey (KHHEUS)

The KHHEUS is a national household survey that explores health seeking behaviour, the utilisation of health services, health spending, and health insurance coverage among Kenyan households (MOH, 2014). The survey has been conducted three times to date, in 2003, 2007 and 2013. All references to the KHHEUS in this report pertain to the 2013 round of the survey, which was conducted by the MOH in conjunction with Kenya National Bureau of Statistics, and with support from the Health Policy Project funded by the United States Agency for International Development. Unlike the previous two rounds, the 2013 KHHEUS is representative at the county level in addition to providing national estimates for key indicators related to healthcare utilisation and spending. The survey has a sample size of 29,205 households. In this paper, we draw on both the 2013 KHHEUS report as well as our analysis of the 2013 data, which we obtained from the Health Policy Project.

### *Access, bottlenecks, costs and efficiency (ABCE) study*

ABCE is a multi-year, multi-country project funded by the Bill & Melinda Gates Foundation. The Kenya component is jointly managed by the Institute for Health Metrics and Evaluation (IHME) and Action Africa Help-International (AAH-I) (IHME, 2014). In 2012, the project conducted a health facility survey with a nationally representative sample of 253 public and private facilities in Kenya, as well as a patient exit survey at the sampled facilities. The facility survey collected information about facility inputs such as medical personnel, infrastructure, medical supplies, etc.; facility finances both in terms of sources of revenue and spending; the volume of services delivered; and supply-side constraints such as bed availability, personnel capacity, drug stock-outs, etc. In a subset of sampled facilities, the ABCE project administered an exit survey to 4,200 patients. The patient exit survey included questions on a range of topics including choice of facility, time and costs associated with the visit, and patient satisfaction. We referred to the study report and analysed the data from the two surveys, which are available on the IHME website.

### *Financial Inclusion Insights Health Facility Study*

In 2014, the Financial Inclusion Insights programme, managed by InterMedia, conducted an in-depth, qualitative research study involving both clinics and patients to understand how healthcare services are financed, the financial barriers faced by health clinics and patients, and how digital financial services might help address some of these gaps (Intermedia Financial Inclusion Insights, 2015). The study covered 49 urban facilities in Nairobi and 51 rural facilities in Kitui county. The team conducted semi-structured, face-to-face interviews with managers of the clinics and administered exit surveys to 476 patients across the 100 facilities. Other reports and studies that we have drawn from are cited accordingly.

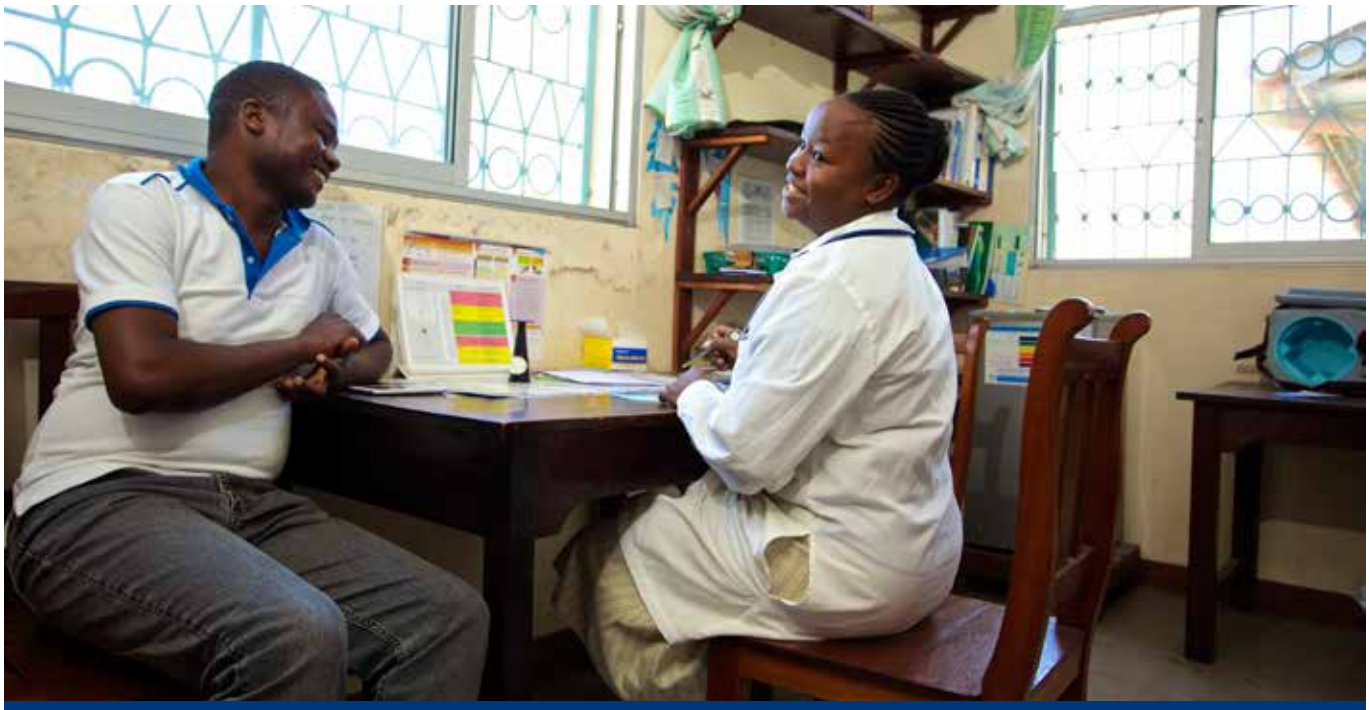
---

4 In the most recent national census, 68 per cent of households were considered rural and 32 per cent urban (Kenya National Bureau of Statistics (KNBS, 2009).

5 According to the Kenya Integrated Household Budget Survey 2005, 67.2 per cent of Kenyans were estimated to be living below this poverty threshold (GoK, 2006).

Chapter 2

# HEALTHCARE AND HEALTH FINANCE IN KENYA



A patient seeks medical advice: While there are good reasons to celebrate Kenya's progress in improving the health of its citizens; more can be done.

There are good reasons to celebrate Kenya's progress in improving the health of its citizens; but there is plenty more to be done. The easiest way to see this is to track Kenya's performance in respect of the health-related Millennium Development Goals (MDGs). Kenya has made great strides towards MDG4 for child health and MDG6 which is related to combating HIV/AIDS, malaria, and other priority diseases. According to successive rounds of the Kenya Demographic and Health Surveys (KDHS), infant mortality and child mortality went down by 36 and 42 per cent, respectively, between 2003 and 2014 (Kenya National Bureau of Statistics, 2015). This was largely in response to improved nutrition amongst children, high rates of childhood vaccination, and timely treatment of childhood illnesses such as diarrhoea, malaria, and respiratory illnesses. The country's efforts to combat HIV/AIDS, which was one of the leading causes of preventable deaths in 2010, has led to prevalence reducing from 7.6 per cent in 2007 to 5.6 per cent in 2012 (Kenya National AIDS Control Council, 2014). However, Kenya's performance with respect to MDG5 – maternal health – has been less impressive: the maternal mortality rate (MMR) measured through the KDHS increased from 414 deaths per 100,000 live births in 2003 to 488 in 2009. The most recent estimate of the MMR for 2013–14 is 400, more than double the target of 147 that Kenya aimed to reach by 2015 (WHO, UNICEF, UNFPA, the World Bank and the United National Population Division, 2014).

The report card is similarly mixed when one looks at patterns of healthcare utilisation. According to the KHHEUS, the average number of outpatient visits increased from two to three visits per person per year between 2003 and 2013, and the percentage of people who had foregone care when they were last sick has dropped from 22.8 per cent in 2003 to 12.7 per cent in 2013. However, these statistics vary considerably across socioeconomic groups. The status of in-facility births drives this point home. The KDHS shows that the percentage of women who give birth at a health facility increased from 43 to 61 per cent between 2009 and 2014. Yet, the coverage rate for the lowest wealth quintile was only 30 per cent in 2014 (up from 18 per cent in 2008–09), compared to 92.7 per cent for the wealthiest quintile (up from 80.9 per cent in the previous KDHS). Amongst urban women, 82 per cent of mothers interviewed gave birth at health facilities in 2014, but the coverage rate was just 49.5 per cent for their rural counterparts. (In 2008–09, coverage was 74.7 per cent for urban women and 35.4 per cent for rural women, respectively.) These statistics show that while the coverage of in-facility birth has improved for all population segments, the healthcare utilisation gap between socioeconomic groups remains not only vast but also persistent.

The financial cost of accessing care is one of the main reasons for the differences in utilisation between the rich and the poor. Simply put, the rich can afford to pay for the care they need, while the poor cannot. Reducing these costs has been one of the main policy tools that successive Kenyan governments have used to increase the uptake of priority health services. Services at public health facilities were free in post-colonial Kenya until 1988, when user fees were first introduced as a way to generate revenue for the health system (Chuma &

Maina, 2013; Mwabu & Mwangi, 1986). All public facilities, including health dispensaries and health centres that provide primary care services, started levying user fees. Studies assessing the impact of user fees showed that they posed a significant financial barrier to access, depressing healthcare utilisation, especially amongst the poor (Mwabu & Liambila, 1995; Moses et al., 1992).

During the 1990s, the GoK introduced waivers and exemptions for priority health areas such as services for children under the age of five, maternal health services, and tuberculosis (Chuma & Maina, 2013), and made services under vertical disease programmes, such as HIV/AIDS treatment in public facilities, free. In 2004, the government adopted the 10/20 policy, whereby user charges for primary care services were capped at KSh 20 and KSh 10, at health centres and dispensaries, respectively (Chuma et al., 2009). An early evaluation of the policy reported high adherence to the new rates on the part of health facilities and a 70 per cent increase in utilisation (MOH, 2005). However, subsequent studies showed that these changes did not last. Three years after the implementation of the policy, Chuma et al. (2009) found that both patients' understanding of the policy and facility adherence to the policy was limited.

In June 2013, the current administration announced a policy to remove all user fees at health centres and dispensaries and abolish charges for maternal health services at all public facilities (Chuma & Maina, 2013). What set this new policy apart from the waivers, exemptions, and caps on user fees that preceded it – and gave the new policy traction – is that, unlike in the past, the national government had set aside funds to compensate facilities for the income they lost as result of discontinuing user fees. Early evaluations of the user fee abolition policy, using administrative data from facilities, report that outpatient services for children under five has increased by 25 per cent between 2012–13 and 2013–14, while the number of deliveries at public facilities increased by 21 per cent over the same time period.

The abolition of user fees for primary care and maternal health services is part of the current government's efforts to put Kenya on track to achieving universal health coverage (UHC) by 2030. Discussions around comprehensive health financing reforms have been ongoing for nearly two decades. In 2004, the then Minister of Health attempted to introduce a social health insurance scheme. A law was passed by parliament but the president of Kenya refused to sign it, citing concerns related to the scheme's technical design. According to the KHHEUS, less than a fifth of Kenyans have health insurance. NHIF, the government-owned insurance agency, accounts for the bulk of this coverage. Historically, NHIF operated as a social health insurance scheme for Kenyans employed in the formal sector, and was financed through mandatory payroll contributions from formal sector employees. In terms of services covered, it focused only on hospitalisation charges. Some private employers topped up the NHIF package with additional insurance to cover outpatient services for their employees. For the past decade, NHIF has sought to extend its membership in the informal sector through voluntary enrolment; and, more recently, NHIF has expanded the benefit package to include outpatient services, starting with a special scheme for civil servants in 2012, since extended to all NHIF members in 2015.

NHIF's future role will depend on the health financing strategy currently being drafted by the MOH to articulate health financing reforms that Kenya will pursue in order to achieve UHC by 2030[6]. There is a broad consensus among health sector stakeholders that the reforms should reduce OOP expenditure (i.e. payments individuals make directly to providers at the time they seek care) for a defined set of essential services, and improve health system efficiency by moving away from a system where the government pays for inputs like salaries and drugs, to a set-up in which pooled funds are used to purchase services from health facilities, both public and private, based on outputs or actual services delivered to patients. Most key stakeholders have accepted that these objectives will be met by adopting a government-mandated and regulated health insurance scheme. However, pursuing an insurance-based route to UHC is not easy in a country where 80 per cent of the working population is employed in the informal sector (World Bank, 2012). Increasing insurance uptake through voluntary enrolment has been a challenge the world over, and it is no different in Kenya.

The role of the private sector in the new health financing regime is another key area for discussion. The public sector accounts for 52 per cent of all health facilities in the country, while private for-profit facilities and not-for-profit facilities operated by faith-based organisations account for 35 per cent and 13 per cent of health facilities, respectively (MOH, 2012). Private facilities account for 41.5 per cent of outpatient visits and 42.4 per cent of hospital admissions, according to the KHHEUS. The survey shows that fewer than 2 per cent of Kenyans have private health insurance, while NHIF covers 15 per cent of Kenyans. However, commercial insurers account for 9 per cent of total health spending in the country, compared to NHIF's share of 5 per cent according to estimates from the most recent round of National Health Accounts (MOH, 2015). Private insurers are key players in Kenya's insurance market and any new health financing structure will need to address what their role will be.

Lastly, the health financing strategy has to take into account Kenya's new devolved system of government, wherein the provision of healthcare services is the responsibility of the 47 newly-formed county governments, and which will likely have a variable capacity to deliver and implement quality health services.

6 This section draws on author interviews with key health-sector stakeholders as well as participation by one of the authors in MOH-led meetings on the health financing strategy for Kenya.

Chapter 3

# HEALTH SPENDING PATTERNS IN KENYA

How much does the typical Kenyan spend on healthcare? How often? How about a poor Kenyan? Are the costs associated with seeking care high enough to deter some poor Kenyans from seeking care? We discuss these questions in this section. We also explore the fact that the amount the average Kenyan spends on an outpatient visit or on healthcare services in a year is actually quite low. But that is not an indicator of accessibility or affordability of care. Even these low OOP costs are unaffordable for poor Kenyans, leading many to forego necessary medical treatment. And for a sizeable share of households, every year, health spending is substantial, even catastrophic. The stories behind these numbers, particularly when we focus on the poor, are complex, shaped by the limits and textures of lives lived in economic scarcity.

## 3.1 SMALL HEALTHCARE COSTS ARE FREQUENT

As one might expect, the typical Kenyan requires some kind of medical attention fairly frequently. The KHHEUS reports an average of three outpatient visits per person per year, up from two visits per person per year in 2002 (see Annex A for distribution of illness and treatment patterns by population subgroups). In a survey of Diaries respondents recalling their incidence of risk events over five years, we found slightly lower rates, averaging 0.9 visits per person per year. This discrepancy may be due to the project's focus on low-income people, the underreporting of free visits in the Diaries survey (which focused on financial transactions), and challenges with respondent recall over such a long period, particularly for minor outpatient visits.

Oftentimes, the OOP cost of a single outpatient visit is not catastrophically high for the user, though estimates of costs incurred per visit vary substantially across studies. When asked how much they spent OOP on outpatient visits in the last five years, Diaries households reported a median cost per outpatient incident of KSh 400 (USD 4.70). The mean value for the same was KSh 1,123 (USD 13.22). In the cash flows observed over the course of the study year, outpatient-related transactions were the most common health expense reported. Among 966 medical service payments, the median individual transaction value was KSh 300 (USD 3.53), while the mean was KSh 939 (USD 11). We had 1,396 transactions for medicine, with a median value of just KSh 50 (USD 0.60) and a mean of KSh 185 (USD 2.20). Free care would not necessarily show up in Diaries data, which focused more on households' monetary transactions rather than service utilisation.

Such numbers, at least for paid medical services, are roughly in line with the findings of the 2013 IHME survey of health facility users and the 2012 KHHEUS (see Figure 1 for a comparison of health costs from different surveys). When we exclude recipients of free care, including HIV-related care and outpatient care for children under five years old (all of which accounts for 39 per cent of facility visits) from the IHME study[7], we find the mean OOP spend per visit to be KSh 367 (USD 4.32). The KHHEUS finds the average out-of-pocket patient spend on a single paid visit to be KSh 686 (USD 8.07). However, because of the large number of free services offered, the overall median OOP expenditure per visit was just KSh 50 in the KHHEUS.

At first glance, spending on a per-visit basis does not seem particularly high. For example, amongst the Diaries households, the median cost of KSh 400 for an outpatient incident is about 6 per cent of median monthly household income. The KHHEUS provides an estimate of total health spending in a year for the average Kenyan – KSh 1,609 (USD 18.86) – about 5 per cent of annual per-capita expenditure for a household right at the USD 1.25/day poverty line.[8] However, with 43 per cent of Kenyans consuming less than USD 1.25 per day[9], the cost of USD 4 for an outpatient visit can pose a significant financial barrier if the household lacks adequate financing mechanisms. (We discuss how the typical family finances health expenditure later in this report).

**Figure 1: Comparing key health spending figures across studies[10]**

**Average number of outpatient visits per year:**
- KHHEUS: 3 per person
- Diaries: 0.9 per person (may undercount free services)

**Percentage of outpatient visits that involved no OOP spending:**
- KHHEUS: 44%
- IHME: 41%
- IM FII: 44%

**OOP spending per outpatient visit, including free visits:**
- KHHEUS: KSh 50 (median); KSh 379 (mean)
- IHME: KSh 20 (median); KSh 262 (mean)

**OOP spending per outpatient visit – paid visits:**
- KHHEUS: KSh 250 (median); KSh 686 (mean)
- IHME: KSh 110 (median); KSh 463 (mean)
- InterMedia: KSh 450 (median); KSh 1,084 (mean)

**OOP health spending per household per year (including both outpatient and inpatient costs):**
- KHHEUS: KSh 6,937 (mean)
- Kenya Financial Diaries: KSh 1,073 (median); KSh 3,962 (mean)

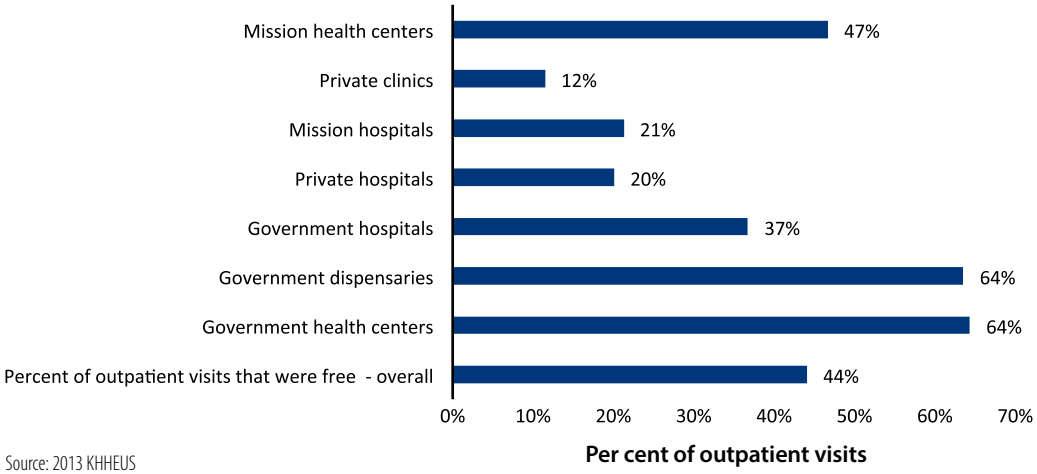
7 The median is KSh 100, but in this calculation, we cannot exclude the free outpatient care provided to those with HIV, but which is not specifically HIV-related.

8 This is based on the USD 1.25/day poverty line set in 2005 dollars and adjusted for inflation up to 2015.

9 Most measures of current poverty levels in Kenya are based on extrapolations from the 2005 Kenya Integrated Household Budget Survey (GoK, 2006). Here we have used an estimate of poverty from the World Bank (World Bank, 2015)

10 The KHHEUS relied on four-week recall for outpatient health expenditures, which were then annualised and added to one-year recall figures for inpatient spending. As such, a large number of households – the 60 per cent who had no outpatient spending in the previous four weeks and no inpatient expenditures in the previous one year – will report 'zero' health spending in the year. As such the sample median for annual health spending in the KHHEUS was 0, which is not a precise reflection of median spending across the year for all households, but rather a reflection of the methodology used for calculating annual costs. Mean costs correct for this by overestimating annual spending for households with recent outpatient care and underestimating annual spending for those with no recent outpatient costs. The Financial Diaries project observed the health spending of households for the entire year; 96 per cent of households had at least some health spending.

**Figure 2: National share of outpatient visits reported as free by facility type**




Source: 2013 KHHEUS

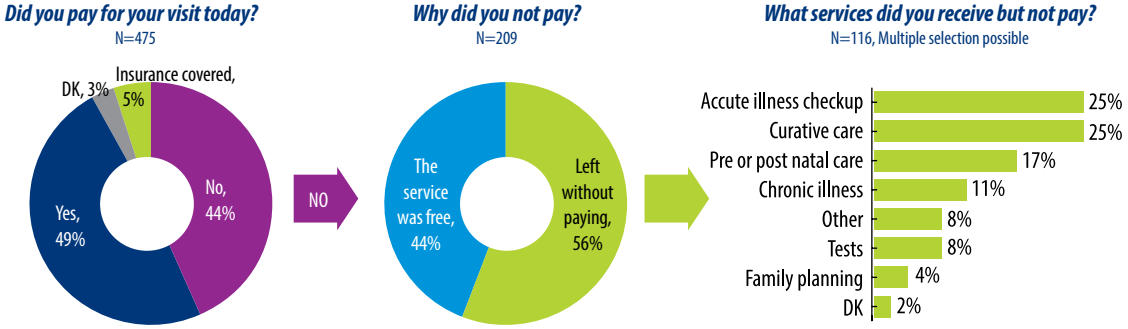
The IHME survey, KHHEUS, and the Intermedia Health Facility study all point out that a large share of outpatient visits actually entail no OOP expenses for patients. We know that this should include maternity care, HIV care, and care for children under five at public facilities. However, many are reporting that free care[11] was provided at private facilities as well. For example, in the KHHEUS, 20 per cent of outpatient visits to private hospitals entailed no OOP payments by users (see Figure 2). The same was true of 47 per cent of visits to mission health centres. When we look at the types of services given patients at no OOP cost, we find they were the same at both private and public facilities: treatment for malaria and respiratory diseases, and the provision of vaccinations. Of course, these are also very common reasons for health facility visits overall.

Part of this may be due to insurance usage, but another part may be a separate phenomenon picked up in the Intermedia health facility survey – a promise to pay later. In their survey of patients from 100 facilities in Kitui and Nairobi counties, Intermedia found that 44 per cent of patients did not pay for their treatment on the date of service, but only 44 per cent of these did not pay because the service was free, as shown in Figure 3. The remaining 56 per cent simply left without paying. Managers of the facilities report that this is typically a promise to pay later, which is often never fulfilled. Forty-seven per cent of facilities surveyed offered credit to patients to deal with such scenarios, in spite of their experiences with cash flow shortfalls. Although 24 per cent of patients in exit interviews reported leaving the facility without paying for fee-based services, only 11 per cent said that a health facility had ever given them credit. It is possible that the obligation to repay feels quite soft for patients.

But, it is not certain whether that is fully a problem with patients' willingness to pay or whether clinics' management of these debts is more at fault. Only a few clinics in the Intermedia study had any system for registering and following-up on credit extended to patients. Most of the time, the credit was given and payment 'encouraged' quite casually. As one facility manager explained, 'We just agree on some terms to repay the debt, and the client needs to stick to the agreement. We don't follow up on outstanding debts.' This is hardly surprising given that most of those running clinics are clinicians of some sort – who are there to provide health services – rather than financial managers. Only 23 per

11 We consider a visit 'free' if it entailed no OOP expenditure.

**Figure 3: Many patients appear not to pay, even for fee-based services**




Source: 2014 Intermedia Health Facility Study

cent of the facilities in the Intermedia study were managers or administrators rather than clinicians.

Many estimates of OOP spending on care are incomplete. For example, IHME measures transportation costs in addition to the costs of care, while the KHHEUS and the Diaries project do not link these two costs. IHME's exit survey found the average patient spent KSh 75 per visit on transport costs, but that figure rose to KSh 164 when isolating those who had to spend money on transport (some were able to walk or access free transport). For many, the cost of transport to a health facility was actually larger than the cost of care itself.

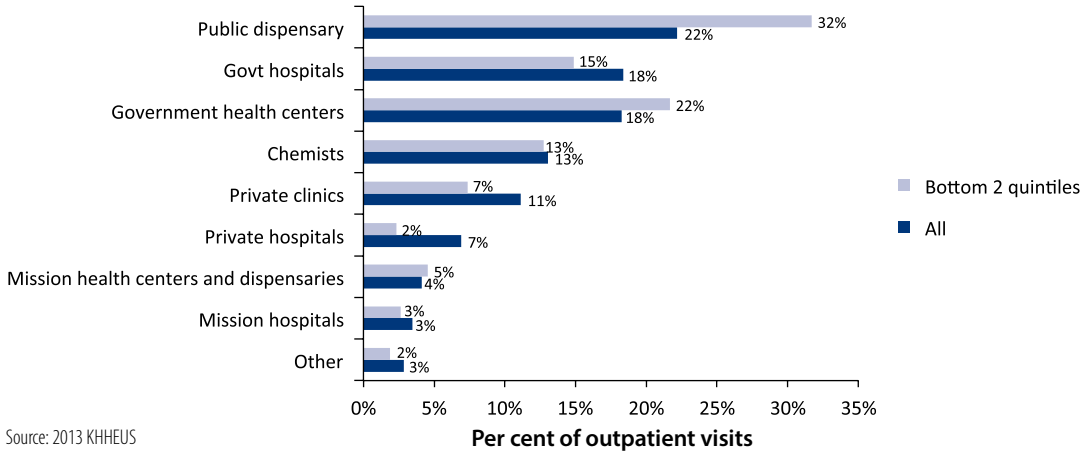
Also, cost-per-visit calculations – the focus of IHME's study – ignore compounding costs of overall care associated with referrals for additional diagnostic testing, imaging, or higher level consultation, as well as the costs for medication that may have been unavailable at the health facility on the day of treatment. Diaries respondents frequently cited these types of costs as bottlenecks in receiving care, even when consultations are free. One respondent, for example, spent nothing on fees at the health facility where she took her son, but still spent KSh 200 on transportation and another KSh 200 on medicine that she had to buy outside the facility. An exit interview would have missed that expense. This seemed to be a frequent problem facing parents receiving free care for their under-five children. These costs – not always picked up in an exit interview – sometimes cannot be met. Though a patient may have received a diagnosis by the time they reach their exit interview, their care is still incomplete. For example, Linda, who lives in a settlement just outside Eldoret, went to a government dispensary during the course of the Diaries and spent just KSh 50 for registration and what she referred to as 'a check-up'. But despite the doctor having prescribed medication, she did not purchase it because she didn't have enough money.

All three cost estimates – from IHME, KHHEUS, and the Diaries project – are from 2012–13. Hence, it is worth asking whether the policy removing user fees for services at government-owned primary care facilities, introduced in mid-2013, will address the financial barriers described above. The answer to this has two parts. First, let us consider where the policy will have an impact. Since it only applies to a subset of Kenyan facilities – namely, health centres and dispensaries in the public sector – the extent of its impact will depend on where Kenyans go to access services. According to the KHHEUS, approximately 40 per cent of outpatient visits took place at public health centres and dispensaries as shown in Figure 4.

Another 18 per cent of outpatient visits took place at public hospitals, where user fees are still levied. Private for-profit facilities, including private pharmacies that accounted for 30 per cent of outpatient visits, also continue to charge fees, as do private non-profit facilities operated by faith-based organisations, which accounted for 9 per cent of outpatient visits.

Second, we need to look at what has happened to user fees at facilities that fall within the remit of the new policy. A 2014 study looking at the implementation of the policy suggests there is plenty to celebrate on this front (Health Policy Project, unpublished). About 85 per cent of patients interviewed as part of an exit survey administered at public health centres and dispensaries reported not having to pay charges for the services they received at these facilities. However, nearly 30 per cent of respondents stated that drug availability had worsened following the implementation of the policy. In the event that a particular drug is not available at a public health facility, the patient would need to spend money to purchase it from a private pharmacy. While user fees may fall, total OOP expenditures per incident – and per year – for low-income families will only fall if the levels of service and treatment offerings within these public primary care facilities stay constant or improve.

**Figure 4: National distribution of outpatient visits by facility**




Source: 2013 KHHEUS

This is not an insignificant problem given that drug costs are considerable. The KHHEUS showed that drugs accounted for two-thirds of OOP spending for an outpatient visit. Furthermore, stock-outs are not uncommon in public facilities. The IHME study found that health centres and dispensaries had about 65 per cent of the drugs on the essential medications list at the time when they were surveyed. The 2012 Public Expenditure Tracking survey (PETS) looked into the availability of 'tracer' or priority drugs from the MOH's list of essential medicines that all facilities are meant to stock, and found that 33 per cent of the public facilities sampled did not have all the drugs being tracked (Onsumu et al., 2012). Bottom line, even at public health centres and dispensaries where the new user fee policy is in effect, a patient may still incur high costs if the drugs they are prescribed are not available at the primary care facility in question and have to be purchased elsewhere.

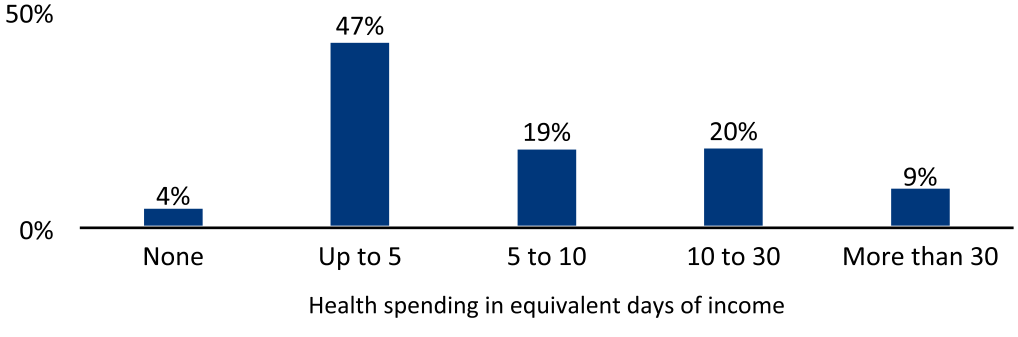
The same is true if the patient is referred to higher-level facilities for additional tests or consultations. This might be because a patient needs tests or treatment that a primary care facility is not meant to provide, for example, cancer screening or treatment. Or it could be because the primary care facility is not equipped to provide a particular service even though it is meant to. For example, the IHME study shows that 97 per cent of public health centres and 80 per cent of dispensaries surveyed report offering antenatal care services to pregnant women, but only 12 per cent of facilities in the study reported having the full stock of medications, tests, and medical equipment recommended for ANC provision, with the stocking of insulin and availability of ultrasounds being major barriers. Services at secondary and tertiary care facilities still carry charges, even in the public sector, and are not cheap.

## 3.2 BIG COSTS ARE NOT INFREQUENT

While the majority of healthcare visits are outpatient visits, any one of which might not be very expensive, the costs can and do escalate very quickly for some families; the risk of incurring sizeable healthcare costs in any given year can be substantial. When we look at the distribution of healthcare spending as a share of income (Figure 5), we see that while a majority of Diaries households had low aggregate health spending during the year of observation, 9 per cent of households spent more than the equivalent of an entire month's income on healthcare during the study. When we look at a full histogram of costs, again we see clustering of respondent households around very low health spending. But we also see some long tails, where a small number of people experience very high costs during the year. The results are similar for the KHHEUS: average household OOP spending on health in a year was KSh 6,937 (USD 82). Nearly 7 per cent of households spent more than KSh 20,000 in a year, which is roughly three times the average OOP spending in a year.

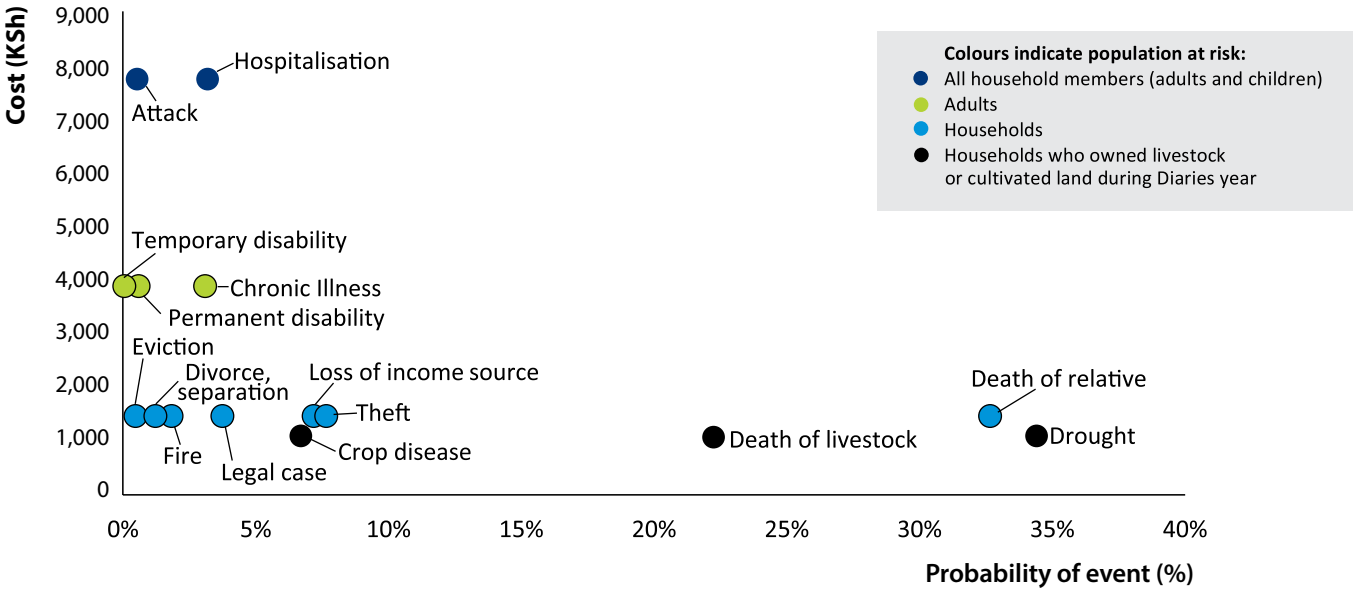
This has important implications. First, experiencing large healthcare costs is not particularly rare. We looked at the incidence and severity of hospitalisation during the course of the Diaries year and through the five-year recall risk module. In the five-year recall method, we project that an individual in the sample has a probability of being admitted to hospital of about 3 per cent per year (see Figure 6). For a family of five, that's about a 15 per cent chance that at least one household member will be hospitalised in the course of a year. They can expect a household member to be admitted about once every 6–7 years. Each of these instances involves significant costs: the median inpatient expenditure in the sample was KSh 5,000 (mean KSh 19,412) over the previous five years. In the KHHEUS, we see that 11.6 per cent of Kenyan households experience at least one hospitalisation in a year. On average, Kenyan households spent KSh 1,504 (USD 18) for inpatient services in a year; however, if we consider just the families that experienced some hospitalisation in the year, the average OOP spend was KSh 12,935 (USD 152) in a year. In terms of catastrophic health spending, the KHHEUS found that approximately 6.2 per cent of households were pushed into poverty as a result of incurring high healthcare costs.

**Figure 5: Heath spending as days of average household income (% of Financial Diaries study sample)**




Source: 2012-13 Kenya Financial Diaries

**Figure 6: Median reported cost of coping with risk event (KSh) versus Probability of of at-risk population experiencing event**




Source: 2012-13 Kenya Financial Diaries based on 5-year recall of events

Much of the risk associated with high-cost inpatient care is random. And at these levels of risk, the question is not if a household will someday have to deal with these kinds of expenses, but rather when, and as we discuss in later segments, how?

The other challenge with financing these big costs associated with care is that the funds are typically needed quickly. While Kenyans are often able to finance other large expenditures, like school fees, by paying slowly over time or saving up, health needs are often urgent and unexpected. While many might have KSh 300 on hand to quickly finance an outpatient visit, having KSh 1,000 available for an X-ray or KSh 10,000 for a surgery is quite different. There is not enough wiggle room in household budgets –recall that the median household in the Diaries sample was earning just KSh 7,120 per month – to make immediate space for these kinds of expenses without deploying some kind of financing mechanism.

For these families, coming up with large sums of money to finance urgent healthcare spending adds tremendous new stress. Some are able to do it, but few without serious delays and without impinging on their already vulnerable livelihoods. Consider Ellen: her husband beat her badly and abandoned her during the post-election violence in 2008, crippling her income and her social network resources. When we met Ellen, her son was suffering from ongoing abdominal pain, which doctors began to suspect was related to a problem with his appendix. They needed KSh 10,000 to perform the surgery, a sum that Ellen just could not pull together quickly. She saved diligently for several months aiming for this KSh 10,000 goal. Along the way, though, she was told about a very good pediatrician in another town. She used what she had saved to take him there, where after a number of tests she was told his problem was actually intestinal and treatable without surgery. But, he would need to come every two months for an injection and medication, at a cost of KSh 2000 plus KSh 200 for transport each visit. It's still an enormous cost, and she's trying to change jobs to afford it, but she has managed a number of rounds, and her son is doing much better.

Ellen was lucky that her son could endure the delay. This is not always the case. Urgent medical needs sometimes crop up when low-income families are least able to manage them. Matthew's mother-in-law was hospitalised with a severe and urgent illness, and the duty to finance her hospital bill of KSh 10,000 fell to him. At the same time, a bank representative showed up at his home asking him to make good on his duties as a guarantor. A friend for whom he had guaranteed a loan had absconded on the balance of KSh 12,000. The only way Matthew could pay for both was to give up his tea farm. He leased it to a local businessman who provided him with KSh 10,000 upfront in exchange for three months of tea revenue. The family went without any new tea income for three months – around KSh 8,000–10,000 per month in good months.

## 3.3 OUT-OF-POCKET EXPENDITURE

***Out-of-pocket expenditure underestimates how much money is actually needed to resolve a health problem. Some required care is incomplete and foregone.***

When we focus on what individuals and households spend on healthcare, we underestimate the true costs of treatment by failing to account for occasions when medical care was needed, but could not be accessed. The Kenya Financial Diaries project found that 38 per cent of households delayed or forwent necessary healthcare at some stage during the study, driven primarily by not having enough money to meet the current need.

Other surveys pick up on similar levels of foregone care. The most recent Afrobarometer survey (2014–15) found that 48 per cent of Kenyan families went without care, and about 27 per cent of households reported that this was more frequent than just once or twice (Afrobarometer, 2015). While high, this is down from 54 and 36 per cent, respectively, in the 2011 round. The KHHEUS, which looks at individuals rather than households or families, finds that 13 per cent of individuals in 2012 (down from 17 per cent in 2007) experienced an illness and did not seek treatment.

The KHHEUS also asks why respondents forwent care. While the leading reason reported in all previous rounds was the 'high cost of care', the 2012 survey introduced a new response option, 'Illness not considered serious enough'. This new response option then became the leading explanation, followed by cost. As the KHHEUS report points out, this raises new questions. How well are Kenyans assessing the severity of their medical needs? Scarce financial resources and high costs of care can skew this perception. Very low costs of care can encourage individuals to seek unnecessary care. In contrast, perceived high costs can encourage people to downplay the severity of their need, disregard the benefits of preventive services, delay seeking necessary care, and in some cases, worsen their condition to the point where effective treatment is much more difficult to administer.

The perception of high costs of care – along with the opportunity costs of long waits and indirect costs like the cost of transportation – come through in a 2014 study led by the Strengthening Health Outcomes through the Private Sector (SHOPS) Project as the most important reasons that informal sector workers earning USD 5–15/day in Nairobi were forgoing care. More than 70 per cent of their 359 respondents reported the costs of care as a key barrier to accessing healthcare, more than 60 per cent cited long waiting times, and more than 40 per cent reported transport costs as a barrier (Munyua, 2015). The KHHEUS found that 86 per cent of patients incurred some kind of transport cost for their facility visits, with the average round trip cost being KSh 143, often more than the cost of treatment itself. IHME's survey reported much less frequent spending on transport, with only 45 per cent reporting transport spending, with a similar average spend of KSh 164.

Because the Kenya Financial Diaries project followed the same households for a long period, we learned more about the circumstances under which low-income people delay and forego care. We also observe the consequences. As the KHHEUS picks up, some of the instances of foregone care were intentional attempts to first try the lowest cost care option for non-urgent matters: waiting.[12] If waiting did not help the illness, families would typically follow with self-treatment through the purchase of medications from a chemist or pharmacist. Seeking medical advice, typically a higher cost option for most, would only come after those mechanisms failed. While most of the time respondents could come up with the first KSh 300–500 for an initial visit to a medical practitioner, they would then run out of funds for follow-up examinations, medications, and procedures.

Cutting courses of medication short, or foregoing them completely, came up as the most frequent example of partially forgone care that was the consequence of running short of funds. Sometimes this foregone medication was for severe and potentially life-threatening illnesses like tuberculosis. Linda, for example, was sick with chest pains for some time. Eventually, she decided to look for help at the government dispensary. She spent KSh 50 on registration and a consultation, but could not afford to purchase the medicine for her care. She carried on with her normal routines, but continued to deteriorate. The next time we saw her, she was hospitalised in a referral hospital with acute tuberculosis.

At other times, the delay in care is not quite as serious, but it can mean that children miss school, adults miss more work, and the sick person in the household suffers while the family tries to accumulate funds to cover the remaining costs of care. Candy's son was sick: she took him to the dispensary near their home in a rural part of Rift Valley and was told that he was suffering from malaria. But Candy did not get the medicine he required, because the family could not raise the money to pay for it. It is always difficult for them to find funds in the middle of the month. Candy's husband is paid once per month from his job picking tea, and his average monthly income is only around KSh 3,900. Once paid, he typically covers the household basics, but there is little cash left. Candy and her husband are only occasionally able to pick up other casual work mid-month, when other needs – like medical costs – arise. They postponed his care for about a week, until they could get the funds together.

Nancy's situation was similar: when her son was sick, she took him to a government health facility in Nairobi. They were not charged for the consultation or one of the medications prescribed. But they were sent to purchase another prescribed medicine at an outside chemist. The medicine cost KSh 300 and she did not have that much money; they would have to wait until she was able to save the sum from the earnings she made from helping out at her mother's grocery business – around KSh 50–150/day, depending on sales. In the meantime her son stayed away from school, waiting to recover.

12 Waiting was not the most common reason, however, which is probably because of some differences in question phrasing between the Diaries and KHHEUS. In the Diaries we asked whether "anyone in the household needed a doctor or medicine and went without," while the KHHEUS recorded all of those who were sick and went without care. More Diaries respondents who were sick, but not feeling "in need of care" would not have reported foregone care.

As respondents delay their full treatment, they prolong their illness, missing school and work and feeling miserable. One respondent told us, 'An aunt of mine sent me some money, but it could not cover the whole expense, so I had to leave some of the prescribed medication, and I took the few I could afford. My wife said that maybe I was not getting any better because I had an incomplete prescription from the hospital.'

Often patients who have limited medical knowledge and not much on-site explanation of the treatments being provided, cannot distinguish between urgent, medically necessary medications and palliative care. So choices that must be made between expensive medications are difficult to optimise.

At moments like these, when the full course of treatment could not be financed, Diaries respondents felt like their only option was waiting. Even if the total amount they needed to complete their treatment was relatively small, the funds were simply not available, and budgets were already very tight. For example, Rachel, who lived in rural Vihiga, fell sick in April 2013. She took KSh 400 from her secret emergency savings in the house to go for a consultation. Two weeks later she was still sick. She spent a further KSh 600 on consultation fees, while the prescribed medicine would cost KSh 1,000 – a sum she didn't have. Typically, she lived on just KSh 2,400 per month. She did not buy the medicine and prayed she would recover without it. This is a tricky situation. Her need – KSh 1,000 more – was too big to come from her liquid savings, which had been exhausted after the two consultations. Insurance may not have helped her in this circumstance, depending on the prescription drug benefits. Throughout the study, she was never able to borrow from friends and family. She was sometimes able to borrow around KSh 1,000 from her *chamas*, but doing so required waiting for a group meeting and not having any loan outstanding when she needed to borrow for medicine.

### 3.5 POOR QUALITY OF CARE

***Poor quality of care imposes an additional tax, increasing the costs of care, direct opportunity costs, missed income, and prolonging suffering.***

Considering Rachel's story, it is hard not to imagine how different the outcome might have been if she had gotten the correct diagnosis and prescription during her first visit. She would have saved KSh 600 on a repeat consultation and may have been able to scrape together the money to purchase her treatment.

The funds that low-income families can call upon to finance healthcare are scarce. Even if a family can finance a first visit to a healthcare provider for one illness episode, costs multiply when repeat visits – often to higher level facilities – are required due to a misdiagnosis or incorrect prescription in the first round. New visits often entail new tests, new medicines, and sometimes an escalation to inpatient care. Josephat, the one-year-old son of tea pickers had to be rushed to the government hospital after a first round diagnosis and treatment failed. His parents had paid KSh 300 for a consultation and treatment, though they were not told his diagnosis. Over a few weeks, he continued to deteriorate. They rushed him to the hospital where they spent another KSh 150 on medicine, and this did help him to recover. A total treatment cost of KSh 450 plus transportation costs may not seem like much, but the entire average monthly income for the household was just KSh 5,895.

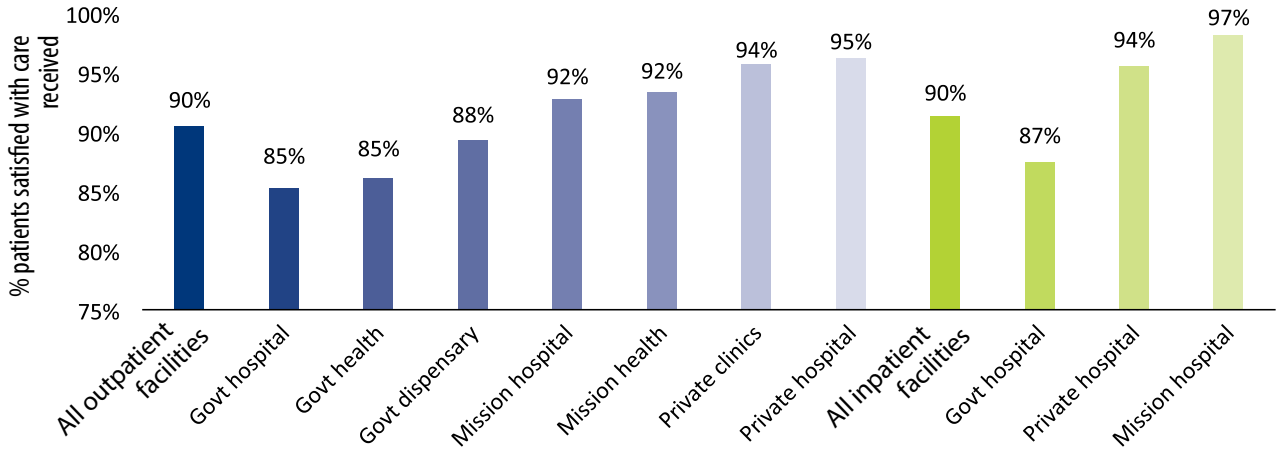
After multiple visits to the hospital, Emmah, in rural Vihiga, was finally diagnosed with Brucellosis, a condition that – judging from the experiences of at least four Diaries respondents – seemed to be frequently misdiagnosed and mismanaged, despite multiple visits to health providers. Emmah believes she acquired the bacterial infection from consuming milk that had not been boiled. The doctors told her that recovery might take quite a long time. When she experienced a flare up, she was able to get the KSh 500 together for tests and consultations by borrowing from funds that a church group had asked her to hold for them. But the medicine she was prescribed cost KSh 6,000 – more than her typical monthly household income of KSh 4,000. She paid a deposit of KSh 900 and hoped to make further payments over time. But the money her husband was sending was never enough; when he sent KSh 1,200, she knew she needed to spend half of that on fertiliser or her maize crop would fail. The rest went towards household food and ROSCA contributions. She never came up with the full KSh 6,000 and would only buy partial treatment from time to time, when she felt particularly ill.

Failures to diagnose accurately and quickly can be disastrous for low-income households since they simply cannot afford endless rounds of repeat visits and diagnoses. This was a major factor in Monicah's untimely death. She visited the hospital more than a dozen times – frequently being told that there was nothing wrong with her and that she should go home. After many repeat visits and admissions, countless tests and compounding expenses, she was finally diagnosed with a throat tumour. The operation was expensive – KSh 23,000 – but that expense paled in comparison to the huge sums spent prior to the diagnosis, which we estimate to have exceeded KSh 50,000[13]. Isaac tapped their social networks and even sold rental properties to finance the visits in which doctors failed to diagnose his wife's condition. By the time they finally discovered what the problem was, Isaac and Monicah's finances were completely drained. The surgery had to wait. Monicah died waiting.

The 2012 Kenya PETS similarly picked up on some weaknesses in the diagnostic capacities of Kenyan medical facilities (Onsumu et al., 2012). Using role-play techniques, survey staff found that only 43.7 per cent of clinicians followed the MOH diagnostic guidelines. While 97 per cent of clinicians were able to correctly diagnose tuberculosis, only 35 per cent were able to correctly identify malaria with anaemia. Even when doctors – the most accurate of the medical personnel in diagnostics – achieved a correct diagnosis, they 'prescribed full

13 The expenditure we recorded during this period was about KSh 15,000, but we later learned that Isaac had sold his rental property to finance an additional KSh 35,000–50,000 in care that was not fully recorded at the time.

**Figure 7: National patient satisfaction levels, overall and by facility type**




Source: 2013 KHHEUS

treatment in only 54 per cent of treatment cases.' PETS did not reveal any large differences in diagnostic and treatment accuracy patterns across public and private facilities, but did find rural and public dispensaries – often the frontline providers of healthcare to the poor – to have the lowest levels of compliance with MOH clinical guidelines.

Such facility-based assessments are an important way to assess quality. But what about patient perspectives? KHHEUS data reflect what appear to be quite high levels of patient satisfaction (90 per cent) for both in- and outpatient care. As Figure 7 depicts, however, these satisfaction levels vary by institution type, with government hospitals typically receiving the lowest scores, and mission and private hospitals the highest. Satisfaction is just one component of quality, however, and may reflect the facility infrastructure and customer service rather than the availability of appropriate personnel and supplies, and the appropriate and accurate diagnosis and treatment of patient cases.

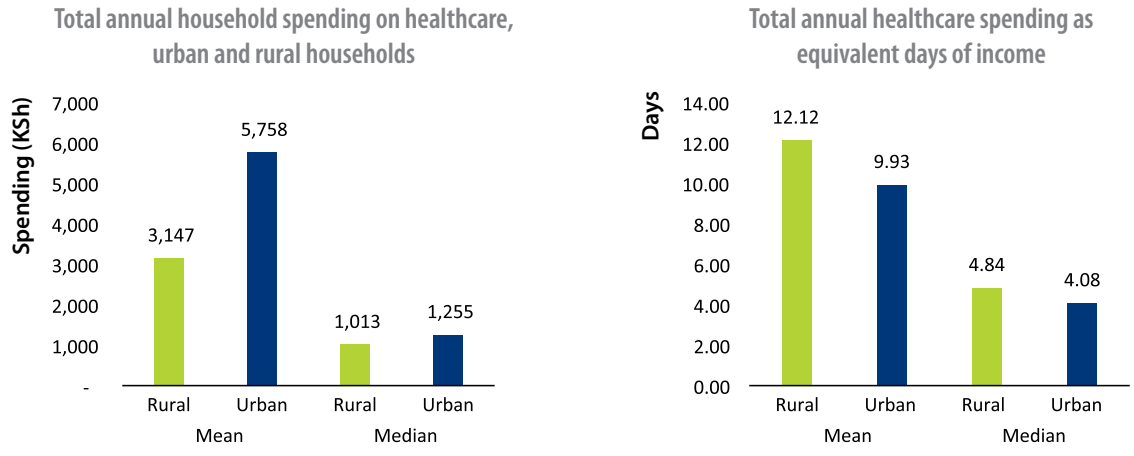
As we have demonstrated above, these failures of adherence result in very real financial burdens for Kenya's poor. Apart from accumulating costs of care, prolonged illnesses also mean longer periods away from businesses and farms. They can mean lost jobs, lost time in school, increases in transport costs, and opportunity costs for caregivers who must put aside their own livelihood activities while they care for the sick.

## 3.5 FINANCIAL BARRIERS

***Financial barriers to care persist even in urban areas where access and incomes are presumed to be higher.***

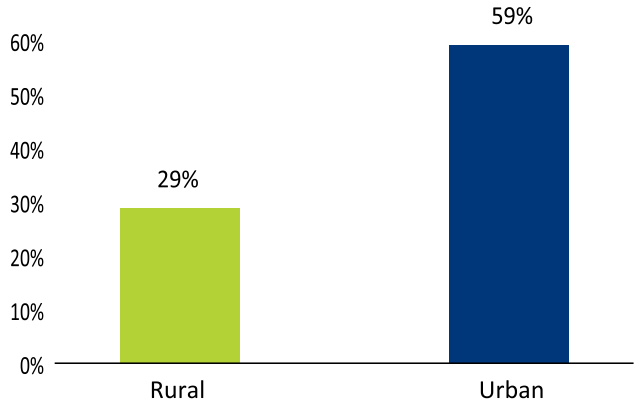
When we break down Diaries healthcare expenditures by population segment,

**Figure 8: Household-level spending on healthcare**




Source: 2012-13 Kenya Financial Diaries

**Figure 9: Share of households who reported not seeing a doctor or taking medicine when needed at least once during participation in Diaries study**




Source: 2012-13 Kenya Financial Diaries

we see something interesting in relation to urban households. They tended to spend more on healthcare than rural households, but only in absolute terms. Relative to their incomes, they were spending a smaller share of their income on healthcare, as shown in Figure 8.

This distinction may be important. When we look at the determinants of delayed or foregone healthcare, we find that household per-capita income is statistically significant only after controlling for the urban/rural designation.

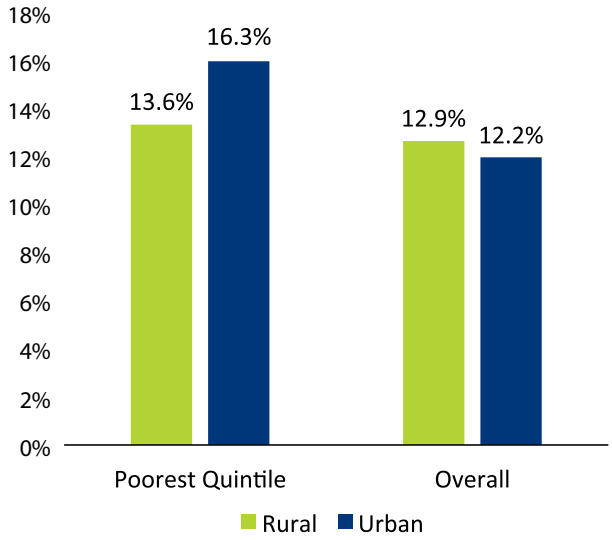
Incomes in the sample tend to be higher in urban areas, but expenses are also significantly higher. Foregone care was more heavily concentrated in urban areas in the study, with 59 per cent of urban households delaying or forgoing care, while only 29 per cent of rural households did the same (Figure 9).

The trend in the KHHEUS is less pronounced: see Figure 10. Across the KHHEUS national sample, the difference in foregone care between urban and rural respondents is very small. However, in the lowest income quintile, urban respondents were slightly more likely to forego care than rural respondents. When it comes to OOP health expenditure, we find that overall, urban individuals are spending more than rural ones on healthcare. Are rural individuals spending more as a share of income? We cannot tell in the KHHEUS, in the absence of income data, though it seems likely given that urban incomes tend to be substantially higher in absolute terms. Among the poorest wealth quintile, rural individuals are spending more than urban individuals in absolute terms.

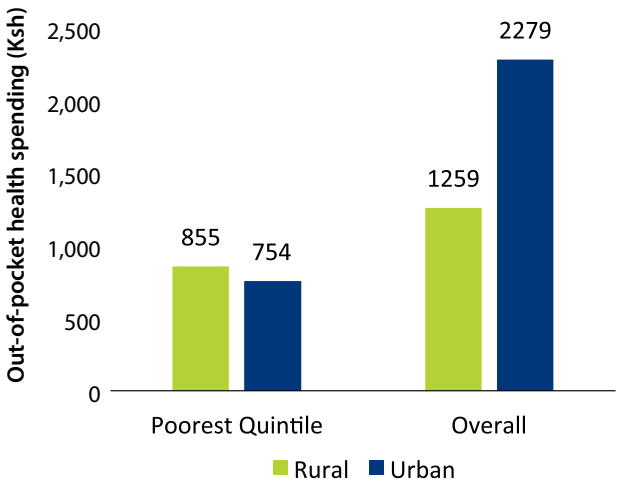
We also see in absolute terms that rural patients tend to spend less per visit on transportation (KSh 44) than urban patients (KSh 130), which seems to reflect that a larger share of rural patients are able to walk to treatment facilities. Again, it is not clear how important these differences are in relative terms, given higher average incomes in urban areas, but it does remind us that physical access in rural areas has improved dramatically, and the cost of travel to facilities remains a relevant financial cost in urban areas, despite being more densely populated.

**Figure 10: National levels of foregone care and health spending**

Per cent of population foregoing care in past year: overall and for the poorest 20% by urban, rural areas




Average annual out-of-pocket health spending per person: overall and for the poorest 20% by urban, rural areas




Source: 2013 KHHEUS

Chapter 4

# FINANCING THE COSTS OF CARE

How do Kenyans find the money to pay for the OOP costs of care? Financing healthcare can be a major challenge, given the tight budgets so many families face and the unpredictable nature of health spending – particularly expenses that surround the kinds of serious illnesses and accidents that require inpatient care.

## 4.1 PAYING FOR HEALTHCARE

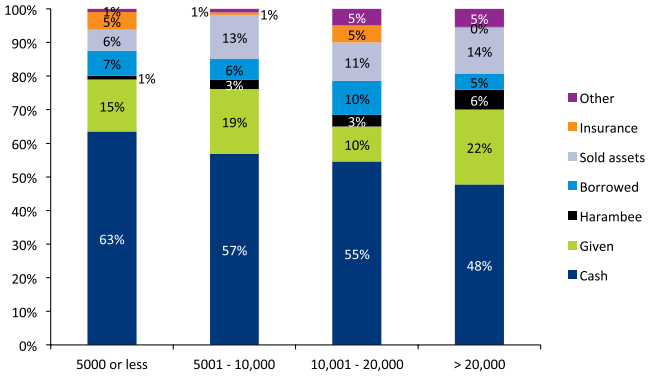
***To pay for healthcare, Kenyans call on liquidity sources that are not always to hand at just the right moment, making even small costs hard to finance.***

The first place most people turn to pay for care is cash on hand, either immediately available from earned income or sums that are kept in liquid savings. This cash-on-hand financing plays some role in managing the cost of care at every expense level, but when expenses grow, other sources also become important, particularly the help that comes from family and friends.

If we look at the KHHEUS and focus on the two lowest wealth quintiles (Figure 11), we see that cash on hand is the largest contributor to outpatient expenses, followed by gifts and remittances from family and friends. For inpatient financing, which tends to require larger sums, the share of financing provided by friends and family increases. *Harambees* and credit from facilities make only minor contributions, presumably because they contribute a large share of the financing required for only a small share of patients.

When we disaggregate the KHHEUS inpatient data by the total cost of the incident, we see that the average contribution from different financing sources again shifts. Figure 12 shows the financing contributions per incident for the lowest two wealth quintiles by the cost of the inpatient care. We see that as costs increase, the share of the contribution from cash on hand diminishes and is overtaken by social network financing. In these lower two quintiles, where use of insurance is minimal, the social networks have to do more of the heavy lifting. But remember, this is only for instances in which the funds were actually found and care was received. The social network can be very powerful, but only when it comes through, and this is by no means guaranteed.

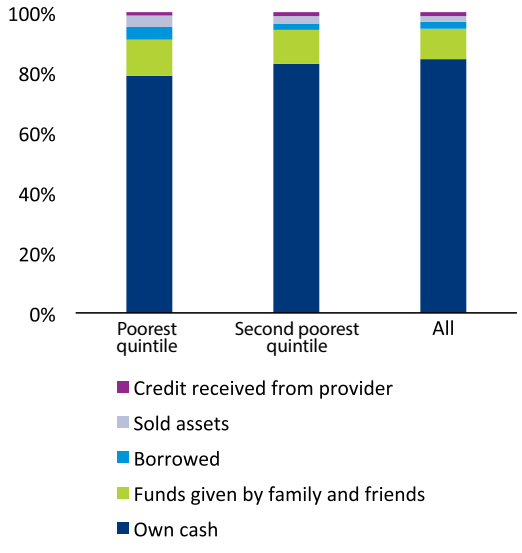
**Figure 12: Strategies for financing the costs of care shift when the level of financing needed increases**




Source: 2013 KHHEUS

**Figure 11: Cash-on-hand is important for the poor – and everyone else – for both small and large care costs, though for larger costs, it's insufficient alone**

Share of **outpatient** financing provided by different financing mechanisms in the poorest two wealth quintiles




Source: 2013 KHHEUS

Share of **inpatient** financing provided by different financing mechanisms in the poorest two wealth quintiles

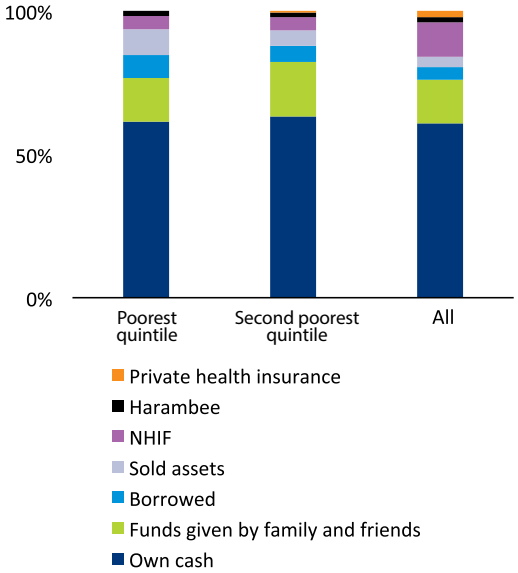
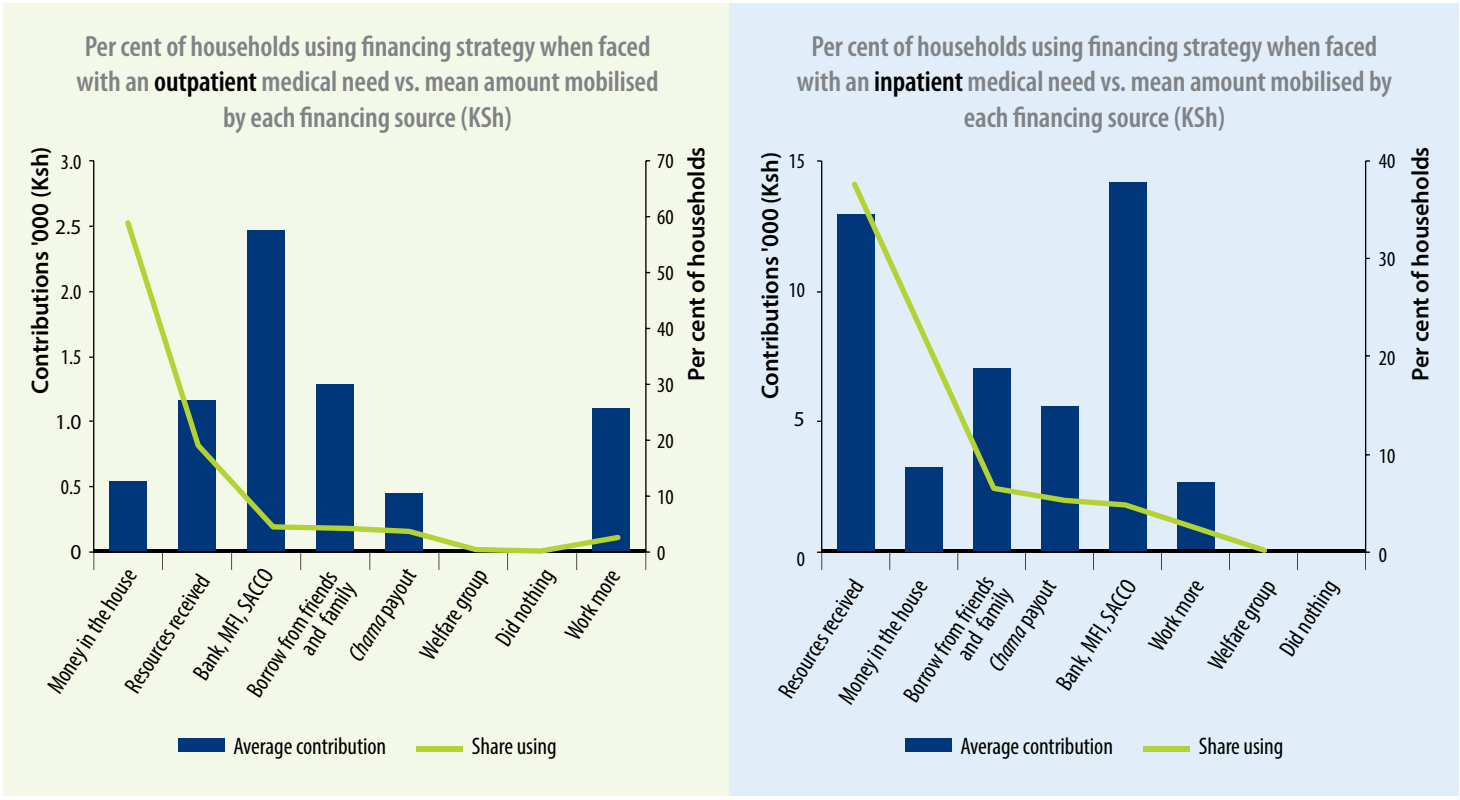


**Figure 13:Household financing strategies for inpatient and outpatient care**




Source: 2012-13 Kenya Financial Diaries

The Kenya Financial Diaries project reflects a similar pattern. As can be seen in Figure 13, cash – mostly 'savings in the house' – was the most commonly used mechanism for financing outpatient care, particularly when costs were low. Once costs broke the KSh 500 threshold, receiving resources from family and friends became important, since that financing mechanism could generate more substantial sums. For inpatient care, those resources were more important than individual savings, both in terms of the frequency that respondents called upon them and how much they were able to contribute to the cause.

Why might this be? The Financial Diaries households tended to be fairly ambitious savers. At the end of the study, the median household held about 129 per cent of their average monthly income in financial assets. However, only about 9 per cent of the typical family's savings was held in a purely liquid savings instrument, such as 'savings in the house', a bank account, or on M-PESA. Even when they had money 'saved', for example in a *chama* (a savings or savings and lending club), it was not immediately available for things like healthcare.

This helps us understand why many individuals in the Diaries study were able to obtain the first KSh 200–400 required for a health facility visit from their cash on hand or savings in the house, but then found their funds exhausted when it came to follow-up and the purchase of additional medications. The liquid financial assets of the poor are very quickly exhausted.

And the choice to tie up so much of one's saving is not necessarily a foolish one. Especially for the poor, we heard that this illiquidity preference is quite intentional. It is in illiquid savings devices that people are able to successfully accumulate an investible sum. Further, for the most common of these devices in Kenya, savers feel that this money is not just put aside for safekeeping, but rather is actively 'working' for them. As the savings build, they are simultaneously generating auxiliary value by enabling the saver to borrow (for example mandatory shares at a SACCO) or helping a neighbour or friend make an immediate investment (as in a *chama*). This larger, illiquid savings is hard to use when unexpected expenses arise, but it is incredibly useful for enabling investments – things like buying land, repairing homes, sending children to secondary school, buying livestock, or buying stock for a business: all the things that increase earnings in the longer term. With very little money going around, we observed that respondents had to make trade-offs in their savings choices – between managing risks and investing in the future, in trying to move just a bit farther away from poverty.

So the social network's help becomes pivotal. It makes it possible for a family to pursue care in many cases and to ensure that financing care is not

economically disastrous for the patient. But, as the Kenya Financial Diaries report, *Shilingi kwa Shilingi*, points out, social network risk sharing is not perfect and in fact has some pretty serious shortcomings (Bankable Frontier Associates and Digital Divide Data, 2014).

1. ***The network cannot bear the scale of every risk event.*** One child in the study, Robert, lived in a household whose combined earnings were about KSh 3,000 per month. Robert needed heart surgery that would cost his family KSh 500,000, a sum completely out of reach for the family and its entire social network. In fact, the family did hold a *harambee* (fundraising event) for his care. They managed to raise only KSh 15,000, which was exhausted by the time he received a diagnosis. *Harambees* can be powerful tools, helping to raise large sums. In the KHHEUS, among those for whom the *harambee* was a key source of funding for inpatient care, the average contribution from the *harambee* was 72 per cent of the cost of care or KSh 37,185. But only 2 per cent of all inpatient visits were partially financed by a *harambee* and it covered more than 50 per cent of the cost of care in 1.4 per cent of hospitalisations.
2. ***It may not deliver in time for every type of need.*** In the case of Isaac and Monicah, the social network was quickly able to raise funds for Monicah's funeral, but failed to come through in time for the surgery that may have saved her live. What happened? Did her friends and family know how urgent the need was? Were they aware of the costs of the surgery? Did they expect their funds would be used appropriately? Did they think the surgery would help? We cannot know for sure the cause of the breakdown, but imagine that perhaps correcting some of the information asymmetries between givers and receivers might have helped harness the power of the network, faster.
3. ***For many poor people, it may not be very large or very effective in generating funds.*** Not all families have access to a large social network with individuals within it who are capable of garnering significant resources. Thirteen per cent of Diaries households received less than 1 per cent of their income from social-network sources over the course of the project. Surely some didn't need the extra help, but others – like Ellen, who saved for a year for her son's appendectomy – simply had no one to call for help.
4. ***It may place at risk the givers, who are often themselves low income, and limit their ability to climb out of poverty.*** Rather than being strictly reciprocal, many of the giving and receiving relationships in the study were redistributive, with the relatively better off supporting the relatively worse off. Many net givers – half of those in the Diaries study – are still poor, living on less than USD 2 per day. When they are forced to finance the care of others – like Matthew, whose mother was hospitalised during the study – it takes a tremendous toll. Matthew's family were forced to lease their tea farm, losing three months of income.

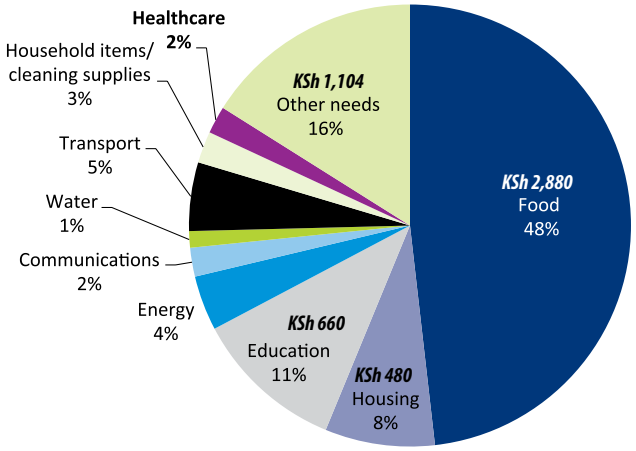
## 4.2 HEALTH SPENDING FOR THE POOR

***For the poor, health spending entails trade-offs with other 'good' spending categories in the budget.***

That choice between saving for emergencies versus saving for investment is just one of many financial trade-offs the poor need to make given that, by definition, their incomes are insufficient to meet all of their consumption needs. When we think about the costs of healthcare, we have to remember that even when the total cost of care is actually very low, money spent on healthcare is money NOT being spent on other priorities for the household, including food, education, loan repayments, and stock for a business. Because they do not make enough money to have significant slack in their budgets, low-income families make trade-offs among good expenditure choices.

Diaries households remind us just how tight budgets can be. As shown in Figure 14, the median household allocated 48 per cent of their expenditure budget to food purchases. School fees and other education-related expenses accounted for another 11 per cent of the household budget at the median. Housing was around 8 per cent at the median, or about KSh 480 per month for a household spending about KSh 6,000 per month. With such a large share of the budget already committed to basic needs, it is hard to make room for the unexpected. It is hard to imagine how a family could make space for even good investments – like health insurance premiums – when finance the pressing needs required for survival is a day-to-day challenge.

**Figure 14: Median monthly household consumption by expenditure category, (KSh and as a per cent of total consumption)**




Source: 2012-13 Kenya Financial Diaries

We see that in the face of moderate to large health spending needs, respondents are forced to make trade-offs. They are choosing between healthcare and stock for their businesses, between healthcare and education for their children. Rachael is a good example: while playing with friends, her son fell from a tree and broke his jaw. The surgery to repair the break was going to cost Rachael KSh 40,000, a huge sum that far exceeded her savings. Rachael put her *changaa* (local alcoholic brew) business on hold, since she had diverted all of her working capital to the medical expenses. Until she could save up enough to start brewing again, she had to pick up casual jobs working for others. While she was out of the house doing this work, she would lock her son in the house, hoping to prevent him from playing and further hurting himself before he had the surgery to fix his jaw. She sold her cow and called all her friends and family to help raise the money. She paid the doctor in small instalments until it was enough for her son to be admitted to the hospital.

These trade-offs are not confined to the very poor. Angus earns a relatively high income – typically about KSh 18,000 per month – from his masonry work in a rural community in the Rift Valley. However, in May 2013, he came under some serious pressure. He had just spent KSh 4,000 on school fees when his daughter became sick. He spent KSh 1,600 on medication for his daughter. Just after that, his son was sent home, because his school fees payment was incomplete. Angus begged the head teacher to give him time to find the rest of the funds.

These trade-offs have long-term implications. Funds diverted from livelihoods and education make it more difficult for families to invest their way out of poverty. This is precisely why it is so important to minimise OOP health expenditure while optimising health outcomes for the poor.

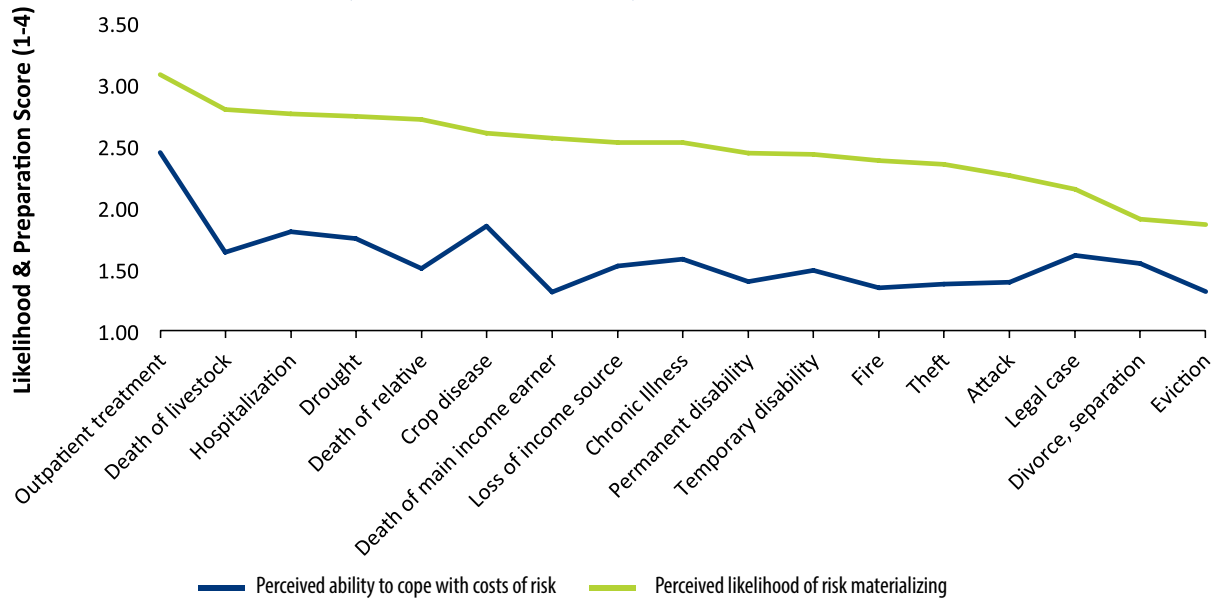
## 4.3 DIFFICULTY IN FINANCING HEALTHCARE

***Low-income people's difficulty in financing healthcare does not stem from a failure to foresee risk or an irrational undervaluing of insurance.***

Low levels of liquid savings and low levels of insurance uptake among the poor do not appear to stem from individuals underestimating their risk exposure. In the Kenya Financial Diaries risk module, we asked about the likelihood of a wide range of risks. Diaries respondents ranked the need for outpatient care and hospitalisation risks as very likely, even if preparedness to address hospitalisation was lower (Figure 15). Similarly, the SHOPs project's survey of informal sector workers in Nairobi county revealed that 80 per cent of respondents worried about their exposure to health risks, and 70 per cent felt there was a need to put money aside for health emergencies (Munyua, 2015).

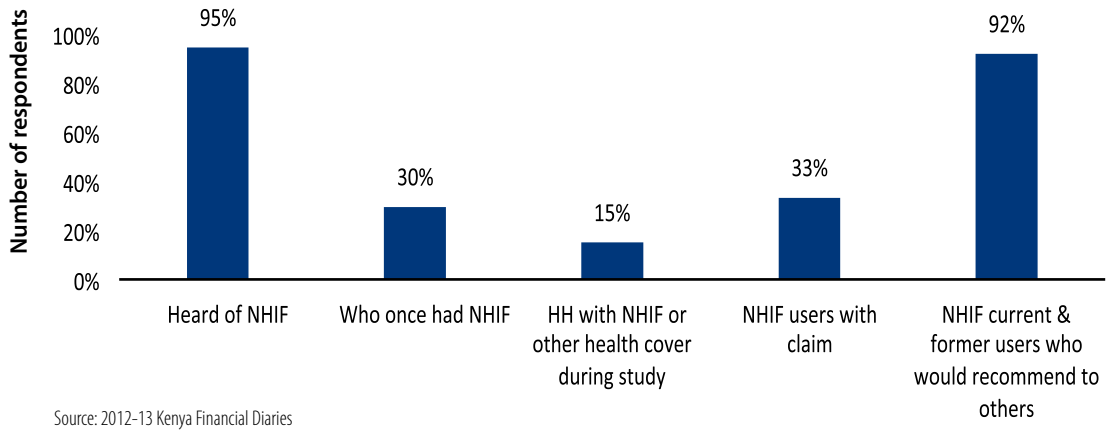
Further, most seem to appreciate the potential value of insurance, even though uptake remains quite low. FinAccess 2013 found that only 29 per cent of urban and 11 per cent of rural adults had any kind of insurance product, with NHIF being the most prevalent (FSD Kenya and Central Bank of Kenya, 2013). During the course of the Diaries study, only 15 per cent of households had any kind of coverage through NHIF or any other form of health insurance.

**Figure 15: Respondents in the Kenya Financial Diaries recognise that health risks are quite likely, but they still don't always feel prepared, particularly for expensive inpatient events**




Source: 2012-13 Kenya Financial Diaries

**Figure 16: Kenya Financial Diaries respondents have heard of NHIF, and those who have had it before would recommend the cover to others**




Source: 2012-13 Kenya Financial Diaries

Over time, we learned a little more about why that uptake is so low. During the Dairies risk module, we interviewed the main respondent from each household. We found that nearly everyone had heard of NHIF, and in fact about 30 per cent of study households had actually had NHIF cover at some stage in their lives (Figure 16). Those who had experienced the cover, mostly thought it was a very good thing: 92 per cent of respondents in this low-income group would recommend it to others. Thirty-three per cent experienced the benefits first-hand, having been able to benefit or receive a claim through NHIF during the period of coverage.

The majority of those who had ever had NHIF insurance cover registered because of a mandatory condition of employment, as shown in Figure 17. This is not particularly surprising, as uptake of voluntary insurance coverage tends to be relatively small worldwide (Chankova et al., 2008; Behrman & Knowles, 1999; Fafchamps, 1995; Jowett, 2003; Morduch, 1999; Alderman & Paxson, 1994). According to 2011 Global Findex data, only 17 per cent of individuals over 15-years old globally and only 3.1 per cent of those in Sub-Saharan Africa had personally purchased health insurance (Demirguc-Kunt et al., 2015).

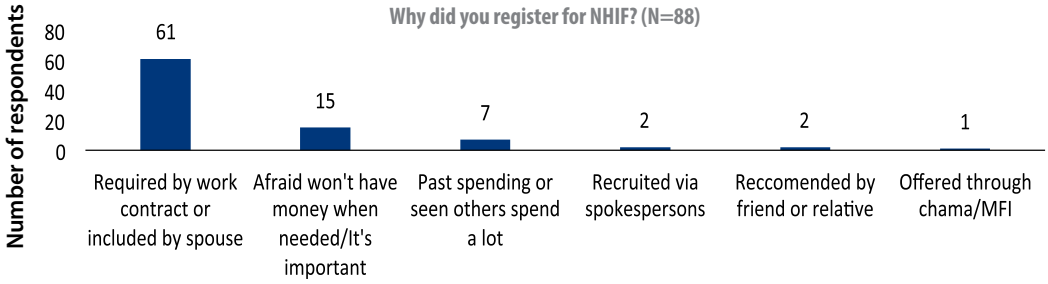
What is perhaps surprising is the 30 per cent of Diaries respondents who had had NHIF cover at some point in time who had signed up with NHIF of their own accord. Among those voluntary contributors, there seemed to be particularly strong and motivating fears about not having sufficient funds to deal with a hospitalisation. This fear seemed to come mostly from the knowledge that they were already suffering from chronic health conditions like HIV/AIDS, high blood pressure, or diabetes. In the case of HIV/AIDS, for example, support groups had referred members to NHIF, and it felt to them like good value, since hospitalisation seems almost inevitable for this group. At the moment they register, they feel confident that the benefits that they will receive will exceed their costs.

Joyce is a good example of this. After several hospitalisations to manage problems with high blood pressure and a difficult-to-diagnose problem ultimately tied to her gall bladder, Joyce eventually registered her family for NHIF towards the end of the Diaries study. Within two months, she was able to use the NHIF cover to offset her expenses in the next hospital admission. Joyce's family had already spent tens of thousands of shillings on her medical care in the previous year, and they felt registering for NHIF would almost certainly reduce their future OOP costs.

In some instances, we observed outright fraud in registration, in which study respondents registered for NHIF and paid backdated premiums only after experiencing a hospitalisation in which they hoped to make a claim. For example, Evelyn's daughter Marie was hospitalised in 2011. The bill mounted to KSh 50,000. Evelyn had been late in paying her NHIF premiums and so was not covered at the time. She begged the NHIF administrators to backdate her premium payments to offset the bill. Luckily, they obliged, though they charged her extra late fees. She now prioritises payments to NHIF and to the welfare groups that help her keep up with Marie's treatment costs. Another example was George's wife, who was hospitalised in Vihiga with a throat tumour. While waiting several weeks for her surgery, she passed away, leaving behind a bill for KSh 36,000. Someone at the hospital informed George that if he registered himself and his wife for NHIF and paid six months of premiums, NHIF would still help with the bill. He did just that– even though he was registering his wife after her death – and NHIF cleared half of the bill. His friends and family members helped him raise the remainder and have the body released for burial.

Of course, adverse selection and fraud – if major drivers of voluntary uptake – deteriorate the quality of the risk pooling mechanism, which pulls down costs by mixing relatively high-risk and relatively low-risk individuals.

**Figure 17: The main reason people register for health insurance is a mandatory requirement imposed by government via employers**




Source: 2012-13 Kenya Financial Diaries

When we asked non-users why they had never registered, we heard four main obstacles to uptake (summarised in Figure 18), which are echoed in a human centred design project implemented by ThinkPlace and the International Finance Corporation (IFC) (2015):

1. **Relevance**. Diaries respondents often told us they did not register for NHIF because it is the preserve of the formally employed. Respondents in the ThinkPlace and IFC study echoed that NHIF seems as though it is really for a 'special class' of people – the employed and civil servants. Not only does NHIF seem to target them, they feel as though other members' contributions are funding the superior services afforded to civil servants. One respondent said, 'Civil servants pay the same as everyone else – KSh 320 max. But they get way more services. Why are they taking our money to do that? Why does NHIF favour public servants?'

2. **Affordability**. Respondents explain that they don't regularly have the money for premiums. Budgets are tight and 72 per cent of Diaries households were already getting by on less than USD 2 per day. Even small premiums are paid at the expense of other very important needs. The research by ThinkPlace and IFC also picked up on this theme. Their respondents pointed out that many people struggle with the KSh 160 informal sector monthly premium as it is. How will NHIF increase enrolments and the price simultaneously? Diaries respondent Brian is a matatu driver and has enrolled his family in NHIF. When we saw him in May, he told us that he hasn't paid his premiums since January. He reported that 'you pay double when you default', but that he just often finds himself postponing the payments to take care of things that feel more urgent. For example, at the time of that interview, they hadn't finished paying school fees for their eldest daughter and were worried about where to come up with those funds.

   Respondents in both the ThinkPlace and IFC study, and in the Diaries project, highlight the challenge of keeping up with any kind of flat monthly payment in the face of volatile income and expenditure patterns. The median Diaries household experienced income fluctuations both upwards and downwards of 55 per cent, from month to month. Expenditures also fluctuated wildly. One respondent in the ThinkPlace and IFC study complained, 'For me I can pay per week because I get money daily.' And when a family misses a payment, they suffer a very high financial penalty that drives members away and lets their coverage lapse.

3. **Value**. Others admit that they really have no interest. These respondents do not feel this coverage provides value for money. This seems to stem from a number of realities that those who do have cover actually experience. Bad news travels far and wide. Here, respondents both in the Diaries project and in the ThinkPlace and IFC study complained that coverage under NHIF is often incomplete, and it is not always clear what NHIF covers and does not cover, even during a hospital admission. NHIF may cover the bed, but not the cost of a procedure or medicine, even those provided inside the facility. The facility may not have the required medications, requiring OOP spending on medications. Patients also mentioned that those with NHIF cover receive a lower quality of care compared to cash-paying patients. Some facilities admit to discriminating against NHIF patients given the difficulties and delays they experience making claims through NHIF.

   Encouraging people to pay for insurance requires that they know what they are buying and that each interaction with the insurer and service provider fulfils that promise, deepening trust and confidence that the cover will be there and will deliver when it's needed most.

4. **Process**. The registration process is viewed as obscure, inconsistent across branches, difficult, logistically demanding, and time consuming. Respondents said they didn't have time to go register, don't have the proper documentation (including birth certificates for children), and aren't sure how to register properly. A good number of Diaries respondents had actually applied, but not been able to complete all the requirements or had not heard back from NHIF.

   Process challenges do not end with registration. Operations issues have an impact on the value that members actually receive and how easily they can keep up with their payments and coverage. Several Diaries respondents tried to use coverage that they actually had but could not.

Payments had lapsed or had been paid into group rather than appropriate individual accounts. For example, one respondent complained that it had taken more than two months to get his NHIF card after registering and paying premiums. Another just had a baby who got sick shortly after birth. Her husband was away, and she didn't have her ID with her at the hospital so she could not claim NHIF benefits. She spent KSh 15,000 OOP on the baby's admission. In spite of their disappointment at not being able to use NHIF when they really needed it, they continued to pay premiums.

Respondents rarely checked on the status of their coverage until it was needed. Some simple communications and payment channel changes could alleviate some of these challenges, helping more people to hold onto coverage that they already value. Similarly, respondents in the ThinkPlace and IFC study expressed concerns about problems with the payments system and inconsistent recognition of premium payments. They asked for reminders when payments were due and that the messages conveyed about the rules for maintaining coverage were clear and consistent across all branches.

**Figure 18: Why haven't you ever registered for NHIF? A summary of leading reasons.**

**Relevance.**
"Because it's for the formally employed she thinks and ones with money."
"Has perception it's for the working class."

**Affordability.**
"Has never registered because they were not financially stable."
"Can't afford to pay."
"Don't have enough money to pay for monthly contributions."

**Value.**
"Does not understand its importance."
"Has never bothered to register; not interested."
"Have never thought of joining NHIF."

**Process.**
"Has applied but is yet to get it [because] of her baby's birth certificate."
"Applied but never followed up on it."
"Don't have time to go to Kakamega to register."

## 4.4 NOR DO SPENDING PATTERNS STEM FROM PREFERENCES FOR TRADITIONAL TREATMENTS

By and large, Diaries respondents were not substituting traditional medicine for modern medicine, and preferred modern medicine where they could afford it. Over the course of the entire year, we observed only 28 cash flows associated with traditional medicine (versus 2,362 for modern medicine), with a median value of just KSh 100 (USD 1.20) and a mean of KSh 526 (USD 6.20), per instance.

We observed some use of herbal medicine or home remedies as a first attempt to deal with a medical problem before shelling out at a modern facility. This sometimes worked for minor illnesses, and resulted in savings. When it did not, the family would later seek care at a modern clinic or hospital. One woman treated her son's burn with lubricant from her sewing machine. She says it then healed within a day, allowing the boy to go back to school and saving a costly visit to the hospital. But it doesn't always work out so well: another respondent, Mary, tried to treat what she thought was malaria with an herbal medicine. While she felt better quickly, the illness was not fully treated. She then had to go to the district hospital and ended up spending KSh 1,800 on medicine, a situation she had hoped to avoid.

However, use of traditional healers – rather than home remedies – was typically a strategy families turned to when modern medicine let them down. They had already spent money at a clinic or hospital and were frustrated by being unable to find relief. Janet was a student at a polytechnic in Makueni, but had to drop out due to kidney problems. She went to the hospital but wasn't getting better. She didn't know what to do, and she was scared. Her grandmother had recently passed away due to kidney problems. Eventually, she resolved to seek the help of a healer, and she feels that she has gotten much better.

Rose turned to a healer purely for financial reasons after many visits to the hospital could not help her overcome a problem of irregular and prolonged menstruation. She believes in allopathic medicine; her husband even works as a community health worker at the hospital. But, after many visits, they told her the next step was an ultrasound that would cost KSh 3,000 or 4,000. She would see if the healer could help first, before trying to come up with the larger sum.

Oftentimes respondents would turn to a healer because they ran out of money before a full diagnostic and treatment programme was complete. Healers' costs were more flexible; the payment terms could be negotiated. Isaac and Monicah, whose story we have covered throughout this report, went to the hospital at least a dozen times before Monicah was finally diagnosed with a throat tumour and was told she would need to find a further KSh 23,000 to have it removed. While resting at her mother's home, she saw a traditional healer. He wanted KSh 18,000 but settled for the KSh 6,000 Isaac could muster by selling his mobile phone. The treatment was not helpful, but the healer had offered an option that was more affordable; a payment that could be negotiated. The hospital did not.

It does not appear that a lack of faith in modern medicine is driving low spending in healthcare or underutilisation of subsidised modern care. It appears to us that the direct and indirect costs of care, alongside quality of care challenges, are much more significant barriers.

Chapter 5

# WHERE TO FROM HERE? IMPLICATIONS AND IDEAS

Easing the burden of health finance for Kenya's poor is a difficult and complex challenge. We cannot know from the evidence in this report alone the 'best' approaches to resolving the health financing challenges that people face today. However, we do believe that this review of patient-level financing behaviours generates a number of important implications and ideas for intervention that could be taken on by a range of stakeholders to begin addressing parts of this very complex challenge.

## 5.1 THREE REALITIES

The ideas we present here grow out of the acceptance of three realities that we believe this research has highlighted.

**Reality 1: The poor – by definition – have an income sufficiency problem.** They cannot increase their personal spending on healthcare or health insurance without lowering their spending on other necessities – like food, education, housing, and productive investments. Meeting social goals for better healthcare necessitates subsidy, though that can be both private (in redistributive social networks) and public (via taxation and cross-subsidy through NHIF enrolments).

This means that as much as possible, the OOP expenses that the poor need to spend on healthcare and insurance must be kept as low as possible, helping them to keep as much money in their pockets as possible for their own development investments. Cash transfers, which are already underway for some segments in Kenya, can also play an important role in increasing the incomes of the poor and, by extension, the affordability of care. Improvements in healthcare alongside cash transfers could potentially be quite powerful. The services that the poor are asked to pay for have to deliver good value for money, both to encourage uptake of services and to ensure positive health outcomes.

**Reality 2: The poor have a liquidity problem.** In Kenya, low-income people are active savers, trying to build useful lump sums to channel into meaningful investments: growing their businesses, sending their children to school, repairing their homes. The little savings people have tend to be tied up in illiquid savings devices in order to meet these objectives. When cash is needed quickly, people turn to their social networks for gifts and loans to bridge the gap. But the money is not always there in large enough amounts or available quickly enough to service an immediate medical need. New mechanisms to help the poor get their hands on fast cash can help them to sort out urgent medical costs of moderate size (KSh 500–10,000).

Understanding the psychology of money among low-income Kenyans helps us understand why the appeal of voluntary insurance is low and why encouraging health savings could be equally challenging. Financing for OOP expenditures may require some inventive solutions, beyond merely insurance, that draw on the many kinds of financing that low-income people already use – including social networks, which already carry much of the burden of catastrophic health spending among poor households.

**Reality 3: Poor quality care compounds the costs of serving the poor.** Poor diagnostics – and the repeat and graduated level of care that they necessitate – jeopardise the lives and pockets of the poor. Treatments currently provided at frontline facilities are not doing a good enough job of sorting out illnesses on first visits or using each interaction with patients as an opportunity to help them become more informed, more savvy consumers of health services. Getting diagnoses and treatment right the first time cuts overall costs to patients and premiums required by insurers. But quality care only changes with the right tools and incentives in place. In time, patients themselves can advocate for better care and favour institutions with good reputations for quality if each interaction with the health sector becomes one in which they are provided accurate information about their diagnosis, underlying causes, treatment plan, the importance of each prescribed medication, and warning signs when they need to follow up for further care. Uninformed patients seek care when it's not needed and delay urgent care, contributing to escalating costs to them and to insurers.

## 5.2 SO, MORE SPECIFICALLY, WHAT MIGHT BE DONE?

Below we outline a number of ideas where a range of stakeholders could consider new approaches to this challenge.

### 5.2.1 Insurers

- **Minimise premium costs.** To improve the health of low-income Kenyans, the OOP costs that the poor are asked to pay for healthcare should be minimised as much as possible – including for insurance premiums. In Kenya, stakeholders seem to have agreed on a path to UHC via national insurance rather than direct government-financed care.

Meeting social goals for coverage likely necessitates subsidy, though that can be both private (in redistributive social networks) and public (via taxation and cross-subsidy through NHIF enrolments). Given the many risks faced by the poor and the many demands on their cash flow, insurance for the high impact, lower risk types of events – like inpatient care – may deliver more value than an expensive, but comprehensive package. Blended financing (as described below) can help address the broader spectrum of financing needs.

- **Consider social network financing of premiums.** Insurers, including NHIF, could market their cover not to the poor but to the slightly better off family and friends in the social network who help them during emergencies and with other key needs, like school fees. It should be very easy for these individuals – who often have stable jobs and existing NHIF cover – to add 'dependents' from their extended family and automate associated payments through payroll or bank-based deductions. This is not a comprehensive solution, but rather an intermediate option that might allow some increase in coverage for those with social networks willing and able to cover portions of their extended families.
- **Provide immediate and enduring value.** For low-income people to feel justified in buying insurance, they need to feel it delivers value immediately, not just when a terrible thing happens. Voluntary insurance is a hard sell anywhere in the world and especially to the poor, who have so many competing needs. One way it may be possible to deliver immediate value in a cost-effective way is via telemedicine, which can provide value for the client while also reducing unnecessary visits and channelling patients to the right level of facility right away.

  Coverage packages that meet the needs of the poor need to be very clear and consistently applied. The poor do not have the wiggle room to fill in the spaces where insurance has let them down. Ideal packages ought to include the cost of drugs and tests, even when a patient must go beyond their primary care provider who is unable to provide the needed services. When subsidies invite higher usage of primary care facilities, complementary investments in managing that flow – with adequate drugs and diagnostics and on-time payment distributions to facilities to cover running costs – have to happen in step.

- **Align with cash flow patterns.** Most of Kenya's low-income population does not have steady, regular cash flows, making it very difficult to pay premiums in steady, regular payments. Insurers, including NHIF, can take lessons from the new generation of mobile financial services about enabling small, easy-to-confirm payments and building in flexibility into premium payment schedules, using incentives and penalties to incentivise desired payment behaviour. Insurers could also align their 'asks' for premiums with cash-flow patterns, such as remittance inflows. Discounts for pre-payment (for example, paying for a year upfront) could be quite appealing to some low-income families with lumpy incomes.

### 5.2.2 Financial service providers (also including insurers)

- **Consider blended financing products.** Insurance has limited appeal to low-income people, given the need to sacrifice funds today for an uncertain tomorrow. Similarly, a savings-led strategy to address the healthcare challenge is not very attractive. If you're not sick, it feels wasteful to let money sit still when it could be invested today in immediate needs and longer term investments. It's no wonder social networks play such an important role in helping people finance care. What may be more viable are products that help the poor more efficiently pool small funds from multiple possible sources – savings, credit, insurance, even social networks – to meet the full cost of their health needs.
- **Point of service financing:** a role for credit? The reality is that for many risks, the poor simply will not be prepared to cover the cost of their need. Financial solutions that are available on demand – at the time of need – may be more attractive than an insurance-only approach. A possibly overlooked financial tool for moderately sized needs (around KSh 300–2,000) may actually be short-term credit that enables the patient to receive the care they need immediately and then 'look for money' from their income sources and social networks over the following one to two months. Mobile lending platforms are showing us that loans of this size can be administered cost effectively in Kenya. Outsourcing this function to a financial service provider frees facilities from managing client credit agreements while also smoothing their cash flows.
- **Social network financing.** Friends and family already play an important role in helping the poor afford larger healthcare costs. In many ways, this is quite helpful, and the redistributive nature of much of this giving is good for the poor. There may be ways to make this work even better by: (1) allowing senders to plan in advance for these costs through insuring network recipients; and (2) improving transparency between senders and receivers by allowing m-bills from insurers and facilities to be shared with network senders and allowing senders to send payment directly to the biller. However, social network financing is not a substitute for a comprehensive, systemic public solution. This is a potentially helpful complement, strengthening existing private financing networks.
- **Provide financing to healthcare facilities.** Facilities that serve low-income groups often face cash flow crunches of their own. Low-income patients are sometimes unable to pay. Reimbursements and allocations from government and NGO partners come late. Proprietors dig into their own pockets and the salaries of staff to keep operations going. Or they remain with stock-outs and reduced service offerings as a result. Financial service providers could look into the viability of providing advances to facilities using expected incoming payments from funders and insurers as collateral.

### 5.2.3 Health service providers

- **Partner with financial service providers.** Health care providers do not specialise in financial service provision, but partnering with financial service providers offering innovative solutions to clients could alleviate the pain of providing credit directly, while also helping ensure their clients can get – and pay for – the care they need.
- **Enabling experiential learning.** Getting the cure right is not enough. Building a healthier future for Kenyan families means helping patients themselves become more active agents in their own care by providing them with more information about their diagnosis, treatment plan, the importance of each prescribed medication, and warning signs when they need to follow up for further care. Every interaction a facility has with a patient is an opportunity to help the patient learn through experience some key health information and how to better manage their own care. Facilities could tie staff financial incentives to this kind of information provision, following up with a sample of patients by phone after visits to assess how well their providers conveyed this kind of empowering information.

### 5.2.4 Government

- **Build on incentives for healthcare quality.** Keeping costs low will necessarily involve patients receiving the right care the first time as much as possible. Sadly, patient satisfaction – particularly immediately after a visit – may not be a good proxy for quality. Might it be possible to tie facility staff incentives more closely to patient welfare? Facility-based assessment scorecard data could, for example, be made public, helping patients make better decisions about where to go when they need treatment. Such data could be complemented by low-cost surveys – possibly administered by text message – checking in on patients two weeks after each visit to confirm their diagnosis, whether they are better, and whether they required follow-up care. Such tools are helpful both for accountability and to enable targeted problem solving. From a health financing perspective, moving to output-based financing (i.e. paying health providers based on services delivered rather than paying for inputs like staff salaries and drugs) has the potential to foster greater competition between providers, which in turn will lead them to improve the quality of their services.

  A wide range of reforms are needed to monitor, regulate, and enforce quality standards across private and public facilities. Operational problems in the sector cause real quality problems, for example, causing stock shortages that push patients towards private facilities and chemists with higher OOP costs, and delaying payments to public facilities that strain normal operations.

- **Text-based accreditation checks.** Kenya's large and vibrant private healthcare market sometimes makes it difficult for patients to know whether providers are legitimate and accredited to provide the services they are offering. With widespread mobile penetration and familiarity, a system could be introduced by which potential patients could query this by text message, using a facility or staff number (much like an M-PESA agent number). In reply, they would receive the provider's name, accreditation status, and physical location. It's possible that such a system could also serve as a mechanism for lodging complaints against a provider or informing the public of expired accreditation or complaints against a provider, so that patients might make more informed choices about which providers to use.
- **Expand and leverage cash transfers.** Kenya's government has already introduced and is expanding its cash transfer programmes across the country. These programmes play an important role addressing the income sufficiency problems of the poor. Such transfers also reduce the non-medical portion of the costs of care, including transport and opportunity costs. There may be ways to leverage such programmes into even broader health benefits, for example, for help with targeting beneficiaries for subsidised health insurance.

### 5.2.5 Development partners

- **Improve health spending and utilisation measurement.** Triangulating multiple different kinds of data sources on health spending and utilisation has helped us see nuance across multiple datasets. It points out some of the weaknesses of current measurement tools. Development partners can play an important role in addressing these gaps and improving the quality of available data to help facilitate important health finance decision-making (see Annex B for more detail).
- **Learning on new models.** Development partners also already facilitate testing and learning on new approaches and models for possible scaling up through government and the private sector. They can continue to help with experimentation and learning around new kinds of financing models, directly in the health sector, but also with financial service providers.

# REFERENCES


1. Afrobarometer (2015) *Afrobarometer Data Analysis tool. [online] retrieved August 24, 2015 <http://afrobarometer.org/online-data-analysis/analyse-online>*.

2. Alderman, H. & Paxson, C. (1994) *"Do the poor insure? A synthesis of the literature on risk sharing institutions in developing countries"* in International Economic Association Moscow Conference Vol. 4. Washington DC: World Bank.

3. Bankable Frontier Associates and Digital Divide Data (2014) *Kenya Financial Diaries 2012–13*. Nairobi, Kenya: Financial Sector Deepening Kenya (FSDK).

4. Bankable Frontier Associates and Digital Divide Data (2014) *Kenya Financial Diaries 2012–13.* Nairobi, Kenya: Financial Sector Deepening Kenya (FSDK).

5. Behrman, J. & Knowles, J. (1999) *The demand for health insurance in Vietnam.* Philadelphia: University of Pennsylvania, mimeo.

6. Chankova, S., Sulzbach, S. & Diop, F. (2008) *"Impact of mutual health organizations: evidence from West Africa",* Health Policy and Planning 23: 264–276.

7. Chuma, J. & Maina, T. (2013) *Free maternal care and removal of user fees at primary-level facilites in Kenya: monitoring the implementation and impact baseline report*. Washington DC: Health Policy Project, Futures Group.

8. Chuma, J., Musimbi, J., Okungu, V., Goodman, C. & Molyneux, C. (2009) *"Reducing user fees for primary health care in Kenya: Policy on paper or policy in practice?"* International Journal for Equity in Health 8: 15.

9. Demirguc-Kunt, A., Klapper, L., Singer, D. & Van Oudheusden, P. (2015) *The Global Findex Database 2014: Measuring Financial Inclusion around the World.* Policy Research Working Paper (7255). Washington, DC: World Bank.

10. Fafchamps, M. (1995) *Risk sharing, quasi-credit, and the enforcement of informal contracts.* Palo Alto: Standford University.

11. FSD Kenya and Central Bank of Kenya. (2013) *FinAccess National Survey 2013*. Nairobi, Kenya: FSD Kenya.

12. Government of Kenya. (2006) *Kenya Integrated Household Budget Survey 2005/06.* Nairobi, Kenya: Government of Kenya.

13. Health Policy Project. (unpublished) *Annual evaluation of the abolition of user fees at primary care facilities.* Nairobi, Kenya: HPP.

14. IHME. (2014) *Health Service Provision in Kenya: Assessing Facility Capacity, Costs of Care, and Patient Perspectives.* Seattle, WA: IHME.

15. Intermedia Financial Inclusion Insights. (2015) *A path to improved health care services in Kenya*. Nairobi: Intermedia.

16. Jowett, M. (2003) *"Do informal risk sharing networks crowd out public voluntary health insurance? Evidence from Vietnam"* Applied Economics 35: 1153–61.

17. Kenya National AIDS Control Council. (2014) *Kenya AIDS Response Progress Report.* Nairobi, Kenya: Government of Kenya.

18. Kenya National Bureau of Statistics (2009) *Population and Housing Census 2009*. Nairobi, Kenya: KNBS.

19. Kenya National Bureau of Statistics (2015) *Kenya Demographic and Health Survey Key Indicators 2014.* Nairobi, Kenya: KNBS.

20. Ministry of Health, Government of Kenya (2012) *2010 Facts and Figures*. Nairobi, Kenya: Ministry of Health.

21. Ministry of Health, Government of Kenya (2014) *2013 Kenya Household Health Expenditure and Utilization Survey.* Nairobi, Kenya: Ministry of Health.

22. Ministry of Health, Government of Kenya (2015). *National Health Accounts 2012/13*. Nairobi, Kenya: Ministry of Health.

23. Ministry of Health, Government of Kenya (2005). *RHF Unit cost/cost sharing review study and the impact of the 10/20 policy*. Nairobi, Kenya: Ministry of Health.

24. Ministry of Health, Government of Kenya (2015). *Status of implementation of the free maternity service (FMS) program.* Nairobi, Kenya: Ministry of Health.

25. Morduch, J. (1999) *"Between the State and the Market: Can Informal Insurance Patch the Safety Net?"* World Bank Research Observer 14: 187–207.

26. Moses, S., Manji, F., Bradley, J., Nagelkerke, N., Malisa, M. & Plummer, F. (1992) *"Impact of user fees on attendance at a referral centre for sexually transmitted diseases in Kenya"*, Lancet 340: 463–66.

27. Munyua, A. (2015) *What does the informal sector know about health insurance? Nairobi, Kenya: Strengthening Health Outcomes through the Private Sector.*

28. Mwabu, G. & Mwangi, W. (1986) *"Health care financing in Kenya: a simulation of welfare effects of user fees",* Social Science and Medicine 22: 763–67.

29. Mwabu, G., Mwanzia, J. & Liambila, W. (1995) *"User charges in government health facilities in Kenya: effect on attendance and revenue",* Health Policy and Planning 10: 164–170.

30. Onsumu, E., Muthaka, D., Mwabu, G., Nyanjom, O., Dutta, A., Maina, T., Barker, C. & Muchiri, S. (2014). *Public Expenditure Tracking Survey in Kenya 2012. Washington DC and Nairobi: Futures Group,* Health Policy Project and Kenya Institute for Public Policy Research and Analysis.

31. Owino, W. (1998) *Public health care pricing practices: the question of fee adjustment, IPAR Discussion Paper Series.* Nairobi: IPAR.

32. Ramana, G., Chepkoech, R. & Workie, N. (2013) *Improving universal primary health care by Kenya: a case study of the Health Sector Services Fund.* Washington, DC: World Bank.

33. World Bank (2015) *Poverty and Equity: Country Dashboard.* [online] Retrieved August 24, 2015 <http://povertydata.worldbank.org/poverty/country/KEN>.

34. ThinkPlace and International Finance Corporation. (2015). *Redesigning NHIF Informal Sector Strategy: Blueprint for Change.* Nairobi, Kenya: ThinkPlace and IFC.

35. WHO, UNICEF, UNFPA, World Bank, and the United National Population Division (2014) *Trends in Maternal Mortality: 1990 to 2013.* Geneva: World Health Organization.

36. World Bank (2012) *Economic Update.* Nairobi, Kenya: World Bank.

**Annex A:**

# SUMMARY OF KHHEUS KEY INDICATORS

| Indicator | Subgroup | Entire sample on average | Bottom 2 quintiles on average |
|---|---|---|---|
| **How frequently do individuals/households experience illness?** Share of people with an illness in 4 weeks prior to survey (%) | Overall | 19.3 | 18.5 |
| | ...Under-fives (0-5) | 27.5 | 24.4 |
| | ...Children (6-14) | 14.8 | 13.8 |
| | . . .Men (15+) | 15.0 | 14.4 |
| | . . . Women (15+) | 22.6 | 23.4 |
| Share of households with at least one sick member who is ill in 4 weeks prior to survey (%) | Overall | 57.6 | 63.3 |
| Share of individuals with illness requiring hospital admission in 12 months prior to survey (%) | Overall | 3.1 | 2.5 |
| | ...Under-fives (0-5) | 3.3 | 2.6 |
| | ...Children (6-14) | 1.1 | 1.1 |
| | . . .Men (15+) | 2.2 | 2.1 |
| | . . . Women (15+) | 5.5 | 4.3 |
| Share of households with at least one member requiring hospital admission in 12 months prior to survey (%) | Overall | 12.1 | 11.6 |
| **How likely are individuals to seek care when ill?** Share of individuals with illness that lead to at least 1 visit to a health provider (%) | Overall | 87.2 | 86.0 |
| | ...Under-fives (0-5) | 91.8 | 88.6 |
| | ...Children (6-14) | 88.2 | 86.5 |
| | . . .Men (15+) | 81.9 | 81.0 |
| | . . . Women (15+) | 87.0 | 86.5 |
| Share of individuals with illness requiring hospital admission who were admitted (%) | Overall | 91.1 | 87.7 |
| | ...Under-fives (0-5) | 94.7 | 91.5 |
| | ...Children (6-14) | 89.0 | 83.5 |
| | . . .Men (15+) | 87.1 | 83.4 |
| | . . . Women (15+) | 91.7 | 89.3 |

| OUTPATIENT CARE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Subgroup | Entire Sample | | | | Bottom 2 quintiles | | | |
| | | On average | At the median | The common range (15th-85th percentile) | The less likely extreme (average among 85th percentile and above) | On average | At the median | The common range (15th-85th percentile) | The less likely extreme (average among 85th percentile and above) |
| **How often do individuals who seek care visit OUTPATIENT providers for an illness?** Among care-seekers, number of visits for outpatient care made in 4 weeks prior to survey (N) | Overall | 1.195 | 1 | 1;1 | - | 1.194 | 1 | 1;1 | - |
| | ...Under-fives (0-5) | 1.181 | 1 | 1;2 | - | 1.169 | 1 | 1;1 | - |
| | ...Children (6-14) | 1.146 | 1 | 1;1 | - | 1.153 | 1 | 1;1 | - |
| | . . .Men (15+) | 1.210 | 1 | 1;2 | - | 1.219 | 1 | 1;2 | - |
| | . . . Women (15+) | 1.222 | 1 | 1;2 | - | 1.225 | 1 | 1;2 | - |
| **How likely are individuals who seek care to get free OUTPATIENT care at a health provider?** Share of visits to a health provider that do not result in OOP expense (%) | Overall | 44.1 | - | - | - | 47.9 | - | - | - |
| | ...Under-fives (0-5) | 60.4 | - | - | - | 65 | - | - | - |
| | ...Children (6-14) | 41.8 | - | - | - | 44.5 | - | - | - |
| | . . .Men (15+) | 33.8 | - | - | - | 35.9 | - | - | - |
| | . . . Women (15+) | 37.9 | - | - | - | 41.2 | - | - | - |
| **Among individuals seeking care, how much money is spent per OUTPATIENT visit (in past 4 weeks)?** Total OOP expenditure (including free visits) (KSh) | Overall | 379.0 | 50 | 0;500 | 1794 | 243 | 50 | 0;350 | 1272 |
| | ...Under-fives (0-5) | 172.0 | 0 | 0;250 | 877 | 87 | 0 | 0;150 | 423 |
| | ...Children (6-14) | 304.0 | 50 | 0;464 | 1546 | 158 | 50 | 0;300 | 733 |
| | . . .Men (15+) | 557.0 | 120 | 0;800 | 2716 | 442 | 100 | 0;500 | 2037 |
| | . . . Women (15+) | 480.0 | 100 | 0;700 | 2349 | 320 | 60 | 0;500 | 1563 |
| **Among individuals seeking care, how much money is spent in total for OUTPATIENT services (summing across all visits, in past 4 weeks)?** Total OOP expenditure (including free visits) (KSh) | Overall | 453.4 | 60 | 0;600 | 2261 | 290 | 50 | 0;400 | 1505 |
| | ...Under-fives (0-5) | 203.0 | 0 | 0;300 | 1037 | 101 | 0 | 0;200 | 536 |
| | ...Children (6-14) | 348.0 | 60 | 0;500 | 1635 | 182 | 50 | 0;300 | 803 |
| | . . .Men (15+) | 674.0 | 150 | 0;1000 | 3386 | 539 | 100 | 0;650 | 2805 |
| | . . . Women (15+) | 587.0 | 100 | 0;800 | 2894 | 392 | 70 | 0;550 | 2006 |

| INPATIENT CARE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Indicator | Subgroup | Entire Sample | | | | Bottom 2 quintiles | | | |
| | | On average | At the median | The common range (15th-85th percentile) | The less likely extreme (average among 85th percentile and above) | On average | At the median | The common range (15th-85th percentile) | The less likely extreme (average among 85th percentile and above) |
| Among individuals admitted to hospital in past 12 months, total number of times admitted (N) | Overall | 1.103 | 1 | 1;1 | - | 1.099 | 1 | 1;1 | - |
| | ...Under-fives (0-5) | 1.095 | 1 | 1;1 | - | 1.082 | 1 | 1;1 | - |
| | ...Children (6-14) | 1.082 | 1 | 1;1 | - | 1.081 | 1 | 1;1 | - |
| | . . .Men (15+) | 1.133 | 1 | 1;1 | - | 1.114 | 1 | 1;1 | - |
| | . . . Women (15+) | 1.098 | 1 | 1;1 | - | 1.104 | 1 | 1;1 | - |
| Among individuals admitted to hospital in past 12 months, total OOP expenditure per hospital admission (last 2) [Ksh] | Overall | 11110 | 1950 | 0;15000 | 59231 | 5762 | 1650 | 0;8702 | 27567 |
| | ...Under-fives(0-5) | 6035 | 1377 | 0;7504 | 30949 | 2900 | 980 | 0;4032 | 13150 |
| | ...Children (6-14) | 12870 | 1500 | 0;9231 | 74649 | 3334 | 1427 | 275;5250 | 12941 |
| | . . .Men (15+) | 15956 | 3000 | 0;24401 | 80439 | 8414 | 2000 | 0;14933 | 40393 |
| | . . . Women (15+) | 10535 | 2000 | 0;14000 | 56153 | 6373 | 2000 | 0;8972 | 29399 |

**Annex B:**

# POTENTIAL TO IMPROVE TRACKING AND MONITORING HEALTH SPENDING AND UTILISATION

This comparative view of data from the Kenya Financial Diaries, KHHEUS, and IHME studies highlights both what we know and, in part, what we don't know or may be tracking in incomplete ways. The analysis points towards a number of ways that existing health spending surveys might be adapted to capture a more complete picture.

**First, we see the advantage of looking at costs at the level of an illness episode as opposed to an exit interview.** The Financial Diaries highlight that many illnesses require multiple visits to multiple facility types in order to finally be resolved. The costs associated with consultations, transportation, prescriptions, and diagnostics compound at each level of care, meaning that diseases that ought to be simple to treat – like malaria and brucellosis – become extremely costly affairs for the poor who can least afford to keep up.

Our current studies tend to measure costs and completeness of care by visit rather than by illness episode, therefore leaving gaps in our understanding around layered costs – both those services that patients find a way to pay for and receive, and those – like x-rays—that they often seem to forgo. Periodic studies of patient health seeking and financing could consider developing more complete case histories by illness episode for a sub-sample of their respondents to better understand these issues around how patients interact with the health system over a period of time associated with specific illness episodes.

**Future tracking studies might consider getting more specificity around delayed, foregone, and incomplete care.** It's difficult to do this during exit interviews since they only consider those who have made the decision to visit a facility, and they may not yet be aware of whether they will purchase and complete their prescribed course of treatment. The KHHEUS attempts to measure the incidence and reasoning for foregone care, but does not look at delayed and incomplete care. Improvements in these measures can hint at progress in successful health financing in a meaningful and more comprehensive way.

**Remember that income fluctuates.** When it comes to income, the Diaries point out that families typically have many and erratic income streams. Especially for those in the informal sector, it may be difficult for them to estimate an average income, given the complexity of these flows. In the Diaries, the median household's income fluctuated about 54 per cent from month to month.

**One important source of income for low-income individuals and families are remittances and gifts from relatives and friends.** These flows can increase when a family experiences an illness. Even when respondents in the KHHEUS report using 'cash' to finance their care, some – even much – of that may be coming from close relatives. In the Diaries, these gifts accounted for about 15 per cent of income in the median household over the course of a year and could stretch up to many multiples of a household's otherwise average annual income if a specific need – like a health emergency – arose. Unless specifically asked, it's likely that we are not seeing just how important the social network is in paying for care, even at the outpatient level.

**Is there a role for Health Diaries?** The 2012-–13 Kenya Financial Diaries give us a rich view of low-income financial lives, but they are not representative. Nor were they designed to pick up health issues and financing specifically. But, perhaps the method of following the same households through repeated interviews over a longer period of time could be done for health, to elicit a more detailed and nuanced understanding of how care is sought, delivered, and financed, and provide deeper insights to the policymakers seeking to achieve UHC by 2030.

FSD Kenya
Financial Sector Deepening

info@fsdkenya.org • www.fsdkenya.org
FSD Kenya is an independent trust established to support the development of inclusive financial markets in Kenya
5th floor, KMA Centre • Junction of Chyulu Road and Mara Road, Upper Hill • PO Box 11353, 00100 Nairobi, Kenya
**T** +254 (20) 2923000 • **C** +254 (724) 319706, (735) 319706