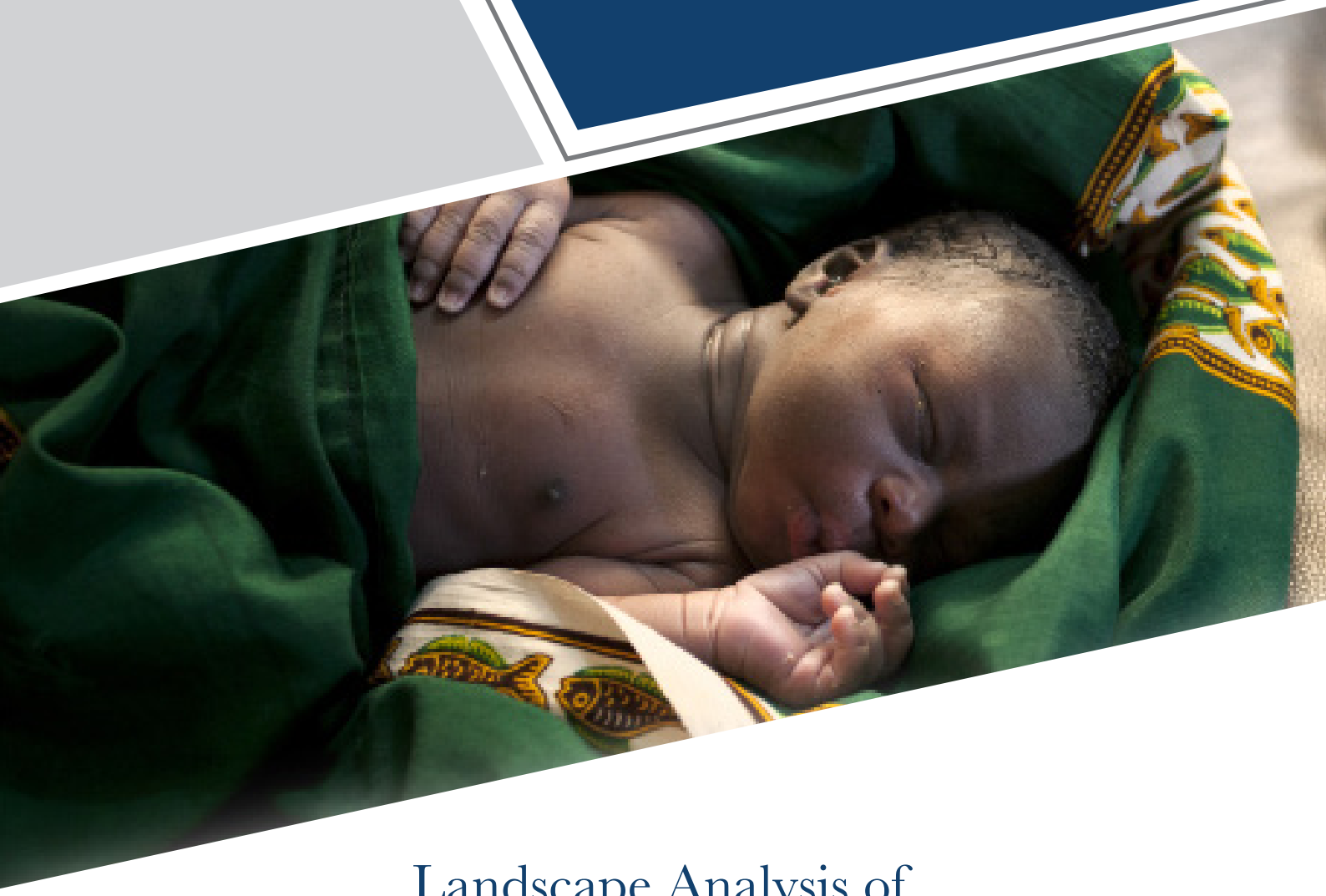


Landscape Analysis of MNCH, FP and HIV/AIDS Integration in Eastern and Southern Africa

Final Report, June 2014

Study conducted by the African Institute for Development Policy (AFIDEP) on behalf of the Bill and Melinda Gates Foundation

AFIDEP African Institute for Development Policy
Bridging Development Research, Policy & Practice

Landscape Analysis of MNCH, FP and HIV/AIDS Integration in Eastern and Southern Africa

Final Report, June 2014

African Institute for Development Policy

This research report has been produced by the
African Institute for Development Policy (AFIDEP)

Published in Nairobi, Kenya
First published: June 2014

Cover photo by: David Chavez/WorldBank

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
www.afidep.org

Table of Contents

List of Figures and Tables iii
List of Acronyms iv
EXECUTIVE SUMMARY vii

1. INTRODUCTION 1
1.1 Background 1
1.2 Summary of Current Research on Integration of MNCH, FP and HIV/AIDS 3
1.3 The Bill and Melinda Gates Foundation's Investments in MNCH, FP and HIV/AIDS Integration 4
1.4 Purpose of Study 6

2. METHODOLOGY 6
2.1 Review of Literature on Integration 6
2.2 Collation and Analysis of Quantitative Data to Map Disease Burden and Service Utilization 6
2.3 Country Level Assessments using Policy Audits and Key Informant Interviews 7

3. FINDINGS 8
3.1 Disease Burden, Service Delivery Gaps and Opportunities for Integrating MNCH, FP and HIV in Eastern and Southern Africa 8
3.1.1 HIV Burden and Service Utilization 8
3.1.2 Unplanned Fertility and Family Planning 8
3.1.3 Maternal Health 9
3.1.4 Child Health 9
3.1.5 Composite Disease Burden and Service Utilization 10
3.2 Status of Integration at Policy, System and Service Delivery Levels 13
3.2.1 Policy Framework for MNCH, FP and HIV/AIDS Integration 13
3.2.2 MNCH, FP and HIV/AIDS Integration at System Level 15
3.2.3 Status of Integration at Service Delivery Level 20
3.2.4 Priority Populations for Integrated Services 22
3.2.5 Entry Points for Integration Efforts 22
3.3 Caution 23

4. CONCLUSION 23
4.1. Potential Role for the Gates Foundation in supporting Integration 23
4.1.1 DRC 24
4.1.2 Malawi 25
4.1.3 Tanzania 25
4.1.4 Zambia 26

References 27

List of Figures and Tables

Figures

Figure 1: The Maternal, Newborn, and Child Health (MNCH) Platform 2

Tables

Table I: Burden and Service Utilization Composite Measures for Program Areas 12
Table II: Summary of the Foundation's MNCH, FP and HIV/AIDS Strategies 30
Table IIIa: HIV/AIDS Burden and Service Utilization 32
Table IIIb: FP and Fertility 33
Table IIIc: Maternal Health 34
Table IIId: Child Health 35
Table IV: Key Policies guiding MNCH, FP and HIV/AIDS in DRC, Malawi, Zambia and Tanzania 37
Table Va DRC: What is being integrated, by who, where 38
Table Vb Malawi: What is being integrated, by who, where 39
Table Vc Tanzania: What is being integrated, by who, where 40
Table Vd Zambia: What is being integrated, by who, where 41
Table VI: Other Potential Roles for Gates Foundation in Supporting Integration 42

List of Acronyms

AIDS	-	Acquired Immune Deficiency Syndrome
AFIDEP	-	African Institute for Development Policy
AMREF	-	African Medical and Research Foundation
AGPAHI	-	Ariel Glazer Paediatric AIDS Healthcare Initiative
ANC	-	Antenatal Care
ARV	-	Antiretroviral
BEmONC	-	Basic Emergency Obstetric and Neonatal Care
BFC	-	Basket Fund Committee
BLM	-	Banja La Msogolo (Marie Stopes)
BMGF	-	Bill & Melinda Gates Foundation
BRN	-	Big Results Now
CBDs	-	Community Based Distributors
CBOs	-	Community Based Organisations
CDC	-	Centre for Disease Control
CHAM	-	Christian Health Association of Malawi
CHAZ	-	Christian Health Association of Zambia
CIDA	-	Canadian International Development Agency
CIRDZ	-	Centre for Research of Infectious Diseases Zambia
CSW	-	Commercial Sex Workers
CTC	-	Care and Treatment Clinic
CPR	-	Contraceptive Prevalence Rate
DP	-	Development Partners
DFID	-	Department for International Development
DHMT	-	District Health Management Team
DHS	-	Demographic Health Surveys
EID	-	Early Infant Diagnosis
eMTCT	-	Elimination of Mother to Child Transmission
EPI	-	Expanded Program of Immunizations
EU	-	European Union
FGM	-	Female Genital Mutilation
FHI360	-	Family Health International
FP	-	Family Planning
FPAM	-	Family Planning Association of Malawi
GIZ	-	Deutsche Gesellschaft fur Internationale Zusammenarbeit (German International Cooperation Office)
GBS	-	General Budget Support
GHI	-	Global Health Initiative
GoT	-	Government of Tanzania

HBF	-	Health Basket Fund
HIV	-	Human Immune Deficiency
HRH	-	Human Resources for Health
HTC	-	HIV Testing and Counselling
IMCI	-	Integrated Management of Childhood Illnesses
IPPF	-	International Planned Parenthood Foundation
IUDs	-	Injecting Drug Users
JICA	-	Japanese International Cooperation Agency
KFW	-	Kreditanstalt für Wiederaufbau, (KFW) a German public-sector Financial institution
LGAs	-	Local Government Authorities
MCDMCH	-	Ministry of Community Development, Mother and Child Health
MCHIP	-	Maternal and Child Health Integrated Program
MDGs	-	Millennium Development Goals
M&E	-	Monitoring and Evaluation
MKUKUTA	-	Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Tanzania
MNCH	-	Maternal, Newborn and child Health
MOF	-	Ministry of Finance
MoH	-	Ministry of Health
MoHSW	-	Ministry of Health and Social Welfare
MSD	-	Medical Stores Department
MSH	-	Management Sciences for Health
MSM	-	Men who have Sex with Men
NAC	-	National Aids Council
NACP	-	National AIDS Control Program
NFPCIP	-	National Family Planning Costed Implementation Program
NIH	-	National Institutes of Health
NMSF	-	National Multi-sectoral Strategic Framework
NSGPR	-	National Strategy for Growth and Poverty Reduction
OPD	-	Outpatient Department
PAC	-	Post Abortion Care
PATH	-	Program for Appropriate Technology in Health
PEP	-	Post Exposure Prophylaxis
PEPFAR	-	US President's Emergency Plan for AIDS Relief
PMI	-	President's Malaria Initiative
PMO-LARG	-	Prime Minister's Office – Regional Administration and Local Governments
PMNCH	-	Partnership for Mother, Newborn and Child Health
PMTCT	-	Prevention of Mother to Child Transmissions
POPC	-	President's Office Planning Commission
PPAZ	-	Planned Parenthood Association of Zambia
PPP	-	Public Private Partnerships
PRB	-	Population Reference Bureau

PSI	-	Population Services International
RH	-	Reproductive Health
RHU	-	Reproductive Health Unit
VCT	-	Voluntary Counselling and Testing
RCHS	-	Reproductive and Child Health Section
RHMT	-	Regional Health Management Team
RFE	-	Rapid Funding Envelope
SFH	-	Society for Family Health
SIDA	-	Swedish International Development Agency
SRH	-	Sexual Reproductive Health
SSDI	-	Service Delivery Integrated Services
STDs	-	Sexually Transmitted Diseases
STIs	-	Sexually Transmitted Infections
SUFP	-	Scaling UP Family Planning
SWAP	-	Sector-wide Approach
TA	-	Technical Assistance
TACAIDS	-	Tanzania Commission for AIDS
TB	-	Tuberculosis
TBAs	-	Traditional Birth Attendants
TFHP	-	Tanzania Family Health Project
THPS	-	Tanzania Health Promotion Support
TFYDP	-	The Tanzania Five-Year Development Plan 2011/12 – 2015/16
UMATI	-	Chama cha Uzazi na Malezi Tanzania
UN	-	United Nations
UNC	-	University of North Carolina
UNFPA	-	United Nations Population Fund
UNICEF	-	United Nations Children Education Fund
USA	-	United States of America
USAID	-	United States Agency for International Development
USG	-	United States Government
UTH	-	University Teaching Hospital
VCT	-	Voluntary Counselling &Testing
V2025	-	Tanzania National Development Vision 2025
WILSA	-	Women in Law South Africa
WHO	-	World Health Organisation
ZISSP	-	Zambia Integrated Systems Strengthening Program
ZPCT II	-	Zambia Prevention, Care and Treatment Partnership II

Executive Summary

Background

The high burden of disease relating to HIV/AIDS, unintended pregnancies, and poor maternal, new born and child health (MNCH) remains a major health challenge in sub-Saharan Africa (SSA). Responses to this challenge have traditionally comprised well-funded HIV/AIDS programs set up parallel to inadequately funded MNCH and Family Planning (FP) programs. Consequently, integration of these issues over the years has been promoted to strengthen Sexual and Reproductive Health (SRH) programs (MNCH and FP) using HIV/AIDS resources. More recent efforts have focused on making the case for using the widely used MNCH platform as a base for integrating FP and HIV/AIDS services. This is because the MNCH platform 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, neonatal and child health.

Purpose of Study and Methodology

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 potential engagement and investments on integration grounded on the MNCH platform by the Bill & Melinda Gates Foundation and other donors. 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 with different permutations of disease burden and service deficiency for rapid national level assessment of the status of and opportunities for MNCH, FP and HIV/AIDS integration. The four countries are the Democratic Republic of Congo (DRC), Malawi, Tanzania and Zambia.

Key Findings

Policy Framework

The findings show that even though there are marked differences in the way the four countries have approached MNCH, FP and HIV/AIDS integration at policy framework level, they face similar integration challenges at the system and service delivery levels. At policy level, Malawi and Tanzania have embraced the global calls for MNCH, FP and HIV/AIDS integration. Tanzania has developed a policy to guide integration efforts and service provision, while Malawi is in the process of developing one. On the other hand, DRC and Zambia have not developed any integration-specific policies and their efforts to meet the broader health needs of the population have focused on the primary health care paradigm, which underscores the provision of wholesome basic services to clients. DRC is interested in developing an integration strategy to guide service delivery. However, there were mixed sentiments about this in Zambia with some officials preferring a health system strengthening approach as opposed to a focus on 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 later has

substantial resources and attention and would end up overshadowing the other issues. Although the presence of a policy framework on MNCH, FP and HIV/AIDS service integration does not automatically translate to effective delivery of integrated services, it demonstrates the much needed government leadership on the issue and provides guidance to donors and other stakeholders involved in programming and service provision.

Service Integration Challenges

A functional and supportive healthcare system[1] is very critical in determining success or failure of integration of MNCH, FP, and HIV/AIDS services. The study confirmed the extensively documented health system challenges to integration, including: 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, weak M&E systems to monitor integrated services, and weak institutional coordination mechanisms, especially on the SRH side. While stakeholders in DRC, Malawi and Tanzania expressed the need to address specific challenges related to MNCH, FP, and HIV/AIDS integration, efforts to enable provision of integrated services should be broadened to address the general health system bottlenecks.

Integration Experiences at Service Delivery Level

At service delivery level, there are many poorly coordinated integration programs being implemented in the four countries. The PMTCT program remains the major integration effort with reasonably high levels of coverage in Malawi, Zambia, and Tanzania, but quite low in DRC. There is, therefore, substantial scope to ensure universal access to PMTCT treatment for the many HIV+ expectant women or HIV-exposed infants to help reduce mother to child transmission of HIV. The four countries could benefit from on-going advocacy and program efforts to integrate PMTCT and MNCH, which research has shown could reduce the loss to follow-up of many mothers and infants.

Other integration programs in the four countries 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 programs are funded by donors, implemented by non-governmental organizations, and are implemented on pilot basis in a few regions/districts/health facilities. The main funders of SRH programs in the four countries include: USAID, DFID, World Bank, UNFPA, UNICEF, Gates Foundation, KFW-Germany, CIDA-Canada, WHO and EU. The main funders for HIV/AIDS include Global Fund, USAID, and PEPFAR/CDC. These agencies largely fund parallel programs on different aspects of MNCH, FP and HIV/AIDS through local and international implementers. Consequently, there is a myriad of programs collaborating with the MoH to offer different models of integrated services, which presents serious coordination challenges.

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, the MNCH programs remain greatly underfunded in all four countries, a factor that hinders integration.

Research assessing various integration models has shown that integration has great potential to improve service utilization even though there still exist significant evidence gaps on the actual magnitude of benefits of integration. The literature and stakeholders that we talked to highlighted the need to understand service delivery realities, health system challenges, 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.

[1]System refers to structures put in place to support or ensure successful implementation of stated policy actions. In this case they include institutional structures within government, funding, human resources, equipment, supplies and commodities, referral and M&E processes.

Current Investment of Gates Foundation in MNCH, FP and HIV/AIDS in SSA

The Gates Foundation's investments in MNCH, FP and HIV/AIDS in sub-Saharan Africa have had the overarching goal of improving quality and expanding access to health care services, particularly to groups that bear the highest burden of poor health. Although the Foundation has largely made parallel investments in these three areas, some of its investments have supported some aspects of MNCH, FP and HIV/AIDS integration. Some of the key areas of focus for the Foundation's investments in sub-Saharan Africa in these three areas include: strengthening community level health care provision; strengthening routine data capturing and management systems; supporting commodity supplies and the supply chain management; creating demand for services and promoting healthy practices; funding implementation research; demonstrating scalability of programs; and global advocacy for better policies, funding and leadership. A key recent strategic shift for the Foundation is that it is increasingly working hand-in-hand with governments to support the realization of national goals in MNCH, FP and HIV/AIDS, with emphasis on improving the quality and coverage of care. The Foundation's approach is also moving more towards making holistic investments in health, particularly for women and children, including supporting key health system functions that will ensure improvement in health care quality and coverage.s.

Potential Areas of Investment on Integration for the Gates Foundation and other Funders

Based on the study's findings and the Foundation's investment interests, we recommend seven main potential areas of focus for the Foundation's future investments on integration:

- **Foundation should develop an MNCH, FP and HIV/AIDS Integration Strategy** - Given the Foundation's growing interest in integration and the existing opportunities for integration in its current investments in MNCH, FP and HIV/AIDS, it is important that the Foundation develops an MNCH, FP and HIV/AIDS Integration Strategy to guide its efforts.

- **Strengthen Governments' Capacity in Policy Development, Planning, Operationalization and Coordination of Partner Efforts** - This study and others highlight the challenge of government's weak capacity to enable effective policymaking, planning, operationalization of policies and coordination of partner efforts. It is important to note that this is a challenge whose solution may be complex, and therefore critical for the Foundation to think through and consider piloting this kind of support in one country in order to draw lessons for sustained improvement, but also for informing similar efforts in other countries.

- **Strengthen critical functions of the health system,** particularly human resources, commodity supply chain, and M&E system to enhance quality and coverage of integrated services.

- **Strengthen community level provision of integrated MNCH, FP and HIV/AIDS information and services.** Given the critical role of community level health care provision in extending information and care to rural and hard-to-reach communities, the Foundation should draw lessons from its past and on-going investments in this area to support the strengthening of community level provision of integrated services in more SSA countries.

- **Support Programs focused on Key MNCH Entry-points.** This study confirmed overwhelming interest and support among policymakers and key stakeholders in using the MNCH platform as a foundation for integration of the three issues in East and Southern Africa. However, the current inadequate funding for MNCH makes it hard for stakeholders to take advantage of the platform for the provision of integrated services. Strategic investments in strengthening the MNCH platform would help strengthen the health system in general, and enhance opportunities for integration of the three issues, in particular.

- **Continue to strengthen global mobilization of funding for maternal health.** The Foundation is already part of the RMNCH Steering Committee and Trust Fund, which partly aims to generate increased funding for RMNCH in countries with the highest maternal and neonatal mortality rates. This is an effort that the Foundation could intensify in order to accelerate progress towards the realization of increased funding for maternal health, which is critical for the success of integration through the MNCH platform.

- **Fund research that evaluates the effectiveness of on-going integration efforts to generate evidence for program improvement and scale-up.** The Foundation should support country-specific research that evaluates the effectiveness and benefits of on-going models of integration. Knowledge from such studies is critical for addressing existing gaps in scientific knowledge on the benefits of integration such as efficiency in service provision, quality improvement and cost saving, as well as informing scale-up efforts.

Country-Specific Entry Points

The in-depth country studies provided specific recommendations on what the Foundation and other funders can do to enhance integration of the three issues in these countries and others that have similar health system and disease burden challenges. These are summarized below.

Democratic Republic of Congo

DRC represents a case study of a country characterised by unstable political systems and weak government architecture, but where the government is seeking to have a new start in improving MNCH, FP, and HIV/AIDS services. Although the Foundation has not made considerable investments in DRC in MNCH, FP or HIV/AIDS in the past, its new FP strategy prioritizes DRC, particularly in enabling the country to realize its FP2020 commitments. DRC provides a good example to enhance integration from an MNCH platform since government officials and other stakeholders in the country are interested in improving access to FP through the platform. Our general recommendation for DRC is that the Foundation should initiate its investments in the country from the integration perspective whereby provision of FP is grounded on the MNCH platform (ANC and PNC) from the outset. This integrated approach should include strong community-level information and service provision structures in order to strengthen these two critical platforms and address the enormous geographical barrier to service delivery due to the size of the country. Furthermore, the Foundation should:

- Support the development, dissemination, and operationalization of MNCH, FP and HIV/AIDS integration strategy, guidelines, job aids, as well as training of health workers in using the guidelines to deliver integrated services.

- Work closely with MoH to strengthen their capacity to lead and coordinate MNCH, FP and HIV/AIDS integration efforts.

- Invest in integration programs that use the MNCH platform to incorporate FP and HIV/AIDS for rural and hard-to-reach areas and work closely with MoH to develop effective M&E systems for these programs.

- Support the evaluation and scale-up of the MoH's minimum package of care, which includes MNCH, FP and HIV/AIDS. The package has been defined by the country's Strategic Framework for Accelerating the Achievement of MDG 4 and 5, and some development partners are already funding implementation of the package in a few zones in the country.

Malawi

Malawi is a country with strong political will and a learning and cooperative culture for working with development partners and adopting proven lessons for improving health services. Despite commendable efforts in improving delivery in the three areas, the burden of disease remains very high, pointing to the need to step up outreach and quality of care. The Foundation is currently investing in Malawi in MNCH, FP and HIV/AIDS. Our general recommendation for Malawi is that the Foundation should intensify and leverage its existing investments in the country to consolidate and scale up MNCH, FP and HIV/AIDS programs through the integrated approach. Such programs should have a research component to evaluate their effectiveness and efficiency to inform future learning scale-up efforts. Additionally, the Foundation should:

- Work with the MoH to:
  - Strengthen its leadership and coordination role to ensure that the government has greater control and moderation of programs that various development partners implement.
  - Support dissemination events for the SRH and HIV/AIDS integration policy that was under development at the time of the study, ensuring that the strategy is grounded on the MNCH platform as opposed to focused on general SRH, which has typically meant FP in many African countries. The Foundation could support the development of the integration implementation plan and guidelines, training of health workers, and job aids for actual service provision.
- Support efforts that streamline and improve the supply chain and logistics to enable joint procurement, storage and distribution. Lessons can be drawn from the Foundation-funded pilot program –supply chain for community case management (SC4CCM)– that has been effective and adopted for national scale-up by the government.

Tanzania

Tanzania represents countries with medium disease burden and service deficiency, and with a relatively strong MNCH platform, but limited progress in improving access and use of FP. The Foundation's investments in Tanzania have been largely in strengthening the country's FP program. Tanzania has already developed MNCH and HIV/AIDS integration guidelines. However, these guidelines are not widely known and operationalized because they were not developed under a consultative process. The Foundation could:

- Work with the MoH to support dissemination and operationalization activities for the National Guidelines for MNCH and HIV/AIDS Integration, including training of health workers in using the guidelines.
- Support programs that will roll out integration of MNCH, FP and HIV/AIDS in rural and hard-to-reach regions with least access to health care.
- Support the MoH in the finalization of the revised Community Health Strategy and its roll out in rural and hard-to-reach regions, including the training of the new cadre of Community Health Workers in these regions.
- Support nationwide training of FP and MNCH healthcare workers in the provision of HIV/AIDS services (i.e. counselling, testing and treatment), including support for government's efforts to introduce training modules in integrated service provision in pre-service training colleges.

Zambia

Zambia has invested a lot in improving its health system and has recently adopted a strong community-based program to improve delivery of primary health care services. However, disease burden is quite high with

intermediate service deficiency. The 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 program. Our findings point to the following potential entry points for integration efforts in the country:

- The current lack of support for SRH/MNCH and HIV/AIDS integration within government means efforts may need to focus on supporting the government to strengthen the main health systems functions, particularly those that increase access to and uptake of services by mothers and their newborns, rural and hard-to-reach populations, and adolescents.
- Zambia has exceptionally high adolescent pregnancy and dropout rates. This is partly why the new ministry (Ministry of Community Development, Mothers and Child Health (MCDMCH)[2] classifies women and young girls generally as a vulnerable group. It would be useful to support the MCDMCH efforts in tackling this challenge (e.g. by supporting the rolling out of the comprehensive sex education curriculum (2013) that has received wide stakeholder support). This program is closely linked to the Foundation's interest in empowering girls through better education and SRH information and services.
- The MDCMCH is also keen on integration of reproductive, maternal, newborn and child health (RMNCH) programs. With the support of European Union and World Bank, they are launching a pilot program on RMNCH. The Foundation could invest in efforts that reinforce the new ministry's on-going programs, including the integration of RMNCH.
- 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. The Foundation can support the training of healthcare workers in these areas, as well as supporting programs that integrate PMTCT into MNCH.

[2]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, Mother and Child Health (MCDMCH), which is responsible for policy implementation and all health facilities from district level downwards.

chapter 1

Introduction

1.1 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). This is largely a result of low demand for and utilization of health care services, which is compounded by weak healthcare systems in the region. Integration of HIV/AIDS, Family Planning (FP), and MNCH services is widely seen as part of the solution to improving health service 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 children during childbirth or breastfeeding (IPPF et al., 2009). FP is a key intervention that enables families to decide when to have children, and when a woman gets pregnant, she requires quality MNCH services in order to be healthy and have a healthy child. After giving birth, the woman becomes susceptible to pregnancy again and while she and her partner grapple with taking care of the health needs of the child, they also have to worry about preventing an unplanned pregnancy and HIV infection.

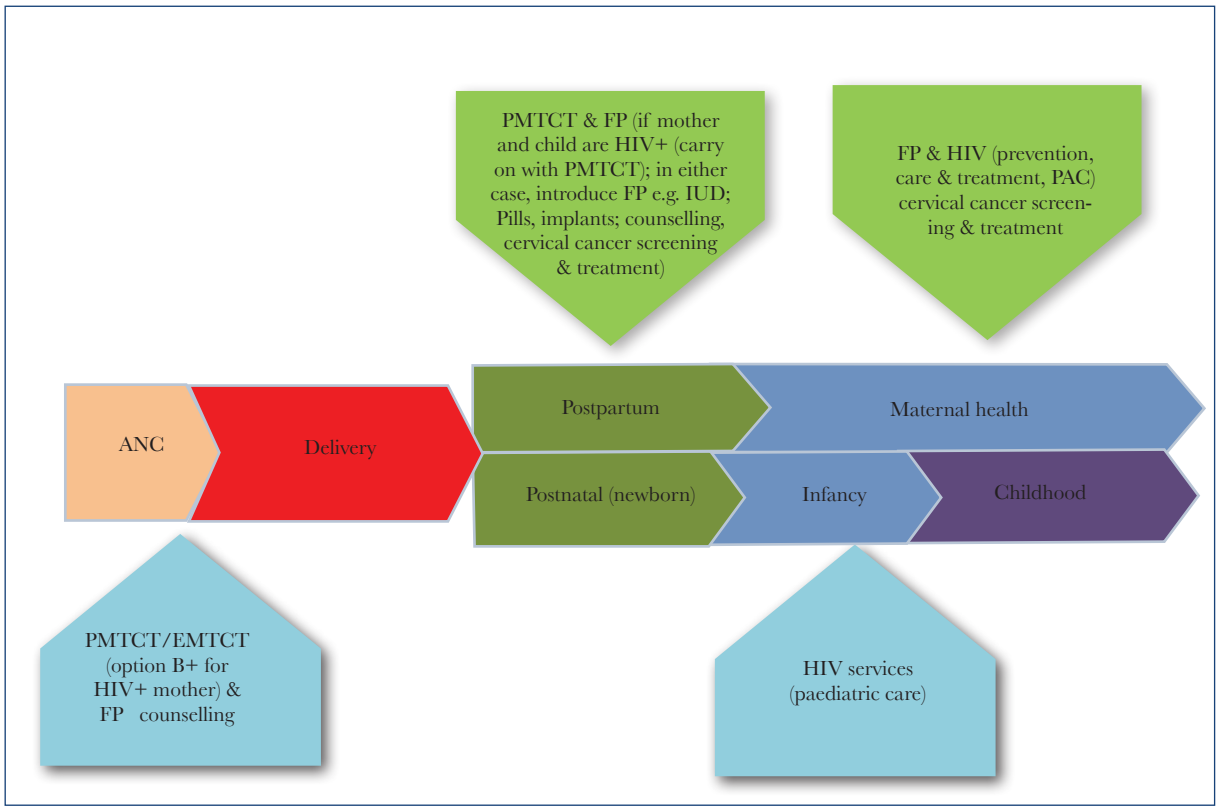
Despite these obvious linkages and potential synergies, efforts to tackle HIV/AIDS have traditionally been laid out parallel to existing platforms for SRH care, resulting in SRH and HIV services being delivered in separate or semi-specialized facilities and units (Smit et al., 2012). The disjuncture has become even more marked as HIV services such as HIV counseling and testing (HCT), prevention of mother-to-child transmission (PMTCT) and HIV care and treatment (CTC) have been rapidly scaled-up in high-prevalence settings (ibid). 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 specialist units in tertiary health facilities, or by health workers specialized in HIV (ibid). The shift of resources and political attention to HIV/AIDS has largely been at the expense of existing SRH programs, particularly MCH and FP.

Integration of SRH and HIV/AIDS services has been promoted since the early 2000s in order to enhance effectiveness and outreach of services. The World Health Organisation (WHO) HIV/MNCH Technical Working Group defines integration as "the organization, 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 use (acceptability)" (WHO, 2008:52). The need to link and integrate SRH and HIV/AIDS responses has been widely recognized at international level as critical to ensuring universal access to SRH and HIV/AIDS services (WHO et al., 2009). This need is evidently more critical in SSA where the burden of HIV/AIDS, unintended pregnancies, and maternal and child mortality are highest.

Over the years, various models of integrating SRH and HIV/AIDS services have been tested including: integrating FP into HIV testing and counseling, FP into HIV/AIDS CTC, HIV into FP, FP into PMTCT, and PMTCT into MNCH services. Since 2008, there is increasingly emphasis on the need to use the MNCH platform as a base for integrating HIV/AIDS and FP services (WHO, 2008). 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. Utilization of various MNCH services is very high in SSA partly 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 (WHO, 2008). The ANC platform has especially been highlighted as key since more than 90% 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 program, where pregnant women who test HIV+ are moved into the PMTCT program. In addition, the child immunization program is also widely used, presenting opportunities for provision of HIV/AIDS services and FP during immunization campaigns. Figure 1 represents the MNCH continuum of care, highlighting entry points for 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, Global Fund) relaxed their policies to incorporate FP and maternal health components into their relatively well-funded programs. This momentum culminated in WHO's call to enhance integration of PMTCT and MNCH services in order to improve patient follow-up and adherence (WHO, 2010). 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 programs of women and infants (Sherr, 2012). 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 (Church et al., 2013). This study examines the current state of and demand for integration of MNCH, FP, and HIV services and identifies opportunities for enhancing such integration in Eastern and Southern Africa, areas with high HIV/AIDS prevalence.

1.2 Summary of Current Research on Integration of MNCH, FP and HIV/AIDS

Various studies have tested and evaluated different integration models and demonstrated the benefits and challenges of integration. The general consensus in the literature is that there is a deficiency of robust studies to demonstrate the benefits of integration to the health care system as well as the clients.

A review of the current research on MNCH, FP and HIV/AIDS integration reveal significant gaps in studies. First, in terms of design, there is a dearth of studies with robust designs that can generate strong evidence for policy on the effectiveness of integration with respect to opportunities and challenges. For instance, besides the INTEGRA study, which adopted observational methods, only one randomized controlled trial – the study of HIV and Antenatal Care Integration in Pregnancy (SHAIP) trial, in Kenya, has been done in SSA (see Turan et al., 2012). Fewer studies have used strong empirical data such as is obtained from controlled studies (Sherr, 2012). As a result, the literature suggests that integration is a broad and ill-defined concept. The scarcity of high-quality studies on the subject limits the confidence with which firm conclusions and recommendations on service provision can be made (ibid).

In terms of benefits of integration, most studies present mixed results. For example, Kennedy et al. (2010) systematic review found that the majority of the studies on SRH and HIV integration showed improvements in all outcomes measured, with some mixed results but no negative findings. They reported that although existing evidence provided support for integration, there were significant gaps in the literature. Another study concluded that although there were clear benefits of integrated programs, there was a need to further examine the efficacy and outcomes of MNCH-FP-HIV integration, and to identify how to effectively design and implement integrated programs (Lindegren et al., 2012). Suthar (2013) highlighted the need to study women's acceptability of receiving ART in ANC clinics, pointing to the fact that this may present a challenge in some contexts.

A recent multi-country study to understand how various models of integration work found that integration of HIV and FP into PNC resulted in increased quality of postnatal care, increased access to HIV testing for post-partum women, and increased access to long-acting FP methods for post-partum women (Askew et al., 2013). The study, however, found that sustainability of integration using the MNCH platform was dependent on a broader supportive context (strengthened systems support – trained providers, available equipment and commodities), as well as need to increase demand for post-natal and postpartum services (ibid). So while most studies present some positive outcomes from integrated services, others have highlighted negative outcomes such as increased levels of discrimination or stigmatization for HIV patients receiving services at the same time as non-HIV clients (Church et al., 2013). However, such studies are few and even then, the evidence remains inconclusive.

It is also worth noting that most of the research has focused on maternal and/or adult service outcomes related to uptake of FP, vertical transmission and antiretroviral coverage, uptake and adherence to PMTCT and HIV/AIDS treatment services. This focus on FP and HIV integrations limits the options available for investors and policy makers and points to the need for studies with a broader focus on other possible integration platforms such as integrating HIV services with gender related issues such as gender based violence and male involvement (WHO, 2003).

Finally, the variations in context present a challenge for most studies. Even in contexts where there could be similarities, it is very difficult to evaluate the contribution of components of various integration models to specific outcomes. Moreover, it is challenging to tease out which components of various integration models contribute to specific outcomes. Contexts differ enormously, and variables such as health care personnel availability, skill levels, motivation, and provision facilities factor into efficacy of service delivery. Overall, the literature on integration is sparse and inadequate and shows a mixed and rather complex picture (Sherr, 2012).

Therefore, more investigation and research are needed to determine the different modalities of integration, which approaches work, and in which contexts they work. Specifically, there is a need for more rigorously designed evaluation studies to assess the effectiveness and cost-effectiveness of integrated MNCH, FP and HIV services across a variety of settings.

This study goes beyond a review of the literature to understand how service practitioners in selected countries in Eastern and Southern Africa understand and value integration and what opportunities they see for enhancing integrated approaches in their programs. Because of the increasing international emphasis on integration through the MNCH platform, this study has put special emphasis on examining integration from an MNCH platform lens.

1.3 The Bill and Melinda Gates Foundation's Investments in MNCH, FP and HIV/AIDS Integration

The Gates Foundation has, over the years, made considerable investments in MNCH, FP and HIV/AIDS in sub-Saharan Africa with the overarching goal of improving quality and expanding access to health care services, particularly to groups that bear the highest burden of poor health. Although the Foundation has largely made parallel investments in these three areas, some of its investments have supported some aspects of MNCH, FP and HIV/AIDS integration. A review of literature and interviews with various staff at the Foundation revealed the following as some of the key areas of focus for the Foundation's investments in MNCH, FP and HIV/AIDS (see Table II (Annex 1)) for summary of the Foundation's strategies for MNCH, FP and HIV/AIDS).

Development and improvement of tools and technologies for prevention and treatment – The Foundation continues to support clinical trials for technologies for HIV/AIDS prevention and treatment, contraception, and management of pregnancy and childbirth related complications.

Strengthening community-level health care provision – The Foundation continues to support various community-level programs that expand the reach of health information and services. These include the Community Health Extension Workers program in Ethiopia, community involvement in the Safe Motherhood Presidential Initiative in Malawi, supporting health posts in Ghana, and the training of Community Health Workers (traditional birth attendants) to provide MNCH and FP related health information to women in northern Nigeria.

Strengthening data capturing and management systems – The Foundation is supporting programs in Malawi and Zambia to improve data capturing and management to enable the generation of lessons that can be used in improving programming, particularly through its HIV/AIDS and FP programs.

Supporting commodity supplies and the supply chain – Through programs like the Global Fund, the Foundation has supported access to life-saving commodities as well as strengthened the commodity supply chain to expand access to health care commodities by groups that are most in need.

Creating demand for services and promoting healthy practices – The Foundation has invested in programs that create demand for FP and MNCH services, as well as those that promote healthy practices.

Demonstrating scalability of programs – Particularly for HIV/AIDS and FP, the Foundation has in the past invested in programs that demonstrate the scalability of programs.

Implementation research – The Foundation is moving towards supporting more implementation research to generate information necessary for improving the quality and coverage of health care services, particularly testing different prevention and treatment models.

Strengthening global and national advocacy for better policies, increased funding and leadership – The Foundation is involved in global and national advocacy efforts for more effective policies, increased funding and leadership particularly for MNCH and FP, the areas that continue to receive limited political support and funding (e.g. the INTEGRA Initiative).

On SRH, FP and HIV/AIDS integration, the Foundation has made some minimal investments including funding the Global Fund (which has shifted from a purely HIV/AIDS focus to also support the inclusion of MNCH and FP components); supporting global meetings on integration; as well as funding research on integration.

Moving into the future, it was noted that the Foundation will work hand-in-hand with governments to support the realization of national goals in MNCH, FP and HIV/AIDS. More emphasis will be on improving the quality and coverage of care, particularly to groups bearing the biggest burden of ill-health and death. It was further noted that the Foundation is now moving towards making holistic investments in health, particularly for women and children, including supporting key health system functions that will ensure sustained improvement in health care quality and coverage. It was specifically noted that in future the Foundation was likely to:

- Support the integration of PMTCT into MNCH since this has become a global policy
- Work more with FP groups to expand the reach of FP services to women
- Increase focus on HIV/AIDS treatment and how treatment can be used as a tool for HIV prevention
- Support the study of different service provision models/AIDS treatment models to generate information needed to improve efficiency and coverage in health care provision

Staff also mentioned key SSA countries where the Foundation is likely to either increase, sustain or initiate investments in either MNCH, FP or HIV/AIDS, including: DRC (initiate investments), Ethiopia (sustain investments), Malawi (sustain or increase investments), Tanzania (initiate investments), and Nigeria (increase investments).

1.4 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 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 programs levels. The overarching objectives of the study included to:

i. Describe current research on integration of MNCH, FP and HIV/AIDS
ii. Identify the major implementers and funders and describe what they are implementing and supporting, respectively
iii. Define existing challenges and gaps in policies and programs and ways to address them
iv. Identify geographies and populations of interest
v. Describe potential role for the Foundation

chapter 2 Methodology

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 specific methodological approaches.

2.1 Review of Literature on Integration

We conducted an extensive review of published and grey literature on SRH, FP and HIV/AIDS integration. Literature reviewed included systematic reviews and other scientific papers, research reports, and reports of key meetings on integration in the past five years. The purpose was to get an understanding of the status of integration, the challenges and opportunities, the global debates and the future direction on integration. We also reviewed the various strategies of the Foundation on MNCH, FP and HIV/AIDS as well as reports of programs funded by the Foundation in order to get an understanding of the Foundation's investments in these areas. Most documents were sourced from the Internet whereas others were gathered from meetings or acquaintances.

2.2 Collation and Analysis of Quantitative Data to Map Disease Burden and Service Utilization

This activity involved collation and generation of indicators to assess the burden of disease and level of service utilization gaps on MNCH, FP and HIV/AIDS in 19 countries in Eastern and Southern Africa that had the requisite data. The analysis was also done to guide the selection of four countries for more in-depth assessment of integration at national level.

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. Table IIIa – IIId (Annex 2) shows the indicators used to quantify the burden and service delivery for MNCH, FP and HIV/AIDS for the 19 countries that had the requisite data. We utilized recent data collated from national data sources, namely the Demographic Health Survey (DHS), UNICEF's Multiple Indicator Cluster Survey (MICS) systems, United Nations projections and the WHO database.

In the first step of the analysis the median value for each indicator was computed and used to define the benchmark value that categorized countries into high and low burden/service provision for each indicator. In a second step, a **composite measure** for each of the four program areas (MH, CH, FP and HIV/AIDS) was derived by adding up the 0/1 indices derived for each indicator. High values indicate poor health outcomes and poor service delivery, while low values indicate relatively better health outcomes and good service delivery. In a third step of the analysis, a **multi-dimensional composite index** for burden and

service delivery was derived by adding up the composite measure from each program area. In the fourth step, we ranked the countries separately by the multi-dimensional index for burden and service gap, and used these ranks to categorize the countries into low, medium and high groups.

In the final stage of the analysis, we used the relative ranks of the countries for both burden and service delivery in order to categorize 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 utilization in order to understand how integration realities, challenges and opportunities play out in these contexts. In choosing the countries, we also took into account the range of investments that the Gates Foundation has made in MNCH, FP, and HIV/AIDS in the 19 countries. We wanted 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

Four countries –the Democratic Republic of Congo (DRC), Malawi, Tanzania and Zambia– were selected for rapid assessment. More details on the selection process are presented in Section 3 on Findings.

2.3 Country Level Assessments using Policy Audits and Key Informant Interviews

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

- Mapping MNCH, FP and HIV/AIDS burden at sub-national level, service delivery gaps, and key integration programs in order to identify the sub-populations with the greatest need 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.
- 15-25 stakeholder interviews and validation workshops on the status of MNCH, FP and HIV/AIDS integration at policy, system, and service levels 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, national AIDS commissions, funding partners, and program implementing organizations. In total, 27 interviews were conducted in DRC, 24 in Malawi, 16 in Tanzania, and 23 in Zambia. The interview guide was adapted from the *Rapid Assessment Tool for Sexual and Reproductive Health and HIV Linkages* (IPPF et al., 2009) to accommodate this study's specific emphasis on integration using the MNCH platform. To validate the findings from the interviews, we held a meeting in each country with key stakeholders to deliberate preliminary findings. The validation meetings were attended by 35 stakeholders in DRC, 21 in Malawi, 9 in Tanzania and 10 in Zambia. All interviews were recorded (in cases where interviewees agreed to be recorded) and detailed notes taken by the research team.

chapter 3 Findings

3.1 Disease Burden, Service Delivery Gaps and Opportunities for Integrating MNCH, FP and HIV in Eastern and Southern Africa

3.1.1 HIV Burden and Service Utilization

The Eastern and Southern Africa regions have the highest HIV/AIDS burden in Africa. The rates are much higher in Southern Africa (median of 13.3%) than in Eastern Africa (median of 2.1%) and range from a low of 0.7% in Eritrea to highs of 23-27% in Swaziland, Botswana and Lesotho (Table IIIa (Annex 2)). The relatively high HIV incidence rates show that there is considerable scope for expansion of both prevention and treatment intervention programs across the region. Good progress has been made in increasing access to ARTs and PMTCT. In 9 of the 12 high-burden countries where HIV prevalence exceeds 5%, at least two-thirds of the HIV-positive people are using ARTs (the lower rates are in Uganda, Mozambique, and Tanzania). Similarly, PMTCT coverage exceeds two-thirds in 8 of the 12 high burden countries (exceptions are Uganda, Malawi, Mozambique and Zimbabwe).

These data show that HIV/AIDS programs are doing a relatively good job in providing care to people who are HIV-positive, but the coverage of prevention programs in the general population is quite low. These patterns demonstrate huge opportunities to increase uptake of preventive services through 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 programs.

3.1.2 Unplanned Fertility and Family Planning

Ample evidence demonstrates that adolescent childbearing is associated high maternal mortality, high HIV infection, high child mortality, and poor education outcomes and socioeconomic status later in life. The ESA countries can be categorized into three burden camps on adolescent birth rates: relatively low rates of less than 55 births per 1000 adolescents aged 15-19 (South Africa, Botswana and Rwanda); intermediate birth rates between 65 and 120 (Eritrea, Ethiopia, Kenya, Tanzania, Lesotho, Swaziland and Zimbabwe); and exceptionally high rates of close to or above 150 (DRC, Uganda, Angola, Madagascar, Malawi, Mozambique and Zambia). 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, intense counseling during pregnancy and provision of services in the postpartum period.

Contraceptive use varies widely across the region, with the Southern Africa countries exhibiting much higher levels than their Eastern counterparts (Table IIIb (Annex 2)). The high proportions of unplanned births and unmet need for FP in the broader 15-49 reproductive age group are a further testament of the lack of

uptake, adherence, and availability of effective means of contraception in the region. Furthermore, the fact that the countries with relatively high contraceptive prevalence rates also exhibit a relatively high proportion of unplanned births demonstrate enormous scope to improve access and use of FP in the region. The public health sector remains the major source of contraceptives for the majority of women in the region, with close to or more than 70% of all contraceptive users sourcing their contraceptives from public institutions in 12 of the 18 countries with data on this variable.

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 and to the same population of women and men of reproductive age who need FP, provides massive opportunities for improving service coverage through integrated programs.

3.1.3 Maternal Health

Maternal Mortality Ratio (MMR) remains high in the region despite improved progress during the last decade. As a result, most countries in the region are unlikely to achieve MDG 5 with the exception of Rwanda, Angola, Eritrea and Ethiopia.

Nearly all women attend ANC at least once, but much fewer women in most countries make the recommended 4 or more ANC visits. Only 7 out of 19 countries reported a proportion of around 50% and higher of women attending 4 or more ANC. Likewise, the proportion of women using skilled care during delivery is also low in most countries. Only Botswana, DRC[3], South Africa, Namibia and Swaziland record a proportion of 80% and above women reporting delivery with skilled care. Of note, a few countries (Eritrea, Ethiopia and Madagascar) with low use of skilled care at delivery and attendance for 4 or more ANC 4 have lower MMRs relative to countries with higher levels.

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 4 or more times 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 to less than 5% (or even lower) in breastfeeding populations from 35%, and to less than 2% in non-breastfeeding populations from 25% (WHO, 2010). Furthermore, the introduction of PMTCT Option B+ in some countries also means that PMTCT goes beyond prevention of vertical transmission, to providing life-long care and treatment for the mother as well.

3.1.4 Child Health

Whereas most countries have made great strides to decrease infant mortality ratio (IMR) and under five mortality, a few countries (5 out of 19) still have under five mortality rates above 100 over 1000 live births. In fact, a number of countries in the region -Rwanda, Ethiopia, Madagascar, Malawi - are on track to achieve MDG 4.

However, uptake of immunization remains low in many countries with only Rwanda having close to universal coverage. Only 6 out of 19 countries have around 70% and above uptake of immunization. Yet, countries with lower IMR and under five mortality rates tend to have higher immunization rates at 1 year relative to countries with higher IMR and under five mortality rates, (with the exception of South Africa, Burundi and Swaziland). Access to pneumonia and diarrhea care and treatment is also low in many countries. Only 5 out of 19 countries have around 70% and above coverage.

[3]Given DRC's current weak healthcare system, it is not very clear how it has achieved 80% skilled births.

Almost two-thirds of all child deaths are caused by preventable infectious diseases (malaria, pneumonia, diarrhea, sepsis, measles and AIDS) (WHO & UNICEF, 2013). Therefore the low immunization, and pneumonia and diarrhea care and treatment coverage in many countries is a concern. Immunization 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.

3.1.5 Composite Disease Burden and Service Utilization

Table I presents the composite measures for disease burden and service utilization for HIV/AIDS, FP, MNCH, and the corresponding composite indices for each program area for each country. The category in which a country falls on the composite index for burden and for service delivery is depicted by different colours. Green represents low disease burden or high service utilization. Yellow represents medium burden and medium disease burden. Red represents high disease burden and low service utilization.

Five countries (Botswana, Eritrea, Ethiopia, Kenya and Rwanda) have low disease burden across the four thematic areas. Lesotho, Malawi, Mozambique, Namibia, Swaziland and Zambia have high disease burden, while the rest have medium level burden. Out of the five countries with low disease burden, Botswana is the only case with high service utilization. There are no cases of high disease burden and low service utilization (red), but four countries (Burundi, Uganda, Tanzania and Zimbabwe) have intermediate value in both. Malawi and Lesotho exhibit a rather contradictory situation with high disease burden and high service utilization.

In order to maximize our learning from the in-depth country studies in light of the findings above and the range of investments that the Gates Foundation has made in the three areas around the region, we selected DRC, Malawi, Tanzania and Zambia for the in-depth studies. DRC represents countries with intermediate disease burden and very poor service utilization. DRC is actually more of the high burden and low service utilization case –part of the reason why it turned out in the intermediate category is that there were several missing indicators on the burden side. Although the Foundation has not invested in DRC in the past (new FP strategy now focusing on FP), the country presents a good "new investment" case since it is emerging from a "conflict" status and the government is trying to put its act together to improve health care delivery.

As noted above, Malawi has a high disease burden against a fairly strong service delivery system. Malawi provides opportunities to explore how integration can enhance effectiveness of services to reduce the relatively high disease burden the country is experiencing, in the light of the investments in MNCH that the Gates Foundation has initiated.

Tanzania, Uganda, Zimbabwe and Burundi are the four countries with intermediate burden and service utilization. Out of these four, we chose to conduct the in-depth study in Tanzania because the Gates Foundation has already been investing in FP and the country is on course to achieve MDG 4 on child survival. Furthermore, we wanted to ensure geographical diversity by including one country from the Eastern Africa region.

Zambia and Mozambique are the only countries in the region with a high disease burden and intermediate service utilization. We selected Zambia for the in-depth study because the country has recently revamped the delivery of primary health care in communities (with the formation of the new ministry, MCDMCH), and has also placed considerable emphasis on health system strengthening. Although the Foundation's investments in the country have mainly focused on support for clinical trials, the country would provide useful lessons on integration and is one of the high potential investment countries for the Foundation.

Table I. Burden and Service Utilization Composite Measures for Program Areas

#	Country	Disease Burden Composite Measures					Service Utilization Composite measures				
		HIV/ AIDS	FP	MH	CH	Composite disease burden	HIV/AIDS	FP	MH	CH	Composite service delivery index
1	Angola	0	1	1	3	5	2	1	2	-	5
2	Botswana	2	1	0	0	3	3	0	0	2	5
3	Burundi	0	0	1	4	5	6	1	1	1	9
4	DRC	0	1	1	3	5	4	2	2	3	11
5	Eritrea	0	0	0	2	2	1	1	3	2	7
6	Ethiopia	1	0	0	2	3	4	2	3	3	12
7	Kenya	0	1	1	1	3	2	1	3	1	7
8	Lesotho	3	1	2	2	8	0	2	0	1	3
9	Madagascar	0	1	0	2	3	4	2	2	3	11
10	Malawi	3	2	1	3	9	4	0	1	0	5
11	Mozambique	3	1	1	2	7	3	1	2	3	9
12	Namibia	3	1	2	1	7	3	1	0	0	4
13	Rwanda	0	0	1	1	2	2	1	1	2	6
14	South Africa	3	1	0	0	4	1	1	1	1	4
15	Swaziland	3	1	1	2	7	4	2	0	0	6
16	Uganda	1	2	0	2	5	2	2	2	1	7
17	Tanzania	0	1	2	1	4	3	3	2	1	9
18	Zambia	3	2	0	3	8	2	2	1	1	6
19	Zimbabwe	3	1	2	0	6	3	2	1	3	9

NOTE: **Burden of disease**: 1-3 = low burden; 4-6 = mid-level burden; 7-9 = High burden

Service Utilization: 1-5 = Good service utilization; 6-9 = mid-level Service Utilization; 10-12 = Low Service Utilization

3.2 Status of Integration at Policy, System and Service Delivery Levels

For effective delivery of integrated services, there is need for supporting policy frameworks and system. As noted by the WHO (2008), 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 country assessments 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 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 (Global Partners Forum, 2007); the UNGASS 60 Session Political Declaration on HIV/AIDS (UNGASS, 2006); and Achieving Universal Access to Comprehensive Prevention of Mother-to-Child Transmission Services consensus statement (Global Partners Forum, 2007).

At the regional level, the African Union's Health Strategy as well as the Southern African Development Community (SADC)'s SRH Strategy emphasise integration, whereas the East African Community (EAC)'s SRH strategy does not.

At the time of the study, Tanzania had developed the National Operational Guidelines for Integration of MNCH and HIV/AIDS in 2012 that serves as the policy framework guiding integration, whereas Malawi was in the process of developing an SRH and HIV/AIDS integration policy. DRC and Zambia on the other hand, do not have specific integration policies but argue that policy guidance on integration is contained in their overall health sector policies because these are guided by PHC principles. In DRC and Zambia, senior policymakers did not see the importance of having a specific policy on integration. Even then, in DRC the policymakers were keen to develop guidelines for service integration. In Zambia, while senior MoH officials were strongly opposed to having a specific integration policy, a newly created Ministry of Community Development, Maternal and Child Health (MCDMCH), was developing a RMNCH integration policy at the time of the study. Notably though this did not refer to SRH/HIV integration, but rather integration of RMNCH programs as the MCDMCH feared that integrating the RMNCH with HIV/AIDS programs was likely to "kill" the RMNCH program since the HIV/AIDS was "very big". In DRC, it is important to note that the HIV prevalence rate remains low (1.6%), and so the push for integration may not have been a priority for partners. In all countries, integration commitments were also contained in specific policies for RH/MNCH, FP and/or HIV/AIDS. Table III (Annex 2) provides a list of key policies and strategies guiding integration in the four countries.

A review of the policies showed mixed effort toward integration in the four countries. Tanzania's National Operational Guidelines for Integration of MNCH and HIV/AIDS Services (2012) is meant to guide service integration. The Zambia National AIDS Strategic Framework (2013) outlines how the ANC-PMTCT integration is to be achieved as well as 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.

The DRC's National Health Development Plan 2011-2015 (PNDS 2011-2015) has two master principles supporting integration of MNCH/FP/HIV. The first principle recognizes the health zone as one operational unit of planning and implementation of PHC in accordance with the principles of integration, continuity and comprehensiveness of care focused on an individual. The second, aims for adequate resource mobilization, allocation and efficiency for integrated delivery of essential health services and universal access.

In addition to being in the process of developing an integration policy, Malawi's RH strategy (2009) adopts an integrated approach bringing together aspects of MNH, FP, and STI/HIV/AIDS. Central to the strategy is enhanced equity and access at service delivery level. The program includes components such as FP, MNH (including management of unsafe abortion), prevention and management of STI/HIV/AIDS, prevention, early detection and management of cervical, breast and prostate cancer, infertility, mitigation of harmful practices and obstetric fistula. Stakeholders argued that the policy had brought about improvements in FP, STIs, management of unsafe abortion and cervical cancer prevention.

Policy Level Challenges

The main challenges at policy level were the lack of policy framework for integration in some countries and the weak leadership and capacity for policy development and implementation.

Lack of a policy framework for integration in some countries - Although senior policymakers in DRC and 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[4]. 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 decried governments' weak leadership in championing the development and/or implementation of SRH/MNCH, FP and HIV/AIDS integration policy. In Zambia for instance, stakeholders blamed the government for the lack of a clear integration policy framework. In addition, the weak technical capacity within the MoH was noted as a challenge to developing effective policies.

Besides developing policies, it was also felt that government leadership to facilitate the implementation of integration policies was lacking. In Tanzania for instance, although the national MNCH and HIV/AIDS integration guidelines were released in 2012, many stakeholders were not aware of the guidelines, and as such, they felt that the guidelines were not being implemented. Even within the MoH in Tanzania, it was felt that the leadership for championing and supporting the implementation of the guidelines was weak.

> *We are still very much focusing on FP and HIV integration even though the MNCH and HIV integration guidelines document was developed in 2012. The shift to MNCH and HIV integration has not really happened.* (MoH interviewee, Tanzania)

In all countries, there was a rallying call for governments to take leadership in policy development, championing integration, partner coordination and implementation, as captured by a respondent:

> *There is need for full government involvement, the government have to lead it [Integration process]; development partners should remain just that, government must show commitment both in policy and practice. You cannot have integration if the minister is not leading.* (WHO Interviewee, Malawi)

3.2.2 MNCH, FP and HIV/AIDS Integration at System Level

The system level refers to structures put in place to support or ensure successful implementation of stated 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 and between MoH and the National AIDS Commission), inadequate funding, insufficient and inadequately skilled health workers, lack of equipment, weak supply chain occasioning frequent stock-outs, and weak M&E systems, as the key system barriers to service integration. As such, the entire system level remains a gap and therefore presents a critical entry point to supporting integration efforts.

[4]Interview with a researcher at the Population Council (Kenya Office) who was part of the team working on the INTEGRA Initiative, Apr 17, 2014.

Funding and Budgetary Support for Integration

In all the four countries, as is the case in SSA, health care is critically underfunded by governments. Currently, government spending on health as a percentage of the national budget stands at 16% in Zambia, 18% in Malawi, 10% in Tanzania and 13% in DRC (WHO, 2013). Most of government funding goes toward recurrent expenditure (such as salaries), leaving very little, if at all, for programs on health service provision. In all four countries, donors provide most funding for integration. Donor funding takes three main forms: pool-funding operationalized 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), and through a system where money is put into an account and spent by government, but with donor oversight.

Most governments preferred basket funding as they argued that it enabled them to apply funds to key national priorities. It also facilitated 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 programs with less support such as MNCH. Some respondents felt that integration would thrive if development partners put all their funds in the basket fund; that funding independent programs greatly undermined integration as it meant vertical programs, reporting, supervisory and M&E processes. In the four study countries, the main funders for SRH (including MNCH, FP) include: USAID, DFID, World Bank, UNFPA, UNICEF, KFW-Germany, CIDA-Canada, WHO and EU. The main funders for HIV/AIDS include Global Fund, USAID, and PEPFAR/CDC. The same funders support integrated programs, albeit at varying levels. Other funders with significant input in all the four countries include SIDA-Sweden, DANIDA-Denmark, and Norwegian Embassy. This information is summarized in Tables Va – Vd (Annex 3).

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

The second challenge was the vertical approach to program funding by development partners. Development partners fund programs independently. Many respondents decried this as a major hindrance to integration. The result is that programs run vertically at health facilities with separate resources and different reporting mechanisms, thereby undermining integration. All these happen in the face of a thin workforce required to report and account to individual donors and government. Stakeholders recommended the need for funding partners to adopt joint financing mechanisms that promote, rather than undermine integration, such as basket funding. The Foundation has largely funded MNCH, FP and HIV/AIDS through non-governmental organization (NGOs), and this challenge presents an opportunity for the Foundation to explore potential direct funding mechanisms to government to boost the different functions of the health system. Most SSA governments have Sector Wide Approach (SWAp) mechanisms[5] that enable funding partners to put money in a common basket for the health sector. Some funding partners, including the World Bank and DFID, support governments largely through this basket funding mechanisms. Notably though, the US government, a key funder of SRH and HIV/AIDS programs, does not support governments through the basket fund, a challenge that many government stakeholders pointed out as responsible for the many parallel programs in the health sector, which undermine integration efforts.

Governments, on their part, need to strengthen their leadership by requiring funders to support government priorities through the basket fund, rather than letting partners run their own vertical programs through multiple NGOs.

[5]Sector-Wide Approach (SWAp) is an approach to international development that brings together governments, donors and other stakeholders within any sector. Under the SWAp, project funds contribute directly to a sector-specific umbrella and are tied to a defined sector policy under a government authority. In essence, a SWAp calls for a partnership in which government and development agencies change their relationships (to clearer government leadership) (WHO website).

Planning and Coordination

Like in many SSA countries, there are vertical structures for SRH/MNCH and HIV/AIDS. Within the various ministries of health, there were separate departments/divisions responsible for SRH/MNCH and FP, and the national AIDS control program responsible for HIV/AIDS. There were also the national AIDS councils/commissions often in the office of the president/prime minister, responsible for the multi-sectoral response to HIV/AIDS. These vertical structures present major challenges for integration. Although respondents argued that there were joint committees between these structures that enable joint planning, in practice, joint planning is not really happening. In Tanzania for instance, it was argued that there is a joint committee for the Reproductive and Child Health Section (RCHS) and National AIDS Control Program (NACP), but when probed, it emerged that in practice this committee has not held any joint planning meetings. This means that even within the MoH, annual planning for SRH/MNCH and FP, and HIV/AIDS is still done separately. Malawi, however, has a fairly strong joint planning and coordination mechanism led by the Directorate of Reproductive Health (DRH), providing a learning example on tackling this issue in the other three countries. Stakeholders argued that given the power and authority embodied in each vertical structure, there is no commitment at the high level for integration as this is likely to weaken the power of the officials leading these structures. The result is vertical MoH programs with vertical reporting and accountability structures that hinder integration of service at delivery points.

Addressing this challenge of vertical structures and planning mechanisms may not lie in merging existing structures, but rather in enabling increased collaboration and joint planning. In particular, the generously funded HIV/AIDS structures and programs need to show leadership and commitment in enabling more meaningful collaboration and joint planning with the MNCH and FP structures and programs in order to support and facilitate actual integration on the ground. As one of the main funders of the Global Fund, which is in turn a key funder of HIV/AIDS programs in most SSA countries, the Foundation could continue to influence the realization of this requirement.

In regard to the coordination of partner efforts, all countries have formulated various Technical Working Groups (TWGs) that convene relevant stakeholders in the three areas. Even then, these TWGs largely focus on MNCH, FP and HIV/AIDS separately, except for Malawi, which has a TWG on integration. Tanzania currently has FP and HIV/AIDS integration TWG. It is hoped that an MNCH and HIV/AIDS integration TWG will be formed to bring together all partners involved in MNCH and HIV/AIDS to spearhead the implementation of the MNCH and HIV/AIDS national integration guidelines in Tanzania. Countries also have SWAp mechanisms that coordinate sector specific activities to align them with national development goals and policies. A good case in point is the Malawi SWAp, which in addition to the TWGs, provides an engaging platform through which donors are required to align their activities with the health sector strategic plan. This enables partners to fund government priority investment areas, while others work with government to develop a work plan 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 keen on running their own programs, presenting a challenge with coordination. Several government departments expressed frustration at having to deal with numerous partners, all demanding attention from the lean workforce. One government interviewee lamented that the process *'tends to be very overwhelming and time consuming'* (MCH Directorate interviewee, Zambia). Yet another commented that:

> *It's challenging to work with different partners – a pool system might serve us better especially given the coordination demands* (Interviewee, Central Medical Stores, Malawi).

On the other hand, stakeholders argued that governments' leadership and coordination of programs was weak and ineffective. Some stakeholders felt that the issue of vertical programs was indeed a failure by the

government to provide leadership in ensuring that partners pool resources rather than run vertical programs. A respondent argued that:

> *Strong government leadership is critical to avoid donor-driven programs, which undermine integration.* (Interviewee, GIZ, Tanzania).

Human Resources

Inadequate human resources capacity remains a major challenge in the health sector in SSA, presenting a key barrier to integration. The human resources challenge includes: inadequate number of health workers in facilities, inadequately skilled healthcare workers particularly in providing integrated services, poor remuneration against large workloads which occasion lack of motivation, high staff turn-over, and provision of poor quality services. All four countries are currently operating at below the WHO recommended client–health worker ratio (Zambia at less than 50%, Malawi has only 30% of required workforce, and Tanzania 35%), typifying the SSA context, where current staffing levels are less than half of the required capacity. This is a well-acknowledged challenge in each country, and there are on-going efforts by governments and partners to alleviate the problem. Key among these efforts is training of healthcare workers. Government and stakeholders were involved in various training interventions to equip health workers with skills needed to provide integrated services. The problem, however, was that often these efforts were not nationwide, but rather in regions/districts where partners were implementing programs. An MoH respondent in Tanzania noted that:

> *In all projects, we have only trained zonal trainers, we now need to move to training regional and district level trainers in efforts to extend integration countrywide.* (MoH Interviewee, Tanzania)

Most partners interviewed had training components in their integration programs. Partners, however, argued that high staff turnover and frequent transfers undermined their training investments as health workers often left before using or transferring their acquired skills. Still on training, Tanzania was considering introducing integrated modules in its pre-service training institutions, something that other countries should consider doing. There were also some efforts to increase the number of health workers in the four countries. In Malawi for instance, the Foundation, through the safe motherhood program, supported the recruitment and training of Community Health Workers in areas with the greatest shortage. The challenge though, was that the recruitment and deployment is still done centrally, limiting the level of accountability, especially in ensuring that health workers were equitably deployed. Across the four countries, partners also recruited and trained more health workers to support the running of their programs in government health facilities, in the hope that the government will absorb such staff when partners' programs end. Stakeholders were also investing in task-sharing/task-shifting in order to alleviate the human resources challenge, albeit with limited and varied success. In Tanzania, however, the task-shifting issue remained particularly controversial following some deaths in some of the pilot sites[6].

The gravity of this challenge requires countries to make clear commitments that progressively address the issue over the years. It further requires countries to consider the much-contested policy of task-shifting (in some countries) to increase access to health care. Innovative strategies that address the insufficient numbers of health workers, the skills gap, and the low remuneration and motivation, present opportunities for strengthening human resources, a critical element for integration.

[6]An interviewee in Tanzania noted that task-shifting efforts had been opposed following the death of two patients in the pilot sites. The sites were training clinical officers to provide some surgical services conventionally performed by doctors and in the process two deaths were recorded. This caused a lot of controversy and opposition to task-shifting/task-sharing from political leaders.

Logistics and Supply of Commodities, and Laboratory Support

Challenges for logistics and supply of commodities for integration varied from country to country. However, all the four countries reported moving from vertical supply chains for different programs and commodities, to integrated systems that include, most, if not all of the essential medicines and other health commodities available through the public sector. Tanzania's integrated logistics system (ILS) implemented by the MoH with technical support from the USAID Deliver project, addressed the challenge by putting in place one system with a single set of procedures (JSI website). The ILS enables health care facilities to effectively order products based on their needs and budget. Even then, Tanzania still faced challenges with limited funding to the Medical Stores Department, which compromised its effectiveness, resulted in delays, stock-outs and pilferage.

Malawi and Zambia reported 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, in both countries, while the supply of condoms had been integrated (under the government supply chain) procurement was still vertical. The result was that each partner followed their own estimations and procurement, sometimes leading to oversupply and expiry of products. Some partners, like USAID and UNFPA, set up a parallel supply system, to complement the government system. However, the goal was usually not met as partners ended up procuring similar products, when, in fact these could have been easily avoided if there was a coordinated forecasting and procurement mechanism. Efforts are in place to address some of these challenges. Some of these efforts, like the CSTOCK program in Malawi (see below under M&E), are supported by the Foundation.

Laboratory support for integrated services is one of the weakest links to integration in all four countries. In Tanzania, for instance, although the MoH stipulates that laboratory services should be available up to the dispensary level, stakeholders noted that in practice this was not the case. Even in facilities where there were laboratories, necessary reagents and supplies, and/or skills required to offer various services were inadequate.

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

Many stakeholders reported using country-specific/MoH indicators (part of the HMIS), for M&E (encompassing data capturing, supervision, reporting and referral). Some partners modified these indicators to reflect the program needs. For instance, in Malawi, the M&E for the RMNCH program led by WHO and implemented in ten districts, was based on seven key indicator areas adopted from the national M&E platform and modified to suit program needs. Some partners are also piloting innovative M&E programs based on IT platforms (e.g. through mobile phones and collecting information electronically) at the facility level, with reported impressive results and improvements of the M&E and supply chain systems. An excellent case in point is the Foundation's supported CSTOCK program in Malawi being implemented by JSI Deliver, which allows Health Service Assistants, facilities, and the District Health Office (DHO), to requisition, monitor, and manage supply chain activities including M&E using simple mobile phone technology, on an integrated platform. Nonetheless, M&E for MNCH, FP and HIV in the four countries is still largely vertical given the verticality of programs. Stakeholders expressed need for integrated and easy to use M&E tools.

On supervision, some stakeholders in Tanzania and Zambia mentioned routine joint supervision exercises with the local District Health Management Teams (DHMTs) and the Regional Health Management Team (RHMTs), as well as among different implementing partners working in the same area. In addition to vertical

data capturing and supervision, the quality of reporting information was noted as a major challenge. It was argued that data quality was poor mainly because health workers were overworked and/or did not appreciate the importance of the data. The following 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, Zambia)

> *Staff say they are too busy to fill out forms. It is an issue of health worker shortage. Some health facilities are underreporting because of not filling out forms at the point of service delivery*. (MoH Interviewee, Malawi)

This means that health care systems lack the necessary information needed to inform their improvement. The referral system in all countries remained weak, with many patients getting lost to treatment and care.

Given these weak systems, investments in re-orienting the M&E systems at health facility level, and piloting/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.

3.2.3 Status of Integration at Service Delivery Level

Tables IVa - IVd (Annex 2) provides a detailed list of integration programs being implemented in the four countries. PMTCT remains the only integrated MNCH and HIV/AIDS model often with nationwide focus. Even then, in most countries PMTCT runs as a separate program from MNCH. In the last five years, most SSA countries have moved towards the PMTCT Plus model, which includes the provision of FP services to HIV+ positive mothers. Among study countries, Malawi and Tanzania have now moved to providing life-long ARVs to all pregnant women who test positive without waiting for the CD4 count (this is commonly being referred to as 'Option B+'). This is part of WHO guidelines whose purpose is to reduce chances of mother to child transmission, as well as protect the mothers from progressing to full-blown AIDS (WHO, 2010).

Even then, the PMTCT program still faces many challenges and is not therefore providing services to all in need. For instance, in Tanzania, about 71% of HIV+ pregnant women receive ARV prophylaxis, 56% of HIV-exposed infants receive ARV prophylaxis, only 37% of PMTCT centers provide early infant diagnosis of HIV, and only 30% of the HIV-exposed infants have access to early infant diagnosis services (Blazer et al ., 2012). The PMTCT program is weakest in DRC[7]. This presents an opportunity for development partners to invest in strengthening existing PMTCT programs to ensure that all possible opportunities for integration are taken advantage of. There are indeed on-going efforts by the USAID, PEPFAR and AIDSTAR-One to promote and, in some countries, facilitate the integration of the PMTCT program into MNCH services (AIDSTAR, undated).

Beyond PMTCT, other forms of integration taking place in the four countries are largely being implemented in a handful of regions/districts/facilities, and are fully funded by development 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 programs (VCT and CTC) was highlighted as the most common integration model in the four countries.

Community-level service provision is of particular importance to integration efforts since it extends the reach of integrated information and services to marginalized and hard-to-reach communities that would otherwise have no access to these services. In all countries, community-level service provision was in two forms; outreach services and community-based service provision. In Zambia, cooperating partners (e.g. PPAZ, Youth Vision Zambia) used joint outreach programs to extend services to hard-to-reach populations, i.e. rural communities

[7]In 2009, only 9% of pregnant women were tested for HIV. This low rate parallels the availability of testing in ANC sites: only 8% of ANC sites offered HIV-testing services in 2009 (UNICEF 2010). For the same year, only 6% of HIV-positive pregnant women and 6% of HIV-exposed infants received ARVs to prevent HIV infection. Compared to the other study countries, DRC has the weakest PMTCT program. It's important to note though that the country also has very low HIV prevalence rate (1.3%).

and young people. Services provided included FP, HIV messaging and treatment, VCT, and community education aimed at getting male support for FP. In Tanzania, a number of implementing partners organize joint outreach programs such as conducting immunization outreach services together with paediatric HIV testing, promoting FP, recruiting FP ambassadors, running radio messages and community-based distribution initiatives to enhance FP integration with paediatric AIDS diagnosis and treatment. In Malawi, the safe motherhood program supported by the Foundation has a community outreach and advocacy element. The program uses community structures and functions such as the Chiefs to educate and advocate for the use and benefits of FP and HIV services. This approach was reported by stakeholders to enhance male engagement in supporting integration services, an area that was identified by respondents as one of the challenges for integration especially for FP and HIV services.

Regarding community-based service provision, the focus was mainly on FP information and distribution and home-based care for AIDS patients. In DRC and Tanzania, community-based service provision was very weak; in Tanzania however, the government was in the process of developing a new policy on Community Health Workers aimed at reviving the program by recruiting and training a new cadre of Community Health Workers[8]. 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). In Malawi, the government was using Health Services Assistants to support community-based service delivery. The Health Services Assistants are trained and facilitated to use mobile phones to support M&E and supply chain system, by monitoring commodity stocks and ensuring clients adhere to their medication, through simple short message service (sms) reminders.

Notably, provision of integrated MNCH, FP and HIV/AIDS services at community-level remains a weak link in the four countries, which typify the situation in much of Eastern and Southern Africa. Ethiopia's Community Health Extension Workers program stands out as a model that other countries in the region could learn from (see UNICEF, 2013). 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 to rural and hard-to-reach communities.

In summary, there were variations in the forms and types of integration at the service delivery level in all four countries. Some stakeholders emphasized a synergistic approach, where programs continue with the vertical approach, with only aspects that could benefit from integration being integrated. In some cases like Zambia and DRC, the governments leaned toward PHE and WHO's systems approach, that emphasize strengthening existing platforms (such as the MNCH) to support integration, while in Malawi and Tanzania, there were efforts for a broad integration approach including a focus on how to add FP services into parallel HIV/AIDS programs (VCT, PMTCT, CTC).

As noted earlier, the nationwide MNCH platform accessed by many women and children, presents some investment opportunities for strengthening integration efforts within countries. 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 (Askew et al., 2013). An important factor though, is that demand for PNC services is very low, and part of the integration efforts need to focus on generating and sustaining demand for PNC services (ibid). 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 testing and counselling, FP into PMTCT, FP into CTC, and provision of community-level integration. The common model –FP into HIV/AIDS services– presents opportunities for scale-up in the four countries.

[8]Tanzania's old community health worker program has been using primary schools leavers, but an MoH official noted that they are currently developing a policy to revive the program. The new program will only recruit secondary schools leavers because these are "trainable" and can therefore offer more services.

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 lack of equipment and laboratory services.

3.2.4 Priority Populations for Integrated Services

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

3.2.5 Entry Points for Integration Efforts

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

MNCH Platform - Some interviewees felt that unlike other programs (FP and HIV), MNCH provides the best linkages and is already integrating other programs 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.

> *If you put money in FP, they will not want to hear anything about MNCH or child health. MNCH is the way to go with integration.* (WHO interviewee, Malawi)

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. For instance, a respondent in Tanzania argued that incorporating FP advice into ANC could enable mothers to make FP decisions before childbirth and therefore take up FP quickly following childbirth. This could reduce chances of unwanted/unplanned pregnancy. ANC further provides the opportunity for integrating male reproductive health services, so that PMTCT are part of the male health education programs. This is particularly so in countries like Zambia where a focused ANC program integrates PMTCT services.

Therefore, 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, Zambia)

The immediate post-natal period and child immunization sessions were also identified as potential entry points for integration, but 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 (Askew et al., 2013). 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 the 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 program.

The main challenges for using the MNCH platform are its weak financial base as well as the inadequate human resource (particularly in rural areas) providing these services.

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 program 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 programs under MNCH. The main challenge for using the HIV platform, which the health system would have to overcome, is its vertical design and in the long-term, funding.

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

3.3 Caution

As noted in the introduction, not all integration efforts produce a positive impact and that there still exists significant knowledge gaps on the benefits and effectiveness of SRH/MNCH, FP and HIV/AIDS integration. This partly implies that not all SRH/MNCH, FP and HIV/AIDS services can be integrated at different types of health facilities. Although the one-stop-shop model of integration where all services are offered under one roof has been shown to have more benefits than other models (Turan et al., 2012; Suthar et al., 2013; Lindegren, 2012; Chukwujekwu, 2010), this may not be a realistic model for many health facilities. Integration is very context-dependent and so, for practical purposes, facilities are often only able to integrate what is possible based on their context, i.e. number, capacity and motivation of health workers, equipment and commodities available. Thus, it is important that facilities are supported to integrate what is "integratable" in their context.

Also, the existing vertical structures and programs in most countries cannot simply be wished away. Some of the respondents feared that integrating stronger and weaker programs could 'kill' the weaker programs. This concern cannot just be ignored. With this reality, it may be necessary for countries to audit their structures, programs and the health care delivery capacity at different stages (i.e. from dispensary to referral), before proposing feasible integration models for different stages of service delivery. Furthermore, considering the many different integration models being adopted in different countries, national-level research that focuses on assessing the effectiveness of these is needed to generate knowledge that can inform scale-up of integration efforts in the different countries.

chapter 4 Conclusion

4.1 Purpose of Study

There have been concerted calls to prioritize integration of MNCH, FP, and HIV/AIDS using the MNCH platform since 2008, when the WHO released guidelines for such integration. Most evaluation studies show that integration has positive benefits for effectiveness of health systems and client satisfaction. However, there have been limited policy and program responses and investments by governments and development partners to enhance service integration. This gap is particularly evident in Eastern and Southern Africa, a region with the exceptionally high MNCH and HIV disease burden and high levels of unplanned pregnancies.

The purpose of this study was to examine the current state of and demand for integration of MNCH, FP, and HIV services, and to identify opportunities for enhancing such integration in East and Southern Africa. The study reviewed the global and national literature on integration and mapped the landscape of MNCH, FP and HIV/AIDS burden and service delivery gaps. The study also mapped on-going efforts to integrate the three issues and opportunities for enhancing the integration using the MNCH platform in the region based on in-depth assessments carried out in DRC, Malawi, Tanzania, and Zambia. The study was commissioned by the Bill and Melinda gates Foundation in order to inform the Foundation's potential engagement and investments on integration.

4.2 Addressing Health System Challenges Key to Enhancing Integration

The study found strong interest and demand for integration of the three issues in DRC, Malawi, and Tanzania. Tanzania has already developed integration guidelines while Malawi was in the process of developing an integration strategy at the time of the study. DRC and Zambia do not have an integration policy, although DRC is interested in developing an integration strategy to guide integration efforts. In Zambia, although stakeholders welcome integration of MNCH and FP, they are wary of including HIV/AIDS in the equation because of the fear that HIV/AIDS would overshadow MNCH and FP given its relatively huge funding base. Their preference is to prioritize comprehensive health system strengthening grounded on the primary health care framework. In all the four countries, there are many small integration experiments that are mostly implemented on pilot basis and poorly coordinated. The poor coordination of integration is mostly attributed to the weak capacity of government institutions that are responsible for managing and coordinating MNCH and FP.

The study confirmed the negative effect on integration of the widely documented health system challenges including vertical planning and funding structures, inadequate and poorly trained health workforce, lack of equipment, weak supply chain management and referral systems, weak monitoring and evaluation systems,

and inadequate funding of the health sector in general, and of FP and MNCH in particular. Stakeholders in all the four countries underscored the fact that integration efforts that do not have a long-term focus, and which do not contribute to addressing the pervasive health systems challenges, will have limited impact.

4.3. Potential Role and Entry Points for the Gates Foundation

Policymakers and other stakeholders in all the four countries provided specific entry points for funding agencies such as the Gates Foundation that are seeking to enhance integration of the three issues using the MNCH platform. Based on these findings and the Foundation's program strategies and overall interests, we recommend the following potential areas of engagement and investment on integration:

- **Foundation should develop an MNCH, FP and HIV/AIDS Integration Strategy:** Given the Gates Foundation's growing interest in integration and the existing opportunities for integration in its current investments in MNCH, FP and HIV/AIDS, it is important that the Foundation shifts from the typical "silo" nature of programming and by developing an MNCH, FP and HIV/AIDS Integration Strategy to guide its efforts. The Integration strategy should define the specific aspects/models of integration that the Foundation will prioritize informed largely by the Foundation's current investments. The strategy will ensure that there is a conscious effort by all staff working in the three areas to integrate their efforts and ensure that the efforts are focused, targeted and are monitored to provide lessons for continuous learning and improvement.

- **Strengthen Governments' Capacity in Policy Development, Planning, Operationalization and Coordination of Partner Efforts:** This study has highlighted the challenge of weak government capacity to enable effective policymaking, planning, and operationalization of policies and coordination of partner efforts. This challenge is complex, varies widely across countries, and it is at the core of the pervasive weaknesses in health systems in Africa. By investing in finding lasting solutions to addressing this critical issue, the Foundation stands to make a substantive contribution in improving health systems in general and integration, in particular. We advise the Foundation to consider piloting this intervention in a few countries such as Malawi and DRC in order to draw lessons for informing similar efforts in other countries. This recommendation is in line with the Foundation's growing commitment to work hand-in-hand with governments and enable them provide the required leadership to improve health care delivery.

- **Strengthen critical functions of the health system:** The weak health system functions in most sub-Saharan African countries remain major hindrances to effective integration efforts. The critical functions that need urgent investments to support integration efforts include human resources, commodity supply chain management, and monitoring and evaluation. There are various on-going efforts by governments and development partners to address these challenges, and so the Foundation would need to map such interventions and pick an area of comparative advantage such as monitoring and evaluation and supply chain management. This intervention is in line with the Foundation commitment to shift towards holistic and system building investments.

- **Strengthen community level provision of integrated MNCH, FP and HIV/AIDS information and services:** Provision of community level information and services remains a critical intervention in most African countries given the huge challenge with accessing facility-based services in rural and hard-to-reach populations. The Foundation is already investing in supporting community level service provision in Ethiopia, Malawi, Nigeria and Ghana. Given the critical role of community level health care provision in extending information and care to rural and hard-to-reach communities, the Foundation should draw lessons from past investments in this area to support the strengthening of community level provision of integrated services in more SSA countries. In countries like Malawi where current community based investments focus on maternal health and FP, opportunities for integrating child health and HIV/AIDS should be explored.

- **Support Programs focused on Key MNCH Entry Points:** This study confirmed overwhelming interest and support among policymakers and key stakeholders in using the MNCH platform as a foundation for integration of the three issues in east and Southern Africa. It is widely acknowledged that the MNCH platform presents missed opportunities for strengthening the provision of integrated services, including integration of FP and HIV into ANC, integration of FP and HIV into delivery and post-natal, and integration of FP and HIV into child immunization care. Despite these opportunities, there is limited funding for the MNCH platform. Strategic investments in strengthening the MNCH platform would help strengthen the health system in general, and enhance opportunities for integration of the three issues, in particular.

- **Continue to strengthen global mobilization of funding for maternal health:** Funding for maternal health remains very low globally and at national level. The Foundation is already part of the RMNCH Steering Committee and Trust Fund, which partly aims to generate increased funding for RMNCH in countries with the highest maternal and neonatal mortality rates. This is an effort that the Foundation should intensify in order to accelerate progress towards the realization of increased funding for maternal health, which is critical for the success of integration using the MNCH platform.

- **Fund research that evaluates the effectiveness of on-going integration efforts to generate evidence for program improvement and scale-up:** The Foundation should support country-specific research that evaluates the effectiveness and benefits of on-going models of integration. Knowledge from such studies is critical for addressing existing gaps in scientific knowledge on the benefits of integration such as efficiency in service provision, quality improvement and cost saving, as well as informing scale-up efforts. This suggestion is also in line with the Foundation's interest in demonstrating scalability of programs.

Table VI highlights more crosscutting recommendations as potential entry points for the Foundation.

The in-depth country studies provided specific recommendations on what the Foundation and other funders can do to enhance integration of the three issues in these countries and others that have similar health system and disease burden challenges. DRC represents a case study of a country characterised by unstable political systems and weak government architecture, but where the government is seeking to have a new start in improving MNCH, FP, and HIV/AIDS services. Malawi is a country with strong political will and a learning and cooperative culture for working with development partners and adopting proven lessons for improving health services. Despite commendable efforts in improving delivery in the three areas, the burden of disease remains very high, pointing to the need to step up outreach and quality of care. Tanzania represents countries with medium disease burden and service deficiency, and with a relatively strong MNCH platform, but limited progress in improving access and use of FP. Zambia has invested a lot in improving its health system and has recently adopted a strong community-based program to improve delivery of primary health care services. Disease burden is also quite high with intermediate service deficiency. Tanzania is also in the process of adopting a community health worker program. The entry point recommendations are synthesized from the interviews that the study team carried out in each of the four countries. However, they could be customized to other countries in Eastern and Southern Africa with similar health concerns and health system challenges.

Below is a summary of country-specific entry points.

4.1.1 Democratic Republic of Congo

DRC represents a case study of a country characterised by unstable political systems and weak government architecture, but where the government is seeking to have a new start in improving MNCH, FP, and HIV/AIDS services. Although the Foundation has not made considerable investments in DRC in MNCH, FP or HIV/AIDS in the past, its new FP strategy prioritizes DRC, particularly in enabling the country to realize its FP2020 commitments. The MNCH program at the Foundation is also interested in investing in DRC. The country provides a good example to enhance integration from an MNCH platform since government officials and other stakeholders in the country are interested in improving access to FP through the platform.

Our general recommendation for DRC is that the Foundation should initiate its investments in the country from the integration perspective whereby provision of FP will be grounded in the MNCH platform (ANC and PNC) from the outset. This integrated approach should include strong community level information and service provision structures in order to strengthen these two critical platforms and address the enormous geographical barrier to service delivery due to the size of the country. Furthermore, we recommend that the Foundation:

- Supports the development, dissemination, and operationalization of MNCH, FP and HIV/AIDS integration strategy, guidelines, job aids, as well as training of health workers in using the guidelines to deliver integrated services.
- Works closely with MoH to strengthen their capacity to lead and coordinate MNCH, FP and HIV/AIDS integration efforts. Stakeholders particularly emphasized the need to strengthen MoH's capacity to effectively coordinate partner activities in the health sector. This is line with the Foundation's interest in working with government institutions and in strengthening the capacity of governments in playing their facilitative and coordination roles.
- Invests in integration programs that use the MNCH platform to incorporate FP and HIV/AIDS for rural and hard-to-reach areas and work closely with MoH to develop effective M&E systems for these programs.
- Supports the evaluation and scale-up of the MoH's minimum package of care, which includes MNCH, FP and HIV/AIDS. The package has been defined by the country's Strategic Framework for Accelerating the Achievement of MDG 4 and 5. Currently, three development partners (DFID, World Bank, and the Department for Foreign Affairs, Trade and Development-Canada) are supporting the implementation of the package in a few zones in the country. The Foundation can reinforce these efforts by augmenting resources to enable scale up of the package across the country.

4.1.2 Malawi

Malawi is a country with strong political will and a learning and cooperative culture for working with development partners and adopting proven lessons for improving health services. Despite commendable efforts in improving delivery in the three areas, the burden of disease remains very high, pointing to the need to step up outreach and quality of care. The Foundation is currently investing in Malawi in MNCH, FP and HIV/AIDS. The Foundation supports the Presidential Safe Motherhood Initiative, which integrates MNCH and FP. The Foundation also supports a program to improve data systems related to HIV/AIDS and FP. The Foundation can strengthen its investments in Malawi given the strong commitment that the government has shown in working with the Foundation and other partners to improve MNCH, FP, and HIV/AIDS services.

The Government of Malawi is already making efforts to facilitate integration and it is in the process of developing an integration policy, and the enabling policy and programme environment in Malawi means there is a good chance that Malawi could turn into a good model country for enhancing service delivery through the integrated approach. Thus, the Foundation should intensify and leverage its existing investments in the country to consolidate and scale up MNCH, FP and HIV/AIDS programs through the integrated approach. Such programs should have a research component to evaluate their effectiveness and efficiency to inform future learning scale-up efforts. Additionally, the Foundation should

- Strengthen the leadership and coordination role of the MoH to ensure that the government has greater control and moderation of programmes that various development partners implement. The elevation of RH coordinating agency from Unit to Directorate level is positive, but the fact that the directorate remains heavily understaffed and over-dependent on development partners for technical capacity undermines its leadership and coordination role. This kind of support should go hand-in-hand with support for local advocacy efforts for government's increased investments into the maternal health and FP programs.

- Support dissemination events for the SRH and HIV/AIDS integration policy that was under development at the time of the study, ensuring that the strategy is grounded on the MNCH platform as opposed to focused on general SRH, which has typically meant FP in many African countries. The Foundation could support the development of the integration implementation plan and guidelines, training of health workers, and job aids for actual service provision.

- Strengthen the Foundation's current investments in the maternal health program in order to extend the program nationwide. Particularly, the Foundation should strengthen its support for the training of nurses and midwives (including community mid wives) in order to address the grave shortage of health workers in Malawi and enhance efforts to reduce maternal and neonatal mortality, especially in hard-to-reach areas. The initiative should also include enhancement of community engagement and advocacy to increase demand for FP and MNCH services. Supporting integration of HIV/AIDS into this program would leverage existing investments for greater impact.

- Support efforts that streamline and improve the supply chain and logistics to enable joint procurement, storage and distribution. Lessons can be drawn from the Foundation-funded pilot program –supply chain for community case management (SC4CCM)– that has been effective and adopted for national scale-up by the government.

4.1.3 Tanzania

Tanzania represents countries with medium disease burden and service deficiency, and with a relatively strong MNCH platform, but limited progress in improving access and use of FP. Tanzania is also in the process of adopting a community health worker program. The Foundation's investments in Tanzania have largely focused on strengthening the country's FP program. Interviews with Foundation staff indicated that Tanzania remains a country of interest to the Foundation's future investments, particularly in the area of HIV/AIDS. As noted in our findings, Tanzania has already developed MNCH and HIV/AIDS integration guidelines. However, these guidelines are not widely known and operationalized because they were not developed under a consultative process. Specifically, the Foundation could:

- Work with the MoH to support dissemination and operationalization activities for the national guidelines for MNCH and HIV/AIDS integration, including training of health workers in using the guidelines. Part of this should be incorporation of FP into the guidelines.

- Support programs that will roll out integration of MNCH, FP and HIV/AIDS in rural and hard-to-reach regions with least access to health care (such as Mbeya, Ruvuma, Iringa).

- Support the MoH in the finalization of the revised Community Health Strategy and its roll out in rural and hard-to-reach regions, including the training of the new cadre of Community Health Workers in these regions. Getting the community health workers adopt integrated perspectives from the outset will provide a good opportunity to promote integration of the three issues.

- Support nationwide training of FP and MNCH healthcare workers in the provision of HIV/AIDS services (i.e. counselling, testing and treatment), including support for government's efforts to introduce training modules in integrated service provision in pre-service training colleges. Stakeholders in Tanzania noted that past training efforts had only focused on training of HIV/AIDS providers in providing FP services.

- Support local advocacy for task-shifting/task-sharing – Partners have been testing some task-shifting/sharing models in getting clinical officers to perform surgical operations in women some parts of the country, but there has been controversy and opposition to this from political leaders due to death of some patients. Lessons could be drawn from Kenya where this was 'sold' as a strategy for rural and hard-to-reach regions with the fewest health workers.

4.1.4 Zambia

Zambia has invested a lot in improving its health system and has recently adopted a strong community-based program to improve delivery of primary health care services. However, disease burden is quite high with intermediate service deficiency. The 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 program. Foundation staff indicated that this position might not change much since the Foundation has not received much support for its work from the government. Nevertheless, our findings point to the following potential entry points for integration efforts in the country:

- The lack of support for SRH/MNCH and HIV/AIDS integration within government means efforts may need to focus on supporting the government to strengthen the main health systems functions (funding, human resource, supply chain and logistics, laboratory and other health facility equipment & M&E), particularly those that increase access to and uptake of services by mothers and their new-borns, rural and hard-to-reach populations, and adolescents.
- Zambia has exceptionally high adolescent pregnancy and dropout rates. This is partly the reason why the new ministry (Ministry of Community Development, Mothers and Child Health (MCDMCH))[1] classifies women and young girls generally as a vulnerable group. It would be useful to support the MCDMCH efforts in tackling this challenge e.g. through supporting the rolling out of the comprehensive sex education curriculum (2013) that has received wide stakeholder support. This program is closely linked to the Foundation's interest in empowering girls through better education and SRH information and services.
- The MDCMCH is also keen on integration of RMNCH programs. With the support of European Union and World Bank, they are launching a pilot program on RMNCH. The new ministry has elicited excitement from stakeholders who view it as a fresh starting point for integration engagement. The Foundation could invest further in supporting coordination and technical working group capacity in this new ministry. This would plug into the Foundation's current efforts via its contact person in Zambia who is supporting coordination of TWGs and joint planning groups between partners and the government.
- 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. The Foundation can support the training of healthcare workers in these areas, as well as supporting programs that integrate PMTCT into MNCH.
- Given the MoH's focus on "integration by referral", support the strengthening of the MoH's referral system in order to address the problem of high loss to follow-up.

[1]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, Mother and Child Health (MCDMCH), which is responsible for policy implementation and all health facilities from district level downwards.

References

African Union Commission (2007). Africa Health Strategy: 2007–2015. Available At: http://www.nepad.org/system/files/AFRICA_HEALTH_STRATEGY%28health%29.pdf

African Union Commission. *Maputo Plan of Action for Operationalization of the Continental Policy Framework for Sexual and Reproductive Health and Rights 2007-2010*. https://www.unfpa.org/africa/newdocs/maputo_eng.pdf

AIDSTAR-One (undated) AIDSTAR-One website (www.aidstar-one.com)

Askew I, Charlotte Warren, Timothy Abuya, James Kimani, Charity Ndwiga, Jackie Kivunaga, Brian Mdawida, Susannah Mayhew. (2013). Integrated Postnatal Care in Kenya and Swaziland: effect on quality of care and health outcomes. Presented at: House of Parliament, London, March 20, 2013.

Blazer, Cassandra, Bisola Ojikutu, Karen Schneider, and Molly Higgins-Biddle (2012). Assessment of the Integration of PMTCT within MNCH Services at Health Facilities in Tanzania. Arlington, VA: USAID's AIDS Support and Technical Assistance Resources, AIDSTAR-One, Task Order 1. Available at: http://www.aidstar-one.com/sites/default/files/AIDSTAR-One_PMTCT-MNCH_Integration_Assessment_Tanzania.pdf

Chukwujekwu, O., N. Chabikuli, M. Merrigan, D. Awi, and C. Hamelmann (2010). "Integrating Reproductive Health and HIV Indicators into the Nigerian Healthy System—Building an Evidence Base for Action." African Journal of Reproductive Health. 14(1):109-16.

Church, Kathrin; Manuela Colombini, Phelele Fakuzde, Joshua Kikuvi, Jackie Kivunaga, Zelda Nhlabatsi, George Ploubidis, Isolde Birdthistle, Natalie Friend du-Preez, Ian Askew Charlotte Warren, Susannah Mayhew. (2013). Client perspectives: preferences and stigma. London dissemination meeting 22nd July 2013.

East Africa Community (EAC) (2007). Regional Strategic Plan on Sexual and Reproductive Health and Rights in East Africa: 2008-2013. Available at: http://www.rhsupplies.org/fileadmin/user_upload/Nomination_Committee/EAC_Narrative.pdf

Global Partners Forum. (2007). Achieving Universal Access to Comprehensive PMTCT Services Meeting Report. 26-27 November 2007. Johannesburg, South Africa. Available at: http://www.unicef.org/aids/files/Global_Partners_Forum_Final_Report.pdf

IPPF, UNFPA, WHO, UNAID S, GNP+, ICW and Young Positives (2009). Rapid Assessment Tool for Sexual & Reproductive Health and HIV Linkages: A Generic Guide.

JSI website: http://www.jsi.com/

Kennedy C, Spaulding A, Brickley D, Almers L, Mirjahangir J, Packel L, Almers L, Mirjahangir J, Packel L, Kennedy GE, Mbizvo M, Collins L, Osborne K (2010). Linking sexual and reproductive health and HIV interventions: a systematic review. J Int AIDS Soc. 12:26. doi: 10.1186/1758-2652-13-26. Available at: http://download.springer.com/static/pdf/199/art%253A10.1186%252F1758-2652-13-26.

pdf?auth66=1390372210_caab288a7854438eb58e5c01baa654cf&ext=.pdf

Lindegren ML, Kennedy CE, Bain-Brickley D, Azman H, Creanga AA, Butler LM, Spaulding AB, Horvath T, Kennedy GE (2012). Integration of HIV/AIDS services with maternal, neonatal and child health, nutrition, and family planning services. Cochrane Database of Systematic Reviews, Issue 9. Art. No.: CD010119. DOI: 10.1002/14651858.CD010119. available at: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010119/abstract;jsessionid=E9C3C6212CF6DEC65E1D9BA76E52C6D4.f03t01

PEPFAR [U.S. President's Emergency Fund for AIDS Relief] (2011). PEPFAR Guidance on Integrating Prevention of Mother to Child Transmission of HIV, Maternal, Neonatal, and Child Health and Pediatric HIV Services. Washington, D.C.: PEPFAR. Available at: http://www.pepfar.gov/reports/guidance/pmtct/158785.htm

Sherr, L. (2012). Literature Review on Program Strategies and Models of Continuity of HIV/Maternal, Newborn, and Child Health Care for HIV-Positive Mothers and Their HIV-Positive/-Exposed Children. Arlington, VA, USAID's AIDS Support and Technical Assistance Resources, AIDSTAR-One, Task Order 1.

Smit, JA, Church K, Milford C, Harrison AD, and Beksinska ME (2012). "Key Informant Perspectives on Policy and Service Level Challenges and Opportunities for Delivering Integrated Sexual and Reproductive Health and HIV Care in South Africa." BMC Health Services Research. 12:48. Available at: http://www.biomedcentral.com/content/pdf/1472-6963-12-48.pdf

Suthar AB, Hoos D, Beqiri A, Lorenz-Dehne K, McClure C, Duncombe C (2013). Integrating antiretroviral therapy into antenatal care and maternal and child health settings: a systematic review and meta-analysis. Bulletin of the World Health Organization, 91:46- 56. doi: 10.2471/BLT.12.107003. Available at: http://www.who.int/bulletin/volumes/91/1/12-107003.pdf

The DHS Program: Demographic and Health Surveys at: http://www.dhsprogram.com/

Tudor Car L, Van Velthoven MH, Brusamento S, Elmoniry H, Car J, Majeed A, Atun R. (2012). Integrating prevention of mother-to-child HIV transmission programs to improve uptake: a systematic review. PLoS One, 12:e35268. doi: 10.1371/journal.pone.0035268. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3338706/

Turan, J; L Nyblade; P Monsfiston (2012). Stigma and discrimination: Key barriers to achieving global goals for maternal health and elimination of new child HIV infection. HPP Working Paper #4.

In Ethiopia, a far-reaching health worker program has helped reduce child mortality across the country (story by Sara Crowe). Available at: http://www.unicef.org/infobycountry/ethiopia_70372.html

UNICEF (2010). Democratic Republic of Congo: PMTCT. Available at: http://www.unicef.org/aids/files/DRC_PMTCTFactsheet_2010.pdf

United Nations Statistics Division, Department of Economic and Social Affairs: Millennium Development Goals Indicators at: http://mdgs.un.org/unsd/mdg/Data.aspx

United Nations General Assembly Political Declaration on HIV/AIDS (UNGASS), 15 June 2006. 60/262. Available at: http://www.unaids.org.ua/files/20060615_hlm_politicaldeclaration_ares.pdf

United Nations Population Fund (UNFPA), Joint United Nations Program on AIDS (UNAIDS), and Family Care International (2004). *The New York Call to Commitment: Linking HIV/AIDS and Sexual and Reproductive Health.* Available at: http://www.unfpa.org/hiv/linking.htm

United Nations General Assembly Special Session on HIV/AIDS (UNGASS), June 2001. Available at: http://www.unaids.org/en/media/unaids/contentassets/dataimport/publications/irc-pub03/aidsdeclaration_en.pdf

United Nations. Report of the International Conference on Population and Development, Cairo. 5-13 September (1994). Available at: https://www.unfpa.org/webdav/site/global/shared/documents/publications/2004/icpd_eng.pdf

World Health Organization and UNICEF (2013). Accountability for maternal, newborn and child survival: The 2013 Update. Available at: http://www.countdown2015mnch.org/reports-and-articles/2013-report

World Health Organization (2010). Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants: Towards Universal Access: Recommendations for a Public Health Approach (2010 Version). Geneva, Switzerland: WHO.

WHO/HIV, UNFPA, IPPF-HIV, UNAIDS, UCSF (2009). Sexual & Reproductive Health and HIV Linkages: Evidence Review and Recommendations. Available at: http://www.unfpa.org/webdav/site/global/shared/documents/publications/2009/linkages_evidence_2009.pdf

WHO (2008). Technical Consultation on the Integration of HIV Interventions into Maternal, Newborn and Child Health Services. Available at: http://whqlibdoc.who.int/hq/2008/WHO_MPS_08.05_eng.pdf

WHO (2006). Glion Consultation on Strengthening the Linkages between Reproductive Health and HIV/AIDS: Family Planning and HIV/AIDS in Women and Children. Available at:

WHO and UNFPA (2004). The Glion Call to Action on Family Planning and HIV/AIDS in Women and Children 3-5 May 2004. Available at: http://www.unfpa.org/webdav/site/global/shared/documents/publications/2004/glion_callaction.pdf

WHO (2003) Integrating Gender into HIV/AIDS Services: A review paper. Department of Gender and Women's Health Family and Community Health, WHO.

ANNEXES

ANNEX 1

SUMMARY OF THE GATES FOUNDATION'S STRATEGIES FOR MNCH, FP AND HIV/AIDS

Table II: Summary of the Foundation's MNCH, FP and HIV/AIDS Strategies

MNCH Strategy	FP Strategy	HIV/AIDS Strategy
The Foundation's MNCH program focuses on expanding the use of current solutions and developing new ones to ensure that mothers and infants survive and stay healthy during childbirth and early childhood, when services are most lacking and the majority of deaths occur. The Foundation's approach recognizes the central role of local health care providers. To support their work, the Foundation invests in efforts to adapt and develop innovative tools, technologies, and treatments; improve the counseling and negotiation skills of frontline health workers; encourage families to practice healthy behaviours and seek out quality maternal and neonatal care; strengthen frontline health workers' skills and effectiveness; and advocate for targeted national and global policies, funding, and leadership. The Foundation also supports research efforts that can lead to better ways to improve the health and save the lives of mothers and newborns. Current efforts focus on India, Ethiopia and Nigeria.	The Foundation's FP program aims to bring access to high-quality contraceptive information, services, and supplies to an additional 120 million women and girls in the poorest countries by 2020. Foundation supports national governments that have committed to the goals of FP2020 and are leading the development and implementation of their own country-specific plans. The Foundation's support includes assessing FP needs, particularly among the poorest and most vulnerable populations; identifying access barriers and funding gaps; developing and testing interventions; sharing evidence-based practices; promoting accountability through real-time performance monitoring and data collection; and fostering coordination among governments, partners, and donors. Furthermore, the Foundation works to increase funding and improve policies for FP, create public-private partnerships to expand contraceptive access and options, develop innovative and affordable contraceptive technologies, and support further research to close knowledge gaps. The Foundation is particularly committed to exploring how its FP efforts can meet the needs of young women and girls.	The Foundation's HIV/AIDS program seeks to support efforts to reduce the global incidence of HIV significantly and sustainably, and to help people infected with HIV lead long, healthy, and productive lives. Efforts are focused in the poorest hyper-endemic countries of SSA, where the Foundation believes its resources can have the greatest impact. To date, the Foundation has committed more than US$2.5 billion in HIV grants to organizations around the world. The Foundation has also committed more than US$1.4 billion to the Global Fund. Beyond direct investments in HIV, the Foundation advocates for sustained and increased funding for HIV service delivery. Given the many funders in HIV, the Foundation concentrates its resources in areas where existing funds are scarce, so that its support can have potentially catalytic impact.

MNCH Strategy	FP Strategy	HIV/AIDS Strategy
Areas of Focus: • Improving tools, technologies and treatments • Improving health practices • Enhancing frontline health workers skills • Increasing funding and improving policies • Extending benefits beyond the neonatal period	**Areas of Focus:** • *Accelerate country action* focusing on countries that are committed to expanding access to FP (DRC is one of the countries of focus) • *Strengthen policy and advocacy,* at the global level but also nationally • *Monitor performance and promote accountability,* in FP2020 countries, Foundation is investing in rapid surveys that will provide data on FP use in 6- and 12-month intervals • *Closing knowledge gaps* on what works in expanding access to and use of contraceptives, particularly in the poorest countries • *Invest in new contraceptive methods* that will enable to poorest women access and use (removing cost, cultural, family, fear of side effects barriers)	**Areas of Focus:** • *Vaccine research and development* • *Antiretroviral prevention methods* including testing dual protection methods that combine microbicides with effective contraception; also invest in efforts to evaluate the prevention potential of HIV treatment • *Efficient and effective service delivery* to ensure that every investment yields maximum results: • *Voluntary medical male circumcision* • *Development of improved diagnostic methods* • *Demonstrating the scalability of HIV programs*

Source: Gates Foundation's Website and Staff Interviews between Jan-Apr 2014

ANNEX 2

APPENDIX OF TABLES SHOWING DATA USE TO MAP DISEASE BURDEN AND SERVICE UTILIZATION

Table IIIa: HIV/AIDS Burden and Service Utilization

	HIV prevalence	HIV incidence	Deaths due to HIV/AIDS (per 100,000 Population)	Access to ART	PMTCT	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)	% of females who tested for HIV in the last 12 months	% of 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. Tanzania = United Republic of TanzaniaData source: DHS & UN Statistics Division MDG indicators

Table IIIb: FP and Fertility

	Adolescent birth rate (per 1000 women aged 15-19)	Unplanned Pregnancies (%)	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 IIIc: Maternal Health

	MMR (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. Tanzania = United Republic of Tanzania
Data source: DHS

Table IIId: Child Health

	IMR	Under five mortality	Stunting Prevalence (%)	Underweight Prevalence (%)	% Of children aged 1 year who are fully immunized	% children <5 years with suspected pneumonia taken to appropriate health provider	Percent children <5 years with suspected pneumonia receiving antibiotic	% of 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: Regional figures are median values. Dashes indicate where there is no data. Tanzania = United Republic of Tanzania
Data source: DHS & WHO and UNICEF 2013

ANNEX 3

INTEGRATION POLICIES, PROGRAMS, FUNDERS, REGIONS IN THE FOUR STUDY COUNTRIES, AND THE POTENTIAL ROLE OF THE GATES FOUNDATION

Table IV: Key Policies Guiding MNCH, FP and HIV/AIDS in DRC, Malawi, Zambia and Tanzania

Tanzania	Democratic Republic of Congo
• The Five-Year Development Plan 2011/12 – 2015/16 • The National Strategy for Growth and Poverty Reduction 2010 – 2015 • The National Health Policy of 2007 • The Health Sector Strategic Plan III • The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania, 2008–2015 (One Plan) • The National Operational Guidelines for Integration of Maternal, Newborn, Child Health and HIV/AIDS Services Integration of 2012 • The Tanzania Third Multi-Sectoral Strategic Framework for HIV and AIDS 2013/14 – 2017/18	• The National Health Development Plan 2011-2015 (PNDS 2011-2015) • Health System Strengthening Strategy (SSRS) • The National Health Policy (NHP) adopted in 2001 • Reproductive Health National Policy (2008): • Adolescent Health National Policy (2009): • HIV National Strategic Plan (2014-2017): • Atlas 2010- PMTCT- mapping of partners & interventions: • Strategic Framework for Accelerating the Achievement of MDG4 and 5
Malawi	**Zambia**
• National Sexual and Reproductive Health and Rights (SRHR) Policy 2009 • National HIV Prevention Strategy 2009-2013 • EMTCT 2012 • National Blood Policy 2012 • Youth Friendly Services Policy 2007 • National Plan of Action for Scaling up SRH & HIV Prevention Interventions for Young People 2008-2012 • National Youth Policy 2013 • Roadmap for Accelerating the Reduction of Maternal and Neonatal Mortality and Morbidity in Malawi 2007	• 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 rolling out in schools • PMTCT Guidelines 2009 • National Reproductive Health Policy -2008 • National Health Policy 2013 • National HIV/AIDS/STI/TB Policy 2005

Table Va: DRC - What is being integrated, by who, where

Integrated services	Funding Institution(s)	Implementing Institution(s)	Region/District
MNCH/FP and HIV	USAID	l' Association de Sante Familiale (ASF)./ Population Services International (PSI)	9 provinces: Kinshasa, Katanga, Bas Congo, Kasaï Occidental, Kasaï Oriental, Equateur, South Kivu, North Kivu
MNCH/FP and HIV	USAID	Management Sciences for Health (MSH)	Occidental Kasaï, Oriental Kasaï, Katanga, South Kivu
MNCH/FP including management of obstetric fistula and youth SRH	UNFPA	Ministry of Health (MoH)	17 health zones in Bandundu, Bas Congo, Kinshasa, Katanga, North Kivu, South Kivu, Maniema and the Oriental Province
MNCH/FP including PMTCT	DFID	Pathfinder International IMA World IntraHealth International	56 health zones in 5 provinces including: 11 in Kasai; 28 in Kisangani; 10 in Maniema; 3 in Oriental province; 4 in South Kivu
FP into HIV/AIDS	Global Fund	Sante Rurale or Rural Health (SANRU)	128 health zones
MoH Package of Essential Health Services	DFID	Sante Rurale or Rural Health (SANRU)	28 health zones in Tasai
MNCH, FP and HIV	Global Fund, government of Netherlands and Private donors	Catholic Organisation for Relief & Development Aid (CORDAID)	110 health zones
RH/MNCH/FP	Foreign Affairs, International Trade and Development Canada (DFATD)	CCID (Canadian Cooperation for International Development)	Kinshasa, North/South Kivu, Katanga, Kasai, Bas-Congo, Bandundu
MoH Package of Essential Health Services	World Bank	Projet d'Appui à la Réhabilitation du Secteur de la Santé (French) PARSS	84 health zones and 10 health districts in Equateur, Katanga, Maniema, Bandundu, Kinshasa
FP into HIV/AIDS including PMTCT		Program for Appropriate Technology in Health (PATH)/ Integrated HIV/AIDS Project (ProVIC)	109 health facilities in 28 health zones in Kinshasa, Bas Congo, Katanga, South Kivu
HIV/AIDS, MNCH, FP & SGBV		International Center for AIDS Care and Treatment Programs (ICAP)	255 health zones in Kinshasa and 19 health zones in Katanga
FP into HIV/AIDS including PMTCT		Elizabeth Glaser Paediatric AIDS Foundation (EGPAF)	Katanga, Kinshasa, Kisangani
FP into HIV (only at hospital level)	Belgian private foundation Global Fund, PEPFAR	Médecins Sans Frontières Pays-Bas (MSF Pays Bas)	10 health centers and 2 hospitals in Equateur, Province Orientale, North Kivu, South Kivu, Maniema, Katanga, Kinshasa.

Table Vb: Malawi - What is being integrated, by who, where

Integrated services	Funding Institution(s)	Implementing Institution(s)	Region/District
HIV and SRH	EU, SIDA (M&E), UNFPA (TA) UNAIDS (TA)	MoH, FPAM	3 districts in Malawi - Nkhatabay, Dedza and Mangochi in 5 health facilities per district
RH (Cervical Cancer screening) and FP into HIV/AIDS	MoH, NAC, CDC, GIZ, BMGF	Lighthouse	Kamuzu central hospital; The Martin Centre (Bwaila Hospital)
FP into HIV/AIDS (PMTCT)	Baylor International Pediatric AIDS Initiative (BIPAI) Malawi	Baylor College of Medicine-Abbott Fund Children's Clinical Centre of Excellence (COE)	Paediatric ward at Kamuzu Central Hospital
MNCH, FP/RH, Malaria, Nutrition, HIV	USAID	JHPIEGO, Save the Children, CARE, Plan International, 10 CBOs (community mobilization), JSI (supply chain)	15 districts: Lilongwe, Dowa, Kanzungu, Nkhotakota, Salima, Mangochi, Balaka, Machinga, Zomba, Palomba, Mulanje, Thyolo, Chikwawe and Nsanje
Mobile health services: Integrate HTC & STI testing into FP and refer clients for STI/HIV care Static sites: FP, HIV/STI, ANC (but no deliveries), Primary health care	DFID, Norway, Cordaid (Core activities - FP) NAC (HIV) UNICEF and UNFPA (youth SRH)	BLM	31 static facilities: Rumphi, Karonga, Mzuzu, Mzimba, Kasungu, Nkhatabay, Dwangwa, Nkhotakota, Mponela, Mchinji, Area 25, Salima, Mangochi, Kawale, Falls, Dedza, Mwanza, Liwonde, Zomba, Balaka, Ntcheu, Mangochi, Bangwe, Lunzu, Chilomoni, Zingwangwa, Ndirande, Ginnery Corner, Ngabu, Mulanje, and Bvumbwe: Outreach in hard to reach areas - 27 of 28 districts
HIV into ANC HIV into FP FP into HIV/AIDS	NAC, DFID	CHAM, MoH	171 member health facilities (20 major hospitals, 30 community hospitals, the rest health centers with or without maternity)
Supply chain for ACTs, HIV test kits, Family planning, Child Health	BMGF (6 districts), WHO (9 districts), Save the Children, UN innovations working group	UNICEF, USAID SSDI (6 Districts), Child health, PSI, UNFPA, D-Tree into M-HEALTH, Concern worldwide	23 districts
FP, STI, HIV and PAC	UNFPA, IPPF, NAC, PRB, KFW, UNC	FPAM, MoH/Directorate of RH	Kasungu, Dowa, Lilongwe, Dedza and Ntcheu
15 high impact interventions tackling under 5 years children including paediatric HIV (including PMTCT option B+) and FP within ANC care, safe delivery and birth by skilled attendance	BMGF, WHO, UNICEF, UNFPA	IMCI and RHU, PMNCH	10 districts: Karonga, Zimba north and Zimba south, Kasunga, Lilongwe, Ndeza, Njeu, Balaka, Chiradzula, Palombe, Nsanje
FP into HIV		PSI and PACT	Sugar plantations in Dwangwa
HIV into FP		PSI	Sugar plantation clinic in Nchalo
MNCH (nutrition, malaria, hospital delivery, exclusive breast feeding & the kangaroo care), FP, HIV, PAC, male involvement & girl child education	BMGF NAC UNFPA	The Presidential Initiative on Maternal and Health and Safe Motherhood in the Office of the president and Cabinet	Lilongwe, Kasungu, Dowa and Mchinji (Dowa and Mchinji, are being used as control districts

Table Vc: Tanzania - What is being integrated, by who, where

Integrated services	Funding Institution	Implementing Institution	Region/District
FP into HIV/AIDS	PEPFAR, NIH, CDC, USAID, UNFPA	THPS, ICAP, Pathfinder, Engenderhealth, AGPAHI, PSI	Pwani, Mtwara, Kigoma, Zanzibar, Manyara, Mzaga , kagera
FP into MNCH/RCH	PEPFAR, NIH, USAID, UNFPA, SIDA, CIDA, WHO	Pathfinder, UNFPA, AGPAHI, AMREF, THPS	Shinyanga, Simiyu, Pwani
FP into PMTCT	PEPFAR, NIH, CDC, USAID, UNFPA	Engenderhealth, ICAP, JHPIEGO, THPS	Manyara, Kigoma, Kagera Mwanza, Pwani
FP into PAC	UNFPA, Brumberg Foundation	Engenderhealth	Manyara
FP into Immunization/Outreach programs	USAID, UNFPA	Engenderhealth, Pathfinder	Manyara, Arusha, Dar es salaam
FP/RH into CTC/VCT	PEPFAR, NIH, CDC, USAID, UNFPA, SIDA, CIDA, WHO	Engenderhealth, AGPAHI, UNFPA, ICAP, THPS, AMREF	Manyara, Kahama, Shinyanga, Morogoro Iringa , Pwani, dare-salaam, Iringa, Mbeya
MNCH into HIV	PEPFAR, NIH, CDC, USAID, UNFPA, CIDA, SIDA, WHO	Engenderhealth, AMREF, ICAP, THPS	Manyara, Pwani, Kagera, Kigoma
TB into HIV	PEPFAR, NIH, CDC, Global Fund, Basket fund	THPS, ICAP, TACAIDS	Pwani, Mtwara, Kigoma, Zanzibar, Kagera, Dar es Salaam

Table Vd: Zambia - What is being integrated, by who, where

Integrated services	Funding Institution	Implementing Institution	Region/District
FP into HIV/AIDS	DFID, USAID, PSI, Population Council, FHI360, Marie Stopes, Clinton Health, Melinda Gates	Scaling Up Family Program (SUFP), ABT Associates Inc, PPAZ, Zambia system integrated program, PPAZ, Zambia HIV focusing on integration of HIV (ZEHRP), Zambia research Institute, American Nurses and Midwives organization, PAF/ PUFF on nutrition, Imperial, MCDMCH and MoH	districts
	Global Fund, PEPFAR, AIDS Fund, USAID, UN joint team	MoH	Throughout the country
	UNFPA, USAID, IPPF, Plan Sweden, Open Society International, JISP	PPAZ, Young Women's Christian Association of Zambia (YWCA), Forum for African Women Educationalists of Zambia (FAWEZA), Camfed, HODI, 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 programs extend to the neighbouring towns and districts (eastern province, Copperbelt province, southern province)
	UNFPA	MCDMCH	One district
	USAID and PEPFAR	Zambia integrated systems strengthening program (ZISSP), CDC, SAP, London School of Tropical Diseases, CSH, Boston University, CIRDZ	10 districts
FP into MNCH/RCH	Gates Foundation, SFH, European Union	Marie Stoppes, PPAZ, Youth engagement, MCDMCH and MoH	10 provinces of the country
	JICA, EU, WB, USAID, SIDAUNICEF	MCDMCH and MoH	Throughout the country
	Canadian SIDA, UNFPA, UNICEF, UNAIDS, WHO and World Bank	INESOR,	Five districts
	UNFPA, UNICEF, WHO, Save the children (Italy, USA), Norway, CIDA and SIDA	SAVE the Children (mCHIP), PATH, MoH, MCDMCH, Boston University, CIDRZ, Elizabeth Glaser Paediatric AIDS Foundation, Zambia Prevention Care and Treatment II, Association of paediatric, ZISSP, Communications Support for Health, JHIEPIGO	Copperbelt, Kitwe
FP into PMTCT	UNFPA, USAID	IPAS, PPAZ, Marie Stopes, SUFP,	89 health public centers in four provinces of the country
FP into Immunization/ Outreach programs	UNICEF, Save the Children	MCDMCH, CHAZ, Child Fund, Society for Family Health	Lusaka, Kitwe, Livingstone, Copperbelt
FP/RH into VCT	UNFPA, USAID, IPPF, Plan Sweden, Open Society International, JISP	PPAZ, Youth Vision Zambia, Society for family health Marie Stopes, IPAS, MoH, MCDMCH, CHAZ	Lusaka, Kitwe, Livingstone but outreach programs extend to the neighboring towns and districts (eastern province, Copperbelt province, southern province)
	Gates foundation, SFH, European funding	Marie Stopes, PPAZ, Youth Engagement, MoH, MCDMCH, SFH	Lusaka, Kitwe, Livingstone, Copperbelt
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, SAP, LSHTM, CSH, Boston University , CIRDZ, CHAZ	27 districts

Table VI: Other Potential Roles for Gates Foundation in Supporting Integration

Issue area	Options
Support the establishment of model sites for integration	• Support countries to set up model sites of integration that the country can draw lessons for scale-up.
Strengthen government-partners coordination and partnership mechanisms for integration	• 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 very weak. • Lessons could be drawn from Zambia, where the Foundation's consultant was supporting efforts to leverage partner activities (at the time of the study). • Work with the MoH to enhance leadership as well as coordination through platforms such as TWGs.
Strengthen logistics and supply chain	• 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 [all] the countries surveyed and additional units of investment (whether in human resource training, application of new, cheap and innovative technologies) have the potential to revolutionize commodity supply and delivery by reducing/eliminating commodity stock-outs, ensuring timely commodity deliveries, and forecasting. The Foundation's supported pilot project – CSTOCK – in Malawi, being delivered by JSI, is an example of how simple, cheap, innovative approaches can support integrated services in resource-scarce settings.
Leverage BMGF's investments in improving M&E for HIV programs in Malawi and Zambia	• Leverage BMGF's current investments in Malawi and Zambia on improving data systems for the HIV/AIDS program to include integrated data systems for MNCH and FP. This would strengthen integration efforts in these two countries and address the weak M&E systems. • Documenting lessons from this program could inform efforts that seek to enhance M&E data systems integrated service provision in other countries in future.
Strengthening community accountability and engagement structures	• Support civil society activities aimed at meaningful community empowerment 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. The Foundation-supported Safe Motherhood program in Malawi, through its community engagement strategy, could provide important lessons.

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
www.afidep.org