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HEALTH EQUITY AND FINANCIAL PROTECTION REPORT

ZAMBIA



About the Health Equity and Financial Protection Reports

The Health Equity and Financial Protection reports are short country-specific volumes that provide a picture of equity and financial protection in the health sectors of low- and middle-income countries. Topics covered include: inequalities in health outcomes, health behavior and health care utilization; benefit incidence analysis; financial protection; and the progressivity of health care financing. Data are drawn from the Demographic and Health Surveys, World Health Surveys, Multiple Indicator Cluster Surveys, Living Standards and Measurement Surveys, as well as other household surveys, and use a common set of health indicators for all countries in the series. All analyses are conducted using the health modules of the ADePT software. Also available are Health Equity and Financial Protection datasheets that summarize key measures of equity and financial protection.

The most recent versions of the Health Equity and Financial Protection reports and datasheets can be downloaded at www.worldbank.org/povertyandhealth.

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List of Abbreviations and Acronyms

ARI	Acute respiratory infection
BIA	Benefit-incidence analysis
CPI	Consumer price index
DHS	Demographic and Health Survey
GDP	Gross domestic product
GHE	Government health expenditures
LCMS V	Zambia Living Conditions Monitoring Survey 2006
LCU	Local currency units
MCH	Maternal and child health
NHA	National Health Accounts
PPP	Purchasing power parity
SHI	Social health insurance
SWAp	Sector-Wide Approach
TB	Tuberculosis
VAT	Value added tax
VCT	Voluntary counseling and testing
WHO	World Health Organization
WHS	World Health Survey

HEALTH EQUITY AND FINANCIAL PROTECTION IN ZAMBIA

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Executive Summary

This report analyses equity and financial protection in the health sector of Zambia. In particular, it examines inequalities in health outcomes, health behavior and health care utilization; benefit incidence analysis; financial protection; and the progressivity of health care financing. Data are drawn from the 2007 Zambia Demographic and Health Survey, the 2006 Zambia Living Conditions Monitoring Survey, the 2003 Zambia World Health Survey and the 2003 Zambia National Health Accounts. All analyses are conducted using original survey data and employ the health modules of the ADePT software.

Is ill health more concentrated among the poor?

Yes. In general, ill health is more concentrated among the poor in Zambia. This includes some selected indicators of *child health*, such as stunting, underweight, acute respiratory infection (ARI) and incidence of malaria. Diarrhea appears to be slightly more prevalent among the better-off. Results for infant and child mortality rates, acute respiratory infection and fever are not statistically significant. With respect to measures of *adult health*, some conditions are concentrated among the poor (such as tuberculosis, arthritis, measures of difficulty with work and household activities, and poor self-assessed health status) whereas HIV prevalence, obesity among non-pregnant women and involvement in road traffic accidents is more common among the better-off. Results for non-traffic accidents, angina, depression and diabetes are not statistically significant. With respect to *risky health behaviors*, the results are mixed. It is the wealthy who are more likely to drink excessively and more likely to have concurrent partnerships (and thus be at risk for sexually transmitted infections). Smoking and insufficient physical activity, on the other hand, is more concentrated among the poor, who are also less likely to use condoms when in concurrent partnerships.

Do the poor use health services less than the rich?

Not substantially so. It depends on the type of care. While the information is dated, the 2003 WHS showed that utilization of outpatient care is concentrated among the poor and the utilization of inpatient care is not significantly more concentrated among the better-off. Of course, this may reflect differences in the underlying disease burden. Of the selected maternal and child health (MCH) interventions, antenatal care take-up, skilled birth attendance and contraceptive prevalence are more concentrated among the better-off part of the population, with other interventions not significantly pro-rich or pro-poor. Among adult preventives services, all results are statistically insignificant.

What is the effect of out-of-pocket payments on household financial well-being?

Not too severe. Only about 5 per cent of households spend more than 10 per cent of total household consumption on out-of-pocket health payments and only 2 per cent spend more than 25 per cent. Using the alternative nonfood measure, about a third (32.5 per cent) of households spend more than 10 per cent of *nonfood* consumption on out-of-pocket payments and around a quarter (23.7 per cent) spend more than 40 per cent. However, catastrophic payments are highly concentrated among the poor,

especially at the higher thresholds. Health spending contributes to impoverishment, but the effect is very slight. Out-of-pocket payments are responsible for an increase in the poverty rate equivalent to 0.4 per cent, when using the US\$2.00 a day measure, and 0.2 per cent, when using the US\$1.25 a day measure, as well as an increase in the depth of poverty (i.e. the poverty gap) of less than 1 per cent.

Is health financing progressive or regressive?

Fairly progressive. Overall, health care financing in Zambia in 2006 was fairly progressive, i.e. the better-off spent a larger fraction of their consumption on health care than the poor. The financing sources that contribute to the overall progressivity of health care finance are general taxation, which finances 42 per cent of domestic spending on health, and contributions made by private employers, which finance 9 per cent of spending. An additional contribution to overall progressivity is made through pre-payment mechanisms, but this remains fairly limited given that they only represent 1 per cent of total health finance. Out-of-pocket health payments, which account for 47 per cent of total health financing, appear to be proportional to income, with only slight and not statistically significant evidence of progressivity.

1 Zambia's Health System

This section provides a brief overview of Zambia's health system, focusing on features that are likely to be especially salient for equity and financial protection.

1.1 Equity and financial protection as policy goals

The Government of Zambia is committed to improving equity and financial protection in health through the implementation of health sector reforms aimed at improving health service delivery. These reforms are designed to *"provide the people of Zambia with equity of access to cost-effective, quality healthcare as close to the family as possible."* These aims were originally stated in the National Health Policies and Strategies of 1992 and were reaffirmed in the 2006-2010 National Health Strategic Plan. Additionally, three of the six key principles expressed in the strategic plan are related to equity and financial protection. These include: 1) equity of access, 2) affordability, 3) cost-effectiveness, 4) accountability, 5) partnerships, and 6) decentralization and leadership. As a result of these policy goals, Zambia has removed user fees at public facilities in rural areas (Ministry of Health 2005).

1.2 Health financing system

Health expenditure

Zambia spends 6.2 per cent (2009) of its gross domestic product (GDP) on health. This is similar to the spending levels in other lower middle-income countries in Africa, which spent an average of 5.8 per cent (2009) of their GDP on health¹. Government spending on health has increased slightly over time as a percentage of the total government budget. In 2009, 15.7 per cent of Zambia's total government expenditures were spent on health, up from 14.7 per cent in 2005. This relatively high percentage points to a continued government commitment to the health sector. As a result, the government accounts for 59.5 per cent of total health expenditures while out-of-pocket expenditures only comprise 27.2 per cent of total health expenditures. This is uncommon, as out-of-pocket payments represent the majority of health expenditures in most lower-income countries. Other sources of funds include non-profit institutions, private insurance and employers.

¹ Non-weighted average of: Angola, Congo, Cote d'Ivoire, Ghana, Nigeria, Senegal, Swaziland, Zambia, and Sudan.

Table 1.1: Health expenditure data, 2009

Indicator	
Health expenditure as share of GDP	6.2%
Total government expenditure as share of GDP	23.3%
Government expenditure on health as share of total government expenditure	15.7%
Out-of-pocket expenditure on health as share of total health expenditure	55.3%
Government expenditure on health, per capita	US\$ 36 (current), US\$ 52 (PPP-adjusted)
Government expenditure on health as share of total health expenditure	59.5%
Out-of-pocket expenditure on health as share of total health expenditure	27.2%

Source: WHO National Health Accounts database (2009)

Decentralization and centralization

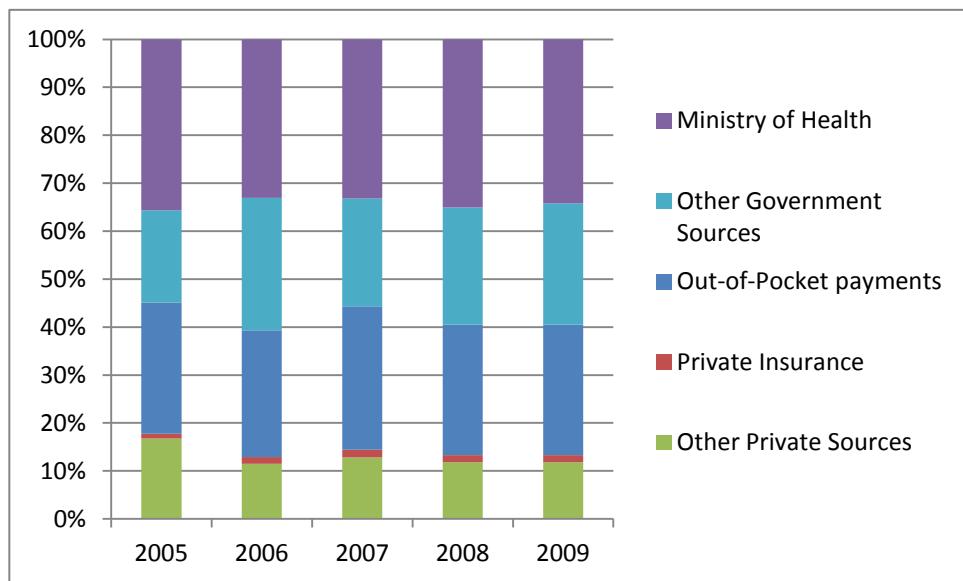
In 1992, Zambia was one of the first countries in Africa to implement a broad decentralization of its health system (Ministry of Health 1992). This included delegation of authority from the central Ministry of Health to the autonomous Central Board of Health. Hospitals were given the ability to set their own fee schedules and retain a portion of them. In 2003, the government initiated the National Decentralization Policy which mandated that all ministries devolve their management responsibilities to the local authorities at the district level. To achieve this, two parallel structures were introduced. The first structure aimed to increase citizen participation in the decision-making process. The Central Board on Health, Hospital Management Boards, District Health Boards, the Neighborhood Health Committees and Health Center Committees were created to fill this function. The second structure was designed to perform technical and managerial tasks. This included the Hospital Management Teams, District Health Management Teams, Provincial Health Offices and a management team in the Ministry of Health. However, in 2005, the health sector underwent a major structural reform following the government's repeal of the National Health Services Act, and in 2006 the decentralization process came to a halt. This led to the re-centralization of certain powers, including the ability to contract providers, back to the Ministry of Health headquarters. It also abolished the Central Board on Health and integrated its power and staff back into the Ministry of Health. Currently, the Ministry of Health has regained management and control of all public health facilities through the Provincial Medical Offices.

Revenue-raising/sources of funds

The government accounts for the majority (59.5 per cent) of total health spending as shown in Figure 1.1. However, it is important to note that a substantial proportion of those funds come from donors in the form of direct budget support and a Sector-Wide Approach (SWAp) mechanism. In fact, 42 per cent of total health expenditures from 2003-2006 originated from donors (Ministry of Health 2009). Most of the monies channeled through the Ministry of Health are spent subsidizing free primary care at clinics and hospitals. The 2003-2006 National Health Accounts (NHA) estimated that 42.4 per cent of Ministry of Health expenditures were spent on the provision of primary care. In particular, hospitals accounted for 39.2 per cent of the government expenditures (Ministry of Health 2009). Zambia currently does not have a social health insurance scheme and private health insurance constitutes only 1.5 per cent of total health expenditures. Out-of-pocket payments finance 27.2 per cent of the health spending in Zambia,

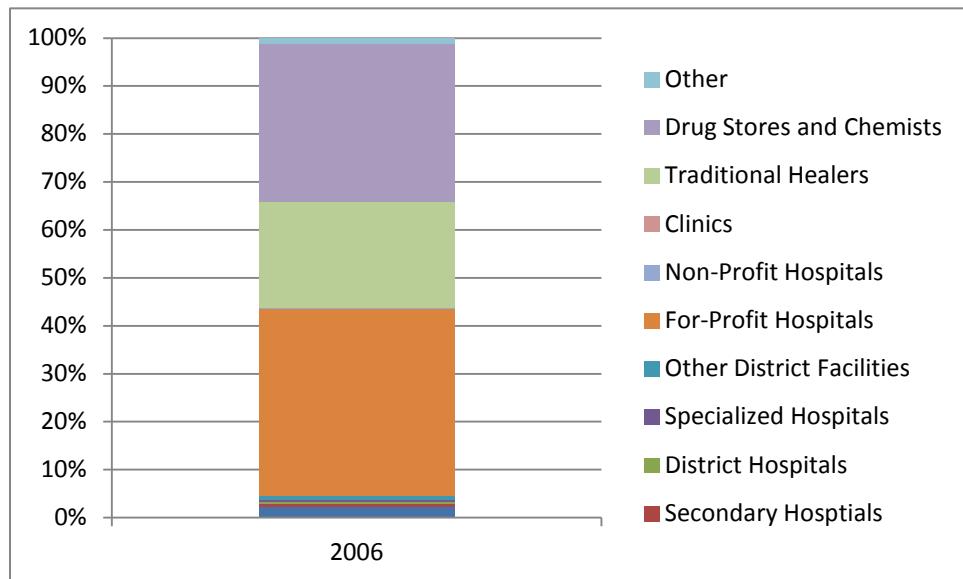
while the remainder is financed from other private sources such as non-governmental institutions and private employers. Payments to private-for-profit hospitals, traditional healers, and drug stores account for the majority of out-of-pocket spending (see Figure 1.2)

Figure 1.1: Health care financing mix, 2005-2009



Source: WHO National Health Accounts database (2009)

Figure 1.2: Composition of out-of-pocket health spending



Source: Ministry of Health (2009)

Risk-pooling

Prior to the health reforms of the early 1990s, the government provided free health care services. Under economic duress, Zambia introduced cost-sharing to increase resource mobilization and instill a sense of ownership among communities. To protect the poor, the government enacted an exception policy based on age and disease-based characteristics. However, the implementation of the user fee exemptions was weak and the government later decided to completely abolish user fees in all rural areas. Several urban facilities continued to charge user fees, though. As a result, the largest share of household out-of-pocket payments tends to occur at private facilities. Risk-pooling remains very rare in Zambia. There is currently no social health insurance system in place, although plans to implement one in the near future are under consideration. Private insurance is in its infancy, accounting for only 1.5 per cent (2009) of total health expenditures (WHO National Health Accounts database 2009). Despite the lack of insurance, several initiatives are in place that can provide protection from the financial consequences of ill health, among other sources of vulnerability. One such initiative is the Social Cash Transfer Scheme which uses community targeting to identify eligible households. However, there is no requirement that the transfer be spent on health care and, since the transfer is a fixed amount, the degree of financial protection offered does not vary according to need.

1.3 Health care delivery system

Provider organization

Zambia operates a tiered health system with tertiary, secondary, and primary facilities that are responsible for the delivery of health care. The public sector services the majority of the population. The formal private sector includes mission hospitals under the aegis of the Churches Medical Association of Zambia. Primary facilities include district hospitals and health centers. They offer primary health care services that are inclusive of both preventive as well as curative services. These facilities are located in all districts and there is a minimum of one district hospital per district. Twenty-six secondary health facilities are primarily located in the provincial headquarters. Of this number, a few are owned and run by non-governmental organizations. Five tertiary hospitals provide referral services at the national level in addition to serving as training centers for medical staff.

Payment mechanisms and provider autonomy

Historically, the health budget in Zambia was based on incremental increases to previous allocation decisions that had little to do with need or efficiency. The introduction of the pooled fund in 2004 started a series of financial reforms that initiated population-based resource allocation criteria for primary health care. Government funds, allocated at the central level, are used to provide a basic health care package for free. Any interventions that are included in the basic health care package do not require cost-sharing. However, services that are outside of the basic health care package are subject to different levels of cost-sharing. Generally, providers are allowed to keep a portion of these user fees and use them as they see fit. The central Ministry of Health also recruits and hires health staff.

Resource availability and utilization

Zambia had 0.6 physicians per 10,000 persons in 2008. Like most of Sub-Saharan Africa, Zambia has a dearth of human resources. Currently the vacancy rates among clinic staff average 66 per cent among all cadres (World Bank 2011). This partly explains why there were only 0.93 clinical health workers per 1,000 population in 2009, far below the World Health Organization (WHO) recommended 2.5 per 1,000 population ratio (WHO 2011). This lack of health care providers disproportionately affects the rural poor. Although 70 per cent of the population lives in rural areas, 76 per cent of doctors are based in urban facilities. Due to relatively robust funding for hospitals, Zambia has 19.0 hospital beds per 10,000 population.

2 Inequalities in health

Most policymakers regard large inequalities in health outcomes between poor and rich as undesirable. This section reports inequalities in child and adult health outcomes, as well as health behaviors.

2.1 Data availability

A Demographic and Health Survey (DHS) was fielded in Zambia in 2007 and a World Health Survey (WHS) was fielded in 2003. Although the DHS has rich information for many health outcomes, particularly in relation to child health outcomes, the WHS has fuller data availability with regard to many adult health outcomes. The DHS excluded consumption or income measures, but one can construct an “asset index” using principal components analysis (see Filmer and Pritchett 2001). The WHS contains information on both consumption and assets, but this section uses the asset information for consistency.

2.2 Inequalities in health

The tables in this section show how health outcomes vary across asset (wealth) quintiles. The tables show the mean values of the indicator for each quintile, as well as for the sample as a whole. Also shown are the concentration indices, which capture the direction and degree of inequality. A negative value indicates that the indicator takes higher values among the poor, while a positive index indicates that the indicator takes higher values among the better-off. The larger the index in absolute size, the more inequality there is.

Table 2.2 shows that, according to the 2007 Zambia DHS, diarrhea is more likely to have been reported among the better-off, while the prevalence of stunting and the prevalence of underweight are more concentrated among the poor. According to the 2003 Zambia WHS, the incidence of malaria is also more prevalent among the poor populations. While the sign of the concentration index suggests higher infant and under-five mortality rates among the poor population, this result is not statistically significant.

Table 2.2 shows inequalities in health outcomes for adults. The 2003 WHS suggests that tuberculosis (TB), non-road traffic accidents, arthritis, asthma and diabetes are more concentrated among the poor, but only the results for tuberculosis and arthritis have statistical significance. The poor in Zambia are more likely to have reported poor self-assessed health status and difficulty with work and household activities. In contrast, road traffic accidents, HIV prevalence, and obesity among non-pregnant women are more concentrated among the better-off.

Table 2.1: Inequalities in child health

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Total	Concentration index
Infant mortality rate ¹	8.4%	10.4%	10.3%	8.6%	7.8%	9.2%	-0.010
Under-five mortality rate ¹	13.9%	16.4%	17.4%	14.9%	10.1%	14.9%	-0.030
Stunting ¹	47.4%	51.2%	47.8%	43.5%	33.6%	45.8%	-0.051***
Underweight ¹	16.5%	15.6%	16.1%	12.5%	10.2%	14.7%	-0.081***
Diarrhea ¹	14.6%	16.7%	14.0%	18.8%	16.0%	15.9%	0.038**
Acute respiratory infection ¹	7.7%	11.3%	8.6%	10.4%	9.1%	9.4%	0.021
Fever ¹	17.4%	19.4%	19.1%	20.0%	13.4%	18.2%	-0.015
Malaria ²	70.3%	71.8%	78.4%	71.2%	61.2%	70.4%	-0.023*

Source: Authors' estimates using ADePT and data from 2007 Zambia DHS¹ and 2003 Zambia WHS².

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

Table 2.2: Inequalities in adult health

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Total	Concentration index
Tuberculosis ²	18.5%	15.7%	15.4%	9.4%	10.7%	14.0%	-0.138***
HIV positive ¹	8.0%	9.4%	12.1%	20.3%	18.1%	14.0%	0.185***
Obesity among non-pregnant women ¹	0.9%	0.7%	2.5%	6.1%	13.2%	5.5%	0.503***
Road traffic accident ²	0.6%	1.8%	0.8%	1.8%	2.7%	1.5%	0.256**
Non-road traffic accident ²	6.2%	4.3%	4.4%	4.0%	6.3%	5.1%	-0.029
Angina ²	3.3%	1.8%	2.7%	2.7%	3.2%	2.7%	0.036
Arthritis ²	4.5%	5.9%	4.4%	1.8%	3.2%	4.0%	-0.151***
Asthma ²	4.1%	2.2%	4.7%	1.7%	2.5%	3.0%	-0.098
Depression ²	2.6%	0.9%	1.0%	3.0%	2.8%	2.1%	0.079
Diabetes ²	0.7%	0.7%	0.5%	0.4%	0.5%	0.6%	-0.146
Difficulty with work and household activities ²	5.4%	4.6%	3.5%	4.1%	1.5%	3.8%	-0.181***
Poor self-assessed health status ²	8.4%	8.5%	6.1%	7.3%	2.6%	6.6%	-0.164***

Source: Authors' estimates using ADePT and data from 2007 Zambia DHS¹ and 2003 Zambia WHS².

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

Table 2.3 shows inequalities in health behaviors that place individuals at risk for developing poor health. The prevalence of smoking among all respondents, insufficient physical activity, and smoking (among women only) is more concentrated among the poor.. However, the prevalence of drinking is more concentrated among the better-off. The data also show that women from wealthier households are more likely to have been in concurrent partnerships (i.e. have sexual intercourse with more than one partner in the last year); though they are also more likely to utilize condoms while in concurrent partnerships. Mosquito net use by children, as well as by pregnant women, is found to be higher among the wealthier quintiles, but the results are not statistically significant.

Table 2.3: Inequalities in health behaviors

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Total	Concentration index
Smoking (all) ²	20.4%	14.5%	14.4%	12.8%	7.9%	14.1%	-0.164***
Smoking (women) ¹	3.1%	3.9%	1.3%	0.7%	0.5%	1.8%	-0.395***
Insufficient intake of fruit and vegetables ²	82.0%	75.3%	73.8%	76.1%	80.0%	77.6%	-0.005
Insufficient physical activity ²	31.0%	27.3%	25.7%	18.7%	13.8%	23.3%	-0.156***
Drinking ²	6.5%	4.9%	6.1%	7.6%	9.5%	6.9%	0.103***
Concurrent partnerships ¹	8.2%	11.4%	10.3%	15.6%	15.7%	12.6%	0.131***
Condom usage (more than one partner) ¹	21.5%	17.7%	27.6%	37.7%	52.0%	35.3%	0.204***
Mosquito net use by children ¹	20.5%	32.3%	33.5%	30.1%	33.2%	29.4%	0.085
Mosquito net use by pregnant women ¹	29.4%	37.3%	40.4%	29.1%	35.1%	34.4%	0.022

Source: Authors' estimates using ADePT and data from 2007 Zambia DHS¹ and 2003 Zambia WHS².

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

In sum, the tables in this section indicate that generally ill health and risky health behaviors are concentrated among the poor in Zambia. Although only half of the selected indicators of child health are both statistically significant and suggest worse outcomes among the poor, it is likely that this is an underestimation due to lack of access to diagnostic care. Among adults, ill health (with the exception of obesity) appears to be common among the poor. The poor also generally exhibit riskier health behaviors than those who are better-off, with the exception of drinking and involvement in concurrent partnerships which both have higher prevalence in the wealthy populations.

3 Inequalities in health care utilization

In many countries, for a variety of possible reasons, health care utilization tends to be distributed very unequally across income groups, even after taking into account differences in medical needs. This section reports on inequalities in utilization of health care in Zambia for different types of care, and for different types of health care provider.

3.1 Data availability

A Demographic and Health Survey (DHS) was fielded in Zambia in 2007 and a World Health Survey (WHS) was fielded in 2003. Although the DHS has rich information for maternal and child health (MCH) interventions, the WHS has fuller data with regard to adult preventive care and general utilization. The DHS excluded consumption or income measures, but one can construct an “asset index” using principal components analysis (see Filmer and Pritchett 2001). The WHS contains information on both consumption and assets, but this section uses the asset information for consistency.

3.2 Inequalities in health care utilization

The tables in this section show how health care utilization varies across consumption or asset quintiles. The tables show the mean values of the indicator for each quintile, as well as for the sample as a whole. Also shown are the concentration indices, which capture the direction and degree of inequality. A negative value indicates that utilization is higher among the poor, while a positive index indicates higher utilization rates among the better-off. The larger the index in absolute size, the more inequality in utilization there is.

Table 3.1 shows coverage of key MCH interventions and the treatment of childhood illness. Less than 15 per cent of children under the age of 5 are fully immunized, while 59 per cent of expectant women receive at least 4 skilled antenatal care visits and less than 50 per cent deliver their baby by a skilled attendant. Approximately 25 per cent of women use some modern form of contraception, although utilization is higher among the wealthier populations. All three interventions are higher among the better-off. The treatment of diarrhea appears to be somewhat pro-poor while the treatment of ARI seems slightly pro-rich, but neither is (statistically) significantly so.

Table 3.1: Inequalities in maternal and child health interventions

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Total	Concentration index
Full immunization	15.9%	11.1%	15.9%	12.0%	19.1%	14.6%	0.026
Treatment of diarrhea	67.5%	69.5%	63.8%	69.8%	66.8%	67.7%	-0.004
Medical treatment of ARI	64.5%	62.1%	65.3%	71.1%	59.8%	64.7%	0.014
Skilled antenatal care (4+ visits)	55.9%	58.0%	59.5%	57.8%	63.9%	58.7%	0.028***
Skilled birth attendance	27.5%	27.9%	36.3%	73.0%	91.6%	46.4%	0.275***
Contraceptive prevalence	25.1%	20.5%	19.0%	27.4%	29.0%	24.6%	0.055***

Source: Authors' estimates using ADePT and data from 2007 Zambia DHS.

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

Table 3.2 shows inequalities in preventive care among adults. It shows low uptake rates for screening of TB (2.8 per cent) in the general population and breast cancer screening among women. Less than 2 per cent of women have had breast cancer screening. Both types of preventive care appear to be more common among the better-off, but the results are not statistically significant.

Table 3.2: Inequalities in adult preventive care

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Total	Concentration index
TB screening	2.3%	2.2%	2.4%	2.5%	4.7%	2.8%	0.136
Breast cancer screening	2.1%	0.0%	2.6%	3.6%	1.3%	1.9%	0.158

Source: Authors' estimates using ADePT and data from 2003 Zambia WHS.

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

Table 3.3 shows the utilization of adult curative care in Zambia. According to the 2003 WHS, utilization of inpatient care is higher among the better-off, regardless of the period of measurement. However, results for inpatient care are not statistically significant. Any health care utilization (inpatient and outpatient) and all outpatient utilization are higher among poorer populations; these two indicators provide concentration indices that are statistically significant.

Table 3.3: Inequalities in adult curative care

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Total	Concentration index
Inpatient or outpatient (12 months)	63.9%	68.3%	67.7%	59.5%	59.5%	63.7%	-0.022**
Inpatient (12 months)	8.7%	7.5%	7.1%	8.8%	9.1%	8.3%	0.021
Inpatient (5 years)	15.5%	14.3%	13.6%	15.9%	19.1%	15.7%	0.041
Outpatient (12 months)	64.9%	69.8%	70.7%	57.4%	56.2%	63.9%	-0.038***

Source: Authors' estimates using ADePT and data from 2003 Zambia WHS.

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

In sum, the tables in this section indicate that the utilization of health care in Zambia is neither pro-poor nor pro-rich (See Table 2A, Annex A for detailed information of the distribution of utilization). All MCH interventions (see Table 3.1) have positive concentration indices, with the exception of treatment of diarrhea, signifying that utilization of most MCH interventions is higher among the better-off. Among adult preventive services, all indicators show that utilization is concentrated among the better-off. However, the indicators of total health care utilization (inpatient and outpatient), and all outpatient utilization, are higher among poorer populations. Finally, when examining utilization of public facilities only, the results suggest that utilization is slightly higher among the poor, but for both outpatient and inpatient hospital the results are not significant at any level.

4 Financial protection in health

Countries finance their health care through a mix of out-of-pocket payments, private and social insurance, general revenues, and international development assistance. All except the latter ultimately come from the pockets of households in the country. Therefore, health systems are not just about improving health but also about ensuring that people are protected from the financial consequences of illness and death, or at least from the financial consequences of having to obtain medical care. This section presents data on two alternative measures of financial protection: one that asks whether out-of-pocket spending is ‘catastrophic’ and the other that asks if it is ‘impoverishing’. Neither captures the income losses associated with illness, and both therefore underestimate the full financial impact of ill health on households. The section also explains the institutional arrangements used in Zambia to provide financial protection in the health sector, and presents data on levels of inequalities in coverage.

4.1 Data availability

A World Health Survey (WHS) was fielded in Zambia in 2003. The WHS has information on health expenditure and household consumption. In order to facilitate international comparisons, the tables below use data from the WHS. Households are ranked by per capita consumption.

4.2 Catastrophic out-of-pocket payments

This subsection provides information on ‘catastrophic’ health payments. Catastrophic payments are defined as health care payments in excess of a predetermined per centage of their total household or nonfood spending.

The columns of Table 4.1 give different thresholds above which health payment “budget shares” might be deemed catastrophic. The first line of the table displays the catastrophic payment “headcount”, i.e. the proportion of households with a health payment budget share greater than the given threshold. The second line relates the catastrophic payment headcount to the household consumption distribution, and shows the concentration index of the incidence of catastrophic payments. A positive value of the concentration index indicates a greater tendency for the better-off to have out-of-pocket spending in excess of the payment threshold, whereas a negative value indicates that the worse off are more likely to have out-of-pocket spending exceeding the threshold.

The information in Table 4.1 on catastrophic payments is for the 2003 WHS. The table shows that, for the WHS data, when the threshold is raised from 5 to 40 per cent of total household expenditure, the estimate of the incidence of catastrophic payments falls from 9.5 to 1.1 per cent. When the threshold is raised from 5 to 40 per cent of nonfood expenditure, the estimate of the incidence of catastrophic payments falls from 35.8 to 23.7 per cent. Table 4.1 also shows that the concentration indices for catastrophic spending are negative at all thresholds for the WHS data, implying that catastrophic payments are always more common among the poor whether using nonfood or total household expenditure.

Table 4.1: Incidence of catastrophic out-of-pocket spending

	Threshold share of total household consumption				
	5%	10%	15%	25%	40%
Headcount	9.5%	5.3%	3.6%	1.9%	1.1%
Concentration index					
	-0.064*	-0.061	-0.131*	-0.344***	-0.635***
	Threshold share of nonfood consumption				
	5%	10%	15%	25%	40%
Headcount	35.8%	32.5%	30.3%	26.3%	23.7%
Concentration index					
	-0.176***	-0.209***	-0.234***	-0.261***	-0.301***

Source: Authors' estimates using ADePT and data from Zambia 2003 WHS.

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

4.3 Impoverishing out-of-pocket payments

This subsection presents poverty measures corresponding to household consumption gross and net of out-of-pocket health spending. A comparison of the two shows the scale of impoverishment due to health payments. The idea is that a health problem necessitating out-of-pocket medical spending may be serious enough to push a household from being above the poverty line 'before' the health problem to being below the poverty line 'after' the health problem. Adding out-of-pocket spending to the household's nonmedical consumption ('consumption including – or gross of – health payments') gives us a sense of what its standard of living would have been *without* the health problem. Its nonmedical spending ('consumption excluding health payments') gives us a sense of what its standard of living looks like *with* the health problem. The assumption here is that out-of-pocket spending is involuntary and caused by health "shocks"; health spending is assumed to be financed by reducing current consumption.

The first line of Table 4.2 shows the poverty "headcount" which represents the proportion of individuals living below the poverty line. Two poverty lines are used: the lower line corresponds to \$1.25 a day at purchasing power parities (PPP); the upper line corresponds to \$2 a day. The poverty gap gives the total shortfall from the poverty line, averaged across the entire population; it is expressed in dollars a day. The mean positive poverty gap is a measure of the intensity of poverty: it indicates the average shortfall from the poverty line among those in poverty; it is also measured in dollars a day. Table 4.2 reports results for the 2003 Zambia WHS. When out-of-pocket payments are counted as part of a household's consumption, 86.1 per cent of the population in 2003 (according to the WHS) was poor using a US\$1.25 a day poverty line. If we exclude out-of-pocket payments from the household's consumption, recognizing that this expenditure is involuntary and simply enables a household to cope with a health problem, the poverty rate goes up to 86.3 per cent; this is the true poverty rate. Thus about 0.2 per cent of the population would not have been poor if the resources they were forced to devote to health care had been available to spend on other things. Out-of-pocket spending on health raises the per-capita poverty gap rises by \$0.01, equivalent to or a 1 per cent increase. The mean positive poverty gap also increases by \$0.02, only a 0.7 per cent increase. When using a poverty line of US\$2.00 a day, the

increase in the percentage of those impoverished is similar, but the percentage increase in depth of poverty is smaller.

Table 4.2: Impoverishment through out-of-pocket health spending

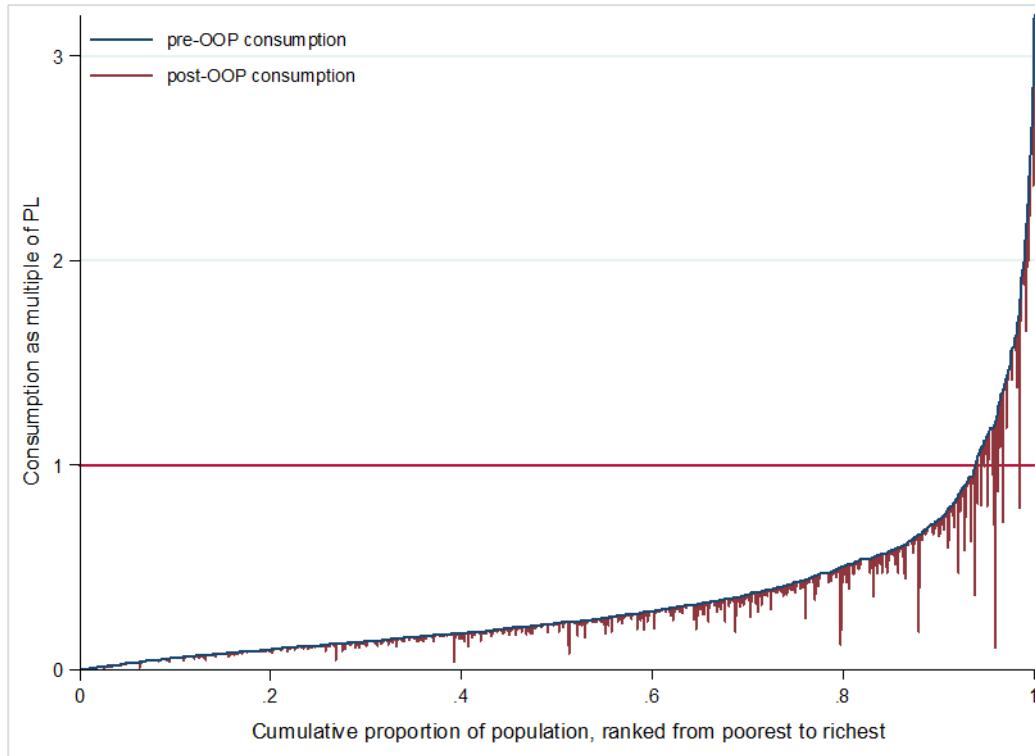
	Consumption including health payments	Consumption excluding health payments	Change	Percentage change
<i>Poverty line at US\$1.25 per capita per day</i>				
Percentage in poverty / Poverty headcount	86.1%	86.3%	0.2 pp	0.2%
Average shortfall from the poverty line	\$0.68	\$0.69	\$0.01	1.0%
Average shortfall from the poverty line, among the poor	\$0.79	\$0.80	\$0.01	0.7%
<i>Poverty line at US\$2.00 per capita per day</i>				
Percentage in poverty / Poverty headcount	93.1%	93.4%	0.4 pp	0.4%
Average shortfall from the poverty line	\$1.36	\$1.37	\$0.01	0.7%
Average shortfall from the poverty line, among the poor	\$1.46	\$1.46	\$0.00	0.3%

Source: Authors' estimates using ADePT and data from 2003 Zambia WHS.

Note: Poverty lines are at 2005 purchasing power parity, adjusted to current prices using Zambia's CPI. Figures are for a 4-week figure and are in Zambian kwacha.

Figure 4.1 shows the effect of out-of-pocket payments on poverty via a "Pen's parade". Households are lined up in ascending order of their consumption including out-of-pocket payments. The vertical "paint drips" show the extent to which out-of-pocket payments divert a household's spending away from items such as food, education, clothing, etc. The length of the paint drip, therefore, shows how far health spending compromises a household's living standards. In this case, we can see that when using a poverty line of US\$1.25 a day, the majority of households, even before of out-of-pocket spending on health, are already below the poverty line. The length of the paint drips grow as the population increases in wealth. As a result of out of pocket spending, there is an impoverishment of many households that would otherwise have not have been poor and a deepening of poverty among the already poor.

Figure 4.1 : The impoverishing effect of out-of-pocket spending



Source: Authors' estimates using ADePT and 2003 Zambia WHS.

Note: Poverty line is US\$1.25 at 2005 purchasing power parities, adjusted to current prices using Zambia's CPI.

In sum, this section does not find very high levels of catastrophic expenditure. However, at all thresholds, catastrophic payments are found to be concentrated among the poor, and most are statistically significant at all levels. The data also indicate that health spending increases the absolute number of the impoverished slightly, but the increase in the poverty gap is mostly due to the impoverishment of households (which would, were it not for health spending, have been above the poverty line) rather than the deepening of poverty among the already-poor particularly when using a lower poverty line. Indeed, the increase in the poverty rate due to health spending is only 0.4 per cent when using the US\$2.00 a day measure and 0.2 per cent when using the US\$1.25 a day measure.

5 Progressivity of health finance

There is a general consensus that payments for health care ought to be at least proportional to households' ability to pay, if not progressive (meaning a poor household contributes a smaller share of its resources than a rich one). The overall progressivity of a health financing system depends on the progressivity of each source of finance, and the share of health spending financed through each source. A system that relies exclusively on out-of-pocket payments is often argued to be likely to be regressive, since out-of-pocket spending often absorbs a larger share of a poor household's resources than of a rich household's resources. This is not always the case, however; when it is not, it is likely that the poor are underusing health care, something that can be assessed by the distribution of health utilization.

5.1 Data availability

The Zambia Living Conditions Monitoring Survey 2006 (LCMS V) captures household total consumption and out-of-pocket health spending. In addition, the contributions made by the households to pre-payment schemes are also recorded. In Zambia, private employers contribute to health finance, mostly directly by contributing to the health outlays of their employees, but also indirectly through private health insurance coverage. In this analysis, the contributions made by private employers have been measured using the wages earned by those employees that report being entitled to social security. Like most household surveys, the LCMS V does not record tax payments. However, the survey includes other useful household and individual variables that can be used to fill this gap. Direct taxes were assessed by applying official tax brackets to individual income. Value added tax (VAT) was assessed by applying official VAT rates and exemptions to household consumption data. The remaining taxes have been allocated according to assumption summarized in Table A1 (see Annex). Finally, data on NHA shares are obtained from WHO National Health Accounts database 2002.

5.2 Progressivity of health care financing

The first five rows of Table 5.1 show each quintile's average consumption and financing share, with households ranked in ascending order of gross consumption (i.e. consumption including health care payments). Health care payments are considered progressive if the poorest quintile's share in total household consumption exceeds its share in total payments, while the opposite is true of the richest quintile. Payments are regressive if the poorest quintile's share in total consumption is less than its share in total payments (while again the opposite is true of the richest quintile). This exercise can be performed for total health care payments, as well as for each source separately. Table 5.1 also shows the NHA shares, i.e. the percentage of total health financing coming from each source. The next line shows the Gini coefficient, which measures the degree of inequality in gross consumption — the higher the number, the more unequal the distribution of consumption. The line below that shows the concentration index, a measure of how unequally distributed health care payments are across consumption quintiles: a positive value indicates that payments are concentrated among the better-off quintiles, while a negative index would indicate a concentration of payments among the poorer quintiles. The next line shows the Kakwani index, defined as the concentration index less the Gini coefficient. A positive value indicates that payments are more concentrated among the better-off than consumption is and is a sign that payments are progressive. A negative Kakwani index indicates that payments are regressive. Finally, the table indicates the size of the "redistributive effect" associated

with health care payments. This is the change in consumption inequality brought about by health care payments. A positive number indicates that there was less inequality in consumption after payments than before, which is the case if payments are progressive. The more progressive they are, and the larger the fraction of (gross) consumption accounted for health care payments, the bigger will be the amount of “redistributive effect”.

Table 5.1: Progressivity of health finance

	Consumption	Taxes	Employer	Pre-payment schemes	Out-of-pocket spending	Total payments
Lowest quintile	3.0	1.1	0.3	0.9	3.7	2.2
2	6.2	2.7	0.9	1.3	5.5	3.9
3	10.3	5.7	3.7	4.4	9.5	7.3
4	18.3	13.8	11.4	14.2	19.1	16.1
Highest quintile	62.2	76.8	83.7	79.1	62.2	70.5
NHA shares		42.4	9.4	0.9	47.3	100.0
Gini coefficient	0.577***					
Concentration index		0.724***	0.786***	0.746***	0.586***	0.665***
Kakwani index		0.147***	0.209***	0.169***	0.009	0.088***

Source: Distribution of consumption, taxes, health financing through employment, and out-of-pocket payments estimated by authors using ADePT and data from LCMS V. Distributions of taxes by quintile were taken from the LCMS V consumption module and applicable tax rates.

Note: * Significant at 10%, **Significant at 5%, ***Significant at 1%.

Table 5.1 shows that health care finance in Zambia in 2006 was fairly progressive, i.e. the better-off spent a larger fraction of their consumption on health care than the poor. The financing sources that contribute to the overall progressivity of health care finance are general taxation, which finances 42 per cent of domestic spending on health, and contributions made by private employers, which finance 9 per cent of spending. An additional contribution to overall progressivity is made through pre-payment mechanisms, but this remains fairly limited given that they only represent 1 per cent of total health finance. As for out-of-pocket health payments, they appear to be proportional to income, with only slight and not statistically significant evidence of progressivity. Given the considerable share of this financing source (47 per cent), it offsets part of the progressivity of taxation and employer contributions, roughly halving their overall progressivity.

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7 Annexes

7.1 Additional graphs and tables

Table A1: Tax progressivity assumptions

	% revenue share	Concentration index	Comment
VAT	9%	0.0938	Estimated from consumption and official tax rates & exemptions
PIT	31%	0.2472	Estimated from wages and official tax brackets
CIT	11%	0.0938	Assumed to be distributed as VAT
Withholding taxes	4%	0.2472	Assumed to be distributed as PIT
Mineral royalty	1%	0.0938	Assumed to be distributed as VAT
Excise duty	13%	0.0938	Assumed to be distributed as VAT
Trade taxes	31%	0.0938	Assumed to be distributed as VAT
Total		0.1474	

Source: Revenue shares from Table 1 in the summary of central government operations 2005-2009, Government of Zambia official website.

Table A2 shows the distribution of utilization of health centers and health posts, and of outpatient and inpatient services in public hospitals. It can be seen that the use of health centers decreases with income, from 35.5 per cent on average in the lowest quintile to 20.9 per cent in the richest. This translates into a negative concentration index that reflects the pro-poor utilization of public health centers in Zambia. The utilization of outpatient and inpatient care is considerably less prevalent compared to health centers (7.4 per cent and 6.2 per cent on average for the whole population). The distribution of these services also favors the poor but less markedly so, especially in the case of inpatient services. The corresponding concentration indices are negative but are not statistically significant.

Table A2: Inequalities in use of publicly financed facilities

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Total	Concentration index
Outpatient health center, health post	35.5%	32.3%	31.0%	29.1%	20.9%	29.8%	-0.085***
Outpatient hospital	9.0%	7.9%	7.9%	5.4%	7.1%	7.4%	-0.074
Inpatient hospital	7.1%	5.6%	5.1%	6.3%	6.7%	6.2%	-0.012

Source: Authors' estimates using ADePT and data from the WHS 2003.

Note: The utilization data refer to the last year in all cases. CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%.

7.2 Measurement of indicators

INDICATOR	MEASUREMENT	DATA
CHILD HEALTH		
Infant mortality rate	Number of deaths among children under 12 months of age per 1,000 live births (Note: mortality rate calculated using the true cohort life table approach; the DHS reports use of the synthetic cohort life table approach)	DHS
Under-five mortality rate	Number of deaths among children under 5 years of age per 1,000 live births (Note: mortality rate calculated using the true cohort life table approach; the DHS reports use of the synthetic cohort life table approach)	DHS
Stunting	% of children with a height-for-age z-score <-2 standard deviations from the reference median (Note: z-score calculated using WHO 2006 Child Growth Standards)	DHS, MICS
Underweight	% of children with a weight-for-age z-score <-2 standard deviations from the reference median (Note: z-score calculated using WHO 2006 Child Growth Standards)	DHS, MICS
Diarrhea	% of children with diarrhea (past two weeks)	DHS, MICS
Diarrhea	% of children with diarrhea (past two weeks; youngest child)	WHS
Acute respiratory infection	% of children with an episode of coughing and rapid breathing (past two weeks)	DHS, MICS
Acute respiratory infection	% of children with an episode of coughing and rapid breathing (past two weeks; youngest child)	WHS
Fever	% of children with fever (past two weeks)	DHS, MICS
Fever	% of children with fever (past two weeks; youngest child)	WHS
Malaria	% of children with an episode of malaria (past year; youngest child)	WHS
ADULT HEALTH		
Tuberculosis	% of adults who reported tuberculosis symptoms (past year)	WHS
HIV positive	% of adults aged 15 to 49 whose blood tests are positive for HIV 1 or HIV 2	DHS
Obesity among non-pregnant women	% of women aged 15 to 49 with a BMI above 30	DHS
Obesity among all women	% of women aged 18 to 49 with a BMI above 30	WHS
Road traffic accident	% of adults involved in a road traffic accident with bodily injury (past year)	WHS
Non-road traffic accident	% of adults who suffered bodily injury that limited everyday activities, due to a fall, burn, poisoning, submersion in water, or by an act of violence (past year)	WHS
Angina	% of adults ever diagnosed with angina or angina pectoris	WHS
Arthritis	% of adults ever diagnosed with arthritis	WHS
Asthma	% of adults ever diagnosed with asthma	WHS
Depression	% of adults ever diagnosed with depression	WHS
Diabetes	% of adults ever diagnosed with diabetes	WHS
Difficulty with work and household activities	% of adults who have severe or extreme difficulties with work or household activities (past 30 days) (Note: This indicator was created from an ordinal variable with five categories)	WHS
Poor self-assessed health status	% of adults who rate own health as bad or very bad (Note: This indicator was created from an ordinal variable with five categories)	WHS
RISK FACTORS		
Smoking (all)	% of adults who smoke any tobacco products such as cigarettes, cigars or pipes	WHS

Smoking (women)	% of women aged 15 to 49 who smoke cigarettes, pipe or other tobacco	DHS
Smoking (women)	% of women aged 18 to 49 who smoke cigarettes, pipe or other tobacco	WHS
Insufficient intake of fruit and vegetables	% of adults who have insufficient intake of fruit/vegetables (less than 5 servings)	WHS
Insufficient physical activity	% of adults who spend < 150 minutes on walking/ moderate activity/vigorous activity (past week)	WHS
Drinking	% of adults who consume ≥5 standard drinks on at least one day (past week)	WHS
Concurrent partnerships	% of women aged 15 to 49 who had sexual intercourse with more than one partner (past year)	DHS, MICS
Concurrent partnerships	% of women aged 18 to 49 who had sexual intercourse with more than one partner (past year)	WHS
Condom usage (more than one partner)	% of women aged 15 to 49 who had more than one partner in the past year and used a condom during last sexual intercourse	DHS, MICS
Condom usage (more than one partner)	% of women aged 18 to 49 who had more than one partner in the past year and used a condom during last sexual intercourse	WHS
Mosquito net use by children	% of children who slept under an (ever) insecticide treated bed net (ITN) (past night)	DHS, MICS
Mosquito net use by pregnant women	% of pregnant women aged 15 to 49 who slept under an (ever) insecticide treated bed net (ITN) (past night)	DHS
MATERNAL AND CHILD HEALTH INTERVENTIONS		
Full immunization	% of children aged 12-23 months who received BCG, measles, and three doses of polio and DPT, either verified by card or by recall of respondent	DHS, MICS
Treatment of diarrhea	% of children with diarrhea given oral rehydration salts (ORS) or home-made solution	DHS, MICS
Medical treatment of ARI	% of children with a cough and rapid breathing who sought medical treatment for acute respiratory infection (past 2 weeks)	DHS, MICS
Skilled antenatal care (4+ visits)	% of mothers aged 15 to 49 who received at least 4 antenatal care visits from any skilled personnel (Note: type of skilled personnel varies by country including doctor, nurse, midwife, auxiliary midwife, feldsher, clinical officer, health surveillance attendant, medical assistant)	DHS
Skilled birth attendance	% of mothers aged 15 to 49 that were attended by any skilled personnel at child's birth (Note: type of skilled personnel varies by country including doctor, nurse, midwife, auxiliary midwife, feldsher, clinical officer, health surveillance attendant, medical assistant)	DHS
Contraceptive prevalence	% of women aged 15 to 49 who currently use a modern method of contraception	DHS, MICS
ADULT PREVENTIVE CARE		
TB screening	% of adults who were tested for tuberculosis (past year)	WHS
Voluntary Counseling and Testing for HIV	% of women aged 18 to 49 who were tested for HIV and were told the results of the test	WHS, MICS
Cervical cancer screening	% of women aged 18 to 69 who received a pap smear during last pelvic examination (past 3 years)	WHS
Breast cancer screening	% of women aged 40 to 69 who received a mammogram (past 3 years)	WHS
ADULT CURATIVE CARE		
Inpatient or outpatient (12 months)	% of adults who used any inpatient or outpatient health care (past year)	WHS
Inpatient (12 months)	% of adults who used any inpatient health care (past year)	WHS
Inpatient (5 years)	% of adults who used any inpatient health care (past 5 years)	WHS
Outpatient (12 months)	% of adults who used any outpatient health care (past year; conditional on having not used any inpatient care past 5 years)	WHS

Note: Unless otherwise noted, all children are under the age of 5 and all adults are aged 18 and older

7.3 Methodological notes

Sections 2 and 3: Inequalities in health and health care utilization

The selection and measurement of health outcome indicators used in Section 2 and 3 on inequalities in health and health care utilization was based on (i) a comparison of indicators used in major health publications and databases, (ii) the advice of World Bank Health Specialists on recommended monitoring and measurement practice in their respective fields, and (iii) how measurable those indicators would be in the available data sources. The following major reports/databases were consulted as a guide to indicator measurement: World Bank Development Indicators, the World Bank's HNPStats database, WHO's World Health Survey country reports, and the World Bank's report series on "Socio-economic differences in health, nutrition and population (Gwatkin et al. 2007).

The data sources for this section include the Demographic and Health Surveys (DHS), World Health Surveys (WHS), Multiple Indicator Cluster Surveys (MICS) and multipurpose household surveys (such as the World Bank Living Standard and Measurement Surveys). Where the selected indicators are available in more than one of these surveys, all measures are reported.

In all analyses of inequality in this section, i.e. quintile analysis and calculation of concentration indices, households are ranked by an asset index computed using principal components analysis. In order to avoid presenting estimates biased by insufficient power, indicators were removed from the tables if the sample size in any quintile was less than the following thresholds: 250 per quintile for infant and child mortality estimates and 25 per quintile for all other indicators. This follows the practice of Gwatkin et al. (2007). In addition, the statistical significance of all concentration indices is reported.

Section 4: Financial protection

Section 4 examines health insurance coverage, catastrophic health care payments and impoverishment due to out-of-pocket expenditures. In this section, households are ranked by consumption. The analysis of catastrophic health care payments follows the popular approach elaborated upon O'Donnell et al. (2008) which defines health spending as "catastrophic" if it exceeds some fraction or threshold of total expenditure, or of total nonfood expenditure, in a given period. As O'Donnell et al. (2008) note, the threshold of 10% for total expenditure and 40% for nonfood expenditure are commonly used in the literature. In addition to measures of incidence, distribution-sensitive measures of catastrophic payments are calculated, specifically the concentration index, and statistical significance is reported. The analysis of impoverishing expenditure uses the poverty lines of US\$1.25 and US\$2.00 per capita per day at 2005 purchasing power parity (PPP) (with PPP values obtained from the World Development Indicators database) and, in some cases, national poverty lines.

Data sources for the analysis of financial protection include the WHS, as well as multipurpose household surveys. Survey data on health insurance coverage is difficult to obtain for most countries.

Section 5: Progressivity of health care finance

This section examines the progressivity of different sources of healthcare financing/payments, including out of pocket payments, health insurance contributions, direct taxation and indirect taxation. The Kakwani index, defined as the concentration index minus the Gini coefficient, indicates whether payments are more/less concentrated among the better-off than consumption is and, thus, is a sign of whether payments are progressive/regressive.

The main data source needed for the analysis of progressivity of health care financing is a multipurpose household survey, preferably with a very detailed consumption module. In addition, knowledge of the local context is typically needed to make informed assumptions, such as information on income tax brackets, VAT tax rates and exemptions, excise taxes, and taxes that are earmarked for health. Where the data do not contain information on direct taxes, this value was calculated by applying official tax brackets to individual reported income. However, in low income countries characterized by high degrees of informality and limited tax collection capacity, this approach may overestimate direct payments. Where the data do not contain information on value added tax (VAT), this is derived from household consumption using official VAT rates and exemption categories, obtained from government websites and various literature. Other important assumptions about the distribution of the burden of taxation that are particular to each country are described in Annex A of the corresponding report.

ABOUT THE HEALTH EQUITY AND FINANCIAL PROTECTION REPORTS

The Health Equity and Financial Protection reports are short country-specific volumes that provide a picture of equity and financial protection in the health sectors of low- and middle-income countries. Topics covered include: inequalities in health outcomes, health behavior and health care utilization; benefit incidence analysis; financial protection; and the progressivity of health care financing. Data are drawn from the Demographic and Health Surveys, World Health Surveys, Multiple Indicator Cluster Surveys, Living Standards and Measurement Surveys, as well as other household surveys, and use a common set of health indicators for all countries in the series. All analyses are conducted using the health modules of the ADePT software. Also available are Health Equity and Financial Protection datasheets that summarize key measures of equity and financial protection.

The most recent versions of the Health Equity and Financial Protection reports and datasheets can be downloaded at www.worldbank.org/povertyandhealth.

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