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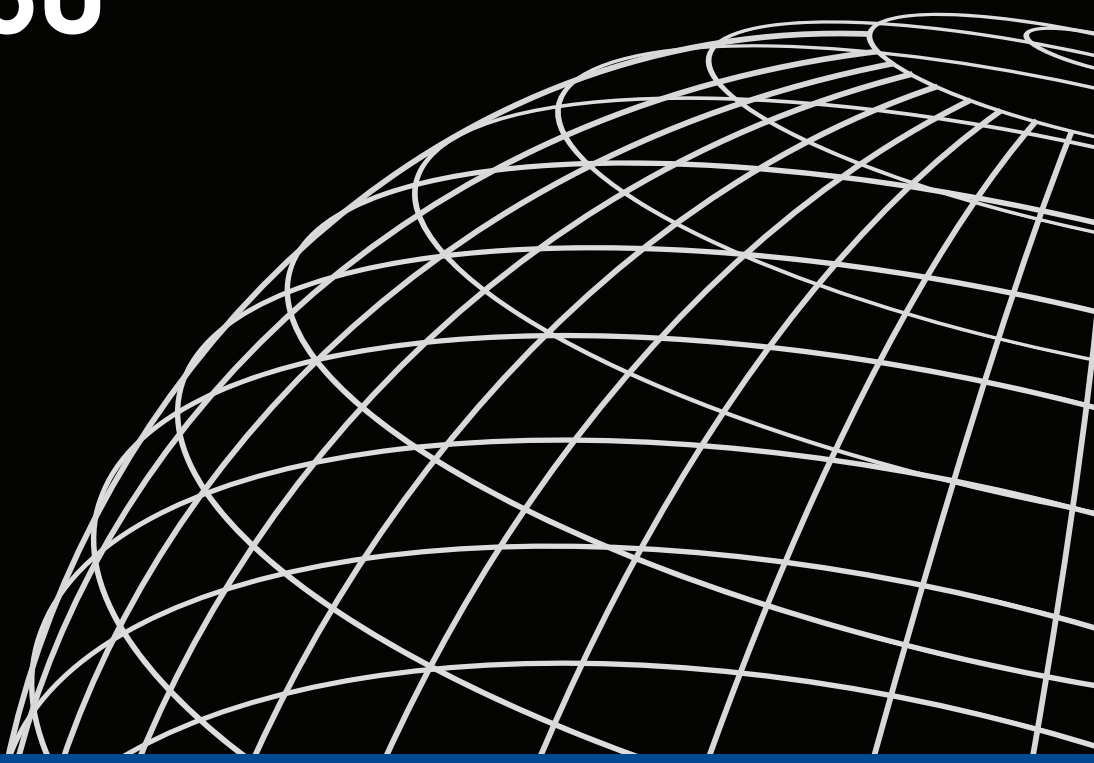
INTEGRATION OF HIV AND FAMILY PLANNING HEALTH SERVICES IN SUB-SAHARAN AFRICA:

A REVIEW OF THE LITERATURE, CURRENT RECOMMENDATIONS, AND EVIDENCE FROM THE SERVICE PROVISION ASSESSMENT HEALTH FACILITY SURVEYS

DHS ANALYTICAL STUDIES 30



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MEASURE DHS assists countries worldwide in the collection and use of data to monitor and evaluate population, health, and nutrition programs. Additional information about the MEASURE DHS project can be obtained by contacting MEASURE DHS, ICF International, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (telephone: 301-572-0200; fax: 301-572-0999; e-mail: reports@measuredhs.com; internet: www.measuredhs.com).

The main objectives of the MEASURE DHS project are:

- to provide decision makers in survey countries with information useful for informed policy choices;
- to expand the international population and health database;
- to advance survey methodology; and
- to develop in participating countries the skills and resources necessary to conduct high-quality demographic and health surveys.

DHS Analytical Studies No. 30

Integration of HIV and Family Planning Health Services in Sub-Saharan Africa:

A Review of the Literature, Current Recommendations, and Evidence from the Service Provision Assessment Health Facility Surveys

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List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretrovirals
CT	Counseling and Testing
DHS	Demographic and Health Surveys
FP	Family Planning
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
MCH	Maternal and Child Health
MNCH	Maternal, Neonatal and Child Health
PEP	Post-Exposure Prophylaxis
PEPFAR	The United States President‘s Emergency Plan for AIDS Relief
PMTCT	Prevention of Mother-to-Child Transmission of HIV
RH	Reproductive Health
SPA	Service Provision Assessment
STI	Sexually Transmitted Infection
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on AIDS
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Preface

One of the most significant contributions of the MEASURE DHS program is the creation of an internationally comparable body of data on the demographic and health characteristics of populations in developing countries.

The *DHS Comparative Reports* series examines these data across countries in a comparative framework. The *DHS Analytical Studies* series focuses on analysis of specific topics. The principal objectives of both series are to provide information for policy formulation at the international level and to examine individual country results in an international context.

While *Comparative Reports* are primarily descriptive, *Analytical Studies* comprise in-depth, focused studies on a variety of substantive topics. The studies are based on a variable number of data sets, depending on the topic being examined. A range of methodologies is used in these studies, including multivariate statistical techniques.

The topics covered in *Analytical Studies* are selected by MEASURE DHS staff in conjunction with the U.S. Agency for International Development.

It is anticipated that the *DHS Analytical Studies* will enhance the understanding of analysts and policymakers regarding significant issues in the fields of international population and health.

Sunita Kishor
Project Director

Executive Summary

After a period of debate around the issue of integration of family planning (FP) and HIV service delivery, particularly in countries hardest-hit by the HIV epidemic, policy recommendations from governments and international organizations alike now explicitly support the integration of HIV and reproductive health service delivery, particularly family planning. There is recognition that integration is needed to support women's and men's reproductive health needs, to push the HIV epidemic back with the goal of achieving an HIV-free generation by 2015, and to meet several of the Millennium Development Goals. Beyond the beneficial impact of integration on the fight against HIV, there are gains to be won with regard to improved coverage of family planning services.

This report provides a review of the current literature on integration of HIV-related services with other areas of service delivery that have important synergies with HIV services. The review indicates that while there remain concerns about integration, such as degradation of the quality of services, insufficient health system capacity, and financial implications, the balance of the literature finds that clinical, service delivery, cost-effectiveness, and rights-based benefits accrue from integration.

This report also presents a descriptive analysis that uses national health facility survey data from the MEASURE DHS project's Service Provision Assessment (SPA) surveys to establish an HIV/FP service integration baseline in five countries in sub-Saharan Africa that have been hard-hit by the HIV epidemic: Kenya, Namibia, Rwanda, Tanzania, and Uganda. We highlight areas where integration can be strengthened in line with international recommendations and national policies, and provide recommendations for strengthening health facility survey data collection approaches to ensure optimal monitoring of HIV/FP service delivery integration in the future.

Using data from the SPA's health worker interviews, facility inventories, and client-provider observations, we describe baseline levels of HIV- and FP-related service integration in the five selected countries guided by the following questions:

• To what extent do health care providers currently deliver both HIV- and FP-related services?

• Do health care providers receive training in both HIV- and FP-related services?

• To what extent are elements of HIV- and FP-related services integrated in health facilities?

• To what extent do health care workers provide integrated services in practice with clients?

Highlighted results from the descriptive analysis include the following:

Condoms for dual protection against pregnancy and HIV

The results of the analysis indicated that the study countries lacked visual educational materials on HIV or condom demonstration models in the family planning units. During the client-provider observations of STI visits, providers demonstrated how to put on a condom to fewer than 10 percent of observed STI clients, and rarely offered clients condoms to take home. We also found that up to 18 percent of facilities offering family planning services do not normally stock male condoms, while female condoms remain essentially unavailable in every country except Namibia.

HIV counseling and testing, and family planning counseling, during antenatal care (ANC)

In Tanzania and Uganda, just under 40 percent of ANC units offer HIV counseling in the ANC service delivery area, and only 20-25 percent of ANC units in those countries offer HIV testing. During client-provider observations of ANC visits, in most cases (save Namibia), less than 50 percent of clients are tested or referred for HIV testing. Further, ANC visits are a key opportunity to educate women about their postpartum contraception options, which may differ depending on their HIV serostatus. Yet while 80 percent or more facilities report offering family planning counseling in their ANC units, less than one quarter of clients are counseled on family planning options during ANC visits with health care providers.

HIV/FP integration in STI-related service delivery

Despite clear and considerable gaps in integration of HIV/FP service delivery, it nevertheless seems that in all countries assessed ANC service provision is more integrated than STI service provision. A lack of routine HIV testing was observed during the STI consultations, as well as a lack of discussion, demonstration, and dissemination of condoms. It is critical that HIV testing and family planning options for condoms as well as other methods are provided in an integrated fashion when people who are simultaneously exposed to the risk of pregnancy and HIV present to a health facility for care.

Correspondence between availability of elements of HIV/FP service delivery during facility inventories and the integrated provision of services during client-provider observation

This report documents considerable disparities between the availability of elements of integrated HIV/FP services, and the actual delivery by a health care provider of ANC or STI services that are fully integrated—where both HIV- and FP-related elements are actually incorporated into the visit. Further research is required to determine the reasons for any discrepancy between HIV and family planning services reported available in specific service delivery units, and the lack of integrated service provision when the provider is face-to-face with a client.

This report also provides recommendations for adjustments to health facility survey questionnaires that would allow for more complete measurement of HIV/FP service delivery integration based on recommendations outlined in the World Health Organization document, *Glion Consultation on Strengthening the Linkages between Reproductive Health and HIV/AIDS: Family Planning and HIV/AIDS in Women and Children*.

The authors would like to thank Drs. Heidi Reynolds and Ann Way for their reviews of this report. They contributed many important criticisms, suggestions, and insights. Any errors or shortcomings that remain are exclusively the responsibility of the report‘s authors.

1 Introduction

1.1 Background

After a period of debate around the issue of integration of family planning (FP) and HIV service delivery, particularly in countries hardest-hit by the HIV epidemic, sufficient evidence and political will have been marshaled in support of integration.

Policy recommendations from governments and international organizations alike now explicitly support the integration of HIV and reproductive health service delivery, particularly family planning. There is recognition that integration is needed to support women's and men's reproductive health needs, to push the HIV epidemic back, with the goal of achieving an HIV-free generation by 2015, and to meet several of the Millennium Development Goals (UNAIDS 2010).

Beyond the beneficial impact of integration on the fight against HIV, there are gains to be won with regard to improved coverage of family planning services, which is particularly important in a context where unmet need for family planning remains extremely high (Singh and Darroch 2012).

Given the recent coalescence of support for HIV/FP service delivery integration, there is now a need to establish baseline estimates of current levels of integration, and identify areas in which integration of service delivery can be strengthened. This is especially relevant at a time when the knowledge and infrastructure that has been built over the past decade to deliver PMTCT care can be leveraged to benefit programs such as family planning (McNairy et al. 2011).

This report provides a review of the current literature on integration of HIV-related services with other areas of service delivery that have important synergies with HIV services. We focus on the integration of HIV- and FP-related services, given the strength of existing efforts in this direction and the current global push to achieve an HIV-free generation by 2015—an objective that is predicated to a great extent on achievement of successful integration of HIV/FP service provision. The report also briefly reviews the evolution of global health recommendations and policies with regard to HIV/FP service delivery integration.

Finally, this report presents a descriptive analysis that uses national health facility survey data from the MEASURE DHS project's Service Provision Assessment (SPA) surveys to establish an HIV/FP services integration baseline in five countries in sub-Saharan Africa that have been hard-hit by the HIV epidemic: Kenya, Namibia, Rwanda, Tanzania, and Uganda. We highlight areas where integration can be strengthened in line with international recommendations and national policies. We also provide recommendations for strengthening health facility survey data collection approaches to ensure optimal monitoring of HIV/FP service delivery integration in the future.

The document is organized as follows:

1. Review of definitions of HIV/FP service delivery integration and key contextual factors affecting success of integration

2. Summary of the key issues in the debate on HIV/FP integration

3. Description of current national and international recommendations and policy environment with regard to HIV/FP service integration

4. Description of baseline levels of HIV- and FP-related service integration in five selected sub-Saharan African countries hard-hit by the HIV epidemic to address the following questions:

    - To what extent do health care providers currently deliver both HIV- and FP-related services?
    - Do health care providers receive training in both HIV- and FP-related services?
    - To what extent are elements of HIV- and FP-related services integrated at the level of the health facility?
    - To what extent do health care workers provide integrated services in practice with clients?

5. Recommendations for improvement in the area of HIV/FP service integration

6. Recommendations for improving approaches to data collection to better capture more specific information on degree of service delivery integration

1.2 Defining Successful Service Delivery Integration

1.2.1 What Constitutes "Integrated" Services?

A review of the literature on service delivery integration reveals that the lexicon of terms that refer to concepts related to ‗integration' is varied, and the definition of the term ‗integration' itself is not uniformly understood. The related term most commonly used, sometimes interchangeably, is the concept of ‗linkages'. The World Health Organization (WHO) has attempted to distinguish between these two terms, defining ‗linkages' as a concept that encompasses more broadly the synergies that exist between sexual and reproductive health and HIV policies, programs, services, and advocacy efforts (WHO 2009). ‗Integration' is one level more specific, focusing on targeted services and/or programs that can be joined together to ensure and perhaps maximize collective outcomes by offering more comprehensive services; this requires specific organizational and management structures/procedures to support such enhanced service delivery (WHO 2009). The text box below highlights some of the most common definitions of ‗integration'.

Existing Definitions of 'Integration'

a. Functional definition of _integration': Any two services can be considered to be integrated when they are offered at the same facility during the same operating hours, and the provider of one service actually encourages clients to consider using the other service during that visit. (Implies possibility of more than one location within facility and more than one service provider.) (Foreit et al. 2002)

b. Joining together different kinds of services or operational programs in order to maximize outcomes, e.g., by organizing referrals from one service to another or offering one-stop comprehensive and integrated services; in the context of HIV, integrated programs may include sexual and reproductive health, primary care, maternal and child health, as well as integration of HIV testing and counseling with the diagnosis, prophylaxis, and treatment of tuberculosis. (UNAIDS 2011)

c. 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). (PEPFAR 2011)

d. The organization and management of health services so that people get the care they need, when they need it, in ways that are user friendly, achieve the desired results, and provide value for money. (WHO 2008)

e. A variety of managerial or operational changes to health systems to bring together inputs, delivery, management, and organization of particular service functions. Integration aims to improve the service in relation to efficiency and quality, thereby maximizing use of resources and opportunities. (Briggs and Garner 2006)

Complicating the discussion about integration further is the fact that a plethora of models for integration exist, varying according to the specific mix of services integrated, the foundation or base service onto which another service is being integrated, the level of the health system in which integration is evident, and the service delivery structure for integration. In terms of the specific mix of services that are integrated, various combinations of the following services can be integrated: HIV counseling and testing (in its various forms), PMTCT, ART, and in some cases MCH more broadly. The base service is usually determined by country context (history of family planning and HIV programs, epidemiology, etc.); the strength of the systems in place to deliver this base service is thought to have direct implications for the success of integration efforts. Integration can occur at various levels of the health system, from national/policy level, to facility or service delivery level, and also down to community level. The modality for integrating services differs widely as well; services can be co-located (at the level of the individual service provider, the consultation room, or at the level of the facility) or provided through referral services to other providers or separate facilities, which often provide more specialized or stand-alone services. However, it is generally accepted that the mere coexistence of services in the same facility does not constitute integrated services.

Most researchers concur that given the highly context-specific nature of service integration, further research is required to specify the circumstances under which different models may be most efficacious and cost-effective (Wilcher et al. 2008; Church and Mayhew 2009; Kuhlmann et al. 2010; Adamchak et al. 2010).

1.2.2 Key Contextual Factors Affecting Success of Service Integration

The literature highlights a number of factors that affect the success of service delivery integration, which can be summarized along the following key areas: policy environment; overall health system capacity and the strength of the base service onto which another is being integrated; local epidemiology; and existing demand for integrated services.

With regard to policy environment, the existence of clear targeted national policies outlining guidance and strategies are required for implementation of integration efforts at scale; political will to drive and support such efforts is equally important, particularly in contexts where „vertical" approaches are still pervasive throughout the health sector.

The capacity of the health system to function smoothly across all key technical domains is an important factor that can affect how well service integration is operationalized. Key domains include health work force (numbers and skill level), supply chain management (particularly regarding sufficient stocks of commodities), health information systems and monitoring and evaluation, infrastructure, referral systems, etc. Using the same logic, the capacity and functioning of the base system to which new services are added is equally important in determining the success of integration efforts (Adamchak et al. 2010).

In order to determine the most effective and relevant service delivery integration options for certain services, an understanding of the epidemiological factors is fundamental—specifically in terms of HIV prevalence and fertility rates of a particular context. For example, with respect to the integration of HIV services into family planning services, countries with concentrated or low-level HIV epidemics have a "less compelling case" to integrate these services at a national level (AIDSTAR-One 2011; WHO 2009; Foreit et al. 2002). Such cases require an understanding of whether the majority of family planning clients are at risk of HIV; if not, targeted rather than integrated HIV programming would be more effective (WHO 2009).

Another important factor to consider is the level of existing demand for the services being integrated. For example, the success of integrated HIV/FP services is unlikely if there is little demand for either family planning services or HIV-related services individually, due to predominant socio-cultural factors that often negatively affect women's care-seeking behavior (Li 2005). Also, related to demand creation is the degree of unmet need for integrated services within the target population; integrated services are likely to be more accepted in contexts where there is a high degree of unmet need.

1.2.3 Past Debate and Current Recommendations on HIV/FP Service Delivery Integration

There have been several decades worth of both political and technical debate on the subject of integration of HIV/FP service delivery. The political debate has recently resolved into consensus on and support for integration, as has the technical debate, with some continued reservations around feasibility and quality assurance. This section briefly summarizes the highlights of the past debates, and outlines the current recommendations on HIV/FP service delivery integration from international organizations and national governments.

1.2.4 Past Debate on HIV/FP Service Delivery Integration

For decades after the concept of service integration was first introduced in the international public health arena through the Alma Ata Declaration in 1978, and after the ICPD formally called for integration of reproductive health and HIV services in 1994, the jury has been out on how to most effectively operationalize this concept, and on how to demonstrate its expected benefits through rigorous evidence-based evaluation. Until recently, a sub-current in the literature questioned the strength of the data

available for decisionmaking, noting the paucity of empirical research that demonstrates the benefits of integration with sufficient rigor, and a lack of evidence on how to effectively operationalize policies into program implementation, how to scale up successful models into population-level interventions, and the cost-effectiveness of such interventions (Kuhlmann et al. 2010; Wilcher et al. 2008; Adamchak et al. 2010; Church and Mayhew 2009; Sweeney et al. 2012).

The majority of the current literature on service delivery integration comes out more strongly in favor of integration, particularly given the ongoing global financial constraints that directly affect foreign aid and drive efforts to seek greater programmatic efficiencies through scalable approaches; and the significant international pressure to meet, or at least to substantially close the gap with, the Millennium Development Goals. Integration has therefore been widely adopted by the international public health policy community.

While there is now general consensus in the global health community regarding the imperative need for and the multi-faceted beneficial impact of HIV/FP service integration (see section 1.3.2: Current recommendations and policy orientations on HIV/FP service delivery integration), it is important to highlight both the evidence-based arguments in favor of integration, as well as some of the words of caution on operationalizing integration efforts and the potential challenges or barriers therein.

Broadly speaking, the potential clinical benefits of integration have long since been researched and documented. However, questions remain regarding the most effective operationalization strategies and also regarding cost-effectiveness. The following sections highlight (a) the key arguments in favor of integration from the perspective of clinical benefits, public health service delivery benefits, cost-effectiveness, and rights-based approaches; (b) key arguments against integration that have not yet become obsolete despite the advances made in HIV/AIDS service delivery and recent evidence around unmet need for family planning; and (c) potential challenges and key considerations in the roll out of service integration efforts.

Benefits of HIV/FP Service Integration

Clinical Benefits

One of the most important advantages to integrating family planning and HIV services is the potential contribution of contraception to preventing unintended HIV-positive births, which has been well established through extensive research (Sweat 2004; Hladik et al. 2009; Reynolds et al. 2005; Reynolds et al. 2006; Reynolds et al. 2008; Halperin et al. 2009). Even modest decreases in the number of pregnancies to HIV-infected women, ranging from 6 percent to 35 percent, could avert HIV-positive births at the same rate as the use of antiretroviral drugs for PMTCT (Sweat 2004). Given the strength of the evidence on the desire of HIV-positive women to prevent unwanted pregnancies (Johnson et al. 2009; Elul et al. 2009; Heys et al. 2009; Wanyenze et al. 2011), and the evidence demonstrating that preventing unintended births to HIV-positive women can significantly amplify the impact of using ARV for pregnant HIV-positive women to reduce infant HIV infections (Halperin et al. 2009; Wilcher 2009; Hladik et al. 2009), the policy justifications for integration are sound. This is reflected by the current WHO guidance on PMTCT, which includes focus on prevention of unintended pregnancies among HIV-positive women as a key priority (WHO 2003).

In addition, the integration of family planning services into ART services is an important strategy to increase access to family planning for people living with HIV. Such integrated services, which often involve repeated contacts with clients and regular counseling sessions, can help ensure that HIV-positive women are making informed choices about their contraceptive method as some ARVs limit the number of methods that are appropriate and effective (Sanders et al. 2007); integrated family planning and ART services can also help HIV-positive women and men who want to have children reduce the risk of

mother-to-child transmission (Ringheim 2012). Some studies have also shown that integrated services increase contraceptive use among HIV-positive women who want to prevent or delay births (Duerr et al. 2005; Chabikuli et al. 2009; Kosgei et al. 2011; Searing et al. 2008); however, existing evidence indicates no significant impact on pregnancy incidence (Mark et al. 2007), primarily due to contraceptive discontinuation or failure. There is also evidence of the benefits of integrating HIV/FP services on uptake of dual protection, which is particularly important for discordant couples (Wilcher et al. 2009; Ringheim 2012; Myer et al. 2010).

Given that HIV-positive mothers co-infected with TB are 2.5 times more likely to transmit HIV to their infants as mothers without TB, the case for integration of FP into HIV-TB services is equally strong (Gupta et al. 2011).

Public Health Service Delivery Benefits

The benefits to service delivery deriving from integration of family planning and HIV services accrue to the client, the provider, and the overall quality of services that providers are able to deliver. From the perspective of the client, one of the most obvious benefits lies in the convenience of allowing clients to access multiple services during one visit, and making it notably easier for clients to coordinate their HIV-related care with their pregnancy-prevention goals. Integrated services can significantly reduce the burden of care-seeking for individuals, as they are able to receive family planning services at the same place they get ART—from providers who know them and their situations (Sanders et al. 2007). There is also some evidence that integrated services may render services more affordable to clients; however, the literature does not present conclusive evidence (WHO 2009).

Integration of services is also believed to reduce STI- and HIV-related stigma and discrimination for clients, because the provision of HIV services is not singularly associated with frontline STI/HIV care as stand-alone services are; instead, integrated service delivery incorporates HIV services as one of many core service areas within a facility (Church and Mayhew 2009; UNAIDS 2010; Sanders et al. 2007). For these and other reasons, integration of services is believed to increase client satisfaction (Church and Mayhew 2009).

From the perspective of service delivery, the literature points to several ways in which integration can help improve both coverage of key populations and the quality of services. Expanding the range of services provided in a particular site or to an individual client can substantially improve service uptake, which is especially important in areas of high HIV prevalence (Church and Mayhew 2009; Foreit et al. 2002). Other authors cite the fact that integrating family planning into ART services makes family planning services available to a broader range of clients, such as men and young people (Church and Mayhew 2009; Sanders et al. 2007). It also improves the organizational effectiveness of service provision and increases the efficiency of service delivery for health workers who can address multiple health issues in one visit (Church and Mayhew 2009). There is also evidence suggesting that integrated HIV/FP services may actually help improve responsiveness to client needs. Given research findings that demonstrate that knowledge of serostatus among HIV-positive women is significantly associated with the desire to limit childbearing and contraceptive use (Hoffman et al. 2008; Johnson et al. 2009), there is a strong argument in favor of integrating family planning services into both general HIV testing services and also PMTCT services in order to meet the demand for contraception.

Some of the literature also suggests that integration of services provides an opportunity to improve the quality of service delivery, including clinical care, interpersonal care, and the coordination of care (Church and Mayhew 2009). Integration not only permits delivery of more comprehensive and holistic care, which studies by FHI in Nigeria demonstrate improves treatment adherence (Ringheim 2012). It also increases the likelihood that providers have knowledge of clients‘ HIV status, which in turn allows them

to respond better to their family planning needs and tailor services better to these needs, which is particularly relevant in the context of PMTCT and the needs of child-bearing HIV-positive women (Duerr et al. 2005). In cases where integration models co-locate services, there is a positive impact on the quality of services in terms of the continuity of care, eliminating the need for external referrals and minimizing clients getting ‗lost in the system' (Ringheim 2012). All of this fosters a more client-centered approach.

Cost-Effectiveness

There is some evidence of the potential cost effectiveness of integrated services (Wilcher et al. 2008; Stover et al. 2003; Halperin et al. 2009), particularly through integration models that co-locate services; however, the empirical evidence is weak. The most common arguments supporting the cost-effectiveness of integration include the potential to maximize productive use of scarce resources and reduce inefficiencies such as duplication of service delivery functions (Foreit et al. 2002). From the client perspective, integration is also thought to be cost-effective, as it reduces the frequency of visits to the health facility and therefore the cost of related appointments (Ringheim 2009). One study shows that integration of family planning at HIV treatment sites would reduce by half the cost of each infant HIV infection prevented (Stover 2003). Analytical modeling suggests that programs for preventing unintended pregnancies to HIV-positive women would contribute cost savings to programs for preventing perinatal HIV transmission (Halperin et al. 2009); some even suggest that increasing contraceptive use to prevent unintended pregnancies appears to be at least as cost-effective for preventing perinatal HIV transmission as providing nevirapine to HIV-infected mothers (Reynolds et al. 2004). However, a recent literature review focusing on the cost-effectiveness of integrating HIV services with other health services highlights that while the studies on integration of family planning for HIV positive clients found provision of family planning to be highly cost-effective or cost-saving relative to non-integration, none compared unit costs of integrated HIV/FP care and treatment versus stand-alone services, nor examined comparative costs of different integration models (Sweeney et al. 2012). Further research is needed to identify efficiency gains from integration beyond the service level and economic gains to HIV service users

Promoting a Rights-Based Approach

Integration of family planning and HIV services promotes a rights-based approach to women's health. In line with the 1994 ICPD program of action, which highlighted the importance of ensuring access to family planning for all in order to safeguard women's right to decide the number and timing of their children, this integration can help empower women to exercise this right and realize their pregnancy intentions (WHO 2009).

Residual Key Arguments against Integration[1]

Degradation of Quality of Services

One author offers words of caution with respect to whether it makes sense to leverage existing services and infrastructure for the integration of other health services (Grepin 2011); while Grepin does not look at HIV/FP service integration specifically, some of her concerns are relevant here. Specifically, the author identifies the risk of sacrificing key elements of standard delivery models in order to ―fit" into existing platforms, and the risk that the effectiveness of existing programs may deteriorate due to the decreased

[1] Note that over the years many arguments against the integration of family planning and HIV services have become obsolete as new developments have emerged in the HIV/AIDS prevention and treatment arena and as new evidence about unmet need for family planning has become widespread; however, some arguments remain relevant in the current global health landscape.

singular focus on (HIV- or FP-) specific outcomes. She also highlights the need for additional financial resources in order to sustain the quality of services once they have been integrated.

Drawing from programmatic research by FHI, Adamchak and colleagues suggest that in many integration models, the addition of new services has the potential to degrade the quality of the base service, especially if the base service onto which an additional service is being integrated is fundamentally weak (Adamchak et al. 2010). FHI et al. (2006) examined the question of whether integration of services increased waiting times for clients through their operations research in Kenya, and found no significant differences. Other research suggests that in some cases integration has led to the dilution of expertise and thus a decline in the quality of care, reduced knowledge, and poorer attendance, with unclear longer-term ramifications (Sherr 2012).

Insufficient Health System Capacity

A key argument against integration of health services is that in many developing countries the health system is not sufficiently strong to support efforts to integrate services. It has been argued that the fragility of the health system, particularly in terms of logistical challenges and health workforce gaps, can constrain effective integration of services (Kuhlmann et al. 2010). Specifically with respect to the ubiquitous challenge of health workforce shortages, integration of services generates demand for an increased pool of skilled health workers, which requires both additional resources and also a significant amount of time for training (Grepin 2011).

Financial Implications

There are grounds to believe that there have been "unrealistic expectations" of greater efficiency and cost savings by the international donors – Caldwell and Caldwell (2002) argue that the integration of services is very costly and that most governments in sub-Saharan Africa cannot afford it. A recent review of cost-effectiveness studies on the integration of HIV with other health services suggests that the existing evidence on cost-effectiveness is inconclusive, given the quality of the evidence (Sweeney et al. 2012).

Potential Challenges to Successful Integration and Key Considerations

The literature highlights numerous challenges that can impede the success of service delivery integration efforts. Here we have organized them into the following categories: political stewardship, health system capacity, funding mechanisms, and demand creation. While many of these points are not necessarily specific to the integration of HIV/FP services, they are nevertheless pertinent.

Political Stewardship

The adoption of enabling policies, national strategies, and guidelines in favor of integration is necessary but not sufficient in the absence of clear political stewardship to drive the implementation of these policies forward. High-level political buy-in and support is essential to the translation of pro-integration policies into integrated service delivery at scale.

Health System Capacity

As with any type of service delivery, successful integration of health services can only occur in the context of a sufficiently strong and functional health system. Strong performance across all key components of a country‘s health system is required to ensure successful integration of services. Notable challenges arise in the following areas:

Challenges of HIV/FP Integration to Health System Capacity

1) **Health Workforce**

- Securing the technical capacity of the health workforce through coordinated training on integrated family planning and HIV services (EGPAF 2011)
- Ensuring that sufficient numbers of staff are trained
- Addressing increased workloads for key staff resulting from integration of services; for example, additional supervision, expanded administrative and financial management and patient follow up requirements (Maynard-Tucker 2009)
- Addressing overburdened health care workers; high volumes of patients with few health workers (WHO 2009, Fullem et al. 2012)
- Addressing staff motivation as integration requires health workers to undertake a new range of activities without any improvement in salary or working conditions (Lush 2002)
- Changing the attitudinal bias that health care providers tend to have against HIV-positive women bearing children (Leach-Lemens 2010)

2) **Supply Chain and Logistics**

- Challenges in modifying existing programs with strong procurement and distribution systems that may resist integration for fear of compromising the quality of the system (EGPAF 2011)
- Addressing increased complexity of logistics for administering supplies and need for greater warehouse capacity (Maynard-Tucker 2009)
- Integrating the supply management system to prevent commodity stock outs

3) **Health Information and M&E**

- Addressing the increased burden of collecting and reporting on additional indicators for the integrated services (EGPAF 2011)
- Challenges in establishing adequate monitoring and evaluation systems, as there are no standard indicators for integration (Fullem et al. 2012); neither PEPFAR nor the Global Fund use contraceptive use as an indicator of success (Wilcher et al. 2008)
- Ensuring monitoring and evaluation tools are adapted for integrated service provision
- Addressing the need for interlinked patient monitoring systems
- Improving data quality

4) **Infrastructure**

- Challenge of limited physical space at service delivery sites, which creates a barrier to service expansion, particularly for services that require private, separate space, such as for counseling, laboratory services, or medical procedures.

5) **Service Delivery**

- Addressing need for increased supportive supervision to ensure quality of integrated services
- Challenge of establishing functional referral systems that can handle integrated services
- Revisions to update service delivery guidelines and norms.

Funding Mechanisms

One of the key challenges to integration of services lies in the fact that both international funding and local government health structures still tend to be siloed separately according to HIV or reproductive

health/family planning—in fact, some authors suggest that it is the nature of the international funding streams that influences the creation of separate departments within ministries of health (Leach-Lemens 2010; Wilcher et al. 2008). In the past there has tended to be a lack of coordination between departments, which not surprisingly stymies efforts at integration (Wilcher et al. 2008). Recently, in most countries there have been concerted efforts to establish coordinating mechanisms, such as the Ministry of Health task force in Kenya, which has played a critical role in advancing HIV/FP service integration (FHI 2006). Overall, global funding trends have been slow to reflect the high level of policy support in favor of integrating HIV/FP service provision, which has become a key obstacle to wide-scale implementation of contraception as an HIV-prevention strategy. Key donor institutions such as PEPFAR and the Global Fund have been equally slow to relinquish the vertical orientation of funding mechanisms for HIV and reproductive health, which in turn has impeded efforts to integrate these services. For example, while PEPFAR programmatically supports the integration of family planning and HIV services, it nonetheless prohibits the use of its funds for purchase of contraceptives for women in HIV care, treatment, and PMTCT programs. Such costs are expected to be covered by a separate funding stream for contraceptive commodities within USAID. Not surprisingly, this restriction creates significant challenges in ensuring availability of access to HIV services that also provide contraceptive supplies and services (Boonstra 2011). The Global Fund has gone a step further by funding integrated programming, though at low levels (Komatsu et al. 2010).

Demand Creation

While we have already mentioned the emerging evidence that HIV-positive women report the desire to prevent unintended pregnancies, the issue of demand creation for integrated HIV/FP services is also highly contingent on predominant socio-cultural beliefs and practices. With respect to this specific type of integration, gender norms are particularly important, as they are for each of these services individually. Sex inequality and related attitudes and perceptions about the rights of women impede demand creation for family planning services (Li 2005), and therefore also affect the demand for integrated services.

Integration of HIV and Family Planning Services: Is There a Clear Cut, Evidence-Based Imperative?

A large part of the literature suggests that, because of the complexity involved in ensuring the success of integration efforts, as has been highlighted above, and also because of the limited amount of rigorous empirical evidence on the impact or effectiveness of various different integration models, strategies to operationalize integration efforts need to be grounded in the local context. There is no ―one-size fits all" approach to integration (Wilcher et al. 2008). Different types of integration may be appropriate for different health care facilities or programs, depending on available resources, capacity, and facility set-up (WHO 2009). Numerous references in the literature suggest that integration of HIV/FP may not be appropriate in all contexts. A recent literature review that assesses the existing evidence base on integrated models for HIV-positive women and their HIV-positive/-exposed infants concludes that, while a number of studies are able to show a positive effect of integration on health outcomes, the lack of rigor in most of this research and the failure to identify which components of the various integration models assessed actually contribute to positive outcomes leads to an unclear picture (Sherr 2012). The authors urge further research to determine the effectiveness and impact of different modalities of integration, and to understand the contexts in which these models are successful, so that conclusive recommendations can be made.

1.2.5 Current Recommendations and Policy Orientations on HIV/FP Service Delivery Integration

National governments and international bodies alike have taken explicit position in support of HIV/FP service delivery integration. In this section we present an overview of the evolution of the international

orientation to integration and its current status, and we present the language on integration that is included in the national policies of the five countries included in this study.

International Recommendations and Policy Orientations on Integration

The Glion Call to Action on Family Planning and HIV/AIDS in Women and Children was issued in May 2004 as a consensus statement by WHO, UNFPA, UNAIDS, UNICEF, several national development agencies and prominent non-governmental organizations. It advocated for a broader approach to PMTCT that incorporates family planning as one of the four essential elements in its HIV prevention strategy:

1. Preventing primary HIV infection in women;

2. Preventing unintended pregnancies in women with HIV infection;

3. Preventing transmission of HIV from infected pregnant women to their infants; and

4. Providing care, treatment and support for HIV-infected women identified through PMTCT or VCT programs and the women's families.

In 2006, the WHO published a document identifying four areas requiring attention and initiative in order to realize the objectives articulated in the Glion Call, specifically the areas of policy and advocacy, program development, resource mobilization, monitoring and evaluation, and research (WHO 2006). It was noted that there was ~~a~~ pressing need to increase advocacy aimed at generating awareness and political commitment to family planning as a potent instrument for combating HIV in women and children."

Addressing the urgent need to integrate family planning and HIV service delivery at that time was somewhat confounded by the fact that the single largest national donor to the fight against HIV and AIDS had disallowed the use of its funds for activities related to family planning. As late as 2008, the PEPFAR FY 2009 Country Operational Plan Guidance stated the following about how PEPFAR funds could be used to combat the epidemic:

> ~~P~~**PMTCT:** Provision of ARV prophylaxis and other ANC services (not to include family planning, which cannot be supported with PEPFAR resources) for HIV-infected pregnant women should be funded under PMTCT."
>
> ~~F~~**Family Planning:** PEPFAR funds may not be used to support family planning activities. The USG supports voluntary family planning programs largely through USAID's population and reproductive health program, while PEPFAR's mission is prevention, treatment, and care of HIV/AIDS. In any wraparounds between HIV/AIDS and family planning activities, PEPFAR funds may only be utilized to support HIV/AIDS activities."
>
> -- *Selected excerpts from PEPFAR FY 2009 Country Operational Plan Guidance*

However, at the same time, in 2008 when PEPFAR was renewed for another five years, the United States Congress introduced more flexibility into PEPFAR language, including ~~a~~ new emphasis on programs that reduce women's risk of acquiring HIV and on promoting linkages between HIV programs and other health sectors" (Boonstra 2011).

By 2009, the US government's language on how PEPFAR funds could be used had been significantly modified to take an integrated approach to confronting the HIV epidemic, including language that explicitly dealt with linking voluntary family planning programs to HIV programming:

> —PEPFAR is a strong supporter of linkages between HIV/AIDS and voluntary family planning programs. The need for family planning for HIV-positive women who desire to space or limit births is an important component of the preventive care package of services for people living with HIV/AIDS and for women accessing PMTCT services."
>
> —In areas with high HIV prevalence and strong voluntary family planning systems, PEPFAR programs are encouraged to support efforts to provide confidential HIV counseling and testing within family planning sites. Indeed, there is growing evidence of unmet need for these family planning services, particularly among vulnerable populations, including for women who are HIV-infected."
>
> —Health care shortages, including midwife and nursing shortages, are well documented in most high-HIV burden countries. PEPFAR programs should support the training of health workers to deliver an enhanced package of MCH services, an essential element of improving care. Training curricula may include PMTCT services and critical MCH, family planning and reproductive health services for women living with HIV."
>
> -- *Selected excerpts from PEPFAR FY 2010 Country Operational Plan Guidance*

In 2011, the United States Global AIDS Coordinator and UNAIDS Executive Director jointly launched the *2011-2015 Global Plan towards the Elimination of New HIV Infections among Children by 2015 and Keeping Their Mothers Alive*. One of the six key elements of the 2011-2015 Global Plan is to ensure that HIV, maternal health, newborn and child health, and family planning programs work together, deliver quality results, and lead to improved health outcomes – thus underscoring the global consensus on integration of services.

National Recommendations and Policy Orientations on Integration

Since the Glion Call in 2004, explicit language on integration of HIV and family planning service delivery has been incorporated into National Health Strategies and related policy documents in each of the countries included in this report: Kenya, Namibia, Rwanda, Tanzania, and Uganda.

Kenya's 2009 National Reproductive Health and HIV and AIDS Integration Strategy (Ministry of Public Health and Sanitation and the Ministry of Medical Services 2009) reflects an unambiguous endorsement of integrating HIV and reproductive health services generally, and family planning services specifically. The strategy noted that —the process of integrating RH and HIV services commenced in Kenya more than a decade ago. Initial efforts included the integration of counseling and testing for pregnant women attending antenatal services (PMTCT). Later efforts included the integration of FP into voluntary counseling and testing (VCT) services and counseling and testing (CT) into FP."

In the same document, the Kenyan government mentioned the influence of US government funding decisions as a determinant of how the country could address its HIV prevention needs: —the U.S. Agency for International Development (USAID)/Kenya, one of the leading supporters for the Kenyan population programme, cut its support for family planning by one-third from 1995 to 2002, while increasing its

funding for the HIV and AIDS programme six fold. In 2004, USAID budgeted US$35 million for HIV and AIDS and US$6 million for family planning in Kenya."

Notably, the Kenyan approach to integration is explicitly bi-directional, envisioning integration of RH- and FP-related service delivery into HIV-related services, as well as integration of HIV-related services into reproductive health and family planning services:

> "The National Reproductive Health Policy (NRHP) 2007 recognises that the continued unmet need for RH services among HIV-positive people remains a challenge. About half of HIV-positive women have an unmet need for family planning. To achieve some of the objectives in this priority area, the NRHP 2007 seeks to integrate HIV and AIDS services into expanded RH care and vice versa. The aim of integration is to provide more comprehensive, convenient, and hence more acceptable, cost-effective RH and HIV and AIDS programmes at all service delivery points/levels, where appropriate."
>
> -- *Kenya 2009 National Reproductive Health and HIV and AIDS Integration Strategy*

In 2010, the government of **Namibia** issued its National Strategic Framework for HIV and AIDS Response in Namibia, 2010/11 – 2015/16 (Ministry of Health and Social Services 2010), which also contained language explicitly articulating an approach that integrates HIV and RH/FP service delivery for prevention more broadly, as well as within the specific domain of PMTCT. Importantly, the Namibian document specifies that the government's approach to service integration is guided by a mandate to provide quality care for all women, regardless of HIV serostatus:

> "The approach will focus primarily on strategies that promote the integration of PMTCT services in a variety of clinical settings including maternal, newborn, and child health clinics, HIV treatment centres, VCT, sexually transmitted infection clinics, and other sexual and reproductive health care including family planning clinics. The aim is to ensure delivery of a comprehensive package of essential services for quality maternal, newborn and child health care that will include routine quality antenatal care for women regardless of HIV status."
>
> -- *2010 National Strategic Framework for HIV and AIDS Response in Namibia*

In March 2009, the government of **Rwanda** issued its Rwanda National Strategic Plan on HIV and AIDS 2009-2012 (National AIDS Control Commission 2009), noting in a sub-section entitled "Integration with Broader Health Programs" that "it is well established also that both HIV and general health services can benefit from integration: PMTCT and ante-natal consultations, infant HIV follow-up and immunization program, condom distribution and family planning, VCT and adolescent reproductive health services, ART and nutritional and psychosocial support. Such integration will be systematically promoted and implemented to improve service efficiency and appropriate staff training will be organized for this purpose."

In November 2009, **Tanzania** issued its National Multisectoral HIV Prevention Strategy 2009-2012, "Towards achieving Tanzania without HIV" (United Republic of Tanzania Prime Minister's Office, 2009). The document notes that despite ongoing efforts to integrate HIV prevention into other health services and development programs, including integration of HIV prevention activities into sexual and

reproductive health services, coverage remained suboptimal. Emphasis was placed on strengthening each of the four prongs of PMTCT, the second of which advocates provision of family planning services for HIV-infected women and their partners to prevent unintended pregnancies. While much of the language remains focused around unidirectional referrals from HIV-focused services to family planning and related services, the Tanzanian policy document ultimately does reflect a fully integrated approach:

> "Integration of HIV prevention services within clinical and community settings to maximize access to high quality HIV prevention services, through:
>
> Reviewing the status of integration of HIV prevention services such as risk reduction counseling and condom distribution within clinical and community settings. The settings where integration should occur include:
>
> - at the facility level, within STI, RCH, FP, TB, PMTCT, and substance abuse clinics,
> - within treatment settings, ART, treatment education, and adherence clinics,
> - within other settings, home-base care, VCT, PLHIV support groups, OVC programs."
>
> -- *Tanzania National Multisectoral HIV Prevention Strategy 2009-2012*

In a high-level meeting held in May 2012 to report progress towards achieving zero new HIV infections in children, the Tanzanian Minister of Health and Welfare reported that currently all family planning services integrate HIV services, and vice-versa (UNAIDS 2012).

Uganda's 2007 National HIV & AIDS Strategic Plan 2007/8 – 2011/12 also articulated its intention to implement integration of HIV and sexual and reproductive health (SRH) interventions, embracing as a guiding principle the "effective mutual integration and mainstreaming of HIV/AIDS in all SRH interventions and SRH in HIV/AIDS interventions" (Uganda AIDS Commission 2007). Uganda's language around integration emphasizes the need for comprehensive care for all people rather than focusing primarily on HIV-positive women, and also specifically mentions men as beneficiaries of integrated HIV/FP service delivery:

> "The National Strategic Plan advocates for the horizontal integration of HIV & reproductive health services, ensuring that HIV prevention, HIV care and treatment and family planning are all available at the same to the same clients."
>
> "Objective 2: To reduce HIV transmission from mother-to-child by 50% by 2012
>
> Strategic actions: Integrate SRH services, especially family planning and HIV/AIDS service delivery targeting both women and men."
>
> -- *Uganda National HIV & AIDS Strategic Plan 2007/8-2011/12*

Recent endorsements of HIV/FP service delivery integration by key international organizations (2009-2012)		
Entity	**Specific Recommendations on HIV/FP Integration**	**Sources**
WHO	Comprehensive four-pronged strategy to prevent HIV transmission from mothers to their infants, including prevention of unintended pregnancies among women living with HIV/AIDS	Strategic Approaches to the Prevention of HIV Infection in Infants: Report of a WHO Meeting, Morges, Switzerland, 20–22 March 2002
	Provides program-informed ways to implement and strengthen the linkages between FP and HIV/AIDS policies, programs, and services, identifying specific action steps for program planners and outlining critical questions regarding integration decisions: 1. What type of service integration, if any, is needed? 2. To what extent should services be integrated? 3. What steps are needed to establish and sustain high-quality integrated services? 4. What information is needed to measure program success and inform program or service delivery improvement, replication, or scale-up?	Strategic Considerations for Strengthening the Linkages Between FP and HIV/AIDS policies, programs, and services. Geneva: WHO, 2009
UNAIDS	Highlights HIV/FP integration as a clear priority: "Given the key contribution of family planning to reduce the number of unplanned pregnancies among women living with HIV, linkages with HIV services will be a priority." It aims to ensure that HIV, maternal health, newborn and child health, and family planning programs work together, deliver quality results and lead to improved health outcomes.	UNAIDS Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive (2011-2015)
	Emphasizes the importance of building off of PMTCT platforms to provide comprehensive services, particularly RH services, so as to maximize economic efficiency, create synergies towards the achievement of MDG goals, and ultimately meet the complex health needs of clients.	UNAIDS 2010-2015 Strategy: Getting to Zero
UNFPA	Supports the 'Global Plan Towards the Elimination of New HIV Infections among Children by 2015 and Keeping their Mothers Alive' by offering guidance for preventing HIV infections and unintended pregnancies with a rights-based focus.	Preventing HIV and Unintended Pregnancies: Strategic Framework 2011 – 2015. UNFPA, 2012.
PEPFAR	Identifies that voluntary family planning should be part of comprehensive quality care for persons living with HIV, emphasizing that linkages between these two program areas are essential for effective HIV prevention, given the importance of unintended pregnancy prevention in lowering the rate of new HIV infections. Specifically encourages the integration of family planning services into two different types of HIV programs: HIV care, treatment and support programs and PMTCT programs.	1. PEPFAR guidance on integrating prevention of mother to child transmission of HIV, maternal, neonatal, and child health and pediatric HIV services, 2011 2. PEPFAR, FY 2012 country operational plan guidance, 2011

	However, PEPFAR funding streams do not fully support these recommendations (Boonstra 2011).	3. PEPFAR, Technical Considerations Provided by PEPFAR Technical Working Groups for FY 2012 COPS and ROPS, Aug 2011, 4. PEPFAR, Guidance for the prevention of sexually transmitted HIV infections, 2011
The Global Fund	GF board (2010) called for disease-specific initiatives, such as HIV, to link with MNCH programs using an integrated approach: ~~–e~~ountries should be encouraged strengthen the MNCH content of their Global Fund investments, maximizing existing flexibilities for integrated programming" The Global Fund has demonstrated it will finance family planning interventions and reproductive health supplies as critical components of HIV, TB, Malaria and HSS applications.	Global Fund, 2010. Exploring Options for Optimising Synergies with Maternal and Child Health

1.3 Research Objectives

Given the recent development of technical and political consensus at the national and international levels on the necessity of taking an integrated service delivery approach to the HIV epidemic as well as to women's reproductive health and family planning needs, there is a need to describe baseline levels of HIV and family planning service delivery integration in countries hard-hit by the HIV epidemic.

To this end, key questions to be answered include:

- To what extent do health care providers currently deliver both HIV- and FP-related services?
- Do health care providers receive training in both HIV- and FP-related services?
- To what extent are elements of HIV- and FP-related services integrated at the level of the health facility?
- To what extent do health care workers provide integrated services in practice?

This report addresses these questions using nationally representative health facility survey data from five sub-Saharan African countries: Kenya, Namibia, Rwanda, Tanzania, and Uganda.

2 Methodology

2.1 Data

To address our research questions, we use data collected through the MEASURE DHS project from the Service Provision Assessment (SPA) surveys. The SPA are nationally and sub-nationally representative health facility assessment surveys that provide a comprehensive overview of a country‘s health service delivery by collecting information on the availability of different facility-based health services in a country, and facility readiness to provide those services at a good level of quality, according to international standards of care.

SPA surveys strive to answer the following key questions:

- To what extent are health facilities prepared to provide health services to clients?
- What infrastructure, resources and support systems (standard precaution items, equipment, supplies, service guidelines, and trained health workers) are available at health facilities on any given day?
- To what extent does the service delivery process follow generally accepted standards of care?
- What issues affect clients and service providers‘ satisfaction with the service delivery environment?

Among the key services and topics assessed in a SPA survey are areas in which integration of HIV and FP services are essential:

Maternal and Newborn Health: availability and appropriate assessment of clients for antenatal care, delivery services, newborn care, emergency obstetric care

Family Planning: availability of contraceptives and supplies, user fees, counseling and client assessment, provision of STI treatment for family planning clients

HIV/AIDS: availability HIV testing services, HIV/AIDS care and support services, antiretroviral treatment, prevention of mother-to-child-transmission, post-exposure prophylaxis

Sexually Transmitted Infections (STIs): availability of STI services, including integration of STI services with other services, and STI service delivery conditions

The SPA employs several different modalities for data collection. We use data from health worker interviews, facility inventory, and client-provider observations to inform our analysis (Figure 1):

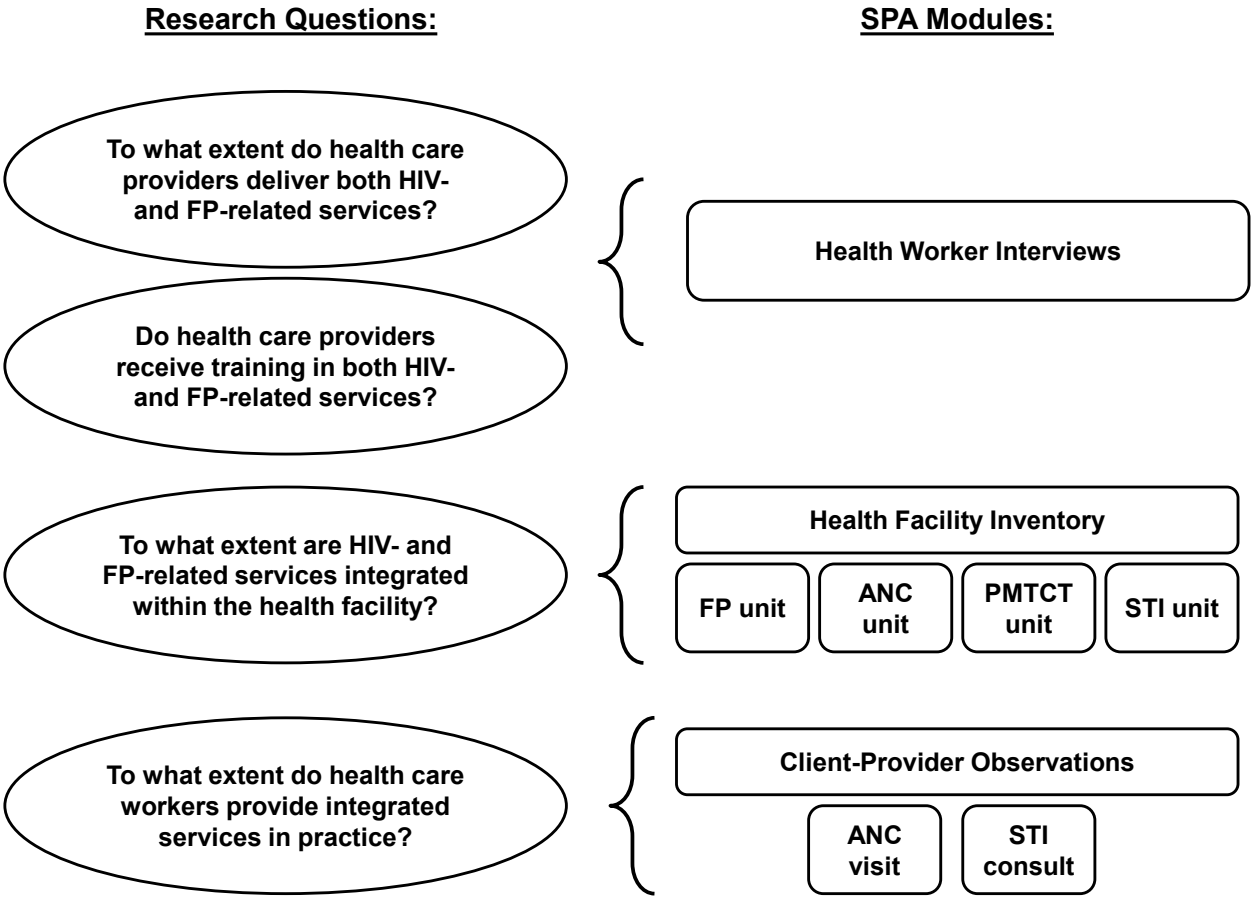
Health Worker Interview: The health worker interview is conducted with a sample of providers present in the facility on the day of the survey. Typically, an average of eight providers per facility are randomly selected for interview. Providers are asked about their qualifications, the type of services that they provide, and training that they may have received.

Facility Inventory: The facility inventory module assesses service availability and determines whether the facility has the resources, infrastructure, and support systems to deliver quality services.

This interview is usually carried out among facility managers or with a knowledgeable provider for specific services.

Client-Provider Observations: Client-provider consultations are observed to assess whether providers adhere to national or international guidelines for provision of each type of service covered by the survey. The sample for observations is usually selected on the basis of convenience. Clients are selected for observation when they arrive for services. Up to five clients for each provider of the service are interviewed, with a maximum of 15 observations in any given facility for each service. In some facilities, fewer clients are interviewed due to low client volume. For this analysis, we make use of client-provider observations for antenatal care visits and STI consults because these are the only client-provider observation data collected in the SPA for which there is potential to have integrated HIV and family planning services.

Figure 1. Research questions and the SPA survey modules used to address them



Changes to the SPA Questionnaire over Time

SPA data have been collected since 1997 and have over the course of the years accumulated a progressively larger number of questions within a questionnaire that was already complex and rich in content. In response to calls to make the SPA more manageable to implement and to make the resultant data sets easier to use, as well as to respond to evolving content-related demands from stakeholders, a process of streamlining and content revision for the SPA has been under way over the past few years.

Namibia 2009 and Kenya 2010 were the first surveys to begin implementing a more streamlined approach to data collection. For example, prior to the Namibia 2009 survey, all ANC units in a facility would have been included in the data collection effort. With the advent of the Namibia 2009 survey, only one ANC unit per facility was selected for questionnaire administration. Thus, the structure of the questionnaire, and to some extent the content of the questionnaire, differs between that which was used for Kenya and Namibia, and that which was used for Rwanda, Tanzania, and Uganda. These changes are not expected to substantially affect the ability to compare outcomes across the two types of datasets, except in the instances in which certain types of data are no longer collected, in which case this is indicated in the results tables with ―na" (not available). Future iterations of the SPA will be streamlined further.

2.2 Types of HIV/FP Service Delivery Integration Assessed

In 2006, WHO issued a set of recommended programmatic measures designed to help bridge the gaps between services for women accessing family planning, testing and counseling, or antenatal care programs, thereby forging closer linkages between family planning and HIV programming to further the objectives articulated by the 2004 Glion Call to Action (see text box). These measures highlight the most essential family planning and HIV services for integration, with particular focus on PMTCT:

Glion Consultation on Strengthening the Linkages between Reproductive Health and HIV/AIDS:

Family Planning and HIV/AIDS in Women and Children

- HIV counseling should be integrated into family planning services in order to address the dual risk of infection and unintended pregnancy women face in their lives.

- HIV testing and counseling should be integrated into family planning programs, and testing and counseling programs should provide contraceptive counseling, especially on the consistent and correct use of condoms. This will enable women who learn that they are HIV-positive to access contraception, if desired, and will help women who are uninfected to avoid HIV infection and unintended pregnancy.

- HIV testing and counseling, safer sex counseling and family planning counseling and services, including condoms, should be provided in antenatal and postnatal care settings. This will help pregnant women to avoid infection and will help to identify pregnant women with HIV, who can be offered postpartum contraceptive counseling and services for the prevention of subsequent pregnancies, if this is desired.

- Exploiting these potential program synergies requires the strengthening of health systems, in particular by providing additional staff, training health providers, upgrading premises and ensuring vital reproductive health supplies.

-- WHO 2006

We interpret the results of our analysis of HIV/FP service delivery integration in light of these recommendations for integration, while extending our analysis to further include the provision of integrated HIV and family planning services in STI-related service delivery settings.

Our analytical definition of integration centers on co-location of HIV/FP clinical practice or training within an individual health worker, or co-location of observed elements of HIV/FP services within a single service delivery unit. We assess integration in the following regards:

1) Health care workers who currently provide both HIV- and FP-related services

2) Health care workers who have been trained to deliver both HIV- and FP-related services

3) Observed presence of HIV-related materials and commodities in family planning units

4) Reported provision of HIV- and FP-related services in antenatal care units

5) Reported provision of FP-related service delivery in PMTCT units

6) Observed presence of HIV- and FP-related materials and commodities in STI units

7) Observation of ANC visits: whether the health worker was observed to provide integrated HIV- and FP-related services

8) Observation of STI visits: whether the health worker was observed to provide integrated HIV- and FP-related services

2.3 Countries Selected for Analysis

For the analysis of HIV/FP integration, we selected all SPA surveys that implemented both an MCH-focused assessment and an HIV-focused assessment in sub-Saharan African countries hard-hit by the HIV epidemic. All SPAs were implemented for representative samples of health facilities, with the exception of Namibia, which was a health facility census. They include:

- 2010 Kenya SPA, implemented by the National Coordinating Agency for Population and Development in collaboration with the Ministry of Public Health and Sanitation, the Ministry of Medical Services, and the Kenya National Bureau of Statistics;

- 2009 Namibia SPA, carried out by the Directorate of Special Programmes (HIV/AIDS/TB/MALARIA) in the Ministry of Health and Social Services;

- 2007 Rwanda SPA, conducted by the National Institute of Statistics and the Ministry of Health;

- 2006 Tanzania SPA, implemented by the National Bureau of Statistics in collaboration with the Ministry of Health and Social Welfare and Office of the Chief Government Statistician, Zanzibar;

- 2007 Uganda HIV/MCH SPA, Uganda Ministry of Health in collaboration with the Uganda Bureau of Statistics.

Table 1 provides information on the SPA survey sample characteristics; population-based HIV prevalence and unmet need for contraception are also presented for each country, drawn primarily from the DHS.

Table 1. Descriptive information on unmet need for family planning and HIV seroprevalence in the five study countries drawn from Demographic and Health Surveys (DHS) data for Kenya 2009-09, Namibia 2006-07, Rwanda 2010, Tanzania 2010, and Uganda 2006, and characteristics of the Service Provision Assessment (SPA) health facility survey for Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007

	Selected Population Characteristics				Facility Survey Characteristics			
Country	Modern contraceptive prevalence among women currently in union	Unmet need for family planning among women currently in union	HIV sero-prevalence women 15-49	HIV sero-prevalence men 15-49	Region	Number of facilities	Facility Type	Number of facilities
Kenya 2008-09								
Residence					*Nairobi*	90	*Hospital*	253
Urban	46.6	20.2	10.4	3.7	*Central*	92	*Health center*	101
Rural	37.2	27.3	7.2	4.5	*Coast*	90	*Maternity*	52
Region					*Eastern*	91	*Clinic*	104
Nairobi	49.0	15.1	10.8	3.4	*North Eastern*	59	*Dispensary*	152
Central	62.5	15.6	6.2	2.6	*Nyanza*	91	*Stand-alone VCT*	41
Coast	29.7	25.4	5.8	2.3	*Rift Valley*	101		
Eastern	43.8	23.7	3.8	3.0	*Western*	89		
North Eastern	32.9	16.0	0.9	0.9				
Nyanza	34.7	31.7	16.0	11.4				
Rift Valley	41.1	31.1	6.3	2.8	Survey year: 2010			
Western	3.5	25.8	9.2	3.4	Total number of facilities sampled: 703			
Total	39.4	25.6	8.0	4.3	Response rate: 99%			
Namibia 2006-07*								
Residence					*Caprivi*	32	*Hospital*	46
Urban	63.8	17.6	--	--	*Erongo*	43	*Health center*	49
Rural	43.0	26.1	--	--	*Hardap*	23	*Clinic*	327
Region					*Karas*	28	*VCT*	15
Caprivi	43.5	20.9	30+	--	*Kavango*	66	*Sick bay*	9
Erongo	68.2	17.3	15-19	--	*Khomas*	49		
Hardap	62.6	21.3	10-14	--	*Kunene*	29		
Karas	63.6	17.5	15-24	--	*Ohangwena*	34		
Kavango	35.8	27.3	15-24	--	*Omaheke*	16		
Khomas	66.3	14.5	<10-24	--	*Omusati*	52		
Kunene	44.3	23.9	10-14	--	*Oshana*	21		
Ohangwena	37.9	29.1	20-29	--	*Oshikoto*	22		
Omaheke	48.2	20.1	<10	--	*Otjozondjupa*	31		
Omusati	49.8	23.2	20-24	--				
Oshana	53.7	25.3	25-29	--				
Oshikoto	48.5	24.5	20-24	--				
Otjozondjupa	55.9	24.6	15-19	--	Survey year: 2009			
Total	53.4	22.3	13.1	--	Total number of facilities sampled: 446			
** HIV estimated ranges based on ANC sentinel surveillance, Republic of Namibia (2008)*					Response rate: 92%			

(Continued...)

Table 1. – *Continued*

	Selected Population Characteristics				Facility Survey Characteristics			
Country	**Modern contraceptive prevalence among women currently in union**	**Unmet need for family planning among women currently in union**	**HIV sero-prevalence women 15-49**	**HIV sero-prevalence men 15-49**	**Region**	**Number of facilities**	**Facility Type**	**Number of facilities**
Rwanda 2010								
Residence					*Northern*	90	*Hospital*	42
Urban	47.0	8.0	8.7	5.4	*Southern*	117	*Health center*	389
Rural	44.9	10.6	2.8	1.6	*Eastern*	113	*Dispensary*	107
Region					*Western*	132		
Northern	47.5	8.4	3.1	1.8	*Kigali City*	86		
Southern	48.3	8.6	3.0	1.8				
Eastern	35.5	10.9	2.5	1.6				
Western	52.0	13.5	3.2	2.0	Survey year: 2007			
Kigali City	45.9	7.9	9.4	5.1	Total number of facilities sampled: 538			
Total	45.1	10.2	3.7	2.2	Response rate: 97%			
Tanzania 2010								
Residence					*Northern*	103	*Hospital*	128
Urban	34.1	19.5	10.6	6.4	*Central*	42	*Health center*	41
Rural	25.2	27.2	5.3	4.0	*S. Highlands*	84	*Dispensary*	437
Region					*Western*	71	*Stand-alone*	5
Western	14.6	25.9	6.6	4.8	*Lake*	83		
Northern	38.7	22.5	3.2	1.8	*Southern*	58		
Central	26.7	34.8	3.7	2.3	*Eastern*	88		
S. Highlands	33.6	19.8	11.3	8.7	*Zanzibar*	82		
Lake	15.5	33.3	6.3	4.1				
Eastern	35.1	17.5	9.1	5.9				
Southern	39.5	23.0	5.7	3.2	Survey year: 2006			
Zanzibar	12.4	34.7	0.7	0.5	Total number of facilities sampled: 611			
Total	27.4	25.3	6.6	4.6	Response rate: 100%			
HIV seroprevalence from Tanzania AIS 2007-08					(replacement sampling used)			

(Continued...)

Table 1. – *Continued*

	Selected Population Characteristics				Facility Survey Characteristics			
Country	**Modern contraceptive prevalence among women currently in union**	**Unmet need for family planning among women currently in union**	**HIV sero-prevalence women 15-49**	**HIV sero-prevalence men 15-49**	**Region**	**Number of facilities**	**Facility Type**	**Number of facilities**
Uganda 2006								
Residence					*Central*	81	*Hospital*	119
Urban	36.5	27.0	12.8	6.7	*Kampala*	40	*Health center-IV*	81
Rural	15.1	42.6	6.5	4.7	*East Central*	69	*Health center-III*	127
Region					*Eastern*	50	*Health center-II*	164
*Central 1**	24.7	35.6	10.2	6.6	*Northeast*	38		
*Central 2**	30.0	35.5			*North Central*	39		
Kampala	39.7	22.5	11.8	4.5	*West Nile*	39		
East Central	16.9	43.5	7.5	5.2	*Western*	56		
Eastern	16.7	45.6	6.2	4.4	*Southwest*	79		
*North***	8.1	46.0						
*Northeast****			3.6	3.2				
North Central			9.0	7.1				
West Nile	10.5	47.4	2.7	1.9				
Western	15.8	40.5	7.8	5.7	Survey year: 2007			
Southwest	18.1	37.0	7.1	4.4	Total number of facilities sampled: 703			
Total	17.9	40.6	7.5	5.0	Response rate: 99%			

HIV seroprevalence from Uganda AIS 2004-05

* Listed as Central in AIS, Central 1 and 2 in DHS

** North not listed in AIS

*** Northeast and North Central not listed in DHS, only AIS

2.4 Limitations of the Analysis

SPA survey instruments are not designed for the purposes of assessing HIV/FP service delivery integration, but more for assessing the readiness of facilities to provide services. However, out of recognition of the essential role that integrated HIV/FP service delivery plays in ensuring quality care, questions that reflect this integration have been included throughout the survey instrument. Thus, while it is possible to use the SPA for the purpose of obtaining a baseline understanding of the level of HIV/FP integration in a country's health system, some elements of information important for building a complete picture of service integration were not collected. We relied on the data available through the SPA despite these limitations, and in the final section of this report we suggest minimal modifications for increasing the utility of the SPA to monitor HIV/FP service integration.

It should also be recalled that the data being reported were collected between 2006 and 2010 and therefore do not necessarily reflect the current (2012) status of integration. The information presented in this report should be interpreted as a baseline.

Further, it should be noted that changes over time in the policy orientations of major donors with regard to HIV/FP integration may have influenced the levels of integration observable for the later SPA surveys (Kenya 2010, and Namibia 2009) relative to the earlier ones (Rwanda 2007, Tanzania 2006, and Uganda 2007). As a result, findings may not be directly comparable across countries, depending on year of survey implementation.

Although results are presented in the tables by type of health facility and region, in some cases the denominators for these subcategories are insufficiently large for reliable analysis. Therefore the corresponding figure may be flagged for cautious interpretation (n=25-49) or suppressed (n<25); these results remain in the tables but are not reported in the text.

3 Results

3.1 To What Extent Do Health Care Providers Currently Deliver Both HIV- and FP-Related Services?

Table 2 presents information on the percentage of clinical health care workers (health workers exclusive of lab-only service providers) that provide FP- and HIV-related services, according to facility type and region.

In each country, 80 percent or more of clinical health workers currently provide some element of HIV-related service delivery, which includes HIV-related counseling, education, or testing services; PMTCT-related services; follow-up services for HIV-positive clients; or post-exposure prophylaxis (PEP)-related services. The percentage of health workers providing HIV-related services ranges from 82 percent in Tanzania to 94 percent in Kenya. The proportion of health workers that deliver HIV-related services varies according to type of facility, with the exception being Namibia, where for all three types of facility (hospital, health center, and clinic), over 90 percent of health workers provide some form of HIV-related service delivery. Namibia also demonstrates the least amount of variation across its provinces in the proportion of health workers providing HIV-related services.

The percentage of health workers who deliver FP-related services is generally 25-30 percentage points lower than the percentage delivering HIV-related services. Whereas HIV-related service providers tend to be most prevalent at higher-level health facilities, the distribution of FP-related service providers tends to skew in the opposite direction, and more strongly, with greater presence in the lower-level facilities relative to hospitals.

Namibia has the highest percentage of health workers who deliver both HIV- and FP-related services, at 67 percent, while Rwanda and Tanzania have the lowest, at 49 and 52 percent, respectively. There is considerable regional variation in the degree to which health workers deliver both FP- and HIV-related services. For example, in Nyanza, Kenya—the region with the highest prevalence of both HIV and unmet need for family planning in the country—there is a relatively high percentage of health workers providing both family planning and HIV services (73 percent), while in Nairobi, which also has relatively high HIV rates, the percentage of health workers providing both HIV and family planning services is much lower (49 percent). Similar regional variation can be observed in all five countries studied.

Kenya, Namibia, Rwanda, and Uganda collected information on whether health workers who provide HIV-related services also provide counseling to HIV-positive women about family planning. In all countries except Kenya, 90 percent or more of health workers offering HIV-related services provided counseling; in Kenya, the figure was considerably lower, at 68 percent.

Table 2. Weighted percent of clinical healthcare workers who provide family planning and HIV-related services, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

Country	Percent of health care workers that: Provide family planning services	Provide HIV-related services	Provide both FP & any HIV services	N of health care workers	Among health care workers providing HIV-related services**, the percent who counsel HIV women on FP	N of health care workers providing HIV-related services
Kenya 2010	**61.5**	**94.3**	**58.24**	**2,513**	**67.9**	**2,085**
Facility Type						
Hospital	52.7	96.2	67.9	806	75.3	700
Health center	61.0	98.4	71.9	436	76.9	399
Maternity	75.0	87.7	60.5	80	75.0	60
Clinic	59.5	85.4	34.1	439	46.2	305
Dispensary	70.9	95.7	53.7	752	63.6	621
Region						
Nairobi	38.2	93.4	49.1	317	54.7	258
Central	59.2	92.4	48.9	331	56.3	279
Coast	61.7	97.2	58.7	287	64.9	248
Eastern	65.9	88.8	60.9	417	78.8	312
North Eastern	46.2	84.6	55.8	52	76.3	38
Nyanza	66.1	93.1	73.2	342	82.8	303
Rift Valley	67.2	98.8	51.7	576	60.0	478
Western	72.8	98.4	76.4	191	84.6	169
Namibia 2009	**68.6**	**93.3**	**67.4**	**1,245**	**93.6**	**770**
Facility Type+						
Hospital	51.5	91.4	51	509	92.2	309
Health center	78.1	95.3	76.8	233	94.0	149
Clinic	81.5	94.4	79.7	503	94.9	312
Region						
Caprivi	(78.8)	(93.8)	(78.8)	33	(96.3)	27
Erongo	67.7	91.5	66.7	94	100.0	55
Hardap	70.0	96.0	69.3	100	90.9	66
Karas	88.0	94.7	82.9	76	93.1	58
Kavango	62.2	94.2	60.6	155	88.4	95
Khomas	55.9	76.9	53.2	156	(82.1)	39
Kunene	74.5	95.7	74.5	48	(91.7)	36
Ohangwena	60.7	93.5	59.8	107	98.6	74
Omaheke	(88.5)	(96.2)	(88.5)	26	(100.0)	21
Omusati	71.5	99.3	71.5	151	92.5	106
Oshana	67.0	99.1	67.0	106	(92.3)	65
Oshikoto	77.1	99.2	77.1	118	98.8	86
Otjozondjupa	65.8	90.0	63.8	80	95.0	40

(Continued...)

Table 2. – *Continued*

Country	Percent of health care workers that: Provide family planning services	Provide HIV-related services	Provide both FP & any HIV services	N of health care workers	Among health care workers providing HIV-related services**, the percent who counsel HIV women on FP	N of health care workers providing HIV-related services
Rwanda 2007	**56.3**	**85.7**	**48.7**	**1,715**	**90.5**	**994**
Facility Type						
Hospital	28.6	94.1	27.1	203	89.8	118
Health center	62.4	86.1	54.0	1,361	90.8	824
Dispensary	38.4	71.1	30.3	151	88.5	52
Province						
Northern	67.8	80.6	56.7	289	92.5	134
Southern	53.4	90.0	47.4	371	90.6	235
Eastern	59.5	91.7	54.0	395	87.4	262
Western	57.1	79.6	46.7	450	92.9	240
Kigali City	37.6	87.3	34.3	210	90.2	123
Tanzania 2006	**59.7**	**82.4**	**52.3**	**2,354**	**na**	**na**
Facility Type						
Hospital	43.4	91.7	40.7	505	na	na
Health center	57.7	87.9	53.9	306	na	na
Dispensary	65.4	78.2	55.7	1,543	na	na
Region						
Western	61.7	70.3	48.4	256	na	na
Northern	58.8	87.9	55.1	473	na	na
Central	86.9	92.9	81.0	153	na	na
S. Highlands	71.2	92.5	67.1	295	na	na
Lake	63.2	85.8	55.8	353	na	na
Eastern	44.7	73.3	36.5	485	na	na
Southern	56.7	82.5	47.2	252	na	na
Zanzibar	34.7	79.6	32.0	50	na	na
Other	64.9	59.5	40.5	37	na	na

(Continued...)

Table 2. – *Continued*

Country	Percent of health care workers that: Provide family planning services	Provide HIV-related services	Provide both FP & any HIV services	N of health care workers	Among health care workers providing HIV-related services**, the percent who counsel HIV women on FP	N of health care workers providing HIV-related services
Uganda 2007	**64.5**	**88.8**	**60.6**	**1,589**	**89.2**	**612**
Facility Type						
Hospital	47.9	95.8	47.2	307	91.3	161
Health center IV	63.7	97.3	62.8	182	85.7	112
Health center III	76.4	90.8	70.3	522	87.1	202
Health center II	70.1	80.7	58.1	578	92.7	137
Region						
Central	70.1	94.6	67.2	351	94.0	199
Kampala	55.4	93.9	51.5	66	94.6	37
East Central	75.2	82.1	61.3	222	93.1	58
Eastern	71.4	79.5	58.0	112	(94.4)	18
Northeast	51.8	81.1	47.7	110	83.9	31
North Central	63.4	96.7	61.4	184	80.5	113
West Nile	55.2	85.8	50.0	134	(80.8)	26
Western	69.9	92.5	64.7	173	84.2	57
Southwest	71.2	85.7	61.9	237	93.1	72

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

+ The analysis of Namibia facilities excludes stand-alone VCTs (n=15) and "sick bays" (n=9) due to small numbers.

** The number of health workers reporting that they provide HIV-related services (column 6 of the above table) is based on a self-reported affirmative response to a broad question about whether the health worker provides HIV-related services. This number is slightly smaller than the total number of health workers – reflected in column 2 of the above table – reporting that they provided specific HIV-related services that were asked about in various locations in the health worker questionnaire.

3.2 Do Health Care Providers Receive Training in Both HIV- and FP-Related Services?

Emphasis on training health workers to be able to provide integrated packages of services including HIV and family planning recurs both within national policy documents and in recommendations from international organizations. This is both an appropriate approach to training health workers, given sexually active clients' concomitant needs for family planning and HIV services, and also a practical approach to integrated service delivery, given the chronic shortage of qualified health workers in health settings around the world.

Table 3 shows the percentage of clinical healthcare workers (exclusive of lab-only service providers) who have been trained in FP- and HIV-related service delivery within the three years prior to the survey.

Tanzanian health workers are the least likely to report having received FP-related training in the past three years, at 15 percent; Kenyan and Ugandan workers are most likely to have received FP-related training, at 30-31 percent. Twenty percent of Namibian health workers and 24 percent of Rwandan health workers received FP-related training in the past three years. Training in HIV-related service delivery is 2-3 times greater than family planning training in all countries with the exception of Tanzania, where relatively low proportions of health workers (38 percent) received training in HIV-related service delivery. In all other countries, proportions of health workers receiving training in HIV exceed 60 percent, with Rwandan health workers most likely to have received HIV training (76 percent). Nearly all health workers receiving training in family planning also received HIV-related training, with only a 3-5 percentage point difference in any of the five countries between the percentage of workers receiving FP-related training and the percentage of workers receiving both FP- and HIV-related training. Health workers in non-hospital settings are generally more likely to have received both kinds of training.

There is wide variation across countries in the percentage of health care workers who received training in family planning and also received training specifically for the provision of counseling on family planning for women living with HIV. Kenya had the highest proportion of family planning service providers who received training to counsel HIV-positive women about family planning at 80 percent, while Tanzania had the lowest proportion at 37 percent. Corresponding figures for the other countries are 47 percent in Rwanda, 60 percent in Uganda, and 67 percent in Namibia. It is notable that in Kenya[2], family planning providers working in maternities are the least likely relative to family planning providers in other kinds of facilities to have received training in counseling HIV-positive women on family planning.

[2] Kenya was the only country where it was possible to disaggregate maternities from other facilities.

Table 3. Weighted percent of clinical healthcare workers who have been trained in family planning and HIV-related service delivery in the past three years, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

Country	Percent of health care workers that were: Trained in family planning service delivery in the past 3 years	Trained in HIV-related services in the past 3 years	Trained in both FP & any HIV services in the past 3 years	N of health care workers	Among health care workers who received training in FP, the percent trained in counseling HIV+ women on FP	N of health care workers who received FP training in the past 3 years
Kenya 2010	**30.2**	**71.3**	**25.1**	**2,513**	**80.2**	**761**
Facility Type						
Hospital	30.9	74.0	25.6	806	80.9	251
Health center	43.2	78.8	37.7	436	78.3	189
Maternity	45.7	58.0	37.0	80	65.8	38
Clinic	31.2	64.5	24.8	439	83.2	137
Dispensary	19.4	69.4	16.2	752	82.2	146
Region						
Nairobi	35.4	78.2	29.3	317	70.5	112
Central	23.3	67.1	16.9	331	84.4	77
Coast	30.9	76.4	26.8	287	87.6	89
Eastern	28.8	57.1	21.3	417	79.2	120
North Eastern	26.4	60.4	17.0	52	85.7	14
Nyanza	35.7	75.2	33.4	342	85.4	123
Rift Valley	28.9	77.3	24.7	576	81.9	166
Western	31.3	67.0	26.6	191	68.3	60
Namibia 2009	**20.3**	**62.7**	**16.8**	**1,250**	**66.5**	**254**
Facility Type[+]						
Hospital	18.2	59.3	15.0	513	(62.8)	94
Health center	27.9	69.5	24.1	233	72.3	65
Clinic	18.9	63.0	15.3	503	66.3	95
Region						
Caprivi	(21.2)	(69.7)	(21.2)	33	*	7
Erongo	16.0	60.6	11.8	94	*	14
Hardap	4.0	56.0	4.0	100	*	4
Karas	31.6	67.1	25.0	76	*	24
Kavango	21.2	60.0	18.1	155	(78.8)	33
Khomas	18.6	44.9	12.2	156	(67.9)	28
Kunene	12.5	81.3	12.5	48	*	6
Ohangwena	18.7	67.3	17.8	107	*	20
Omaheke	(19.2)	(65.4)	(19.2)	26	*	5
Omusati	17.2	70.9	14.0	151	(68.0)	25
Oshana	41.5	78.3	39.6	106	(47.7)	44
Oshikoto	23.7	62.7	16.1	118	*	28
Otjozondjupa	16.5	52.5	12.7	80	*	13

(Continued...)

Table 3. – *Continued*

Country	Percent of health care workers that were: Trained in family planning service delivery in the past 3 years	Trained in HIV-related services in the past 3 years	Trained in both FP & any HIV services in the past 3 years	N of health care workers	Among health care workers who received training in FP, the percent trained in counseling HIV+ women on FP	N of health care workers who received FP training in the past 3 years
Rwanda 2007	**24.0**	**75.7**	**19.7**	**1,719**	**46.8**	**412**
Facility Type						
Hospital	15.8	90.1	14.3	203	(59.4)	32
Health center	25.0	75.8	20.4	1,364	46.0	341
Dispensary	25.7	55.3	20.4	152	(43.6)	39
Province						
Northern	22.5	68.2	18.0	289	40.0	65
Southern	20.2	80.1	17.0	371	41.3	75
Eastern	26.8	81.1	21.5	396	42.5	106
Western	24.2	71.1	20.0	450	53.2	109
Kigali City	26.8	77.9	22.5	213	57.9	57
Tanzania 2006	**14.8**	**37.7**	**9.2**	**2,354**	**36.8**	**348**
Facility Type						
Hospital	19.4	65.3	15.2	505	51.0	98
Health center	14.1	44.4	9.5	306	(41.9)	43
Dispensary	13.4	27.3	7.2	1,543	29.0	207
Region						
Western	16.4	32.0	8.6	256	(29.3)	41
Northern	16.1	43.8	9.9	473	34.2	76
Central	7.2	21.6	3.2	153	*	11
S. Highlands	19.3	47.1	11.9	295	38.6	57
Lake	15.9	34.0	10.8	353	35.7	56
Eastern	9.5	33.0	6.8	485	(41.3)	46
Southern	14.3	42.1	9.5	252	(50.0)	36
Zanzibar	22.0	52.0	12.2	50	(18.2)	11
Other	35.1	37.8	18.9	37	(23.1)	13

(Continued...)

Table 3. – *Continued*

Country	Percent of health care workers that were: Trained in family planning service delivery in the past 3 years	Trained in HIV-related services in the past 3 years	Trained in both FP & any HIV services in the past 3 years	N of health care workers	Among health care workers who received training in FP, the percent trained in counseling HIV+ women on FP	N of health care workers who received FP training in the past 3 years
Uganda 2007	**31.0**	**61.0**	**25.4**	**1,589**	**59.6**	**492**
Facility Type						
Hospital	30.7	74.9	27.7	307	68.1	94
Health center IV	32.4	75.3	26.9	182	62.7	59
Health center III	35.8	57.9	29.7	522	62.6	187
Health center II	26.3	51.9	19.7	578	(49.3)	152
Region						
Central	24.2	75.2	22.8	351	69.4	85
Kampala	38.5	80.3	36.4	66	73.1	26
East Central	35.1	53.2	24.3	222	55.7	79
Eastern	39.3	51.8	30.4	112	(51.2)	43
Northeast	20.7	42.7	17.1	110	(45.5)	22
North Central	43.5	79.9	40.2	184	83.8	80
West Nile	28.4	56.0	23.1	134	(55.3)	38
Western	33.5	61.8	25.6	173	28.8	59
Southwest	25.8	42.6	18.2	237	54.1	61

* indicates that the figure has been suppressed due to too few case (unweighted N < 25)

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

+ The analysis of Namibia facilities excludes stand-alone VCTs (n=15) and "sick bays" (n=9) due to small numbers.

3.3 To What Extent Are Elements of HIV- and FP-Related Services Integrated at the Level of the Health Facility?

3.3.1 Family Planning Service Delivery Units

As Table 4 shows, at least three quarters of all health facilities in the five study countries offer family planning services, with Namibia having the highest percentage of facilities delivering family planning services (92 percent), and Rwanda the lowest (74 percent). Among those facilities offering family planning services, we examined the percentage in which HIV-related services are offered in the family planning unit. We also looked specifically at the availability of barrier methods of family planning, given their dual protection against both pregnancy and STIs, including HIV.

The SPA questionnaire includes a question on the availability of visual aids (e.g., posters) for teaching about HIV in the family planning service delivery unit. Service providers are also asked whether they have a visual aid available to demonstrate the correct way to use a condom, and whether information booklets on HIV and AIDS are available in the family planning unit. Table 4 shows the percentage of family planning units in which the interviewer observed these three types of visual aids for HIV-related education to be available.

Overall, the availability of visual education materials related to HIV in family planning units was low in all countries. These materials were most frequently available in Namibia. Still, in Namibia visual aids for HIV education were observed in only 54 percent of family planning units, while models for demonstrating correct condom use were available in only 56 percent of family planning units, and informational booklets or pamphlets on HIV were available in only 43 percent of family planning units.

In Kenyan family planning units, visual aids for HIV education were rarely observed (4 percent), while only 32 percent of units had a visual aid to demonstrate condom use, and only 19 percent had informational booklets on HIV. Approximately one third of Ugandan family planning units had visual educational materials on HIV or condom demonstration models, while only 10 percent carried information booklets on HIV.

Only about one in every four Tanzanian family planning units had any visual aids or booklets for teaching about HIV, or visual aids for condom demonstration. The Southern Highlands region, which has the highest estimated prevalence of HIV, was also the region in which family planning units were most likely to have visual aids for educating clients about HIV observable on the premises.

While Rwandan family planning units were more likely to have visual aids to model condom use (51 percent) than Kenya, Rwanda, or Uganda, only 33 percent had visual educational materials on HIV in the family planning units, and only 28 percent had information booklets on HIV. Although national HIV seroprevalence in Rwanda is the lowest among the countries in this study, prevalence in the capital of Kigali is high, at 9 percent for women and 5 percent for men, yet family planning units in Kigali were the least likely of all regions to have condom demonstration models or information booklets on HIV.

Table 4 also provides information on the availability of male and female condoms, and whether the facility has experienced a stockout in either type of condom in the past six months. The data show that not all facilities offering family planning services normally stock male condoms. While in Kenya and Namibia, more than 95 percent of facilities offering family planning normally stock male condoms, only 82 percent of such facilities in Rwanda keep male condoms in stock. Corresponding figures for Uganda and Tanzania are 91 and 94 percent, respectively. Among facilities that do typically stock male condoms, 50 percent of facilities in Rwanda and 37 percent in Tanzania experienced stockouts of male condoms in the past six months. In Kenya, 8 percent of facilities that normally stock male condoms experienced a

stockout in the past six months, while the corresponding figure in Uganda was only 2 percent. Namibia did not collect information on stockouts of male or female condoms.

Female condoms are essentially unavailable in Uganda or Tanzania, where only 1 percent and 5 percent, respectively, of facilities providing family planning services normally stock them. Namibia‘s proximity to and economic relationship with South Africa, the world‘s second-largest market for condoms after Brazil (Matthews and Harrison 2006), likely influences the wide availability of female condoms in Namibian health facilities: 78 percent of facilities normally stock them. Less than half of facilities providing family planning services in Kenya and Rwanda normally stock female condoms. Where female condoms are available, they are more likely to be subject to stockouts: 21 percent of facilities that normally stock female condoms in Kenya reported stockouts in the past six months; in Rwanda, the corresponding figure was 53 percent, and in Tanzania, 100 percent.

Table 4. Weighted percent of facilities in which family planning services are offered, and among these, the percent in which HIV-related elements of service delivery are observed, including availability of male and female condoms, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

			Percent of facilities in which:									
Country	Percent of facilities offering FP services	N of facilities in sample	Visual aids related to HIV/AIDS observed in the FP unit	Visual aids to demonstrate condom use observed in the FP unit	Information booklets on HIV/AIDS observed in the FP unit	Male condoms reported as normally stocked	Female condoms reported as normally stocked	N of facilities in which FP services are offered	Percent of facilities with records indicating stockouts of male condoms in the past 6 months	N of facilities that normally stock male condoms	Percent of facilities with records indicating experiencing stockouts of female condoms in the past 6 months	N of facilities that normally stock female condoms
Kenya 2010	**88.2**	**695**	**4.4**	**32.0**	**18.5**	**95.3**	**37.7**	**613**	**8.2**	**549**	**21.2**	**219**
Facility Type												
Hospital	90.2	51	8.9	67.4	26.1	97.7	60.5	45	12.2	41	36.0	25
Health center	86.1	80	5.9	54.4	25.0	100.0	43.1	68	9.2	65	(39.3)	28
Maternity	88.2	17	(0.0)	(40.0)	(25.0)	(92.9)	(46.2)	15	(15.4)	13	*	7
Clinic	79.3	208	3.6	23.6	10.2	85.6	30.3	165	16.2	130	(10.9)	46
Dispensary	93.8	340	4.1	26.0	20.1	99.0	36.8	320	3.7	298	(17.1)	111
Region												
Nairobi	63.6	45	(6.9)	(51.7)	(17.9)	(89.7)	(39.3)	29	(12.0)	25	(33.3)	12
Central	90.4	125	6.3	25.9	17.0	88.6	39.6	112	6.4	94	(4.7)	43
Coast	82.7	82	4.5	40.3	13.2	90.2	42.6	67	21.8	55	(26.9)	26
Eastern	86.4	118	3.9	29.4	30.4	100.0	31.2	102	2.2	93	(13.8)	29
North Eastern	66.7	24	(0.0)	(40.0)	(0.0)	(100.0)	(12.5)	16	0.0	16	*	3
Nyanza	95.2	83	2.5	39.2	29.1	100.0	54.7	79	18.7	75	(29.3)	41
Rift Valley	94.9	175	4.2	26.3	9.6	96.8	34.8	167	4.0	150	(20.0)	55
Western	93.2	44	2.4	31.7	26.8	100.0	26.8	41	7.3	41	(40.0)	10

(Continued...)

Table 4. – *Continued*

Country	Percent of facilities offering FP services	N of facilities in sample	Percent of facilities in which: Visual aids related to HIV/AIDS observed in the FP unit	Visual aids to demonstrate condom use observed in the FP unit	Information booklets on HIV/AIDS observed in the FP unit	Male condoms reported as normally stocked	Female condoms reported as normally stocked	N of facilities in which FP services are offered	Percent of facilities with records indicating stockouts of male condoms in the past 6 months	N of facilities that normally stock male condoms	Percent of facilities with records indicating experiencing stockouts of female condoms in the past 6 months	N of facilities that normally stock female condoms
Namibia 2009	**92.0**	**387**	**53.5**	**56.2**	**42.8**	**98.9**	**77.6**	**353**	**na**	**na**	**na**	**na**
Facility Type[+]												
Hospital	51.1	45	*	*	*	*	*	23	na	na	na	na
Health center	95.7	47	(60.0)	(62.2)	(55.6)	(97.8)	(86.7)	45	na	na	na	na
Clinic	97.6	295	54.0	58.0	42.5	99.0	76.4	285	na	na	na	na
Region												
Caprivi	(96.3)	27	(84.6)	(80.8)	(69.2)	(100.0)	(96.2)	26	na	na	na	na
Erongo	(88.2)	34	(48.3)	(43.3)	(41.4)	(96.7)	(86.7)	29	na	na	na	na
Hardap	*	20	*	*	*	*	*	19	na	na	na	na
Karas	92.0	25	*	*	*	*	*	23	na	na	na	na
Kavango	98.2	56	45.3	63.6	41.8	98.2	43.6	53	na	na	na	na
Khomas	(75.0)	32	*	*	*	*	*	24	na	na	na	na
Kunene	(96.4)	28	(70.4)	(81.5)	(48.1)	(100.0)	(72.0)	27	na	na	na	na
Ohangwena	(90.6)	32	(41.4)	(79.3)	(27.6)	(100.0)	(79.3)	29	na	na	na	na
Omaheke	*	16	*	*	*	*	*	15	na	na	na	na
Omusati	(93.9)	49	(67.4)	(34.8)	(47.8)	(100.0)	(97.8)	46	na	na	na	na
Oshana	*	18	*	*	*	*	*	18	na	na	na	na
Oshikoto	*	22	*	*	*	*	*	20	na	na	na	na
Otjozondjupa	(85.7)	28	*	*	*	*	*	24	na	na	na	na

(Continued...)

Table 4. – *Continued*

Country	Percent of facilities offering FP services	N of facilities in sample	Percent of facilities in which: Visual aids related to HIV/AIDS observed in the FP unit	Visual aids to demonstrate condom use observed in the FP unit	Information booklets on HIV/AIDS observed in the FP unit	Male condoms reported as normally stocked	Female condoms reported as normally stocked	N of facilities in which FP services are offered	Percent of facilities with records indicating stockouts of male condoms in the past 6 months	N of facilities that normally stock male condoms	Percent of facilities with records indicating experiencing stockouts of female condoms in the past 6 months	N of facilities that normally stock female condoms
Rwanda 2007	**73.6**	**538**	**33.1**	**50.8**	**28.0**	**82.1**	**28.8**	**396**	**49.5**	**325**	**52.6**	**114**
Facility Type												
Hospital	(57.1)	42	*	*	*	*	*	23	*	16	*	5
Health center	85.3	389	35.0	55.0	30.5	84.9	31.0	331	47.5	282	52.4	103
Dispensary	37.4	107	(22.5)	(27.5)	(7.5)	(67.5)	(15.0)	40	74.1	27	*	6
Province												
Northern	77.8	90	24.6	55.7	15.7	87.1	50	70	42.6	61	(54.3)	35
Southern	69.2	117	37.0	56.3	34.6	86.4	18.5	80	48.6	70	*	15
Eastern	79.6	113	28.1	54.4	26.7	80.0	14.4	90	54.2	72	*	13
Western	82.6	132	37.6	45.0	36.7	83.5	34.9	109	46.2	91	(50.0)	38
Kigali City	53.5	86	(39.1)	(41.3)	(17.8)	(67.4)	(28.3)	46	(64.5)	31	*	13
Tanzania 2006	**78.5**	**610**	**22.9**	**25.1**	**21.8**	**94.2**	**5.2**	**477**	**37.3**	**451**	**(100.0)**	**25**
Facility Type												
Hospital	83.3	24	30.0	52.4	35.0	95.0	15.0	20	31.6	19	*	3
Health center	(90.9)	55	(36.2)	(34.0)	(29.8)	(84.0)	(8.0)	47	35.7	42	*	4
Dispensary	77.0	531	21.0	22.7	20.3	95.4	4.4	410	37.7	390	*	18
Region												
Western	80.5	82	13.6	9.0	15.2	100.0	4.5	67	20.0	10	*	3
Northern	69.1	110	25.3	36.0	19.7	89.3	14.5	76	23.9	67	*	11
Central	93.6	47	(20.5)	(2.3)	(11.4)	(100.0)	(4.5)	44	20.9	67	*	2
S. Highlands	87.4	95	30.5	37.8	41.0	90.4	0.0	83	36.4	44	*	--
Lake	84.4	90	26.7	18.4	14.7	98.7	3.9	76	33.3	75	*	3
Eastern	65.7	102	10.6	25.4	12.1	89.6	7.5	67	55.0	60	*	5
Southern	83.6	61	(27.1)	(40.8)	(30.6)	(94.2)	0.0	51	75.0	48	*	0
Zanzibar	42.9	14	*	*	*	*	*	6	*	6	*	0
Other	(90.9)	11	(36.4)	(20.0)	(40.0)	(90.9)	(9.1)	11	20.0	10	*	1

(Continued...)

Table 4. – *Continued*

Country	Percent of facilities offering FP services	N of facilities in sample	Percent of facilities in which: Visual aids related to HIV/AIDS observed in the FP unit	Visual aids to demonstrate condom use observed in the FP unit	Information booklets on HIV/AIDS observed in the FP unit	Male condoms reported as normally stocked	Female condoms reported as normally stocked	N of facilities in which FP services are offered	Percent of facilities with records indicating stockouts of male condoms in the past 6 months	N of facilities that normally stock male condoms	Percent of facilities with records indicating experiencing stockouts of female condoms in the past 6 months	N of facilities that normally stock female condoms
Uganda 2007	**80.9**	**492**	**36.4**	**31.7**	**9.8**	**90.9**	**0.8**	**395**	**1.9**	**361**	*****	**4**
Facility Type												
Hospital	75.0	20	40.0	53.3	20.0	86.7	0.0	15	0.0	12	*	0
Health center IV	100.0	27	48.1	56.0	17.9	100.0	3.7	27	0.0	27	*	1
Health center III	86.7	158	33.6	41.9	9.4	94.2	1.5	137	2.3	129	*	2
Health center II	76.3	287	28.8	21.1	8.2	88.1	0.0	218	2.1	193	*	0
Region												
Central	95.9	98	33.3	24.5	15.1	83.0	1.1	93	2.6	78	*	1
Kampala	(75.0)	8	(28.6)	(57.1)	(14.3)	(83.3)	(0.0)	7	*	5	*	0
East Central	87.2	78	64.7	37.3	14.5	88.2	1.5	68	0.0	60	*	1
Eastern	89.8	49	(16.3)	(36.4)	(4.5)	(84.1)	(0.0)	43	(0.0)	38	*	0
Northeast	(51.2)	41	(30.0)	(20.0)	(14.3)	(100.0)	(0.0)	20	(0.0)	20	*	0
North Central	(83.3)	36	(40.0)	(16.7)	(6.5)	(100.0)	(3.3)	30	(0.0)	29	*	1
West Nile	(70.3)	37	(20.0)	(19.2)	(3.8)	(100.0)	(0.0)	25	(8.0)	25	*	0
Western	72.1	61	(34.1)	(30.2)	(9.1)	(100.0)	(0.0)	44	(4.5)	44	*	0
Southwest	77.4	84	7.7	49.2	3.1	95.4	0.0	65	3.2	62	*	0

* indicates that the figure has been suppressed due to too few case (unweighted N < 25)

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

+ The analysis of Namibia facilities excludes stand-alone VCTs (n=15) and "sick bays" (n=9) due to small numbers.

3.3.2 Antenatal Care Service Delivery Units

Around 70-80 percent of all facilities in the five countries studied provide antenatal care services (Table 5). While the large majority of antenatal care units report that they provide family planning counseling on site in the ANC service delivery area, ranging from 83 percent in Uganda to 90 percent in Namibia, provision of HIV-related services is not as high in all countries.

Overall, Namibia and Kenya report the highest levels of HIV-related service delivery in ANC units: approximately 90 percent of facilities offering ANC in these countries also provide HIV counseling on site, approximately 95 percent offer HIV testing on site, and around 85 percent of ANC units maintain ARVs for PMTCT in the service delivery area. Consequently, both Kenya and Namibia reflect relatively high levels of HIV/FP service integration in ANC service delivery areas: 84 percent for Kenya and 87 percent for Namibia, with negligible variation across facility type and region.

Rwanda, Tanzania and Uganda all have much lower levels of HIV-related service delivery in the ANC units. In Rwanda, about 57 percent of ANC units provide HIV counseling and testing, while only 17 percent maintain ARVs for PMTCT in the ANC service delivery area. Because the levels of family planning service delivery are rather high, the levels of HIV/FP integration in Rwandan ANC units are only as high as the levels of HIV-related service provision in the ANC units. HIV-related service delivery, and hence HIV/FP service integration in the ANC units, is considerably higher—about 20 percentage points higher—in Southern Province in Rwanda. In Tanzania and Uganda, just under 40 percent of ANC units offer HIV counseling in the ANC service delivery area. In Tanzania, about one ANC unit in every five offers HIV testing, while in Uganda, one unit in four offers HIV testing. The low levels of HIV-related service delivery results in overall low levels of HIV/FP service integration.

Table 5. Weighted percent of facilities in which ANC services are offered, and the percent of ANC units in which HIV- and FP-related elements of service delivery are reported, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

Country	% facilities offering ANC services	N of facilities in sample	% ANC units where FP counseling provided in ANC service delivery area	% ANC units where HIV counseling is offered in ANC service delivery area	% ANC units where HIV testing is offered in ANC service delivery area	% ANC units where ARVs for PMTCT are observed as kept in ANC service delivery area	% ANC units where both FP counseling and HIV-related service delivery offered in ANC service delivery area	N of units offering ANC services
Kenya 2010	**73.4**	**685**	**88.4**	**94.7**	**87.6**	**na**	**84.3**	**508**
Facility Type								
Hospital	94.1	51	81.3	95.7	95.8	na	81.3	48
Health center	98.8	80	84.6	98.7	93.6	na	83.3	78
Maternity	94.1	17	(81.3)	87.5	93.8	na	81.3	16
Clinic	39.9	208	92.7	90.2	74.7	na	81.9	83
Dispensary	83.8	340	89.8	95.1	88.0	na	85.9	284
Region								
Nairobi	73.3	45	90.9	90.9	78.8	na	84.8	33
Central	56.8	125	84.3	91.5	91.5	na	77.1	70
Coast	69.5	82	92.9	100.0	87.5	na	92.9	56
Eastern	71.2	118	86.9	91.7	89.3	na	83.3	84
North Eastern	70.8	24	(81.3)	(88.2)	(88.2)	na	(75.0)	16
Nyanza	94.0	83	88.5	97.4	93.6	na	87.2	78
Rift Valley	74.3	175	93.8	93.1	82.9	na	87.7	130
Western	93.2	44	75.6	97.6	88.1	na	73.2	41

(Continued...)

Table 5. – *Continued*

Country	% facilities offering ANC services	N of facilities in sample	% ANC units where FP counseling provided in ANC service delivery area	% ANC units where HIV counseling is offered in ANC service delivery area	% ANC units where HIV testing is offered in ANC service delivery area	% ANC units where ARVs for PMTCT are observed as kept in ANC service delivery area	% ANC units where both FP counseling and HIV-related service delivery offered in ANC service delivery area	N of units offering ANC services
Namibia 2009	**79.1**	**387**	**90.4**	**96.7**	**83.8**	**na**	**86.6**	**303**
Facility Type[+]								
Hospital	(20.0)	45	*	*	*	na	*	8
Health center	(91.5)	47	(86.0)	(100.0)	(97.7)	na	(86.0)	43
Clinic	86.1	295	91.7	96.0	81.0	na	87.4	252
Region								
Caprivi	(96.3)	27	(92.3)	(100.0)	(96.2)	na	(92.3)	26
Erongo	(58.8)	34	*	*	*	na	*	19
Hardap	*	20	*	*	*	na	*	17
Karas	76.0	25	*	*	*	na	*	19
Kavango	94.6	56	(81.1)	(94.3)	(71.7)	na	(75.5)	53
Khomas	(28.1)	32	*	*	*	na	*	9
Kunene	(89.3)	28	(100.0)	(92.0)	(56.0)	na	(92.0)	25
Ohangwena	(90.6)	32	(96.6)	(100.0)	(93.1)	na	(96.6)	29
Omaheke	*	16	*	*	*	na	*	13
Omusati	(83.7)	49	(95.1)	(97.6)	(82.9)	na	(92.7)	41
Oshana	*	18	*	*	*	na	*	14
Oshikoto	*	22	*	*	*	na	*	20
Otjozondjupa	(64.3)	28	*	*	*	na	*	18

(Continued...)

Table 5. – *Continued*

Country	% facilities offering ANC services	N of facilities in sample	% ANC units where FP counseling provided in ANC service delivery area	% ANC units where HIV counseling is offered in ANC service delivery area	% ANC units where HIV testing is offered in ANC service delivery area	% ANC units where ARVs for PMTCT are observed as kept in ANC service delivery area	% ANC units where both FP counseling and HIV-related service delivery offered in ANC service delivery area	N of units offering ANC services
Rwanda 2007	**80.7**	**538**	**86.6**	**57.8**	**57.4**	**17.1**	**52.5**	**434**
Facility Type								
Hospital	(35.7)	42	*	*	*	*	*	15
Health center	98.5	389	88.8	62.7	61.9	18.5	57.4	383
Dispensary	33.6	107	(88.9)	(11.1)	(11.1)	(2.8)	(11.1)	36
Province								
Northern	88.9	90	95.0	45.0	45.0	7.5	45.0	80
Southern	88.9	117	89.4	72.1	72.1	20.2	68.3	104
Eastern	80.5	113	76.9	58.2	54.9	19.8	46.2	91
Western	87.9	132	89.7	52.6	52.6	19.8	48.3	116
Kigali City	50.0	86	(76.7)	(60.5)	(62.8)	(14.0)	(53.5)	43
Tanzania 2006	**82.3**	**610**	**85.1**	**37.2**	**18.1**	**na**	**34.9**	**503**
Facility Type								
Hospital	95.8	24	95.7	87.0	78.3	na	82.6	23
Health center	(92.7)	55	(92.2)	(66.7)	(51.0)	na	(66.7)	51
Dispensary	80.6	531	83.6	31.0	11.0	na	28.5	429
Region								
Western	80.5	82	85.1	32.8	18.2	na	32.8	66
Northern	74.5	110	91.5	53.7	34.1	na	52.4	82
Central	95.7	47	(93.3)	(17.8)	(4.4)	na	17.8	45
S. Highlands	91.6	95	86	26.4	10.5	na	21.8	86
Lake	84.4	90	76	38.7	6.7	na	36	75
Eastern	72.5	102	81.1	37.8	33.8	na	35.6	74
Southern	93.4	61	84.2	48.2	12.5	na	44.6	56
Zanzibar	42.9	14	*	*	*	na	*	5
Other	(90.9)	11	(90.9)	(27.3)	(0.0)	na	(27.3)	10

(Continued...)

Table 5. – *Continued*

Country	% facilities offering ANC services	N of facilities in sample	% ANC units where FP counseling provided in ANC service delivery area	% ANC units where HIV counseling is offered in ANC service delivery area	% ANC units where HIV testing is offered in ANC service delivery area	% ANC units where ARVs for PMTCT are observed as kept in ANC service delivery area	% ANC units where both FP counseling and HIV-related service delivery offered in ANC service delivery area	N of units offering ANC services
Uganda 2007	**70.5**	**492**	**82.7**	**39.3**	**25.6**	**21.2**	**32.6**	**346**
Facility Type								
Hospital	95.0	20	68.4	94.4	84.2	66.7	63.2	18
Health center IV	100.0	27	88.9	85.7	77.8	77.8	81.5	27
Health center III	96.2	158	84.9	41.4	28.3	23.0	34.2	152
Health center II	51.9	287	81.1	21.6	6.0	3.4	18.1	149
Region								
Central	92.9	98	74.7	62.6	30.8	26.7	45.1	91
Kampala	(77.8)	8	(71.4)	(57.1)	(50.0)	(28.6)	(42.9)	6
East Central	71.8	78	71.9	28.1	17.9	23.2	26.3	56
Eastern	65.3	49	(90.6)	(18.8)	(12.5)	(9.1)	(12.5)	32
Northeast	(51.2)	41	(76.2)	(30.0)	(23.8)	(10.0)	(28.6)	21
North Central	(66.7)	36	(100.0)	(36.0)	(29.2)	(24.0)	(36.0)	25
West Nile	(78.4)	37	(89.3)	(20.7)	(17.9)	(6.9)	(17.9)	29
Western	60.0	61	(83.3)	(44.4)	(33.3)	(16.7)	(37.1)	36
Southwest	61.4	84	96.1	33.3	25.5	31.4	31.4	51

* indicates that the figure has been suppressed due to too few case (unweighted N < 25)

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

+ The analysis of Namibia facilities excludes stand-alone VCTs (n=15) and "sick bays" (n=9) due to small numbers.

3.3.3 PMTCT Service Delivery Units

Not surprisingly, PMTCT service delivery units provide among the highest levels of integrated HIV- and FP-related services. Because the base of PMTCT services is fundamentally HIV-related, in Table 6 we present percentages of PMTCT units in which selected FP-related services are reported as being offered or are observed.

The large majority of PMTCT units report that they provide family planning counseling on site, ranging from 87 percent in Tanzania to 96 percent in Kenya. Actual provision of family planning methods on site in the PMTCT unit tends to be somewhat lower than counseling levels in each of the five countries studied.

Given the higher probability of mother-to-child transmission during pregnancy when the mother is exposed to unprotected sexual intercourse (Matheson et al. 1996), and given the increased susceptibility of both women (Gray et al. 2005) and men (Mugo et al. 2011) to HIV infection during pregnancy, counseling on condom use is especially important. Provision of counseling in PMTCT units on the dual protection function of condoms ranges from 83 percent in Tanzania to 96 percent in Namibia, while actual distribution of condoms on site is 69 percent in Tanzania, 76 percent in Uganda, 80 percent in Rwanda, 87 percent in Kenya, and 92 percent in Namibia.

Only two countries, Rwanda and Uganda, collected information on whether guidelines for providing family planning counseling to HIV-positive women were available and observed on site in the PMTCT unit; guidelines were observed in a negligible proportion of units (1 and 3 percent, respectively).

Table 6. Weighted percent of PMTCT service delivery units reporting that they offer FP-related services, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

	Percent of PMTCT service delivery units reporting that they:					
Country	Provide FP counseling in PMTCT service delivery unit	Provide FP methods in PMTCT unit or refer to other unit in same facility	Provide counseling on condom dual protection in PMTCT service delivery unit	Distribute condoms in PMTCT service delivery unit	Have guidelines for providing FP counseling to HIV+ women available and observed	N of units delivering PMTCT services
Kenya 2010	**96.0**	**90.8**	**92.0**	**87.1**	**na**	**401**
Facility Type						
Hospital	93.3	82.2	88.6	82.2	na	45
Health center	90.4	83.6	85.1	79.7	na	73
Maternity	(100.0)	(100.0)	(91.7)	(83.3)	na	12
Clinic	(97.9)	(91.7)	(97.9)	(85.4)	na	48
Dispensary	97.8	94.2	93.7	91.0	na	223
Region						
Nairobi	(81.0)	(61.9)	(77.3)	(63.6)	na	21
Central	96.4	93.0	93.0	91.2	na	56
Coast	100.0	94.7	94.7	83.8	na	37
Eastern	100.0	92.4	84.8	80.3	na	65
North Eastern	*	*	*	*	na	6
Nyanza	92.8	89.7	94.2	89.9	na	69
Rift Valley	96.3	93.4	95.3	94.3	na	107
Western	100.0	89.7	94.7	92.1	na	38
Namibia 2009	**94.9**	**87.5**	**95.6**	**92.2**	**na**	**295**
Facility Type[+]						
Hospital	(80.6)	(25.0)	(69.4)	(52.8)	na	36
Health center	(97.7)	(93.0)	(97.7)	(95.3)	na	43
Clinic	96.8	96.8	99.5	98.1	na	216
Region						
Caprivi	(100.0)	(100.0)	(100.0)	(100.0)	na	25
Erongo	*	*	*	*	na	23
Hardap	*	*	*	*	na	15
Karas	*	*	*	*	na	22
Kavango	(95.7)	(97.9)	(97.9)	(89.4)	na	47
Khomas	*	*	*	*	na	6
Kunene	(94.4)	(83.3)	(88.9)	(94.4)	na	18
Ohangwena	(100.0)	(90.0)	(100.0)	(96.7)	na	30
Omaheke	*	*	*	*	na	14
Omusati	(97.6)	(85.4)	(95.1)	(92.7)	na	41
Oshana	*	*	*	*	na	15
Oshikoto	*	*	*	*	na	21
Otjozondjupa	*	*	*	*	na	18

(Continued...)

Table 6. – *Continued*

Country	Percent of PMTCT service delivery units that: Provide FP counseling in PMTCT service delivery unit	Provide FP methods in PMTCT unit or refer to other unit in same facility	Provide counseling on condom dual protection in PMTCT service delivery unit	Distribute condoms in PMTCT service delivery unit	Have guidelines for providing FP counseling to HIV+ women available and observed	N of units delivering PMTCT services
Rwanda 2007	**88.5**	**83.0**	**90.6**	**80.2**	**1.0**	**288**
Facility Type						
Hospital	(85.7)	(75.0)	(85.7)	(60.7)	(3.6)	28
Health center	89.1	83.6	91.0	82.0	0.8	256
Dispensary	*	*	*	*	*	4
Province						
Northern	(92.9)	(85.7)	(95.2)	(95.2)	(0.0)	42
Southern	83.5	74.7	88.6	77.2	3.8	79
Eastern	85.7	78.6	85.7	74.3	0.0	70
Western	94.0	94.0	98.5	88.1	0.0	67
Kigali City	(90.0)	(86.7)	(83.3)	(76.7)	(0.0)	30
Tanzania 2006	**87.2**	**89.4**	**83.2**	**68.8**	**na**	**94**
Facility Type						
Hospital	78.8	81.8	67.6	39.4	na	33
Health center	*	*	*	*	na	22
Dispensary	(97.4)	(97.4)	(97.4)	(89.7)	na	39
Region						
Western	(87.5)	(100)	(93.8)	(93.8)	na	16
Northern	80.8	84.6	76.9	72.0	na	26
Central	*	*	*	*	na	3
S. Highlands	(100)	(100)	(100)	(66.7)	na	6
Lake	(75.0)	(87.5)	(75.0)	(37.5)	na	8
Eastern	(89.7)	(85.7)	(82.1)	(62.1)	na	28
Southern	(85.7)	(85.7)	(85.7)	(57.1)	na	7
Zanzibar	*	*	*	*	na	1

(Continued...)

Table 6. – *Continued*

Country	Percent of PMTCT service delivery units that: Provide FP counseling in PMTCT service delivery unit	Provide FP methods in PMTCT unit or refer to other unit in same facility	Provide counseling on condom dual protection in PMTCT service delivery unit	Distribute condoms in PMTCT service delivery unit	Have guidelines for providing FP counseling to HIV+ women available and observed	N of units delivering PMTCT services
Uganda 2007	**92.6**	**89.3**	**88.0**	**76.4**	**2.7**	**149**
Facility Type						
Hospital	90.5	77.3	81.8	61.9	4.5	21
Health center IV	96.2	96.2	96.2	88.0	3.8	26
Health center III	92.5	92.5	88.1	83.6	0.0	67
Health center II	*	*	*	*	*	35
Region						
Central	96.7	93.3	86.9	73.8	3.3	60
Kampala	*	*	*	*	*	5
East Central	(94.4)	(88.9)	(94.4)	(83.3)	(0.0)	18
Eastern	*	*	*	*	*	8
Northeast	*	*	*	*	*	8
North Central	*	*	*	*	*	11
West Nile	*	*	*	*	*	7
Western	(78.6)	(85.7)	(85.7)	(71.4)	(0.0)	14
Southwest	(100.0)	(100.0)	(100.0)	(94.4)	(0.0)	17

* indicates that the figure has been suppressed due to too few case (unweighted N < 25)

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

+ The analysis of Namibia facilities excludes stand-alone VCTs (n=15) and "sick bays" (n=9) due to small numbers.

3.3.4 STI Service Delivery Units

For the analysis of integration of HIV/FP services within STI units, it should be noted that the only observable FP-related service reflected in the STI unit data is related to condoms; that is therefore what we use in this analysis to represent family planning services.

More than 90 percent of facilities in all five countries studied provide STI-related services (Table 7). However, observed provision of HIV- and FP-related services in STI units is generally lower than expected.

Namibia, which has the highest HIV seroprevalence of all five countries, at an estimated 13 percent, demonstrated the greatest degree of integrated service delivery in STI units: 74 percent of STI service delivery units in the country were observed to provide information on HIV in the form of posters or pamphlets, 60 percent of Namibian STI units had a model to teach proper use of condoms, and 88 percent were observed to make condoms available for clients to take. Overall, 70 percent of Namibian STI units were observed to offer integrated services.

With regard to the other four countries, only 40 percent of STI units in Rwanda and Tanzania were observed as having any type of informational pamphlets or posters about HIV on site; the corresponding figures for Uganda and Kenya are 51 percent and 59 percent, respectively. Within Kenya, Nyanza Province has by far the highest proportion of STI units in which informational materials about HIV were observed on site, at 80 percent.

In all countries other than Namibia, less than one third of STI units have visual models available on site to teach clients how to use condoms correctly. Surprisingly low percentages of STI service delivery units have condoms available on site for clients to take with them: 38 percent in Rwanda, 49 percent in Tanzania, 54 percent in Kenya, and 56 percent in Uganda.

Taking the observed HIV- and FP-related services together, only about one quarter of STI units in Rwanda can be said to have integrated service delivery, about one third each in Tanzania and Uganda, and a little more than two fifths in Kenya.

Only 6 percent of STI units in Tanzania report that they routinely refer all STI clients for HIV testing compared with 21 percent in Uganda, 32 percent in Kenya, 62 percent in Namibia, and 76 percent in Rwanda. It may be that some STI units do provide HIV testing and counseling on site; however, this question was not asked in the SPA.

Table 7. Weighted percent of facilities in which STI-related services are offered, and the percent of STI units in which HIV- and FP-related elements of service delivery are observed to be available within the unit, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

Country	Percent of facilities offering STI services	N of facilities in sample	Percent of STI units with: HIV information observed in STI service delivery area (posters, pamphlets)	Model to teach condom use observed in STI service delivery area	Condoms for clients to take observed in STI service delivery area	Both HIV & FP (condom) services observed in STI service delivery area	Routine referral of all STI clients for HIV Testing reported [a]	N of units delivering STI services
Kenya 2010	**91.7**	**685**	**58.9**	**28.1**	**53.6**	**44.5**	**31.7**	**637**
Facility Type								
Hospital	96.0	51	64.6	50.0	60.4	54.2	44.9	48
Health center	100.0	80	76.3	49.4	53.8	54.4	43.8	80
Maternity	94.1	17	(62.5)	(37.5)	(56.3)	(50.0)	(40.0)	16
Clinic	81.7	208	39.4	13.5	36.1	24.1	20.6	170
Dispensary	95.0	340	63.8	26.9	61.6	51.1	32.1	323
Region								
Nairobi	84.4	45	57.9	31.6	43.2	31.6	41.0	37
Central	92.0	125	46.1	18.1	29.6	30.4	27.8	115
Coast	85.4	82	45.7	37.1	41.4	35.7	38.6	70
Eastern	98.3	118	61.2	24.3	69.8	46.6	33.0	116
North Eastern	91.7	24	45.5	30.4	68.2	36.4	4.5	22
Nyanza	95.2	83	80.8	48.1	74.7	72.2	44.3	79
Rift Valley	88.0	175	64.3	20.1	50.6	46.1	21.4	154
Western	97.7	44	58.1	37.2	69.8	51.2	48.8	43
Namibia 2009	**93.8**	**387**	**73.8**	**60.3**	**88.2**	**69.5**	**62.3**	**363**
Facility Type[+]								
Hospital	(71.1)	45	(59.4)	(28.1)	(71.9)	(50.0)	(62.5)	32
Health center	(97.9)	47	84.8	78.3	87.0	80.4	69.6	46
Clinic	96.6	295	73.7	61.1	90.2	69.5	61.1	285
Region								
Caprivi	(100.0)	27	(92.6)	(81.5)	(96.3)	(88.9)	(63.0)	27
Erongo	(91.2)	34	(87.1)	(58.1)	(87.1)	(80.6)	(77.4)	31
Hardap	(100.0)	20	*	*	*	*	*	20
Karas	*	25	*	*	*	*	*	22
Kavango	(100.0)	56	67.9	60.7	91.1	64.3	48.2	56
Khomas	(68.8)	32	*	*	*	*	*	22
Kunene	(100.0)	28	(67.9)	(82.1)	(92.9)	(64.3)	(78.6)	28
Ohangwena	(100.0)	32	(65.6)	(78.1)	(100.0)	(65.6)	(71.9)	32
Omaheke	*	16	*	*	*	*	*	15
Omusati	(95.9)	49	(68.1)	(34.0)	(78.7)	(55.3)	(53.2)	47
Oshana	*	18	*	*	*	*	*	16
Oshikoto	*	22	*	*	*	*	*	21
Otjozondjupa	(92.9)	28	(65.4)	(42.3)	(73.1)	(57.7)	(46.2)	26

(Continued...)

Table 7. – *Continued*

Country	Percent of facilities offering STI services	N of facilities in sample	Percent of STI units with: HIV information observed in STI service delivery area (posters, pamphlets)	Model to teach condom use observed in STI service delivery area	Condoms for clients to take observed in STI service delivery area	Both HIV & FP (condom) services observed in STI service delivery area	Routine referral of all STI clients for HIV Testing reported [(a)]	N of units delivering STI services
Rwanda 2007	**95.5**	**538**	**39.7**	**27.2**	**37.9**	**25.3**	**76.4**	**514**
Facility Type								
Hospital	(92.9)	42	(51.3)	(25.6)	(28.2)	(28.2)	(86.8)	39
Health center	99.2	389	42.2	29.8	40.4	27.7	79.0	386
Dispensary	83.2	107	23.6	16.9	31.5	13.5	60.7	89
Province								
Northern	100.0	90	45.6	42.2	52.2	37.8	87.8	90
Southern	97.4	117	29.8	16.7	19.3	17.5	81.3	114
Eastern	96.5	113	39.4	32.1	55.0	27.5	52.3	109
Western	100.0	132	46.2	25.8	31.1	22.7	87.1	132
Kigali City	80.2	86	36.2	20.3	36.2	23.2	71.0	69
Tanzania 2006	**96.6**	**610**	**39.8**	**21.7**	**49.2**	**29.4**	**6.4**	**590**
Facility Type								
Hospital	100.0	24	62.5	33.3	41.7	41.7	20.8	24
Health center	(100.0)	55	(49.1)	(29.1)	(45.5)	(34.5)	(18.2)	55
Dispensary	96.1	531	37.8	20.4	49.9	28.2	4.5	511
Region								
Western	96.3	82	34.2	16.5	60.8	29.1	0.0	79
Northern	94.5	110	50.0	31.7	49.0	35.6	14.4	104
Central	100.0	47	(63.8)	(8.5)	(78.3)	(53.2)	(4.3)	47
S. Highlands	100.0	95	43.2	30.5	59.4	36.5	4.2	95
Lake	98.9	90	42.0	15.9	50.0	25.0	9.1	88
Eastern	98.0	102	15.8	14.0	31.0	11.0	2.0	101
Southern	90.2	61	41.8	30.9	30.4	25.5	8.9	55
Zanzibar	85.7	14	(33.3)	(25.0)	(25.0)	(16.7)	(8.3)	12
Other	(81.8)	11	(55.6)	(22.2)	(44.4)	(33.3)	(0.0)	9

(Continued...)

Table 7. – *Continued*

Country	Percent of facilities offering STI services	N of facilities in sample	Percent of STI units with: HIV information observed in STI service delivery area (posters, pamphlets)	Model to teach condom use observed in STI service delivery area	Condoms for clients to take observed in STI service delivery area	Both HIV & FP (condom) services observed in STI service delivery area	Routine referral of all STI clients for HIV Testing reported [(a)]	N of units delivering STI services
Uganda 2007	**98.6**	**491**	**50.5**	**20.5**	**55.9**	**34.4**	**21.1**	**484**
Facility Type								
Hospital	100.0	19	63.2	26.3	42.1	36.8	38.9	19
Health center IV	100.0	27	70.4	51.9	70.4	59.3	42.3	27
Health center III	100.0	158	55.7	27.2	53.8	39.9	21.5	158
Health center II	97.6	287	44.8	13.6	56.8	28.6	17.5	280
Region								
Central	100.0	98	57.1	18.4	51.5	34.7	10.3	98
Kampala	(100.0)	9	(55.6)	(22.2)	(55.6)	(44.4)	(44.4)	9
East Central	94.9	78	68.9	27.0	62.7	48.6	23.0	78
Eastern	100.0	48	45.8	16.3	37.5	25.0	18.4	48
Northeast	(100.0)	41	(24.4)	(12.2)	(50.0)	(12.2)	(17.1)	41
North Central	(100.0)	37	(48.6)	(8.3)	(47.2)	(35.1)	(2.8)	37
West Nile	(100.0)	37	(58.3)	(18.9)	(59.5)	(45.9)	(27.0)	37
Western	93.3	60	33.3	21.4	73.7	26.8	15.8	60
Southwest	100.0	83	50.6	28.9	58.3	36.1	41.7	83

* indicates that the figure has been suppressed due to too few case (unweighted N < 25)

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

(a) For Tanzania, the question is only about whether there is a policy of referral of all STI clients for HIV testing, not whether it was standard practice; if the policy was reported as existing, the facility was categorized as having it, observed or not.

+ The analysis of Namibia facilities excludes stand-alone VCTs (n=15) and "sick bays" (n=9) due to small numbers.

3.4 To What Extent Do Health Care Workers Provide Integrated Services in Practice?

While health facility inventory data may give an impression that HIV/FP services are provided in a way that would reflect an integrated service delivery environment, actual observations of health workers' interactions with clients may provide a more nuanced understanding of how services are actually delivered. In this section, we provide a comparative analysis between what is reported in ANC delivery units as services that are routinely provided and what is actually observed during client visits with health care providers.

For this broad comparison, we do not match clients directly with the health facilities in which they received their services. Nevertheless, it is expected that levels of service provision reported by facilities should approximate levels of service provision observed during the client consultations at the health facilities.

Further, it should be noted that some services, like HIV testing, might have been implemented during a previous visit. For clients who previously tested positive, HIV testing would not be expected to be implemented again. In high HIV seroprevalence countries, it is recommended that clients who test negative early in their pregnancy are retested before their 36th week of pregnancy; we therefore do not exclude from the analytical sample women for whom the observed visit is not their first. However, we do present national-level estimates of the percentage of first-time clients who were referred for or provided HIV testing and HIV counseling, and with whom providers discussed the issue of postpartum family planning. The estimates for first-time clients are presented in bold italics, and within square brackets in Table 8.

3.4.1 Client-Provider Observation: Antenatal Care Visit

In this review of the results, we refer back to Table 5 for what was reported by the ANC service delivery units as services that are routinely provided to ANC clients and compare this with the information from client-provider observations of ANC visits presented in Table 8. We proceed through the analysis on a country-by-country basis, with the text focusing on the national-level results based on observations of **first-time clients**. The tables also present results for observations of all clients.

Kenya: Table 5 shows that 95 percent of ANC service delivery areas reported providing HIV counseling to clients in the ANC service delivery area. However, observations of 556 ANC clients' first visits with their health care providers revealed that HIV counseling was referred for or provided to only 79 percent of ANC clients (Table 8). Table 5 also shows that 88 percent of ANC service delivery areas provide HIV testing; Table 8 closely corresponds, with 87 percent of first-time ANC clients being referred for or provided with HIV testing services. Eighty-eight percent of ANC service delivery areas reported that they provided family planning counseling to their clients; yet data from the ANC client-provider observations show that only 30 percent of clients received counseling on postpartum family planning. Overall, 29 percent of ANC client-provider observations in Kenya contained integrated elements of HIV and family planning service delivery.

Namibia: For Namibia, Table 5 indicates that 97 percent of ANC service delivery areas reported providing HIV counseling to clients in the ANC service delivery area. Observations of 390 ANC clients' first visits with their health care providers showed that HIV counseling was referred for or provided to 87 percent of first-time ANC clients (Table 8). Table 5 also shows that 84 percent of ANC service delivery areas provide HIV testing on site; results in Table 8 closely correspond, showing that 82 percent of first-time ANC clients were referred for or provided with HIV testing services. Ninety percent of ANC service delivery areas reported that they provided family planning counseling to their clients; yet data from the ANC client-provider observations show that only 40 percent of clients received counseling on postpartum

family planning. Overall, 38 percent of ANC client-provider observations in Namibia contained integrated elements of HIV and family planning service delivery.

Rwanda: With regard to Rwanda, Table 5 shows that 58 percent of ANC service delivery areas reported that they provide HIV counseling to clients in the ANC service delivery area, and approximately the same proportion reported also providing HIV testing. Observations of 352 first-time ANC clients' visits with their health care providers demonstrated that HIV counseling was referred for or provided to 73 percent of first-time ANC clients, and HIV testing was referred for or provided to 75 percent of first-time ANC clients (Table 8) – well over the proportions expected based on reported facility readiness to provide these services, though still not complete coverage. Also in Table 5, we find that 87 percent of ANC service delivery areas reported that they provided family planning counseling to their clients; however, data from the ANC client-provider observations show that only 40 percent of first-time clients received counseling on postpartum family planning. Overall, 33 percent of ANC client-provider observations of first-time ANC visits in Rwanda contained integrated elements of HIV and family planning service delivery.

Tanzania: The data for Tanzania in Table 5 indicate that only 37 percent of ANC service delivery areas reported providing HIV counseling to clients in the ANC service delivery area, and only 18 percent reporting providing HIV testing. During observations of 584 ANC clients' first visits with their health care providers, it was found that HIV counseling was referred for or provided to only 24 percent of ANC clients (Table 8), while HIV testing was referred for or provided to 21 percent of clients—a figure closer to that reported by the ANC service delivery unit. Eighty-five percent of ANC service delivery areas reported that they provided family planning counseling to their clients; but data from the ANC client-provider observations show that only 39 percent of first-time clients received counseling on postpartum family planning. Only 13 percent of ANC client-provider observations of first-time ANC visits in Tanzania contained integrated elements of HIV and family planning service delivery.

Uganda: For Uganda, Table 5 shows that 39 percent of ANC service delivery areas reported providing HIV counseling to clients in the ANC service delivery area, and 26 percent reported providing HIV testing services. Observations of 173 ANC clients' first visits with their health care providers found a high degree of consistency: HIV counseling and testing was referred for or provided to 42 percent and 56 percent, respectively, of first-time ANC clients (Table 8). Table 5 also shows that 83 percent of ANC service delivery areas reported that they provided family planning counseling to their clients, but data from the ANC client-provider observations show that only 31 percent of first-time clients actually received counseling on postpartum family planning. Overall, 23 percent of ANC client-provider observations of first-time ANC visits in Uganda contained integrated elements of HIV and family planning service delivery.

Table 8. Client-Provider Observation: Antenatal Care Visit: The percent of observed ANC consultations in which the health care provider implemented HIV- and FP-related elements of service provision, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

Country	Percent of ANC consultations in which the provider: Referred or tested client for HIV *[Referred or tested first-time clients for HIV]*	Referred or provided clients HIV counseling *[Referred or provided first-time clients for HIV counseling]*	Discussed postpartum family planning with client *[Discussed postpartum family planning with first-time client]*	Referred client for HIV testing or counseling & discussed postpartum family planning *[HIV testing or counseling & discussed postpartum family planning with first-time client]*	N of client-provider ANC observations *[N of client-provider ANC observations for first-time clients]*
Kenya 2010	**47.3**	**38.2**	**22.5**	**14.5**	**1,409**
	[87.3]	***[78.8]***	***[29.8]***	***[28.6]***	***[556]***
Facility Type					
Hospital	48.2	41.5	22.9	15.3	511
Health center	50.8	40.3	23.2	16.3	380
Maternity	47.4	50.0	5.6	5.6	18
Clinic	(36.8)	(37.7)	14.5	4.3	69
Dispensary	44.8	32.0	23.4	13.9	431
Region					
Nairobi	39.4	31.4	24.5	11.2	188
Central	29.9	23.7	33.0	9.3	97
Coast	39.5	38.8	24.0	10.1	129
Eastern	47.8	41.3	26.6	17.9	184
North Eastern	23.3	33.3	6.7	6.7	30
Nyanza	61.5	52.3	18.8	16.3	239
Rift Valley	51.2	30.9	25.2	20.8	337
Western	48.3	45.4	13.2	8.8	205
Namibia 2009	**46.4**	**49.4**	**27.0**	**20.3**	**859**
	[82.1]	***[87.3]***	***[40.5]***	***[38.2]***	***[390]***
Facility Type[+]					
Hospital	(72.5)	(72.5)	(24.6)	(24.6)	69
Health center	38.5	44.8	33.5	22.5	213
Clinic	46.3	48.4	25.0	18.9	577
Region					
Caprivi	(42.9)	(35.7)	(15.4)	(7.7)	14
Erongo	38.6	37.3	22.9	16.9	83
Hardap	28.9	27.0	10.8	8.1	38
Karas	21.9	31.3	18.8	6.3	32
Kavango	54.4	59.5	18.4	17.6	125
Khomas	(61.9)	(54.8)	(27.4)	(27.4)	84
Kunene	63.8	73.6	27.4	17.0	105
Ohangwena	60.5	60.5	73.7	54.5	76
Omaheke	*	*	*	*	16
Omusati	32.7	35.5	12.1	8.3	107
Oshana	(12.2)	(25.6)	(40.2)	(22.0)	82
Oshikoto	79.6	79.6	20.8	18.8	49
Otjozondjupa	31.9	29.8	12.8	8.5	47

(Continued...)

Table 8. – *Continued*

Country	Percent of ANC consultations in which the provider: Referred or tested client for HIV *[Referred or tested first-time clients for HIV]*	Referred or provided clients HIV counseling *[Referred or provided first-time clients for HIV counseling]*	Discussed postpartum family planning with client *[Discussed postpartum family planning with first-time client]*	Referred client for HIV testing or counseling & discussed postpartum family planning *[HIV testing or counseling & discussed postpartum family planning with first-time client]*	N of client-provider ANC observations *[N of client-provider ANC observations for first-time clients]*
Rwanda 2007	**57.2**	**55.1**	**36.5**	**24.8**	**737**
	[75.1]	***[73.4]***	***[39.5]***	***[32.7]***	***[352]***
Facility Type					
Hospital	*	*	*	*	15
Health center	57.6	56.8	37.0	25.5	705
Dispensary	*	*	*	*	13
Province					
Northern	60.6	58.8	63.5	41.7	156
Southern	49.1	53.6	17.5	13.9	166
Eastern	60.4	58.4	27.3	20.9	139
Western	58.0	52.9	40.0	22.9	205
Kigali City	59.4	56.5	29.6	26.8	71
Tanzania 2006	**13.0**	**15.8**	**31.2**	**8.5**	**1,301**
	[20.7]	***[24.1]***	***[39.2]***	***[13.2]***	***[584]***
Facility Type					
Hospital	28.3	33.9	34.6	18.1	127
Health center	20.7	25.3	35.1	13.8	174
Dispensary	9.7	11.8	30.1	6.4	1,000
Region					
Western	14.0	20.0	32.3	10.8	186
Northern	29.7	31.4	38.2	19.3	192
Central	1.2	3.7	31.1	3.0	164
S. Highlands	3.6	8.3	25.4	2.4	168
Lake	4.8	11.5	38.5	10.0	270
Eastern	16.4	20.9	26.3	7.2	152
Southern	27.1	16.4	19.5	2.5	118
Zanzibar	20.0	15.0	10.0	5.0	20
Other	13.8	10.0	33.3	10.0	29

(Continued...)

Table 8. – *Continued*

Country	Percent of ANC consultations in which the provider: Referred or tested client for HIV *[Referred or tested first-time clients for HIV]*	Referred or provided clients HIV counseling *[Referred or provided first-time clients for HIV counseling]*	Discussed postpartum family planning with client *[Discussed postpartum family planning with first-time client]*	Referred client for HIV testing or counseling & discussed postpartum family planning *[HIV testing or counseling & discussed postpartum family planning with first-time client]*	N of client-provider ANC observations [N of client-provider ANC observations for first-time clients]
Uganda 2007	**27.9**	**39.5**	**23.5**	**15.0**	**366**
	[55.7]	***[42.2]***	***[31.2]***	***[23.0]***	***[173]***
Facility Type					
Hospital	40.3	55.7	27.0	19.0	62
Health center IV	44.0	58.7	26.3	22.4	75
Health center III	23.2	29.6	21.0	12.7	177
Health center II	*	*	*	*	52
Region					
Central	36.6	47.3	22.4	14.7	112
Kampala	36.4	45.5	18.2	9.1	11
East Central	27.0	51.4	48.6	40.5	37
Eastern	(28.6)	(38.5)	(35.7)	(21.4)	14
Northeast	16.7	16.7	15.8	0.0	18
North Central	27.9	41.0	30.6	21.3	61
West Nile	21.2	33.3	18.2	6.1	33
Western	34.6	46.2	26.9	7.7	26
Southwest	16.1	21.8	1.8	1.8	56

** indicates that the figure has been suppressed due to too few case (unweighted N < 25)*

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

+ The analysis of Namibia facilities excludes stand-alone VCTs (n=15) and "sick bays" (n=9) due to small numbers.

[ ] The denominator for the figure is comprised of clients visiting the ANC provider for the first time for the current pregnancy.

Figure 2a. Weighted percentage of ANC units reporting that HIV counseling is routinely provided to all ANC clients in the ANC unit and the percentage of first-time clients counseled about HIV during observed consultations, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006 and Uganda 2007 Service Provision Assessment Surveys

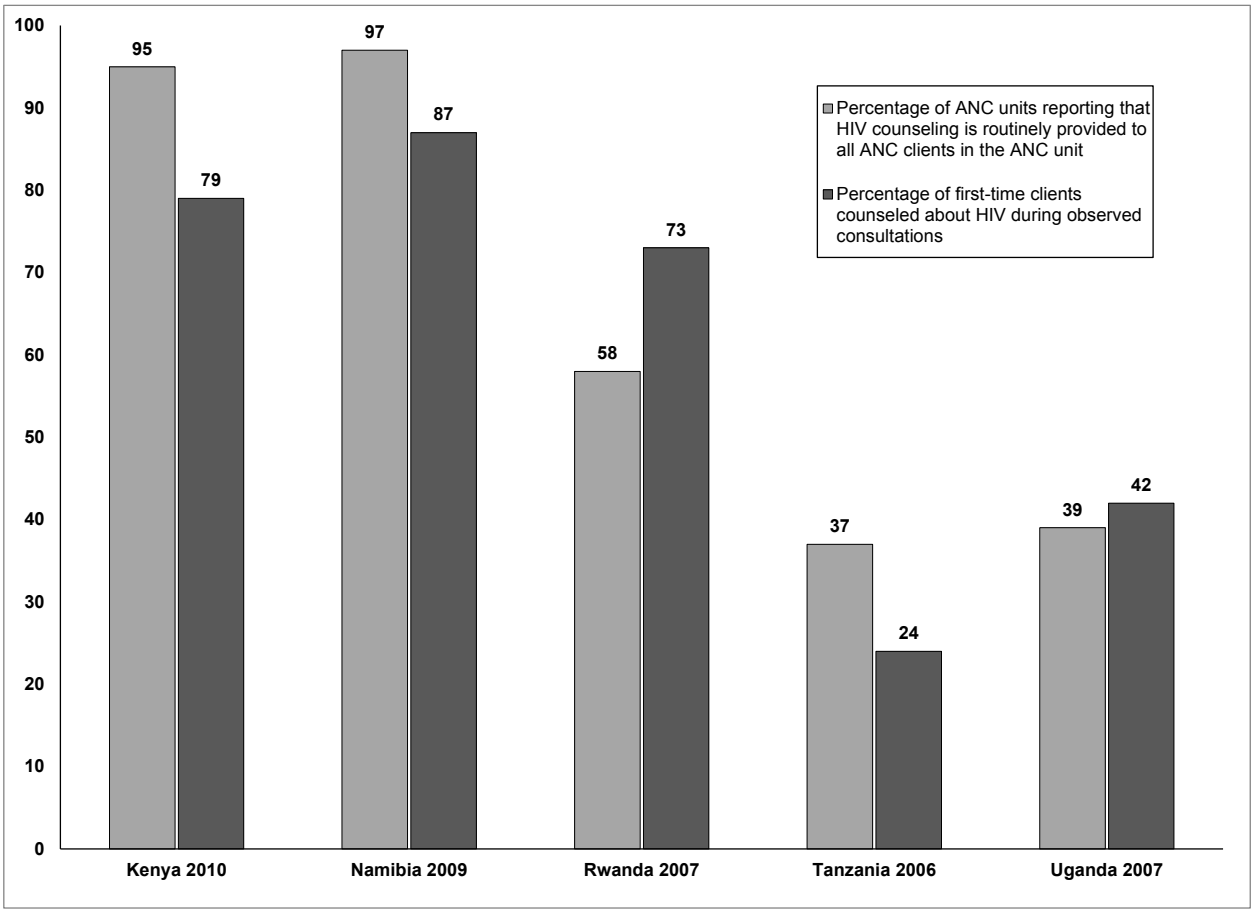


Figure 2b. Weighted percentage of ANC units reporting that HIV testing is available to all ANC clients in the ANC unit and the percentage of first-time clients offered or referred for HIV during observed consultations, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006 and Uganda 2007 Service Provision Assessment Surveys

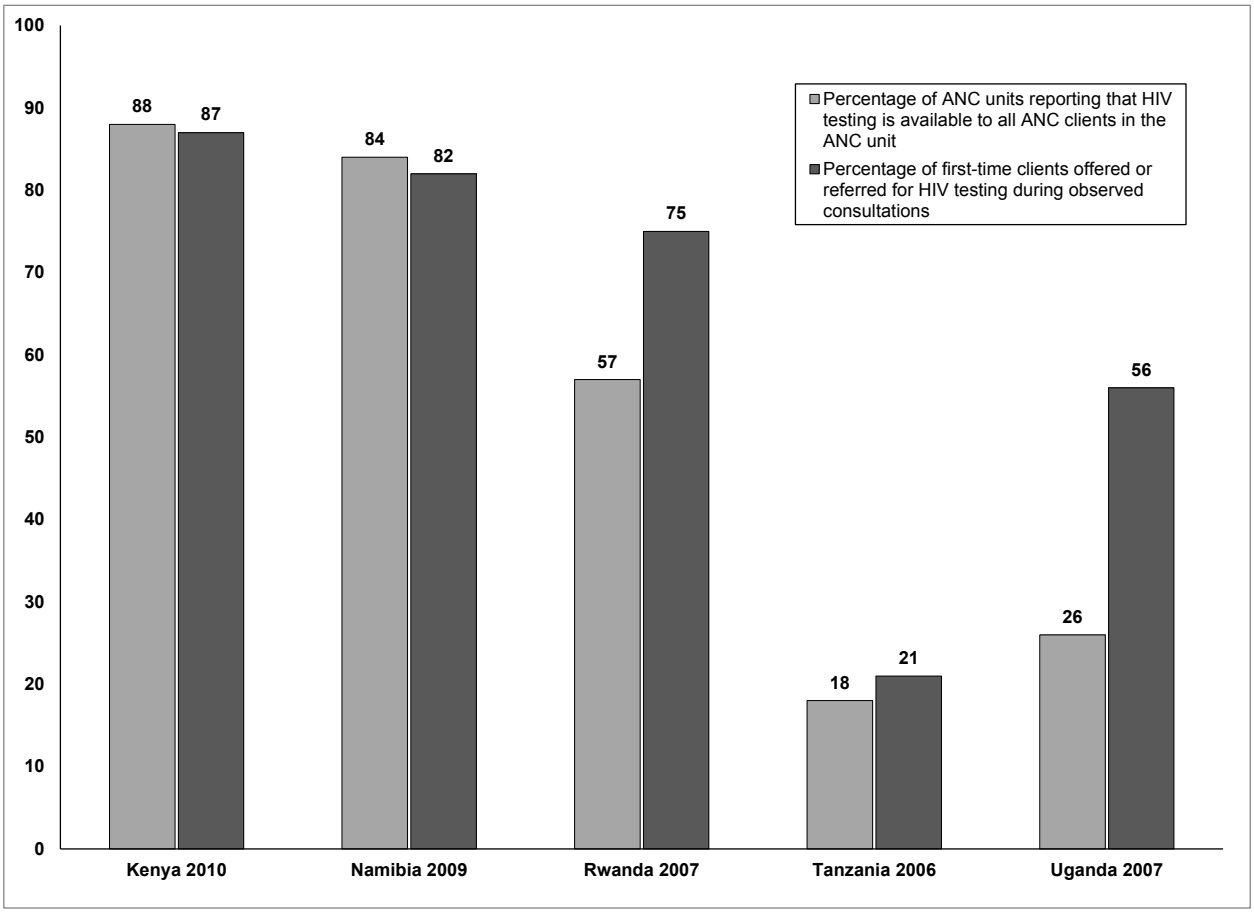
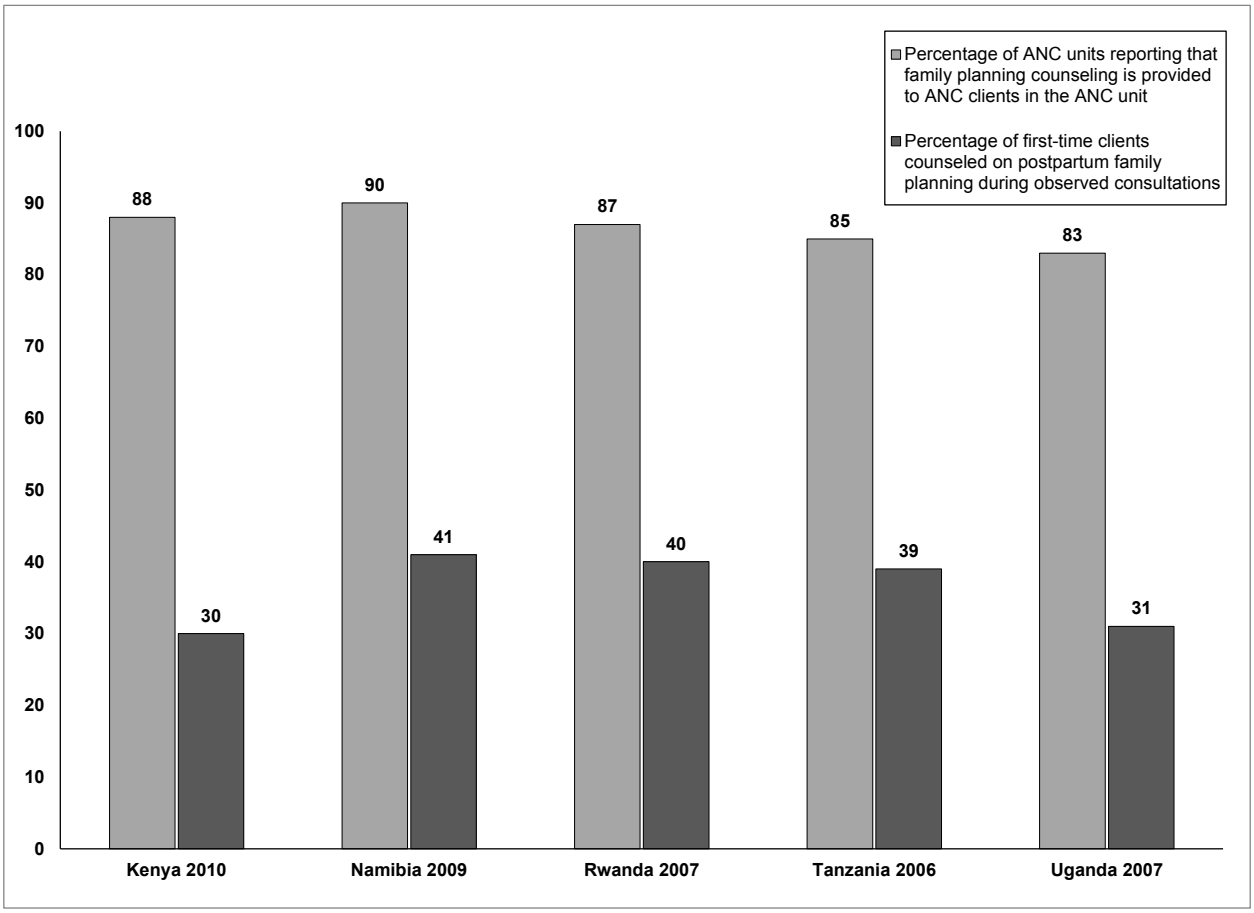


Figure 2c. Weighted percentage of ANC units reporting that family planning counseling is available in the ANC unit and the percentage of first-time clients counseled about postpartum family planning during observed consultations, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006 and Uganda 2007 Service Provision Assessment Surveys



3.4.2 Client-Provider Observation: STI Consultations

As with the ANC results, in this section on STI service provision, we refer back to data in Table 7 showing the percentage of STI service delivery units that report routine referral of all clients for HIV testing and compare this with the information from client-provider observations of STI visits presented in Table 9. We also discuss other elements of service provision that one might expect based on information reported in Table 7 and compare these with findings reported in Table 9. We again proceed through the analysis on a country-by-country basis. Namibia did not collect client-provider observation data for STI consultations and is therefore not represented in Table 9.

Kenya: Table 7 shows that 32 percent of STI service delivery areas reported routine referral of all STI clients for HIV testing. Observations of 164 STI clients' visits with their health care providers revealed that in fact 52 percent of clients were referred for HIV testing (Table 9). While Table 7 shows that 28 percent of STI service delivery areas have a model for teaching correct use of condoms, Table 9 shows that during the client visit, only 8 percent of clients were actually shown how to put on a condom; 17 percent were told how to do it. While 54 percent of STI service delivery areas were observed to have condoms available for their clients to take, during the client-provider observations, only 12 percent of clients were offered condoms.

Rwanda: With regard to Rwanda, Table 7 shows that 76 percent of STI service delivery areas reported routine referral of all STI clients for HIV testing. Observations of 106 STI clients' visits with their health care providers revealed that in fact 25 percent of clients were referred for HIV testing (Table 9). While Table 7 shows that 27 percent of STI service delivery areas have a model for teaching correct use of condoms, Table 9 shows that during the client visit, only 2 percent of clients were actually shown how to put on a condom, and 12 percent were told how to do it. While 38 percent of STI service delivery areas were observed to have condoms available for their clients to take, during the client-provider observations, only 3 percent of clients were offered condoms.

Tanzania: The data for Tanzania in Table 7 show that only 6 percent of STI service delivery areas reported routine referral of all STI clients for HIV testing. Observations of 191 STI clients' visits with their health care providers revealed that only 2 percent of clients were referred for HIV testing (Table 9). While Table 7 shows that 22 percent of STI service delivery areas have a model for teaching correct use of condoms, Table 9 shows that during the client visit, only 4 percent of clients were actually shown how to put on a condom, and 7 percent were told how to do it. While 49 percent of STI service delivery areas were observed to have condoms available for their clients to take, during the client-provider observations, only 4 percent of clients were offered condoms.

Uganda: For Uganda, Table 7 shows that 21 percent of STI service delivery areas reported routine referral of all STI clients for HIV testing. Observations of 117 STI clients' visits (unweighted N=206) with their health care providers revealed that only 5 percent of clients were referred for HIV testing (Table 9). While Table 7 shows that 21 percent of STI service delivery areas have a model for teaching correct use of condoms, Table 9 shows that during the client visit, only 3 percent of clients were actually shown how to put on a condom; 8 percent were told how to do it. While 56 percent of STI service delivery areas were observed to have condoms available for their clients to take, during the client-provider observations, only 22 percent of clients were offered condoms.

Table 9. Client-Provider Observation: Sexually Transmitted Infections Visit: The weighted percent of observations in which the health care provider implemented HIV- and FP-related elements of service provision, Kenya 2010, Rwanda 2007, Tanzania 2006, and Uganda 2007 HIV/Maternal & Child Health Service Provision Assessment

	Percent of client-provider observations in which the health care provider:							
Country	Ordered an HIV test	Used visual aids to discuss HIV	Discussed risks of HIV	Discussed role of condoms to prevent HIV	Described to client how to use a condom	Showed the client how to put on a condom	Offered condoms to the client	N of client-provider STI observations
Kenya 2010	**51.9**	**5.9**	**35.2**	**39.7**	**16.8**	**8.0**	**11.7**	**164**
	(note: too few cases to disaggregate)							
Rwanda 2007	**24.5**	**8.6**	**47.2**	**29.2**	**12.3**	**1.9**	**2.8**	**106**
	(note: too few cases to disaggregate)							
Tanzania 2006	**2.1**	**10.5**	**25.8**	**21.1**	**6.8**	**4.2**	**4.3**	**191**
Facility Type								
Hospital	8.3	13.0	52.2	21.7	8.7	8.7	4.5	24
Health center	*	*	*	*	*	*	*	31
Dispensary	0.7	11.8	24.3	25.0	8.1	4.4	4.4	136
Region								
Western	*	*	*	*	*	*	*	9
Northern	(2.9)	(5.9)	(31.4)	(11.8)	(2.9)	(0.0)	(0.0)	35
Central	(0.0)	(0.0)	(11.1)	(22.2)	(0.0)	(0.0)	(7.7)	27
S. Highlands	(6.7)	(0.0)	(37.5)	(13.3)	(0.0)	(0.0)	(0.0)	15
Lake	0.0	13.6	36.4	47.7	18.2	11.4	11.4	44
Eastern	(5.1)	(26.3)	(15.8)	(5.1)	(5.1)	(5.1)	(5.1)	39
Southern	*	*	*	*	*	*	*	19
Zanzibar	*	*	*	*	*	*	*	2
Other	*	*	*	*	*	*	*	2

(Continued...)

Table 9. – *Continued*

Country	Percent of client-provider observations in which the health care provider: Ordered an HIV test	Used visual aids to discuss HIV	Discussed risks of HIV	Discussed role of condoms to prevent HIV	Described to client how to use a condom	Showed the client how to put on a condom	Offered condoms to the client	N of client-provider STI observations
Uganda 2007	**5.1**	**7.6**	**40.5**	**47.9**	**7.8**	**2.6**	**22.4**	**117**
Facility Type								
Hospital	14.3	7.1	40.0	50.0	21.4	7.1	14.3	14
Health center IV	9.5	9.5	47.6	42.9	9.5	4.8	23.8	21
Health center III	(0.0)	(11.5)	(32.0)	(51.9)	(8.0)	(2.0)	(20.0)	50
Health center II	*	*	*	*	*	*	*	31
Region								
Central	0.0	0.0	5.1	29.7	17.5	2.6	2.6	38
Kampala	*	*	*	*	*	*	*	4
East Central	*	*	*	*	*	*	*	6
Eastern	*	*	*	*	*	*	*	2
Northeast	*	*	*	*	*	*	*	1
North Central	9.1	50.0	12.1	48.5	81.8	11.8	0.0	33
West Nile	*	*	*	*	*	*	*	1
Western	(4.8)	(16.7)	(14.3)	(30.0)	(76.2)	(15.0)	(9.5)	21
Southwest	*	*	*	*	*	*	*	10

* indicates that the figure has been suppressed due to too few case (unweighted N < 25)

() indicates that the figure should be interpreted with caution due to a small number of case (unweighted N 25-49)

Figure 3a. Weighted percentage of STI units reporting all STI clients are routinely referred for HIV testing and the percentage of clients referred for HIV testing during observed consultations, Kenya 2010, Rwanda 2007, Tanzania 2006 and Uganda 2007 Service Provision Assessment Surveys

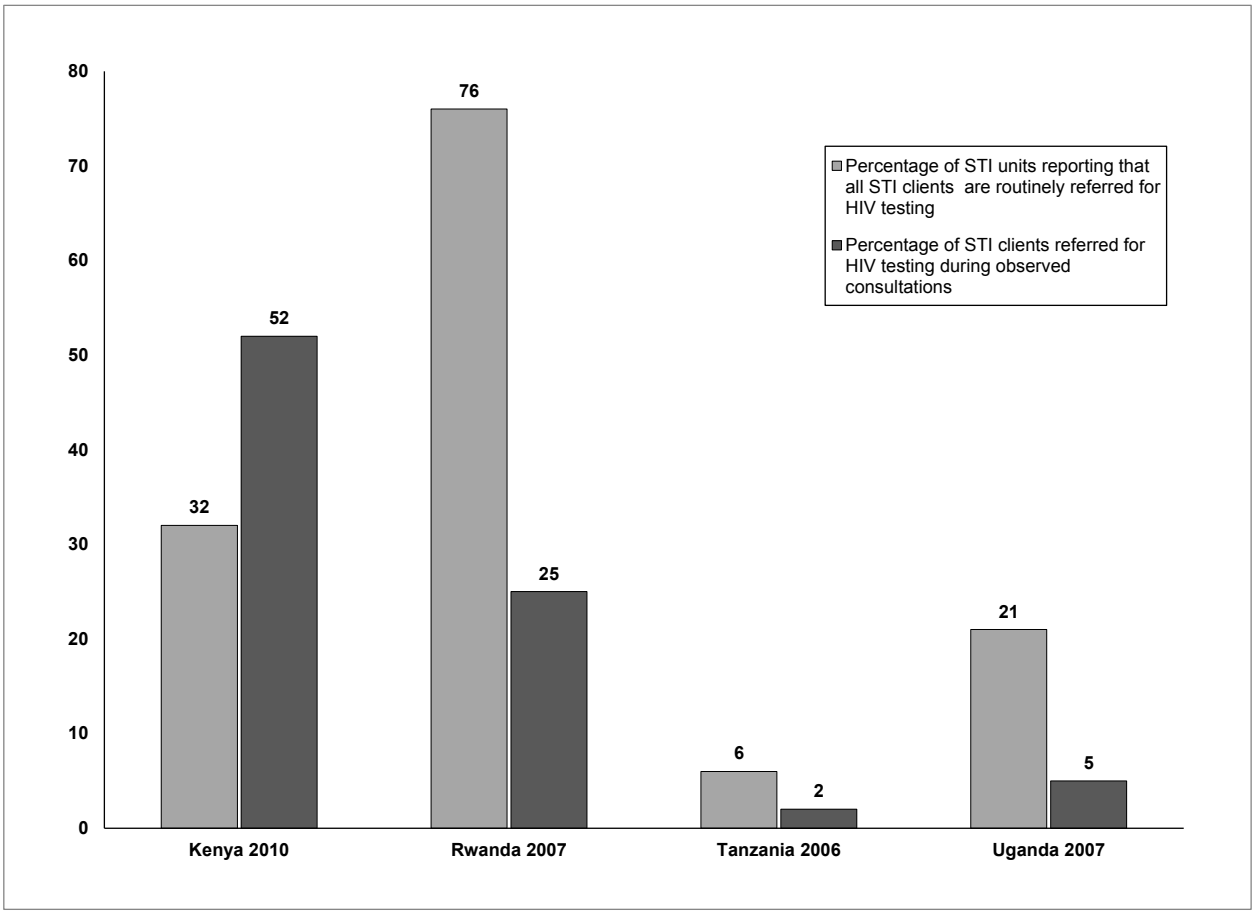


Figure 3b. Weighted percentage of STI units in which a model for teaching the correct use of condoms was observed to be available in the STI unit and the percentage of STI clients shown how to put a condom on during observed consultations, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006 and Uganda 2007 Service Provision Assessment Surveys

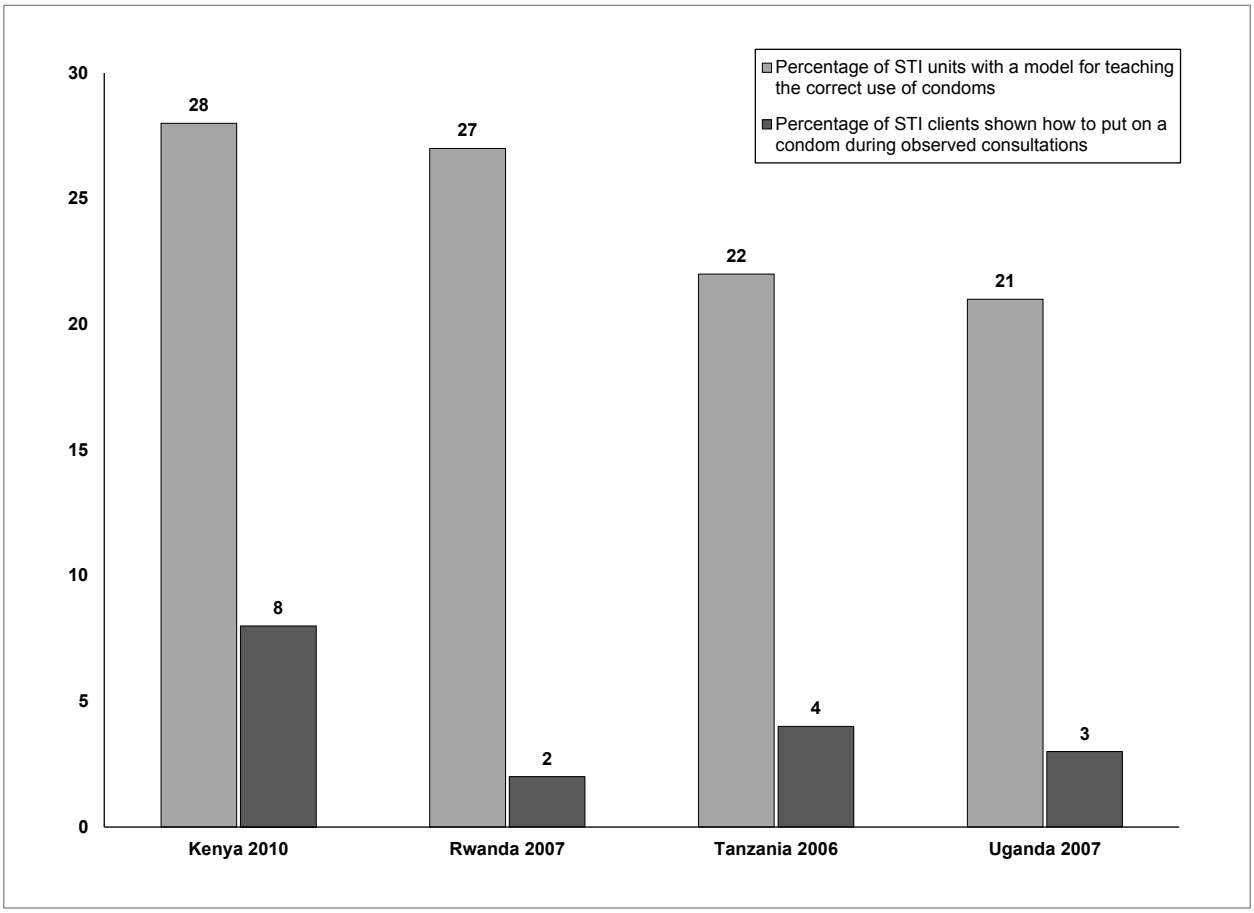
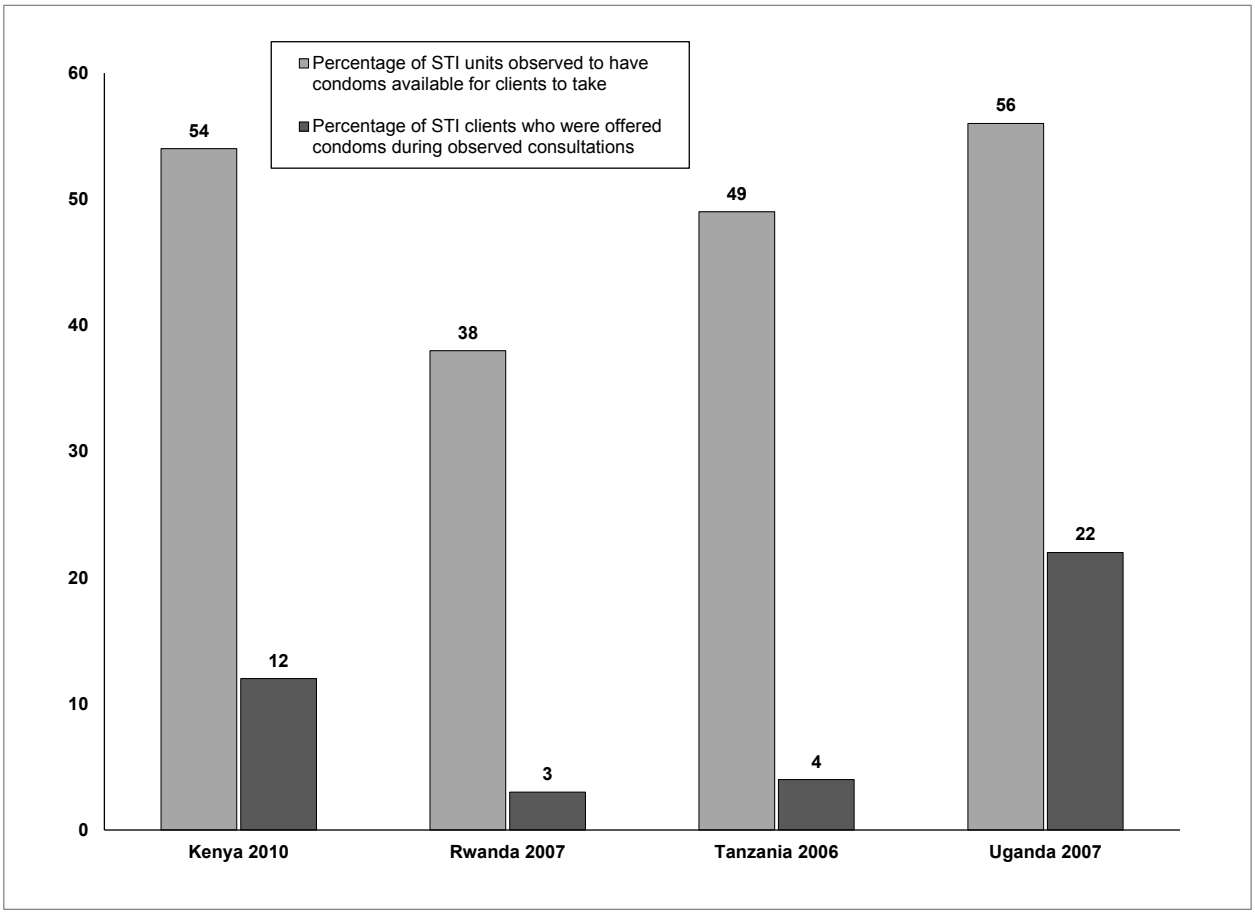


Figure 3c. Weighted percentage of STI units in which condoms for clients to take were observed to be available in the STI unit and the percentage of clients offered condoms during observed consultations, Kenya 2010, Namibia 2009, Rwanda 2007, Tanzania 2006 and Uganda 2007 Service Provision Assessment Surveys



4 Discussion and Recommendations

4.1 HIV/FP Service Delivery Integration

The descriptive analysis of the SPA data on the integration of HIV- and FP-related services covered health workers' current service and training, the integration of elements of HIV and family planning service delivery within specific service delivery areas in health facilities, and observations of actual visits of clients to health workers to obtain care.

4.1.1 Health Workers' Current Service and Training

We found considerable variation across countries in the degree to which health workers reported delivering both HIV- and FP-related services. Levels of training in HIV- and FP-related services were fairly uniform across countries, with the exception of Tanzania, which exhibited very low levels of staff training. However, the proportion of health workers receiving training in FP-related services was considerably lower than those receiving training in HIV-related services.

Further, the percentage of health workers who received training in the past three years in either HIV or family planning is invariably lower than the percentage of health workers who report that they provide HIV- or FP-related services; this is as expected, given that some health workers are likely to have received training in their area of service provision prior to the three-year reference period. However, the difference between the percentage trained in family planning and the percentage actually delivering family planning services tends to be much larger than the corresponding difference between levels of HIV training and HIV service provision. This suggests not only that there are gaps in training for health workers across the board but also that the gap is more significant for those providing family planning services, with the possible implication that some health care workers may be providing family planning services without having received formal training. This points to potential problems in quality of care. Furthermore, lack of regularly updated training in the area of family planning has the potential to perpetuate outdated practices related to FP methods, resulting in provider-generated barriers to clients' use of methods. This is particularly important with regard to clients living with HIV; particularly given nuances around the use of hormonal methods by women living with HIV, it is critical that providers stay abreast of the latest updates and recommendations. It is possible, as implied by the Kenyan Ministry of Health (2009), that stipulations related to funding streams have created an imbalance in the ability of governments to ensure that trainings are provided equally regularly across service delivery areas.

The proportion of health workers reporting that they provide both HIV- and FP-related services is largely dependent on whether the health worker provides any family planning services, as from 80 percent to upwards of 90 percent of all health workers report providing HIV-related services. Similarly, the proportion of health workers reporting that they were trained in both HIV and FP-related services is largely dependent on the levels of HIV-related training.

If HIV/FP service integration is to occur successfully, increased training of health workers to deliver FP-related services will likely be required. Further, we find that not all workers who did receive training in family planning were trained in counseling women living with HIV about their family planning options. In high HIV seroprevalence countries, ensuring that family planning service providers are aware of the special contraceptive needs of women living with HIV should be a priority.

In terms of country-specific concerns, it is notable that in Tanzania, very few health workers received training in HIV-related service delivery (38 percent) or in family planning (14 percent). Further inquiry into these low levels of training is required.

It is also notable that in Kenya, family planning providers working in maternities are the least likely relative to family planning providers in other kinds of facilities to have received training in counseling HIV-positive women on family planning issues. This represents a missed opportunity to ensure that the family planning providers who interact with women in their postpartum period are able to provide family planning services tailored to the contraceptive needs of HIV-positive clients. Formative research is needed to better understand how maternity services are organized to determine the feasibility of integrating family planning and HIV services in these settings, and if feasible, how such integration may be efficiently implemented.

4.1.2 HIV and Family Planning Service Availability and Delivery

Condoms for Dual Protection against Pregnancy and HIV

The results of the analysis indicated that the study countries lacked visual educational materials on HIV or condom demonstration models in the family planning units. During the client-provider observations of STI visits, providers demonstrated how to put on a condom to fewer than 10 percent of observed STI clients, and rarely offered clients condoms to take home. We also found that up to 18 percent of facilities offering family planning services do not normally stock male condoms, while female condoms remain essentially unavailable in every country except Namibia.

Given that condoms are the only family planning method that has the potential to provide dual protection against both unintended pregnancy and STIs including HIV, and given that studies have shown that it is a preferred method of contraception among women living with HIV (Johnson 2009), it is essential that male and female clients are fully educated about how to use condoms, and that condoms are made available wherever needed. Increasing the availability of models to demonstrate condom use, and encouraging providers to show clients how to put condoms on are key measures required to ensure that one of the best interventions that people can use against HIV works effectively.

HIV Counseling and Testing, and Family Planning Counseling, during ANC

In Tanzania and Uganda, just under 40 percent of ANC units offer HIV counseling in the ANC service delivery area, and only 20-25 percent of ANC units in those countries offer HIV testing. During client-provider observations of ANC visits, in most cases (save Namibia), less than 50 percent of clients are tested or referred for HIV testing. If ANC clients are HIV-positive but do not know their status, they cannot take steps to protect their babies from infection; if they are HIV-negative but do not know their status, they cannot take steps to ensure that they stay HIV-free during the sensitive pregnancy period and beyond.

Further, ANC visits are a key opportunity to educate women about their postpartum contraception options, which may differ depending on their HIV serostatus. Yet while 80 percent or more facilities report offering family planning counseling in their ANC units, less than one quarter of clients are counseled on their family planning options during ANC visits with health care providers.

Ensuring that women have access to family planning counseling and HIV counseling and testing on site during ANC, and that health workers are trained to deliver these elements of HIV and family planning in an integrated manner, is fundamental to ensuring that women‘s reproductive health needs are met, and a critical step towards eliminating vertical transmission of HIV.

HIV/FP Integration in STI-Related Service Delivery

Despite clear and considerable gaps in integration of HIV/FP service delivery, it nevertheless seems that in all countries assessed ANC service provision is more integrated than STI service provision. The lack of routine HIV testing observed during the STI consultations was surprising, if not more so than the lack of discussion, demonstration, and dissemination of condoms. While integrating HIV/FP service provision is critical in ANC service delivery to stop vertical transmission of HIV, it is no less critical that HIV testing and family planning options for condoms as well as other methods are provided in an integrated fashion when people who are simultaneously exposed to the risk of pregnancy and HIV present to a health facility for care.

Correspondence between Availability of Elements of HIV/FP Service Delivery during Facility Inventories and the Integrated Provision of Services during Client-Provider Observation

This report documents considerable disparities between the availability of elements of integrated HIV/FP services, and the actual delivery by a health care provider of ANC or STI services that are fully integrated—where both HIV- and FP-related elements are actually incorporated into the visit.

Further research is required to determine the reasons for any discrepancy between HIV and family planning services reported available in specific service delivery units, and the lack of integrated service provision when the provider is face-to-face with a client.

4.2 Data Collection Methodology

The SPA methodology, as mentioned earlier in this report, is not designed to measure service integration; however, considering that SPA surveys are conducted at the national level, they present a unique opportunity to collect information to measure service integration.

Countries have the opportunity to adapt SPA questionnaires to meet specific country needs. Therefore, even though the standard SPA questionnaires might have only limited questions on service integration, countries or national programs do have the opportunity to add key questions that could shed light on service integration.

Providing recommendations for measuring full integration between FP- and HIV-related service delivery is beyond the scope of the present work. However, it is possible to provide more limited recommendations for adjustments to health facility survey questionnaires that would allow for more complete measurement of HIV/FP service delivery integration based on recommendations outlined in the PMTCT-focused 2006 WHO document (WHO 2006), *Glion Consultation on Strengthening the Linkages between Reproductive Health and HIV/AIDS: Family Planning and HIV/AIDS in Women and Children:*

- The Glion consultation recommended that HIV counseling should be integrated into family planning services in order to address the dual risk of infection and unintended pregnancy women face in their lives. In the current SPA questionnaires, there are no questions asked about the provision of HIV counseling, or HIV testing and counseling, in the family planning unit; it is therefore recommended to add questions on whether HIV counseling and/or testing are provided in the family planning service delivery context.

  The family planning section of the forthcoming revised inventory questionnaire for the SPA will include questions on whether family planning providers conduct HIV testing from the family planning service site, and if yes, they are asked to show the interviewers an HIV test kit.

- It was also recommended that testing and counseling programs should provide contraceptive counseling, especially on the consistent and correct use of condoms, in order to enable women who learn that they are HIV-positive to access contraception if desired, and to help women who are uninfected to avoid HIV infection and unintended pregnancy. In the current SPA questionnaires, the questions asked in the SPA with regard to the VCT unit are not consistent across surveys. When questions are asked about whether FP-related services are provided in the VCT unit, they are only asked with reference to HIV-positive clients; however, family planning should be offered to all VCT clients. Our recommendation for future data collection is to revise the VCT questionnaire to better capture availability of family planning services to all VCT clients.

  The HIV testing section of the revised SPA inventory questionnaire asks if condoms are made available in the HIV testing site to give to clients receiving HIV testing and counseling services (regardless of HIV serostatus); if so, the interviewer asks to see the condoms.

- The participants in the Glion Consultation recommended that HIV testing and counseling, safer-sex counseling and family planning counseling and services (including condoms) should be provided in antenatal and postnatal care settings to help pregnant women to avoid infection, and to help identify pregnant women with HIV who can then be offered postpartum contraceptive counseling. While HIV testing and counseling are asked about in the SPA's ANC unit questionnaire, questions on safer sex counseling and condoms are not asked. We therefore recommend their addition to the survey instrument.

This report has covered the technical and policy-related evolution towards full integration of HIV and family planning health services, which has as its objective "getting to zero" new HIV infections, as well as improved reproductive health for women and men. It has also provided a baseline assessment of current levels of integration of family planning and HIV-related service delivery in five countries hit hard by the HIV epidemic, and may provide actionable evidence for policymakers and program implementers. We hope that the report is a useful contribution to the literature and suggests avenues for further exploration and action to advance the delivery of this essential combination of health services.

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