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# **Landscape Analysis of Maternal, Newborn and Child Health, Family Planning and HIV/AIDS Integration in Zambia**



Report, 2014



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African Institute for Development Policy (AFIDEP)



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Published in Nairobi, Kenya

First published: May, 2014

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African Institute for Development Policy  
Suite #29, 2nd Floor, Royal Offices, Mogotio Road, Westlands,  
P.O. Box 14688-00800, Nairobi, KENYA.

Tel: +254 20 2039-510

Mobile: +254 735 249 499; +254 716 002 059

Email: [info@afidep.org](mailto:info@afidep.org)

[www.afidep.org](http://www.afidep.org)

Recommended Citation:

Atela, M., Mushani, N., & Oronje, R. (2014). *Landscape Analysis of Maternal, Newborn and Child Health, Family Planning and HIV/AIDS Integration in Zambia*. (Publication). Nairobi: African Institute for Development Policy (AFIDEP).

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## List of Acronyms

<b>AIDS</b>	-	Acquired Immune Deficiency Syndrome
<b>AFIDEP</b>	-	African Institute for Development Policy
<b>ANC</b>	-	Antenatal Care
<b>CDC</b>	-	Centers for Disease Control and Prevention
<b>CHAZ</b>	-	Christian Health Association of Zambia
<b>CIDA</b>	-	Canadian International Development Agency
<b>CIRDZ</b>	-	Centre for Infectious Diseases Research in Zambia
<b>CTC</b>	-	Care and Treatment Clinic
<b>CPR</b>	-	Contraceptive Prevalence Rate
<b>DFID</b>	-	Department for International Development
<b>DHO</b>	-	District Health Officer
<b>DHS</b>	-	Demographic Health Surveys
<b>DRC</b>	-	Democratic Republic of Congo
<b>EMTCT</b>	-	Elimination of Mother to Child Transmission
<b>EU</b>	-	European Union
<b>FHI360</b>	-	Family Health International
<b>FP</b>	-	Family Planning
<b>HIV</b>	-	Human Immune Deficiency
<b>HMIS</b>	-	Health Management Information System
<b>HWs</b>	-	Health Workers
<b>IMR</b>	-	Infant Mortality Ratio
<b>IPPF</b>	-	International Planned Parenthood Federation
<b>JICA</b>	-	Japanese International Cooperation Agency
<b>KFW</b>	-	Kreditanstalt für Wiederaufbau, (KFW) a German public-sector financial institution
<b>MCDMCH</b>	-	Ministry of Community Development, Mother and Child Health
<b>MCH</b>	-	Maternal & Child Health
<b>MDGs</b>	-	Millennium Development Goals
<b>M&amp;E</b>	-	Monitoring and Evaluation
<b>MNCH</b>	-	Maternal, Newborn and Child Health
<b>MoH</b>	-	Ministry of Health
<b>MSH</b>	-	Management Sciences for Health
<b>MSL</b>	-	Medical Supplies Limited
<b>MSM</b>	-	Men who have Sex with Men
<b>NAC</b>	-	National Aids Council
<b>NGO</b>	-	Non-Governmental Organisation
<b>NHSP</b>	-	National Health Strategic Plan

<b>PAC</b>	-	Post-Abortion Care
<b>PATH</b>	-	Program for Appropriate Technology in Health
<b>PEPFAR</b>	-	US President's Emergency Plan for AIDS Relief
<b>PMTCT</b>	-	Prevention of Mother to Child Transmission
<b>PNC</b>	-	Postnatal Care
<b>PPAZ</b>	-	Planned Parenthood Association of Zambia
<b>PSI</b>	-	Population Services International
<b>RH</b>	-	Reproductive Health
<b>RMNCH</b>	-	Reproductive, Maternal, Newborn and Child Health
<b>VCT</b>	-	Voluntary Counselling and Testing
<b>SADC</b>	-	South African Development Community
<b>SFH</b>	-	Society for Family Health
<b>SIDA</b>	-	Swedish International Development Agency
<b>SRH</b>	-	Sexual Reproductive Health
<b>SSA</b>	-	Sub-Saharan Africa
<b>STIs</b>	-	Sexually Transmitted Infections
<b>SUFP</b>	-	Scaling UP Family Planning
<b>TB</b>	-	Tuberculosis
<b>UN</b>	-	United Nations
<b>UNAIDS</b>	-	Joint United Nations Program on HIV/AIDS
<b>UNFPA</b>	-	United Nations Population Fund
<b>UNGASS</b>	-	United Nations General Assembly Special Session
<b>UNICEF</b>	-	United Nations Children's Fund
<b>USAID</b>	-	United States Agency for International Development
<b>UTH</b>	-	University Teaching Hospital
<b>VCT</b>	-	Voluntary Counselling and Testing
<b>WB</b>	-	World Bank
<b>WHO</b>	-	World Health Organisation
<b>TWG</b>	-	Technical Working Group
<b>ZISSP</b>	-	Zambia Integrated Systems Strengthening Program
<b>ZPCT II</b>	-	Zambia Prevention, Care and Treatment Partnership II



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# Executive Summary

## Background

The high burden of disease relating to HIV/AIDS, unintended pregnancies, and poor maternal, newborn and child health (MNCH) remains a major health challenge in sub-Saharan Africa (SSA). Responses to this challenge have traditionally been comprised of well-funded HIV/AIDS programmes set up in parallel to existing inadequately funded sexual and reproductive health (SRH) programmes (MNCH & family planning). Consequently, integration of SRH/MNCH, FP and HIV/AIDS services has, over the years, been promoted to strengthen SRH programmes using HIV/AIDS resources. More recent efforts have focused on making the case for integration efforts to use the existing MNCH platform since this is accessed by many women and children, the sub-populations that bear the highest burden of disease from HIV/AIDS, unwanted pregnancy, and poor maternal, newborn and child health.

## Purpose of study and methodology

The purpose of this study was to assess the landscape of MNCH, FP and HIV/AIDS burden and integration efforts in order to inform the Bill & Melinda Gates Foundation's future potential engagement and investments in the area. The study was designed to help understand the burden of disease and service deficiencies across these three issues, to assess the state of integration of the issues at policy and programme levels and to identify key policy and programme gaps that the Gates Foundation and other partners can help address in order to enhance integration efforts grounded on the MNCH platform.

The study combined both qualitative and quantitative methodologies, including document review, collation and analysis of quantitative data, policy audits, key informant interviews and validation meetings. The quantitative data analysis informed the selection of four countries (Democratic Republic of Congo, Malawi, Tanzania and Zambia) with different permutations of disease burden and service deficiency for rapid national level assessment of the status of MNCH, FP and HIV/AIDS integration. This report focuses on Zambia.

## Key findings

### Policy framework

Zambia has not developed any integration-specific policies and the country's efforts to meet the broader health needs of the population have focused on the primary health care paradigm, which underscores the provision of holistic basic services to the individual. There were mixed views on this among officials, with some preferring a health system strengthening approach as opposed to a focus on SRH/MNCH, FP and HIV/AIDS integration. Those who favoured integration felt that it was fine to integrate MNCH and FP, but not HIV/AIDS because the latter has substantial resources and attention and would end up overshadowing the other issues. Although the presence of a policy framework on SRH/MNCH, FP and HIV/AIDS service integration does not automatically translate to the provision of integrated services, it demonstrates much-needed Government leadership on the issue and provides guidance to donors and other stakeholders involved in programing and service provision.

### Service integration challenges

A functional and supportive healthcare system is critical in determining the success or failure of integration of MNCH, FP, and HIV/AIDS services. Health system challenges to integration identified in Zambia include: vertical structures and planning mechanisms within the Government (e.g. within MoH and between MoH and the National AIDS Commission); inadequate funding, especially for SRH issues; insufficient and inadequately skilled health workers; lack of equipment; weak supply chain systems occasioning frequent commodity stock outs; and weak M&E systems to monitor integrated services.

While stakeholders felt that addressing specific challenges related to MNCH, HIV/AIDS, and FP integration is a good idea, efforts to enhance integrated services should be broadened to address these general health system bottlenecks as well.

### Integration experiences at service delivery level

At service delivery level, there are various integration programmes being implemented in Zambia. The PMTCT

programme remains the major integration effort with reasonably high levels of uptake. There is, therefore, substantial scope to ensure universal access to PMTCT treatment for the many HIV+ expectant women or treatment to HIV-exposed infants. The country could benefit from on-going advocacy and programme efforts to integrate PMTCT and MNCH, which research has shown could reduce the loss to follow-up of many mothers and infants.

Other integration programmes in Zambia range from integration of FP into HIV testing and counselling, FP into HIV care and treatment, HIV into FP, FP into PMTCT, PMTCT into MNCH, and FP and HIV/AIDS into MNCH. Notably though, most of these programmes are funded by donors, implemented by non-Governmental organisations and are implemented on a pilot basis in a few regions, districts, or health facilities. The main funders of MNCH and FP programmes in Zambia include: USAID, DFID, World Bank, UNFPA, UNICEF, KFW-Germany, CIDA-Canada, Swedish Embassy and EU. The main funders for HIV/AIDS include Global Fund, USAID, and PEPFAR/CDC. These agencies largely fund parallel programmes on different aspects of MNCH, FP and HIV/AIDS through different implementers. Consequently, there is a myriad of programmes collaborating with the Government to offer different models of integrated services.

Despite calls by global players (mainly the WHO) for countries and development partners to focus on integration through the MNCH platform, there is limited conscious effort to expand HIV/AIDS and FP services through this widely used platform. In fact, MNCH programmes remain greatly underfunded in Zambia (as is the case in the rest of SSA), a factor that hinders integration.

Research assessing various integration models has shown that integration has the potential to improve service utilisation, even though there still exist significant knowledge gaps on the actual benefits of integration. Stakeholders who were interviewed highlighted the need to understand service delivery realities, health system challenges and the needs and expectations of patients in thinking about what and how to integrate, since not every service can be integrated in any given health facility or context.

### **Current and potential areas of investment in integration for development partners**

Although development partners have largely made parallel investments in MNCH, FP and HIV/AIDS, some of these investments have supported some aspects of MNCH, FP and HIV/AIDS integration. Some of the key areas of focus for the cooperating partners' investments in Zambia in these three areas include: strengthening community level health

care provision; strengthening routine data capturing and management systems; supporting commodity supplies and supply chain management; creating demand for services and promoting healthy practices; funding implementation research; demonstrating scalability of programmes; and global advocacy for better policies, funding and leadership.

Discussions with various partners showed that future investments would likely involve working hand-in-hand with the Government to support the realisation of national goals in MNCH, FP and HIV/AIDS, with emphasis on improving the quality and coverage of care. Partners should move towards making holistic investments in health, particularly for women and children, including supporting key health system functions that will ensure improvements in health care quality and coverage.

Based on the study's findings and development partners' interests, especially the Gates Foundation's investment interests, we recommend that partners prioritise efforts that: support the Zambian Government to develop MNCH, FP and HIV/AIDS integration policies, strategies and guidelines; support critical functions of the health system, particularly human resources, commodity supply chain management, and M&E to enhance quality and coverage of integrated services; strengthen community-level provision of integrated MNCH, FP and HIV/AIDS information and services and fund research that evaluates the effectiveness of on-going integration efforts to generate evidence for programme improvement and scale-up.

Our in-depth country study of Zambia provided specific recommendations on what partners can do to enhance integration of the three issues. Zambia has invested a lot in improving its health system and has recently adopted a strong community-based programme to improve delivery of primary health care services. Disease burden is also quite high, yet the analysis showed service deficiency to be at moderate to medium levels. The entry point recommendations are synthesised from the results of the assessment that the study team did between December and April 2014.

Our findings point to the following potential entry points for integration efforts in the country.

1. Support the Government to strengthen the main health systems functions (funding, human resource, supply chain and logistics, laboratory and other health facility equipment and M&E), particularly those that increase access to and uptake of services by mothers and newborns, rural and hard-to-reach populations and adolescents.

2. Zambia has exceptionally high adolescent pregnancy and dropout rates. This is partly why the new Ministry of Community Development, Mother and Child Health (MCDMCH) classifies women and young girls generally as a vulnerable group. It would be useful to support MCDMCH efforts in tackling this challenge, e.g. through supporting the rollout of the Comprehensive Sex Education Curriculum (2013) that has received wide stakeholder support, but was yet to be rolled out at the time of the study. Particularly, partners running FP programmes could support and/or develop mechanisms aimed at ensuring FP efforts can meet the needs of girls.
3. The MDCMCH is also keen on integration of RMNCH programmes. With the support of European Union and World Bank, the Ministry was launching a programme on RMNCH at the time of the study. The new Ministry has elicited enthusiasm from stakeholders who view it as a fresh starting point for integration engagement. Partners could invest further in supporting coordination and technical working group capacity in this new Ministry. This would plug into current efforts supporting coordination of TWGs and joint planning groups between partners and the Government.
4. Support the implementation of the National AIDS Strategic Framework, which provides for the integration of PMTCT into other clinical services including MNCH, in rural and hard-to-reach areas by supporting the training of healthcare workers in these areas, as well as supporting programmes that integrate PMTCT into MNCH in these areas.
5. Given the MoH's focus on 'integration by referral,' support the strengthening of the MoH's referral system; the referral system remains weak and there are many cases of loss to follow-up.

**Despite these obvious linkages and potential synergies, efforts to tackle HIV/AIDS have traditionally occurred in parallel to existing platforms for SRH care, resulting in SRH and HIV services being delivered in separate or semi-specialised facilities and units.**

# Introduction

## 1.1 Background

The sub-Saharan Africa (SSA) region faces numerous health challenges, including a high burden of disease relating to HIV/AIDS, unintended pregnancies and poor maternal, newborn and child health (MNCH). This is largely a result of weak health systems compounded by a low demand for, and utilisation of, health care services in the region.

Integration of HIV/AIDS, family planning (FP), and MNCH services is widely seen as part of the solution to improving health delivery in SSA because the three issues are fundamentally interconnected and clients seeking HIV/AIDS services and those seeking SRH services are mostly in the same age range and share common health needs. HIV is mostly transmitted through unprotected sex or directly from mothers to babies during childbirth or breastfeeding. FP is a key intervention that enables families to decide when and how many children to have. Pregnant women require quality MNCH services in order to have healthy pregnancies and healthy babies. FP and MNCH interventions together have been shown to reduce the burden of maternal, newborn and child mortality.

Despite these obvious linkages and potential synergies, efforts to tackle HIV/AIDS have traditionally occurred in parallel to existing platforms for SRH care, resulting in SRH and HIV services being delivered in separate or semi-specialised facilities and units. The disjuncture has become even more marked as HIV services such as HIV counselling and testing (HCT), prevention of mother-to-child transmission (PMTCT), and HIV care and treatment clinics (CTC) have been rapidly scaled-up in high-prevalence settings. Furthermore, while SRH services such as FP and MNCH are delivered through the standard primary health care (PHC) structure, treatment-focused HIV services have often been delivered within more specialised units in tertiary health facilities or by health workers specialised in HIV. The shift of resources and political attention to HIV/AIDS has largely been at the expense of existing SRH programmes, particularly MCH and FP.

Integration of SRH and HIV/AIDS services has been promoted since the early 2000s to enhance effectiveness and extend the reach of services. The World Health Organisation (WHO)'s HIV/MNCH Technical

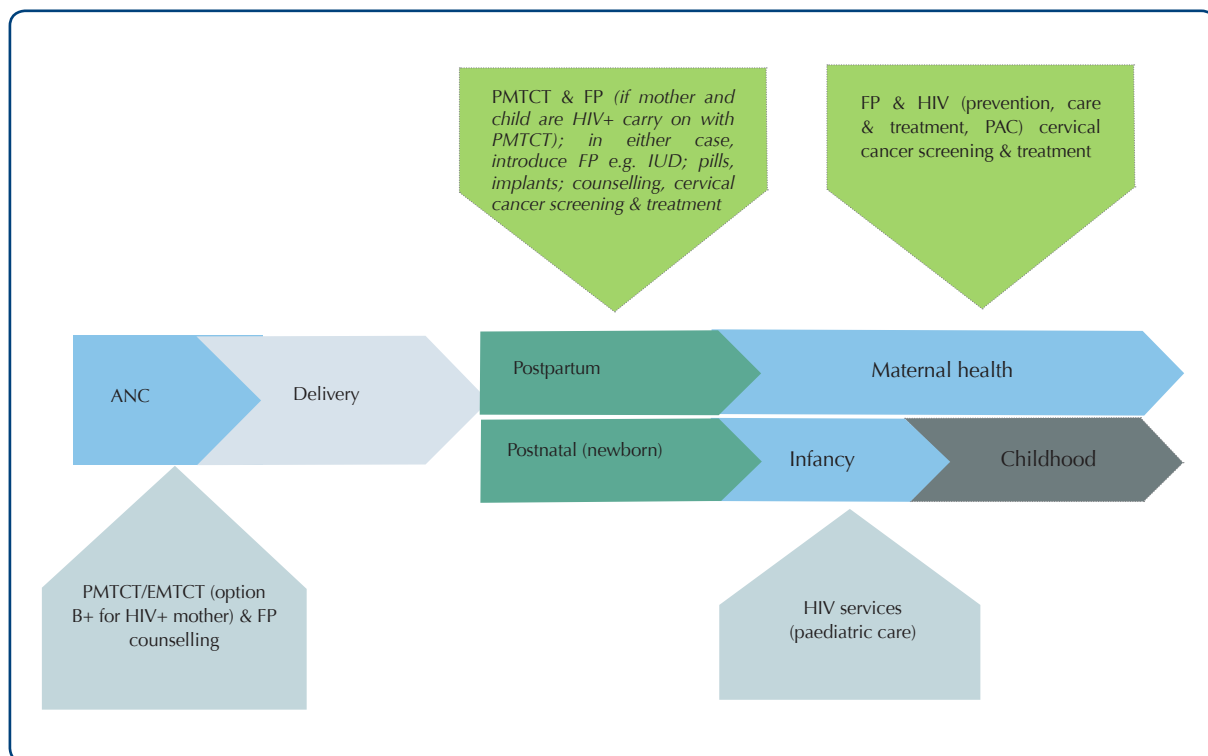
Working Group defines integration as “the organisation, coordination, and management of multiple activities and resources to ensure the delivery of more efficient and coherent services in relation to cost, output, impact, and acceptability.” The need to link and integrate SRH and HIV/AIDS responses has been recognised internationally as critical to ensuring universal access to SRH and HIV/AIDS services. This need is even more critical in SSA where the burden of HIV/AIDS, unintended pregnancies and maternal and child mortality are highest compared to the other three WHO regions – the Americas, Europe and the Western Pacific.

Over the years, various models of integrating SRH and HIV/AIDS services have been tested including: integrating FP into HIV testing and counselling, FP into HIV/AIDS CTC, HIV into FP, FP into PMTCT, and PMTCT into MNCH services. In the last five years, there is increasing emphasis on the need to use the MNCH platform as a base for integrating HIV/AIDS and FP services. In this report, the MNCH platform refers to the range of care and services given to women during pregnancy and delivery and to women and children

during the postpartum period up to childhood (5 years). These services include ANC, delivery care, postnatal care (PNC) and postpartum care, infancy and childhood.

Use of various MNCH services is very high in SSA because of high fertility and the fact that there is no controversy regarding enhancing child and maternal health and survival. Integrating HIV interventions into the MNCH platform offers valuable opportunities to reach women, children and families with a comprehensive package of interventions for HIV prevention, treatment and care. The ANC platform has been highlighted since more than 90 percent of women in most SSA countries make at least one ANC visit during pregnancy. In particular, ANC provides a key entry point for the PMTCT programme, where pregnant women who test HIV+ are moved into the PMTCT programme. In addition, the child immunisation programme is also widely used, presenting opportunities for provision of HIV/AIDS services and FP during immunisation campaigns. Figure 1 represents the MNCH continuum of care, highlighting entry points for integrating/integration of FP and HIV/AIDS.

Figure 1. The Maternal, Newborn, and Child Health (MNCH) Platform



Source: Adapted from PEPFAR 2011's Life Cycle Continuum of Care

Integration efforts have been boosted since 2008 when the key HIV/AIDS funders (PEPFAR, USAID, and Global Fund) relaxed their policies to incorporate FP and maternal health components into their relatively well-funded programmes. This momentum culminated in WHO's call to enhance integration of PMTCT and MNCH services in order to improve patient follow-up and adherence. Some studies have argued that full integration of PMTCT and MNCH will help address the challenge of high levels of loss to follow-up from PMTCT programmes of women and infants. However, efforts to integrate MNCH and PMTCT services should take account of the fact that some patients attending HIV-only services strongly favour keeping HIV services separate mainly because of stigma.

This study examines the current state of, and demand for, integration of MNCH, FP, and HIV services and identifies opportunities for enhancing integration in Zambia. While Zambia has invested a lot in improving its health system and has recently adopted a strong community-based programme to improve delivery of primary health care services, disease burden is quite high with intermediate service deficiency. The Bill & Melinda Gates Foundation has only made minimal investments in Zambia, mainly in clinical trials for HIV/AIDS vaccines and in strengthening routine data capturing and management systems for HIV/AIDS programme.

## 1.2 Purpose of study

The purpose of this study was to provide an understanding of the landscape of MNCH, FP and HIV/AIDS burden, service delivery gaps, and integration efforts to inform the Gates Foundation's future potential engagement and investments in the area. The Foundation was especially interested in integration that uses the MNCH platform. The study mapped the overlapping geographies, population groups, the highest burden areas and lowest intervention coverage for MNCH, FP and HIV/AIDS (i.e. the gap) and identified the entry points for integration approaches at policy and programme levels. The overarching objectives of the study included:

1. Describing current research on integration of MNCH, FP and HIV/AIDS;
2. Identifying the major implementers and funders and describing what they are implementing and supporting, respectively;
3. Defining existing challenges and gaps in policies and programmes and ways to address them;
4. Identifying geographies and populations of interest; and
5. Describing a potential role for the Gates Foundation and other development partners.



**We applied a step-by-step analytical approach to map and systematically identify the countries with the highest burden for MNCH, FP and HIV/AIDS, as well as countries with the biggest service delivery gaps in the Eastern and Southern Africa region (ESAR), the two sub-regions with the biggest burden of the HIV/AIDS pandemic in Africa.**

## Methods

A combination of qualitative and quantitative methods was used in conducting this rapid landscape analysis over a period of four and half months, from December 2013 to April 2014. We used the following methodological approaches.

### 2.1 Review of literature on integration

We conducted a review of relevant literature and policies addressing SRH, FP and HIV/AIDS integration in Zambia. The purpose was to get an understanding of the status of integration, the challenges and opportunities and the future direction on integration. Most of this data was sourced from the Internet.

### 2.2 Collation and analysis of quantitative data to map disease burden and service utilisation

This activity involved collation and generation of indicators to assess the burden of disease and level of service utilisation gaps on MNCH, FP and HIV/AIDS in 19 countries in Eastern and Southern Africa, including Zambia, that had the requisite data.

We applied a step-by-step analytical approach to map and systematically identify the countries with the highest burden for MNCH, FP and HIV/AIDS, as well as countries with the biggest service delivery gaps in the Eastern and Southern Africa region (ESAR), the two sub-regions with the biggest burden of the HIV/AIDS pandemic in Africa. Appendix 1 (Table 1a-1d) shows the indicators used to quantify the burden and service delivery for MNCH, FP and HIV/AIDS for the 19 countries with requisite data. We utilised recent data collated from national data sources, namely the Demographic and Health Survey (DHS), UNICEF's Multiple Indicator Cluster Survey (MICS) systems, United Nations projections and the WHO database.

In the final stage of the analysis, we used the relative ranks of the countries for both burden and service delivery in order to categorise the countries into groups representing combined permutations of high burden, medium burden, and low burden on the one hand, and high, medium and low service deficiency, on the other. We used these permutations to select four countries with different combinations of



disease burden and service utilisation in order to understand how integration realities, challenges and opportunities play out in these contexts. We sought to select four countries that represent the following features:

- High disease burden and poor service delivery
- High disease burden and good service delivery
- High disease burden and intermediate service delivery
- Medium disease burden and medium service delivery

Based on these criteria, four countries – the Democratic Republic of Congo (DRC), Malawi, Tanzania and Zambia – were selected for rapid assessment.

## 2.3 Country-level assessment using policy audits and key informant interviews

The country-level assessment was done to understand the burden of MNCH, FP and HIV/AIDS at sub-national levels, the gaps in service delivery, the integration programmes being implemented in each country and to identify opportunities for enhancing integration. The assessment included three main activities:

- Mapping MNCH, FP and the HIV/AIDS burden at sub-national level, service delivery gaps and key integration programme in order to identify the sub-

populations with the greatest needs in each of the four countries.

- Reviewing policies, strategies, guidelines, project reports and other relevant publications on MCNH, FP and HIV/AIDS to understand the commitment and guidance provided by Government to enable integration.
- Stakeholder interviews and validation workshops on the status of MNCH, FP and HIV/AIDS integration at policy, system, and service levels and opportunities for intervention to understand key challenges and identify opportunities for enhancing integration.

The interviews were done with key stakeholders, including MoH agencies responsible for SRH and HIV/AIDS, the national AIDS commissions, funding partners and program implementing organisations. In total, we conducted 23 interviews. The interview guide was adapted from the Rapid Assessment Tool for Sexual and Reproductive Health and HIV Linkages to accommodate this study's specific emphasis on integration using the MNCH platform. Interviews were recorded (in cases where interviewees agreed to be recorded) and detailed notes taken by the research team. To validate the findings from the interviews, we held a meeting with key stakeholders to deliberate on the preliminary findings. The validation meeting was attended by 10 individual stakeholders.

**Since young people hardly interact with the public health system before they become pregnant, efforts to improve uptake of FP in this group should focus on non-public service outlets, making public services more youth-friendly, intensive counselling during pregnancy and provision of services in the postpartum period.**

## Findings

### 3.1 Disease burden, service delivery gaps and opportunities for integrating MNCH, FP and HIV in Zambia

#### 3.1.1 HIV burden and service utilisation

Zambia has one of the highest HIV/AIDS burden in Africa (12.7 percent prevalence). Table 1a (Appendix 1) shows how Zambia compares with the rest of SSA. The relatively high HIV incidence rates suggest that there is considerable need for expansion of both prevention and treatment intervention programmes in the country. Good progress has been made in increasing access to ARTs and PMTCT, with at least 82 percent and 86 percent of HIV-positive people accessing ARTs and PMTCT, respectively. These patterns demonstrate huge opportunities to increase uptake of preventive services through increased provision of FP and MNCH services, but also to increase use of FP and MNCH services among people living with HIV through the well-grounded ART and PMTCT programmes.

#### 3.1.2 Unplanned fertility and family planning

Ample evidence demonstrates that adolescent childbearing is associated with high maternal mortality, high HIV infection, high child mortality, poor education outcomes and low socioeconomic status later in life. Compared with other Eastern and Southern African countries, Zambia, together with DRC, Uganda, Angola, Madagascar, Malawi, and Mozambique have exceptionally high adolescent birth rates (151/1000). Since young people hardly interact with the public health system before they become pregnant, efforts to improve uptake of FP in this group should focus on non-public service outlets, making public services more youth-friendly, intensive counselling during pregnancy and provision of services in the postpartum period.

High unplanned pregnancy rates are linked to the fact that the country also has one of the lowest contraceptive prevalence rates (CPR) in Southern Africa (Table 1b, Appendix of Tables). The high proportions of unplanned births and unmet need for FP in the broader 15-49 reproductive age group attest to the lack of effective means of contraception, and provides enormous scope to improve access and use of FP in the country. The public health sector remains the major

source of contraceptives for the majority of women in the country, with 68 percent of all contraceptive users sourcing their contraceptives from public institutions.

FP services can be promoted through the contacts with the health system that pregnant women and mothers with children make, and through contacts that people seeking HIV/AIDS preventive and treatment services make, and vice versa. The fact that MNCH and HIV/AIDS services are also primarily delivered through the public health sector to the same population of women and men of reproductive age who need FP provides good opportunities for improving service coverage through integrated programmes.

### 3.1.3 Maternal health

According to the latest WHO report, Zambia is among the countries making progress in reducing maternal mortality toward the MDGs. Currently, the country has a Maternal Mortality Ratio (MMR) of 280/100,000 live births.

The country also has an excellent ANC attendance record with nearly all pregnant women attending ANC at least once. However, ANC attendance drops to 60 percent in the fourth visit. Similarly, the proportion of women using skilled care during delivery is also low (47 percent) compared to other Southern Africa countries such as Botswana, DRC, South Africa, Namibia and Swaziland, with a proportion of 80 percent and above.

The high attendance to ANC at least once presents an opportunity to encourage women to go for more ANC visits and opt for hospital deliveries or deliveries using skilled care. Research shows that use of FP is higher among women who attended the recommended four or more ANC visits, making the case for integration of FP into ANC services. In addition, deliveries with skilled care can ensure that women who are HIV positive can receive PMTCT, which is proven to reduce the risk of vertical transmission of HIV from 35 percent to less than 5 percent (or even lower) in breastfeeding populations, and from 25 percent to less than 2 percent in non-breastfeeding populations. Zambia could consider introducing PMTCT Option B+, to provide care that goes beyond prevention of vertical transmission for HIV-positive pregnant women, to providing life-long care and treatment. The data showing how Zambia compares to the rest of SSA is summarised in Table 1c, Appendix of Tables.

### 3.1.4 Child health

Zambia has high under-five and infant mortality rates at 138/1000 and 76/1000, respectively, falling way below the MDG 4 targets. Immunisation coverage is also low (55 percent) compared to other Southern African countries.

Access to pneumonia and diarrhoea care and treatment is also low in the country, with all indicators being under 70 percent. Since almost two-thirds of all child deaths are caused by preventable infectious diseases, including malaria, pneumonia, diarrhoea, sepsis, measles and AIDS, the low immunisation and low pneumonia and diarrhoea care and treatment coverage in the country is a concern. Immunisation is a proven tool for controlling and eliminating life-threatening infectious diseases. It is also one of the most cost-effective health investments, with proven strategies that make it accessible even to the most hard-to-reach and vulnerable populations. Therefore, it presents an opportunity for expanding access to other key MNCH, HIV and FP services. The data showing how Zambia compares to the rest of SSA is summarised in Table 1d, Appendix of Tables.

## 3.2 Status of integration at policy, systems and service delivery levels

For effective delivery of integrated services, there is need for supportive policy frameworks and systems. As noted by the WHO, effective integration requires coordination at multiple levels, within and among Government and partner agencies, including policies and guidelines, administration and governance, funding, human resources, information systems and commodity supply chains. In this section, we provide results from the country assessment describing the integration landscape at policy, system and service delivery levels. These are considered in the light of the literature and current practice in the region.

### 3.2.1 Stakeholders' perspectives on integration

While there was a general consensus about the need for integration, opinion was divided on the type and form that integration should take. Generally, most stakeholders felt that integration should take a systems approach, and that such an approach should ensure client-centeredness, community involvement and financial sustainability.

“As a human being I am integrated, so should services, to yield optimum outcomes. Where integration is not feasible, synergies between programmes should be found and enhanced to ensure better results.”

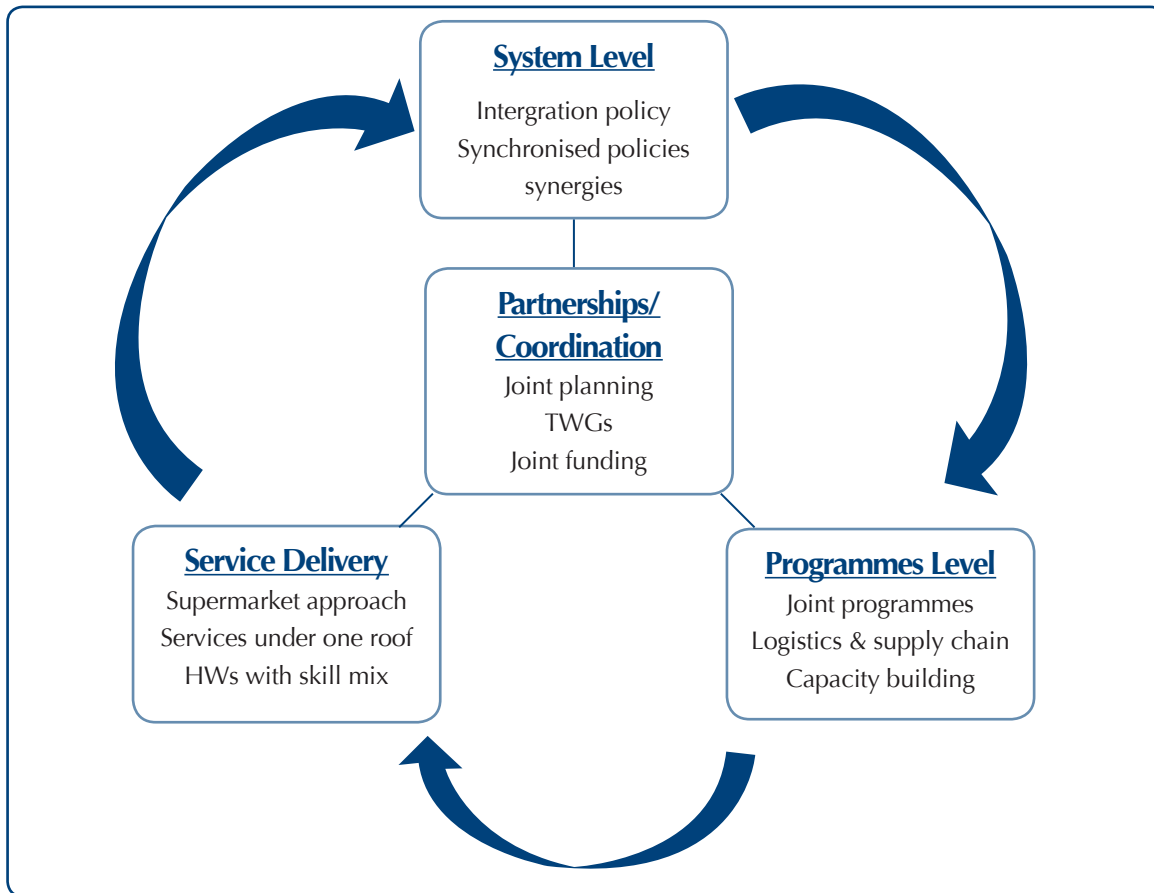
-Implementing Partner

“Holistic service provision at policy and service delivery level, a one-stop shop like a ShopRite.”

-UNFPA representative

The stakeholder perspectives are summarised in Figure 2 below.

Figure 2: Summary of stakeholder perspectives on integration in Zambia



### 3.2.2 Policy framework for MNCH, FP and HIV/AIDS integration

Although the presence of a policy framework on SRH/MNCH, FP and HIV/AIDS service integration does not automatically translate to provision of integrated services, it demonstrates the much-needed global and Government leadership on the issue and provides guidance to stakeholders involved in funding, programming and service provision. Since the mid-1990s, various global commitments have been made towards promoting linkages and integration between SRH and HIV/AIDS services. These include: the 1994 International Conference on Population and Development (ICPD); the 2001 (UN General Assembly) UNGASS Declaration of Commitment on HIV/AIDS; the 2004 New York Call to Commitment: Linking HIV/AIDS and Sexual and Reproductive Health; the 2005 Call to Action: Towards an HIV-Free and AIDS-Free Generation, the UNGASS 60 Session Political Declaration on HIV/AIDS; and Achieving Universal Access to Comprehensive Prevention of Mother-to-Child Transmission Services consensus statement.

At the time of the study, Zambia did not have a specific integration policy and there were no indications that one would be developed in the near future. Nonetheless, the Ministry of Community Development, Maternal and Child Health (MCDMCH), was developing a RMNCH integration policy. Notably though this did not refer to SRH/HIV integration, but only RMNCH integration. In our interviews, respondents, especially those handling MNCH programmes, expressed fear that integrating RMNCH with HIV/AIDS programmes, as currently structured, was likely to “kill” RMNCH programmes since the HIV/AIDS programmes were “very big”.

“We do not wish to add HIV [to RMNCH] as it is too big and it has already gained ground and has strongholds. Don’t even go there. HIV has taken too much centre stage, pushing out RMNCH... we do not want RMNCH to be swallowed; do you think we can have focus on RMNCH if we add HIV to it? We fear it [RMNCH] might not take off.”

– MCDMCH interviewee

Some policymakers argued that policy guidance on integration is contained in their overall health sector policies because these are guided by the principles of primary health care and a systems approach to health care provision.

“Integration to us is about creating synergies and effectiveness between programmes. This is what is captured in the various Government policies such as the National Youth Policy, National Health Strategic Plan (NHSP) and National M & E framework”

– MoH interviewee

Because of this systems approach, this group of respondents did not see the importance of having a specific policy on integration. A review of the key policies (see Table 1 below)

#### Box 1: Key Policies guiding MNCH, FP and HIV/AIDS in Zambia

- National Health Strategic Plan 2011 - 2015
- Strategic Plan for the MCDMCH 2013 - 2016
- Scaling up 2020 Family Planning Strategy 2013-2020
- National HIV Prevention Strategy 2011 - 2015
- Adolescent Health Strategic Plan 2011 - 2015
- Comprehensive Sex Education Curriculum (2013) for roll out in schools
- PMTCT Guidelines 2009
- National Reproductive Health Policy - 2008
- National Health Policy 2013
- National HIV/AIDS/STI/TB Policy 2005

guiding service delivery in the Zambian health system reveals mixed efforts toward integration. For example, the Zambia National AIDS Strategic Framework outlines how the ANC-PMTCT integration is to be achieved and also provides for integration of PMTCT into other appropriate clinic-based services, including MNCH, HIV and STI. The framework further aims to train health care workers to integrate STI services into other care such as MCH, FP and PMTCT. The integration envisaged here is bidirectional.

#### Policy level challenges

The main challenge at policy level is the lack of an overall policy framework for integration and perhaps more important, the lack of consensus on the need for a policy, coupled with weak leadership of integration and poor capacity for policy development.

#### Lack of a policy framework and consensus on integration

Most stakeholders (in interviews and during the validation meeting) expressed a desire for a policy document to guide integration, arguing that it was the only way to hold the Government accountable and to bring various actors in the health sector together. The lack of such a document was blamed for the haphazard implementation of integration programmes.

“Each and every organisation is doing its own way.”

– Development partner

“It’s more of a case-by-case situation where each facility decides what to integrate.”

– Implementing partner

Some respondents, however, especially those from the Government, were of the opinion that Zambia for a long time has adopted a systems approach to health care provision, which effectively meant that most services were integrated through a referral system or what was referred to as “integration by referral”.

“We do not look at integration from the donor perspective – they think they can tease out few areas, cherry pick here and there and direct us on what to integrate. Integration to us is about creating synergies and effectiveness between programmes. This is what is captured in the various Government policies such as the National Youth Policy, NHSP and National M&E Framework.”

– MoH Interviewee

Zambia has a focussed antenatal and postnatal care approach at the service delivery level, which, to a given extent, integrates voluntary HIV counselling and testing, PMTCT, STI treatment and initiation of ART services. The Zambia National AIDS Strategic Framework also provides for ANC-PMTCT integration at the service delivery level. It envisages the integration of PMTCT into other appropriate clinic-based services, such as MNCH clinics, HIV treatment centres, STI clinics and other RH service centres. To achieve these, the framework envisages the training of health care workers to enable them to integrate STI services into other care such as male circumcision, FP and PMTCT, along with equipping health facilities with the necessary diagnostic tools and treatment drugs as well as condoms to effectively treat and manage patients with STIs.

Although some policymakers in Zambia did not see the value of developing a specific integration policy, lessons



from Kenya indicate that having an integration policy demonstrates high-level commitment to integration, which is essential for lower level implementation and outlines clear guidelines on possible integration models, as well as specifying a minimum package for integrated services. It was felt that for Kenya, having an integration policy (strategy and guidelines) has been instrumental in the country's achievements on SRH/MNCH, FP and HIV/AIDS service integration [ibid].

### **Weak leadership and capacity for integration policy development and implementation**

Stakeholders pointed out Government's weak leadership in championing the development and implementation of MNCH, FP and HIV/AIDS integration policy. Both the interviews and stakeholder forums revealed a desire by development partners for the Government to take leadership in policy development, championing integration, partner coordination and policy implementation. To support these efforts, stakeholders emphasised the need for an all-inclusive process, bringing together the Government, cooperating partners, researchers and implementers (the health work force) and service recipients (the community). For Zambia, therefore, the opportunity for development partners lies in working with the ministries (MoH and the MCDMCH) to support MNCH and FP integration, as well as supporting the strengthening of the functions of the health system, which remain critical for enabling service integration.

#### **3.2.3 MNCH, FP and HIV/AIDS integration at system level**

The 'system level' refers to the structures in place to support successful implementation of policy actions. The existence of supportive systems that facilitate the actual provision of integrated services remains a critical factor in determining the success or failure of any integration efforts. The study identified vertical structures and planning mechanisms within the Government (i.e. within MoH, the MCDMCH and between these two ministries and the national AIDS commission), inadequate funding, insufficient and inadequately skilled health workers, lacking equipment,

weak supply chains occasioning frequent stock outs and weak M&E systems as the key system barriers to service integration. According to WHO, health systems are made up of "a horizontal system" of general services, providing prevention and care for prevailing health problems and of "vertical programmes" for specific health conditions. Vertical programmes are found more frequently where poverty prevails and epidemics flourish; general health services are weakly developed under such conditions. As such, the weak health system presents a critical entry point for supporting integration efforts.

### **Funding and budgetary support for integration**

As is the case in SSA, health care is critically underfunded in Zambia. Currently, Government spending on health stands at 16 percent in Zambia. Most Government funding goes toward recurrent expenditure (such as salaries), leaving very little, if at all, for programmes on health service provision. Similar to the rest of SSA, cooperating partners provide substantial funding for integration in Zambia (see Table 2 below). Cooperating partners support takes two main forms: pooled (basket) funding, operationalised through memoranda of understanding (MoU) with bilateral and multilateral funders (funds are provided through the Government structures and are applied based on the Government's need) and discrete funding, where funds are managed by individual donors (in many cases, funds are given to implementing partners such as NGOs).

MoH & MCDMCH interviewees preferred basket funding, arguing that this method allowed for funds to be applied more equitably to key national priorities. It also facilitated some integration since funds put in the basket lose identity and in cases where donors do not determine areas where the funds are invested, these could be leveraged to cover programmes with less support, such as MNCH. Some respondents felt that integration would thrive if development partners put all their funds in the basket fund and that funding independent programmes greatly undermined integration as it meant the vertical structuring of programmes with independent reporting, supervisory and M&E processes.

Table 1: Different Types of Integration in Zambia

Integrated services	Funding Institution	Implementing Institution	Region/District
FP into HIV/AIDS	DFID, USAID, PSI, Population Council, FHI360, Marie Stopes, Clinton Health, Bill & Melinda Gates	Scaling Up Family Program (SUFF), ABT Associates Inc., PPAZ, Zambia System Integrated Program, PPAZ, Zambia HIV focusing on integration of HIV (ZEHRP), Zambia Research Institute, American Nurses and Midwives organisation, MCDMCH, MoH	Districts
	Global Fund, PEPFAR, AIDS Fund, USAID, UN joint team	MoH	Throughout the country
	UNFPA, USAID, IPPE, Plan Sweden, Open Society International	PPAZ, Young Women's Christian Association of Zambia (YWCA), Forum for African Women Educationalists of Zambia (FAWEZA), Alliance Zambia, Copperbelt Health Education Project, Catholic Diocese of Ndola, People's Process on Poverty and Housing in Zambia, Women for Change and Students Partnership Worldwide, MCDMCH and MoH	Lusaka, Kitwe, Livingstone but outreach programmes extend to the neighbouring towns and districts (Eastern Province, Copper belt Province, Southern Province)
	UNFPA	MCDMCH	One district
	USAID and PEPFAR	Zambia integrated systems strengthening programme (ZISSP), CDC, London School of Hygiene and Tropical Diseases, Boston University, CIRZD	10 districts
FP into MNCH/RCH	Gates Foundation, SFH, European funding,	Marie Stopes, PPAZ, Youth engagement, MCDMCH and MoH	10 provinces of the country
	JICA, EU, WB, USAID, SIDAUNICEF	MCDMCH and MoH	Throughout the country
	UNFPA, UNICEF, WHO, Save the Children (Italy, USA), Norway, CIDA and SIDA	SAVE the Children, PATH, MoH, MCDMCH, Boston University, CIDRZ, Elizabeth Glaser Paediatric AIDS Foundation, Zambia Prevention Care and Treatment II, ZISSP, Communications Support for Health, JHPIEGO	Copper belt, Kitwe
FP into PMTCT	UNFPA, USAID	IPAS, PPAZ, Marie Stopes, SUFF,	89 health public centres in four provinces of the country
FP into Immunisation/ Outreach programmes	UNICEF, Save the Children	MCDMCH, CHAZ, Child Fund, Society for Family Health	Lusaka, Kitwe, Livingstone, Copper belt
FP/RH into VCT	UNFPA, USAID, IPPE, Plan Sweden, Open Society International,	PPAZ, Youth Vision Zambia, Society for Family Health Marie Stopes, IPAS, MoH, MCDMCH, CHAZ	Lusaka, Kitwe, Livingstone but outreach programmes extend to the neighbouring towns and districts (eastern province, Copper belt province, southern province)
	Gates foundation, SFH, European funding	Marie Stopes, PPAZ, Youth engagement, MoH, MCDMCH, SFH	Lusaka, Kitwe, Livingstone, Copper belt

MNCH into HIV	UNICEF, USAID, UNFPA, Irish Aid, Danish, EU, MoH, MCDMCH	CHAZ	68 sites, throughout the ten provinces of Zambia
TB into HIV	JICA	NAC, MoH, MCDMCH	Throughout the country
	PEPFAR, CDC, EU, Comic Relief, Susan Community Foundation, USAID	CIRDZ, MoH, MCDMCH, ZPCT II-FHI360, MSH, CHAZ, UTH, Care international, Emerging Markets Group, Social Impact, the Salvation Army, World Service Office, CHAZ, Network of Zambian People Living with HIV/AIDS, Salvation Army/Zambia	12 clinics in the Eastern, southern and western provinces, 400 Government health facilities in 45 districts and in 30 private clinics
FP, HIV, MNCH	USAID, PEPFAR, American college of nursing midwives	ZISSP, CDC, London School of Hygiene and Tropical Medicine, Boston University, CIRDZ, CHAZ	Operating in 27 districts

In Zambia, the main funders for SRH (including MNCH, FP) include USAID, DFID, UNFPA, UNICEF, CIDA-Canada, WHO, SIDA-Sweden and EU. The main funders for HIV/AIDS include Global Fund, USAID and PEPFAR/CDC. The same funders support integrated programmes, albeit at varying levels (see Table 2 above).

There were two main challenges with funding. The first was the grave inadequacy of funding, particularly for the MNCH programme. The MNCH presents many opportunities for integration, yet it is greatly underfunded compared to HIV/AIDS, FP and child immunisation. Thus, efforts seeking to enable integration through the MNCH platform need to invest in strengthening the maternal health programme.

The second challenge was the vertical approach to programme funding by development partners. Development partners often fund programmes independently, which many respondents reported to be a major hindrance to integration. The result is that programmes run vertically at health facilities with separate resources and different reporting mechanisms. This happens in the face of a thin workforce already required to report and account to individual donors and Government. Stakeholders therefore recommended the need for funding partners to adopt joint financing mechanisms that promote, rather than undermine, integration, such as basket funding.

The Zambian Government has a mechanism within the Ministry of Finance that enables funding partners to put money into a common basket for the health sector. Some funding partners, including the World Bank and DFID support the Government through this basket funding mechanism. Notably though, the US Government, a key funder of SRH and HIV/AIDS programmes, does not support the Zambian Government through the basket fund, a situation that many stakeholders pointed out as responsible

for the many parallel programmes in the health sector and which undermine integration efforts.

The Zambian Government, through the MCDMCH, is taking steps to strengthen its leadership by requiring funders to support Government priorities through the basket fund and through the decentralised units, rather than letting partners run their own vertical programmes through multiple NGOs. Most stakeholders, however, pointed out to the need for the Government to strengthen its internal accountability structures and seal corruption loopholes that have previously elevated suspicion and ended up weakening relationships, particularly with cooperating partners. Cooperating partners emphasised that that 'era of blank cheques was gone' and Government must be ready to account for every dollar received and show value for money.

### Planning and coordination

As in many SSA countries, there are vertical structures for SRH/MNCH and HIV/AIDS. The Zambian Government recently split the MoH into two ministries – the MoH, which is responsible for policy development and national- and referral-level health facilities and the Ministry of Community Development and Mother and Child Health (MCDMCH), which is responsible for policy implementation and all health facilities from district level downwards. Within these two ministries, there are separate departments and divisions responsible for SRH, MNCH and FP, as well as the national AIDS control programme, responsible for HIV/AIDS. Additionally there is the National AIDS Council, an independent entity created by an act of Parliament, responsible for the multi-sectoral response to HIV/AIDS.

Although respondents argued that there are joint committees between these structures that enable joint planning, in practice, joint planning is limited by the vertical nature of



these structures. Stakeholders argued that given the power and authority espoused/embodied in each vertical structure, there is no commitment at this level for integration as this is likely to weaken the power of the officials leading these structures. The result is that programmes have separate reporting and accountability structures that hinder the integration of services at delivery points.

Addressing the challenge of vertical structures and planning mechanisms may not lie entirely in merging existing structures, but rather in enabling increased collaboration and joint planning. In particular, development partners' interviews felt that generously-funded HIV/AIDS structures and programmes need to show leadership and commitment in enabling more meaningful collaboration and joint planning with the MNCH and FP structures and programmes in order to support and facilitate actual integration on the ground.

With regard to the coordination of partner efforts, Zambia has various mechanisms such as technical working groups (TWGs) that convene relevant stakeholder meetings in the three areas. Even then, these TWGs tend to focus on MNCH, FP and HIV/AIDS separately. TWGs and other joint planning structures such as the annual partners meeting and biannual partner review enable partners to fund Government priority investment areas, while others work with Government to develop work plans based on jointly identified need areas. In spite of these efforts, there were challenges with coordination. On the part of Government, it was felt that there were too many partners running their own programmes and officials expressed frustration at having to deal with numerous partners. At the time of the study, the MCDMCH had decided on supporting the decentralised units (districts) to ensure partners engaged with service recipients at the district level. One Government (MCDMCH) interviewee lamented that the process "tends to be very overwhelming and time consuming." Coordination challenges at national and district levels remain, mainly due to multiplicity of vertical programmes, with key donors funding specific programmes in ways that ensure their visibility:

"Few donors want to invest in training of more health staff or funding local organisations to implement; he who has the money, their voice is heard... even amongst themselves, they compete to be seen."

– CIDRZ interviewee

On the other hand, stakeholders argued that the Government's leadership and coordination of programmes was weak and ineffective.

## Human resources

Inadequate human resources capacity remains a major challenge in the health sector in Zambia presenting, a key barrier to integration, as is the case in most of SSA. This involves an inadequate number of health workers in facilities, inadequately skilled healthcare workers, particularly in providing integrated services, poor remuneration against large workloads which can result in low motivation, high staff turn-over and the provision of poor quality services. Zambia currently operates at below the WHO-recommended client-health worker ratios with less than 50 percent of the required workforce, typifying the SSA context, where current staffing is at less than half of the required capacity.

"In some facilities, especially the rural areas, there will be only one health worker providing all the services, resulting in heavy workloads. There is a big gap between the approved establishments and the actual number of health workers at a given health centre."

– Implementing partner

Both Government and cooperating partners are making efforts to address the well-acknowledged human resources challenge. Key among these efforts is training of health workers. Government and stakeholders have been involved in various training interventions to equip health workers with the skills needed to provide integrated services. The challenge, however, was that often these efforts were not nationwide, but rather in regions or districts where partners were implementing programmes. Most partners interviewed had training components in their programmes. Partners also reported that the main challenge with training was high staff turnover and frequent transfers, which undermined their training investments, as health workers often left before applying or transferring their acquired skills. The gravity of the human resources challenge requires Zambia to make clear commitments that progressively address the issue over the years. Innovative strategies that address the insufficient numbers of health workers, the skills gap and low remuneration and motivation present opportunities for strengthening human resources, which is a critical element for integration.

## Logistics and supply of commodities

In Zambia, like in many other SSA countries, there are efforts to shift from vertical supply chains for different programmes and commodities, to integrated systems that include, most, if not all of the essential medicines and other health

commodities available through the public sector. These efforts are, however, still faced with numerous challenges ranging from separate, uncoordinated procurement procedures, inadequate transport for commodities, to weak capacity for forecasting, the latter often resulting in stock-outs. For example, while the supply of condoms has been integrated (under the Government supply chain) procurement is still vertical. The result is that some partners follow their own estimations and procurement procedures, which sometimes leads to oversupply and expiry of products. Some partners, like USAID and UNFPA, set up a parallel supply system to complement the Government system. The goal, however, was usually not met as partners ended up procuring similar products, which could have been easily avoided if there was a coordinated forecasting and procurement mechanism. Interviews with key leadership at Medical Suppliers Limited (MSL) revealed that efforts are being made to address some of these challenges and shown some good results, for example bringing together development partners and Government to support an integrated, devolved supply chain system.

Despite the above efforts, Zambia's logistics and supply chain faces a number of challenges, among them limited geographic reach, an uncoordinated approach to procurement of products, lack of information for reliable forecasting and supply chain planning, insufficient scale in warehousing and distribution and poor access to financing. At facility level, inadequate technical capacity to monitor actual consumption, forecasting and ordering or redistribution often leads to stock-outs or expiration of commodities. In other cases, it is the attitude of health workers who sometimes prefer curative to preventive commodities and end up ordering fewer preventive commodities.

“At central level, there has not been any stock-out in the recent years. However, stock-outs happen at service delivery points. This is mainly due to attitude of workers when they are ordering the commodities, they under-order or under-plan. Immunisation kits are never short at clinics yet the same health workers do the ordering and delivery.”

– MSL interviewee

At the end-user level, the geographical distance might prevent clients from accessing commodities. On the other hand, a client might get to a facility but find a limited choice of commodities due to under-stocking. Non-integrated forecasting and procurement procedures result in under-stocking or over-stocking of drugs and commodities at the

facility level. Coordination of procurement is done at the MoH, leaving MSL with distribution role only. Moreover, poor coordination and lack of communication between partners results in partners ordering separate, but similar products, resulting in oversupply. In the current system, partners do not declare their procurement plans in advance. MSL has no control over the supplies that come into the central stores.

Vertical programmes implemented by the development partners usually do not look into the extended cost of medication, e.g. powder drugs need water, syringes, and swabs which most of them do not provide and have to be supported through Government funding.”

– MSL interviewee

In some instances, due to lack of communication, different partners will procure the same products during the same period. This challenge is especially severe in the procurement processes for malaria and RH, resulting in uncoordinated procurement process that would often lead to over purchase of commodities and in some instances, expiry of some commodities. MSL faces other difficulties including inadequate storage capacity (sometimes forcing it to hire out storage spaces where quality standards cannot be adequately guaranteed) and a weak legal structure to support disposal of pharmaceutical commodities.

### Laboratory support

Laboratory support for integrated services is one of the weakest links to integration in Zambia. Even in facilities where there are laboratories, necessary reagents and other supplies and the skills required to offer various services are often inadequate. Stakeholder interviews revealed that these challenges are being addressed. Under a USAID-supported programme Zambia Prevention, Care and Treatment Partnership II (ZPCTII) and in conjunction with other stakeholders, Government is renovating and upgrading laboratories by procuring equipment, training health workers in the use and maintenance of the machines, providing start-up reagents and where possible, increasing physical space. Major hospitals and health centres have adequate and working equipment, but not enough to cater for the high demand that integration requires. Additionally, in most rural health centres, there are only basic tools and for most of the major tests, referral has to be done. In other cases, clients cannot afford to travel the distance, so specimens are collected and sent for analysis in better-equipped facilities up the health system. This hinders service delivery in that it takes a long time for clients get results in order to be put on treatment.

“Health centres are not adequately equipped to handle integration – some facilities are not even equipped to support a single service like HIV testing, thus this might compromise on the quality of services being integrated and provided.”

–Development partner

Intra- and inter-health facility referrals are uncoordinated, resulting in loss to follow up, especially for children. In some cases when clients are referred from a free-of-charge facility to a fee-paying facility, they cannot get services due to financial constraints, while in others, health workers fail to sign referral feedback forms because they are not obliged to do so or they are too busy. To deal with this, a results-based finance framework that obliges health workers to complete feedback forms is being piloted in 11 districts. Some stakeholders suggested that referral systems do not work because citizens do not take the initiative to follow through with referrals.

Other challenges with the laboratory services include inadequate space within facilities and inadequate laboratory systems to support product testing to ensure quality products:

“Even though there are legal provisions guiding procurement, these are not strong enough to support internationally agreed standards especially because of challenges of inadequate laboratories for testing products entering the market.”

– MSL interviewee

The weak commodity supply chain as well as the inadequacy of equipment required for healthcare provision present key opportunities for investments that seek to strengthen integration efforts.

## Monitoring and Evaluation

M&E for MNCH, FP and HIV is still largely vertical given the verticality of programmes. Stakeholders expressed the need for integrated and easy to use M&E tools. Zambia’s National Health Strategic Plan sets out the priority areas for health interventions and provides a basis for monitoring progress of its implementation through the health management information system (HMIS). The HMIS is currently undergoing some reforms in order to improve timeliness, accuracy and completeness of the data. Under the HMIS, the 3As approach is being applied to encourage health workers to *aggregate*, *analyse* and *act* based on the data collected.

Despite the improvements being made under HMIS, the M&E system still faces a number of challenges. There have been a lot of changes in recent years with the realignment

of MoH and the creation of MCDMCH. The main M&E unit is housed under the MoH, yet programmes that support the system by providing data are now under the MCDMCH. To deal with this, the MCDMCH reported setting up an M&E unit with support from various partners. HMIS indicators being used are not yet integrated and dealing with the diversity of indicators and reporting mechanisms is time-consuming for health workers.

“In the registers at facility level, FP has three indicators but the HIV component has quite a number of indicators, apart from the indicators from other programmes like TB.”

– Implementing partner

HMIS is not efficient at capturing data at all levels, due to parallel M&E structures and platforms and the inadequate capacity of health workers. In some cases, not all the required data is fed into the HMIS, resulting in loss. For instance, data collected by community-based health workers does not always get captured at district level.

“HMIS is inadequate and sometimes contains different data from what is being captured at the district level; bad data can filter through to national levels.”

– MCDMCH interviewee

“I attended a meeting where a DHO expressed shock at the data being shown to have come from his district, the poor guy had never seen that data before.”

– Validation meeting participant

Service delivery requires quality assurance and improvement, but apart from specific programmes that have instituted quality improvement and assurance in the impact areas, this remains a difficulty due to poor supervision mechanisms and coordination. It was argued that data quality was poor mainly because health workers were overworked or did not appreciate the importance of the data. Comments from respondents illustrate this:

“Most health workers don’t see the need for the data being asked of them, they see many problems every day that HMIS is not a priority to them.”

– MoH interviewee

A few facilities with working relationships with other stakeholders like Planned Parenthood Association of Zambia (PPAZ) have supervision and mentorship visits on a quarterly basis to ensure adherence to the clinical care guidelines. The HMIS could benefit from the use of simple, cheap technologies like mobile handsets, which can

facilitate easy collection of data. Most facilities in the rural areas are still using paper-based data collection systems while others use electronic systems (e.g. the smart-care system supported by USAID), creating parallel systems of data collection and management. There is an urgent need to merge or link the two.

The referral system also remains weak, with many patients getting lost to follow-up treatment and care. Given these weak systems, investments in re-orienting the M&E systems at health facility level, and piloting or scaling up IT/mobile phone-based M&E systems will contribute to ensuring more effective referral systems as well as generating useful data required to inform service delivery processes.

### 3.2.4 Status of integration at service delivery level

The main forms of integration taking place in Zambia are largely carried out by cooperating partners and implemented only in select regions and facilities (see Table 3, Section 3.2.3). Most of these programmes are fully funded by cooperating partners. These include integration of FP into PMTCT, FP into HIV CTC, FP into HIV VCT, HIV into FP, and community-level provision of FP and HIV/AIDS information and some services. FP into HIV programmes was highlighted as the most common integration model.

In Zambia, cooperating partners (e.g. PPAZ, Youth Vision Zambia) used joint outreach programmes to extend services to hard-to-reach populations, i.e. rural communities and young people. Services provided included FP, HIV messaging and treatment, VCT, and community education aimed at getting male support for FP. The main focus for most of the community-based service provision was on FP information and distribution and home-based care for AIDS patients. In Zambia, the Government, with the support of cooperating partners, was using trained community-based health workers to provide community-based services ranging from FP, safe deliveries, ANC, PMTCT and Voluntary Male Circumcision (VMC).

Notably, provision of integrated MNCH, FP and HIV/AIDS services at community level remains a weak link in Zambia, typifying the situation in much of Eastern and Southern Africa. Ethiopia's community level service provision programme (the Community Health Extension Workers Program) stands out as a model that Zambia could learn from. Supporting the provision of community-level integrated services for MNCH, FP and HIV/AIDS has the potential to extend the reach of important life-saving services particularly to rural and hard-to-reach communities.

The nationwide MNCH platform accessed by many women and children at service delivery level presents investment opportunities for strengthening integration. Research has shown that integrating FP and HIV/AIDS services into ANC, delivery, PNC and child-care services increases uptake of FP and HIV/AIDS services. An important factor, though, is that demand for PNC services is very low and in part, integration efforts need to focus on generating and sustaining demand for PNC services. Efforts that focus on strengthening the skills of MNCH service providers to also offer HIV/AIDS and FP services, motivating health care workers as well as equipping facilities with required equipment and commodities could support the provision of integrated services.

It is important to note that other integration models also offer opportunities for extending the reach of life-saving services to communities, particularly integration of FP into HIV/VCT, FP into PMTCT, FP into CTC and provision of community level integration. The common model – FP into HIV/AIDS services – also presents opportunities for scale-up in Zambia.

The main challenges to integration at the service delivery level were highlighted as inadequate numbers of health workers, inadequate skills, lack of integration guidelines, frequent stock-outs, and lacking equipment and laboratory services.

### 3.2.5 Priority populations for integrated services

The priority populations for integrated services identified included rural populations, mothers and their newborns, adolescents and sexual minorities. Stakeholders argued that these groups often bear the highest burden of disease and death associated with MNCH, unwanted pregnancy and HIV/AIDS. Thus, integration programmes that target these populations are likely to increase access to lifesaving services by those most in need but lacking access.

### 3.2.6 Entry points for integration efforts

The two most cited best entry points for integration by interviewed stakeholders were through the MNCH platform (mainly through the ANC platform) and HIV/AIDS platform (mainly through the PMTCT/EMTCT platform). Opinion was divided, however, on the best integration models.

*MNCH Platform* (see Figure 1) - Some interviewees felt that unlike other programmes (FP and HIV), MNCH provides the best linkages and is already integrating other programmes both at service delivery and policy level and as such was



'open to change.' On the other hand, FP and HIV were seen as historically rigid and vertically-oriented programmes, and therefore not very supportive of integration.

Stakeholders particularly identified the ANC platform as a good entry point to incorporate many other services such as PMTCT, malaria prevention, screening for TB and FP advice. Incorporating FP advice into ANC could enable mothers to make FP decisions before childbirth and therefore take up FP quickly following childbirth to reduce chances of unwanted and unplanned pregnancies. ANC further provides the opportunity for integrating male reproductive health services so that PMTCT can be part of male health education programmes as they accompany their partners to ANC clinics. This is particularly so for Zambia where a focused ANC programme integrates PMTCT services. If adopted, it has the potential to improve access to most services e.g. by reducing costs associated with service access such as transportation (women will not have to travel multiple times to the health facility for different services every other day) and by reducing health workers' workload. ANC is also cost-effective and meets multiple needs of the clients at one point, besides being the health system point at which most women are captured and thereafter followed. As one respondent noted:

"An integration approach that uses the MNCH platform and captures all key population groups e.g. where do we classify adolescent girls needing ANC service/FP services at the moment? There is a grey area here."

– UNAIDS interviewee

The immediate postnatal period and child immunisation sessions were also identified as potential entry points for integration, which are often missed. This is in line with the findings of the INTEGRA Initiative, which reported increased uptake of HIV and FP services following the inclusion of FP, and HIV/AIDS services into MNCH. The study, however, pointed out the low demand and uptake of post-natal services and the need to create demand for these services as part of integration efforts. The on-going efforts to integrate PMTCT into MNCH are critical and provide important entry points that would address some of the gaps that still exist in the PMTCT programme. The main challenges for using the MNCH platform are its weak financial base as well as the inadequate human resources, particularly in rural areas.

*HIV/AIDS platform* – Some stakeholders argued that the MNCH challenges above could be overcome easily if the HIV platform were to be adopted. This group argued that given the high political support, huge investments and the robust M&E platform for HIV/AIDS, the programme provided a better platform for integrating MNCH, especially in view of the latter's limited funding and low political priority. Respondents pointed out that HIV was already integrating FP, and as such, it might be easy to leverage its financial strength to support other programmes under MNCH. The main challenges for using the HIV platform, which the health system would have to overcome, are the vertical design and the difficulty of securing long-term funding.

Overall, stakeholders emphasised the need for integration efforts to aim for quality and not quantity, to strengthen health systems, target underserved populations, and leverage limited resources for maximum benefits.

**Partners should support current efforts to strengthen advocacy, accountability structures and strong coordination.**

## Conclusion

### 4.1. Potential role for cooperating partners in supporting integration

The findings of this rapid assessment and analysis point to the critical role of health systems in determining whether integration efforts succeed or fail. Based on these findings, several potential roles and options for development partners have been identified in Zambia. The areas identified for support or intervention offer unique opportunities for health system strengthening for integration and potential for achieving optimum results.

#### 4.1.1 Health system strengthening

- Support the Government in strengthening the main health systems functions (funding, human resources, referral, supply chain and logistics, laboratory and other health facility equipment and M&E), particularly those that increase access to and uptake of services by mothers and their newborns in rural and hard-to-reach populations and among adolescents. Additional investments are needed to enhance the MCDMCH efforts in tackling the high adolescent pregnancy and school dropout rates, for example through supporting the implementation of the Comprehensive Sex Education Curriculum (2013), which has received wide stakeholder support but is yet to be rolled out.
- Support the implementation of the National AIDS Strategic Framework, which provides for the integration of PMTCT into other clinical services, including MNCH, in rural and hard-to-reach areas. Support could go to the training of health workers in these areas, as well as supporting other programmes that integrate PMTCT into MNCH in these areas.

#### 4.1.2 Capacity strengthening for integration coordination

- Partners should support RMNCH integration by supporting capacity building of the coordination and technical working group in the new Ministry, the MDCMCH. At the time of the study, the MCDMCH, with the support of the EU and WB, was launching a programme on RMNCH. Based on stakeholder

interviews, the new ministry has elicited enthusiasm from stakeholders who view it as a fresh starting point for integration engagement. Capacity-strengthening support could plug into the current efforts supporting coordination of TWGs and joint planning groups between partners and the Government.

- Partners should support current efforts to strengthen advocacy, accountability structures and strong coordination. This could ensure strong coordination units within MoH to ensure buy-in from partners, which is currently lacking or poor. Most partners expressed frustration with weak coordination systems, despite commitments to support integration.
- Partners should work with the MoH to enhance leadership as well as coordination through platforms such as TWGs.

#### 4.1.3 Research to generate evidence for effective integration efforts

- Partners should invest in country-specific research that evaluates the benefits of the different models of integration in different contexts. This could contribute to addressing existing gaps in scientific knowledge on the benefits of integration, such as efficiency in service provision, quality improvement and cost saving.
- Partners could also invest in setting up model sites of integration from which the country can draw lessons for scale-up.

#### 4.1.4 Strengthening community accountability and engagement structures

- Support civil society activities aimed at community mobilisation, especially for women and youth. This would deepen advocacy and community empowerment to understand the benefits of integration and enhance community buy-in and demand for services. Additionally, such efforts should encourage male buy-in and support, especially for FP and HIV services.

#### 4.1.5 Strengthening logistics and supply chains

- Effective delivery of integrated services depends a lot on a country's supply chain. There are encouraging efforts to reform logistics and supply chain systems in Zambia. This is one area in which additional investment (whether in human resource training, application of new, cheap and innovative technologies) have the potential to revolutionise commodity supply and delivery by reducing and eliminating commodity stock-outs, ensuring timely commodity deliveries and improving forecasting. Zambia could learn from a Malawian intervention, C STOCK, being delivered by John Snow Incorporated (JSI), which provides a good example of how simple, cheap, innovative approaches can support integrated services in resource-poor settings.

#### 4.1.6 Policy development

- Given Zambia's emphasis on systems strengthening, partners should support service-level integration, e.g. by supporting the development of guidelines for a minimum package for the provision of integrated services. Additionally, partners could support capacity for policy development in the MoH and MDCMCH. This would help develop the Government's capacity to use evidence to inform policy, given the general capacity weakness in this area.

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# Appendix

Tables Showing Data Used to Map Disease Burden and Service Utilisation

Table 1a: HIV/AIDS Burden and service utilisation indicators in Sub-Saharan Africa

	HIV prevalence	HIV incidence	Deaths due to HIV/AIDS (per 100,000 Population)	Access to ART	PMCT	Proportion of population aged 15-49 years without comprehensive knowledge of HIV/AIDS (women)	Proportion of population aged 15-49 years without comprehensive knowledge of HIV/AIDS (men)	Percentage females who tested for HIV in the last 12 months	Percentage males who tested for HIV in the last 12 months
Angola	2.3	0.3	59	38	16	75	68	-	-
Botswana	23.0	1.3	-	95	94	60	68	-	-
Burundi	1.3	0.1	67	54	52	56	54	19	11
DRC	1.3	0.1	32	6	37	84	79	4	4
Eritrea	0.7	0.0	26	49	-	64	-	-	-
Ethiopia	1.3	0.0	47	57	24	76	66	20	20
Kenya	6.1	0.4	148	72	67	53	45	29	22
Lesotho	23.1	2.3	638	58	62	61	71	42	25
Madagascar	0.5	0.0	12	3	-	78	74	4	4
Malawi	10.8	0.8	285	67	53	58	55	-	31
Mozambique	11.1	1.0	310	46	51	64	66	26	13
Namibia	13.3	0.8	223	95	85	35	38	29	18
Rwanda	2.9	0.1	58	82	56	48	54	39	37
South Africa	17.9	1.4	535	66	95	80	-	19	20
Swaziland	26.5	2.0	556	83	95	42	46	22	9
Uganda	7.3	0.8	181	54	50	62	61	42	30
United Republic of Tanzania	5.1	0.3	181	40	74	60	53	30	25
Zambia	12.7	0.8	232	82	86	62	59	19	12
Zimbabwe	14.7	1.0	457	77	54	48	53	34	20

NOTE: Regional figures are median values. Dashes indicate where there is no data.  
Data source: DHS & UN Statistics Division MDG indicators

Table 1b: FP and fertility indicators in Sub-Saharan Africa

	Adolescent birth rate (per 1000 women aged 15-19)	Unplanned pregnancies ( percent)	CPR	Unmet need for FP	Knowledge of sources of modern contraceptive methods	Sources of FP - Public
Angola	165		4.5	-	-	-
Botswana	51	38	51.2	26.9	-	94
Burundi	65	31	17.7	32.4	-	87
DRC	135	30	5.5	26.9	-	21
Eritrea	85	25	5.1	28.5	-	74
Ethiopia	79	28	27.3	25.3	-	82
Kenya	106	43	38.9	25.6	-	57
Lesotho	92	52	45.6	23.3	-	63
Madagascar	147	12	28.2	19.0	45	73
Malawi	157	44	42.2	26.2	83	74
Mozambique	193	15	11.3	28.5	-	77
Namibia	-	53	53.5	20.7	82	75
Rwanda	41	38	44.0	18.9	91	92
South Africa	54	47	59.8	13.8	-	84
Swaziland	111	64	63.0	13.0	-	45
Uganda	159	44	25.8	38.0	-	47
United Republic of Tanzania	128	26	26.1	25.3	71	63
Zambia	151	41	26.5	26.6	87	68
Zimbabwe	115	32	57.1	15.5	-	73

NOTE: Regional figures are median values. Dashes indicate where there is no data. Tanzania = United Republic of Tanzania  
Data source: DHS

Table 1c: Maternal Health indicators in Sub-Saharan Africa

	Maternal mortality ratio (per 100,000 deaths)	Nutrition: women's body mass index (BMI) in kg/square height in meters: BMI mean	SBA	ANC 1 visit	ANC 4 visits
Angola	450	-	49	68	47
Botswana	160	-	95	92	73
Burundi	800	21	60	99	33
DRC	540	21	80	86	45
Eritrea	240	20	28	70	41
Ethiopia	350	20	10	34	19
Kenya	360	23	44	92	47
Lesotho	620	25	62	92	70
Madagascar	240	20	44	86	49
Malawi	460	22	71	95	46
Mozambique	490	22	55	91	51
Namibia	449	24	82	95	70
Rwanda	340	23	69	98	35
South Africa	300	-	91	92	87
Swaziland	320	27	82	97	77
Uganda	310	22	57	95	47
United Republic of Tanzania	460	23	49	96	43
Zambia	440	22	47	94	60
Zimbabwe	570	24	66	90	65

NOTE: Regional figures are median values. Dashes indicate where there is no data.

Data source: Respective country DHS

Table 1d: Child Health indicators in Sub-Saharan Africa

	IMR	U5 mortality	Stunting prevalence (percent)	Under-weight Prevalence (percent)	percent Of children aged 1 year who are fully immunised	Percentage children <5 years with suspected pneumonia taken to appropriate health provider	Percentage children <5 years with suspected pneumonia receiving antibiotic	Percentage children with diarrhoea for whom advice or treatment was sought from a health facility or provider
Angola	96	158	29	16	-	-	-	-
Botswana	20	26	31	11	68.2	14	-	45.9
Burundi	86	139	58	29	78.5	55	43	57.4
DRC	111	168	43	24	28.4	40	42	52.6
Eritrea	46	68	44	35	69.2	44	-	41.9
Ethiopia	52	77	44	29	21.7	27	7	31.8
Kenya	48	73	35	16	65.3	56	50	48.6
Lesotho	63	86	39	13	53.2	66	-	53.4
Madagascar	43	62	49	37	55.2	42	-	34.4
Malawi	53	83	47	13	71.8	70	-	62.1
Mozambique	72	103	43	15	51.5	52	12.1	56
Namibia	46	69	29	17	63.8	75	-	69.3
Rwanda	38	54	44	11	85.4	50	-	37.2
South Africa	35	47	24	9	18.5	65	-	55.7
Swaziland	69	104	31	6	73.7	58	61	71.9
Uganda	58	90	33	14	40.3	79	47	72.4
United Republic of Tanzania	45	68	43	16	66.2	71	-	52.6
Zambia	53	83	46	15	55	68	47	58.8
Zimbabwe	43	67	32	10	55.6	48	31	35.8

NOTE: Dashes indicate where there is no data.  
Data source: DHS & WHO and UNICEF 2013





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African Institute for Development Policy (AFIDEP)  
Suite #25, Royal Offices, Mogotio Road, off Chiromo Lane  
P.O. Box 14688-00800, Westlands, Nairobi, Kenya  
Tel: +254 20 203 9510 | +254 716 002 059 | +254 735 249499  
Email: [info@afidep.org](mailto:info@afidep.org) | Website: [www.afidep.org](http://www.afidep.org)

