EXPLORING INTEGRATION OF FAMILY PLANNING AND HIV SERVICES

LITERATURE REVIEW

July 2019

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HIV Prevention Market Manager

Accelerating Product Introduction
Informing Product Development
Reducing Time to Impact

AVAC Global Advocacy for HIV Prevention

CLINTON HEALTH ACCESS INITIATIVE

Supported by the Bill & Melinda Gates Foundation

PURPOSE OF LITERATURE REVIEW

To inform key questions on the feasibility of providing existing and new HIV prevention options and services in family planning settings, the HIV Prevention Market Manager (PMM) Project[1] has conducted a literature review to identify existing knowledge on barriers and enablers to the integration of HIV and family planning services. Because adolescent girls and young women in sub-Saharan Africa shoulder a disproportionate burden of HIV, the review aimed to focus on this population and region. Factors reviewed include policy, service delivery, provider needs, behavioral understanding of providers and clients, and communication and messaging. While gaps still exist in available research, this review and extensive bibliography lays the groundwork to design qualitative research towards understanding how to optimize integration for existing and new HIV prevention products and services.

BACKGROUND

In 2018, FP2020 reported that the total number of women and girls using a modern method of contraception was 317 million in the 69 lowest-income countries; however, 214 million women of reproductive age in the developing world want to avoid pregnancy and are not using a modern contraceptive method.[2] In sub-Saharan Africa, young women account for 75 percent of new HIV infections among adolescents 15–19 years old.[3] Because sexually active young women and girls are at risk of both unintended pregnancies and HIV, it is critical to ensure access to both contraception and HIV prevention, especially as the "youth bulge" is seeing millions of young people entering their reproductive years in sub-Saharan Africa. Integrating family planning and HIV services can lead to an increased uptake of both, especially among those who might be deterred from seeking HIV services due to barriers, like stigma.

The global discourse on integration of family planning and HIV services has gained momentum, with UNFPA and the World Health Organization (WHO)'s Call to Action to link SRHR and HIV,[4] the UNAIDS and FP2020 partnership, and additional efforts to strengthen the response to family planning and HIV. The forthcoming ECHO trial results[5] may also provide an opportunity to focus on the importance of method mix and informed choice.

As new HIV prevention options move through development to delivery stages, integration should occur at the policy, operational, and service delivery levels to ensure access for women and girls who need them most.

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1 Through the HIV Prevention Market Manager (PMM) Project, funded by the Bill & Melinda Gates Foundation, AVAC and the Clinton Health Access Initiative (CHAI) seek to facilitate an efficient and effective rollout of HIV prevention products. PMM works with partners across the prevention research to rollout spectrum to expand the portfolio of options and ensure appropriate products are available, accessible and used by those who need them most. For more information, visit: AVAC and CHAI, *HIV Prevention Market Manager* (2017), https://www.prepwatch.org/wp-content/uploads/2017/01/PMM_project_2pager_jan2017.pdf.

2 FP 2020. FP2020 Catalyzing Collaboration 2017-2018. 2019.

3 Joint United Nations Programme on HIV and AIDS (UNAIDS). Women and Girls and HIV. Geneva: UNAIDS; 2018.

4 UNFPA, FP2020. A renewed Call to Action on SRHR-HIV linkages Advancing towards universal health coverage. 2018.

5 ECHO Consortium. Update on the Evidence for Contraceptive Options and HIV Outcomes (ECHO) Trial. 2018.

DEFINITION OF INTEGRATION FROM LITERATURE

Each study applies the lens of integration in slightly different ways, albeit with common components. Sexual and reproductive health (SRH) and HIV services in integrated care can include family planning, ante- and post-natal care, HIV prevention, such as voluntary counseling and testing (VCT), antiretroviral therapy (ART), STI treatment, and cervical cancer screening.[6] The Integra study, for instance, defines integration as the provision of any reproductive health service plus any HIV or sexual health service in a single visit.[7] A scoping study opted for a "continuum of integration," ranging from a referral system among separate sites to full integration within one visit, with degrees of integration in between.[8] Some studies refer to integration as the physical co-location of services, which is found to facilitate integration success.[9] Another version of integration is the rotation of providers that deliver each service.[10]

Several studies defined ***full i***ntegration as having one provider offer a range of SRH and HIV services, also known as ***provider-level*** integration or the ***one-stop shop model***. Full integration reduces referrals to other providers or facilities for individual SRH services, which can be burdensome for clients,[11] who may make trade-offs with forms of care they need. Another type is ***partial***, or ***facility-level***, integration, characterized by a team-based approach to comprehensive care, particularly in larger facilities where internal referrals to sub-specialist providers are feasible.[12] Partial integration can also denote referrals to off-site facilities for services.[13]

Full integration is found to be more efficient and can improve quality of care if staff have sufficient time to take on more services, while partial integration has been successful if limited resources exist.[14] One study reported that while full integration did not change the quality of services, partial integration increased provider-client discussions on contraceptive options.[15]

Structural and ***functional*** integration refer to types of integration within facilities. Structural integration is defined as measurable elements of infrastructure, trained staff, and other facility-level factors. Functional integration is when the care received by a client is integrated. Research suggests that structural integration at a facility is not sufficient in and of itself to achieve functional integration, and that other factors, such as adequate support for staff, are important.[16]

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16 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya

For the purposes of this review, the findings are not classified according to type of integration, unless the finding is directly related to the type. "Integrated services" will encompass functional, structural, full and partial integration, and specific findings will call out types of integration that have led to project or programmatic success.

METHODOLOGY

We conducted a literature review on PubMed of peer-reviewed journal articles and a separate review of grey literature. Our initial search criteria focused on family planning and HIV prevention service integration for adolescent girls and young women (AGYW) ages 13-24 in sub-Saharan Africa from 2010-2019. Because these combined criteria yielded limited evidence, we broadened our search parameters to include:

- integration of family planning and HIV care and treatment services, on which a more robust body of evidence exists;
- integration of HIV prevention and family planning products, known as multipurpose prevention technologies (MPTs);
- integration of adolescent sexual and reproductive health (SRH) services, broadly; and
- women and girls of all ages.

Exclusion criteria included regions outside of sub-Saharan Africa; literature published before 2010; study protocols; and studies that recommended service integration in conclusions but did not contain their own findings on integration.

The review on PubMed yielded 1,077 combined results, though overlap of articles existed among results from different search terms. All searches were timebound from January 1, 2010-April 1, 2019.

Search terms	**Results (# of articles)**
"Family planning" AND "HIV prevention"	575
"Family planning" AND "HIV services," filtered by ages 13-24	279
"Integration" AND "Family planning" AND "HIV prevention"	67
"Integration" AND "Family planning" AND "HIV prevention" AND "girls"	40
"Integration" AND "Family planning" AND "HIV services," filtered by ages 13-24	39
"Family planning" AND "pre-exposure prophylaxis"	26
"Integration" AND "Family planning" AND "HIV prevention," filtered by ages 13-24	20

"Integration" AND "Family planning" AND "HIV prevention" AND "Adolescents" OR "Youth"	18
"Integration" AND "Family planning" AND "HIV prevention" AND "young women"	13

Articles were first screened by title for subject and regional relevance; abstracts were then reviewed to determine if they met inclusion criteria. Bibliographies of key articles identified in this search were also reviewed for other pertinent articles.

The review of peer-reviewed literature yielded 129 relevant journal articles. A separate internet search for grey literature identified an additional 19 articles for inclusion. Two systematic reviews from 2009 were included for their relevance. In total, 148 articles were included in the literature review.

a. Limitations

A rapid review of initial search criteria revealed a noticeable dearth of data on integration of family planning and HIV prevention services for AGYW. Consequently, we expanded our search parameters to include studies on integrated services that could have applicable learnings to HIV prevention and family planning. Ample research exists on integration of other SRH services, such as family planning with HIV care and treatment or prevention of mother-to-child transmission programs, many of which was not specific to AGYW. Because these studies do not fall within our baseline search criteria, we included them insofar as they provided insights that could be translated to family planning and HIV prevention services for AGYW. While we do not claim to include a comprehensive review of all SRH service integration literature, we have conducted an extensive review of literature to distill key themes and gaps that have programmatic implications for our stated focus area.

The full list of articles included in the literature review can be found in the Annex. After compiling relevant literature, the following steps were taken:

1. Literature Classification

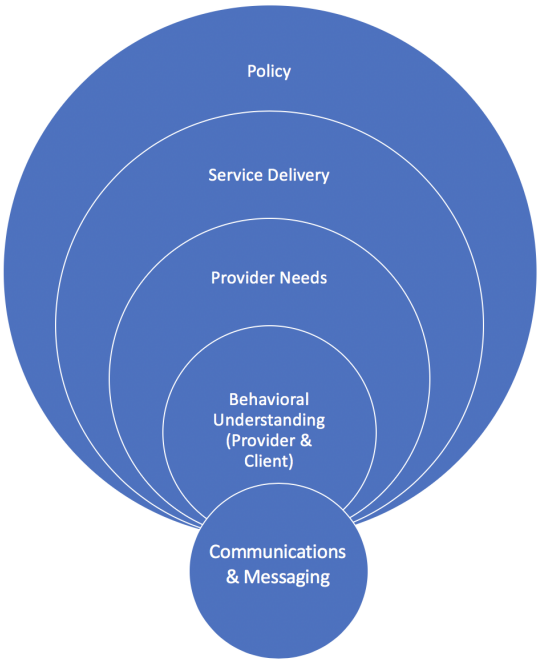
Main classifications of articles included were: Author, Journal/Source, Year, Country, Age Range, AGYW Focus, Service Delivery Integration, Dual Products, Best Practices, Challenges/Barriers, Provider Findings and Service Delivery Settings. Some of these categories contained sub-classifications, such as type of challenge/barrier and type of service delivery setting.

Several other classifications were noted, including if the article focused on: Oral PrEP, Couples, Female Sex Workers (FSWs), Men, Cost-effectiveness, Training, Behavioral Factors, Policy, Monitoring & Evaluation and Human-centered Design.

2. Organization of Findings

The literature was read and mined for findings on **challenges to** and **best practices on** integrating family planning and HIV services. A finding was considered a best practice if the study found an intervention effective or acceptable, or if it was a recommendation based on other findings. Findings were analyzed

along a modified socio-ecological framework that examined integration barriers and enablers at the following levels:



3. Analysis of Findings

Our objective was to understand what knowledge exists on integration that can be implemented in programming and policy, and where gaps in knowledge remain. To this end, within each level of the socio-ecological framework, findings were evaluated for their applicability and actionability in real-world settings. Key learnings were highlighted that not only identified challenges and best practices, but translated these lessons into programmatic recommendations.

ANALYSIS OF LITERATURE

OVERVIEW

An integrated model of family planning and HIV service integration led to decreased pregnancy incidence among HIV-positive women[17] and increased HIV testing.[18] [19] Integration of HIV prevention into family planning facilities suggests overall increased uptake, and in several settings it increased continued use of both HIV and family planning services, increased access to all services and reduced unmet need.[20]

[17] Integration of family planning services into HIV care clinics: Results one year after a cluster randomized controlled trial in Kenya.

[18] Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients

[19] GHAIN Support to RH-HIV Integration in Nigeria: End of Project Monograph

[20] Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

[21] [22] [23] [24] [25] [26] [27] [28] [29] The desire for integration of services came from users,[30] but also providers feeling that integration extended family planning to more people, facilitated male involvement in family planning, and improved adherence.[31] [32] Integration of services in several clinic settings also minimized transportation costs and wait times for clients.[33] [34] One systematic review of 44 studies found that clients reported no negative views of integration of HIV prevention and care and family planning services.[35] Community health workers (CHW) also reported that it was easier to recruit women when they could discuss both family planning and HIV.[36] Providers had mixed views, but overall increased satisfaction was reported,[37] [38] and in several settings they believed integrated services brought more women into the clinic.[39]

Integrated service delivery may be particularly important for young female sex workers who are less likely to be married and may struggle to receive adequate contraception at primary health care facilities,[40] in addition to younger women not currently using family planning, those of lower socioeconomic status, and those who make family-planning decisions jointly with their partner.[41]

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[21] Linking family planning with HIV/AIDS interventions: a systematic review of the evidence.

[22] Use of HIV-Related Services and Modern Contraception among Women of Reproductive Age, Rakai Uganda

[23] Integrating Reproductive Health and HIV Indicators into the Nigerian Health System – Building an Evidence Base for Action

[24] Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

[25] Integrating family planning services into HIV care: use of a point-of-care electronic medical record system in Lilongwe, Malawi

[26] Contraceptive use and pregnancy rates among women receiving antiretroviral therapy in Malawi: a retrospective cohort study

[27] Improving referrals and integrating family planning and HIV services through organizational network strengthening

[28] Comparing Youth-Friendly Health Services to the Standard of Care Through "Girl Power-Malawi": A Quasi-Experimental Cohort Study

[29] Impact of Integrated Family Planning and HIV Care Services on Contraceptive Use and Pregnancy Outcomes: A Retrospective Cohort Study

[30] Need, demand and missed opportunities for integrated reproductive health–HIV care in Kenya and Swaziland: evidence from household surveys

[31] Integrating family planning into HIV care in western Kenya: HIV care providers' perspectives and experiences one year following integration

[32] Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa.

[33] Contraceptive use and pregnancy rates among women receiving antiretroviral therapy in Malawi: a retrospective cohort study

[34] Fertility intentions and interest in integrated family planning services among women living with HIV in Nyanza Province, Kenya: a qualitative study

[35] Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

[36] Integrating Family Planning and HIV Services at the Community Level: Formative Assessment with Village Health Teams in Uganda

[37] See full provider section.

[38] Study of Family Planning and HIV Integrated Services in Five Countries

[39] Study of Family Planning and HIV Integrated Services in Five Countries

[40] An urgent need for integration of family planning services into HIV care: the high burden of unplanned pregnancy, termination of pregnancy, and limited contraception use among female sex workers in Côte d'Ivoire

[41] Does integrating family planning into HIV care and treatment impact intention to use contraception? Patient perspectives from HIV-infected individuals in Nyanza Province, Kenya

SUMMARY OF FINDINGS IN LITERATURE

POLICY LEARNINGS

While this review focused on literature around integration of services and not on the actual policies or guidelines on integration (PMM has conducted a complementary policy review), some literature discussed integration policies.

Since 2010, the policy context has changed considerably with increased financial and technical support for integration, country-led guideline development, improved national coordination and planning, more consistent health sector integration strategies, and an increase in technical assistance and donor support for integration.[42] **Aligning various local and national health policies** and strategies – before integration is implemented[43] – was identified as a way to improve coordination and delivery of services across the care continuum.[44] [45] In one analysis, seven countries mapped their national policies, strategies, plans, and protocols in order to identify opportunities, challenges, and priority linkages.[46]

The literature discussed the necessity of entities tasked with moving forward integration policies,[47] including via the formation of **Integration Technical Working Groups** (TWG)[48] and/or an **integration focal person** within Ministries of Health to ensure joint responsibility and accountability.[49] For example, in Ethiopia, the Family Planning and HIV Integration TWG contributed to guiding early integration by identifying pilot regions and holding a national orientation workshop, brought together key stakeholders and ensured policy support for integration that is laid out in the country's SRH Strategy, as well as in national guidelines on HIV testing and counseling, PMTCT, and ART.[50] Similarly, in Rwanda, Technical Working Groups were created to facilitate discussion of programs and performance results, and to revise targets between stakeholders and implementers.[51]

Additionally, the **inclusion of stakeholders at all levels** in the design and implementation of integrated services was referenced as key, with one study recommending, "All level of decision makers (National and District) need to be well informed and sensitized on the integration."[52] Rapid scale-up in Ethiopia was possible because of its TWG and its guidance through strategies and guidelines, and the process was generally inclusive of a diversity of government, civil society, and international implementing partners.

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42 Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study

43 Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study

44 Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa

45 Assessing the need and capacity for integration of Family Planning and HIV counseling and testing in Tanzania

46 Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa

47 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

48 GHAIN Support to RH-HIV Integration in Nigeria: End of Project Monograph

49 Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa.

50 Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up

51 Rwandan stakeholder perspectives of integrated family planning and HIV services

52 Assessing the need and capacity for integration of Family Planning and HIV counseling and testing in Tanzania

Though target populations were not directly included in the TWG engagements, the group held regional sensitization workshops to **engage community stakeholders**.[53]

Lastly, several policy recommendations were made by one review around commodity financing, including the development of detailed costing studies for integration and review of funding mechanisms to develop integrated financing streams and supply chains to ensure coordination of HIV and SRH commodity procurement.[54]

SERVICE DELIVERY LEARNINGS

Integrating family planning into HIV clinics using a service delivery model that included additional training of health staff, support for commodity procurement, and supervision of family planning service provision increased continued use of family planning methods.[55] Quality of services was also impacted by integration, specifically on reporting, communication and counseling skills, and provider knowledge and attitudes. Youth-friendly services led to increases in uptake of integrated services, but factors contributing to youth-friendliness of services were not explored in detail in this review.[56]

One study found the most important factors in uptake of integrated services were clinic-level, and showed no influence of other factors (i.e., perceived provider stigma, distance living from a testing site, socio-economic status, and age).[57] Facility-level factors—adequately trained staff, appropriately equipped consulting rooms, functional infrastructure, resources, including commodity stock and mechanisms for maintaining stock—were all identified as necessities for successful integration.[58] However, another study found that while structures need to be prepared with equipment and training before integration occurs, structural inputs are not sufficient to achieve successful integration, which they found depends greatly on staff motivation and support.[59]

The **"One nurse, one patient, one room"** approach, or "one stop shop" model, means that clients no longer have to queue multiple times at different provider rooms per visit, whereas before integration, most clients would leave before seeing the next provider to whom they were referred due to lengthy queues.[60] [61] [62] [63] [64] Provider-level integration, where one provider offers a range of SRH and HIV services,

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53 Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up

54 Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study

55 Integration of family planning services into HIV care clinics: Results one year after a cluster randomized controlled trial in Kenya.

56 Increasing Uptake of HIV, Sexually Transmitted Infection, and Family Planning Services, and Reducing HIV-Related Risk Behaviors Among Youth Living With HIV in Uganda

57 Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients

58 Integration of HIV prevention into Sexual and Reproductive Health services in an urban setting in South Africa

59 Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients

60 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

61 Integrating family planning into HIV care in western Kenya: HIV care providers' perspectives and experiences one year following integration

62 Integrating family planning services into HIV care: use of a point-of-care electronic medical record system in Lilongwe, Malawi

63 Perception of the Girl Power clinic versus other settings in Malawi: a qualitative study

64 Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa

was found as ideal in several settings,[65] [66] [67] [68] [69] with one study finding that clients now received more than one service per visit,[70] and another noting it has the potential to improve nurse productivity by 2.5 times.[71] **Provider continuity** was also identified as key: clients preferred to see the same provider at each visit, recommending the importance of continuity of care.[72] [73] [74] [75]

Girl Power-Malawi: Which service delivery settings work best for AGYW?

The Girl Power study[76] compared four models: one "standard of care" facility, providing vertical HIV testing, family planning, and STI management in an adult-oriented setting, and three variations of youth-friendly integrated facilities: one provided standard youth-friendly services, with youth-friendly providers and peers on staff, integrated SRH and HIV care, and longer clinic hours; the second added to this a behavioral intervention of monthly interactive group sessions on SRH and HIV; and a third layered a conditional cash transfer on top of the other interventions. All three youth-friendly models demonstrated higher service uptake, more frequent service utilization, and faster provision of care than in the standard model. Among them, the behavioral intervention alone did not impact clinical service uptake more than the basic youth-friendly model. However, the conditional cash transfer added to the behavioral intervention increased uptake of condoms, contraception, dual protection, and STI services. The authors hypothesize that the conditional cash transfer incentivized AGYW to attend the group sessions, and the co-location of sessions with clinical services rendered them easy to access.

Integration of indicators into existing M&E systems and choosing the right M&E indicators to track, with minimal additional indicators, is important, and should be done through revisions to existing national tools where possible (i.e., number of family planning clients tested for HIV).[77] [78] [79] [80] [81] [82] [83]

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65 Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa

66 Assessing the need and capacity for integration of Family Planning and HIV counseling and testing in Tanzania

67 Impact of Integrated Family Planning and HIV Care Services on Contraceptive Use and Pregnancy Outcomes: A Retrospective Cohort Study

68 Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa

69 Experiences of stigma among women living with HIV attending sexual and reproductive health services in Kenya: a qualitative study

70 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

71 Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa

72 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

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81 Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study

82 Challenges encountered in providing integrated HIV, antenatal and postnatal care services: a case study of Katakwi and Mubende districts in Uganda

83 Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up

Additionally, M&E should be incorporated from the program planning stage for any new service added.[84] One study suggested adding an indicator for "the proportion of women accessing HIV services who are screened for unmet family planning need," and tools should, at a minimum, ascertain that a woman is of reproductive age and ask whether she is sexually active, currently using an family planning method, and if not, whether she wishes to become pregnant.[85] Developing more accurate counts of daily and monthly active client loads, disaggregated by age and sex, would provide programs with useful information to inform monitoring and planning of integration.[86] Disaggregating by age across services could be particularly important[87] as different age groups were identified as being more at risk of both HIV and unintended pregnancy. Additionally, a system of unique patient identifiers can be used for partial integration settings so that cross-service referrals are tracked and completed referrals documented.[88] [89]

Private clinics were identified by one study as able to provide better conditions for integrated services: all clients were seen by medical doctors, nurses occupied supporting roles, counseling rooms were spacious, air-conditioned, well-lit, and well-equipped, and they experienced no stock-outs due to purchasing supplies in the private market.[90] Not surprisingly, those facilities with laboratory equipment, thus capable of performing HIV testing, were more likely to be ready to provide integrated services.[91] By contrast, one study describes public sector facilities as basic, with limited space, more than one provider offering services in the same room, badly ventilated and poorly lit consultation rooms and no guaranteed electricity. Consultation rooms in public facilities often had stock-outs of equipment and supplies, and these limits in space and staff resulted in long queues and limited time with a provider for a consultation.[92]

Challenges on integration included supply issues, staff availability, physical space, and community involvement. **Commodity shortages** (drug/equipment) **with increased volume of clients**[93] caused challenges.[94] In one study including government public health centers and public FSW-focused drop-in centers, when integration occurred there were stock-outs of female condoms and lack of introduction of specific commodities like the contraceptive implant.[95] Support for procurement of commodities in one study led to increased continued use of contraceptive methods in HV clinics.[96]

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84 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

85 Developing a system to monitor family planning and HIV service integration: results from a pilot test of indicators

86 Developing a system to monitor family planning and HIV service integration: results from a pilot test of indicators

87 Developing a system to monitor family planning and HIV service integration: results from a pilot test of indicators

88 Developing a system to monitor family planning and HIV service integration: results from a pilot test of indicators

89 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

90 Are HIV and reproductive health services adapted to the needs of female sex workers? Results of a policy and situational analysis in Tete, Mozambique

91 Determinants of facility readiness for integration of family planning with HIV testing and counseling services: evidence from the Tanzania service provision assessment survey, 2014-2015

92 Are HIV and reproductive health services adapted to the needs of female sex workers? Results of a policy and situational analysis in Tete, Mozambique

93 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya

94 Integrating Family Planning and HIV Services at the Community Level: Formative Assessment with Village Health Teams in Uganda

95 Are HIV and reproductive health services adapted to the needs of female sex workers? Results of a policy and situational analysis in Tete, Mozambique

96 Integration of family planning services into HIV care clinics: Results one year after a cluster randomized controlled trial in Kenya

Lack of staff time[97] [98] was identified as a challenge posed by integration due to an increase in consultation times.[99] [100] However, evidence of this was mixed in one five-country study, which found the majority of providers were not overworked or rushed.[101] Group counseling was identified by one study as a way to ameliorate this challenge, to allow for flexibility in time given to individual clients.[102] **Shortage of physical space**[103] [104] was referenced in several studies, with one study suggesting a mapping of physical space for integrated services and earmarking budgets for facility renovations.[105] Similar to a mapping, another study suggests calculating the cost of integrated services and prioritizing interventions for training, materials and supervision.[106]

Lack of community involvement[107] was identified as a challenge. To overcome this challenge in Malawi, community SRH-HIV integration committees were formed to support an integration project's sites, effectively fostering linkages between communities and health facilities and strengthening monitoring of integrated service provision.[108]

It should be noted that many study settings experienced an influx of resources to undergo integration, resulting in additional staff, commodities and other supplies, and new infrastructure development.[109] [110] [111] In Kenya, integration incurred an average marginal cost of $841 per site and $48 per female client, with the bulk of integration costs for human resources (initial training ($872), refresher training ($330), mentoring ($902), and supervising ($1636)), while much fewer costs went to other expenses.[112]

Another study found family planning services had the least variation in cost ($Int 6.71-52.24) across sites, while HIV and STI treatment visits had the highest.[113] The study concludes that integration alone does not resolve cost variation among SRH and HIV services, however because fixed costs (human resources, operations) are a large component of facility costs, integration has the potential to lower them and improve efficiencies by consolidating resources. A related study found that "an increase in the range of services per clinical staff decreases costs significantly," the extent of which depends on the

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101 Study of Family Planning and HIV Integrated Services in Five Countries

102 Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

103 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

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105 Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study

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110 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

111 GHAIN Support to RH-HIV Integration in Nigeria: End of Project Monograph

112 Cost, cost-efficiency and cost-effectiveness of integrated family planning and HIV services

113 The Costs of Delivering Integrated HIV and Sexual Reproductive Health Services in Limited Resource Settings

combination of services, with STI and HCT exhibiting economies of scale more than comprehensive SRH and HIV services.[114]

A study in Zambia found **cost savings in integrated sites compared to stand-alone HTC and VMMC sites due to a larger number of clients**, which lowered fixed costs, such as personnel and operations, of service delivery.[115] [116] Further, cost-effectiveness was achieved in one study when staff had the time to test all patients for HIV in one study.[117]

One potential cost savings could come from strengthening referrals for those sites that are not able to have full integration. One study suggests an approach of HIV and family planning counseling prior to referral from one service to another.[118]

PROVIDER NEEDS LEARNINGS

Health care workers (HCW) are considered gatekeepers of new health products and interventions, as their knowledge, attitudes, and practices play a key role in determining the success of HIV prevention product delivery. The importance of providers as influences in reproductive decisions was above that of family or other community members in one study,[119] and the majority of studies included in this review focus heavily on the provider aspect of integration.

Task-shifting was identified as a way to ensure nurses and doctors could deliver comprehensive care. Depending on who is providing which type of care in a specific setting may impact the type of task shifting that could be done. For example, the majority of family planning providers in Kenya and Rwanda, and in Uganda to a lesser extent, are professional nurses or midwives, while in South Africa, auxiliary nurses, or nurse aides, are primarily responsible for delivering family planning services.[120] In these settings, at least 75 percent of family planning providers had received any HIV training, demonstrating far more readiness to integrate HIV testing, care, and treatment services than HIV providers to integrate family planning services. While better trained, in practice family planning providers more often refer clients to HIV testing, rather than provide the service themselves.

Separating out **skilled tasks** from non-skilled is one way to task shift. Efficiencies can be accomplished by having a few key staff members perform more complicated tasks that require additional training, such as IUD and implant fitting or sterilizations while lesser-skilled staff can take on patient screening or counselling.[121] [122] Additionally, counselors could be delivering health talks on SRH issues at HIV clinics

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114 Does integration of HIV and SRH services achieve economies of scale and scope in practice? A cost function analysis of the Integra Initiative

115 Randomized evaluation and cost-effectiveness of HIV and sexual and reproductive health service referral and linkage models in Zambia

116 Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

117 Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

118 Rwandan stakeholder perspectives of integrated family planning and HIV services

119 Fertility intentions and interest in integrated family planning services among women living with HIV in Nyanza Province, Kenya: a qualitative study

120 Study of Family Planning and HIV Integrated Services in Five Countries

121 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

122 Integrating family planning into HIV care in western Kenya: HIV care providers' perspectives and experiences one year following integration

and booking clerks facilitating client screening.[123] However, one study ran into roadblocks task-shifting to support staff, who are underutilized resources, when their job descriptions did not allow for taking on service provision tasks. While security guards were trained to be able to direct clients to services provided at the facility and to condom dispensers outside of it, other staff did not have flexibility to take on new capacities.[124]

Using peers to task-shift, for example health system "navigators" and champions, were identified in several studies as a way to free up nurses' workloads.[125] [126] The navigators gave talks to clients in waiting areas and at community events on SRH and HIV topics, explaining integrated services. They also escorted clients to service points, and follow-up on referrals to ensure clients had accessed services. However, escorting patients from one service to the next was challenging to incorporate into practice in one study, which had an easier time incorporating referral slips.[127] Navigators were used by nurses for activities beyond their original remit—including filing and other administrative tasks. The navigator is similar to the CHW in terms of skills and remuneration.[128]

HIV testing, counseling, and care providers as well as family planning providers tend to be busiest around 11:00am, with greater availability earlier and in the afternoon.[129] **Workload distribution** could create efficiencies when adding a new service, by reorganizing the workload of providers so that their time with clients was more evenly distributed throughout the day.[130] [131] In one study, achieving integration redistributed providers' client loads once they began offering similar service profiles.[132]

Across settings, the majority of HCWs who received training in family planning also received HIV-related training, with those in non-hospital settings more likely to have received both,[133] theoretically because hospital settings have more siloed care. However, the specific type of training (i.e., counseling for HIV-positive women) varies widely across settings.[134] Training on both reproductive health and HIV enhanced provider skills, and increased their awareness of other health problems,[135] and additional training increased continued use of family planning in HIV clinics.[136] Additionally, facilities with at least one staff member trained in both family planning and HIV testing were identified as having increased

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123 Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa.

124 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

125 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

126 Greater involvement of HIV-infected peer-mothers in provision of reproductive health services as "family planning champions" increases referrals and uptake of family planning among HIV-infected mothers

127 Integrating family planning services into HIV care and treatment clinics in Tanzania: evaluation of a facilitated referral model

128 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

129 Study of Family Planning and HIV Integrated Services in Five Countries

130 Study of Family Planning and HIV Integrated Services in Five Countries

131 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

132 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

133 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

134 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

135 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

136 Integration of family planning services into HIV care clinics: Results one year after a cluster randomized controlled trial in Kenya.

readiness to integrate services.[137] One study suggests that clearer criteria should be established to ensure that appropriate personnel are sent to trainings, and that provider capacity in basic family planning service delivery may be weaker than anticipated and should be addressed before training on more complex procedures.[138]

Components of trainings that led to successful integration were discussed in the literature. Building in **agency and self-confidence** in provider training helped manage structural deficits (i.e., lack of rooms).[139] To increase attendance, training sessions were **conducted on-site** in providers' facilities in one study.[140] They also included non-clinical staff (such as clinic receptionists and security guards), along with community stakeholders.[141] **Including community in training** in integrated services better equipped members to play active roles in their facilities.[142] **One-on-one mentorship** was used to guide application of new skills and knowledge learned in training and improve confidence to apply this knowledge, and the importance in having a mentor/mentee relationship built on the desire to learn, patience, trust and respect was also highlighted across studies.[143] [144] [145] [146] **Refresher trainings** were identified as important in multiple studies, often due to high staff turn-over.[147] [148] [149] **Interactive adult learning techniques**, such as role playing and **values clarification**, were valuable for providers who were new to family planning counseling[150] and addressed issues of provider stigma.[151] Integrated training courses for sexual and reproductive health and HIV were also identified as a strategy, whereas most projects had separate training for each (and were Ministry of Health-led).[152]

Training provided on more **systemic issues** was identified as important, such as methods to strengthen referral systems, monitoring and evaluation and record-keeping. Training providers to improve record-keeping practice within the existing system, including **regular feedback sessions**, were held in facilities to inform providers about client statistics in their facilities and underscore the importance of accurate

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137 Determinants of facility readiness for integration of family planning with HIV testing and counseling services: evidence from the Tanzania service provision assessment survey, 2014-2015

138 Expanding contraceptive options for PMTCT clients: a mixed methods implementation study in Cape Town, South Africa

139 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya

140 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

141 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

142 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

143 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa.

144 Exploring experiences in peer mentoring as a strategy for capacity building in sexual reproductive health and HIV service integration in Kenya

145 Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa

146 Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa

147 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

148 Determinants of facility readiness for integration of family planning with HIV testing and counseling services: evidence from the Tanzania service provision assessment survey, 2014-2015

149 A process evaluation of the scale up of a youth-friendly health services initiative in northern Tanzania

150 Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up

151 Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa

152 Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa

record-keeping.[153] [154] [155] Provider training on **monitoring systems** to access stock from central distribution points can ameliorate issues of stock-outs.[156] One study suggested that stock-outs were partly due to staff uninterested and unmotivated to remember to order supplies when stocks were low.[157]

Lastly, **identifying gaps in knowledge in a site**, and training based on those gaps, is critical. In one study with too few dedicated HIV counsellors in service delivery sites, family planning providers were trained to perform HCT.[158]

PROVIDER BEHAVIOR LEARNINGS

The majority of studies reported that providers experienced **greater professional fulfillment and job satisfaction** from integration. Providers reported that because of the more regular positive feedback from clients on integration, constantly changing clientele, confronting new health problems, and improved communication among staff/providers, they had more job satisfaction and were able to provide better quality service delivery.[159] [160] [161] [162] [163] Providers also reported a **convenience factor**, in that they **no longer had to move from room to room**, and that they lost fewer clients after integration due to reduced internal referrals.[164] However, one study reported that staff thought integrating HIV services was too much an added burden on the site and that they were putting themselves at risk by providing those services.[165] Some providers even reported a significantly **reduced workload** due to the combining of resources to support integration (i.e., ability to prescribe long-acting contraception thus seeing fewer return clients, increased numbers of staff and re-distribution of client load.)[166] [167] Other studies found that workload increased among staff who provided all services, and staff turnover was high.[168] One, in Eswatini, described nurses' reluctance to provide new HIV services, considered "emotionally challenging"; they instead defaulted to ART providers for HIV service provision, hindering

[153] Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

[154] Integrating Reproductive Health and HIV Indicators into the Nigerian Health System – Building an Evidence Base for Action

[155] Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up

[156] Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

[157] Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

[158] Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa.

[159] Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

[160] Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

[161] Integrating Family Planning and HIV Services at the Community Level: Formative Assessment with Village Health Teams in Uganda

[162] Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study

[163] Exploring the Feasibility of Service Integration in a Low-Income Setting: A Mixed Methods Investigation into Different Models of Reproductive Health and HIV Care in Swaziland

[164] Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

[165] Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

[166] Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

[167] Integrating Family Planning and HIV Services at the Community Level: Formative Assessment with Village Health Teams in Uganda

[168] Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

full integration.[169] Providers of routine HIV care felt in a better position to offer contraception with their clients because of the rapport and trust they had built.[170]

Several strategies showed success in increasing provider satisfaction with integration. **Teamwork, provider-driven solutions and management**, as well as regular staff meetings were identified as key to provider satisfaction with integration.[171] [172] [173] [174] [175] [176] When teamworking was absent, or supervision defined only in terms of resources (tools, equipment, commodities), with no mention of supporting staff decisions and working through problems together, it had a noticeable impact on the way facilities functioned.[177] Regular staff debriefing or "unwinding meetings" to discuss occupational issues, including stress, may provide a solution to occupational dissatisfaction among staff.[178]

Real-time data collection through a mobile integrated counseling tool that enables real-time data collection influenced CHW motivation and improved accountability.[179] Various **incentives** were mentioned by the literature (i.e., phone minutes); however, the feasibility of scaling employee incentives for providing integrated services was not discussed.[180] [181] The **flexibility of supervisors** and managers facilitated necessary adjustments to providers' work schedules, allocation of clients and commodities, ensured mentorship on necessary skills, and contributed to a positive environment for providers.[182] [183]

While there was mention of the need for non-stigmatizing services and the importance of provider attitudes in successful integration,[184] little detail was provided on the specifics of strategies to directly address provider attitudes related to stigma beyond values clarification as part of provider trainings. In one setting, staff were meant to rotate regularly between services, to keep them multi-skilled, but rotation was limited partly by **religiously-motivated conscientious objection** by some staff who refused

169 Exploring the Feasibility of Service Integration in a Low-Income Setting: A Mixed Methods Investigation into Different Models of Reproductive Health and HIV Care in Swaziland

170 Integrating family planning into HIV care in western Kenya: HIV care providers' perspectives and experiences one year following integration

171 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya

172 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

173 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

174 Determinants of facility readiness for integration of family planning with HIV testing and counseling services: evidence from the Tanzania service provision assessment survey, 2014-2015

175 Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up

176 Exploring the Feasibility of Service Integration in a Low-Income Setting: A Mixed Methods Investigation into Different Models of Reproductive Health and HIV Care in Swaziland

177 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

178 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

179 Family Planning Counseling in Your Pocket: A Mobile Job Aid for Community Health Workers in Tanzania

180 Family Planning Counseling in Your Pocket: A Mobile Job Aid for Community Health Workers in Tanzania

181 Expanding HIV testing and counselling into communities: Feasibility, acceptability, and effects of an integrated family planning/HTC service delivery model by Village Health Teams in Uganda

182 Exploring experiences in peer mentoring as a strategy for capacity building in sexual reproductive health and HIV service integration in Kenya

183 Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

184 Linking sexual and reproductive health and HIV interventions: a systematic review

to provide condoms or family planning services, not wanting to provide family planning to certain types of clients (i.e., young, unmarried).[185]

CLIENT BEHAVIOR LEARNINGS

The literature review focus on client behavior was on behavior towards integrated services, and not on specific family planning or HIV products. Clients expressed a number of barriers and enablers to receiving integrated services, including: cost of services, clinic hours, provider friendliness and respect, presence of peers, confidentiality, availability of commodity supply at the clinic, and a desire to go where they already receive routine care.[186] [187] [188] [189] There was mixed evidence on whether transport is an issue, but having services more conveniently located was clearly a factor.[190] Partner opposition to family planning can also have an impact, with one study finding that male partner opposition to modern contraception is a signal that men and women accessing HIV services in Nigeria need to be targeted for family planning.[191]

Additionally, integrated models can offer more **privacy and confidentiality**,[192] [193] and more clients in one study were willing to be tested for HIV.[194] [195] One study providing family planning in an HIV clinic found that because multiple women were counselled together at a family planning clinic, an HIV clinic offered more confidentiality.[196]

The Link Up Project: Integrated SRH and HIV services for young key populations

The Link Up Project, a three-year initiative in Bangladesh, Burundi, Ethiopia, Myanmar, and Uganda, integrated comprehensive SRHR and HIV services for youth 10-24 years old through putting youth at the forefront.[197] For instance, peer support groups provided education and counseling on SRH and HIV, and included vouchers for referrals to health services in the community, which led to uncharacteristically high service completion rates: of the nearly 50 percent of youth who received vouchers through peer support groups, 81 percent used them to seek health services.[198] Along with creating demand for services, Link Up trained providers in youth-friendly integrated care and youth acted as liaisons between

185 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.

186 Perception of the Girl Power clinic versus other settings in Malawi: a qualitative study

187 Modern contraceptive utilization among female ART attendees in health facilities of Gimbie town, West Ethiopia

188 HIV-Positive Men's Experiences with Integrated Family Planning and HIV Services in Western Kenya: Integration Fosters Male Involvement

189 Experiences of stigma among women living with HIV attending sexual and reproductive health services in Kenya: a qualitative study

190 HIV-Positive Men's Experiences with Integrated Family Planning and HIV Services in Western Kenya: Integration Fosters Male Involvement

191 Unmet Need for Contraception among Clients of FP/HIV Integrated Services in Nigeria: The Role of Partner Opposition

192 Integrating Family Planning and HIV Services at the Community Level: Formative Assessment with Village Health Teams in Uganda

193 Perception of the Girl Power clinic versus other settings in Malawi: a qualitative study

194 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

195 Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

196 Experiences of stigma among women living with HIV attending sexual and reproductive health services in Kenya: a qualitative study

197 Linking Sexual and Reproductive Health and Rights and HIV Services for Young People: The Link Up Project

198 Increasing Uptake of HIV, Sexually Transmitted Infection, and Family Planning Services, and Reducing HIV-Related Risk Behaviors Among Youth Living With HIV in Uganda

their peers and the health system. This model saw significant increases in every indicator, including modern contraceptive use, comprehensive knowledge of HIV, condom use at last sex, and self-efficacy.

MESSAGING & COMMUNICATION LEARNINGS

Promoting the full range of services provided in a facility was important, especially when they had not previously been offered. Messaging with the full range of services (dual protection, emergency contraception, female condoms and medical male circumcision) available was printed on posters, pamphlets and on **health systems navigator t-shirts,** making them visible to clients.[199] **Daily patient education sessions** promoting the availability of family planning services were conducted using both oral and visual methods in one study; this method, combined with electronic medical records systems that walked providers through clinical interactions and decision-making, are credited with fostering integration in one clinic.[200]

Prior to initiating any new services at a clinic, it was important to **openly discuss and dispel myths about the service with all staff**, even if they may not be directly involved with family planning service provision.[201] Prior to the introduction of each new service (contraceptive implants, cervical cancer screening and cryotherapy), ensuring all staff understood correct and consistent messaging was key to integration success.[202] **Integrated messaging can reduce stigma and discrimination of HIV** because provision of HIV services is not associated only with HIV care as a stand-alone—integrated service delivery incorporated HIV services as one of many within a facility.[203] In one study, family planning clinics that introduced an interactive toolkit that broadened contraceptive counseling to include discussions on HIV and STI prevention, testing, and treatment led to increased uptake of HIV testing.[204] Literature did not discuss whether providing HIV care in family planning facilities brings with it additional issues of stigma, thus affecting uptake of services. Providers highlighted the need to revise ART information, education and communication (IEC) materials to include data on contraception as a reminder for them to talk to clients about family planning.[205]

Peer educators communicating key messages led to increased uptake of HIV and family planning services,[206] and including additional topics, such as income-generating activities, in peer-led support groups may lead to greater interest and retention in groups.[207]

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199 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa.

200 Contraceptive use and pregnancy rates among women receiving antiretroviral therapy in Malawi: a retrospective cohort study

201 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

202 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

203 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

204 Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients

205 Exploring the Feasibility of Service Integration in a Low-Income Setting: A Mixed Methods Investigation into Different Models of Reproductive Health and HIV Care in Swaziland

206 Increasing Uptake of HIV, Sexually Transmitted Infection, and Family Planning Services, and Reducing HIV-Related Risk Behaviors Among Youth Living With HIV in Uganda

207 Increasing Uptake of HIV, Sexually Transmitted Infection, and Family Planning Services, and Reducing HIV-Related Risk Behaviors Among Youth Living With HIV in Uganda

Several strategies were explored specific to counseling. Ideal counseling may include **picking and choosing which interventions to focus on to not overwhelm clients**, which could have particular importance when discussing both contraceptives and HIV prevention methods, with one study explaining: "Discussing all available methods of contraception in one counseling session may overwhelm couples with information; since knowledge of OCPs [*oral contraceptive pills*] and injections is already very high, focusing on IUD and implant education, as well as BTL and vasectomy where available, for couples wanting to limit or delay childbearing may be a more practical and impactful strategy."[208]

Male partner involvement in contraceptive counseling in an integrated service delivery model was identified as important to whether a woman takes up contraception, chooses a more effective prevention method, and reduces discontinuation.[209] [210] [211] A study in Kenya that integrated couples' contraceptive counseling into HIV care fostered communication with partners about fertility and HIV and could increase contraceptive use and outcomes. Another study recommends family planning counseling with male partners that discusses gender and cultural norms around contraception and helps clients with informed decision-making.[212] One intervention used three videos to initiate couples' counseling: on long-acting contraceptive methods, future planning behaviors, and a "control" video, that included more general health information. While the contraceptive methods video was associated with increased uptake, the study found a one-time video cannot sustain adherence.[213]

Counseling should include a **self-efficacy component** to increase comfortability in speaking with providers.[214] Research in Uganda noted that knowledge gained from individual and group counseling with AGYW on HIV, engaging in healthy behaviors, condom use, and HIV disclosure improved their comfort level with providers.

208 Contraceptive discontinuation and switching among couples receiving integrated HIV and family planning services in Lusaka, Zambia

209 Contraceptive discontinuation and switching among couples receiving integrated HIV and family planning services in Lusaka, Zambia

210 Unintended Pregnancy among HIV Positive Couples Receiving Integrated HIV Counseling, Testing, and Family Planning Services in Zambia

211 Does integrating family planning into HIV care and treatment impact intention to use contraception? Patient perspectives from HIV-infected individuals in Nyanza Province, Kenya

212 Unmet Need for Contraception among Clients of FP/HIV Integrated Services in Nigeria: The Role of Partner Opposition

213 Contraceptive discontinuation and switching among couples receiving integrated HIV and family planning services in Lusaka, Zambia

214 Increasing Uptake of HIV, Sexually Transmitted Infection, and Family Planning Services, and Reducing HIV-Related Risk Behaviors Among Youth Living With HIV in Uganda

KEY LEARNINGS SUMMARY

Integration of family planning and HIV services leads to satisfaction from clients and providers,[215] [216] increased HIV and contraceptive service uptake[217] [218] [219] [220] [221] [222] [223] [224] and continued use of HIV care, treatment and prevention, as well as contraception.[225] [226] [227]

The overarching message from the existing evidence on integration is that the *setup of and level of support received in a clinic matters most to both clients and providers*. Integration can strengthen quality of care, such as by reducing queues for multiple services, enhancing confidentiality, and meeting the holistic SRH needs of clients, but the degree of success in integrated settings can still depend on interpersonal factors like provider attitudes and a supportive work environment. While some studies saw improvements in service utilization through partial integration, *the majority of research showed the most success in patient outcomes when full, or provider-level, integration was achieved*.

WHAT WE KNOW WORKS WITH INTEGRATION OF FAMILY PLANNING & HIV SERVICES

POLICY	Key learning	Implementation of learning
1. Streamline national and local policies and funding mechanisms	Funding streams (i.e., PEPFAR and Global Fund) are slow to align with policies on integration, and instead fund HIV and FP separately. Alignment of national and local health policies improves coordination and service delivery.	Through the SRHR and HIV Linkages Project,[228] an initiative to scale up national integration in Botswana, Lesotho, Malawi, Namibia, Eswatini, Zambia, and Zimbabwe, mappings of national policies, strategies, and plans identified best practices, challenges, and linkages prior to integration implementation and informed integration policies and service delivery standards.
2. Technical Working Groups catalyze stakeholder	Formation of Technical Working Groups (TWGs) supports the MoH and ensures accountability, responsibility, and buy-in for integration.	In Ethiopia, the Family Planning/HIV Integration TWG identified pilot regions for integration and held a national orientation workshop as well as regional sensitization workshops. It convened the Ministry of Health and other key stakeholders to ensure policy support for FP/HIV integration in the country's SRH

215 Study of Family Planning and HIV Integrated Services in Five Countries. See full provider section for more information.

216 The Relationship Between Service Integration and Client Satisfaction: A Mixed Methods Case Study Within HIV Services in a High Prevalence Setting in Africa

217 Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients

218 GHAIN Support to RH-HIV Integration in Nigeria: End of Project Monograph

219 Linking family planning with HIV/AIDS interventions: a systematic review of the evidence

220 Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature

221 Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study

222 Integrating Reproductive Health and HIV Indicators into the Nigerian Health System – Building an Evidence Base for Action

223 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

224 Impact of Integrated Family Planning and HIV Care Services on Contraceptive Use and Pregnancy Outcomes: A Retrospective Cohort Study

225 Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients

226 A Randomized Controlled Trial to Promote Long-Term Contraceptive Use Among HIV-Serodiscordant and Concordant Positive Couples in Zambia

227 Integrating family planning into HIV care in western Kenya: HIV care providers' perspectives and experiences one year following integration

228 Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa

support for integration		Strategy and in national guidelines on HIV testing and counseling, PMTCT, and ART. The TWG brought to the table diverse groups, including government, civil society, and international implementing partners.[229]
SERVICE DELIVERY	**Key learning**	**Implementation of learning**
3. People-centered management can mitigate commodity shortages	More frequent commodity shortages with poor resource and people management at integrated facilities.	A study in Kenya[230] found that one integrated facility with strong resource management did not experience serious shortages of HIV or contraceptive commodities. By contrast, other facilities in the same study that managed their own procurement faced frequent stockouts of long-acting contraceptives and HIV test kits, suggesting low staff motivation to order supplies. Greater support for staff agency and teamwork can help address structural challenges like commodity shortages.
PROVIDERS	**Key learning**	**Implementation of learning**
4. Task-shifting eases workload of overburdened providers	Task-shifting can be achieved efficiently and effectively by separating skilled tasks from non-skilled.	A study in Malawi[231] employed key staff members to perform more complex tasks that require additional training, such as IUD and implant insertions, while lesser-skilled staff took on screening and counseling clients. Facilities in South Africa[232] used health system "navigators" to deliver talks on integrated SRH and HIV services in waiting areas and at community events, escort clients to services, and follow up on referrals, which allotted nurses more time for other duties.
5. Need for management strategies to address consultation times and staff shortages	Longer consultation times & frequent staff shortages increase provider workloads and undermine services offered.	A study in Kenya[233] found longer consultation times for integrated services (approximately double the time) than for family planning-only services. In another study,[234] high staff turnover preceded a steep decline in integration performance, while remaining staff omitted certain services to reduce workload. Strategies identified to address this include regular staff debriefing or "unwinding meetings";[235] daily team meetings to allocate staff according to client flow; team-working; flexible hours; and managing appointment times.

229 Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up

230 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya

231 Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi

232 Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

233 Impact of integration of sexual and reproductive health services on consultation duration times: results from the Integra Initiative

234 Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya

235 Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

6. Need for "soft skills" in provider training	In provider training, frame integration as a client-management approach, or person-centered care, rather than an imposed clinical protocol	A values clarification component to training on integrated service delivery can address provider stigma and opposition to integration, such as reluctance to counsel clients on sexual behavior.[236] One study in Kenya emphasized the need to build in an agency/confidence component to manage structural site deficits (i.e. lack of rooms), because it facilitates integrated client-based care regardless of facility resources.[237]
CLIENTS	**Key learning**	**Implementation of learning**
7. Ensure full range of services is known and accessible by clients	Use innovative ways to ensure IEC messaging promotes the full range of services on offer, especially when new services added.	In a study in South Africa,[238] health systems navigators promoted messaging with the full range of integrated services (dual protection, emergency contraception, female condoms, and VMMC) on posters, pamphlets and t-shirts, making them visible to clients they could then escort to their desired services. Incorporating IEC materials in a variety of ways reminds providers to discuss new services with client.
8. Familiarity with facilities indicates preferred service delivery setting	Clients prefer to receive services where they already get care (i.e., if HIV-positive, prefer services from an HIV-specific facility).	In studies in Ethiopia[239] and Kenya,[240] ART clients preferred family planning services at ART clinics where they were receiving care, indicating that providing family planning with HIV care and treatment is feasible. Providers should ensure clients receive targeted information about family planning and HIV drug interactions to quell concerns.
M&E	**Key learning**	**Implementation of learning**
9. National M&E tools should add indicators that integrate HIV-FP	Integration of M&E tools and registers can enhance planning, accountability, and client monitoring	In Nigeria,[241] [242] choosing the right M&E indicators to track, with minimal additional indicators, was important, i.e. number of family planning clients tested for HIV and proportion of HIV clients screened for unmet family planning need, as was adapting indicators to existing national M&E tools.

[236] Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa

[237] Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya

[238] Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa

[239] Modern contraceptive utilization among female ART attendees in health facilities of Gimbie town, West Ethiopia

[240] HIV-Positive Men's Experiences with Integrated Family Planning and HIV Services in Western Kenya: Integration Fosters Male Involvement

[241] Integrating Reproductive Health and HIV Indicators into the Nigerian Health System – Building an Evidence Base for Action

[242] GHAIN Support to RH-HIV Integration in Nigeria: End of Project Monograph

KNOWLEDGE GAPS

Very little available literature focused on integration of HIV prevention and family planning, with the vast majority of studies focused on HIV testing, care and treatment. PMM completed an initial analysis on the introduction of oral PrEP in family planning settings; additional qualitative work to understand the specifics of providing a biomedical prevention product alongside family planning is needed to fully answer key questions on service delivery integration. Several knowledge gaps are questions PMM posed at the outset of the project that were not answered by available literature, and several arose from partial information in the literature.

WHAT WE DON'T KNOW ABOUT INTEGRATION OF FAMILY PLANNING & HIV FROM AVAILABLE LITERATURE

POLICY	
KEY QUESTION	**KNOWLEDGE GAPS**
What are recommendations for overcoming integration of HIV prevention with family planning policy barriers and ***supporting an enabling environment?***	How are current integration policies applied today in countries that have them? (*Note: PMM policy analysis will provide insight*). How can and should HIV prevention products be incorporated into national policies on integration?
SERVICE DELIVERY	
KEY QUESTION	**KNOWLEDGE GAPS**
Are family planning services viable platforms for HIV prevention delivery, are they able to/do they want to bundle with HIV, ***and how can we improve efficiencies with bundling?***	How can visit time be reduced in an integrated setting while including comprehensive information? What are the barriers/enablers of providing an HIV prevention product in a fully vs. partially integrated setting? What are the unique needs of each? What type of community engagement work needs to be done when a new prevention product is introduced to an existing family planning setting? What are the additional costs of introducing an HIV prevention product in a family planning setting?
PROVIDER NEEDS	
KEY QUESTION	**KNOWLEDGE GAPS**
What type of training and support do providers need to facilitate the delivery of HIV prevention in family planning settings or vice versa?	What is the ideal task-shifting model by setting, and what are other successful approaches to optimizing provider workload in integrated settings?
PROVIDER BEHAVIOR	
KEY QUESTION	**KNOWLEDGE GAP**

What are provider barriers, attitudes and concerns to delivering HIV services alongside family planning, and ***what are recommendations or interventions that can be implemented or have been implemented to reduce barriers and address provider concerns?***	What are effective interventions to improve quality of provider-client interactions? What are provider barriers, attitudes and concerns to receiving/delivering HIV prevention alongside a contraceptive injection, implant, pill, etc. (injection/insert site issues, time, etc.)? Other than technical/clinical training, what kind of behavioral tools (e.g. counseling) may be needed to prepare providers for new prevention products? What are the design levers that can inform the development of universal guidelines for influencing behavior of healthcare providers?
CLIENT BEHAVIOR	
KEY QUESTION	**KNOWLEDGE GAP**
Where do women 15-24 prefer to receive integrated family planning and HIV services? ***What are consumer barriers, attitudes and concerns*** about receiving HIV services family planning?	What HIV prevention/family planning integration models have been effective at reaching AGYW? Are there observed differences among AGYW with different characteristics (i.e., age, urban v. rural setting) in terms of where they would like to access services? What are consumer barriers, attitudes and concerns about receiving/delivering HIV prevention alongside a contraceptive injection, implant, pill, etc. (injection/insert site issues, time, etc.)?
DEMAND GENERATION & COMMUNICATION	
KEY QUESTION	**KNOWLEDGE GAP**
What type of messaging and communications strategies have been used with integrated services, and ***what has been successful***?	What are the necessary messages/information on integration to convey to AGYW clients during a clinic visit?

CONCLUSION

This review comprises part of a package of PMM analyses on HIV/SRH integration, and will be complemented by other analyses that include: a literature review on provider barriers/enablers to HIV prevention services; review of PrEP and family planning policies and guidelines; review of human-centered design research on HIV prevention for AGYW in SSA; and in-depth interviews with projects and programs on HIV prevention and family planning integration and provider training requirements in SSA.

Together, these resources capture a multifaceted view of integration that includes the most recent evidence on what works and what question remain. PMM plans to draw from actionable insights identified in these analyses to propose recommendations to policymakers and implementers for strengthening integration of HIV prevention in family planning settings, particularly for AGYW, and informing provider training and development. Optimizing integrated services should pave the way for faster, more effective, client-centered delivery of HIV prevention and family services and ultimately meet the sexual and reproductive health needs and desires of women and girls globally.

ANNEX

#	Study	Authors	Journal/Source	Year	Country	Age Range
1	Integration of family planning into HIV services: a synthesis of recent evidence	Wilcher, Rose; Hoke, Theresa; Adamchak, Susan E.; Cates, Willard Jr	AIDS	2013	N/A	N/A
2	Integration of HIV/AIDS services with maternal, neonatal and child health, nutrition, and family planning services	Lindegren ML et al.	Cochrane Database Syst Rev.	2012	N/A	N/A
3	Integration of HIV and maternal healthcare in a high HIV-prevalence setting: analysis of client flow data over time in Swaziland	Birdthistle IJ et al.	BMJ Open.	2014	Eswatini	12+
4	Randomized evaluation and cost-effectiveness of HIV and sexual and reproductive health service referral and linkage models in Zambia	Hewett PC et al.	BMC Public Health	2016	Zambia	18+
5	Family Planning Counseling in Your Pocket: A Mobile Job Aid for Community Health Workers in Tanzania.	Agarwal S et al.	Glob Health Sci Pract.	2016	Tanzania	15+
6	An urgent need for integration of family planning services into HIV care: the high burden of unplanned pregnancy, termination of pregnancy, and limited contraception use among female sex workers in Côte d'Ivoire	Schwartz S et al.	JAIDS	2015	Cote d'Ivoire	18+
7	Integration of family planning services into HIV care clinics: Results one year after a cluster randomized controlled trial in Kenya.	CR Cohen et al.	PLoS One	2017	Kenya	18-45
8	Contraceptive discontinuation and switching among couples receiving integrated HIV and family planning services in Lusaka, Zambia.	L Haddad et al.	AIDS	2013	Zambia	18-45
9	Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study	Richard Mutemwa et al.	BMC Health Serv Res.	2013	Kenya	N/A

10	Need, demand and missed opportunities for integrated reproductive health–HIV care in Kenya and Swaziland: evidence from household surveys	Joelle Mak et al.	AIDS	2013	Kenya, Eswatini	18-49
11	Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa.	Smit JA et al.	BMC Health Serv Res.	2012	South Africa	31-68
12	Service delivery characteristics associated with contraceptive use among youth clients in integrated voluntary counseling and HIV testing clinics in Kenya	Baumgartner JN et al.	AIDS Care	2012	Kenya	15-24
13	Integrating family planning into HIV care in western Kenya: HIV care providers' perspectives and experiences one year following integration	Newmann SJ et al.	AIDS Care	2016	Kenya	N/A
14	Does Integrating Family Planning into HIV Services Improve Gender Equitable Attitudes? Results from a Cluster Randomized Trial in Nyanza, Kenya.	Newmann SJ et al.	AIDS Behav.	2016	Kenya	N/A
15	Does integrating family planning into HIV care and treatment impact intention to use contraception? Patient perspectives from HIV-infected individuals in Nyanza Province, Kenya	Newmann SJ et al.	Int J Gynaecol Obstet	2013	Kenya	18-45
16	Developing a system to monitor family planning and HIV service integration: results from a pilot test of indicators.	Adamchak SE, Okello FO, Kaboré I	J Fam Plann Reprod Health Care	2016	Ethiopia, Rwanda, Tanzania, Uganda	N/A
17	Numbers, systems, people: how interactions influence integration. Insights from case studies of HIV and reproductive health services delivery in Kenya.	SH Mayhew et al.	Health Policy Plan.	2017	Kenya	N/A
18	Unintended Pregnancy among HIV Positive Couples Receiving Integrated HIV Counseling, Testing, and Family Planning Services in Zambia	Kristin M. Wall et al.	PLoS One	2013	Zambia	18-45

19	Pilot study of home-based delivery of HIV testing and counseling and contraceptive services to couples in Malawi	S Becker et al.	BMC Public Health	2014	Malawi	15-49
20	Are HIV and reproductive health services adapted to the needs of female sex workers? Results of a policy and situational analysis in Tete, Mozambique	Yves Lafort et al.	BMC Health Services Research	2016	Mozambique	18+
21	Integration of HIV and reproductive health services in public sector facilities: analysis of client flow data over time in Kenya	Birdthistle IJ et al.	BMJ Global Health	2018	Kenya	12+
22	Developing a model for integrating sexual and reproductive health services with HIV prevention and care in KwaZulu-Natal, South Africa.	C Milford et al.	Reproductive Health	2018	South Africa	15-49
23	Provider understandings of and attitudes towards integration: implementing an HIV and sexual and reproductive health service integration model, South Africa	C Milford et al.	African Journal of AIDS Research	2018	South Africa	N/A
24	Implementation of a sexual and reproductive health service integration model: South African providers' reports	C Milford et al.	Cogent Medicine	2019	South Africa	N/A
25	Unmet Need for Contraception among Clients of FP/HIV Integrated Services in Nigeria: The Role of Partner Opposition	Chinelo C. Okigbo et al.	Afr J Reprod Health	2014	Nigeria	18-45
26	Integration of STI and HIV Prevention, Care, and Treatment into Family Planning Services: A Review of the Literature	Kathryn Church and Susannah H. Mayhew	Studies in Family Planning	2009	N/A	N/A
27	Linking family planning with HIV/AIDS interventions: a systematic review of the evidence.	AB Spaulding et al.	AIDS	2009	N/A	N/A
28	Linking sexual and reproductive health and HIV interventions: a systematic review	Caitlin E Kennedy, AB Spaulding et al.	JIAS	2010	N/A	N/A
29	Integration of HIV/AIDS Services with Maternal, Neonatal and Child Health, Nutrition, and Family Planning Services	Karolina Lisy	Public Health Nursing	2013		N/A

30	Impact of integration of sexual and reproductive health services on consultation duration times: results from the Integra Initiative	Mariana Siapka et al.	Health Policy Plan.	2017	Kenya	N/A
31	Exploring experiences in peer mentoring as a strategy for capacity building in sexual reproductive health and HIV service integration in Kenya	Charity Ndwiga et al.	BMC Health Services Research	2014	Kenya	<30 to >50
32	Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients	Kathryn Church et al.	Studies in Family Planning	2017	Kenya	15-49
33	Exploring the Feasibility of Service Integration in a Low-Income Setting: A Mixed Methods Investigation into Different Models of Reproductive Health and HIV Care in Swaziland	Kathryn Church et al.	PLoS One	2015	Eswatini	18+
34	A national evaluation using standardised patient actors to assess STI services in public sector clinical sentinel surveillance facilities in South Africa	Kohler PK et al.	Sex. Transm. Infect.	2017	South Africa	N/A
35	Use of HIV-Related Services and Modern Contraception among Women of Reproductive Age, Rakai Uganda	Fredrick Makumbi et al.	Afr J Reprod Health	2010	Uganda	15-49
36	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	Kiersten Johnson, Ilona Varallyay & Paul Ametepi	USAID	2012	Kenya, Namibia, Rwanda, Tanzania, Uganda	N/A
37	Delivering Prevention Interventions to People Living with HIV in Clinical Care Settings: Results of a Cluster Randomized Trial in Kenya, Namibia, and Tanzania	Pamela Bachanas et al.	AIDS Behav.	2016	Kenya, Namibia, Tanzania	18+
38	Health Systems Integration of Sexual and Reproductive Health and HIV Services in Sub-Saharan Africa: A Scoping Study	Rebecca Hope et al.	JAIDS	2014	Kenya, Nigeria, Tanzania, Rwanda, Mozambique	N/A

39	GHAIN Support to RH-HIV Integration in Nigeria: End of Project Monograph	Global HIV/AIDS Initiative Nigeria (GHAIN)	FHI 360	2012	Nigeria	N/A
40	Integrating Reproductive Health and HIV Indicators into the Nigerian Health System – Building an Evidence Base for Action	Ogo Chukwujekwu et al.	Afr J Reprod Health	2010	Nigeria	N/A
41	Rolling Out of Tenofovir Gel in Family Planning Clinics: The CAPRISA 008 Implementation Trial	Leila E. Mansoor, Kathryn T. Mngadi & Quarraisha Abdool Karim	The CAPRISA Clinical Trials: HIV Treatment and Prevention (book)	2017	South Africa	18+
42	Integration of family planning services into HIV care and treatment in Kenya: a cluster-randomized trial	D Grossman et al.	AIDS	2013	Kenya	18-45
43	Integrating family planning services into HIV care and treatment clinics in Tanzania: evaluation of a facilitated referral model	Baumgartner JN et al.	Health Policy Plan.	2014	Tanzania	18-45
44	High rate of unplanned pregnancy in the context of integrated family planning and HIV care services in South Africa	Adeniyi OV et al.	BMC Health Serv Res.	2018	South Africa	<21 to 44
45	Integrating reproductive health services into HIV care: strategies for successful implementation in a low-resource HIV clinic in Lilongwe, Malawi	Phiri S et al.	J Fam Plann Reprod Health Care	2016	Malawi	15-49
46	Integrating family planning services into HIV care: use of a point-of-care electronic medical record system in Lilongwe, Malawi	Tweya H et al.	Glob Health Action	2017	Malawi	15-49
47	Contraceptive use and pregnancy rates among women receiving antiretroviral therapy in Malawi: a retrospective cohort study	Tweya H et al.	Reproductive Health	2018	Malawi	15-49
48	Longitudinal study of correlates of modern contraceptive use and impact of HIV care programmes among HIV concordant and serodiscordant couples in Rakai, Uganda	Brahmbhatt H et al.	J Fam Plann Reprod Health Care	2014	Uganda	15-49

49	Meeting the Reproductive Health Needs of Female Key Populations Affected by HIV in Low- and Middle-Income Countries: A Review of the Evidence	Nicole B. Ippoliti, Geeta Nanda, Rose Wilcher	Studies in Family Planning	2017	N/A	N/A
50	Challenges encountered in providing integrated HIV, antenatal and postnatal care services: a case study of Katakwi and Mubende districts in Uganda	Ahumuza SE et al.	Reproductive Health	2016	Uganda	18+ (most 18-24)
51	Cost, cost-efficiency and cost-effectiveness of integrated family planning and HIV services	SB Shade et al.	AIDS	2013	Kenya	N/A
52	Improving referrals and integrating family planning and HIV services through organizational network strengthening	JC Thomas et al.	Health Policy Plan.	2016	Ethiopia	18-49
53	Integration opportunities for HIV and family planning services in Addis Ababa, Ethiopia: an organizational network analysis	JC Thomas et al.	BMC Health Serv Res.	2014	Ethiopia	18-49
54	Rwandan stakeholder perspectives of integrated family planning and HIV services	Kristin M. Wall et al.	Int J Health Plann Manage.	2018	Rwanda	N/A
55	Increasing Uptake of HIV, Sexually Transmitted Infection, and Family Planning Services, and Reducing HIV-Related Risk Behaviors Among Youth Living With HIV in Uganda	L Vu et al.	J Adolesc Health	2017	Uganda	15-24
56	Greater involvement of HIV-infected peer-mothers in provision of reproductive health services as "family planning champions" increases referrals and uptake of family planning among HIV-infected mothers	Mudiope P et al.	BMC Health Serv Res.	2017	Uganda	N/A
57	Integration of HIV prevention into Sexual and Reproductive Health services in an urban setting in South Africa	Shireen Parker & Vera Scott	Afr J Prim Health Care Fam Med.	2013	South Africa	N/A
58	Fertility intentions and interest in integrated family planning services among women living with HIV in Nyanza Province, Kenya: a qualitative study	Harrington EK et al.	Infect Dis Obstet Gynecol	2012	Kenya	18-42

59	Experiences of stigma among women living with HIV attending sexual and reproductive health services in Kenya: a qualitative study	Manuela Colombini et al.	BMC Health Serv Res.	2014	Kenya	18+
60	Comparing Youth-Friendly Health Services to the Standard of Care Through "Girl Power-Malawi": A Quasi-Experimental Cohort Study	Rosenberg NE et al.	JAIDS	2018	Malawi	15-24
61	Perception of the Girl Power clinic versus other settings in Malawi: a qualitative study	Twambilile Phanga et al.	AIDS Impact 2019	2019	Malawi	15-24
62	Fertility goal-based counseling increases contraceptive implant and IUD use in HIV discordant couples in Rwanda and Zambia	Naw H. Khu et al.	Contraception	2013	Rwanda, Zambia	18-45
63	Integrating Family Planning and HIV in Ethiopia: An Analysis of Pathfinder's Approach and Scale-Up	Pathfinder International	USAID, Pathfinder, JSI	2011	Ethiopia	N/A
64	Study of Family Planning and HIV Integrated Services in Five Countries	Susan Adamchak et al.	FHI 360, USAID	2010	Ethiopia, Kenya, Rwanda, South Africa, Uganda	18+
65	Fertility and contraceptive decision-making and support for HIV infected individuals: client and provider experiences and perceptions at two HIV clinics in Uganda	Rhoda K Wanyenze et al.	BMC Public Health	2013	Uganda	15-49
66	Fertility desires and unmet need for family planning among HIV infected individuals in two HIV clinics with differing models of family planning service delivery	Rhoda K Wanyenze et al.	BMC Women's Health	2015	Uganda	18+
67	Correlates of reported modern contraceptive use among postpartum HIV-positive women in rural Nigeria: an analysis from the MoMent prospective cohort study	Chinaeke EE et al.	Reproductive Health	2019	Nigeria	15+
68	A Randomized Controlled Trial to Promote Long-Term Contraceptive Use Among HIV-Serodiscordant	Rob Stephenson et al.	J Women's Health	2011	Zambia	18-45

	and Concordant Positive Couples in Zambia					
69	Determinants of facility readiness for integration of family planning with HIV testing and counseling services: evidence from the Tanzania service provision assessment survey, 2014-2015	Bintabara D, Nakamura K & Seino K	BMC Health Serv Res.	2017	Tanzania	N/A
70	Assessing the need and capacity for integration of Family Planning and HIV counseling and testing in Tanzania	Awadhi B et al.	Pan Afr Med J.	2012	Tanzania	15+
71	Modern contraceptive utilization among female ART attendees in health facilities of Gimbie town, West Ethiopia	Addisu Polisi et al.	Reproductive Health	2014	Ethiopia	15-49
72	HIV-Positive Men's Experiences with Integrated Family Planning and HIV Services in Western Kenya: Integration Fosters Male Involvement	Rena Patel et al.	AIDS Patient Care STDS	2014	Kenya	27-55
73	Integrating Family Planning and HIV Services in Western Kenya: The Impact on HIV-Infected Patients' Knowledge of Family Planning and Male Attitudes Towards Family Planning	Maricianah Onono et al.	AIDS Care	2015	Kenya	18-45
74	Impact of Integrated Family Planning and HIV Care Services on Contraceptive Use and Pregnancy Outcomes: A Retrospective Cohort Study	Rose J. Kosgei et al.	JAIDS	2011	Kenya	15-49
75	Changes in contraceptive use following integration of family planning into ART Services in Cross River State, Nigeria	McCarraher DR et al.	Studies in Family Planning	2011	Nigeria	18-45
76	Expanding contraceptive options for PMTCT clients: a mixed methods implementation study in Cape Town, South Africa	Theresa Hoke et al.	Reproductive Health	2014	South Africa	18-53

77	Integrating reproductive and child health and HIV services in Tanzania: Implication to policy, systems and services	Prince Mutalemwa et al.	Tanzania Journal of Health Research	2013	Tanzania	N/A
78	Linking Sexual and Reproductive Health and Rights and HIV in Southern Africa	UNAIDS, UNFPA		2015	Botswana, Lesotho, Malawi, Namibia, Eswatini, Zambia, Zimbabwe	N/A
79	Integrating Family Planning and HIV Services at the Community Level: Formative Assessment with Village Health Teams in Uganda	Aurélie Brunie et al.	Afr J Reprod Health	2017	Uganda	N/A
80	Contraceptive Use and Method Preference among Women in Soweto, South Africa: The Influence of Expanding Access to HIV Care and Treatment Services	Angela Kaida et al.	PLoS One	2010	South Africa	18-44
81	Family planning practices and pregnancy intentions among HIV-positive and HIV-negative postpartum women in Swaziland: a cross sectional survey	Charlotte E Warren et al.	BMC Pregnancy Childbirth	2013	Eswatini	18-45
82	A process evaluation of the scale up of a youth-friendly health services initiative in northern Tanzania	Jenny Renju et al.	JIAS	2010	Tanzania	N/A
83	Female sex workers in Kigali, Rwanda: a key population at risk of HIV, sexually transmitted infections, and unplanned pregnancy	Rosine Ingabire et al.	Int J STD AIDS	2019	Rwanda	N/A
84	Estimating the hypothetical dual health impact and cost-effectiveness of the Woman's Condom in selected sub-Saharan African countries	Mercy Mvundura et al.	Int J Women's Health	2015	Botswana, Cameroon, Kenya, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda,	15-49

					Zambia, Zimbabwe	
85	Integration of Family Planning Services into HIV Care and Treatment Services: A Systematic Review	Sabina A. Haberlen et al.	Studies in Family Planning	2017	N/A	N/A
86	The Relationship Between Service Integration and Client Satisfaction: A Mixed Methods Case Study Within HIV Services in a High Prevalence Setting in Africa	Kathryn Church et al.	AIDS Patient Care STDS	2012	Eswatini	N/A
87	Are integrated HIV services less stigmatizing than stand-alone models of care? A comparative case study from Swaziland	Kathryn Church et al.	JIAS	2013	Eswatini	18+
88	Interpersonal Relations Between Health Care Workers and Young Clients: Barriers to Accessing Sexual and Reproductive Health Care	Farzana Alli, Pranitha Maharaj & Mohammed Yacoob Vawda	Journal of Community Health	2013	South Africa	N/A
89	What works to meet the sexual and reproductive health needs of women living with HIV/AIDS	Jill Gay et al.	JIAS	2011	N/A	N/A
90	Scale up use of family planning services to prevent maternal transmission of HIV among discordant couples: a cross-sectional study within a resource-limited setting	Martin Kuete et al.	Patient Pref Adherence	2016	Cameroon	≤25-≥35
91	Without Strong Integration of Family Planning into PMTCT Services in Rwanda, Clients Remain with a High Unmet Need for Effective Family Planning	Jennifer A. Leslie et al.	Afr J Reprod Health	2010	Rwanda	N/A
92	Impact of a “Diagonal” Intervention on Uptake of Sexual and Reproductive Health Services by Female Sex Workers in Mozambique: A Mixed-Methods Implementation Study	Yves Lafort et al.	Front Public Health	2018	Mozambique	≤20-≥36
93	Feasibility, acceptability and potential sustainability of a 'diagonal' approach to health services for female sex workers in Mozambique	Yves Lafort et al.	BMC Health Serv Res.	2018	Mozambique	N/A

94	Sexual and reproductive health services utilization by female sex workers is context-specific: results from a cross-sectional survey in India, Kenya, Mozambique and South Africa	Yves Lafort et al.	Reproductive Health	2017	Kenya, Mozambique, South Africa, India	≤20-≥36
95	Final Report Summary - DIFFER (Diagonal Interventions to Fast-Forward Enhanced Reproductive Health)		European Commission		Kenya, Mozambique, South Africa, India	
96	Modern Contraceptive and Dual Method Use among HIV-Infected Women in Lusaka, Zambia	Carla J. Chibwesha et al.	Infect Dis Obstet Gynecol	2011	Zambia	16-50
97	Young Women's Stated Preferences for Biomedical HIV Prevention: Results of a Discrete Choice Experiment in Kenya and South Africa	Minnis, Alexandra M. et al.	JAIDS	2019	Kenya, South Africa	18-30
98	"We are not the same": African women's view of multipurpose prevention products in the TRIO clinical study	Mary Kate Shapley-Quinn et al.	Int J Women's Health	2019	Kenya, South Africa	18-30
99	The cost-effectiveness of multi-purpose HIV and pregnancy prevention technologies in South Africa	Matthew Quaife et al.	JIAS	2018	South Africa	16-24
100	The Tablets, Ring, Injections as Options (TRIO) study: what young African women chose and used for future HIV and pregnancy prevention	Ariane van der Straten et al.	JIAS	2018	Kenya, South Africa	18-30
101	Young Women's Ratings of Three Placebo Multipurpose Prevention Technologies for HIV and Pregnancy Prevention in a Randomized, Cross-Over Study in Kenya and South Africa	Minnis, Alexandra M. et al.	AIDS Behav.	2018	Kenya, South Africa	18-30
102	Post-partum Family Planning Service Provision in Durban, South Africa: Client and Provider Perspectives	Heather M. Marlow et al.	Health Care Women Int.	2014	South Africa	18-36
103	"I Always Worry about What Might Happen Ahead": Implementing Safer Conception Services in the Current Environment of	Lynn T. Matthews et al.	Biomed Res Int.	2016	Uganda	N/A

	Reproductive Counseling for HIV-Affected Men and Women in Uganda					
104	Evaluating the feasibility and uptake of a community-led HIV testing and multi-disease health campaign in rural Uganda	Jane Kabami et al.	JIAS	2017	Uganda	15+
105	Meet us on the phone: mobile phone programs for adolescent sexual and reproductive health in low-to-middle income countries	Nicole B. Ippoliti and Kelly L'Engle	Reprod Health	2017	Senegal, Nicaragua, Belize, Ethiopia, Mali, Cambodia, Morocco, Egypt, Tanzania, Kenya, Uganda, South Africa, Mozambique, Thailand, Russia, Nigeria, Papua New Guinea	10-24 (target audience)
106	Sexual and Reproductive Health Needs of HIV Positive Women in Botswana - A Study of Health Care Worker's Views	Michelle Marian Schaan et al.	AIDS Care	2012	Botswana	N/A
107	Integrating family planning and prevention of mother to child HIV transmission in Zimbabwe	Clea C. Sarnquist et al.	Contraception	2014	Zimbabwe	18-40
108	Providers' Views Concerning Family Planning Service Delivery to HIV-positive Women in Mozambique	Sarah R. Hayford & Victor Agadjanian	Stud Fam Plann.	2010	Mozambique	N/A
109	Accessing Sexual and Reproductive Health Information and Services: A Mixed Methods Study of Young Women's Needs and Experiences in Soweto, South Africa	Naomi Lince-Deroche et al.	Afr J Reprod Health	2015	South Africa	18-24
110	End-Users' Product Preference Across Three Multipurpose Prevention Technology Delivery Forms: Baseline Results from Young Women in Kenya and South Africa	Rachel Weinrib et al.	AIDS Behav.	2018	Kenya, South Africa	18-30

111	Exploring Intravaginal Ring Acceptability for Disease Prevention Among At-Risk Community Members in Cape Town	Josephine Bowen et al.	Worcester Polytechnic Institute	2017	South Africa	16-34
112	A Randomized Crossover Study Evaluating the Use and Acceptability of the SILCS Diaphragm Compared to Vaginal Applicators for Vaginal Gel Delivery	Mags Beksinska et al.	AIDS Behav.	2018	South Africa	
113	Understanding the family planning and HIV prevention needs of South African adolescent girls: A cultural consensus modeling approach	Brown et al.	J Adolesc Health	2018	South Africa	14-17
114	Divergent Preferences for HIV Prevention: A Discrete Choice Experiment for Multipurpose HIV Prevention Products in South Africa	Matthew Quaife et al.	Medical Decisionmaking	2017	South Africa	18-49
115	Understanding the Potential for Multipurpose Prevention of Pregnancy and HIV: Results from surveys assessing four hypothetical concept profiles of Multipurpose Prevention Technologies (MPTs) in Uganda, Nigeria and South Africa	M El-Sahn et al.	Gates Foundation	2016	Uganda, Nigeria, South Africa	15-35
116	Brief Report: Integration of PrEP Services Into Routine Antenatal and Postnatal Care Experiences From an Implementation Program in Western Kenya	Pintye, Jillian et al.	JAIDS	2018	Kenya	
117	Strengthening the Integration of Family Planning and HIV Services at the Community Level in Kenya	Wilson Liambila et al.	Population Council	2018	Kenya	18-49
118	REacH: Randomized Evaluation of HIV/FP Service Models	Paul C. Hewett et al.	PSI, Society for Family Health, Population Council	2015	Zambia	N/A
119	The impact of HIV/SRH service integration on workload: analysis from the Integra Initiative in two African settings	Sedona Sweeney et al.	Human Resource for Health	2014	Kenya, Eswatini	
120	The Costs of Delivering Integrated HIV and Sexual Reproductive Health Services in Limited Resource Settings	Carol Dayo Obure et al.	PLoS One	2015	Kenya, Eswatini	

121	Does integration of HIV and sexual and reproductive health services improve technical efficiency in Kenya and Swaziland? An application of a two-stage semi parametric approach incorporating quality measures	Carol Dayo Obure et al.	Soc Sci Med.	2016	Kenya, Eswatini	
122	Does integration of HIV and SRH services achieve economies of scale and scope in practice? A cost function analysis of the Integra Initiative	Carol Dayo Obure et al.	Sex Transm Infect.	2016	Kenya, Eswatini	
123	Designing a package of sexual and reproductive health and HIV outreach services to meet the heterogeneous preferences of young people in Malawi: results from a discrete choice experiment	Christine Michaels-Igbokwe et al.	Health Econ Rev.	2015	Malawi	15-24
124	Young People's Preferences for Family Planning Service Providers in Rural Malawi: A Discrete Choice Experiment	Christine Michaels-Igbokwe et al.	PLoS One	2015	Malawi	15-24
125	The Current Status of Research on the Integration of Sexual and Reproductive Health and HIV Services	Charlotte E Warren, Susannah H. Mayhew & Jonathan Hopkins	Stud Fam Plann.	2017	N/A	
126	Linking Sexual and Reproductive Health and Rights and HIV Services for Young People: The Link Up Project	Lucy Stackpool-Moore et al.	J Adolesc Health	2017	Bangladesh, Burundi, Ethiopia, Myanmar, Uganda	10-24
127	Perceptions and Experiences of Integrated Service Delivery Among Women Living with HIV Attending Reproductive Health Services in Kenya: A Mixed Methods Study	Manuela Colombini et al.	AIDS Behav.	2016	Kenya	16+
128	Innovation in Evaluating the Impact of Integrated Service-Delivery: The Integra Indexes of HIV and Reproductive Health Integration	SH Mayhew et al.	PLoS One	2016	Kenya, Eswatini	N/A
129	Use of HIV counseling and testing and family planning services among	James Kimani et al.	BMC Women's Health	2015	Kenya	15-49

	postpartum women in Kenya: a multicentre, non-randomised trial					
130	Findings of an evaluation of community and school-based reproductive health and HIV prevention programs in Kenya	Carolyne Njue et al.	African Population Studies	2015	Kenya	10-19
131	Community-Based Interventions Can Expand Access to Comprehensive Reproductive Health and HIV Information and Services for Married Adolescent Girls	Chi-Chi Undie et al.	Int J Child Adolesc Health	2014	Kenya	
132	HIV and family planning integration in Tanzania: building on the PEPFAR platform to advance global health. A report of the CSIS Global Health Policy Center	J. Fleischman	CSIS	2012	Tanzania	N/A
133	Sexual reproductive health service provision to young people in Kenya; health service providers' experiences	Pamela M Godia et al.	BMC Health Serv Res.	2013	Kenya	15-24
134	Mainstreaming Youth-friendly Sexual & Reproductive Health Services in the Public Sector in Mozambique & Tanzania	Pathfinder International		2017	Mozambique, Tanzania	10-24
135	Integrating Family Planning into Primary Health Care & HIV Care and Treatment in Mozambique	Pathfinder International		2014	Mozambique	
136	Pursuing Youth-Powered, Transdisciplinary Programming for Contraceptive Service Delivery across Three Countries: The Case of Kuwa Mjanja in Tanzania	Adolescents 360	PSI et al.	2018	Tanzania	15-19
137	Adolescents 360 Evaluation: How might we better meet the needs of adolescent couples with contraceptive counseling and services through Ethiopia's Health Extension Program?	Itad	PSI et al.	2018	Ethiopia	15-19
138	A360 Emerging Insights for Design: Ethiopia	Adolescents 360, PSI, and Ideo.org	PSI	2017	Ethiopia	15-19
139	Nigeria Emerging Insights for Design	Adolescents 360, PSI, and Ideo.org	PSI	2017	Nigeria	15-19
140	A360 Tanzania: Married Adolescent Insights: Insights for Design	Adolescents 360, PSI, and Ideo.org	PSI	2017	Tanzania	15-19

141	The Socio-cultural Drivers of Sexual and Reproductive Health for Adolescent Girls in Ethiopia	Adolescents 360 &PSI	PSI	2017	Ethiopia	15-19
142	An Effective Model for the Integration of Modern Family Planning Services into Community-Level HIV Programming for Female Sex Workers in Ethiopia	PSI	PSI	2016	Ethiopia	N/A
143	Integration of Family Planning and HIV Services in Zimbabwe: Hormonal Implants and Dual Protection Messages	PSI	PSI	2014	Zimbabwe	N/A
144	Integrating HIV Services in Local Family Planning: The Expanded Community-Based Distribution Model and Zimbabwe Experience	USAID, Extending Service Delivery	USAID	2011	Zimbabwe	N/A
145	Gateways to integration: a case study from Rwanda	Government of Rwanda, IPPF, UNAIDS, UNFPA, WHO	UNFPA	2013	Rwanda	N/A
146	Integrating Family Planning and HIV Services: Programs in Kenya and Ethiopia Lead the Way	Edward Scholl and Daniel Cothran	AIDSTAR-One, USAID	2011	Kenya, Ethiopia	N/A
147	Addressing Unmet Need for Contraception among HIV-positive Women: Endline Survey Results and Comparison with the Baseline	Elizabeth Oliveras, Caroline Nalwoga, and Lucy Shillingi	Pathfinder International	2014	Uganda	N/A
148	Expanding HIV testing and counselling into communities: Feasibility, acceptability, and effects of an integrated family planning/HTC service delivery model by Village Health Teams in Uganda	Aurélie Brunie et al.	Health Policy Plan.	2016	Uganda	N/A