Some Leading Practices in Equitable Sexual and Reproductive Health Service Provision from Zambia

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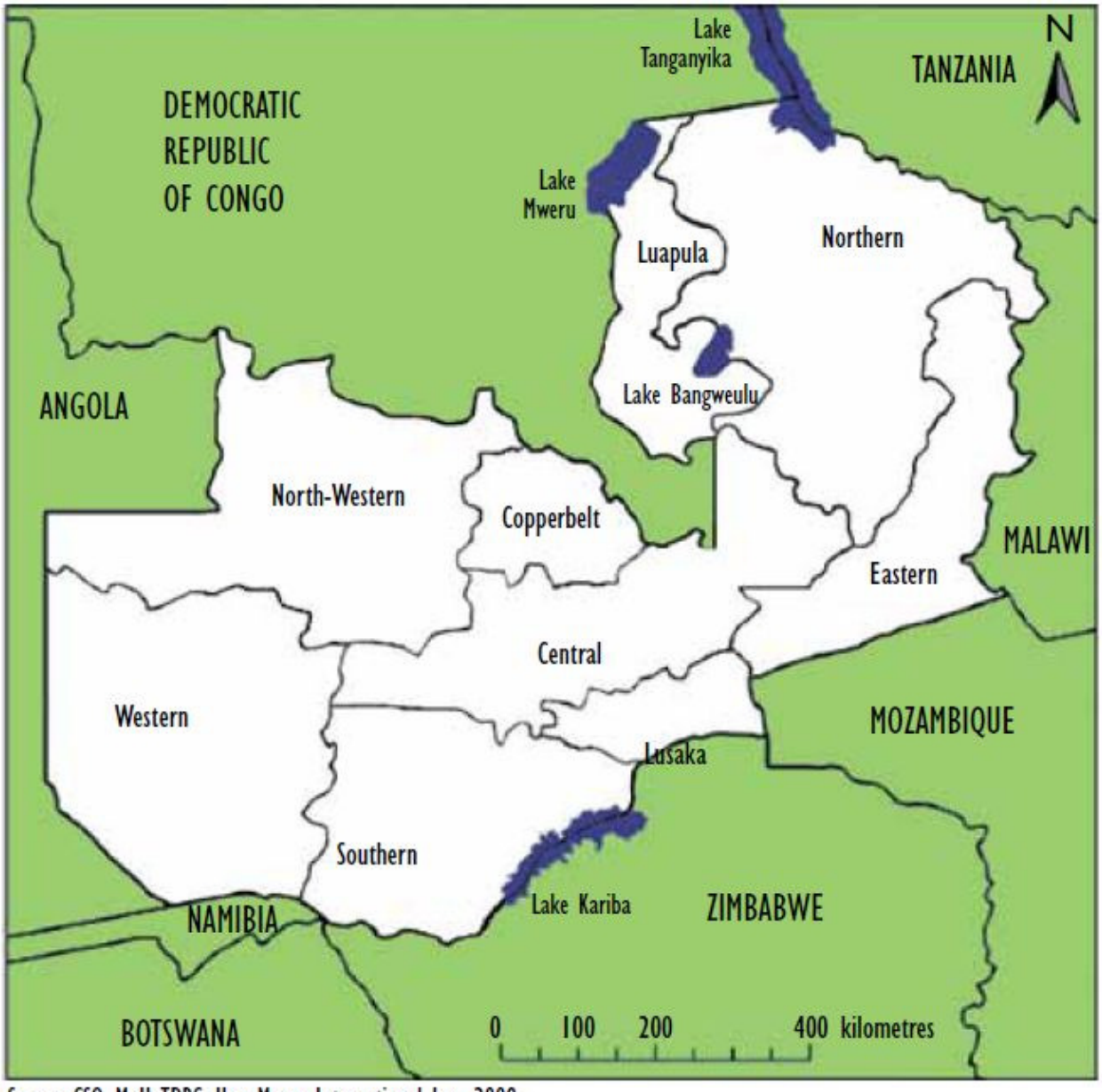
Map of Zambia



Source: CSO, MoH TDRC, Unz, Macro International Inc., 2009

Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
CBoH	Central Board of Health
CHAZ	Churches Health Association of Zambia
CSO	Central Statistical Office
EU	European Union
FAMS	Financial, Administration, and Management System
FANC	Focused Antenatal Care
GDP	Gross Domestic Product
GRZ	Government of the Republic of Zambia
HDI	Human Development Index
HIV	Human immunodeficiency virus
HMIS	Health Management Information System
JSI	John Snow International
MDG	Millennium Development Goal
MoFNP	Ministry of Finance and National Planning
MoH	Ministry of Health
MSIZ	Marie Stopes International Zambia
NAC	National AIDS Council
PPAZ	Planned Parenthood Association of Zambia
PMTCT	Prevention of Mother to Child Transmission
SFH	Society for Family Health
SMAG	Safe Motherhood Action Group
STI	Sexually Transmitted Infection
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNZA	University of Zambia
USAID	United States Agency for International Development
WHO	World Health Organisation
ZDHS	Zambia Demographic and Health Survey
ZNAN	Zambia National AIDS Network

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Executive Summary

Background and Methodology

One of the challenges in achieving the Millennium Development Goals (MDGs) has been the persistent issue of inequity in health service provision. Of particular concern have been the uneven access and outcomes relating to maternal and reproductive health services (UNDP 2011a).

A preliminary analysis by UNFPA identified Zambia as achieving relatively high levels of equity in its provision of services for skilled birth attendance, antenatal care visits and unmet need for family planning. The purpose of this study is to complement this preliminary analysis by identifying the enabling factors that have facilitated Zambia's achievement of high levels of equity.

The conceptual framework for this study is based on the seminal Tanahashi Model of effective health service coverage (Tanahashi 1978). The Tanahashi model focuses on four domains of equity in access to health services that determine the level of effective coverage, namely: availability coverage; accessibility coverage; acceptability coverage and contact coverage. In presenting the findings of the study, we have followed the general hierarchy of the Tanahashi Model by first reviewing the case for effective coverage of sexual and reproductive services, then examining data relating to contact coverage and acceptability coverage, and finally undertaking a detailed review of themes relating to accessibility and availability coverage.

This study has been based on a comprehensive desk review completed between December 2011 and January 2012. The documents reviewed were those available in the public domain; they were accessed either online or through key informants. The desk review was combined with a small number of key informant interviews to assist in the validation and interpretation of findings.

Despite a number of developmental 'shocks' over the past two decades, there is persuasive evidence to suggest that Zambia has been successful in providing antenatal care services that have reached poorer and less well educated women, including those in rural areas. It has also made good progress in satisfying the demand for family planning in rural areas. The case for provision of skilled birth attendance is more ambiguous. The *specific* research question for this study has, therefore, been defined as: how has Zambia maintained high levels of equity in antenatal attendance, and made progress in satisfying the demand for family planning in rural areas since 1992, despite the challenges and 'shocks' of the resource and human development environment?

At a Glance: Leading Practices from Zambia

Leading Practice I: Scaling up though an effective partnership cross-sector partnership with faith-based providers

CHAZ was formed in 1970 as an interdenominational organisation representing both Catholic and Protestant Medical Committees. It comprises a Secretariat, 4 Provincial/regional programme offices, 144 health facilities (including hospitals, health centres, health posts), and 11 health training schools. CHAZ facilities are found in 56 out of the 74 districts in all 9 provinces of Zambia, and have particular prominence in rural areas. In some rural areas it provides 50 percent of all health services. CHAZ complements government efforts in the delivery of quality health care by bringing additional human, financial and material resources (including drugs and supplies) to the health sector. CHAZ's services include antenatal care and family planning services. When faith based providers cannot offer family planning, CHAZ makes arrangements with the Ministry of Health's District

Health Management Team to supply additional family planning services. Under CHAZ's Memorandum of Understanding with the Ministry of Health, CHAZ receives funding for health worker salaries and operational costs. National Health Strategic Plans and District Health Action Plans are the basis of joint planning and resource allocations. CHAZ's Christian heritage means it is a highly respected and influential partner in Zambia. Transparency and accountability have been key themes in maintaining the long-term partnership with the government.

Leading practice II: Zambia's Health Workers Retention Scheme

From its inception in 2003, the aim of the Health Workers Retention Scheme was to attract and retain qualified health professionals, especially in rural areas. The pilot that was commenced in 2003 proved highly successful. It was based on a mix of monetary incentives, housing rehabilitation, car loans and facility improvements, and required the medical practitioner to make a contractual commitment for three years. A mid-term review of the pilot scheme in 2005 found that, from a baseline of 15 doctors in 2003, a total of 88 doctors had been successfully retained in rural areas for the contract period and 65 percent had renewed for a second three year term. It was also found that there were high levels of job satisfaction, while 86 percent of sites reported reduced referrals to provincial hospitals. In addition, 92 percent reported an expansion of services (including emergency obstetric care). As a result of the mid-term review, an expansion plan was commenced in 2007 for incremental inclusion of nurse tutors, clinical officers, nurses and environmental health technicians. The expansion plan built on lessons learnt from the pilot phase. The Ministry of Health has reported that, as a result of the scheme, 860 health workers had been retained by the end of 2009. In addition, the expanded scheme has been especially successful among tutors and lecturers allowing a number of provincial training schools to be re-opened and the nurse deficit to be further addressed.

Leading Practice III: provision of integrated reproductive health services through PMTCT programmes

Between 2003 and 2011 the Zambian government and its partners provided PMTCT services to to more than 1,081,137 women. By the end 2008, 936 health facilities were offering PMTCT services; these services are now available in all 72 districts in the country. In 2008, it was estimated that the annual number of unintended HIV-positive births averted through contraceptive use was 12,823. These results have been achieved through collaborative working between the government, cooperating partners, non-governmental organisations and the private sector. All providers follow national guidelines on PMTCT service provision; these are currently based on WHO 2010 recommendations (Option A). National guidelines emphasise integrated service provision based on activities that include: antenatal care; counselling and testing, including couple counselling; prophylactic antiretroviral treatment; male involvement; screening and treatment for sexually transmitted infections; community mobilisation; family planning; cotrimoxazole prophylaxis for child health; distribution of information, education and communication material.

Findings of this Study

Contact coverage

In keeping with the Tanahashi Model, the assessment of contact coverage required an assessment of contact time with service providers and continuity of service coverage.

- In Zambia, staff workloads at the health centre level are measured through the health centre staff-patient daily contacts ratio, which assesses the average number of patient contacts for each qualified health worker. All provinces, except for Copperbelt and Lusaka, had a health centre staff-patient high daily contacts ratio score of more than 15 from 2005 to 2008. The daily contact ratio was highest in rural provinces.
- Data from the 2007 Zambia Demographic and Health Survey (ZDHS) show that visits to antenatal clinics are sustained throughout pregnancy with 60.3 percent of pregnant women completing

more than four visits. There were relatively low urban: rural differentials (61.2 percent compared to 58.6 percent respectively).

- The recent slight decline in the number of antenatal visits completed may be explained by Zambia's recent transition to the World Health Organisation (WHO) recommended 'Focused Antenatal Care' (FANC) approach to service provision.

Acceptability coverage

In keeping with the Tanahashi Model, the assessment of acceptability coverage required a review of themes relating to social practice, quality of care, and information and communication.

- Some concerns have been expressed about the consistent quality of antenatal care at district level. However, a 2010 study of five (urban) clinics in Lusaka found that the majority of service users were satisfied with antenatal care received.
- Administrative and demand side factors may also play a part in explaining antenatal care attendance. An antenatal card can "act as a birth certificate" or as an accepted record confirming the birth and age of a child, and can be used to support school enrolment.
- According to the 2007 ZDHS, knowledge of family planning (including types and benefits,) is almost universal in Zambia. Family planning knowledge is almost equal in urban and rural areas (99.8 percent in urban areas compared to 98.4 percent in rural areas).
- Radio is the most frequent source of family planning messages for both women (39 percent) and men (52 percent).

Availability and Accessibility Coverage

Application of the Tanahashi Model required the assessment of availability coverage to review the resource inputs available for service delivery (including the policy context). The assessment of accessibility coverage required a review of physical access and 'social access' to services, as well as the affordability of services. Since much of the information available in the literature cross-cut both these themes, the findings of these assessments have been combined.

<u>The policy context</u>

- Zambia's long term vision for 2030 aims for "equitable access to quality health care".
- Between 1980 and 2005, Zambia ratified a number of international treaties relating to human rights, equity and equitable access to health care services.
- Policy in Zambia has, for several decades, recognised the right to health and equitable access to health care. Important health sector reforms were implemented under 1995 National Health Services Act. This Act was repealed in 2005 and has not been replaced, leaving a 'legislative vacuum'.
- Many policies relating to the health sector need to be updated and there is a need to focus on implementation (including, for example, the 2008 National Reproductive Health Policy).

<u>The Health System</u>

- Since health sector reforms were commenced in 1992, efforts have been made to extend health sector infrastructure to decentralised levels. In Zambia, rural areas are generally served by health posts. In 2011, there were 231 health posts in Zambia, compared to 20 in 2006.

However, it has been estimated that there is a need to build a further 350 health posts to meet the government's target of one health post within 5 km of every rural household.

- The Churches Health Association of Zambia (CHAZ) is the second largest provider of health care services in Zambia. It provides a third of all healthcare services and focuses on rural areas. The government's long term partnership with the CHAZ is an example of *leading practice* in scaling up service provision to extend quality health care services to rural areas.
- The human resource crisis in the health sector remains a challenge. However, implementation of Zambia's Health Worker Retention Scheme within the context of a broader Human Resource Strategy is an example of *leading practice.* The Health Worker Retention Scheme has focused on the development of incentive packages for a range of health worker cadres to encourage them to remain in rural areas for three years or more.
- Government spending on health has fluctuated over the past decade. The allocation to district health services increased from 19 percent in 2004 to 24 percent in 2007, and remained stable in 2008 and 2009. External donor funds to the health sector (partly administered through a health sector System Wide Approaches (SWAps)) accounted for the increase on per capita spending on health since 2003. Concerns about financial mismanagement resulted in a significant withdrawal of donor funds in 2009. Large amounts of additional external resources have been mobilised for the national AIDS response, especially through PEPFAR and the Global Fund. Some of these resources have been channelled to health system strengthening and the provision of integrated sexual and reproductive health services, especially through support to Prevention of Mother to Child Transmission (PMTCT) services.
- The abolition of use fees in 2006 is reported to have resulted in increased staff–patient contact time, increased drug consumption and increased use of health facilities.

<u>Programme review</u>

- Research studies from Zambia and the region suggest that investments in PMTCT programmes can lead to improved antenatal care attendance. Programmatic interventions relating to PMTCT in Zambia provide good examples of service integration and continuity of care, as well as the channelling of resources to improve outreach, quality of care and community mobilisation. PMTCT programmes, therefore, provide a good example of *leading practice* from Zambia.
- United Nations (UN) agencies have played a key role in facilitating stakeholder collaboration and in providing technical support for equitable delivery of effective sexual and reproductive health services.
- Non-governmental organisations have played an important role in extending sexual and reproductive health services to underserved populations, including rural populations, mobile populations, young people and people with disabilities. They have also spearheaded innovative practice and operational research.

<u>Stakeholder engagement</u>

- The 2005 Health Services (Repeal) Act abolished a number stakeholder structures and redefined the role of Neighbourhood Health Committees as 'advisory'. The effect of these changes has yet to be evaluated.

- There are some concerns that there is an "advocacy gap" within civil society due to limited skills and capacity, funding challenges and limited constituency consultations. However, the overall governance environment is conducive to civil society engagement, and there are a number of emerging initiatives relating to voice and accountability, service delivery monitoring and budget advocacy.

Additional themes

- Female education is a key variable affecting access to maternal health and family planning services. Within the Zambian education sector, there have been marked improvements in school enrolments and a reduction of gender differentials. This has been associated with greater investment in staff recruitment and school construction, the abolition of primary school fees and an increase in pupil enrolment.

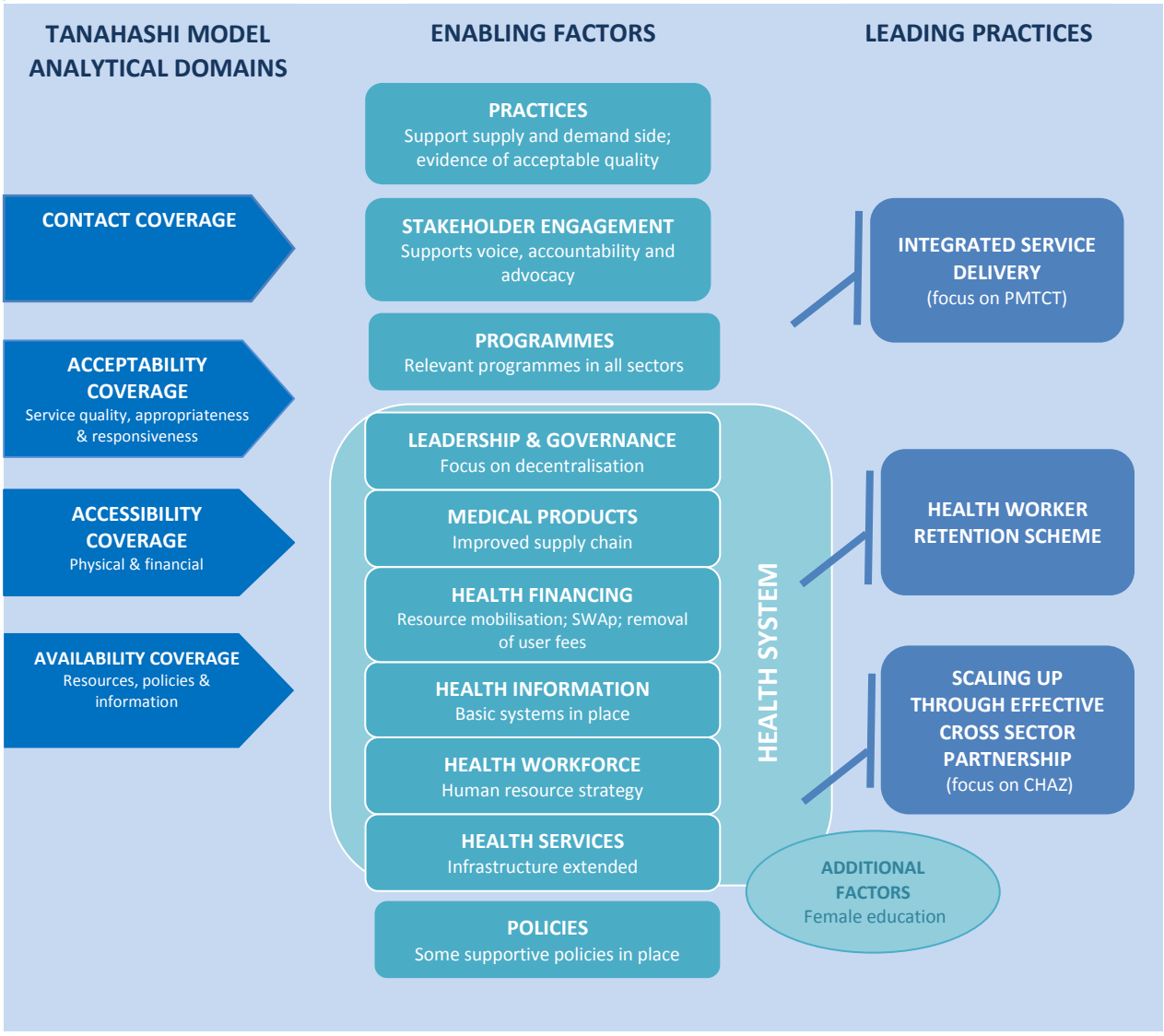
Conclusion and Recommendations

It appears that the answer to the specific research question for this study does not lie in a single enabling factor or leading practice. Rather, the explanation for Zambia's achievements in equitable provision of antenatal care and family planning services since 1992 seems to reside in a *cluster* of leading practices and enabling factors (Figure (i)).

We have seen that leading practices relate to effective partnership with faith-based organisations, the Health Worker Retention Scheme, and integrated service provision (with a focus on PMTCT). The effectiveness of these leading practices depends, however, on a number of factors that have contributed to an 'enabling environment'. These factors include: the presence of some supportive legislation and policies; government efforts to extend health service infrastructure and decentralise health sector administration; the ongoing implementation of a Human Resource Strategy; the presence of a satisfactory health management information system; a strengthened supply chain management system; efforts to mobilise additional financial resources and remove of user fees; relevant sexual and reproductive health programmes being implemented by public, private and non-governmental sectors; a relatively supporting governance environment; and some positive supply and demand-side practices. Combined with the leading practices, these enabling factors appear to have contributed to the availability, accessibility, and acceptability of antenatal care and family planning services and, hence, to more equitable and effective service provision.

The creation of an enabling environment for equitable sexual and reproductive health services in Zambia is commendable and the leading practices identified should support learning elsewhere. This study has generated a number of recommendations for other countries seeking to achieve improvements in equitable provision of sexual and reproductive health services. These recommendations relate to: i) building effective cross-sector partnerships by engaging with three different categories of civil society partner; ii) strengthening human resource capacity by building on the lessons learnt from Zambia's Health Worker Retention Scheme; iii) promoting integrated service provision, while mitigating some potential challenges; and iv) the value of systematically analysing availability, accessibility, acceptability and contact coverage to identify enabling factors and opportunities arising.

Figure (i): Case Study Overview: the linkages between the Tanahashi Model, enabling factors and leading practices



1. Introduction

One of the largest challenges in achieving the MDGs has been the persistent issue of inequity in health service provision. Of particular concern has been the uneven access and outcomes relating to sexual and reproductive health services (UNDP 2011a). Whether measuring skilled birth attendance, unmet need for family planning, antenatal care rates or other reproductive health services, there are often striking disparities associated with levels of wealth, urban: rural residence, age and levels of education (*ibid*).

The UNFPA has recently completed a preliminary analysis of Demographic and Health Survey data to identify factors that are most predictive of equity in sexual and reproductive health service coverage through a focus on "leading" and "lagging" countries (Friedman 2011 *draft*). The analysis identified Zambia as achieving higher levels of equity in its provision of services for antenatal care visits and unmet need for family planning compared to other countries in sub-Saharan Africa, such as Nigeria, Eritrea, Chad and Niger. Zambia may, therefore, be a country that can offer leading practices and lessons for advancing more equitable service provision across the region.

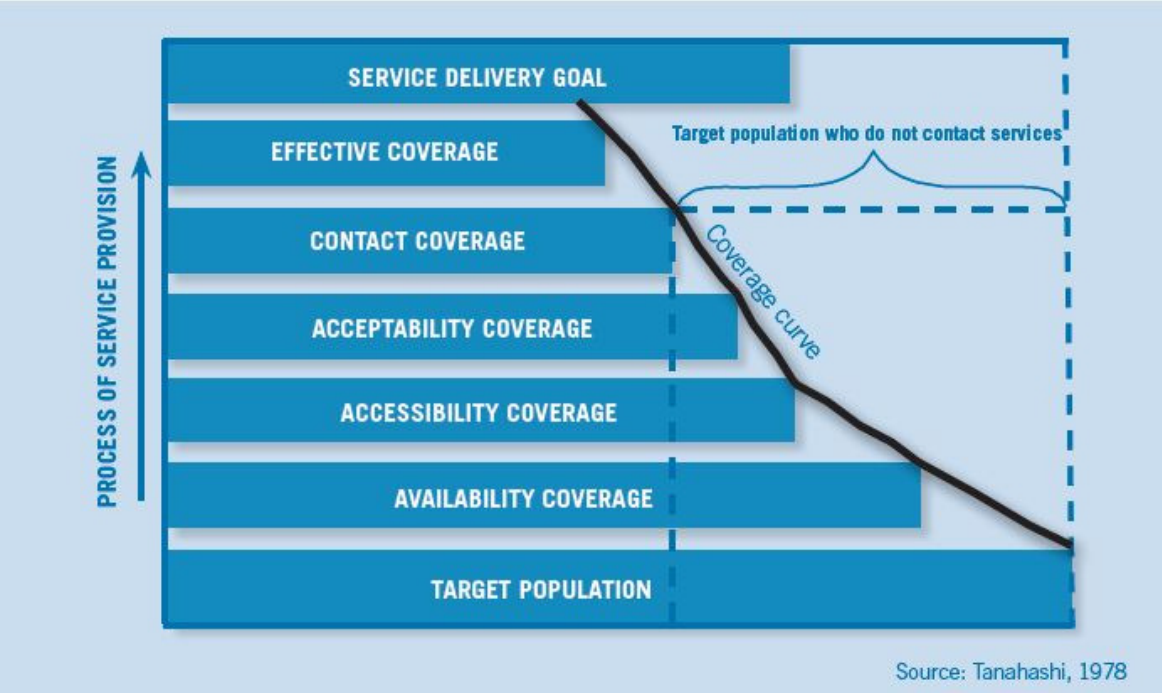
The purpose of this study is to complement the UNFPA's preliminary analysis with a detailed review of Zambia's policies, health system structures, programmes, practices and stakeholder engagement. The principal objective of the study is to identify leading practices and enabling factors (or drivers) that have facilitated Zambia's achievement of high levels of equity in key areas of sexual and reproductive health service provision. It is hoped that the findings and recommendations of this study will assist other countries seeking to provide equitable sexual and reproductive health services for their citizens.

2. Methodology

2.1 Our conceptual framework

The conceptual framework for this study is adapted from an approach developed under the auspices of the WHO to assess equity in access to AIDS treatment programmes (WHO et al. 2010). The approach developed draws on the WHO'S recent work on the social determinants of health (WHO 2008) and examines key themes for building equitable and comprehensive coverage in health systems. These themes (or dimensions) include the principal 'building blocks' of the health system (service delivery, the health workforce, health information, medical products and technologies, health financing, and leadership and governance), as well as dimensions relating to the public-private mix, the policy context, programme alignment and stakeholder engagement. The conceptual framework underpinning the approach (see Figure 1) is based on the Tanahashi Model of effective health service coverage (WHO et al. 2010; Tanahashi 1978).

Figure 1: The Tanahashi Model of Health Sector Coverage



In recent years, the World Bank and UNICEF have built on the Tanahashi model to analyse health sector bottlenecks and develop the 'Marginal Budgeting for Bottlenecks' (MBB) approach for costing health sector strategies (Carrera 2010).

As indicated in Figure 1, the Tanahashi model focuses on four domains of equity in access to health services that finally determine the level of effective coverage,[1] namely: availability coverage;

[1] In the Tanahashi model, effective coverage represents the proportion of the population in need of health services who ultimately receive an actual intervention

accessibility coverage; acceptability coverage and contact coverage. The WHO et al.'s 2010 publication on assessing equity in health systems identifies a number of themes that need to be considered in assessing the four domains to assess equity in reproductive health services. These themes are summarised in Table 1.

Table 1: Summary of recommended assessment themes for each analytical domain of the Tanahashi Model

Analytical Domain of Tanahashi Model	Recommended assessment themes2
Contact coverage	Measures the proportion of the population that have had contact with a service provider. For some services (such as antenatal care) this may also extend to continuity of coverage.
Acceptability coverage	Includes non-financial factors such as culture, belief, religion, gender, and related practices. Extends to health system responsiveness, quality of care (including prompt attention, choice, quality of basic amenities and social support) and client satisfaction. May also extend to communication and provision of appropriate information.
Accessibility coverage	The two main dimensions include physical access (distance or travel time to a health care provider) and financial access or affordability. Out of pocket health expenditure can be used as an indicator of financial barriers to access. Can extend to social accessibility (including issues such as stigma, discrimination, class, status and social exclusion).
Availability coverage	The resources available for delivering services, including for example the number and density of health facilities and personnel; the availability of drugs, equipment etc. Can also extend to the policy context and the availability of reliable data to inform resource allocation.

The assessment themes described in Table 1 have then informed this study and have formed the basis of our analysis. In presenting the findings of the study, we have followed the general hierarchy of the Tanahashi Model by first reviewing the case for effective coverage of sexual and reproductive services, then examining data relating to contact coverage and acceptability coverage, and finally undertaking a detailed review of themes relating to accessibility and availability coverage.

2.2 Data collection methods

The data for this study have been derived from a comprehensive desk review completed between December 2011 and January 2012. The documents reviewed were those available in the public domain and were accessed either online or through key informants. Although Zambia's last Demographic and Health Survey (ZDHS) was published in 2007 and the last Sexual Behaviour Survey was published in 2009, the research team were fortunate in that a number of publications were released in 2011 that proved invaluable sources of information and data for the study. These publications included Zambia's 2011 Human Development Report, the 2011 country report on progress towards the MDGs, and the Sixth National Development Plan (2011-2015).

[2] Source: WHO et al. 2010

The comprehensive desk review was supplemented by a small number of key informant interviews that were used not only to identify additional sources of information, but also to assist in the interpretation and validation of findings, and to ensure leading practices were endorsed by stakeholders at country level (see Annex E).

2.3 The research questions

The themes identified in Table 1 have informed the general research questions underpinning data collection. An initial review of the supporting evidence for equity in effective provision of sexual and reproductive health services in Zambia suggested that over the past two decades, the principal areas of success in equitable service provision have related less to skilled birth attendance, and more to antenatal care and satisfying the demand for family planning services. This observation led to a narrowing of the specific research question for the study to: how has Zambia maintained high levels of equity in antenatal attendance, and made progress in satisfying the demand for family planning in rural areas since 1992, despite the challenges and 'shocks' of the resource and human development environment? (For a further explanation of the determination of the specific research question see Section 4).

2.4 Definition of health equity

Equity is considered to be one of the basic requirements of the Primary Health Care approach (WHO 1981). Over the years, equity in health has been conceptualised and defined in many ways, since its principles derive from the fields of philosophy, ethics and economics, as well as medicine and public health. Common to most definitions of health equity is the idea that certain health differences (most often referred to as 'inequalities in health') are unfair or unjust (Macinko & Starfield 2002). However, it is helpful to make a clear distinction between the concepts of health equality and health equity. For the purposes of this study, health *inequality* has been regarded as a generic term used to designate differences, variations, and disparities in the health achievements of individuals and groups, while health *inequity* has been used to refer to those inequalities in health that are deemed to be unfair or stemming from some form of injustice (see Kawachi et al. 2002).

Studies in health equity often make a distinction between two forms of health equity, namely vertical equity (preferential treatment for those with greater health needs), and horizontal equity (equal treatment for equivalent needs) (Macinko and Starfield 2002). The focus of this study has been on horizontal equity.

In order to explain the presence of health inequities, many authors have attempted to determine the pathways by which inequities in health come to be, or are perpetuated. The most common theories of health equity refer to the role of socioeconomic status measured by education, occupation, and/or income. Other explanations involve social discrimination based on gender or race/ethnicity. Proposed pathways deriving from these theories tend to focus on the environment in which people live, including living conditions and the distribution of income (Macinko & Starfield 2002). Other hypothesised pathways involve the political and policy context, including the extent of primary care, the geographic distribution and mix of health services, the fairness of health financing, social policies and political, social, and economic relationships (*ibid*). Several authors point to the importance of complex pathways that act in concert to exacerbate or propagate health inequities, with the relative weight of different components varying between population groups (Kawachi, et al 2002; Macinko & Starfield 2002). In the course of this study we have mainly focused on the 'social stratifiers' of wealth, education and urban/rural setting. However, in identifying enabling factors and leading practices, we have considered the main elements of the pathways described above.

2.5 The limitations of this study

This study has been based on a brief desk review of available literature, as well as a small number of key informant interviews in Zambia. No primary research has been possible within the timeframes and resources available for this study. Data collection has been limited to publications and grey literature available in the public domain. The findings of this study have, then, been shaped by the information and data contained in the literature. Efforts have been made to validate findings through a small number of key informant interviews and, where possible, triangulation of data sources. Unfortunately, in many cases only single data sources were available, and resources did not permit extensive consultation with stakeholders.

The data available have not always been constructed around the concepts described above or the themes contained in Table 1. In particular, material on themes relating to 'availability coverage' and 'accessibility coverage' has tended to be overlapping in the source literature. These analytical domains have, therefore, presented as a combined section in this report.

3. Zambia: An overview

Zambia is situated in southern Africa with a population of 13,046,508 comprising of 51 percent female and 49 percent male (CSO 2011). There has been a steady increase in the size of the population from an estimated 3 million in 1964. The average population growth rate is 2.8 percent. At the current rate the Zambian population is expected to double in 25 years. The 2007 Zambia Demographics Health Survey (ZDHS) estimates that 50 percent of the total population is aged less than 15 years, and only 3 percent are aged 65 years and over. The regional distribution of the population shows that 61 percent (7,978,274) lives in rural areas, while 39 percent (5,068,234) lives in urban areas. Copperbelt and Lusaka are the most densely populated provinces, with almost 25 percent of Zambia's total population living in these two regions (CSO 2011; CSO et al. 2009).

Table 2: Population distribution by residence

Population group	No. of people	% total
Total Zambian population	13,046,508	100
Population residing in urban areas	5,068,234	39
Population residing in rural areas	7,978,278	61

Source: CSO, 2011

Zambia has been politically stable since its independence in 1964. The country adopted a one-party system of governance in 1972 but reverted to a multi-party political system in 1991. In September 2011, Zambia made a relatively peaceful transition to the presidency of Michael Sata. President Sata's Patriotic Front-led government has indicated its commitment to the main elements of the social sector policies of the previous administration; notably however there is now a particular emphasis on addressing wealth disparities (GRZ 2011a).

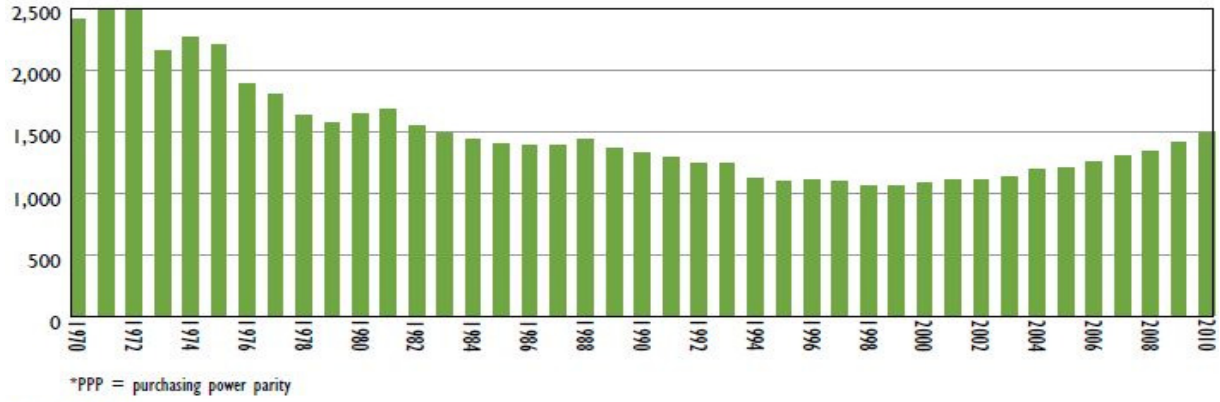
Although the World Bank reclassified Zambia as a middle income country in July 2011,[3] it is still considered to be among the poorest nations globally.[4] At the time of its independence, Zambia had one of the highest per capita incomes in sub-Saharan Africa. This relative prosperity made it possible to develop the country's infrastructure, abolish fees for education and health services, improve access to services and strengthen equity in income distribution in the 1970s. However, by the 1990s, the World Bank observed that Zambia had become one of the poorest countries on the continent (World Bank 1994:10).

Zambia's macro-economic performance declined from the late 1970s up to 2000, and included a period of harsh structural adjustment in the 1990s. Since 2000, macroeconomic performance has improved, mainly due to improved output in agriculture (MoFNP, 2000-2010) (see Figure 2).

[3] Zambia Daily Mail, 14th July 2011.

[4] In a World Bank listing of countries by Gross Domestic Product (GDP) per capita at nominal values (World Development Indicators Database 2010), Zambia ranked 143rd of 190 countries.

Figure 2: Per capita Gross Domestic Product PPP*, Zambia 1970-2010



*PPP = purchasing power parity

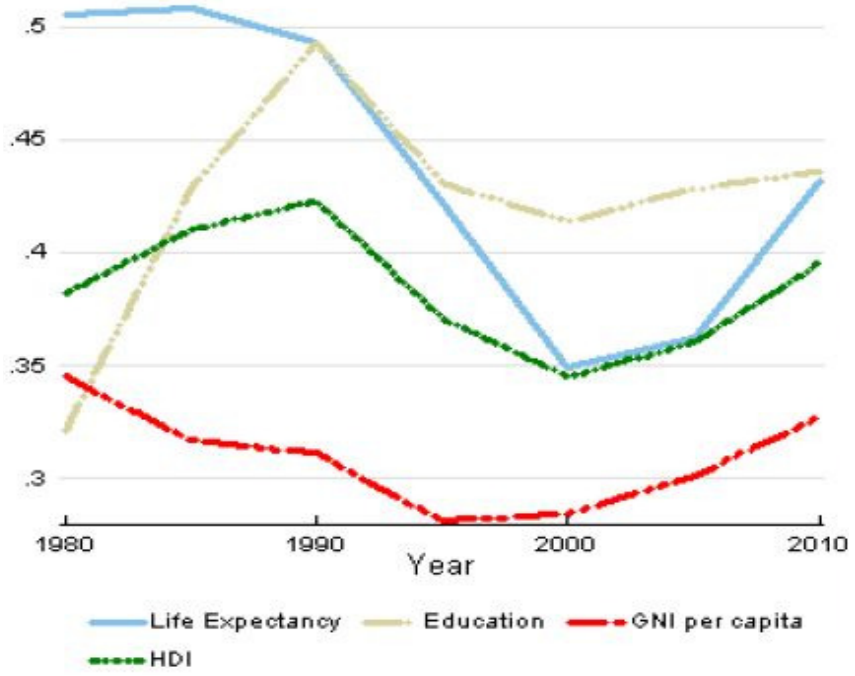
Source: UNDP, 2010

The country has experienced a significant decline in multilateral debt and debt servicing with the 'Highly Indebted Poor Countries initiative'. There is limited evidence that this has benefited allocations to the health sector. There is also some concern about the generation of new debt, as the 2010 national budget anticipates there will be US$400 million in new debt for projects in the country (UNZA et al. 2011).

Zambia experienced a decline in many socio-economic development indicators between 1980 and 2000. However, since 2000, there have been improvements in some of these indicators. The Human Development Index (an aggregate index of gross national income (GNI) per capita, education and life expectancy indicators) rose in Zambia between 1980 and 1990, then fell until 2000, and has since begun to rise, reaching 0.395 in 2010 (Figure 3).[5] With respect to the Human Development Index components, only the education component improved during the 1980s, while all three components deteriorated in the 1990s. Since 2000, all components have improved. Nevertheless, Zambia's recent Human Development Index score of 0.395 (2010) means it is still in the low human development category, with a ranking of 150th out of 169 countries (UNDP 2011b).

[5] In 2010, UNDP introduced several adjustments in the indicators and methodology used to calculate the Human Development Index (HDI) in order to further strengthen its statistical integrity. First, "mean years of schooling" and "expected years of schooling" were used to capture the knowledge dimension instead of the previously used "adult literacy rate" and "gross enrolment ratio." Second, gross national income (GNI) per capita was employed instead of the conventional gross domestic product (GDP) per capita. Third, a geometric mean was used that normalised indices measuring achievements in each dimension, instead of simple arithmetic averages. These methodological improvements resulted in substantial changes that have made comparison with previous HDI figures difficult. For the purpose of analysing long-term trends, this report has use the hybrid HDI used for Zambia's 2011 Human Development Report (UNDP 2011b).

Figure 3: Progress in Zambia's Human Development Index 1980-2010 showing component variables



The 2011 Zambia Human Development Report suggests that a "perfect storm" of shocks on three fronts has been responsible for Zambia's faltering human development since 1980. *First*, inappropriate macroeconomic policies in the 1970s and 1980s caused stagnation and even a decline in economic growth. This were followed by orthodox stabilisation and structural adjustment efforts in the 1990s that led to a sharp increase in unemployment, reduced real wages and a significantly increased incidence of extreme poverty. *Second*, Zambia was at the epicentre of the AIDS pandemic in central and southern Africa. It had an adult prevalence of 23 percent in 1992, 15.6 percent in 2002 and 14.3 percent in 2007 (see CSO et al. 1993, 2002, 2009). The destructive impacts of HIV and AIDS on Zambian society have resulted in Zambia having the third lowest life expectancy at birth in the world (47.3 years in 2010) (UNDP 2011b), and significant losses in per capita gross domestic product, estimated at 5.8 percent in the medium term[6] (Resch et al. 2008). *Third*, Zambia has experienced a systematic erosion of its governance institutions. This has been associated with lower government spending, and is considered to have drastically accelerated the downward spiral in human development between 1993 and 2000 (UNDP 2011b).

The Zambia Human Development Report for 2011 suggests that 64 percent of the population suffers from multiple deprivations at the household level, while an additional 18 percent are vulnerable to multiple deprivations. The Multidimensional Poverty Index (MPI), which is the share of the population that is multi-dimensionally poor, adjusted by the intensity of the deprivations, is 0.325.[7] These figures mean that most households in Zambia lack basic conditions such as safe drinking water, basic health or clean energy sources, and those deprivations are severe half of the cases (UNDP 2011b).

[6] In this study, the medium term refers to the period 2007-2011.

[7] This compares, for example, to the United Arab Emirates which has a very low multidimensional poverty index of 0.002 (UNDP 2010).

Overall poverty in Zambia declined between 1998 and 2006, although with high rural-urban differentials. After 2006, extreme poverty declined in both the rural and urban areas but the ratios between rural and urban areas widened (Table 3). The Central Statistics Office has projected that, with growth rates in gross domestic averaging 5 percent, the country should be able to achieve a 14 percent reduction of extreme poverty between 2010 and 2015, and attain the Millennium Development Goal of halving the number of people living in extreme poverty (MoFNP & UNDP 2011).

Table 3: Progress in Poverty Indicators 1991-2006 [8]

	1991	1993	1996	1998	2002	2004	2006	2015 Target
Proportion of population living in extreme poverty (%)								
National	58	61	53	58	46	47	51	29
Rural	81	84	79	71	52	53	67	40.5
Urban	32	24	44	36	32	34	20	16
Poverty Gap Raton (incidence x depth of poverty) (%)								
National	62.2		51.3			53	34	31.1
Rural	69.7		55.6			56	45	34.8
Urban	46.4		37.9			42	13	23.2

Source: MoFNP & UNDP 2011

While a national decline in poverty is an important achievement, the above data suggest that this may still leave high levels of extreme poverty in some communities, especially in rural areas. In Zambia, extreme poverty is strongly associated with a number of household characteristics, including gender, age and the educational level of the person heading the household (*ibid*). In 2006, extreme poverty stood at 57 percent in female-headed households compared to 49 percent for male-headed households. Households with older people were also more likely to be poor: 66 percent of households headed by people above 60 years lived in extreme poverty compared to 50 percent for households headed by those aged 30-59 years.[9] Additionally, as expected, extreme poverty is influenced by education. In 2006, extreme poverty was highest in households with heads without education (77 percent) and lowest in households with heads with tertiary education (9 percent) (*ibid*).

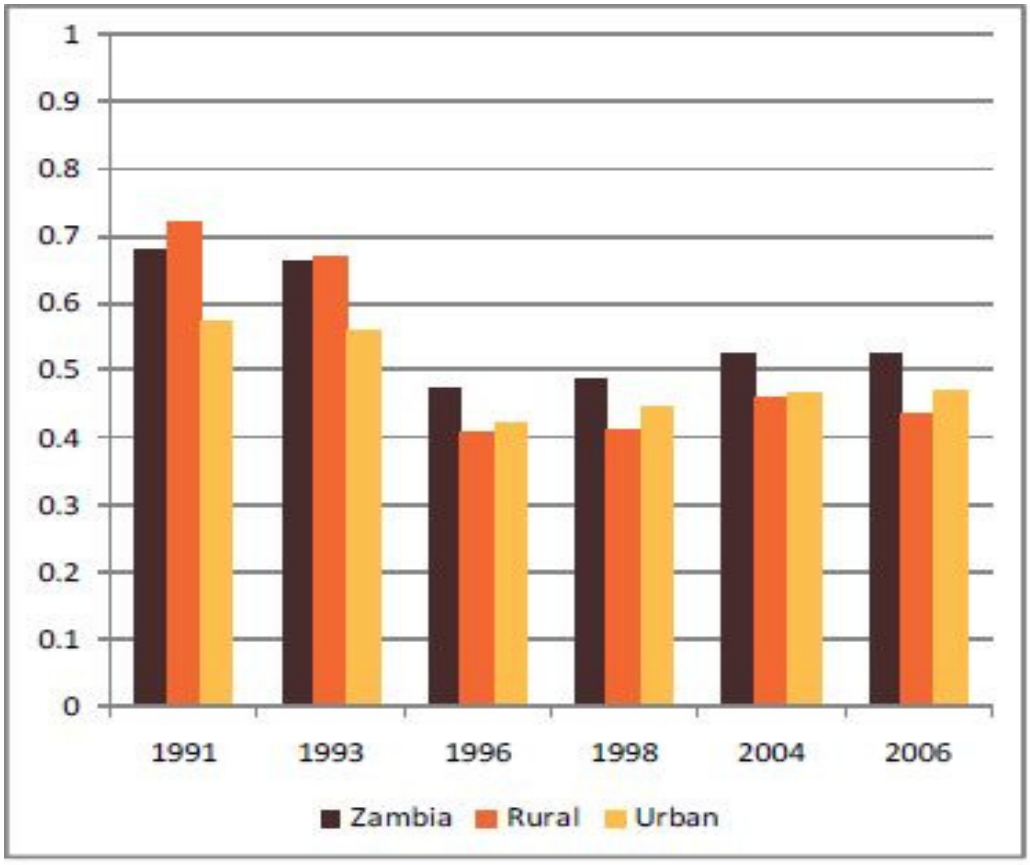
Income inequality in Zambia is very high. The Gini Index in 2006 was 0.526, making Zambia one of the twenty most inequitable countries in the world.[10] Tracking of the Gini Index shows that there was progress between 1991 and 1996, but there was little change between 1996 and 2006 (Figure 4).

[8] As of April 2011, poverty data for 2010 had not been released

[9] Some reports suggest this is partly due to the impact of the AIDS epidemic which has resulted in an additional economic burden on grandparents who take care of AIDS orphans, as well as lack of social protection provision for older people (CHG 2004; Kakwani & Subbarao 2005).

[10] The World Bank uses the Gini Index to measure the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. Source http://data.worldbank.org/indicator/SI.POV.GINI

Figure 4: Gini Index, Zambia 1991-2006



Source: MoFNP & UNDP 2011

The Gender Inequality Index for Zambia is 0.752, ranking it 124th out of 137 countries based on 2008 data. Key indicators bear out this story: only 15 percent of parliamentary seats are held by women; only 26 percent of adult women have a secondary or higher level of education compared to 44 percent of adult men; and female labour market participation is 60 percent compared to 79 percent for men (UNDP 2010).

4. The Case for Equity in Effective Sexual and Reproductive Health Services in Zambia

4.1 Antenatal care

In recent years Zambia has made progress in some key areas of sexual and reproductive health. For example, the Maternal Mortality Rate declined from 729 per 100,000 live births in 2002 to 591 per 100,000 live births in 2007. Under-five mortality rates have also declined over time, from 168 per 1000 live births in 2002 to 119 in 2007, while infant mortality rates (IMR) fell from 95 to 70 per 1000 live births over the same period (MoFNP & UNDP 2011).

Data from the ZDHS 2007 suggest that access to antenatal care in Zambia is very high, with 94 percent of women receiving antenatal care from a skilled provider during their last pregnancy (Table 4). Although some inequities persist in service provision, differentials are relatively low. For example, in urban areas 99 percent of women accessed antenatal care services for their most recent live birth, compared to 91 percent in rural areas; moreover 99 percent of women with a secondary education and above accessed antenatal care services compared to 88 percent of women with no education.

The 2007 ZDHS data suggest that 90 percent of women who accessed antenatal care during the survey period received iron supplements, and there was little variation by urban: rural residence. 81 percent of women receiving antenatal care were protected against neonatal tetanus, with women in the *lowest* wealth quintiles being more likely to have their last birth protected than women in the highest wealth quintiles (84.6 percent protection was achieved in the lowest quintile compared to 79.3 percent in the highest quintile) (CSO et al. 2009).

Table 4: Key indicators for antenatal care received for most recent live births compiled from Zambia Demographic and Health Surveys 1992-2007

Indicator	ZDHS 1992	ZDHS 1996	ZDHS 2001-2002	ZDHS 2007
Percentage of women receiving at least one antenatal care visit from a skilled provider	92.4	95.6	93.4	93.7
By residence				
Urban	98.0	98.7	97.7	99.0
Rural	87.4	93.5	91.1	91.2
By mother's education				
No education	81.0	89.4	83.9	88.0
Secondary and above	100.0	99.4	97.8	99.2
By wealth quintile				
Lowest	-	-	-	89.9
Highest	-	-	-	98.7
Percentage of women completing 4+ antenatal care visits	68.5	71.3	71.6	60.3
By residence				
Urban	-	-	79.6	61.2
Rural	-	-	67.5	58.6
Percentage of women receiving iron supplement	-	-	70.6	90.4
By residence				
Urban	-	-	64.7	90.7
Rural	-	-	73.6	90.3
By mother's education				
No education	-	-	62.7	86.9
Secondary and above	-	-	81.2	92.1
By wealth quintile				
Lowest	-	-	-	88.9
Highest	-	-	-	91.5
Percentage of women protected against neonatal tetanus	80.9	84.6	74.8	81.3
By residence				
Urban	86.8	88.0	78.3	80.2
Rural	75.8	82.2	72.9	81.9
By mother's education				
No education	66.7	77.7	66.5	77.2
Secondary and above	76.7	91.6	72.3	84.3
By wealth quintile				
Lowest	-	-	-	84.6
Highest	-	-	-	79.3

The figures presented in Table 4 show that antenatal attendance has been consistently high in Zambia since 1992, with positive trends in equity differentials.[11] Between 2002 and 2007 there has been good progress in indicators relating to iron supplementation and protection against neonatal tetanus, although there has also been something of a decline in women completing more than four antenatal visits. These trends are, however, consistent with Zambia's adoption of the WHO-recommended 'Focused Antenatal Care' (FANC) approach in 2005 (see Section 5). Recent figures from Zambia's 2010 Annual Health Bulletin suggest that there may also have been a slight decline in first antenatal attendance from 98 percent in 2008 to 88 percent in 2009 (MoH 2011). However overall, available data suggest that Zambia has maintained exceptionally high levels of antenatal care attendance and made considerable inroads in addressing inequities in service provision over the past two decades.

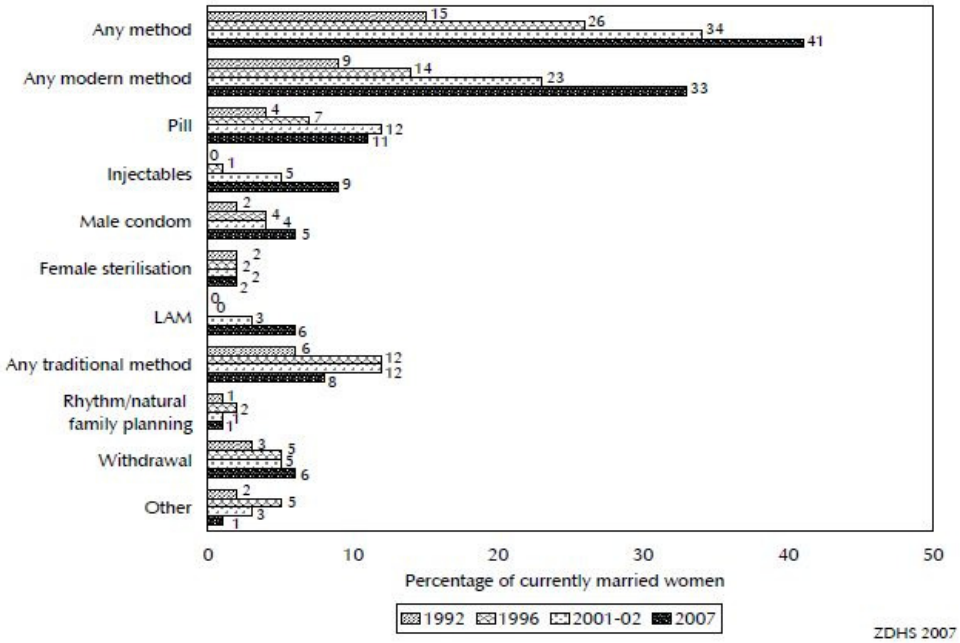
4.2 Family Planning

Knowledge of family planning has been nearly universal in Zambia since 1996. According to the 2007 ZDHS, 97 percent of all women and 99 percent of all men knew about a contraceptive method. The pill, male condoms, and injectables were the most widely known methods.

The use of contraception in Zambia has increased from a rate of 15 percent in 1992 and 26 percent in 1996 to 34 percent in 2001-2002 and 41 percent in 2007. There has also been a corresponding increase in the use of modern methods of contraception from 9 percent in 1992, to 14 percent in 1996 and 23 percent in 2001-2002 to 33 percent in 2007 (CSO et al. 2009).

In 2007, the most commonly used method among currently married women was the pill (11 percent), followed by injectables (9 percent) and the male condom (5 percent) (*ibid*). Figure 5 shows that there was a relatively large increase in the use of pills and injectables over the period 1992-2007. This appears to be related to a scaling up of family planning programmes during this period (see section 6.2).

Figure 5: Trends in contraceptive use among currently married women 1992-2007



[11] The authors have not been able to find any reliable data on antenatal care for the period prior to 1992.

The 2007 ZDHS reported that 27 percent of married women had an unmet need for family planning (17 percent for spacing, and 9 percent for limiting). 28 percent of married women in rural areas had an unmet need for family planning (19 percent for spacing and 9 percent for limiting), compared with 23 percent of urban women (13 percent for spacing births and 10 percent for limiting).

In the Zambia Demographic and Health Surveys, women who indicate that they either want no more children (limiters) or want to wait for two or more years before having another child (spacers), but are not using contraception, are the group identified as having an unmet need for family planning. Women who are currently using a family planning method are considered to have a met need for family planning. Women with unmet need for family planning and those who are currently using contraception together constitute the total demand for family planning. The demand satisfied is determined by dividing the total met need for family planning by the total demand for family planning (ZDHS 2007:110).

For example, the 2007 ZDHS found that 40.8 percent of married women were using contraception (constituting met need). The total demand for family planning among married women was estimated to be 67.2 percent. Consequently, the percentage of demand satisfied was 60.6 percent.

Table 5 below shows trends in unmet need for family planning and demand satisfied using data from successive demographic and health surveys. Although the unmet need for family planning among married women remains typical for the region (Khan et al. 2007), comparison of data over successive demographic and health surveys suggests there may be some positive trends, especially in demand for family planning satisfied (with a notable increase in rural areas between 1992 and 2007).

Table 5: Trends in the unmet need for family planning and satisfying the demand for family planning among currently married women, 1992-2007

Indicator	ZDHS 1992	ZDHS 1996	ZDHS 2001-2002	ZDHS 2007
Percentage of currently married women aged 15-49 with unmet need for family planning	33.4	26.5	27.4	26.5
By residence				
Urban	34.4	26.6	25.5	23.2
Rural	32.6	26.5	28.5	28.2
By mother's education				
No education	34.6	24.4	27.2	27.6
Secondary and above	11.2	17.4	16.4	13.2
By wealth quintile				
Lowest	-	-	-	26.4
Highest	-	-	-	19.0
Percentage of currently married women aged 15-49 with demand for family planning satisfied	31.2	49.4	55.5	60.6
By residence				
Urban	37.7	55.6	64.2	67.5
Rural	23.9	44.1	49.5	56.5
By mother's education				
No education	18.7	41.2	46.0	55.9
Secondary and above	83.9	76.1	79.3	81.4
By wealth quintile				
Lowest	-	-	-	60.5
Highest	-	-	-	74.1

4.3 Scope of this study

Despite achievements in providing antenatal services and satisfying the unmet need for family planning, skilled birth attendance has remained low in Zambia with high urban: rural differentials (CSO et al. 1997, 2003, 2009). The 2007 ZDHS reports that just 46.5 percent of births were attended by a skilled practitioner in the five years preceding the survey. What is more, while 83 percent of women giving birth in urban areas were assisted by skilled personnel, only 31.3 percent of women in rural areas received skilled assistance (CSO et al. 2009). It is notable, however, that skilled birth attendance generally requires good health sector and transport infrastructure, as well as high levels of human resource capacity (WHO 2009); consequently, improvements may be harder to achieve, especially among poorer communities.

The operational and resource environment has been challenging for Zambia since 1992, and women face a number of barriers to accessing health care (see Section 6). Given this context, Zambia's achievements in providing antenatal care and addressing the demand for family planning are impressive. The above analysis suggests, however, that there is a need for a more specific research question for this study:

Specific research question for this study

How has Zambia maintained high levels of equity in antenatal attendance and made progress in satisfying the demand for family planning in rural areas since 1992, despite the challenges and 'shocks' of the resource and human development environment?

Identifying the factors that have contributed to equity in antenatal care and family planning services will, therefore, be the focus of the remaining sections of this report.

A recent review by the Zambian Ministry of Health points to some of the factors that were pivotal in our investigation, especially with respect to antenatal care. In 2010 the Ministry of Health asked programme officers at provincial, district and facility level to reflect on trends in antenatal care attendance and interventions that may need strengthening. The feedback provided (Table 6) gives some insight into local provider perspectives on the factors to be considered (MoH 2011).

Table 6: Provider perspectives on antenatal care service provision[12]

Factors cited for trends in antenatal attendance	Comments on interventions that may need strengthening
■ Inadequate knowledge of mothers regarding focused antenatal care visits ■ Reduced accessibility to some health facilities especially during the flooding season. ■ Long travelling distances to some far flung health facilities ■ Focused antenatal care has contributed to low coverage as some women only attend when the need arises ■ Irregular outreach services compounded by poor male involvement ■ Shortage of trained staff especially at rural health centre level ■ Weak sensitisation programmes at community level on the importance of Safe Motherhood Action Groups (SMAGs) ■ Insufficient information, education and communication at first attendance on the importance of antenatal care services ■ Outreach services have been reduced ■ Lack of continuity scale up of PMTCT services	■ Continuous training and refresher courses for each cadre providing antenatal care is needed, especially on focused antenatal care ■ Sensitisation of pregnant women is necessary on the need to attend antenatal care bookings ■ Safe Motherhood Action Groups need to be scaled up to all districts ■ The quality of antenatal care needs to be strengthened to ensure optimum use of patient-staff contact ■ Community sensitisation meetings through drama action groups should be encouraged ■ Midwifery training needs to be accelerated, ensuring equitable distribution and retention of midwives ■ Strengthening of supplies and equipment to improve quality of services should be encouraged ■ The scale-up of the PMTCT programme needs to be continued ■ Antenatal care services need to be provided in outreach stations and to the integration of services needs to be improved at these sites

The comments presented in Table 6 are based on the recognition of a continuous need to strengthen service provision. They suggest, however, that providers see both supply and demand side issues as important, and that key themes in the effective provision of antenatal care services relate to human resources and outreach, service integration (especially with PMTCT services), as well as community mobilisation and education. These themes will remain central to our investigation.

[12] Source: MoH 2011.

5. Findings I: Contact Coverage

Summary of key findings

In Zambia staff workloads at the health centre level are measured through the health centre staff-patient daily contacts ratio, which assesses the average number of patient contacts for each qualified health worker. All provinces, except for Copperbelt and Lusaka, had a health centre staff-patient high daily contacts ratio of more than 15 from 2005 to 2008; workloads were highest in rural provinces.

Data from the 2007 ZDHS show that visits to antenatal clinics are sustained throughout pregnancy with 60.3 percent of pregnant women completing more than four visits. There are relatively low urban: rural differentials (61.2 percent compared to 58.6 percent respectively).

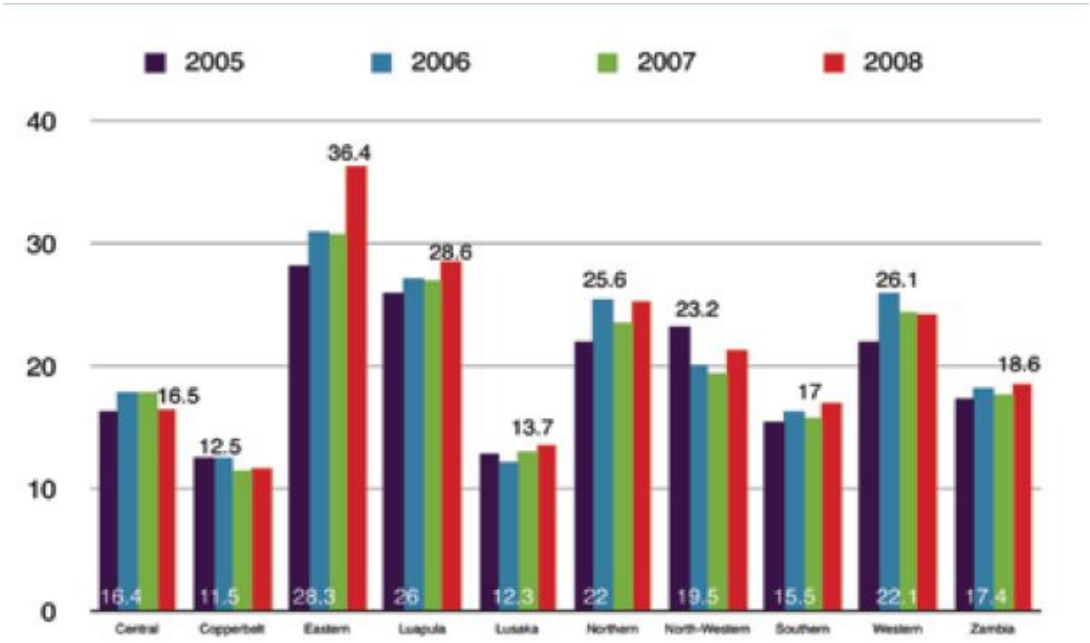
The recent slight decline in the number of antenatal visits completed may be explained by Zambia's recent transition to the WHO recommended 'Focused Antenatal Care' (FANC) approach to service provision.

In keeping with the methodology deriving from the Tanahashi Model, this section reviews the data available on contact coverage and continuity of care.

5.1 Contact coverage

In Zambia, staff workloads at the health centre level are measured through the health centre staff-patient daily contacts ratio, which assesses the average number of patient contacts for each qualified health worker in a given reporting period. Analysis suggests that all provinces, except for Copperbelt and Lusaka, had a health centre staff-patient high daily contacts ratio of more than 15 from 2005 to 2008; however, the situation was worse in rural provinces of Eastern, Luapula, Northern, Western and North Western Provinces (UNDP 2011b). Nevertheless, staff-patient contact ratios appear to have remained fairly constant for each province since 2005 (Figure 6).

Figure 6: Health centre staff-patient daily contact ratio by province, 2005-2008



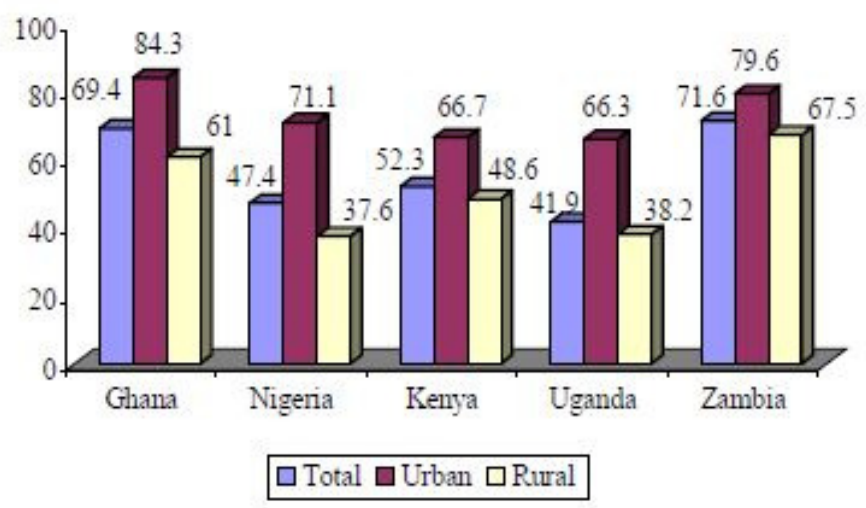
Sources: Health Management Information System Bulletin 2007, 2008. Cited in UNDP 2011b

In Zambia, a significant proportion of antenatal care and family planning services is provided at the primary health care level. Measures of health centre utilisation suggest that there has been a progressive increase in utilisation of health centres over time. Ministry of Health data indicate that nationally health centre outpatient per capita attendance[13] has increased steadily from 0.42 in 2000 to 0.78 in 2005 to 1.11 in 2010 (MoFNP 2005, MoH 2011).[14]

5.2 Continuity of care

Data from the 2007 ZDHS show that, in Zambia, visits to antenatal clinics are sustained throughout pregnancy with 60.3 percent of pregnant women completing more than four visits. Again there are relatively low urban: rural differentials (61.2 percent compared to 58.6 percent respectively). A 2006 study using data derived from the 2001-2002 ZDHS suggests that, in this respect, Zambia has been performing well compared to other countries in the region (Figure 7) (Tawiah 2006).

Figure 7: Percentage of women who make four or more antenatal care visits by type of place of residence and country



Source: Tawiah 2006

Data from the 2007 ZDHS suggest that, in practice, only about one-fifth (19 percent) of women had their first antenatal visit in the first trimester of pregnancy. 73 percent of women had their first visit before six months of pregnancy, and more than half (53 percent) of women attended their first antenatal visit between their fourth and fifth month of pregnancy. The median number of months of pregnancy at the first antenatal care visit was five months. Differentials did not vary much by urban and rural residence (CSO et al. 2009). As indicated in Section 4, recent data also suggest a slight decline in antenatal attendance and women completing four visits (MoH 2011).

These trends may be partly explained by Zambia's recent transition to the WHO recommended 'Focused Antenatal Care' approach to service provision. Until 2005, Zambia's policy guidelines

[13] This is the number of first attendance and admissions at health centre level during a given period of time per the catchment population (MoH 2011)

[14] Unfortunately, available data does not permit these figures to be disaggregated by service type, service user or service location and it has not been possible to access figures on precise volumes of health facility attendance.

recommended at least twelve antenatal care visits for pregnant women (with the first visit taking place during the first trimester; and thereafter visits taking place monthly until 28th week of pregnancy, every two weeks until the 36th week, and then every week until delivery). Since 2005, Zambia has been introducing the Focused Antenatal Care approach (CSO et al. 2009).

Overview of Focused Antenatal Care services[15]

Focused antenatal care services generally entail the following:

- History taking on current complaints, dietary history, reproductive history, tetanus vaccination status, and review of danger signs.
- Screening for malaria, syphilis, and tuberculosis.
- Physical examination including general health assessment, check for sexually transmitted infections, pre-eclampsia, anaemia, and foetal growth.
- Provision of iron folate, anti-malarials, and tetanus toxoid.
- Client counselling on an individual birth plan, complication readiness, nutrition and return dates, and postpartum use of *family planning*.
- Laboratory investigation for haemoglobin, grouping and rhesus factor, screening and testing for syphilis, sickle cell, tuberculosis, hepatitis B (if indicated), and HIV.

In keeping with Focused Antenatal Care approach, Zambia's current service guidelines recommend that the schedule of antenatal visits for uncomplicated pregnancies should be as follows: the first visit should occur by the end of 16 weeks of pregnancy; the second visit is between 24 and 28 weeks of pregnancy; the third visit is scheduled at 32 weeks; and the fourth visit is at 36 weeks.

While this review of contact coverage does not reveal specific enabling factors or areas of leading practice, the overall findings remain consistent with the case presented in Section 4.

[15] Source: Population Council 2008 (emphasis added).

6. Findings II: Acceptability Coverage

Summary of key findings

Although some concerns have been expressed about the consistent quality of antenatal care at district level, a recent study in Lusaka found that the majority of service users were satisfied with antenatal care received.

Over the past decade, significant efforts have been made to integrate reproductive health and HIV services, especially in public health facilities

Administrative and demand side factors may also play a part in explaining antenatal care attendance. An antenatal card can "act as a birth certificate" or as an accepted record confirming the birth and age of a child, and can be used to support school enrolment.

The 2007 ZDHS, knowledge of family planning (including types and benefits,) is almost universal. Family planning knowledge is almost equal in urban and rural areas (99.8 percent in urban areas compared to 98.4 percent in rural areas).

Radio is the most frequent source of family planning messages for both women (39 percent) and men (52 percent).

In keeping with the methodology derived from the Tanahashi Model, this section will examine available information on relevant practices, the responsiveness of service delivery to client needs, quality of care, as well as communication and information. This section should be seen as providing important contextual information for the identification of enabling factors and leading practices in Section 7.

Overview of sexual behaviour and practice in Zambia[16]

The 2009 Zambia Sexual Behaviour Survey reported that the median age of sexual debut among young people aged 15-24 was 19.5 years for males and 17.5 years for females -an increase since 2000 of two years among males and one year among females. Among respondents aged 20-24, 86 percent had experienced penetrative sexual intercourse, a decline of about 5 percent since 2000. On average, the median age at first marriage among respondents aged 20-49 was 23 years for males and 19 years for females. One third of respondents aged 15-49 were single/never-married, about half reported being in a monogamous union, and 6 percent reported being in a polygamous union. Among respondents who reported having had multiple sexual partnerships in the past year, about 87 percent reported having had concurrent sexual partnerships, with higher proportions observed in rural (90 percent) than in urban (81percent) areas. Among respondents who engaged in higher-risk sexual intercourse, only 37 percent of women and 50 percent of men reported that they used a condom at the last high-risk sexual intercourse.

The ZDHS 2007 reported that fertility in Zambia has remained high over the last 15 years with the total fertility rate being 6.5 births per woman in 1992 and 6.2 births per woman in 2007. The report suggests that on average, rural women were having three more children per woman than urban women (7.5 and 4.3 children, respectively). Fertility differentials by education and wealth were noticeable. On average, women who had no formal education and women in the lowest wealth quintile were having more than 8 children, while women with higher than a secondary education and women in the highest wealth quintile were having less than 4 children. Unplanned pregnancies were common: overall, 16 percent of births were unwanted, while 26 percent were mistimed.

[16] Sources: CSO et al. 2009; CSO 2010.

The 2007 ZDHS also reported that domestic violence was occurring across all socioeconomic and cultural backgrounds. Almost half (47 percent) of all women interviewed had experienced physical violence since they were 15 years old. Only 46 percent of Zambian women who had experienced physical or sexual violence had sought help from any source.

Circumcision is practised in some parts of Zambia for traditional, health, and other reasons, and often serves as a rite of passage to adulthood. The 2007 ZDHS found that overall, 13 percent of men age 15-49 and 14 percent of men age 30-49 were circumcised. Circumcision was higher among men with more than a secondary education (16 percent) than among men with less education.

The 2007 ZDHS reported that 4 percent of adults age 15-49 had tested positive for syphilis. Among women, the syphilis rate was 4 percent compared with 5 percent among men. There was no variation in syphilis rates by urban and rural residence. The 2001-2002 ZDHS reported that men with a sexually transmitted infection were twice as likely as women to seek advice from friends, relatives or a shop, rather than a clinic.

According to the 2009 Sexual Behaviour Survey, knowledge of HIV and AIDS is universal in Zambia. Almost all (99 percent) of women and men age 15-49 have heard of HIV or AIDS. 68 percent of women and 56 percent of men know that the risk of mother-to-child transmission can be reduced by a mother taking special drugs during pregnancy. 14 percent of Zambian adults age 15-49 are HIV positive. HIV prevalence in urban areas is twice that of rural areas (20 percent versus 10 percent respectively).

6.1 Acceptability coverage for antenatal care services

In Zambia, the majority of antenatal care services are provided by the public health sector within primary health care settings. The 2007 ZDHS indicates that most pregnant women (87 percent) received antenatal services from a nurse or midwife, while 5 percent received antenatal services from a clinical officer, and 2 percent from a doctor. 3 percent of women received antenatal services from a traditional birth attendant, and 2 percent did not receive antenatal services at all. Review of successive ZDHS suggests that these figures have been fairly consistent, with the percentage of service users receiving care from a nurse or midwife reaching a high of 93 percent in 1996.

The 2007 ZDHS found that the administration of intestinal anti-parasitic drugs was less common than the administration of iron supplementation during antenatal care. It was reported that 36 percent of women took drugs to combat intestinal parasites during their last pregnancy. Differentials varied by, birth order, the mother's age, residence, province, education, and wealth quintile. Women in urban areas (50 percent) were almost twice as likely as women in rural areas (29 percent) to have taken drugs to prevent intestinal parasites during their last pregnancy. More than half of women with more than a secondary education (52 percent) and women in the highest wealth quintile (55 percent) had taken drugs to prevent intestinal parasites.

The 2007 DHS found that three in four women who received antenatal care during their last pregnancy were informed of the symptoms of pregnancy complications. However, women in urban areas were more likely to receive such information than those in rural areas (82 percent compared with 69 percent). The majority of women were weighed (91 percent) and had their blood pressure measured (80 percent). More than half of women (59 percent) had a blood sample taken to test for maternal syphilis, HIV, and anaemia.

Although some concerns have been expressed about the consistent quality of antenatal care at district level (Herbst et al. 2011), a recent study (Menon et al. 2010) of 194 women attending five antenatal clinics in Lusaka found that the majority of service users were satisfied with antenatal care received. 98 percent of women interviewed agreed that the clinic was helpful. The physical aspects

of the clinic were also considered to be satisfactory, 55 percent of women reported being able to find a seat and 43 percent reported that the toilet facilities were satisfactory. 99 percent of women interviewed agreed that they would come for future appointments. Reported satisfaction with nursing care and information provision was also high (Table 7).

Table 7: Satisfaction with antenatal care in five Lusaka clinics[17]

Question	Agree	Don't know / Disagree	Did not respond
The process was simple	185 (95%)	8 (4%)	1 (0.5%)
Administrative staff members were helpful?	183 (94%)	7 (4%)	4 (2%)
The waiting room was pleasant	173 (89%)	21 (11%)	0 (0%)
I was able to find a seat	107 (55%)	79 (41%)	8 (4%)
The toilet facilities were good?	82 (43%)	108 (57%)	4 (2%)
I found the nurses pleasant	170 (88%)	8 (4%)	16 (8%)
I found nurses helpful	173 (89%)	3 (2%)	18 (9%)
I found clinic useful	190 (98%)	0 (0%)	4 (2%)
The nurse gave me information	175 (90%)	8 (4%)	11 (6%)
I will come for future appointments	192 (99%)	0 (0%)	2 (1%)
I will come to the hospital to deliver	191 (98.5)	2 (1%)	1 (0.5%)

The mean time that the women reported waiting was 3.6 hours with a range of 1 to 6 hours. Despite the lengthy waiting time women appeared to committed to clinic attendance. Of the 119 women with children, only 4 (3.4%) had not attended in their previous pregnancy. The main reason women reported attending was to check on their health (42%) though only 14 (7.2%) considered that they had health problems.

Over the past decade, significant efforts have been made to integrate reproductive health and HIV services and to promote continuity of care, especially in public health facilities (Syacumpi et al. 2003). In 2003, the Ministry of Health published protocol guidelines for the integration of prevention of mother to child health services into maternal health services (MoH 2003). Since then, voluntary counselling and testing, PMTCT services, treatment of sexually transmitted infections and initiation of antiretroviral treatment have been integrated in antenatal and post-natal care services (SAfAIDS & YVZ 2011).

[17] Source: Menon et al. 2010.

Snapshot: Integrated service provision[18]

"It has become standard practice at health facility level that when a pregnant woman visits the clinic, she will also be accorded an opportunity to test for HIV and be enrolled for PMTCT where she will receive medication to protect the child from HIV infection. If she is HIV positive and eligible for HIV treatment, a referral system exists; she will be referred for antiretroviral treatment services within the health facility or, if not available at that particular facility, referral is made to another facility for the woman to begin HIV treatment. Although the referral system is still weak as it has no documented follow up mechanisms on whether the referred woman has received the service or not, the practice is however there and medical staff say that it works but must be strengthened in order not to lose people for follow up. In addition, during the antenatal session pregnant women are also screened for sexually transmitted infections, particularly syphilis. If a woman has any sexually transmitted infection, she will be provided with an opportunity to treat the infection. Counselling on the use of condoms is provided to all clients and various demonstrations on condom use, infant feeding and pregnancy care are also provided."

For the 2007 ZDHS, women were asked about barriers to use of services, such as maternal health services. More than half (54 percent) of women reported that they were concerned that there were no drugs available at the health facility. 42 percent of women reported that transportation and distance to the health facility were major problems, while 34 percent reported that getting money for medicines was a problem (CSO et al. 2009). Some community level barriers have persisted, including the knowledge and acceptability of health care services and cultural and traditional barriers that affect health-seeking behaviours (CSO et al. 2009; 2003).

Maimbolwa (2004) suggests that pregnant women often seek the advice of a "social support companion" or *mbusa* during pregnancy. An *mbusa* may provide more traditional forms of support during pregnancy. The author concludes that there are opportunities to mobilise social support networks to provide more positive support to pregnant women, especially in rural areas (see Annex D).

Snapshot: Some traditional practices associated with pregnancy in Zambia[19]

Some *mbusas* are traditional birth attendants but others may simply be women of experience. An *mbusa* does not provide antenatal care per se but she can provide advice and support to a pregnant women. If a pregnant woman or foetus is considered to be physically or spiritually weak, an *mbusa* will give advice on avoiding sickness, witches and evil forces in the environment. A pregnant woman may also be given traditional medicine to widen the birth canal. Sexual relations during pregnancy are discussed. It is a common belief that sexual relations outside of marriage can lead to obstructed labour. If an infidelity is reported, traditional medicines may be used to ensure the pregnancy progresses well.

In consultations to validate the findings of this study, a number of key informants suggested that, in Zambia, administrative and demand side factors may also play a part in explaining antenatal care attendance. It was reported that health centres require antenatal cards to be provided by women who attend for institutional deliveries. It was observed, too, that an antenatal card can "act as a birth certificate" or as an accepted record confirming the birth and age of a child. An antenatal card can,

[18] Source: SAfAIDS & YVZ 2011:25

[19] Source: Maimbolwa 2004.

for example, be used to support an application for school enrolment. It was emphasised that these practices are important in understanding the demand for antenatal care, especially in rural areas.[20]

6.2 Acceptability coverage for family planning services

The 2007 ZDHS reported that more than two-thirds of users of modern contraceptive methods had obtained their contraceptive method from the public sector; mostly government health centres (53 percent). Private medical institutions were the second most common source of contraception (17 percent), while non-medical sources were the least common (13 percent). There had been a shift away from reliance on private medical sources for contraceptive methods. The proportion of users relying on private medical sources had declined from 36 percent in 1992 to 17 percent in 2007. On the other hand, reliance on public sources had increased from 56 percent in 1992 to 68 percent in 2007.

The 2007 ZDHS used information given to service users about side effects and other available methods as a measure of the quality of family planning service provision. The data indicated that 74 percent of contraceptive users were informed of the side effects of the method they used, 73 percent were informed about what to do if they experienced side effects, and 63 percent were informed of other available methods of contraception. About eight in ten women who obtained their family planning method from public sector facilities were informed about side effects, method related problems, and what to do if they experienced side effects. Conversely, only two-thirds of women who obtained their method from the private medical sector were informed of method-related problems and how to address them should they occur.

Annex B provides a timeline of key policy developments and activities relating to family planning. Until the mid-1990s, most women who used modern contraceptive methods used either oral contraceptives or condoms. Interventions sought to expand contraceptive choice, in particular working to overcome long-standing biases against injectables, such as Depo Provera, which had essentially been banned in the country since 1982. Projects in Lusaka and Copperbelt Provinces trained providers, supplied equipment, and incorporated community involvement and outreach (see Annex B). This led to increased uptake of all methods and a scaling up of pilot projects: “The range of methods encouraged women to come forward because now they had a wide range to choose from.” Depo Provera was found to be particularly popular and was finally registered in the country in 2004 (Solo et al. 2005:viii). Figure 5 above (on page 19) shows that there has, indeed, been an increase in the use of injectables from under 1 percent in 1992 to 9 percent in 2007. Pill use has almost tripled from 4 percent in 1992 to 11 percent in 2007. Condom use has more than doubled from 2 percent in 1992 to 6 percent in 2007. The proportion of married women undergoing female sterilisation has remained relatively stable between 1992 and 2007 at 2 percent (CSO et al. 2009).

In general, the 2007 data show that few women in Zambia (less than one in ten (9 percent)) start using contraception before they begin childbearing. Most women have had at least one living child the first time they ever used a method of contraception (29 percent) (*ibid*).

According to the 2007 ZDHS, information on family planning (including its benefits, as well as the different types of methods used) is almost universal. 97 percent of all women and 98.8 percent of currently married women know about at least one contraceptive method. 99 percent of all men and

[20] Source: key informant interviews with CHAZ and UNFPA representatives, 23rd January 2012.

99.8 percent of married men know about any contraceptive method. This knowledge is similar in urban and rural areas (99.8 percent in urban areas compared to 98.4 percent in rural areas). People are more knowledgeable about modern family planning methods than they are about traditional methods. Condoms are the commonly mentioned contraceptive followed by pills and then injectables.

Radio is the most frequent source of family planning messages for both women (39 percent) and men (52 percent). Television is also a common source, with one in five women and one in four men reported seeing a family planning message on television in the 12 months preceding the 2007 ZDHS survey. Newspapers and magazines were the least common source of family planning messages for both women and men (12 and 19 percent, respectively). More than half of women (56 percent) and about four in ten men (41 percent) were not exposed to any family planning messages through radio, television, newspapers, or magazines (CSO et al. 2009).

Exposure to family planning messages was more common among men than women and is also more common in urban areas than rural areas. Among the provinces, respondents in Lusaka and Copperbelt had the highest exposure to family planning messages through any media, while women in North-Western and Western and men in Luapula, Eastern and North-Western had the least exposure. Media exposure also increased with education and wealth quintile for both women and men (*ibid*).

Staff at health facilities were more likely to discuss family planning with women aged 20-39 than with women younger women aged 15-19 or older women aged 44-49. Urban women were somewhat less likely than rural women to visit a health facility and discuss family planning (16 percent versus 18 percent). Women with higher levels of education and those in higher wealth quintiles were more likely to visit a health facility and discuss family planning with a provider than women with less education and those in lower wealth quintiles (*ibid*).

A review of studies conducted on family planning in Zambia suggests that the principal barriers to obtaining contraception include: (1) cultural and provider biases, which marginalise unmarried women, women who do not obtain consent from their male partners, and adolescents; (2) poorly trained service delivery personnel and inefficient delivery systems; and (3) a narrow range of available contraceptives (Centre for Reproductive Rights 2011). Key informants suggested that, over the past decade, there have been concerted efforts by government and NGOs working in partnership to address cultural barriers to the use of family planning and increase male involvement, especially through the deployment of community-based distributors.[21]

Table 8, from the 2007 ZDHS, shows the reasons given by women aged 15-49 years for not intending to use contraception.

[21] Telephone conference with UNFPA staff, 21st February 2012.

Table 8: Reasons given by women (15-49 years) for not intending to use contraception

Percent distribution of currently married women age 15-49 who are not using contraception and who do not intend to use in the future by main reason for not intending to use	
Reason	**Percent distribution**
Fertility-related reasons	54.7
Infrequent sex/no sex	7.9
Menopausal/had hysterectomy	13.4
Low fertility/infertility	22.5
Wants as many children as possible	10.9
Opposition to use	10.5
Respondent opposed	4.9
Husband/partner opposed	4.1
Others opposed	0.1
Religious prohibition	1.4
Lack of knowledge	2.1
Knows no method	1.7
Knows no source	0.4
Method-related reasons	26.2
Health concerns	4.3
Fear of side effects	17.6
Lack of access/too far	0.4
Costs too much	0.1
Inconvenient to use	0.7
Interferes with body's normal process	3.1
Other	4.7
Don't know	1.2
Missing	0.6
Total	100.0
Number of women	752

Source: CSO et al. 2009

As indicated above, efforts have been made to integrate HIV services and treatment of sexually transmitted infections into family planning services over the past decade (SAfAIDS & YVZ 2011). However, in 2005, Solo et al reported that the national AIDS response also threatened to sideline family planning services: "*The factor that had the strongest effect in Zambia, however, was HIV/AIDS... Efforts by government and donors have opened up a dialogue on sexuality, but safer sex is still not the norm. The demands of HIV are so tangible, real, and immediate that family planning has been overshadowed*" (Solo et al. 2005:9).

7. Findings III: Components of Availability and Accessibility Coverage

In keeping with the methodology derived from the Tanahashi Model, this section will examine both the availability and the accessibility of services by examining key features of the policy environment, the health system, sexual and reproductive health programmes and stakeholder engagement.

7.1 The policy framework for effective service delivery

Summary of key findings

Zambia's long-term vision for 2030 aims for "equitable access to quality health care."

Between 1980 and 2005, Zambia ratified a number of international treaties relating to human rights, equity and equitable access to health care services.

Policy in Zambia has, for several decades, recognised the right to health and equitable access to health care. Important health sector reforms were implemented under 1995 National Health Services Act. This Act was repealed in 2005 and has not been replaced, leaving a 'legislative vacuum'.

Many policies relating to the health sector need to be updated and there is a need to focus on implementation (for example of the 2008 National Reproductive Health Policy).

Zambia's long-term vision for 2030 aims for "equitable access to quality health care." This goal has been reflected in Zambia's recent National Development Plans (GRZ 2006, 2011), as well as successive national health strategic plans. Notably, the Fifth National Development Plan (2006-2010) placed considerable emphasis on improving maternal and reproductive health care services and reducing urban: rural inequalities.[22]

In the period 1980–2005, Zambia became signatory to a number of international declarations and conventions that have a bearing on health, including those shown in Table 9 below, although with some qualifications on these commitments.

[22] Unfortunately, these themes do not receive the same emphasis in the Sixth National Development Plan 2011-2015.

Table 9: Ratification of international treaties by Zambia

TREATY	DATE SIGNED / RATIFIED
Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (Convention against Torture)	Adopted 10 December 1984. Entered into force 26 June 1987, acceded to by Zambia 7 October 1998
International Covenant on Economic, Social and Cultural Rights (ICESCR)	Adopted 16 December 1966. Entered into force 3 January 1976, acceded to by Zambia 10 April 1984
Convention on the Elimination of all forms of Discrimination Against Women (CEDAW)	Adopted 18 December 1979. Entered into force 3 September 1981, acceded to by Zambia 21 June 1985
Convention on the Rights of the Child	Adopted 20 November 1989. Entered into force 2 September 1990, acceded to by Zambia 6 December 1991
International Convention on the Elimination of All Forms of Racial Discrimination	Adopted 21 December 1965. Entered into force 5 January 1969, ratified by Zambia 4 February 1972
African Charter on Human and Peoples' Rights	Adopted 27 June 1981. Entered into force 21 October 1986, ratified by Zambia 10 January 1984
Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa	Adopted by the 2nd Ordinary Session of the Assembly of the African Union, Maputo on 13 September 2000. Entered into force 25 November 2005. Zambia included.

Source: Human Rights Watch, 2010

Zambia is also a signatory to the 2000 United Nations Millennium Commitment and the Millennium Development Goals, the 2001 African Union Abuja Declaration on HIV/AIDS, Tuberculosis and other related Infectious Diseases (2000), as well as the Southern African Development Community (SADC) Protocol on Health adopted by the SADC Heads of State and Government on 18 August 1999. The Zambian government has made specific commitments to universal access to prevention and treatment of HIV and AIDS and to services for sexual and reproductive health as set out in the 2006 Maputo Plan of Action on Sexual and Reproductive Health and Rights (Masiye et al. 2008; UNZA et al. 2011).

In keeping with the 1978 Alma Ata Declaration on primary health care, Zambia's post-independence policies have aimed to make health services available to all Zambians at no or minimal cost. In 1992 the government instigated a period of health sector reforms based on the principles that people have the right to access affordable and good quality health care, and that all Zambians have the right to decide the future of their health care system (MoH, 1992, 1996). In 1995 the Medical Services Act aimed to "provide the people of Zambia with equity of access to cost-effective, quality health care as close to the family as possible" (see MoH 2005a:I).

In 1996, an 'essential health care package' of services was defined to make health entitlements clear and to guide prioritisation and allocation of public resources and investments (MoH 1996).[23] During this period, the Central Board of Health (CBoH) also developed and disseminated a 'Citizens' Charter of Rights' to inform the public and clinicians about citizens' rights in relation to health care. These rights include the right of access to a health facility, the right to be attended to and seen by a qualified provider (if available), and the right to be involved in community planning and priority setting through the Neighbourhood Health Committees. Notably, however, the Citizens' Charter has not yet been fully incorporated into policy or legislation (UNZA et al. 2011).

The 1998 Population Policy has been heralded as an important milestone that signalled changing attitudes towards family planning (Solo et al. 2005). The policy highlighted that economic development depended on lowering fertility, that family planning was good for the welfare of the mother and the child, and that information and access to family planning services was a fundamental human right.

In 2005, the National Health Services Act (1995) was repealed to pave the way for efficiency reforms and rationalised health sector management structures. The repeal was a response to a number of issues including (i) the excess expenditures incurred by the government on human resource costs and (ii) the apparent duplication of roles in management structures and (iii) deteriorating health sector performance especially in terms of access, efficiency, effectiveness, quality and equity (MoH 2005). Unfortunately, following the repeal, there has not yet been a replacement of the National Health Services Act and there is growing concern that there is no officially agreed framework for organisation and coordination of health services (UNDP 2011b).

Zambia's National Reproductive Health Policy was approved in 2008 and it covers a number of reproductive health issues and services. The overall goal of the policy is to achieve the highest possible level of integrated reproductive health for all Zambians as close to the family as possible. The key programmes that the policy tries to address include: safe motherhood; male reproductive health; family planning; adolescent health and development; sexually transmitted infections; HIV and AIDS; termination of pregnancy; infertility; and other reproductive health issues such as cervical cancer. At ministerial level there is a Reproductive Health Unit which is responsible for ensuring that this policy is implemented. Its coordination at provincial and district level is in the Provincial Health Office and the District Health Office. It has been noted, however, that implementation of the policy has not yet begun and the policy has not yet been disseminated to all stakeholders (SAfAIDS & YVZ 2011). The 2005 National HIV/AIDS, STI, TB Policy is now under review and there is a growing consensus that linkages to the National Reproductive Health Policy and family planning need to be made explicit (*ibid*).

In short, it appears that Zambia has a legislative and institutional framework that is intended to ensure effective and equitable delivery of health services, as well as the desired coordination of the various levels and actors. However, there is concern that the legislation is inadequate. The 2011 Zambia Human Development Report observes that fourteen laws relating to the health sector were enacted more than fifty years ago, and some are irrelevant to current sector dynamics. Additionally, most new policies and legislation are still in draft form, and there is an apparent disconnect between policy formulation and implementation (UNDP 2011b).

[23] The Sixth National Development Plan 2011-2015 indicates that the essential package of services will be re-defined in the current planning cycle.

7.2 The Health System

Summary of key findings

Since health sector reforms were commenced in 1992 efforts have been made to extend health sector infrastructure to decentralised levels. In 2011 there were 231 health posts in Zambia, compared to 20 in 2006. However, it has been estimated that there is a need to build a further 350 health posts to meet the government's target of one health post within 5 km of every rural household.

The Churches Health Association of Zambia (CHAZ) is the second largest provider of health care services in Zambia. It provides a third of all health care services and focuses on rural areas. The government's long term partnership with the Association is an example of leading practice in scaling up service provision to extend quality health care services to rural areas.

The human resource crisis in the health sector remains a challenge. However, Zambia's Health Worker Retention Scheme is an example of leading practice in developing incentive packages for a range of health worker cadres to remain in rural areas for three years or more.

Government spending on health has fluctuated over the past decade. The allocation to district health services increased from 19 percent in 2004 to 24 percent in 2007, and remained stable in 2008 and 2009. External donor funds to the health sector (partly administered through a health sector SWAp) accounted for the increase on per capita spending on health since 2003. Concerns about financial mismanagement resulted in a significant withdrawal of donor funds in 2009. Large amounts of additional external resources have been mobilised for the national AIDS response, especially through PEPFAR and the Global Fund. Some of these resources have been channelled to health system strengthening and provision of integrated sexual and reproductive health services, especially through support to PMTCT.

The abolition of use fees in 2006 is reported to have resulted in fees has resulted in increased drug consumption, increased staff–patient contact time, as well as increased health facility use.

The World Health Organisation's six core 'building blocks' of the health system include: service delivery, health workforce, health information, medical products and technologies, health financing, and leadership and governance (WHO 2007). These building blocks provide a useful framework for analysing themes of availability, accessibility and effectiveness of the health system. This section reviews our specific research question in terms of these building blocks.

Service delivery decentralisation has been a key feature of Zambia's health sector reform programme since 1992. The structure of public health services comprises: health posts, health centres, level one hospitals, level two hospitals and level three hospitals (GRZ 2006). Successive National Health Strategic Plans describe the framework within which both public and private service delivery is organised over a five-year period. The details of the five (5) levels of health care are summarised in Table 10, together with the status of the ongoing infrastructure expansion programme.

Table 10: Overview of health sector service delivery structures in Zambia

Health service structure	Description	Infrastructure status[24]
Third level hospitals specialist and teaching hospitals	▪ Cater for a catchment population of approximately 800,000 and above, and have sub-specialisations in internal medicine, surgery, paediatrics, obstetrics, gynaecology, intensive care, psychiatry, training and research. ▪ Referral hospitals for second level hospitals.	There are currently 6 third level hospitals located in Lusaka and the Copperbelt.
Second level referral hospitals (Provincial and General Hospitals)	▪ Cater for a catchment population of between 200,000 and 800,000 people, with services in internal medicine, general surgery, paediatrics, obstetrics and gynaecology, dental, psychiatry and intensive care services. Referral hospitals for first level institutions, including the provision of technical backup and training functions.	There are twenty 22 second level hospitals
First level referral hospital (District Hospitals)	▪ Cater for a catchment population of between 80,000 and 200,000 and provide services such as medical, surgical, obstetric services and all clinical services in support of health centre referrals.	There are currently 72 first level hospitals, with a further 8 scheduled for completion and 19 planned for construction in the period 2011-2015
Health centres	▪ Include urban health centres serving a catchment population of between 30,000 to 50,000 people; and rural health centres, serving a catchment area of 29km or a population of 10,000 people. ▪ Staffed by nurses and other ancillary staff and (where available) clinical officers. ▪ Designed to be the primary level attendance point for patients and to provide basic preventive and primary care.	There are currently 1,294 health centres (compared to 1,210 in 2006). Of these 1,029 are rural health centres and 265 are urban health centres The government aims to improve and expand 250 existing health centres by 2015
Health posts	▪ The lowest levels of health care, built in communities far away from health centres.[25] ▪ Cater for a catchment population of approximately 500 households or 3,500 persons in rural areas; and 1,000 households or 7,000 persons in the urban settings. ▪ Intended that, for sparsely populated populations, there will be a health post within 5km of all households.	There are currently 231 health posts (compared to 20 in 2006). It is estimated that a further 350 health posts are needed to meet the required distribution of facilities

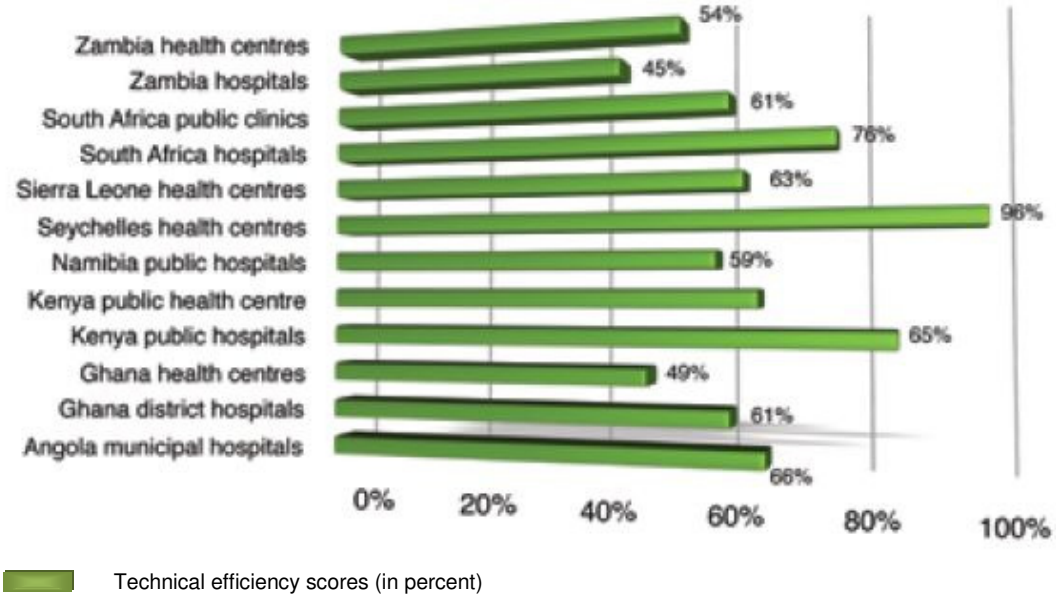
Zambia's 2011 Human Development Report estimates that Zambia's public health facilities are only operating at around 50 percent efficiency, which is rather low compared to other countries in the

[24] Source GRZ 2011b and Africa Health Workforce Observatory. 2010.

[25] It has not been possible to establish from the available literature precisely how health posts are staffed or the extent of service offered.

region (see Figure 8). Figure 8 draws on data from a study by J. M. Kirigia and A. J. Diarra-Nama (2008) which focuses on hospitals and health centres. The study measures health facility efficiency as a composite of: the scope for increasing provision of health services using financial resources allocated; the scope for transferring inputs from over-resourced to under-resourced health facilities; the scope for reducing inefficiencies relating to misallocation of resources; the scope for rationalising services by levels of care; and the effects of channelling donor funds through vertical programmes.

Figure 8: Review of health facility efficiency studies in selected African countries



Source: UNDP 2011b

Consequently, while Zambia's health sector reform programme and efforts to expand health sector infrastructure are likely to have been *enabling factors* in equitable provision of antenatal care and family planning services, the data suggest they do not in themselves provide examples of leading practice in the region.

Other health care providers:

Health care in Zambia is provided by government institutions, the Churches Health Association of Zambia (CHAZ) and other non-governmental organisations, the mining companies, parastatal organisations (such as regulatory bodies), private clinics and traditional healers.

After the government, CHAZ is by far the main provider of health care services in Zambia. It is estimated to provide 30 percent of all health care services. CHAZ's efforts are particularly focused on service provision in rural and hard-to-reach communities, and in some rural areas it is estimated to provide 50 percent of health care services (Herbst et al. 2011).

CHAZ is an umbrella Christian organisation that represents 135 member institutions (including mission hospitals, rural health centres, and community-based initiatives). Its services are fully integrated into the public health sector and, for several decades, the government has operated a form of public-private partnership with CHAZ. Under this agreement, the Ministry of Health provides a number of trained staff for CHAZ, pays salaries, and funds some service related activities. For its part, CHAZ complements government efforts in health care delivery; it provides additional

infrastructure and skilled human resources while managing operations through member institutions in accordance with government standards and the essential health care package. CHAZ submits data on service delivery using the national Health Management Information System.

CHAZ has been operating at scale in rural areas for a number of years (Berman et al. 1995).

> "The missions [CHAZ] run a network of non-profit hospitals and clinics in the more peripheral, poorer rural areas away from the line-of-rail. With limited government funding, supplemented by donations and fees, they are an important source of basic, and apparently good quality health care in many deprived areas of the country. Because of their locations, their patients tend to be more likely to be poor than is the case with other formal providers." (Berman et al. 1995:2)

CHAZ's operations have long extended to antenatal care and family planning services in rural areas. Within the timeframe of this study it has not been possible to disaggregate the proportion of national antenatal care services provided under CHAZ over the past two decades, although this is likely to be proportionate to the general level of health care services provided by the organisation. As a highly-performing principal recipient of several Global Fund grants in Zambia, CHAZ has provided Prevention of Mother to Child Transmission (PMTCT) services as part of integrated sexual and reproductive service provision. The figures relating to implementation of its Round 1 and Round 8 grants give some indication of the scale of its operation. For example, under the Global Fund Round 1 grant, CHAZ supported 38 health facilities in providing PMTCT services and provided antiretroviral therapy for PMTCT to 5,296 women between September 2003 and June 2008. Under the Round 8 Global Fund grant, CHAZ provided antiretroviral therapy to 2,524 for the purposes of PMTCT between January 2010 and March 2011.

Provision of family planning services has been somewhat shaped by the values of the member organisations (which include Roman Catholic mission hospitals). Nevertheless, CHAZ provided around 2 percent of modern contraceptive coverage nationally between 2002 and 2007 (CSO et al. 2009). Notably, this is a slight decrease from the 5 percent national coverage reported in 1996 (CSO et al. 1996).

It appears, then, that CHAZ has been an important partner in providing antenatal and family planning services at scale over the past two decades. Its ability to mobilise and administer additional financial and human resources within the context of the essential health package appear to have been key factors in maintaining and promoting key health services, especially in rural areas. The long-term partnership between the government and the faith-based non-governmental sector provides an important example of leading practice from Zambia.

Leading Practice: the Churches Health Association of Zambia and scaling up through effective cross sector partnership[26]

CHAZ was formed in 1970 as an interdenominational organisation representing both Catholic and Protestant Medical Committees. It comprises a Secretariat, 4 Provincial/regional program offices, 144 health facilities including hospitals, health centres, health posts, and 11 health training schools. CHAZ facilities are found in 56 out of the 74 districts in all 9 provinces of Zambia, with particular prominence in rural areas. Currently, CHAZ is the second largest provider of health care services in Zambia after the government.

CHAZ acts on behalf of the 16 Christian churches (Catholic and Protestants) and church based community organisations that share its vision, mission and core values. Registered members operate on a not-for-profit basis and within the policy framework of the Ministry of Health.

CHAZ complements government efforts in the delivery of quality health care by bringing to the health sector additional human, financial and material resources (including drugs and supplies) to the health sector. CHAZ believes that quality health services (both curative and preventive) should be available to all, including the poor and the underserved in rural and hard-to-reach areas of Zambia.

CHAZ is guided by its core value of partnership and innovation for sustainability, and collaboration with diverse stakeholders is regarded as an inseparable part of how the organisation does its work. CHAZ has a multiplicity of stakeholders and partners. These partners are drawn locally and internationally and include the government, (through the Ministry of Health), cooperating partners (CPs), like-minded sister organisations in Africa (known as Christian Health Associations (CHAs)), other civil society organisations and implementing partners.

CHAZ currently has a Memorandum of Understanding with the Zambian government through the Ministry of Health. Among other benefits, the Memorandum guarantees government's support to CHAZ in the form of financial, material, equipment, human resources. Currently, the government is the largest single funder to CHAZ, funding salaries for health workers and operational costs. As the second largest provider of health care services in Zambia, CHAZ is a significant partner in the work of Ministry of Health and plays a formal role in the planning cycles of the Ministry at all levels, including the community, the district and the provincial levels. CHAZ shares data with the Ministry of Health and is fully transparent about the resources available to it. At the national level, CHAZ is part of key Technical Working Groups, as well as the Sector Advisory Group (SAG). In addition, by virtue of its position as a Principal Recipient under the Global Fund, CHAZ has representation in the Country Coordinating Mechanism in Zambia. The involvement of CHAZ at all these structures ensures that the association is an important contributor to government policies and their implementation.

Some key lessons from the partnership arrangement between CHAZ and the government include:

- CHAZ's Christian heritage means it is a highly respected and influential partner in Zambia. CHAZ takes pride in providing complete health care that focuses on spiritual, emotional, mental and physical well-being. "We provide our services with a high sense of calling"[27] and this has become associated with quality of care and integrity. This means that CHAZ brings considerable moral

[26] Source: http://www.chaz.org.zm/ and key informant interviews

[27] Source: key informant interview with CHAZ representative 23rd January 2012.

authority to partnership agreements and resource allocations.

- Transparency has been a key theme in maintaining the long-term partnership with the government. National Health Strategic Plans and District Health Action Plans are the basis of joint planning and resource allocations. "Whatever resources are sent to the mission hospitals, Provincial Heath Directors are informed."[28] Government allocations to CHAZ are reflected in the Government 'Yellow Book', so the information remains in the public domain. Notably, CHAZ does not accept government funds for the operations of its Secretariat "because CHAZ would like to maintain its autonomy".[29]
- CHAZ health facilities and hospitals do provide family planning. Only the Catholic mission hospitals do not. In these cases, CHAZ makes arrangements with District Health Management Teams to provide additional family planning services with support from CHAZ, so that "churches are not seen to be dictating which services communities receive".[30]

The health workforce

Zambia, like many developing countries in the sub-Saharan region, faces a critical shortage of health workers, a situation that was described as a disaster in 2004 (MoH 2004). The human resource shortage has been caused by a number of factors, but the Ministry of Health has observed that the most prominent ones are: unattractive conditions of service (pay, allowances and incentives); poor working conditions (facilities, supplies and equipment); weak human resource management systems; inadequate education and training systems, including inconsistencies in implementing training policies for continuing medical education; and attrition associated with HIV and AIDS (MoH 2005b).

Inadequate staffing levels have meant health facilities have been understaffed, with the situation being most acute in rural areas (*ibid*). Shortages of human resources for health clearly constitute a blockage in the provision of effective and equitable sexual and reproductive health services. In order to address the inequitable distribution of health workers, the government initiated the Zambia Health Workers Retention Scheme in 2003. Initially developed as a pilot for medical doctors, the success of the scheme meant that it was scaled up to other categories of health workers from 2007 (see Annex F for further details of the incentive packages for each cadre of health worker). By the end of 2009, the scheme had a total of 860 health workers comprising different types of health cadres. In addition, training of health workers was increased, with student enrolments for the 2008/2009 intakes growing by 75 percent nationwide (GRZ 2006).

Key informants suggested that recent initiatives relating to task shifting and increased use of community-based distributors may also have helped to address human resource challenges in rural areas, and contributed to outreach of family planning services, and the promotion of antenatal care and PMTCT services.[31]

[28] *ibid*
[29] *ibid*
[30] *ibid*
[31] Telephone conference with UNFPA staff, 21st February 2012.

Leading practice – Zambia's Health Workers Retention Scheme[32]

From its inception in 2003, the aim of the Health Workers Retention Scheme was to attract and retain qualified health professionals, especially in rural areas. The Scheme has been supported by a number of Cooperating Partners working in collaboration with the Ministry of Health, including the Royal Netherlands Embassy, USAID, the European Union and the UK's Department for International Development.

The pilot that was commenced in 2003 proved highly successful. It was based on a mix of monetary incentives, housing rehabilitation, car loans and facility improvements (such as medical equipment, improved water and sanitation and installation of solar panels) and required the medical practitioner to make a contractual commitment for three years. A mid-term review of the pilot scheme in 2005 found that, from a baseline of 15 doctors in 2003, a total of 88 doctors had been successfully retained in rural areas for the contract period, 65 percent had renewed for a second three year term, and 35 percent had commenced post-graduate training (Mwale et al. 2010). It was also found that there were high levels of job satisfaction, while 86 percent of sites reported reduced referrals to provincial hospitals, and 92 percent reported an expansion of services (including emergency obstetric care). A further review found that by 2008, the number of doctors retained in rural areas had increased to 94 (*ibid*).

As a result of the mid-term review, an expansion plan was commenced in 2007 for incremental inclusion of nurse tutors, clinical officers, nurses and environmental health technicians. The expansion plan built on lessons learnt from the pilot phase and included refinement of management supervision and performance management systems, inclusion of in-service and on the job training opportunities, and establishment of a national coordination mechanism. The overall aim of the expanded retention scheme was to retain 1,650 health workers by 2012. The expanded scheme has yet to be fully evaluated but there is general consensus that the scheme is making a positive impact and that, with appropriate support, health workers are willing to work and relocate to rural and remote areas. The Ministry of Health has reported that, as a result of the scheme, 860 health workers had been retained by the end of 2009 (GRZ 2011b). In addition, the expanded scheme has been especially successful among tutors and lecturers allowing a number of provincial training schools to be re-opened and the nurse deficit to be further addressed.

Lessons learnt from implementation of the expanded scheme include:

- The scheme appears to have a differential impact on different cadres of health workers suggesting that the factors affecting motivation of health cadres in remote and rural areas affect various cadres differently.
- Non-involvement of local district administrators has partly contributed to the delay in the expansion of the scheme.
- There is a need to establish a comprehensive monitoring and evaluation scheme to assess both the qualitative and quantitative benefits of the retention scheme
- Weak human resource management systems can negatively affect the performance of health worker retention programmes e.g. through delays in payments and placement on payroll.
- Failure to harmonise various funding sources can lead to inequity in health worker earnings.

[32] Sources: Mwale et al. 2010; UNDP 2011b

Health information

By 2001, the Ministry of Health had successfully established a unified Financial, Administration, and Management System (FAMS) and the national Health Management Information System (HMIS) to monitor health inputs, outputs, and outcomes data. By 2001, FAMS and the HMIS were operational in all districts and some lower-level facilities and were being extended to the hospital sector (Chitah and Bossert 2001).

A recent review of country health information systems found that, in Zambia, the basic foundations of a good health information system (i.e. a policy, a comprehensive plan, coordination mechanisms, investment, and a health information workforce) are in place. Nevertheless, poor availability and quality of data continue to hamper the ability to monitor progress and performance against core indicators and targets. This includes significant challenges associated with record keeping and reporting relating to antenatal care and family planning services (SAfAIDS & YVZ 2011). These challenges have largely been attributed to overstretched staff, lack of materials, as well as poor training and supervision (Fujisaki et al. 2000; Disha et al. 2008). It has also been observed that global indicator proliferation and onerous international reporting requirements place considerable pressures on information systems at country level (WHO 2011a).

A number of technological innovations could contribute to an enabling environment for sexual and reproductive health services over time. For example, Zambia's 'SmartCare' system (using digital information cards kept by patients to support secure record keeping and continuity of care) has been in place since 2007. It is now operational in over 200 health facilities in all districts, with over 200,000 patients enrolled. Following the success of the SmartCare system, it is being interfaced with a new 'Zambia Electronic Perinatal Record System' (ZEPRS).[33] UNICEF has also been working with the Ministry of Health to pilot and scale up schemes that make use of cell phone technology to speed up the communication of test results, data and mobilisation of transport services. This initiative (Project Mwana) is also intended to strengthen maternal health services.[34]

Medical products and technologies

In 2009 stock outs of essential drugs were found to be more likely at health centre level than at district pharmacy level across a range of essential drugs. This was partly attributable to the weak supply chain management between district pharmacies and health centres (UNZA et al. 2011). This 'secondary level distribution' was identified as key bottleneck in the distribution of drugs and supplies in Zambia (World Bank, 2010: 98). There have also been considerable pressures on the supply chain associated with the government's policy of providing free antiretroviral drugs for people living with HIV (GRZ 2006). In addition, laboratory services have faced a number of challenges that include inadequate maintenance, use of untrained staff to operate the equipment and inadequate supply of reagents and related commodities (GRZ 2011b).

In recent years some improvements have been observed in overall supply chain management. These have largely been attributed to outsourcing of the management of central medical stores, and efficiency gains associated with support for distribution of antiretroviral drugs (Yadav 2007).[35] Recent

[33] Source: http://en.wikipedia.org/wiki/SmartCare

[34] Source: http://projectmwana.posterous.com/

[35] This support has largely been provided though the USAID JSI Deliver Project.

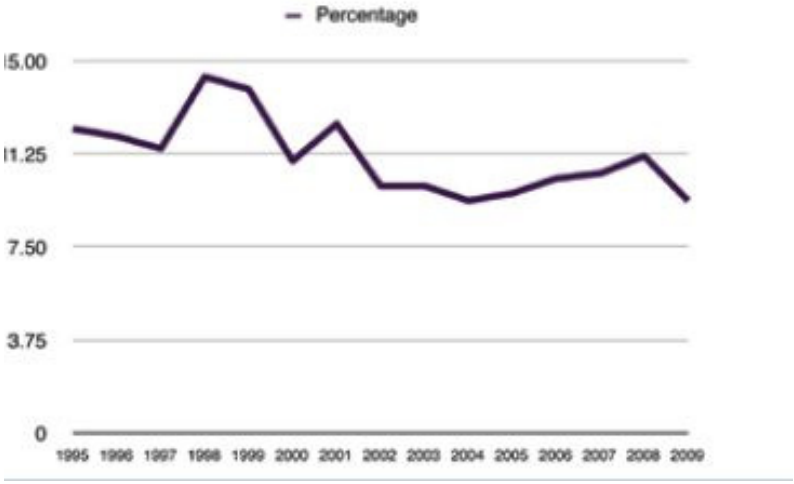
pilot studies to improve supply chain management at district level have also shown some success (World Bank 2010).

In 2008, a John Snow International (JSI) Deliver study suggested that there were particular supply chain management issues relating to the distribution of family planning commodities (Disha et al. 2008). As a response to this and other reviews, Zambia established a 'Reproductive Health Commodity Security Committee' in 2008 with the aim of ensuring a steady and adequate flow of reproductive health commodities, including family planning. Members of the Committee include the Ministry of Health, the Ministry of Finance and National Planning, non-governmental organisations and cooperating partners, including UNFPA. It is reported that improved coordination through this Committee has helped reduce disruptions in the flow of reproductive health commodities (including family planning commodities) over the past two years (GRZ 2011b).

Health financing

The government health budget was on average 10.4 percent of the national budget between 2000 and 2009 (Figure 9). The highest allocation of 14.4 percent was attained in 1998, with the lowest being 9.4 percent for 2004 and 2009. In recent years, the resurgence of higher economic growth rates together with debt cancellation under the 'Highly Indebted Poor Countries' initiative has resulted in the creation of some fiscal space for health services, leading to a small increase in allocations between 2004 and 2008. This trend could not be sustained in 2009, owing to the impact of the global financial and economic crises.

Figure 9: Trends in government health budget allocations, 1995-2009



Source: UNDP 2011b

An analysis of the Ministry of Health domestic budget by level and functional areas reveals that allocations to tertiary and general hospitals have been constant at 10 percent and 8 percent, respectively. The allocation to district health services increased from 19 percent in 2004 to 24 percent in 2007, and remained stable in 2008 and 2009 (UNZA et al. 2011).

There appear to be some differentials in the distribution of the public sector recurrent health budget across Zambia's provinces, with relatively well served, higher income provinces (like Lusaka and Copperbelt) being better funded than others with greater health needs. Higher allocations to these provinces are a product of combined government and external funder allocations. The national health accounts reports show evidence of increased resources allocated to the district and primary care level between 2003 and 2005, with the combined total to the district and primary care level rising above 50 percent in 2005; however, between 2005 and 2006 there were some reversals to these improved allocations (*ibid*).

The abolition of user fees in April 2006 (originally introduced in 1993) at public primary health care facilities was accompanied by increased public funding to the most affected districts. Some externally funded programmes also exempted users from paying high fees, including for antiretroviral treatment, HIV diagnostic services, prevention of mother to child transmission, tuberculosis drugs, malaria treatment and reproductive health services. It has been reported that the removal of user fees has resulted in increased drug consumption, increased staff–patient contact time, as well as increased health facility use (Masiye et al. 2008).

Snapshot: Access to free family planning services

The 2007 ZDHS reported that more than two-thirds of current modern method contraceptive users obtained their contraceptive method from the public sector; mostly government health centres (53 percent). There has been a shift away from reliance on private medical sources for contraceptive methods. The proportion of current users relying on private medical sources has declined from 36 percent in 1992 to 17 percent in 2007. On the other hand, reliance on free public sources has increased from 56 percent in 1992 to 68 percent in 2007. Some of our key informants suggested that the high cost of living over the past decade has been a factor. They reported too that uptake has been supported by the fact that contraception can now be accessed for free through community-based distributors in poorer communities.[36]

Other than domestic resources from the government, the health sector in Zambia receives significant external financial resources. In 1994 the Ministry of Health developed a sector policy on aid harmonisation in consultation with cooperating partners. This policy was later coined the sector-wide approach (SWAp). While the health sector SWAp is reported to have improved the overall management of the sector, and from a sectoral investment point of view contributed to improving the coordination of external resources, the health sector is still faced with many aid coordination challenges associated with the failure of a number of cooperating partners to align their support within the SWAp framework (Table 11) (Chansa 2009; UNDP 2011b).

Table 11: Total external funds to health by mechanism (kwacha billions), 2005–2010

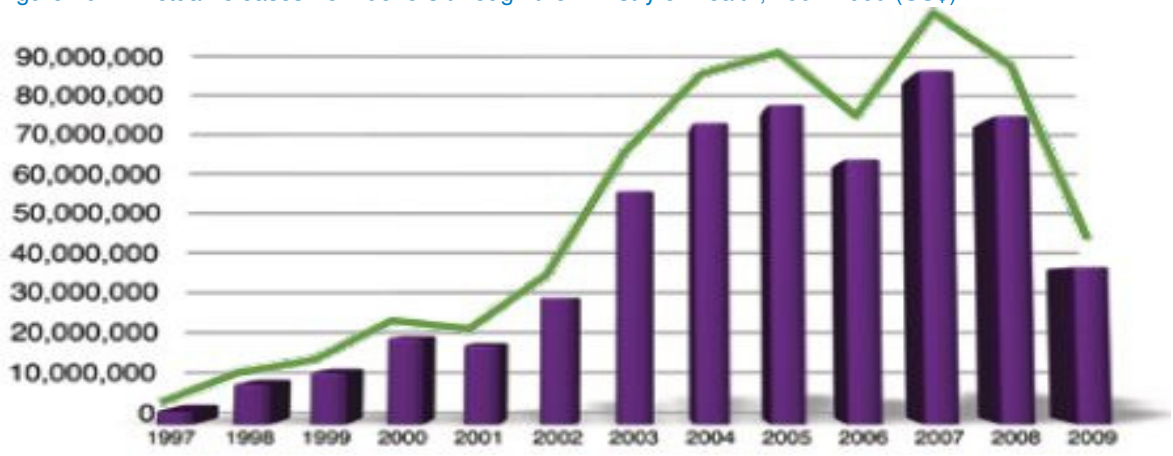
Funds to the health sector	2005	2006	2007	2008	2009	2010
SWAp	28.20	43.94	51.18	43.72	35.00	35.00
Projects and loans	70.55	229.60	292.60	275.21	252.04	214.11
Total external funding	98.75	273.54	343.78	318.93	287.04	249.11
Basket funding as % of total	29%	16%	15%	14%	12%	14%

Source: MoH, 2010

Over the past 10 years, however, there has been a steady increase in the flow of funds from donors that use the Ministry of Health accounting system. In 2008, disbursements were problematic due to the global financial crisis, while in 2009, almost all key donors contributing to the expanded basket of funds withdrew due to allegations of financial mismanagement in the Ministry of Health. Withdrawal of funding was very significant, as only 39 percent of the total donor pledged amount was actually disbursed in 2009 (Figure 10) (UNDP 2011b).

[36] Source: key informant interviews with CHAZ and UNFPA representative 23rd January 2012.

Figure 10: Actual releases from donors through the Ministry of Health, 1997-2009 (US$)



Source: UNDP 2011b

Over the past decade significant external resources have been directed towards the national response to AIDS, TB and malaria. For example, in 2006 Zambia received over US$ 159 million for the national AIDS response from external donors (NAC 2010), that is nearly three times the sum received from external donors for the wider health sector (see Figure 10), and up from the US$ 95 million provided by external donors for the AIDS response in 2005 (*ibid*).

In Zambia, the largest proportion of external funding for the AIDS response has come from the US Government and the Global Fund. During the period 2003 to 2006, 50 percent of funding from external sources was provided by the US President's Emergency Plan for AIDS Relief (PEPFAR) and 16 percent was provided by the Global Fund (GHIN 2009). A significant proportion of these resources supported antenatal care services and integrated reproductive health services (for example, in 2005 alone PEPFAR allocated US$ 6,504,000 for PMTCT services and US$ 7,949,600 for distribution of condoms and related activities (NAC 2008).

Integrated sexual and reproductive health services (including PMTCT and condom promotion for dual protection), continuity of care and health systems strengthening have been recurring themes in Zambia's successful Global Fund applications between 2004 and 2008 (see Annex C). Unfortunately, poor management of Global Fund resources by two of Zambia's principal recipients (namely the Ministry of Health and the Zambia National AIDS Network) (UNDP 2011b) mean that Zambia's efforts in this respect cannot be regarded as an example of leading practice. Nevertheless, it is likely that the additional resources mobilised over the period 2004 to 2008 have been enabling factors in Zambia's provision of antenatal care and family planning services.[37]

[37] Notably, PPEFAR and Global Fund resources could not be used for improving skilled birth attendance (where little progress has been made). This strengthens the argument that the use of AIDS resources to support antenatal care and some family planning services has helped these services make progress despite the development 'shocks' of the past decade.

Leadership and governance

The main feature of the organisational and institutional restructuring commenced under the 1992 health sector reform programme was the decentralisation of health service delivery, through devolution of key management responsibilities and resources to district level. Decentralisation of health services was characterised by both delegation of the day to day management responsibilities from the Ministry of Health to the semi-autonomous Central Board of Health, and 'de-concentration' of resource management to District Health Boards (MoH 1996, 2006).

As indicated above, the National Health Services Act was repealed in 2005 to pave the way for more efficient governance structures. This involved the dissolution of the Central Board of Health and District Health Boards and redefinition of the role of Neighbourhood Health Committees. The impact of these changes in governance structures has been difficult to gauge due to a number of changes in the political environment in Zambia and the corruption scandal mentioned above. These, in turn, have led to successive changes in leadership within the Ministry of Health and a period of structural instability and uncertainty (UNZA et al. 2011).

Although decentralisation of services is likely to have supported more equitable delivery of antenatal and family planning services, overall, health sector leadership and governance cannot be regarded as strong areas of leading practice.

7.3 Programmes

Summary of findings
Research studies suggest that investments in PMTCT programmes can lead to improved antenatal care attendance. Programmatic interventions relating to PMTCT provide good examples of integration and continuity of care, as well as the channelling of resources to improve outreach, quality of care and community mobilisation. They constitute an area of leading practice.
UN agencies have played a key role in facilitating stakeholder collaboration and in providing technical support.
Non-governmental organisations have played an important role in extending sexual and reproductive health services to underserved populations, including rural populations, mobile populations, young people and people with disabilities. They have also spearheaded innovative practice and operational research.

Public sector programmes

Several research studies in Zambia and the region have demonstrated that investments in PMTCT programmes can lead to improved antenatal care attendance, due mostly to improved quality of care associated with improvements in facility infrastructure, staff training, closer supervision, monitoring and evaluation, improved supply of drugs and supplies, and associated community mobilisation activities (Potter et al. 2008; Price et al. 2009; Brugha et al. 2010). Zambia's 2009 'Modes of Transmission Study' suggests that family planning promotion within the context of integrated PMTCT services has also contributed to increased births averted, especially among HIV positive women (see below). The study also indicates that the PMTCT programme has been associated with a number of innovative partnerships between the public, private and non-governmental sectors that have maximised the comparative advantage of each sector (see for example, Allison et al. 2009) and resulted in the extension of reproductive health services to remote rural areas (NAC 2009).

Snapshot: Extending services to remote rural areas

At the beginning of 2010 there was little antenatal care available in Luwingu, a rural district of north-eastern Zambia. It was recognised that without antenatal consultations, pregnant women were unlikely to find out if they were HIV positive, and those that were could not receive PMTCT services. In June 2010, Médecins Sans Frontières mobile teams started working in four rural health centres in Luwingu, providing reproductive health services, antenatal care, emergency obstetric care and PMTCT services. Between June and December 2010, more than 2,650 antenatal consultations were carried out, and 150 women received postnatal care. Staff provided special supplementary food to 52 HIV-positive women, and enrolled 41 women in the PMTCT programme. Médecins Sans Frontières has been researching two new World Health Organisation protocols for PMTCT, testing their feasibility in remote settings and comparing the outcomes.[38]

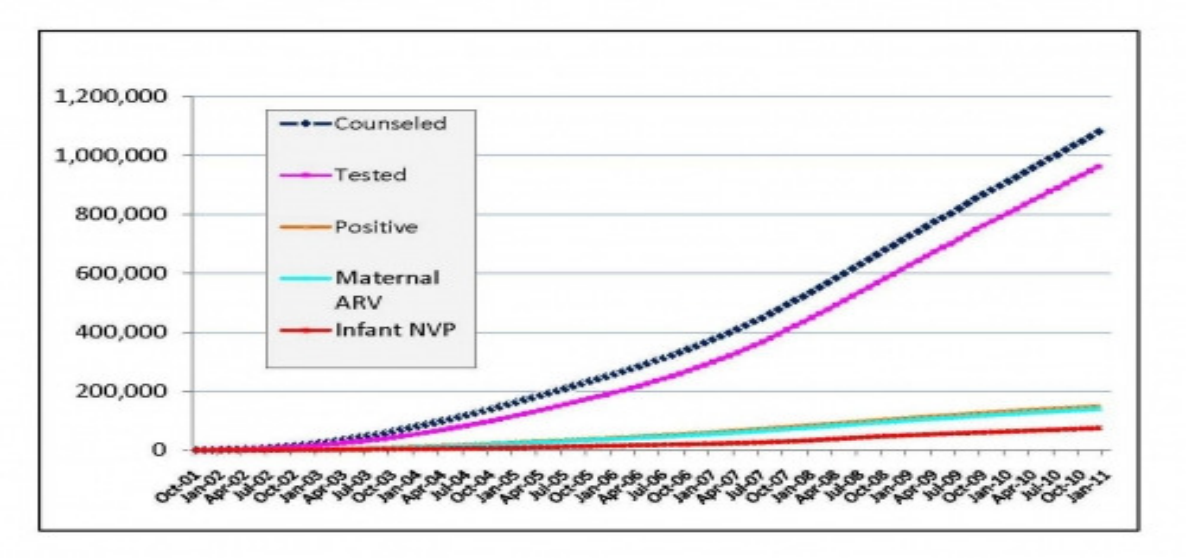
It appears that the Zambian government's policy of integrated sexual and reproductive health service provision has been a key factor in achievements made relating to antenatal care and family planning over the period 1992 to 2010. Services have been integrated since 2003, both in terms of the type of service (for example integration of antenatal care, PMTCT, antiretroviral therapy, sexually transmitted diseases and family planning services) and in terms of service providers (through partnership arrangements between government and non-governmental providers at public sector health facilities). Programmatic interventions relating to PMTCT provide good examples of integration and constitute an area of leading practice.

[38] Source: http://www.msf-me.org/en/mission/in-the-field/msf-projects-world-wide/zambia-1.html

Leading Practice: provision of integrated reproductive health services through PMTCT programmes

By February 2011 the Zambian government and its partners had provided PMTCT services to to more than 1,081,137 women (Figure 11).

Figure 11: PMTCT service provision 2001-2011



The Zambia 2009 'Modes of Transmission' study reports that by the end 2008, 936 health facilities offered PMTCT services. In 2008, 3,538 professional health providers and 2,4,34 lay/community health providers were trained to provide PMTCT services. It was estimated that the annual number of unintended HIV-positive births averted through contraceptive use was 12,823 (NAC 2009). In 2005, rural-urban differentials in the provision of HIV testing and PMTCT services were still marked with only 12 percent of rural health centres offering these services compared to 47 percent of urban health centres. The Modes of Transmission study reports that with a continued increase in PMTCT service delivery between 2005 and 2008, equity in access to services improved dramatically. PMTCT services are now available in all 72 districts in the country (NAC 2009).

These results have been achieved through collaborative working between the government, cooperating partners, non-governmental organisations and the private sector. All providers follow national guidelines on PMTCT service provision; these are currently based on WHO 2010 recommendations (Option A). National guidelines emphasise integrated service provision based on the following activities:[39]

- counselling and testing, including couple counselling;
- prophylactic antiretroviral treatment;
- male involvement;
- screening and treatment for sexually transmitted infections;
- community mobilisation and adherence support follow-up;
- referral for CD4 count; infant feeding, and family planning;
- follow up of mother-infant pair;
- cotrimoxazole prophylaxis for child health;

[39] Source: http://www.cidrz.org/pmtct

- training community volunteers and health care providers;
- development and distribution of information, education and communication materials; and,
- condom promotion and distribution.

The Global Fund (see Annex C) and PEPFAR have been key cooperating partners in terms of resource provision for integrated PMTCT programmes. Between 2004 and 2010, the PEPFAR programme supported 605,000 pregnant women in receiving counselling and testing services for PMTCT, and 89,000 in receiving antiretroviral prophylaxis (from 14 weeks of pregnancy) through more than 520 service outlets. Although PEPFAR initiatives are often associated with parallel service provision (Oomman et al. 2007), in Zambia PEPFAR's non-governmental 'prime partners' and implementing partners (which include CHAZ) work mostly with public health facilities to provide integrated PMTCT services that support a continuum of care with maternal and child health services.[40] For example, since 2001 PEPFAR's implementing partner, the Center for Infectious Disease Research in Zambia (CIDRZ), has provided technical and financial support to over 330 public health facilities in Lusaka and the rural provinces of Eastern and Western Provinces. It has helped refurbish a number of health facilities and train over 2000 health care providers on the PMTCT minimum package of care. CIDRZ has also worked with the Ministry of Health to provide a comprehensive package of quality assured maternal and child health services. These activities have included antenatal and postnatal visits. CIDRZ programmes also have a strong component of community engagement. This includes community awareness-raising through drama, door to door education, and training of peer educators, lay counsellors, and traditional birth attendants.[41]

Investments in PMTCT and other HIV services have also led to innovative alliances between the government and private sector companies. For example, since 2007, the Mkushi Farmers' Association together with two companies (Dunavant Zambia Ltd, and First Quantum Minerals Ltd) have supported the operation of mobile health units in the three rural districts of Katete, Mkushi and Solwezi, under the framework of the Global Development Alliance (a public-private partnership between the Zambian private sector, the United States Government and the Ministry of Health). The units visit around eight sites every fortnight on a pre-determined route agreed by the rural health centres and communities within the district. At these sites, the mobile health units offer PMTCT and other reproductive health services. This initiative is part of a social responsibility programme aimed at contributing to the health of the workforce. Under the overall supervision of the district director of health, the district health office contributes items such as medical equipment, drugs, condoms and testing kits for the mobile health units, while the private sector operators provide staff, vehicles and pay for staff training (Allison et al. 2009).

Other government-led programmes:

In the course of implementing the National Health Strategic Plan 2006-2010, the Zambian government established a number of relevant programmes. These programmes are likely to have contributed to the enabling environment. However, since they remain relatively recent and do not fully explain achievements in antenatal care and family planning services over the past two decades. These recent programmes include:

- Establishment of Safe Motherhood Action Groups. To date, the groups have been introduced into 24 Districts across the country and are intended to provide community-based education to women regarding their sexual and reproductive health needs while promoting antenatal care and safe deliveries (SAfAIDS & YVZ 2011).

[40] See http://www.pepfar.gov/about/122668.htm

[41] Source: http://www.cidrz.org/pmtct

- To relieve the burden of health care from health workers in health facilities, the government has introduced programmes to train community health workers and traditional birth attendants. Although this initiative is intended to support task shifting, results have been slow to emerge. Available data suggest that only 19 percent of community health workers and 10 percent of trained traditional birth attendants are active in providing services within their communities. This has been attributed to lack of incentives to motivate community health workers and traditional birth attendants, limited information to the public on their availability and limited mobility of trained cadres (*ibid*).
- The Campaign for Accelerated Reduction of Maternal Mortality (CARMMA) was launched by the government in collaboration with the African Union and other Development Partners in 2010 to address the need to reduce maternal mortality. Under the banner "no woman should die while giving life", Zambia's campaign focuses on training and retention of midwives and improving infrastructure at district level (WHO 2010).
- The government of Zambia is also working with the WHO and the UNFPA in collaboration with other cooperating partners to implement the Strategic Partnership Programme for Zambia. This programme focuses on development of national guidelines for improving the quality of maternal and reproductive health care with a particular focus on integrating and extending family planning services (WHO 2011b).

Non-governmental programmes

Over the past two decades, a number of non-governmental organisations have undertaken activities that have supported maternal health and family planning in ways that complement or strengthen public sector service provision. For example, organisations such as the Planned Parenthood Association of Zambia have worked closely with the public sector to help scale up Safe Motherhood Action Groups and support community based distribution of family planning. In many cases, the projects of these non-governmental partners have been short-term or small scale, but some have been large-scale and have made efforts to target underserved populations (such as young people, rural women, sex workers, mobile populations and people with disabilities).[42] Examples of non-governmental organisations that have produced significant results over the past decade include Africare, CARE International, the Planned Parenthood Association of Zambia, Marie Stopes International, the Population Council and the Society for Family Health. An overview of the key projects of these organisations is included in Annex E.

Between 1998 and 2010, USAID funded some large scale health sector programmes that were implemented by non-state actors and aimed to improve the health status of Zambians by expanding access to and improving the quality of maternal, child, reproductive, and HIV/AIDS health services, while simultaneously strengthening the underlying health system. These programmes included the 'Zambian Integrated Health Program' (ZHIP) (1998-2004) and the 'Health Services and Systems Program' (HSSP) (2004-2010). These programmes appear to have made extremely positive contributions to capacity building, achievement of technical excellence and development of best practices in the sites where they were implemented, and have aimed to address both supply and demand side issues. However, programme reviews raised issues about the narrow scope of interventions, sustainability and the establishment of parallel structures (see for example, Biemba et al. 2001).

[42] In these instances, non-governmental organisations could also be said to be supporting the responsiveness or 'acceptability coverage' of sexual and reproductive health services.

Since 2010, there have been some innovative developments in support of the renewed international commitment to address Millennium Development Goal 5 (reducing maternal mortality). For example, the Mobilising Access to Maternal Health Services in Zambia (MAMaZ) programme has been designed to complement International Health Partnership Plus (IHP+) initiatives through a focus on reducing barriers to accessing maternal health services. Implemented as an integrated operations research initiative, the MAMaZ programme includes: community mobilisation to raise awareness of maternal and newborn health issues; the establishment of community systems such as communal savings schemes, bicycle ambulances for emergency transport, and child minding exchanges; facility-based emergency transport using eRanger motorcycle ambulances; community monitoring systems to track progress and identity issues arising; mentoring and support with a focus on embedding sustainability and promoting community and district ownership. Although this initiative is unlikely to have influenced services within the timeframes of this study, it does build on previous experience and lessons learnt.[43]

As suggested above, non-governmental organisations have played a particular role in extending sexual and reproductive health services to underserved populations, such as young people. In recent years, a number of non-governmental organisations under the leadership of the Zambian Federation of Disability Organisations have become increasingly active in working to ensure sexual and reproductive health services meet the needs of people with disabilities (Collins et al. 2009). In addition, the UNFPA has played a particular role in supporting non-governmental organisations to undertake cutting edge work with underserved communities. For example, in 2001 the UNFPA supported the United States based Women's Commission for Refugee Women and Children to undertake an influential assessment of reproductive health for refugees in Zambia.[44]

Snapshot: UNFPA's innovative work with refugees

UNFPA Zambia has been working with refugees since 1999 especially with respect to the promotion of sexual and reproductive health. It has provided culturally sensitive education and services in close cooperation with the Zambian government, other UN agencies and non-governmental organisations. The UNFPA has had an active programme in Meheba camp and has worked closely with the Young Men's Christian Association (YMCA) to assist Angolan refugees in three sites. The project has trained health providers on reproductive health issues, offered technical assistance to health centres, and provided contraceptives to health centres and hospitals. The project has also implemented information, education and communication campaigns with condom distribution through peer educators and promoted male involvement in family planning. The YMCA/UNFPA refugee project started in 1999 in Meheba camp and continued until 2005.[45]

[43] Source: http://www.healthpartners-int.co.uk/our_projects/mamaz.html

[44] See Women's Commission for Refugee Women and Children (2001).

[45] Sources: Women's Commission for Refugee Women and Children 2001 and http://www.unhcr.org/cgi-bin/texis/vtx/news/opendoc.htm?tbl=NEWS&page=home&id=4086732e2

7.4 Stakeholder engagement

Summary of findings

The 2005 Health Services (Repeal) Act abolished a number stakeholder structures and redefined the role of Neighbourhood Health Committees as 'advisory'. The effect of these changes has yet to be evaluated.

There are some concerns that there is an "advocacy gap" within civil society due to limited skills and capacity, funding challenges and limited constituency consultations. However, the overall governance environment is conducive to civil society engagement, and there are a number of emerging initiatives relating to voice and accountability, service delivery monitoring and budget advocacy.

Within the context of this study, stakeholder engagement appears to cross-cut issues of availability coverage and accessibility coverage, while also touching on issues of acceptability coverage.

Formal structures for public participation in the health system

There was limited space for participation in the Zambian health system in the early 1980s. One element of the health sector reform in 1992 was to address this. Subsequently, the decentralisation policy included in the National Health Services Act (1995) ushered in the stakeholder based District and Hospital Management Boards and the Neighbourhood Health Committees. Survey evidence in 2006 suggested that, further to considerable investments in capacity building of stakeholder structures, most communities were involved in planning and budgeting for health activities. Unfortunately, however, there was little or no incorporation and implementation of these community plans by health centres. Communities were not well informed about available resources, or about their disbursement and use at health centre and community levels. This, in turn, led to tensions and misunderstandings between health workers and the local communities they served (Equity Gauge Zambia, 2006).

As indicated above, the 2005 Health Services (Repeal) Act, the Ministry of Health abolished a number of structures that were charged with responsibilities for health care provision and support, most notably the District Health and Health Management Boards and the Central Board of Health. The role of Neighbourhood Health Committees was redefined as 'advisory'. It has been observed that the unclear situation on the right to health in the Constitution, combined with the legal vacuum created by the repeal of the Health Services Act, has created an uncertain framework for citizens' participation. This has highlighted the need for further assessment and policy dialogue with civil society representatives and communities to establish the legal provisions, mechanisms and capacities needed for public and social roles in health planning and implementation (UNZA et al. 2011).

Other mechanisms for stakeholder engagement

Coordination of national sexual and reproductive health programmes is supported by a number of multisectoral standing committees convened by the Ministry of Health and the National AIDS Council. For example, the Ministry of Health convenes the Maternal and Newborn Child Health Interagency Coordinating Committee. This Committee is chaired by the Minister of Health and meets quarterly to discuss progress in programme implementation. Members include programme officers, UN agencies, health partners, non-governmental organisations and training institutions. In addition, multisectoral Technical Working Groups for Safe Motherhood, Emergency and Obstetric Care and Family Planning meet regularly to address technical challenges and support optimal use of resources (WHO 2010).

The engagement of several cooperating partners has been framed by the 'Memorandum of Understanding for the Joint Assistance Strategy' that was first agreed in 2004. Recent corruption scandals associated with the Ministry of Health have meant that, since 2009, the general tenor of this engagement has related to themes of accountability (Danaiya Usher 2010; Wild and Domingo 2010). The election of a new government in September 2011 means that many cooperating partners are observing developments in the Ministry of Health with interest.

A number of civil society organisations are involved in health sector monitoring and advocacy in Zambia. For example, the White Ribbon Alliance is part of a global partnership of civil society organisations that campaign on maternal, newborn and child health issues. The Civil Society for Poverty Reduction in Zambia (CSPR), together with the Jesuit Centre for Theological Reflection (JCTR) and Transparency International Zambia, play key roles in budget tracking and service delivery monitoring from a governance and human rights perspective, as well as in building community level capacity. Meanwhile EQUINET and the Centre for Health Science and Social Research (CHESSORE) have been highly active in monitoring health equity in Zambia and in supporting evidence-based dialogue, especially as part of the Equity Gauge Project.

There are some concerns that there is an "advocacy gap" within civil society due to limited skills and capacity, funding challenges and limited constituency consultations. However, the overall governance environment is conducive to civil society engagement, and there are a number of emerging initiatives relating to voice and accountability, service delivery monitoring and budget advocacy (SAfAIDS & YVZ 2011).

7.5 Additional themes

Summary of key findings

Female education is a key variable affecting access to maternal health and family planning services. Within the Zambian education sector, there have been marked improvements in school enrolments and a reduction of gender differentials. This has been associated with greater investment in staff recruitment and school construction, the abolition of primary school fees and an increase in pupil enrolment.

Achieving and closing gender differentials in the attainment of universal primary and secondary education

It has long been observed that female education is a key variable affecting access to maternal health and family planning services (WHO 2008). In recent years, there have been marked improvements in school enrolments and a reduction of gender differentials in Zambia. The last five years in particular have been characterised by investments in infrastructure which have led to a marked improvement in access as a way of increasing school enrolment. Resource allocation to the education sector has increased steadily and this has been accompanied by a major recruitment drive for teachers. The greater investment in school construction, an increase in staff recruitment, the abolition of primary school fees and an increase in pupil enrolment have improved overall access to education (UNDP 2011b; UNZA et al. 2011).

Social protection programmes

Levels of predictable income can be a factor in the accessibility and acceptability of health care services (WHO 2008). During the period 2006-2010, the social protection sector pioneered the use of innovative approaches to empowering low capacity households in cassava production, processing

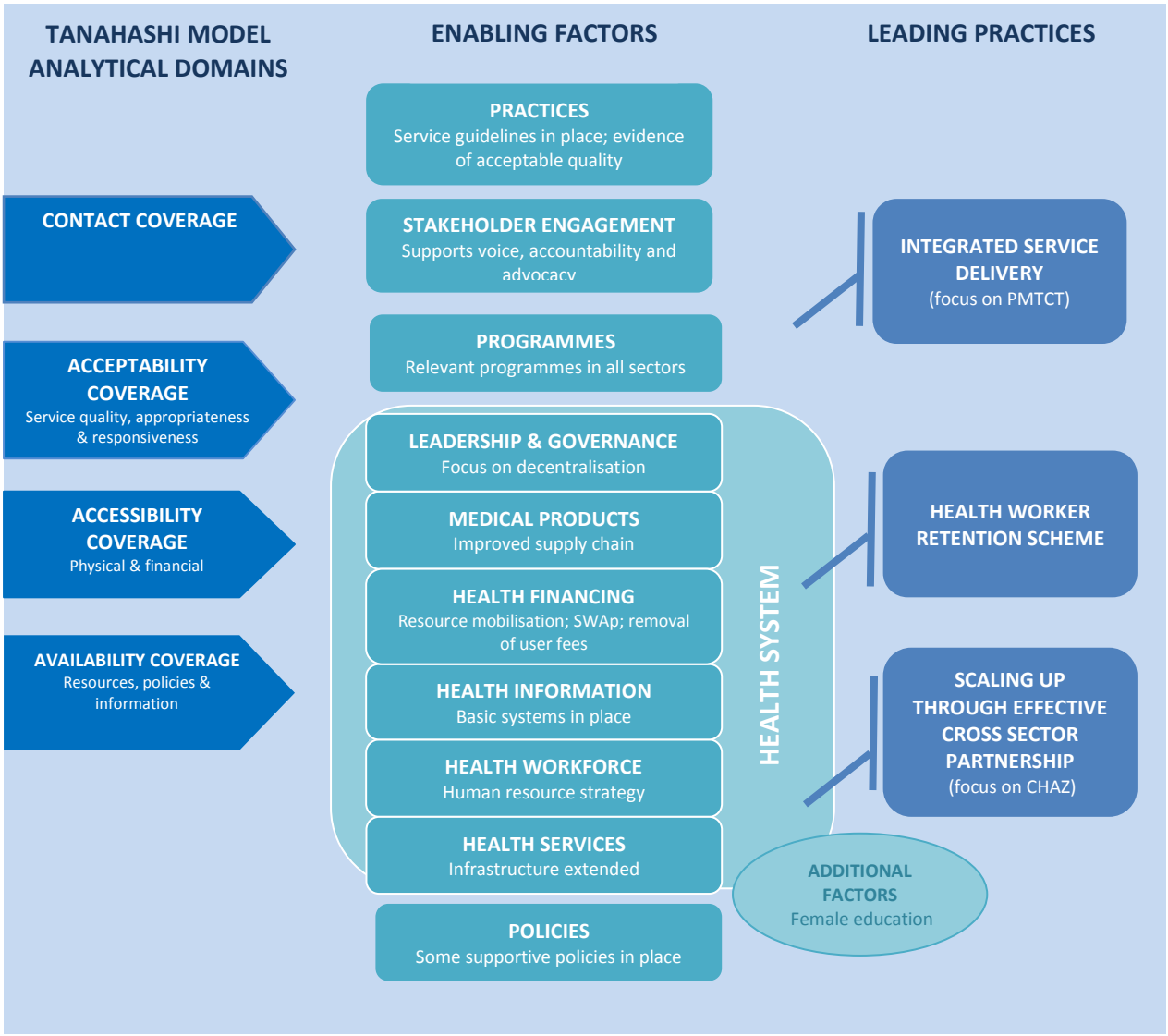
and marketing, and delivering social assistance through cash transfers and vouchers. National guidelines on children's homes and the National Communication Strategy on Sexual and Gender-Based violence were developed. Despite these successes, the sector faced a number of constraints in the implementation of social protection programmes, including the absence of a social protection policy to guide programme development, weak administrative capacity, poor monitoring and evaluation and poor coordination among stakeholders and across sectors (GRZ 2011b).

Between 2006 and 2010, the Social Cash Transfers Scheme supported 7,563 households (2,708 males and 4,855 females) and 4,343 individuals (1,567 males and 2,776 females). Results under this scheme show that individuals and households accessing social cash transfers have seen notable improvements in their lives, including reduced hunger and better school attendance for children. To date, however, cash transfer projects have remained at the pilot stage and have yet to be fully scaled up nationally (*ibid*).

8. Discussion of Findings and Recommendations

Figure 12 shows some of the enabling factors that appear to have contributed to Zambia's achievements in improved equity relating to antenatal care and satisfying the demand for family planning over the past two decades. It also shows the three leading practices that have emerged, namely integrated service provision (with a focus on PMTCT), the health worker retention scheme and effective cross sector partnerships (with a focus on CHAZ).

Figure 12: Case Study Overview: the linkages between the Tanahashi Model, Enabling Factors and Leading Practices



The creation of an enabling environment for equitable sexual and reproductive health services in Zambia is commendable and the leading practices identified could support learning elsewhere. It is important to consider, however, that the enabling factors and practices identified are situated within a dynamic and changing development environment, and this constantly generates fresh challenges.

We have seen that Zambia is currently dealing with some difficult leadership and governance issues in the Ministry of Health, and these have implications for resource flows to district level. The implementation of the Health Worker Retention Scheme has highlighted the need to adapt incentive packages to different cadres of health worker, and to ensure the scheme is accompanied by tailored performance management and monitoring and evaluation systems. Integration of sexual and reproductive health services has thrown up new challenges, such as additional demands on staff time and longer waiting times for service users (SAfAIDS & YVZ 2011). The enabling factors and leading practices we have presented are, therefore, situated within an ongoing narrative in which there are multiple voices and experiences to be heard. However, the one constant in the narrative is Zambia's responsiveness to emerging challenges and opportunities. It is this enduring quality that may be the key to further achievements in equitable sexual and reproductive health service delivery in the future.

8.1 Recommendations

This case study points to a number of recommendations for other counties seeking to achieve improvements in equitable provision of sexual and reproductive health services.

The recommendations arising from this study relate to:

Effective cross-sector partnerships

- Partnerships between government and civil society (including private and non-governmental organisations) can play an important role in extending services to underserved communities. However, it is helpful to distinguish between different types of civil society role-players in order to engage with them effectively. This study suggests it is useful to distinguish three main categories:
  - Some civil society role-players can provide services *at scale* and provide additional resources for extending services to underserved communities. For these role-players, consideration should be given to development of a public-private partnership that formalises complementary service provision and resource allocations. Key features of such partnerships should be: transparency; mutual accountability; quality assurance; joint planning; and collaborative working to maximise comparative advantage and ensure gaps in service delivery are addressed.
  - Some civil society role-players may only have capacity to work at a *local level* or on a small scale. Their comparative advantage may lie in delivering services to specific groups or hard-to-reach communities (such as young people, people with disabilities, sex workers and mobile populations), or in developing innovative practice. Here, too, it is important to establish cross-sector partnerships. However, partnership arrangements need to be appropriate to the size, capacity and governance arrangements of the organisations involved. Experience from Zambia suggests that, while these partnership arrangements might be less formal they should, as a minimum, be based on joint planning and information exchange within the context of relevant national policies, strategies and operational guidelines.
  - The primary role of some civil society organisations may be in supporting *good governance*. While these organisations need to maintain autonomy, the value of their role in supporting voice and accountability needs to be recognised. These organisations may play an important role, for example, in budget monitoring and public expenditure tracking. In order to undertake such roles effectively, these organisations may need additional support and capacity development in areas such as: rolling out of accountability mechanisms (including for example social compacts, 'community notice

boards' and beneficiary accountability frameworks[46]); networking and partnership building; data collection, applied research and evidence-based advocacy; and undertaking constituency consultations and feedback.

Clearly, the above roles are not mutually exclusive; however, experience from Zambia suggests that strategic engagement with each of these roles can make a difference to equitable service provision.

Strengthening human resource capacity

- The availability of a skilled health workforce for provision of equitable sexual and reproductive health services is a major challenge throughout the sub-Saharan region.[47] Zambia's Health Worker Retention Scheme provides a leading practice on addressing the problem of health worker retention in rural areas. However, a key feature of this Scheme has been the piloting, incremental scaling up and continuous building on lessons learnt. While the design of the Scheme can be instructive for other countries, there is ongoing work to be done to design appropriate packages for different cadres of health workers, as well as tailored performance management systems and monitoring and evaluation systems. Zambia has also found that it is necessary to gain the buy-in of cooperating partners to support standardisation of incentive packages across programmes. It is apparent, too, that such Health Worker Retention Schemes need to be situated within a complementary human resource strategy that addresses the supply and skill levels of the health workforce, as well as issues such as task shifting.

Integration of service delivery

- Integrated service delivery of sexual and reproductive health services can play a role in equitable service provision by supporting more efficient use of resources (through reduced duplication of services) and improved acceptability of services through continuity of care. Experience from Zambia has also shown that this approach can create opportunities for distributing resources from vertical programmes, as well as innovative cross-sector partnerships. However, it is also necessary to mitigate some of the challenges arising from integrated service delivery, such as the additional burden on human resources (in terms of time and skills required) and the longer waiting times for service users.

Enhancing enabling factors

- We have seen that improvements in equitable provision of sexual and reproductive health services may require attention to the broader 'enabling environment', including the policy environment and the operations of the health system, as well as linkages to other sectors (such as the education sector and the social protection sector). In examining all of these themes, it can be helpful to view them through the lens of availability, accessibility, acceptability and contact coverage in order to systematically determine where there are opportunities for improving the effectiveness of equitable service provision.

[46] See for example, Stockton 2008.

[47] See http://www.who.int/healthsystems/topics/workforce/en/

9. Conclusion

In this report we have used the Tanahashi Model as a basis for reviewing the provision of equitable sexual and reproductive health services in Zambia. Our analysis has therefore been based on four domains of analysis, namely contact coverage, acceptability coverage and accessibility and availability coverage.

Despite a number of developmental 'shocks' over the past two decades, there is persuasive evidence indicating that Zambia has been successful in providing antenatal care services that have reached poorer and less well educated women, including those in rural areas. It has also made good progress in satisfying the demand for family planning in rural areas. The case for provision of skilled birth attendance is more ambiguous, so our review of leading practices has focused on the former. Our specific research question therefore became: How has Zambia maintained high levels of equity in antenatal attendance, and made progress in satisfying the demand for family planning in rural areas since 1992, despite the challenges and 'shocks' of the resource and human development environment?

In the course of this study we have identified a number of cross-cutting enabling factors relating to policies, practices, the health system, programmes and stakeholder engagement that appear to have contributed to Zambia's achievements in the equitable provision of antenatal and family planning services. Recurring themes in the creation of an 'enabling environment' have been Zambia's success in channelling the considerable resources mobilised for the national AIDS response towards the provision of integrated sexual and reproductive health services. Investments in PMTCT services have been a particular channel for extending and improving antenatal care services and supporting the outreach of family planning services. Meanwhile, Zambia has continued to make concerted efforts to strengthen the health system, with a focus on decentralisation and addressing the crisis of human resources. Zambia's relative stability and its success in building strong linkages between the public sector and the non-governmental sectors have also allowed Zambia to harness additional resources to scale up service provision to rural areas (especially through faith based networks). Cross sector partnerships have also supported outreach to underserved populations, and enhanced service provision through innovation, community mobilisation and demand side activities. Zambia's efforts relating to integrated service provision, retention of human resources and cross-sector partnerships are, then, areas of leading practice that could provide rich experience for other countries.

Zambia's story regarding the provision of equitable and effective sexual and reproductive health services is, however, ongoing. The achievements of the past two decades sit within their own historical trajectories, and Zambia needs to address a number of challenges if it is to achieve its 2030 vision of "equitable access to quality health care" for all its citizens. Key priorities relate to leadership, governance and resource management. The way forward depends, however, on the extent to which Zambia can continue to harness the exceptional creativity, capacity and commitment of the many actors working in the field of sexual and reproductive health.

10. Annex A: Terms of reference

A.1. Background

One of the largest challenges in achieving the MDGs has been the persistent issue of inequity in health service provision. Whether measuring skilled birth attendance, unmet need for family planning, antenatal care rates or other services related to sexual and reproductive health, there are often striking disparities between the service levels in wealthier versus poorer communities, urban versus rural, educated versus uneducated and often younger versus older women.

Preliminary analysis at UNFPA based on the DHS survey data has identified Zambia as achieving higher levels of equity in their provision of service for skilled birth attendance, antenatal care visits and unmet need for family planning. These countries may be provisionally termed as “leading” with regard to equity in these areas of health service provision. This preliminary report will be shared as part of the Terms of Reference in order to provide background information for the study.

A.2. Objective

The objective of the research is to develop a detailed review of Zambia’s policies (macro, micro); health system structures, programmes, practices and stakeholders engagement (e.g., Parliament; Executive; CSOs; Communities and Development Partners) with a particular focus on identifying what are the enabling factors or drivers that facilitate these countries to achieve such relatively higher levels of equity. The outcome of the project will be a practical research report on “Some Leading Practices in Equitable Sexual and Reproductive Health Service Provision from Zambia”. The report should be suitable for distribution, following editing, to a wide audience as a UNFPA official publication on the subject.

A.3. Process

The initial analysis report developed by UNFPA will be shared with the collaborating partner. The collaborating partner will proceed to perform a detailed desk review of the policies; health system structure, programs, stakeholders, etc. with an eye towards identifying what are the enabling factors that are facilitating the relatively high degree of equity.

No travel is expected.

A.4. Deliverables

The collaborating partner, working together with experts from UNFPA, is expected to perform the following duties:

a. Develop a detailed review of the policies (macro, micro); health system structure, programmes, practices, stakeholders and other key aspects/drivers that enable Zambia to achieve the relatively higher levels of equity.

b. Summarize the findings in a formal report with recommendations of what best practices can be adopted by other countries seeking to achieve improvements in equitable sexual and reproductive

health service provision. The report should be appropriately documented and annotated so that with minor editing it can be used as the basis of a UNFPA publication on the subject. It is not expected that the report will be designed, formatted etc. for publication since the report's immediate target audience is the UNFPA's Country offices, Regional Offices and Headquarters.

11. Annex B: Timeline of key policy developments and activities relating to family planning in Zambia

Table 12: Timeline of key policy developments and activities relating to family planning in Zambia 1964-2004

Year	Key Policy and Program Activities	Impact	Context
1964 ⇒			• Nation achieves independence.
1970–1973 ⇒	• Churches Health Association of Zambia (CHAZ) is formed. • Planned Parenthood Association of Zambia (PPAZ) comes into being to advocate for child spacing.		• New constitution ushers in one-party political system.
1978 ⇒	• Government recognizes family planning as an integral part of primary health care.		
1979 ⇒	• Family Health Unit is established in the Ministry of Health (MOH).		
1980 ⇒		TFR: 7.2	
1982 ⇒	• Training of family health nurses by MOH begins (and continues until 1993).		• Depo Provera is banned in Zambia.
1983 ⇒			
1984 ⇒	• Norplant introductory trials are conducted at University Teaching Hospital (1984–1990)		• First AIDS case is detected at University Teaching Hospital.
1985 ⇒			
1986 ⇒			
1987 ⇒	• Second UNFPA Country Program (CP), with family planning, is set up.		
1988 ⇒	• Contraceptive Prevalence Survey (CPS) is conducted.	CPR: 3.4%	
1989 ⇒	• National Population Policy is established. • Interagency Technical Committee on Population (ITCP) is formed. • PPAZ establishes clinic in Lusaka.		
1990 ⇒		Population: 7.8 million	• Constitution is amended to reintroduce multiparty system.
1991 ⇒	• PPAZ establishes clinic in Kitwe.		• Health-sector reform begins. • Multiparty elections are held.
1992 ⇒	• Demographic and Health Survey (DHS) is conducted. • Social marketing of Maximum condoms begins. • Training of trainers in family planning is conducted in Mauritius. • Third UNFPA CP is set up.	TFR: 6.5 CPR: 8.9%	• Depo Provera is approved by U.S. Food and Drug Administration.
1993 ⇒	• USAID-funded Zambia Family Planning Services Project begins (1993–1998).		
1994 ⇒	• CARE Community Family Planning Project begins (1994–2001). • ODA provides support primarily in contraceptive supplies and logistics (1994–1999).		• International Conference on Population and Development is convened.
1995 ⇒	• Contraceptive Needs Assessment is conducted.		• Beijing conference takes place.
1996 ⇒	• DHS is conducted. • Expanding Contraceptive Choice Pilot Study is conducted in three districts in Copperbelt Province (1996–2001). • Kafue Adolescent Reproductive Health Project begins (1996–2002). • Family planning logo is launched. • Social marketing of SafePlan oral contraceptives begins. • Fourth UNFPA CP is set up.	TFR: 6.1 CPR: 14.4%	
1997 ⇒	• Zambia Situation Analysis Study is conducted. • *Family Planning in Reproductive Health Policy, Framework, Strategies and Guidelines* is launched. • Nurses and Midwifery Act is passed. • Phase 1 of emergency contraception study is conducted.		
1998 ⇒	• USAID-funded Zambia Integrated Health Project (ZIHP) begins. • Phase 2 of emergency contraception study begins.		
1999 ⇒	• UK Department for International Development (DFID) support for contraceptive supplies and logistics is continued (1999–2003).		
2000 ⇒		Population: 10.3million	
2001 ⇒	• DHS is conducted.	TFR: 5.9 CPR:22.6%	• Adult HIV prevalence is 16% .
2002 ⇒	• PRP Initiative is launched in Copperbelt Province. • Fifth UNFPA CP, providing contraceptives, is set up, focused on Northwestern Province.		
2003 ⇒	• DFID funds for contraceptive supplies are transferred to basket fund.		
2004 ⇒	• USAID-funded Health Services and Systems Program (HSSP) begins.		

(Source: Solo et al. 2005)

12. Annex C: Summary of how Zambia's Global Fund proposals have supported equitable provision integrated sexual and reproductive health services

Since its Global Fund Round 1 proposal Zambia has worked with four principal recipients, two from government (the Ministry of Finance and the Ministry of Health) and two from the non-governmental sectors (the Zambia National AIDS Network (ZNAN) and the Churches Health Association of Zambia (CHAZ)). Unfortunately, since 2009 the Global Fund grants of both ZNAN and the Ministry of Health have been suspended following concerns raised by the auditors. The United Nations Development Programme (UNDP) is now acting as a principal recipient on behalf of the Ministry of Health.

Table 13: Summary of key focus areas of Zambia's Global Fund Proposals

Global Fund Round	Summary of key focus areas
Round 1 (2003-2009)	Under this proposal, Zambia requested the sum of US$ 93 million to address a number of priorities on HIV/AIDS that also supported more equitable provision of integrated sexual and reproductive health services. These priority areas included: improved management of sexually transmitted diseases; multi-sectoral behaviour change communication campaigns to benefit at-risk populations; public sector condom promotion and distribution to benefit people who live in areas where social marketing channels are lacking and people who cannot afford to buy condoms; prevention of mother-to-child transmission services; community-based care for the benefit of people living with HIV and AIDS, households (particularly female-headed households), communities, and community-based organisations; gender-specific interventions to benefit mainly young people, boys, girls, women, widows, and orphans.
Round 4 (2005-2011)	Zambia's Round 4 proposal was highly focused on extending antiretroviral treatment services, including PMCT services to underserved areas. There were also elements that supported health system strengthening, such as refurbishment of health facilities, strengthening supply chain management systems at sub-national levels, and building of human resource capacity. The total sum requested for HIV and AIDS activities was around US$ 253 million.
Round 8 (2010-2011)	The Round 8 proposal recognised several challenges relating to sexual and reproductive health namely: inadequate integration of PMTCT in reproductive health services; lack of infrastructure and equipment to support scale up of PMTCT especially in rural areas; and inadequate dissemination of information on the linkages between gender, social cultural issues and HIV and reproductive health. The Round 8 proposal focused on prevention with some elements of sexual reproductive health services incorporated, such as condom distribution, provision of reproductive health information through counselling and testing, and expansion of PMTCT services. The Round 8 proposal argued that through the provision of PMTCT services, children's exposure to HIV would be minimised; safe delivery practices would be promoted, and antiretroviral treatment and prophylaxis would be provided to mothers and their babies. Reproductive health services delivered through the Ministry of Health and CHAZ would also integrate services such as family planning. It was proposed that all four principal recipients would disseminate reproductive health information targeting high risk population groups (commercial sex workers, prisoners, mobile populations, young people and men who have sex with men). Again, almost US$ 253 million was requested for HIV and AIDS activities.

13. Annex D: Diagram summarising some cultural childbirth practices and beliefs in Zambia

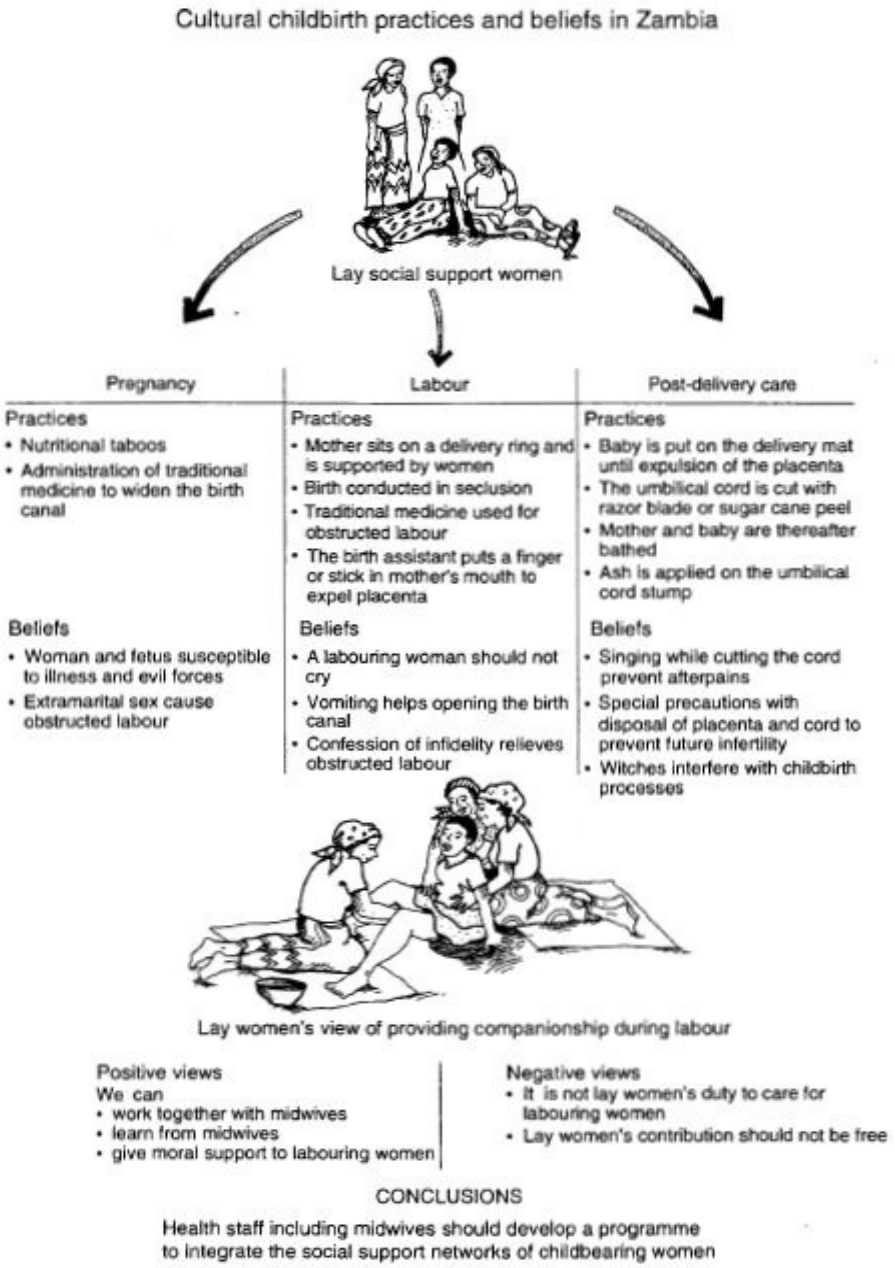


Figure 13: Cultural childbirth practices and beliefs in Zambia

Source: Maimbolwa 2004

14. Annex E: Overview of the sexual and reproductive health activities of key non-governmental organisations in Zambia

Organisation	Overview of maternal and reproductive health activities
Africare	Africare-Zambia currently provides assistance to Zambians through a number of donor-supported projects that focus on maternal and child health, HIV and AIDS awareness and prevention, gender-based violence and youth life skills and livelihoods. Africare has 10 project offices distributed throughout 7 of Zambia's 9 provinces and collaborates with national, provincial and local partners to contribute to Zambia's development priorities. Africare's health projects place particular emphasis on gender parity, including male involvement and enhancing women's knowledge, skills and status in their communities. More than 60, 000 people were reached with health promotion messages between 2008 and 2010. Maternal and child health projects cover family planning, reproductive health, as well as community based obstetric care and childhood illnesses. Africare has trained Safe Motherhood Action Group (SMAG) volunteers to provide a wide variety of maternal and child health services including family planning, obstetric fistula prevention, maternal and child nutrition and other livelihoods activities. This initiative began in 2008, and as of December 2010, Africare had trained over 2,300 SMAG volunteers in supporting community mobilisation activities and fostering positive health seeking behaviour; antenatal attendance has increased and facility based births have doubled in Africare's intervention areas since the beginning of the SMAG initiative. Support from community and religious leaders, and increased male involvement in seeking maternal and child health care services for their families are among the strategies Africare has used to reach the objectives of this project.48
CARE International	CARE International has been operational in Zambia since 1992. Key programmes focus on rural livelihoods, health and HIV/AIDS. Between 1994 and 2001, the Community Family Planning Project supported access to high-quality reproductive health care by improving community and clinic services. At the community level, the project established a network of 400 trained health educators who provided information, counselling and medical referrals. The project further promoted a supportive environment for behaviour change through 40 local support groups where adolescents, women and men met monthly to discuss reproductive health issues. The project also worked with 172 clinical service providers to ensure quality to and access of reproductive health services. The delivery of family planning was strengthened through provider training, institution of quality care monitoring and the provision of basic supplies and equipment.49 Between 1998 and 2004, CARE's 'Communication and Community Partnership Program' was a component of the 'Zambia Integrated Healthcare Program' (ZIHP) (see below). This programme focused on building the capacity of Neighbourhood Health Committees in 12 districts for providing leadership in the implementation of health activities at community level.
Marie Stopes International, Zambia (MSIZ)	MSIZ commenced operations in Zambia in 2008. It has scaled up rapidly and currently works in Lusaka, Central and Southern Provinces and the Copperbelt with the aim of preventing unwanted pregnancies and sexual and reproductive diseases. MSIZ works through partnerships to respond to unmet need for family planning services and supplies; expand the capacities of the Zambian health system in hard–to–reach areas; integrate family planning and safe motherhood services with comprehensive sexual and reproductive health care; set a standard in facilities and quality of care to increase client satisfaction and improve standards across the reproductive health sector. MSIZ has scaled up rapidly: through its urban and rural outreach and integrated clinics, over 1200 women have chosen long–term reversible contraception in the first twelve months of MSIZ's working in partnership with the Ministry of Health in Lusaka and Central Province (MSIZ 2010).50

[48] Source: http://www.africare.org/news/news2011/Zambia-MCH.php

[49] Source: http://www.care.org/newsroom/specialreports/womensday/summary.asp

[50] MSIZ has not yet published a formal evaluation of these initiatives.

Planned Parenthood Association of Zambia (PPAZ)	Established in 1972, PPAZ has long been regarded as one of the country's leading non-governmental organisations for promoting and providing sexual and reproductive health services. It has a particular focus on improving the sexual and reproductive health status of young people. For example, between 2003 and 2005 PPAZ's youth and adolescent project reached 8,579 young people through information, education and communication activities, including group discussions, drama and education in schools. 566 young people accessed youth-friendly sexual and reproductive health services. 3,643 young people accessed community-based distribution agents for contraceptives, counselling and home visits. 39 volunteers were trained in peer education, community-based distribution of contraceptives and education about HIV/AIDS. More recently, PPAZ has been working with government to support the establishment of SMAG. Under this project PPAZ has trained 60 SMAG members between 2010 and 2011. In addition to providing information to their communities, the SMAG members have played a key role in supporting PPAZ service providers in the provision of mobile services during and activities. The project has also supported the training of 31 health care workers in focused antenatal care (FANC) services and 9 providers in comprehensive abortion care. It is estimated that around 8,550 people were provided with safe motherhood services, and some 8,000 people who were provided with family planning services (PPAZ 2011; IPPF 2008).
The Population Council	The Population Council has been operational in Zambia since 1994. It has made significant contributions to family planning and reproductive health policy during the past two decades, and the Council remains actively involved in Zambia's national debates on family planning. Highlights of its work over the past two decades include: (i) completion of the national Strategic Assessment of Contraceptive Needs (1995), in conjunction with the WHO and the Ministry of Health which proved crucial in shaping the future of reproductive health services in Zambia; (ii) completion of the operational research study "Expanding Contraceptive Choice" (1996–2000), which introduced two new family planning methods and reintroduced injectable contraceptives into the country's family planning programme (the model was scaled up in the 'Pilots to Regional Programs' initiative (2002–05), which was recognised by the Ministry of Health as a "best practice"); collaborated with the Ministry of Health and Zambia Police Service on operations research to test the feasibility of police provision of emergency contraception to survivors of sexual violence. Based on the success of this study, the Ministries have requested further assistance with national scale-up; partners in Malawi and Kenya are also replicating the intervention. 51
Society for Family Health (SFH)	Social marketing through the Society for Family Health (SFH) has contributed significantly to family planning in Zambia. The SFH began work on social marketing in Zambia in 1992, with the promotion of the Maximum condom. In 1996, SFH also began marketing an oral contraceptive called SafePlan. This work has helped to broaden access and increase awareness, supplementing and reinforcing government supplies and services. Since 1997, the Maximum condoms have made up roughly one-third of all condoms distributed or sold in Zambia. While SafePlan started in 1997 at only 7 percent of all oral contraceptive use in the country, this share increased to a high of 22 percent in 2002. Data from the 2001–2002 DHS found that almost one in five pill users (19 percent) were using SafePlan, although this varied by urban-rural residence (22 percent vs. 12 percent). Besides being distributed through traditional outlets—pharmacies, drug stores, and kiosks— Maximum condoms and SafePlan pills are also available at rural health centres and from community based distributors, providing a valuable buffer stock when Central Board of Health's usual supplies are exhausted. Projects in Zambia have incorporated a number of innovative strategies, including involving the community (such as male motivators, peer counsellors, and women's support groups called "circles of friends"). There have also been efforts to move services beyond health facilities through community-based distribution agents, commercial sales agents, and employer-based agents.52

[51] Source: http://www.popcouncil.org/countries/zambia.asp

[52] See SFH 2005 and http://www.psi.org/zambia

15. Annex F: Overview of the Incentive Packages for the Zambia Health Workers Retention Scheme

Table 14: Overview of the incentive packages that were included in the Zambia Health Workers Retention Scheme as reported in 2009.[53]

Employee Category	Monthly Stipend (Hardship Allowance)	Housing Rehabilitation	Vehicle Loan Available	Facility Incentives	Duration of Contract
Zambian Medical Consultants	B $1126 C $1287 D $1448	$3000	Yes	Provision of medical equipment at Provincial Hospitals	3 consecutive years
All Medical Officers	C=$698 D=$1179	$3000	Yes, after completing 6 months of contract	Provision of medical equipment at Health Centres and District Hospitals	3 consecutive years
All Medical Licentiates	C=$448 D=$650	$3000	Yes, after completing 6 months of contract	Provision of medical equipment, improvement of water reticulation systems	3 consecutive years
Zambian Nurse Tutors/ lecturers	A=S258 B=$400 C=$569	Applicable at select facilities	Not Applicable	Rehabilitation of schools, provision of medical equipment, upgrading staff accommodation	3 consecutive years
Zambian Clinical Officers Nurses EHTs	$344	Rehabilitation of clinic building and staff houses	Provision of one motor bike per Health Centre	Provision of solar panels, medical equipment, water reticulation systems	3 consecutive years

[53] Source: Mwale 2009.

16. Annex G: List of key informants

Date	Name	Organisation	Position	Contact details
06/12/2011	Dr. Mary Nambao	Ministry of Health	Reproductive Health Specialist	nambao/kaonga-wckaonga@yahoo.com
07/12/2011	Dr. Jubra Muyanga	Ministry of Health	Quality Assurance and Quality Improvement Specialist	jmuyanga@yahoo.com
08/12/2011	Annah R. Mupinde	Intra Health International	Programme Coordinator	annahmupinde@yamail.com
14/12/2011	Mr. Bernard Munkombwe	Southern Africa HIV and AIDS Information Dissemination Services	Programme Manager	Bernard@safaids.co.zm
19/12/2011	Mr. Henry Kaimba	Planned Parenthood Association of Zambia	Programme Manager-Restricted Projects and Governance	hkaimba@ppaz.org.zm
19/12/2011	Ms. Felicia Sakala	Innovations for Poverty Action	Country Director	sakala@ipas.org
20/02/2011	Mr. Nicholas Shiliya	Society for Family Health	Director Research Monitoring and Evaluation	nicholass@sfh.org.zm
21/12/2011	Mr. Justin Mwiinga	National HIV/AIDS/STI/TB Council	Donor Coordinator and Public Relations Manager	jmwiinga@nacsec.org.zm
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17. Annex H: Bibliography

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