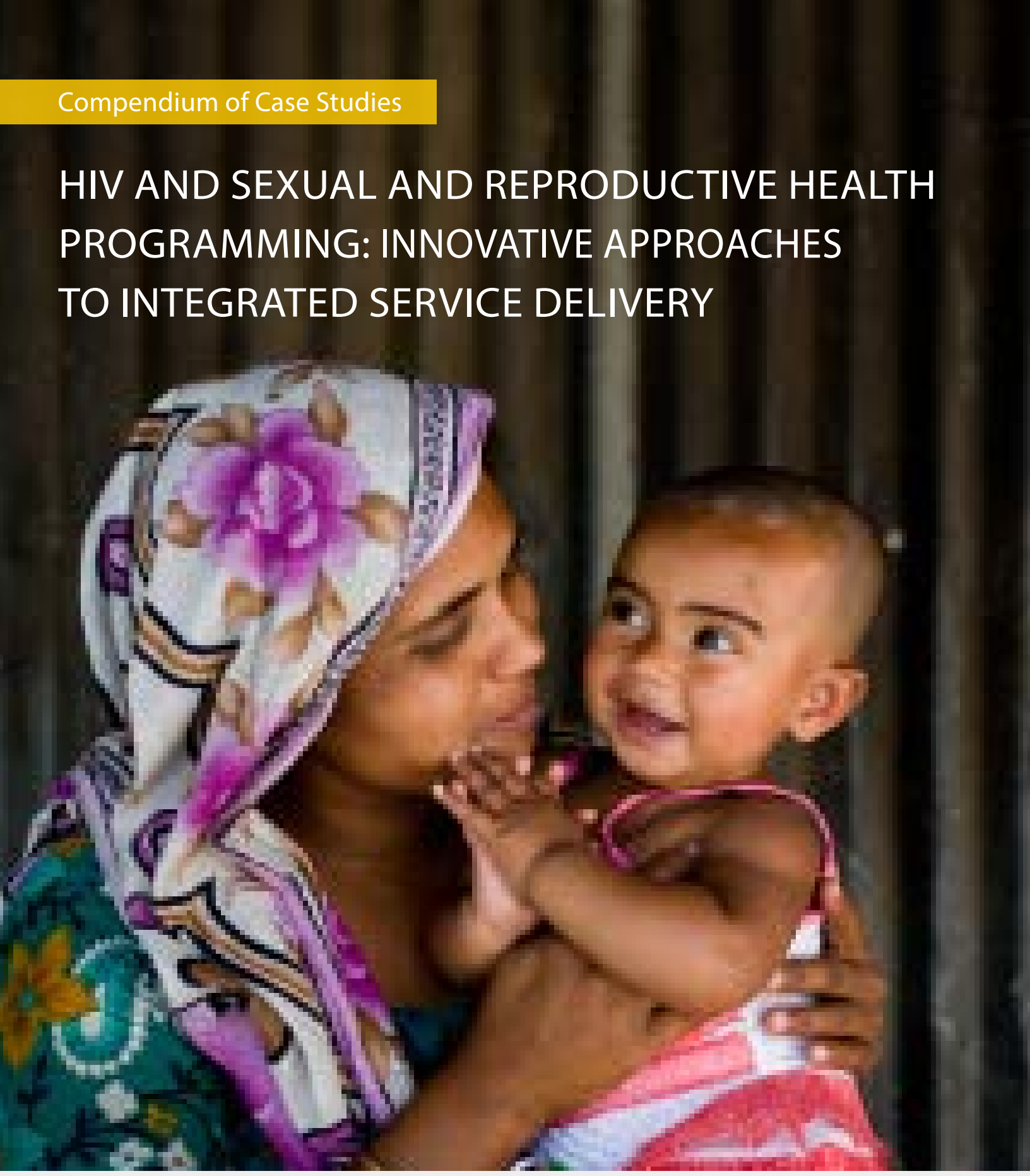
Compendium of Case Studies

HIV AND SEXUAL AND REPRODUCTIVE HEALTH PROGRAMMING: INNOVATIVE APPROACHES TO INTEGRATED SERVICE DELIVERY



IATT
THE INTERAGENCY TASK TEAM
The Interagency Task Team on the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children

World Health Organization

unicef

UNFPA

WHO WE ARE

Established in 1998, the Inter-Agency Task Team (IATT) for the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children provides support for the roll-out of normative guidance, progress tracking of Global Plan[1] targets and coordination of technical assistance to countries based on nationally determined needs relating to prevention of mother-to-child transmission (PMTCT) of HIV and paediatrics. It is a partnership of 33 member organizations, including donor agencies, non-governmental organizations (NGOs) and networks of people living with HIV. The partnership was reconfigured in 2011 to focus on providing technical support to achieve the goals of the Global Plan towards the Elimination of New HIV Infections Among Children by 2015 and Keeping Their Mothers Alive (Global Plan). Co-convened by UNICEF and the World Health Organization (WHO), the IATT is the technical partnership that leverages the expertise and resources of its members to 1) coordinate and track the provision of technical assistance primarily to the 22 priority countries of the Global Plan, 2) monitor progress of country-led implementation of the Global Plan and 3) develop, update and disseminate operational and normative tools and guidance related to the elimination of mother-to-child transmission (EMTCT) of HIV. The IATT also participates in the Global Steering Group of the Global Plan.

IATT PARTNERS

The IATT member organizations are: African Network for the Care of Children Affected by HIV/AIDS (ANECCA), French National Agency for Research on AIDS and Viral Hepatitis (ANRS), Baylor International Pediatric AIDS Foundation (BIPAI), Catholic Medical Mission Board (CMMB), Centers for Disease Control and Prevention, USA (CDC), Clinton Health Access Initiative (CHAI), Department of Foreign Affairs, Trade and Development, Canada (DFATD), Earth Institute, Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), EngenderHealth, Ensemble pour une Solidarité Thérapeutique Hospitalière en Réseau (ESTHER), FHI360, Global Fund for AIDS, Tuberculosis and Malaria (GFATM), Global Network of People Living with HIV (GNP+), International AIDS Society (IAS), International Center for AIDS Care and Treatment Programs (ICAP) at Columbia University's Mailman School of Public Health, International Community of Women Living with HIV/AIDS (ICW), International Planned Parenthood Federation (IPPF), IntraHealth, JHPIEGO, Joint United Nations Programme on HIV/ AIDS (UNAIDS) Secretariat, Management Sciences for Health (MSH), Mothers2Mothers (M2M), U.S. Office of the Global AIDS Coordinator (OGAC), Population Council, Save the Children, the United Kingdom's Department for International Development (DFID), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), United States Agency for International Development (USAID), World Bank, World Health Organization (WHO) and World Vision.

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Keywords: EMTCT, HIV, innovations, integrated services, and sexual and reproductive health

Acronyms and abbreviations

AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal care
ART	antiretroviral therapy
ARV	antiretroviral drug
BCC	behaviour change communication
CDC	Centers for Disease Control and Prevention
CHW	community health worker
DFATD	Department of Foreign Affairs, Trade and Development of Canada
CSO	civil society organizations
DBS	dried blood spot
EGPAF	Elizabeth Glaser Paediatric AIDS Foundation
EID	early infant diagnosis
EMTCT	elimination of mother-to-child transmission (of HIV)
FBO	faith-based organizations
FP	family planning
Global Plan	Global Plan towards the Elimination of New HIV Infections among Children by 2015 and Keeping their Mothers Alive
HCW	health care worker
HEI	HIV-exposed infants
HIV	human immunodeficiency virus
HTC	HIV testing and counselling
IATT	Inter-Agency Task Team
IAWG	Inter-Agency Working Group
IPPF	International Planned Parenthood Federation
LTFU	loss-to-follow-up
M&E	monitoring and evaluation
MNCH	maternal, newborn and child health
MOH	Ministry of Health
MTCT	mother-to-child transmission of HIV
NGO	non-governmental organization
NIMART	nurse-initiated management of ART
OGAC	Office of the U.S. Global AIDS Coordinator
OI	opportunistic infection
PCR	polymerase chain reaction
PEPFAR	President's Emergency Plan forAIDS AIDS Relief
PMTCT	prevention of mother-to-child transmission (of HIV)
PSCM	procurement and supply chain management
QI	quality improvement
SCMS	supply chain management systems
SMS	short message service
SRH	sexual and reproductive health
STIs	sexually transmitted infections
TWG	technical working group
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VHW	village health worker
VHT	village health team
WHO	World Health Organization

ACKNOWLEDGEMENTS

This compendium of case studies is the result of a four-day workshop on Integrated Service Delivery Models held in Dar es Salaam, United Republic of Tanzania, from 28–31 October 2013, organized by the Inter-Agency Task Team (IATT) on the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children. The case studies are a testimony to the hard work and commitment of the teams that participated in the workshop from the 10 countries in attendance, including Ethiopia, Ghana, Lesotho, Malawi, Nigeria, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe, and the 3 countries that shared lessons learned, namely, Botswana, Namibia and Rwanda. These case studies complement the workshop report which can be found on the IATT website. The IATT is especially grateful to UNFPA, UNICEF, WHO and Johnson & Johnson for providing the funding to carry out this workshop. We would also like to recognize the leadership of the Planning Committee: Rosalind Carter (IATT Secretariat), Lynn Collins (UNFPA), Rene Ekpini (UNICEF), Chewe Luo (UNICEF), Meghan Mattingly (EGPAF), Eyerusalem Kebede Negussie (WHO), Lisa Nelson (WHO), Chinyere Omeogu (IATT Secretariat), Christian Pitter (EGPAF) and Sostena Romano (Consultant).

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Contents

Introduction

In light of recent progress towards eliminating paediatric HIV, strong momentum for integrating HIV and sexual and reproductive health (SRH) (including maternal, newborn and child health (MNCH), family planning (FP), and sexually transmitted infection (STI)) programmes, and the recent WHO guidelines on the use of antiretroviral drugs (ARVs) for the prevention and treatment of HIV infection, there has been growing demand for practical country-level guidance to optimize integrated service delivery models. Numerous existing service delivery models are being implemented with limited evidence on their effectiveness in terms of improved maternal and infant health outcomes. While no single model will work in every country context, there is a need to further gather evidence, share experiences, and document and promote promising integrated service delivery models.[2]

The Global Plan for Towards Eliminating New HIV Infections among Children by 2015 and Keeping Mothers Alive (Global Plan) explicitly calls for integrated HIV and SRH programming. It urges national leaders to "build a vibrant coalition between the HIV and maternal, newborn and child health constituencies around the goals of eliminating new HIV infections among children by 2015 and keeping their mothers alive…" and "promote greater synergies and the strategic integration of prevention of mother-to-child HIV transmission programmes and maternal, newborn and child health programmes, as well as family planning services."[4]

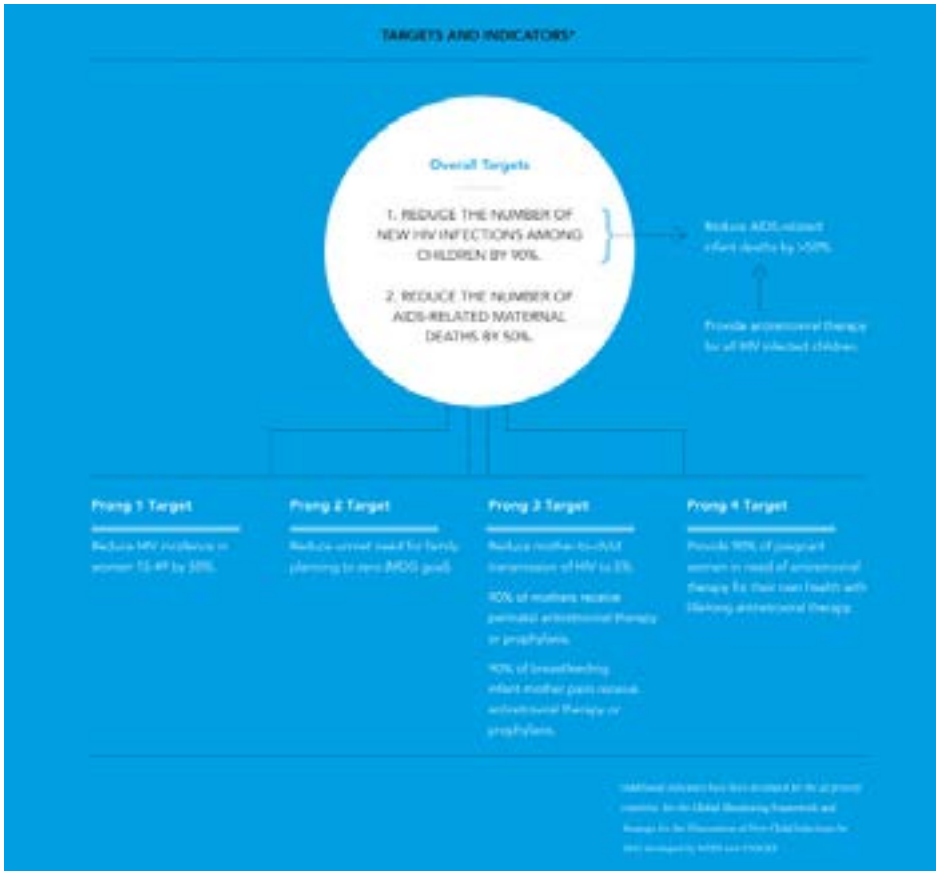
As shown below, the Global Plan[3] targets implicitly recognize that reductions in maternal and infant mortality and mother-to-child transmission (MTCT) rates are closely tied to making advances in reducing HIV incidence among adolescent girls and women of reproductive age, addressing FP needs, and providing comprehensive HIV prevention, care and treatment services for women and children living with HIV.

The Global Plan

The Global Plan has two overarching global targets to reach by 2015 compared against the 2009 baseline:

1. Reduce the number of new HIV infections among children by 90 per cent; and
2. Reduce the number of AIDS-related maternal deaths by 50 per cent.

The Global Plan follows a four-pronged strategy:


TARGETS AND INDICATORS*
Overall Targets
1. REDUCE THE NUMBER OF NEW HIV INFECTIONS AMONG CHILDREN BY 90%.
2. REDUCE THE NUMBER OF AIDS-RELATED MATERNAL DEATHS BY 50%.
Prong 1 Target
Prong 2 Target
Prong 3 Target
Prong 4 Target
90% of mothers receive
90% of breastfeeding

The Integrated Service Delivery Models Workshop[5]

While there is an abundance of theoretical reasons why integration is effective, less is known about innovative practices currently implemented at country level in the context of EMTCT. In this vein, a four-day workshop on integrated service delivery models was held in the United Republic of Tanzania from 28 to 31 October 2013, with the participation of 13 countries to share approaches to integration that have shown promising results.

The workshop aimed to identify key programmatic considerations for promising service delivery models with a focus on delivering integrated HIV care and treatment with SRH services, including antenatal, labor and delivery, post-partum, paediatric and FP services, with a particular emphasis on strengthening monitoring and evaluation (M&E) systems. The workshop's five primary objectives were to: 1) share evidence-based and experience-based service delivery models; 2) facilitate country exchanges of best practices and field experience with different integrated service delivery models; 3) formulate guidance on key considerations/ modalities for promising integrated service delivery models; 4) provide guidance on M&E systems, with a focus on monitoring of retention of mother and infants; and 5) provide guidance and recommendations for countries on how to optimize EMTCT and SRH.

Ten of the Global Plan priority countries – Ethiopia, Ghana, Lesotho, Malawi, Nigeria, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe – attended the workshop as participating countries with full delegations to present lessons learned and share insights on how to make integration more effective in their contexts. Each country delegation included Ministry of Health representation from across the following programmes: 1) PMTCT; 2) antiretroviral therapy (ART); 3) FP; 4) maternal, newborn and child health (MNCH); and 5) M&E/health management information systems. In addition, each country delegation included one representative from the President's Emergency Plan for AIDS Relief (U.S. PEPFAR) or a PEPFAR implementing partner, an IATT focal point (from either WHO or UNICEF), and a representative from civil society/networks of women living with HIV. An additional three countries – Botswana, Namibia and Rwanda – participated as resource countries, with select colleagues sharing specific integration examples and in-depth guidance on how to advance and even institutionalize integration as a standard approach to programming. The levels and models of integration varied widely from country to country. This compendium is a product of the workshop.

Integration

Integrating health services is high on the political agenda, and is seen as critical in terms of attaining post-2015 sustainable development goals.[6] As early as 2011, the United Nations Political Declaration on HIV and AIDS called for "strengthening health systems and integrating HIV and AIDS with broader health and development," including "integration of HIV and AIDS programmes into primary health care, sexual and reproductive health-care services and specialized infectious disease services…."[7] Although efforts have been made to integrate HIV into broader health initiatives and strengthen linkages with other sectors, more can be done to accelerate this process. As reported by UNAIDS in 2013, "nearly all countries (90%) recognize integration as a core HIV priority, 82% address integration in their national strategic plans and 45% report that HIV has been aligned with other disease-specific planning... 70% of countries have integrated services to prevent mother-to-child HIV transmission in antenatal care, and two-thirds have integrated HIV and sexual and reproductive health services... more than half have integrated HIV testing and counselling and/or antiretroviral therapy in general outpatient care."[8]

There are many different models for integrating

services, including which services and how these services are delivered. In addition, there are many largely complementary definitions of integration. Three main definitions guide this compendium.

1. Integration of health services is the management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs over time and across different levels of the health system.[9] (WHO)

2. Specifically, integration of HIV and SRH services refers to offering a comprehensive package of SRH and HIV services or operational programmes that can be joined together to ensure and perhaps maximize collective outcomes. It is based on the need to offer comprehensive and integrated services.[10] (InterAgency Working Group (IAWG) SRH and HIV linkages)

3. From the client's perspective, integration is being able to timely access comprehensive, quality services as much as possible at the same time and in the same place, assurance of continuity of care, and referral when necessary. Although these models are primarily implemented at the secondary and primary levels of the health system, where health-care providers tend to be polyvalent and where most women and children receive care, integrated service delivery can occur at any and all levels of the health system. These services can be co-located in the same room with the same provider (e.g., 'one-stop shop') or provided in the same clinic, but in different rooms or by different providers. (WHO)

The potential benefits of integration have been widely cited. As early as 2005, WHO/UNFPA/UNAIDS/IPPF documented the advantages of integrating HIV and SRH services,[11] which, according to them, included:

- Improved access to and uptake of key HIV and SRH services;
- Better access of people living with HIV to SRH services tailored to their needs;
- Reduction in HIV-related stigma and discrimination;
- Improved coverage of underserved/vulnerable/key populations;
- Greater support for dual protection;
- Improved quality of care;
- Decreased duplication of efforts and competition for scarce resources;
- Better understanding and protection of individuals' rights;
- Mutually reinforcing complementarities in legal and policy frameworks;
- Enhanced programme effectiveness and efficiency; and
- Better utilization of scarce human resources for health.

In the context of EMTCT, prominent among the potential benefits of integrated services for clients are improved access to and uptake of FP and other SRH services, timely initiation of ART for both women and children, when integrated into MNCH and other settings, effective post-partum and post-natal care, reduced loss to follow-up (vis-à-vis shorter waiting times and lower transport costs), and reduced stigma and discrimination.

Evidence for HIV-SRH integration

Since 2004, the need to expand integration to include HIV and SRH services has been recognized and increasingly implemented and examined with greater rigor. In this document, integrated HIV and SRH services are proposed as an umbrella framework for delivering comprehensive EMTCT services, including MNCH services. This multi-pronged approach to implementing EMTCT interventions includes antenatal care (ANC), rights-based FP, provision of maternal ARVs (including lifelong ART, infant prophylaxis and treatment, early infant diagnosis, ending gender-based violence (GBV),

preventing and treating STIs, and safer childbirth and infant feeding, which requires delivery through integrated HIV and SRH/MNCH platforms. Emerging evidence and new research conducted by the Integra Initiative and the UNAIDS/UNFPA European Union (EU)/ Swedish International Development Agency (SIDA)-funded HIV and SRH and Rights Linkages Project in Southern Africa both attempt to measure the impact of integration on health and rights outcomes.

Preliminary research findings suggest that integrated services can improve health outcomes and service delivery, and potentially lead to efficiencies. These projects found that integrating HIV services into FP and post-natal care services improved the uptake of HIV counselling and testing at these facilities. However, this mode of service delivery was not found to decrease service quality, and actually increased the quality of FP and post-natal care provided in some areas of service provision. Clients preferred fully integrated services to save time and money. Many women living with HIV preferred SRH services, such as FP, to be integrated into specialist HIV units, as they trusted the providers at these facilities, enjoyed continuity of care from them, had a reduced fear of stigma and benefited from the collegiality received from other clients living with HIV.[12]

Similarly, early findings from the SRHR and HIV Linkages Project in Southern Africa observed an increased uptake of ART, increased utilization of FP services, reduced workload, better patient flow, and increased involvement of men in antenatal clinic visits following service integration.[13] Other studies also demonstrate an increase in uptake of modern contraceptive methods when FP and HIV services are integrated.[14] A systematic review found that integrated HIV services were more cost-effective compared with siloed approaches, and integrated HTC was most cost-effective when offered as part of a comprehensive package of services at a health centre as opposed to stand-alone sites.[15]

Operations research has increasingly demonstrated the clinical benefits of ART initiation on reducing MTCT of HIV and keeping mothers alive longer.[16,17] As national programmes and health facilities have integrated ART into antenatal care (ANC), delays between diagnosis and treatment initiation have been minimized.[18,19] Integration of HTC and HIV care and treatment within MNCH has been viewed as a gateway to increasing access to ART for pregnant women. Several studies demonstrated that, indeed, integration of ART initiation into ANC is associated with higher levels of ART initiation in pregnancy.[20,21] A systematic review on ART and ANC integration found that ART coverage increased at clinics where these services were integrated, as compared with stand-alone sites.[22,23] In the past five years, providing ART within ANC has become standard practice in many high HIV prevalence settings. Finally, the 2013 WHO Consolidated ARV Guidelines recommend integration and decentralization of HIV care and treatment.

Integrated service delivery also has the potential to improve child health. More recently, studies have shown that providing early infant diagnosis (EID) of HIV during routine immunization visits can increase the uptake of infant HIV testing. A study in Malawi showed that when these services were integrated, there was a more than threefold increase in the proportion of HIV-exposed infants who were brought back for their polymerase chain reaction (PCR) result and enrolled into care (78.6 per cent vs. 25.0 per cent, $P < 0.001$).[24] Rwanda increased EID coverage from 24 per cent to 72 per cent between 2008 and 2011, in part through integration of EID with vaccination programmes.[25] While this evidence is promising, more research and case studies are needed to examine the impact of HIV and SRH integration on infant and child health.

Integrating community care and support into HIV and SRH services is also critical. Community health workers and lay cadres are typically the glue that binds health facilities, clients and communities together. Evidence suggests that programmes that engage community health workers (CHWs) demonstrate outcomes that are

equivalent to clinical or facility-based interventions, and may even improve outcomes, such as uptake of prophylaxis or ART, early testing of infants, initiation of ART and retention rates of both mothers and children living with HIV.[26,27] For example, the Tingathe programme in Malawi reported improvements in maternal antiretroviral (ARV)/ART coverage, DNA-PCR testing rates and ART initiation among HIV-exposed infants following the introduction of the CHW programme.[28] In Zimbabwe, a cohort study following 704 lactating women and their infants for 1–12 months after delivery found notable increases in uptake of essential services in the group that received support from voluntary village health workers (VHWs). Mothers living with HIV visited by VHWs were 24 per cent more likely to be registered at an ART clinic, twice as likely to receive CTX prophylaxis and 13 per cent more likely to have infants tested for HIV.

Purpose

The aim of this compendium is to provide a user-friendly resource of innovative promising approaches to integrated HIV-SRH service delivery for improving maternal, newborn and child health outcomes, strengthening health systems, and promoting community engagement. The compendium contains 11 case studies that document different policies, strategies and interventions designed to achieve more effective integration of HIV and SRH in the context of EMTCT. It is hoped that compiling these case studies will help to inform future programming by providing examples of promising practices related to integration in sub-Saharan Africa in order to extrapolate the common elements of, and barriers to, effective integrated service delivery. The case studies featured in the compendium focus on 9 of the 22 Global Plan Countries and showcase practical examples of interventions delivered through integrated services in the context of EMTCT.

Each case study includes:

1. a description of the context and challenge;
2. the intervention implemented to address the specific challenge;
3. important quantitative or qualitative results; and
4. lessons learned and recommendations.

Some case studies are more evidence-informed than others, partly depending on the stage of

implementation and evaluation methodology. Similarly, some case studies are more directly related to integrated service delivery than others. Clearly, this compendium contains early examples and preliminary findings of integrated service delivery models and the featured interventions will require further and more rigorous evaluation. However, all case studies touch on health systems strengthening, which lays the groundwork and builds a stronger foundation for more effective implementation of comprehensive, integrated services. In spite of this caveat, this document contains a wide array of promising practices for those interested in learning more about innovative approaches to integrated service delivery in the region.[29]

Target audience

National programme managers, funders, implementing partners, policymakers and advocates interested in country experiences with implementing integrated service delivery using various models, which can potentially result in improved health and rights outcomes for pregnant women, mothers and infants living with and exposed to HIV.

Methods

Case studies were collected from Ministry of Health programme managers and civil society representatives of the participating country delegations at the integrated service delivery models workshop in October 2013. A standardized template including background/ context, approach, results, lessons learned, potential for wider application and next steps was used to collect information for each case study. Follow-up questions were relayed to the country teams through the IATT Regional and Country Focal Points. The country teams approved the final descriptions for publication in the compendium in February 2014. The IATT Secretariat and colleagues from three IATT partner organizations, including EGPAF, UNFPA and WHO, facilitated the completion of these templates and reviewed the case studies to ensure their quality.

For more information on integrated service delivery, see:

- SRH and HIV Linkages Project: http://srhhivlinkages.org/
- Integra Initiative: http://integrainitiative.org/
- Global Fund: 'Maximizing the Impact on Reproductive, Maternal, Newborn and Child Health (RMNCH) Information Note' (2014) http://www.theglobalfund.org/en/fundingmodel/support/infonotes/
- WHO 2013 consolidated guidelines on the use of antiretroviral drugs for the prevention and treatment of HIV Infection (2013): http://apps.who.int/iris/_bitsream/10665/85321/1/9789241505727_eng.pdf
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Case studies

ETHIOPIA: WHY EMPOWERING COMMUNITIES IS VITAL: A REVIEW OF THE HEALTH EXTENSION WORKERS PROGRAMME

Background/context:

Nearly 15 years ago, MNCH indicators in Ethiopia painted a bleak picture. Based on Demographic Health Survey results, in 2000, the maternal mortality rate was exceptionally high at 871 per 100,000 live births, ANC coverage was 27 per cent and the percentage of pregnant women who benefited from skilled delivery was 6 per cent. Immunization rates were equally low at 14 per cent and the under-5 mortality rate was 166 per 1,000 live births. In part, due to the high proportion of the population living in rural areas, access to MNCH services was extremely limited and the health of women and children was not given adequate attention.

Approach/intervention:

To address these problems, Ethiopia introduced the widely lauded health extension programme. Launched in 2003, the programme aimed to provide universal access to primary health-care services, mainly preventive, through more than 34,000 government-salaried female health extension workers. Two health extension workers are placed in a health post to serve a kebele, the smallest administrative unit, with about 5,000 people. Such workers spend 75 per cent of their time on outreach activities: conducting home visits, educating families to adopt healthy lifestyles, serving as 'model families' in their neighbourhoods and organizing communities to participate in the expansion of Health Extension Programme services. A network of volunteers, drawn from 'model family' households, supported the health extension workers by providing key health messages to the community. Overall, the main objectives of the programme are to:

- Improve access and equity to preventive essential health interventions at the village and household levels in line with the decentralization process to ensure health-care coverage to the rural areas;
- Ensure ownership and participation by increasing health awareness, knowledge and skills among community members;
- Promote gender equality in accessing health services;
- Improve the utilization of peripheral health services by bridging the gap between the communities and health facilities through health extension workers; and
- Reduce maternal and child mortality.

More recently, the Government of Ethiopia added a new element to this approach: the Women's Health Development Army. One woman, responsible for all health-related issues, works with 30 households to respond to their health needs, refer them to nearby health facilities and improve service utilization by the community and household members.

Results:

By 2011, there was a complete turnaround in performance against key MNCH indicators, and health outcomes for women and children drastically improved. Comparing Demographic Health Survey

results from 2000 and 2011 showed the following:

- ANC attendance (first visit) increased from 27 per cent in 2000 to 68 per cent in 2011;
- Skilled birth attendance increased from 6 per cent in 2000 to 12 per cent in 2011;
- Contraceptive prevalence rate increased from 6 per cent to 28 per cent; and
- Infant mortality rate decreased from 166 per 1,000 live births to 88 per 1,000 live births.

Challenges and lessons learned:

As the programme evolved, different components were added to address specific challenges related to antenatal and post-natal care for pregnant women and their infants. Monthly conferences facilitated by health extension workers were held at health posts to support pregnant women. Similar meetings were held every two weeks in communities facilitated by the Health Development Army for that catchment area. Male partners, traditional birth attendants, religious leaders, and mothers or mothers-in-laws of pregnant women attended these meetings to discuss issues such as birth planning and complication readiness preparation. Given long distances to health facilities with maternity wards, traditional ambulance services were introduced to increase rates of institutional delivery. FP counselling and contraceptive methods, including implant insertion, were provided at the community level. The Health Development Army also played an instrumental role in tracing pregnant women and linking them to health facilities to receive comprehensive MNCH services and HIV care. This included follow-up counselling and home visits to women living with HIV to support adherence to HIV treatment and infant care. Neighbours were encouraged to support mothers and their newborns during the post-partum period by providing food, hygiene advice and support, which has strengthened social capital and reinforced existing community networks.

Recommendations:

Ethiopia's experience demonstrates the power of engaging communities in achieving key health and development goals. High-level government commitment to the approach (including funding the salaries of health extension workers) has also been critical. Essentially, communities have been provided the space and resources to take ownership of their health, which significantly contributes to increased access to a broad range of health services. Above all, it is cost-efficient and sustainable, as it relies on existing resources in the community, making scale-up and replication feasible in other settings.

GHANA: INTEGRATED SUPERVISION AND MONITORING SYSTEMS

Background/context:

In the past three years, Ghana experienced a threefold decrease in the national MTCT rate, with a decline from 31 per cent in 2009 to 9 per cent in 2012. In recent years, the Ministry of Health has supported the integration of HIV programming into the broader health sector. Prior to 2012, supervision and monitoring of health services was verticalized, with separate teams monitoring specific programmes. This resulted in duplication of efforts and made coordination between different programmes and levels of the health system more time-consuming, costly and challenging.

Approach/intervention:

To reduce the burden and fragmentation this caused, multidisciplinary teams were dispatched to monitor programmes with an integrated tool that addressed all health services. This involved the use of multidisciplinary teams to monitor the implementation of all programmes using a newly developed integrated monitoring tool. The visiting team of focal persons from different programmes verifies the progress of every project in a facility, then gives feedback and recommendations in a programme director's forum.

Results:

The implementation of the integrated supervision system reduced the reporting and visit burden for health workers, thereby improving performance and resulting in more effective monitoring that could cover issues with more depth and accuracy. There was a clear reduction in the number of supervisory and monitoring visits to the sites, which saved costs, as travel was better coordinated. This minimized interruption of services, which translated to health workers spending more time providing services. Other benefits included improved teamwork and early identification and response to systemic challenges at the national level.

Challenges and lessons learned:

- Coordination and clear leadership at the national level was important and reinforced by the identification of a team of multidisciplinary programme focal points, which is pivotal to the success of this plan.
- Reporting requirements of funding agencies: Each donor has a different reporting format/ template for the same indicator. This is still being addressed through dialogue with various implementing partners in order to harmonize reporting requirements and indicators. Still, integrated monitoring tools reduced duplication of efforts, which saved time for the monitoring team.
- Dilution of focus: It is not possible to provide intensive focus to the PMTCT programme as compared with the level of monitoring prior to the innovation. However, this trade-off may be offset by the benefits to the client in accessing integrated, comprehensive services. This dilutes the monitoring in a way, but at the same time, it pushes the teams to be focused and more strategic. It is important to systematically assess the effect and analyse potential gaps prior to scale-up.
- Integration has resource implications. It is essential to assess such implications before adopting any innovation and only scale up innovations whose anticipated benefits outweigh the costs. There are also long-term versus short-term costs to consider; integration may take initial investment but then 'pay off' in the long term.

LESOTHO: INTEGRATED MONITORING SYSTEMS FOR IMPROVED FOLLOW-UP CARE FOR MOTHERS AND INFANTS

Background/context:

Loss to follow-up has been a pervasive challenge in the majority of high HIV burden countries. In Lesotho, if a client did not return to the health centre for a scheduled appointment, a CHW was instructed to locate the client and ask her/him to return. Essentially, the tracking system was weak and disjointed. Furthermore, each health facility used its own method to address loss to follow-up, and the lack of standardized guidelines or a system to identify clients who were at risk of missing a visit, or who had not returned for a consultation or to refill their medication, made client monitoring even more difficult. While some health facilities and implementing partners called clients via phone to remind them of their appointments, this approach was not as effective as home visits conducted by VHWs. According to the Ministry of Health and Social Welfare in Lesotho, a total of 7,140 VHWs had been trained as of 2010.[29] Given these observations, the Government of Lesotho opted to rely on the existing infrastructure to build a more robust system to provide follow-up care to clients.

Approach/intervention:

To address the loss to follow-up, the Ministry of Health developed a unified system to track clients. This consisted of giving clients appointment dates that were recorded in appointment books kept at the health facility, which were also linked to the patient registers. If a client missed the consultation, the client's name was given to a VHW. Each client was given an appointment slip by the VHW with a stamped number on it that corresponded to the clinic appointment book. A client was asked to bring this slip to the clinic when returning for the next visit. One of the key features of this intervention was that ALL clients were tracked regardless of their diagnosis. This practice reduced HIV-related stigma by offering anonymity that counteracted the common perception that VHWs only provided follow-up care and home visits to people living with HIV.

Results:

This system resulted in a standardized method across the country for tracking clients who discontinued treatment and were considered lost to follow-up. It included developing a standardized definition of defaulter across all illnesses (missed their scheduled consultation by more than a month), which was adopted by all stakeholders (government, NGOs, faith-based organizations and private-sector providers). The approach also led to more robust monitoring within the facility, as in some cases clients who had been previously mislabelled as 'defaulters' were now recognized to have had actually made visits to the clinic. Direct benefits included: improved retention, increased clinical re-engagement and better understanding of the reasons why clients default. Secondary benefits were a reduction in stigma; improvement in the quality of facility-based data; and strengthened ART adherence support.

Challenges and lessons learned:

As with many interventions, some facilitating factors also create new challenges. The physical presence of the VHW via home visits was critical to increasing re-engagement; however, communities without VHWs did not benefit as much from the integrated

monitoring system, as physical contact with the VHWs was the key to re-establishing a link to the health facility. Based on targets from the Ministry of Health and Social Welfare, each VHW should cater to a maximum of 40 households and each village should have at least two VHWs. In addition, long distances due to the difficult terrain make it difficult for VHWs to reach clients who live in remote areas. Certain sociocultural norms inhibit the effectiveness of the VHWs, as male VHWs are not permitted to visit a woman up to three months post-partum. It is evident, based on client feedback, that integrated monitoring reduces stigma because it is a system for ALL clients regardless of their diagnosis, so tracking is no longer disease-specific. Sites that combined the VHWs' home visits with the integrated monitoring system reported the most improvements in retention.

Recommendations:

Going forward, the Ministry of Health plans to collect and report on these data as part of the health management information system. The country has also conducted a mapping of VHWs to determine where they work and to identify gaps in order to increase the number available to track clients. Standardized systems work better than individually developed approaches, as they give a sense of direction for health staff, VHWs and implementing partners. Incorporating clients' values and preferences from the outset could support acceptability of different approaches. It also provides a standard measurement to compare performance across all facilities. Integration of follow-up care within the VHWs portfolio by providing home visits that cut across all populations and health issues is ultimately more efficient and reduces stigma.

MALAWI: IMPLEMENTATION OF LIFELONG ART FOR ALL PREGNANT AND BREASTFEEDING WOMEN ('OPTION B+') THROUGH INTEGRATION INTO THE MNCH PLATFORM, PARTICULARLY INITIATION AND RETENTION IN CARE AND TREATMENT

Background/context:

Known as the pioneer in providing lifelong ART for all pregnant and breastfeeding women (Option B+), Malawi's success can be attributed to building critical components of the programme on the MNCH platform. This approach was largely responsible for the impressive results observed in the past two years has prompted many countries to follow suit and provided important evidence to inform the 2013 WHO Consolidated ARV Guidelines. Planning for Option B+ began with the official approval of the Ministry of Health in January 2011, six months prior to implementation. The planning process entailed: 1) reprogramming of resources to cover both the costs and redistribution of human resources; 2) assessment of primary health-care facilities to provide ART; 3) development of plans for staff training and procurement; 4) development of integrated PMTCT/ART guidelines and in-depth training and mentoring manuals; 5) revision of M&E tools with a move towards longitudinal reporting; 6) consolidating procurement issues, including purchase and distribution of medicines and supplies; 7) training of all staff and mentors and, finally, full implementation.

Approach/intervention:

Transitioning to Option B+ was grounded in the integration of SRH and HIV services delivering long-term ART within MNCH settings. This was only possible through task-shifting the initiation of and management of ART to nurses and other cadres of health workers. As a result, MNCH facilities provided HTC to all pregnant women; initiated pregnant and breastfeeding women living with HIV on ART; provided routine follow-up; provided EID to HIV-exposed infants; and offered HTC during family planning consultations and FP services in ART clinics.

Results:

By September 2012, Malawi witnessed a dramatic increase in the number of pregnant and breastfeeding women initiating ART to prevent MTCT of HIV and for their own health. During the same time period, the number of pregnant and breastfeeding women starting on ART increased by 748 per cent.[30] According to the Ministry of Health September 2013 quarterly Integrated HIV Program Report, a total of 590 sites had enrolled women under PMTCT Option B+, with 8,908 (89 per cent) of (known) HIV-infected women attending ANC receiving ART. This represents 57 per cent of the estimated 15,750 HIV-positive pregnant women at the population level for that quarter. In addition, an increasing number of pregnant women entered ANC on treatment. Of the 8,908 ANC women who were known to be receiving ART, 3,244 (36 per cent) were already on ART when starting ANC, with 4,227 (47 per cent) initiated before 28 weeks of pregnancy and 1,437 (16%) initiated during the last trimester of pregnancy. Twelve-month group cohort survival outcomes show that of the women who started ART in ANC, 6,630 (72 per cent) were retained at 12 months after registration. Of the women who were not retained in care, 2,350 (91 per cent) were lost to follow-up, 49 (2 per cent) were known to have stopped ART and 176 (7 per cent) were known to have died.

Challenges and lessons learned:

Merging the PMTCT and ART programmes, guidelines and technical working groups and decentralizing ART services to primary health-care level are key drivers of the significant improvements in access to ART observed to date. However, rapid scale-up has brought additional challenges. While it is too early to draw definitive conclusions, retaining women in care poses a new set of challenges, as there is less time for them to process the diagnosis and, being asymptomatic, women may not continue on treatment because they still feel strong and healthy without it.[31,32]

The uptake of EID and retention of children beyond EID at 4–8 weeks is another concern. Confirmatory testing of HIV-exposed infants (HEI) at 12 and 24 months is not routinely performed. Strengthening linkages between clinical care and CHWs is urgently needed to address this gap and to ensure that children are not left behind. Issues of equity and discrimination have also been raised, as many male partners express feeling left behind by the fast-tracking of pregnant and breastfeeding women to receive ART. In addition, other populations, such as adolescents and young women, do not receive the same opportunities to start treatment upon diagnosis.

In summary, the main lesson learned from Malawi's experience is that integration should be emphasized as the most effective mode of delivering Option B+, especially within the MNCH platform. Essentially, implementing Option B+ is contingent upon effective linkages between ANC, PMTCT and ART services. This provides a unique opportunity for countries to reassess the organization of service delivery and make adjustments as needed to further integrate services. Decentralization of services is critical to improving coverage, facilitating decision-making and fostering integrated service delivery. Human resource capacity should be a top priority through the

promotion of task-shifting and supportive supervision and mentoring.

Specifically, training health workers to perform HIV testing (including EID) and thereby ensuring quality samples/results is very important.

Related to this, strengthening supply chain management to ensure an uninterrupted supply of medicines and commodities is equally critical to success. Neglecting to do so may increase the likelihood of stock-outs and drug resistance, exacerbate challenges with retention, and impair trust in the health system. Cultural and gender norms and structural barriers should be addressed to increase male involvement and community engagement to increase retention. Community mobilization – using mass communication before and during implementation of the policy – is vital to ensure that women living with HIV and their families are aware of the changes in treatment options. Although significant strides have been made to expand access to lifelong treatment for pregnant and breastfeeding women living with HIV in Malawi, more innovative approaches are required to scale up infant diagnosis and paediatric care and treatment.

MALAWI: USING AN INTEGRATED MHEALTH PLATFORM TO IMPROVE M&E FOR MNCH AND MONITORING

Background/context:

Malawi has made remarkable strides in providing lifelong treatment for pregnant and breastfeeding women living with HIV. Access to ART among HIV-positive pregnant and breastfeeding women has increased from 22 per cent in 2011 to 47 per cent in 2012, and the 12-month retention rate is approximately 78 per cent. Despite these acheivements, EID testing rates and the number of severely malnourished children has not changed significantly. Loss to follow-up among HEI was quite high. Furthermore, the average turnaround time for infant virologic test (e.g., PCR) results was one or more months. According to WHO, mHealth or mobile health is defined as medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices. While coverage for mobile phones among women living with HIV is estimated to be around 70 per cent, nearly all (90 per cent) HCWs have mobile phones. Mobile phones were seen as a vehicle for improving communication of PCR results to health workers and caregivers that could potentially improve timeliness of results return and retention of women and children in HIV care and treatment.

Approach/intervention:

In 2011, Malawi launched an initiative to use rapid SMS technology to send appointment reminders to all women attending ANC, regardless of HIV status, and to caregivers of malnourished children. The reminders are sent three days prior to the scheduled consultation. In cases where a client has not agreed to receive the reminders, the client is referred to a health surveillance assistant in the area. Implemented in 450 health facilities throughout the country, the initiative has expanded to include the delivery of PCR testing results from central laboratories to health workers. The test results are sent via pin-protected text to the mobile phone of a laboratory technician or a clinician, and are also sent to SMS printers for record-keeping. SMS printers are used for sites with high patient volumes, while texting is used for lower-volume facilities. Critical to getting the initiative off the ground was the engagement of mobile service providers, who donated free airtime as part of their social responsibility programmes. Additional training and equipment were also required for health staff on the use of SMS reminders and the importance of confidentiality and testing procedures.

Results:

Combining the delivery of PCR results, client follow-up and growth monitoring via SMS produced encouraging results, including:

1. EID test results were obtained in real time and turnaround time was reduced to 15 days;
2. Improved retention of pregnant and breastfeeding women living with HIV by reminding women of their post-partum consultations;
3. The reporting of some 30,000 PCR test results

since implementation (prior to that, the number was available, but reports showed that results were quite delayed and often lost); and

4. An increase in early initiation of ART among children living with HIV, from 15 per cent in 2009 to 36 per cent in 2012.[33]

Challenges and lessons learned:

Disruptions in network availability forced people to revert to paper-based systems, which caused challenges in reporting. Limited access to electricity at some facilities impaired the functioning of the SMS reminders and printers. While the integration of HIV and infant nutrition was a first step, the use of rapid SMS for other services has not occurred. The use of SMS for delivery of test results has been evaluated, but the findings have not yet been published. Once the preliminary results are reviewed, there are plans to monitor a broader range of SRH and HIV services through SMS. Mobile phone coverage among women and adolescents and its use for private purposes also need to be assessed. The influence and role of men will be evaluated, because within the household, it is often men who own and carry a cell phone. Increasing male involvement may lead to improved utilization and retention. Plans to expand the initiative are being discussed and negotiations with the service provider are under way for improvements in areas where the network is unreliable.

NIGERIA: INTEGRATED SUPPLY CHAIN MANAGEMENT SYSTEMS

Background/context:

Prior to 2010, the Government of Nigeria, the Global Fund and PEPFAR each procured drugs and commodities separately. These parallel supply chains essentially delivered the same commodities to facilities scattered across the country. Coordination was minimal, with high stock-outs and drugs that were frequently expired.

Approach/intervention:

In 2012, both the Government of Nigeria and donors decided to create a unified supply chain system. Procurement was pooled and commodities were centrally warehoused and distributed to all facilities across the country.

Results:

An assessment conducted six months after the unification revealed that post-unification stock-outs were nearly eliminated at PMTCT sites decreasing considerably from a range of 12.5 per cent to 50 per cent to almost 0 per cent, and from 34 per cent to 5 per cent for ART sites. Wastage has been reduced because commodities can be moved across facilities if one is over-stocked or drugs are near expiration. In addition, expiries were almost eliminated except for some donated commodities which were received pre-unification. This also indirectly increased reporting on logistics data across health facilities.

Challenges and lessons learned:

Effective coordination between the national government and donors is key to the success of the intervention, with the Ministry of Health leading the process. Furthermore, local governments should be consulted and fully involved in reengineering the system. Clearly defined roles and responsibilities and the development of highly transparent procurement plans are integral to the effectiveness of the unified procurement and supply chain system.

SWAZILAND: DATA USE AND MENTORING TO IMPROVE QUALITY OF INTEGRATED SERVICE DELIVERY

Background/context:

In 2010, ART delivery – including PMTCT services – was decentralized in all four regions in Swaziland. More than 88 per cent of health facilities offered integrated MNCH and HIV services with high rates of utilization. Uptake of ARV prophylaxis to reduce MTCT was high among pregnant women living with HIV, with 86 per cent receiving some form of ARVs.

After scaling up MNCH services, the Government wanted to confirm that quality of care was not compromised at the expense of reaching a larger proportion of the population. Quality improvement was part and parcel of the HIVQUAL initiative, a quality improvement (QI) strategy that encouraged health workers to be self-motivated to perform their own site assessments and analysis and to recommend implementable solutions for improving the quality and uptake of the health services. However, when funding for the programme ended, QI was temporarily discontinued.

Approach/intervention:

Given that the Ministry of Health valued the QI process and wanted to continue to improve the quality of service delivery, the Government of Swaziland decided to establish teams dedicated to this purpose, led by Ministry of Health regional clinical mentors. Supervisors and regional officers worked closely with implementing partners in the four teams. This involved the development of mentorship and supportive supervision strategies. One of the principal strategies was the use of facility-based data to track progress. These teams consisted of a doctor, nurses, and the SRH, HIV and M&E focal points who would visit the four regions simultaneously.

During monthly supervision visits, the regional teams reviewed health facility data to highlight and recognize progress as well as to identify gaps – together with the facility staff – such as correctly recording patient demographics or the number of CD4 test results. The most common gaps were incomplete registers and reporting forms or not offering HTC to all clients. Facilities used graphs during the monthly data aggregation to show progress. Another key component of the supervision was on-the-job training on data collection and reporting. Feedback sessions with health staff were conducted twice a year during regional meetings.

Results:

Publicly displaying the performance of the health facility in the clinic increased knowledge and awareness of successes and challenges among all staff at the site. It also increased health workers' skills and ease in using and analysing data to identify trends in performance. This indirectly contributed to improving health workers' performance, competency and professional growth. There was improved team spirit and morale for sustained performance as the health workers saw tangible results and appreciated their improved work. Furthermore, this instilled a sense of responsibility and accountability at the individual level. These structured visits also improved the quality of reporting by facilities. Well-coordinated, continuous data and self-driven assessment across multiple levels improved quality of data collected and reported.

Challenges and lessons learned:

First and foremost, the Ministry of Health led the call for sustained QI efforts and designed the approach. This commitment trickled down to the regional teams, health facilities and partners. Effective coordination between the regional teams, implementing partners and health facilities enabled the visits to run smoothly. Clear objectives were articulated and roles and responsibilities defined. The buy-in of health facility staff was critical, as they understood the potential benefits such visits could have on their ability to better respond to the needs of their clients.

One of the keys to the intervention's success was repetition. It was only after one year of consistent supervision by the regional teams that data use improved and became more routine for health facilities. It was also personnel-intensive, as many regional focal points participated to ensure that supervision was integrated. Over time, the duration of the visits decreased from one per day to three or four per month as the teams became more comfortable with the process.

SWAZILAND: IMPROVING CONTINUITY OF CARE AND TREATMENT OF HIV-POSITIVE PREGNANT WOMEN, MOTHERS AND THEIR CHILDREN THROUGH AN INNOVATIVE INTEGRATED SERVICE DELIVERY MODEL FOR EMTCT WITHIN MNCH CLINICS

Background/context:

Since 2003, Swaziland has been integrating HIV into SRH (including MNCH) using PMTCT as the main entry point. This approach was implemented in primary health care and public health units, as well as in hospitals. A comprehensive package of HIV services was added onto the MNCH platform. These included HIV prevention, with an emphasis on condom use and voluntary male circumcision, provider-initiated HTC, the provision of ARV prophylaxis and ART, EID and paediatric ART coordinated with under-5 child health services, and on-site CD4 testing.

Approach/intervention:

To usher in this approach, key policy changes were endorsed. Most notably, HIV services were provided free of charge within MNCH, treatment services were embedded within the prevention services of MNCH, and an official accreditation process authorizing public health clinics to provide ART was developed. Government approval of task-shifting – most notably, authorizing and training nurses to initiate and manage women and children on ART, and 'lay cadres' to provide adherence counselling and follow-up care – was an integral component of this integrated approach. Delegation of tasks occurred in conjunction with supportive supervision and mentoring. Linkages with CHWs, expert patients and mother-to-mother support groups were reinforced to identify clients who missed appointments and help re-engage them in care. Procurement and expansion of point-of-care CD4 machines prevented delays in the initiation of ART. Revisions of patient registers and the Child Health Card were made to include HIV data and related information, and primary health-care units participated in semi-annual data review meetings.

Results:

Taken together, these changes facilitated a family-centred approach at MNCH and ART sites. Harmonized appointments for mothers and infants up

to 24 months at the same location were the cornerstone of this new model. Given its success, plans are under way to provide follow-up care until a child is 5 years old. Following implementation, significant increases in ART uptake were reported, including:

- The proportion of pregnant women initiating ART based on 2010 WHO guidelines (CD4 ≤350) increased from 45 per cent in 2010 to 75 per cent in 2013.
- Increased uptake of ART by children younger than 15 years old, from 55 per cent in 2010 to 70 per cent as of December 2012.

Challenges and lessons learned:

Although the model was a resounding success, there were inadvertent consequences as a result of integration. Public health units experienced overcrowding due to an increased demand for ART and other services by women and their families. To reduce saturation of certain sites, mothers and their children were referred back to ART clinics, but most refuse and prefer to receive care within MNCH settings. The existing space and infrastructure does not always accommodate the added services and new patient flow. For the most part, nurses and lay cadres assume the bulk of the responsibility and workload, which leads to burnout and attrition. Relying on mobile technology for follow-up is not a panacea, as not all clients have a cell phone or landline at home.

Despite these inevitable drawbacks, important lessons were learned from this intervention. First, sustained political commitment supplemented by clear policies and guidelines is fundamental to making integration work. New policies are adhered to and disseminated only if both effective coordination and management structures focus on desired goals, with the Ministry of Health playing a stewardship role. Continuous community engagement – which is vital to increase utilization of services and retention in care – requires innovative strategies to ensure that lay cadres stay motivated, despite low remuneration. M&E is also a crucial element for accountability and quality improvement. Tools must be refined along with services to effectively measure the extent to which services are truly integrated and outcomes have improved.

UGANDA: OVERCOMING IMPLEMENTATION BOTTLENECKS THROUGH INVOLVEMENT OF COMMUNITY STRUCTURES TO IMPROVE MATERNAL AND CHILD CARE CONTINUUM IN THE CONTEXT OF ART FOR EMTCT

Background/context:

In October 2012, the Ministry of Health in Uganda decided to initiate lifelong ART for pregnant and lactating women (formerly Option B+) living with HIV. Using a phased approach, this policy was taken to scale by August 2013. Recognizing the critical role of communities in raising awareness and demand for services and improving adherence and retention, the Ministry made deliberate efforts to engage community structures in the implementation of the new EMTCT guidelines. It appreciated the potential long-term benefits of community engagement that can have multiplier effects across services and levels of the health system. Community leaders and structures were able to help create demand for services through community education; alleviate human resources for health constraints by supporting adherence counselling; track loss to follow-up; and advocate for engagement of male partners. Community involvement also enabled broader MNCH bottlenecks beyond PMTCT/HIV to be addressed, including registering and mobilization for early ANC booking, referring pregnant women for skilled delivery and reminding mothers to honour their post-natal care appointments.

Approach/intervention:

Advocating for policies that ensured community engagement was integrated into an overarching approach to EMTCT was the first step. To this end, the Ministry of Health developed a National Communication Strategy & Conceptual Framework for each target audience, along with appropriate intervention domains and expected outcomes. To complement this, an EMTCT communication plan to support the roll-out of Option B+ and a Social Mobilization Handbook for Leaders was developed and disseminated in 2012. A National Coordination Task Force and development training package for community actors was established to spearhead this process. Resources were mobilized through the support of implementing partners that funded the community initiatives.

One of the pillars of the Ministry's strategy was increasing awareness about the importance of EMTCT to galvanize support at the regional and local levels for the new guidelines and policies. The First Lady of Uganda, Janet Kataaha Museveni, was selected as the National EMTCT Champion, and four regional EMTCT campaigns were launched between March and December 2013, with an additional six scheduled for 2014. Networks of people living with HIV acted as liaisons between health facilities and communities and village health teams (VHTs) to create awareness of PMTCT and other services at the district level.

Strengthening community structures and systems were at the heart of efforts to improve retention and adherence. Mentor mothers and fathers, peer educators and family support groups also provided follow-up care for women and children living with and affected by HIV and AIDS. Volunteer clients who received PMTCT services were invited to mobilize, refer and support clients. Short message service (SMS) messages were also sent (with a client's consent) with appointment reminders and to alert mothers when

test results were ready to be picked up and when to take their pills. VHTs – both facility-and community-based – provided counselling, triage in ART clinics, and facilitated family support groups. Supervised by health professionals, VHTs typically provided referrals from community to facility using a specific referral form located at the health centres. Doing so helped to keep mother-infant pairs together at one health facility and care point through 18 months post-partum.

Results:

A more robust and systematic approach to community engagement has demonstrated encouraging results. Between October 2012 and September 2013, out of the estimated 1.7 million pregnant women in the country, approximately 1.5 million knew their HIV status, and the majority (1,453,754) were tested in the current pregnancy. There was a notable increase in number of pregnant and breastfeeding women receiving ARVs, from 26 per cent in 2012 to 72 per cent in 2013. Of the 88,266 pregnant women living with HIV who received ARV for PMTCT, some 51,700 (58 per cent) initiated lifelong ART, 24,559 (28 per cent) received ARV prophylaxis through the end of breastfeeding and the number of new paediatric HIV infections decreased by 47 per cent since 2009.[34] Retention rates varied between 60 per cent and 87 percent in the various sites, and were generally higher in sites that have routine retention monitoring and linkage facilitators.

Challenges and lessons learned:

Community engagement requires persistence and sustained investment. Stigma and discrimination impede many women from accepting services for themselves and their children. For example, clients do not necessarily give their telephone numbers and addresses when requested for record-keeping purposes or to facilitate home visits. This exacerbates challenges related to tracking mother-baby pairs and returning EID results. Despite initiatives, such as invitation letters and by-laws that encourage men to attend ANC and/or get tested with their partners, meaningful male engagement is still not systematic. Limited clinic opening hours could prevent men from attending health services with their partners. Tools that capture data on community-based activities are limited, with the exception of family support group and VHT registers and select job aids.

Recommendations:

Providing lifelong ART for pregnant and breastfeeding women living with HIV and potentially their families requires intensified community engagement, and reduced HIV-related stigma and discrimination. Advance planning and resource mobilization, including financial and human resource support for more robust community outreach and involvement, are key elements and should be discussed in tandem with clinicians. Accountability, motivation, remuneration and sustainability are critical areas for consideration in community programming, as volunteerism is not sustainable. Regardless of the inherent challenges, community engagement should be an integral component of any integrated service delivery model

UNITED REPUBLIC OF TANZANIA: STRENGTHENING ART CLIENT TRACKING SYSTEMS TO IMPROVE ADHERENCE

Background/context:

Poor adherence and retention is a challenge in the United Republic of Tanzania, as it is in many countries. According to 2011 data, the drop-out rate was 26 per cent in the first year of treatment. This attrition rate was anticipated to increase as the country moved towards providing lifelong ART to pregnant and breastfeeding women, since women will be initiating ART upon diagnosis with limited time for adherence counselling at the reproductive health clinic setting.

The United Republic of Tanzania recently completed a comprehensive evaluation of programme retention in two large district hospitals from 2004–2012, which enrolled 5,525 adults on ART. Roughly 3,758 (68 per cent) were found to be currently on ART, while 1,767 (32 per cent) were no longer on ART. Of those not currently receiving ART, the reasons included: death (50 per cent), lost to follow-up (31 per cent) and unknown factors (19 per cent). Community/ home-based care workers tracked 1,026 patients, and 136 of them were found and interviewed. For the remaining 890 patients, only relatives could be found and interviewed. Of those categorized as loss to follow-up, about half (54 per cent) were deaths, 25 per cent were true loss to follow-up and the remaining 21 per cent self-transferred to another facility or were unknown. Among the 5,525 patients enrolled in the study, the estimated probability of attrition was 11 per cent, 17 per cent, 24 per cent and 29 per cent at 6, 12, 24 and 36 months on ART, respectively.[35]

Risk factors for attrition included female sex, older age, lower baseline weight, advanced clinical disease and presence of active tuberculosis, which are markers of advanced HIV infection and may be associated with the high rates of mortality reported above. One of the outcomes of the evaluation of retention was the introduction of an appointment and client tracking system.

Although there was an appointment system in place, every facility used its own system, which made it difficult to compare data and trends across facilities, as different tools and approaches were used. There was no method to track who was scheduled to show up. The system only registered clients who in fact attended the health facility, regardless of whether or not there was a scheduled consultation. The majority of clients prefer morning consultations. As a result, clinics tended to be congested in the morning with long waiting times.

Approach/intervention:

In response to the risks posed by attrition, the Ministry of Health restructured the appointment system and strengthened community structures to track patients at two district hospitals.

The new appointment system established a client-determined time for clinical consultation, so that not all of the clients would arrive at the same time in the morning. This system also introduced a level of standardization. Previously, health staff used different tools for making and monitoring appointments. This intervention consisted of introducing a standardized appointment and patient tracking register. The appointment register allows the facility to know which patients to expect and allows for tracking of no-shows, to help identify clients who are lost. This also helps to provide data on the total number of clients, number

of clients being seen for clinical visits and those lost to follow-up. The facility client-tracking register is designed to capture those clients who have missed an appointment. The register is kept at the facility and used in coordination with community-based providers, who provide home-based care and follow-up care to clients. If a client does not show up within three to five days after the scheduled appointment, then his or her address is transferred to the tracking register. The home-based care provider takes the information from the register and attempts to locate the client using his or her mobile number and address, and bring her/him back to the clinic. The provider then returns the tracking paper with patient outcomes: dead, loss to follow-up or returned to care, and then makes the next appointment for the client, when necessary.

Results:

The standardization of the appointment system improved coordination of services and follow-up care provided to clients. The appointment book and tracking tool were not M&E tools for recording and reporting, as there was no transfer of information to higher levels of the health system, which was a limitation observed during the tool's assessment. Training on the new tools was conducted on site rather than through a formal training, which was quite inexpensive. The use of the new tools also proved easy to reinforce during site supervision visits.

Quantitative evidence on the impact of the appointment system on retention rates is not yet available. Observations from clinical sites, however, showed that clients return for care in facilities that use the system. The appointment books made service providers more aware of client volume, and motivated them to distribute client appointments throughout the week.

Challenges and lessons learned:

Although the pilot phase did not include an evaluation component, through observation and qualitative feedback from health workers, it is evident that the tools were scalable and therefore adopted nationally. The system was piloted by an implementing partner and required buy-in from the National AIDS Control Program to adapt it for national roll-out.

The tools work best in medium-to-low client volume facilities. Transferring information from the appointment book to the tracking register is time-consuming for nurses, and therefore not recommended for medium-to-high-volume clinics. For large-volume facilities with an ART programme database, staff can use the electronic system to generate a list of clients who failed to attend, along with their contact information. Therefore, tools are most relevant and useful for sites that do not have an electronic ART patient database (about 25 per cent of ART clinics nationally).

Based on the usefulness of the tools in the ART clinics to promote retention, they will also be recommended and integrated into MNCH clinics for tracking pregnant and breastfeeding women initiating lifelong ART, and their infants.

ZIMBABWE: INTEGRATION OF SRH AND HIV SERVICES AT TERTIARY HOSPITALS

Background/context:

Typically in Zimbabwe, tertiary facilities such as provincial hospitals provide specialized services. However, referrals to a different department or location within the same hospital deterred women and their children from accessing follow-up services and tests. Therefore, the Ministry of Health addressed service fragmentation by creating a 'one-stop shop'

where clients accessed a range of services to reduce missed opportunities for women in need of specialized care, including HIV.

Approach/intervention:

First, the Ministry of Health conducted a rapid assessment to map out and evaluate the services tertiary facilities offered. Key stakeholders such as parliamentarians, CHWs and hospital staff were consulted to develop a minimum package of services offered to all clients attending that hospital. This team then developed guidelines for the package, which was approved by the Permanent Secretary. This minimum package became the standard for all facilities, which included pap smear exams, fertility testing, male circumcision, all contraceptive methods (including long-acting options), ART initiation and integrated training of health-care providers.

The integrated training curriculum was the cornerstone of this integrated service delivery model and combined formerly separate trainings in EMTCT, FP, tuberculosis co-management, nutrition, sexually transmitted infection management, provider-initiated testing and counselling, ART initiation and management, and M&E. A number of specialized trainings remained in place, such as training related to cervical cancer, which was relatively new and recently being rolled out at the provincial level.

Results:

Training and services were effectively integrated at tertiary hospitals. The number of days allocated to training decreased from 42 to 12 days, which, by extension, reduced costs and increased the amount of time that health staff spent at hospitals. Nurses became a multi-skilled cadre that provided a wide array of services, and missed opportunities were reduced. Patient turnover or lost to follow-up has decreased significantly as well.

Challenges and lessons learned:

Due to the limited number of health professionals, virtually all health-care workers have to be trained, which requires significant time and investment. High staff turnover further compounds this challenge. Health-worker perceptions regarding contraception also influence demand for particular methods. For example, demand for intra-uterine devices and implants are thwarted by the fact that these methods required a higher level of skill to administer and the prevailing perception that birth control pills and condoms are easier to distribute. While integration is welcomed by clients and health-care workers, it also created additional work for nurses. Registers that facilitate reporting on service integration should be implemented prior to integration to measure the impact. Critical success factors include obtaining buy-in from all stakeholders to generate adequate political will and support, and developing an integrated training curriculum that is well vetted by programme managers.

Recommendations:

Integrated training and service delivery ensures that clients receive comprehensive care. Expanding the pilot beyond tertiary institutions to provincial hospitals is recommended to determine whether integrated service delivery will be as effective and efficient at lower levels of care. Building the capacity of private service providers is being considered, since a significant proportion of the population receives care through the private sector.

Recurrent themes and recommendations

Drawing from the 11 case studies, there are several common threads that make integrated service delivery successful. These include:

Sustained political commitment and coordination

In nearly all of the case studies, the Ministry of Health was in the driver's seat and advanced the adoption of an innovative practice related to integrated service delivery models. In most cases, the national government convened all key stakeholders and implementing partners to discuss the approach, refine the process, and leverage resources to implement the intervention. Technical and implementing partners and civil society supported implementation at the district and facility level to carry out the government's vision. Sparking commitment at the national level is essential for scaling up integrated service delivery, but maintaining momentum and follow-through at the sub-national and health-facility level requires the buy-in and capacity-building of district programme managers, clinical staff and community cadres.

Clear, streamlined and documented strategies and policies

Once support for a particular change in approach or innovation was articulated, clear policies and strategies were developed to provide a framework for all interested parties. This reinforced the expressed political commitment and authorized the changes to be adopted at the appropriate level of the health system. Given that some of these approaches required significant shifts in programming, having clear guidance was critical to its successful execution. This was especially the case in Malawi and Uganda with the transition to providing lifelong ART to pregnant and breastfeeding women, or in Ghana, Lesotho and Swaziland to establish integrated client-monitoring systems.

Training, mentorship and supportive supervision

Significant investment in health workers' continued education and professional and leadership development including, but not limited to, mentoring and supportive supervision is needed to ensure that frontline health workers are equipped to deliver services, using a new, more integrated approach. While not unique to implementing integrated service delivery models, building the capacity of community and facility-based health workers and continued support is required to ensure that health staff are well equipped to manage the change in service organization. Costs for building health workers' clinical, managerial and leadership capacity (i.e., training, mentoring, distance learning) to integrate services must also be included in these calculations. Providing integrated supervision can be effective and must be well coordinated to work around the conflicting demands of various managers reporting to different programmes, which may continue to be distinct entities at the central level.

Community engagement is vital to demand creation and retention

As clinical programme components become increasingly more integrated, community engagement can magnify the benefits achieved by such models. Ethiopia and Uganda present concrete and compelling examples of how mobilizing existing community structures can contribute to profound improvements in the performance of key maternal and child health indicators. In both countries, the Ministry of Health championed the involvement of civil society and recognized the inherent, enduring value of leveraging

community assets to improve the health of women and children. Stronger collaboration between health facilities and communities was achieved, with VHTs or extension workers providing counselling, adherence support and referrals to a wide range of services. This approach offers clients a more holistic package of services, merging biomedical interventions with broader support and bringing health services closer to clients. As a result, service utilization increased, as observed in Ethiopia, and retention rates improved in Uganda.

Integrated M&E

The integration of M&E systems should follow the integration of service delivery models. Recognizing that stigma impeded adequate monitoring and follow-up of people living with HIV, Lesotho, Malawi and the United Republic of Tanzania implemented strategies to reach out to all clients regardless of HIV or other health status. Standardizing tools made it simpler for health workers to track clients and identify and overcome barriers to follow-up for clients living in a specific catchment area, or for family members. An integrated health information system also enables comparisons across facilities, which can promote cross-learning and provides strategic information to managers for effectively tracking programme performance.

Conclusion

This compendium has profiled and analysed 11 case studies on integrated service delivery in the context of EMTCT from 9 countries in sub-Saharan Africa. All of the examples demonstrate a general trend towards the implementation of integrated service delivery models supported by policy frameworks adopted in country and by service organizations at the facility level. These promising practices are by no means exhaustive or geographically representative. They do, however, contain valuable and practical vignettes of integrated service delivery in countries with generalized HIV epidemics. This compendium could be enriched with examples of integrated service delivery models from different contexts and regions, and integration across health services, including more on integration of ART into MNCH and integrated followed up.

Despite the promising results contained in this compendium, some questions remain and operations research is needed to better determine which integrated service delivery models are the most effective – as measured against the health outcomes that the Global Plan is trying to achieve. Specifically, it is important to understand how to integrate services – is a phased approach better than an immediate one? Which sequence of steps should be followed? Less is also known about clients' perspectives and experiences receiving care within an integrated model, compared with vertical services, although several studies shed light on this.[36,37,38,39] Lastly, many of these practices have only been piloted and have not yet been taken to scale nationally. Zeroing in on what is required to scale up these models of integrated care is imperative to ensuring that the benefits of integration are widely distributed across different populations. Many best practices are already occurring at the country level. Countries and partners should continue to document and share their experiences.

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Annexes

ANNEX 1: CASE STUDY TEMPLATE

IATT Integrated HIV/SRH Service Delivery Models Workshop

Case Study Template

Innovation: Introduction of a new concept, idea, service, process, system, policy or commodity aimed at improving treatment, diagnosis, education, outreach, prevention and research, and with the long term goals of improving quality, safety, outcomes, efficiency and costs for child and maternal health.

Please use one template per country team and coordinate with Meghan Mattingly, EGPAF, to complete the sections below.

1. Background information

Country:

Innovation:

Partners and roles involved:
(technical, financing, etc.)

Notetaker:

2. Applicable topic:

Programme Area:

Level:

Phase:

Evidence:

3. Description:

Practice/Innovation/Approach :

3a. Background and context:
Please briefly describe the context of the problem or challenge:

3b. Please describe the most important changes and why this is a best/promising practice, innovation, lesson learned:

3b. What where the key elements of success?

3b. What where the key challenges in implementing this innovation? How did the team try to address these challenges?

3c. Benefits/results:

Consider access, uptake, quality, cost, timeliness and satisfaction as you describe the benefits and results achieved. Please describe the progress and any verified results achieved (positive, negative or unanticipated) in during the planning, implementation or monitoring phase. Provide a summary of any initial evidence (quantitative and/or qualitative).

3d. Key lessons learned:

If you had to implement the intervention again, what would you do differently, what would you replicate, what conditions are necessary to achieve similar results?

3e. Recommendations and implications:

Please describe the potential for wider application of the intervention, e.g., scale-up, replication, as well as any potential considerations or constraints that must be realistically considered based on current knowledge and experiences.

ANNEX 2: INTEGRATED HIV/SRH SERVICE DELIVERY MODELS WORKSHOP AGENDA

Integrated HIV/SRH Service Delivery Model Workshop Agenda

28–31 October 2013, Dar es Salaam, United Republic of Tanzania

Objectives of the Workshop

1. Share evidence-based and experience-based service delivery models that include EMTCT services integrated with antenatal, post-partum and family planning care models, and integrated HIV services for exposed and infected children.
2. Facilitate country exchanges of best practices and field experience with different integrated service delivery models:
    a. Intentionally organized to promote South-to-South learning with summary presentations by country teams.
    b. Identify needs and action steps to be completed.
    c. To identify HIV-exposed and infected children and ensure provision of ART and family planning.
3. Formulate guidance on key considerations/modalities for promising integrated service delivery models.
4. Provide guidance on M&E systems review including identifying gaps in current tools and registers and suggestions for updating tools for new service delivery models with focus on monitoring of retention of mother and infants.
5. Provide guidance and recommendations for countries on how to optimize EMTCT and SRH (MNCH, family planning, and sexually transmitted infections) integration for maximum efficiency gains.

START TIME	SESSION ACTIVITIES AND OBJECTIVES	FORMAT	SESSION FACILITATORS AND PRESENTERS
Day 1			
8:00	Participant Registration		
8:30	Session 1: Welcome, Introductions, Review of Objectives and Agenda (30 minutes) Objectives: • Welcome participants • Introduce participants • Review agenda and objectives of the workshop	Plenary	Neema Rusibamayila, Director, Preventive Services, MOHSW, Tanzania Jama Gulaid, UNICEF Lisa Nelson, WHO Anna Gieselman, PEPFAR Lynn Collins, UNFPA Christian Pitter, EGPAF
9:00	Session 2a: Scene Setting: Global Initiatives Related to Integrated Service Delivery Models (ISDM) (75 minutes) Objectives: • Share and understand critical global initiatives related to achieving the targets of the Global Plan towards eliminating new HIV infections among children by 2015 and keeping their mothers alive, focusing on delivering integrated HIV and sexual & reproductive health (SRH) services	Moderated Plenary Panel	Facilitator: Eyerusalem Negussie, WHO Presenters: Chinyere Omeogu, IATT Nicholas Muraguri, GSG Lisa Nelson, WHO Anouk Amzel, USAID Margaret Anyetei, UNFPA
10:15	Session 2b: Scene Setting: Overview of Findings from the Literature Review on Integrated Service Delivery Models (ISDM) (45 minutes) Objectives: • Share findings from the literature review on integrated service delivery for pregnant and breastfeeding women, women living with HIV, mothers and their children across the continuum of care • Discuss working definitions of key concepts around HIV/SRH integrated service delivery models focusing on integration, identification, initiation, and retention in the context of HIV and Sexual & Reproductive Health (family planning, maternal, newborn, and child health, sexually transmitted infections).	Plenary	Facilitator: Sostena Romano, Johnson & Johnson Presenters: Virgil Onama, UNICEF consultant

11:15	Session 2c:
	Country Experiences with Delivering Integrated HIV/SRH Services
	(60 minutes)
	
	Objectives:
	• Facilitate learning through presentation and sharing of country experience in:
	  • integrated HIV/SRH (family planning, maternal, newborn and child health, and sexually transmitted infections) service delivery models, opportunities, challenges and lessons learnt;
	  • in providing antiretroviral therapy (ART) in maternal and child health (MCH) settings- operational and programme implications and considerations;
	  • follow up and retention of pregnant women, and mother-infant pair across service delivery points, and from postpartum to long term care of women living with HIV, and linkage to family planning services for all women.
		Moderated Plenary Panel	Facilitator:
			Tanzania MOH
			Presenters:
			Joseph Hermann Singirankabo; Rwanda Biomedical Center.
			Michael Eliya, PMTCT Programme Officer, MoH, Malawi.
			Rejoice Nkambule Deputy Director of Health Services- Public Health, MOH Swaziland

START TIME	SESSION ACTIVITIES AND OBJECTIVES	FORMAT	SESSION FACILITATORS AND PRESENTERS
Day 1			
12:15	Session 2d: Understanding the Client Perspective in Accessing and Utilizing Integrated Services (45 minutes) Objectives: • Understand client perspectives (experiences and challenges) in accessing and utilizing integrated HIV and SRH services • Understand how community engagement can complement integrated service delivery • Engage health ministries in discussion on how to amplify community engagement for the purposes of improving service integration and, ultimately, health outcomes • Identify ways for civil society to proactively engage in EMTCT and other HIV/SRH integrated service delivery	Plenary	Facilitator: CSO rep Presenters: Patricia Ukoli, civil society member from Nigeria, representing ICW and GNP+ Eunice Sinyemu, civil society member from Zambia, representing ICW and GNP+ Moono Nyambe, ICW and GNP+
13:00	Session 3: Critical Topics Introduction and Topic Selection (15 minutes) Objectives: • Finalize list of critical topics offered on Day 3, including solicitation of new topics based on participant suggestions	Plenary, TBD	Facilitator: Rosalind Carter, IATT
13:15	Lunch break		

10:15	Session 4a:
	Introduction to Group Work and How to Integrate Health Services: Perspectives from Namibia
	(60 minutes)
	
	Objectives:
	• Share Namibia's experience on integrated service delivery focusing on how to integrate health services, including sharing findings from a pilot study analysing client flow/time motion leading to integrated service delivery for reducing client waiting time, improving retention, decreasing stigma, increasing uptake of services, and improving health provider productivity
	• Provide detailed guidance on the group work including:
	  • an overview of the different sub-sessions, their specific objectives, format and expected outcomes
	  • the process by which groups will identify/review major bottlenecks to effective integrated service delivery; solutions to bottlenecks; and key considerations and recommendations for implementation
		Plenary	Facilitator:
			Rene Ekpini, UNICEF
			Lynn Collins, UNFPA
			
			Presenters:
			Tomas Zapata, on behalf of MOH, Namibia

15:15	Tea break		

START TIME	SESSION ACTIVITIES AND OBJECTIVES	FORMAT	SESSION FACILITATORS AND PRESENTERS
Day 1			
15:30	Session 4b: Review and Validation of Summary Country-Level Survey Findings on ISDM (120 minutes) Objectives: • Review and identify gaps in the survey findings, make amendments as needed, and validate compiled information.	Group work by country	Facilitator: TBD
17:30	End of day		
Day 2			

10:15	Session 4c:
	Review of Major Bottlenecks to Identification, Initiation and Retention
	(120 minutes)
	Objectives:
	• Review and discuss bottlenecks described in the template, identify gaps, and validate a final list. Bottlenecks will be discussed by intervention for each of the 3 service delivery processes:
	  • Identification (e.g., maternal HIV status during both pregnancy and breastfeeding, pregnancy, need for family planning (FP), early infant diagnosis (EID), HIV status of make partners and other children, syphilis screening, etc.)
	  • Initiation (e.g., maternal ART/B/B+, infant feeding, contraception, routine antenatal care, cotrimoxazole, ART initiation for male partner, children, and/or other people living with HIV in the community, etc.) and
	  • Retention (e.g., Clinical and laboratory monitoring of adult and paediatric ART, consistent attendance at antenatal (ANC) and post-partum follow-up visits, repeat HIV testing, follow-up of HIV-exposed infants through final HIV status, ART adherence support, FP follow up, completion of immunization schedule, etc.)
	• Prioritize bottlenecks identified across the following key determinants: a) enabling environment; b) commodities/supplies; c) human resources; d) service utilization/uptake; e) coordination, planning and management of service delivery; and f) monitoring and evaluation.
		Group work by country	Facilitator:
			TBD

10:30	Tea break		
10:45	Session 5: Integration Innovation Café (120 minutes) Objectives: • Share integration innovations and tools • Share innovations related to integration among the country teams • Identify promising practices that can be implemented in various settings and for broader sharing with all workshop members • Highlight the key components of each intervention (HOW) • Discuss ways to scale up these interventions	Group work; inter-country activity	Facilitator: Meghan Mattingly, EGPAF Presenters: Country teams
12:45	Lunch break		

START TIME	SESSION ACTIVITIES AND OBJECTIVES	FORMAT	SESSIONFACILITATORSAND PRESENTERS
Day 2			
13:45	Session 6a: Critical Topics: Part 1 (120 minutes) Objectives: • Provide opportunity for more intimate learning on key topics that can be applied to improving integration and solving bottlenecks. • Improve country problem-solving skills and knowledge by working through scenarios in mixed country teams	Small group work; inter-country activity	Facilitator: TBD
15:45	Tea break		
16:00	Session 6b: Critical Topics: Part 2 (90 minutes) Objectives: • Gain applied experience in challenges of data aggregation using current national tools and reflect on ways to improve systems.	Small group work; inter-country activity	Facilitator: TBD
17:30	End of day		
Day 3			
8:30	Session 7a: Identification of Solutions and Recommendations to Improve ISDM: Part 1 (120 minutes) Objectives: • Identify and discuss solutions for each of the main bottlenecks from the previous group work session • Discuss what needs to be done to ensure successful implementation of the solutions including their scalability.	Group work by country	Facilitator: TBD
10:30	Break		
10:45	Session 7b: Identification of Solutions and Recommendations to Improve ISDM: Part 2 (120 minutes) Objectives: • Identify and discuss solutions for each of the main bottlenecks from the previous group work session • Discuss what needs to be done to ensure successful implementation of the solutions including their scalability.	Group work by country	Facilitator: TBD
12:45	Lunch break		
13:45	Session 7b: Follow-up Plan Development (180 minutes) Working tea break Objectives: • Develop country plans for follow-up after workshop	Group work by country	Facilitator: TBD
16:45	End of day		

START TIME	SESSION ACTIVITIES AND OBJECTIVES	FORMAT	SESSION FACILITATORS AND PRESENTERS
Day 4			
9:00	Session 8b: Follow-up Plan Presentation and Feedback (90 minutes) Objectives: • Receive feedback on country follow-up plans • Learn about priority follow-up actions from other countries • Strengthen country follow-up plans	Small group work; inter-country activity	Facilitator: TBD Presenters: Country teams
10:30	Tea break		
10:45	Session 9: Readout From Session 4a-e; Discussion of Key Considerations Framework (90 minutes) Objectives: • Share and discuss feedback on bottlenecks, solutions and key considerations and recommendations from country group discussions. • Summarize and discuss group work done on common bottlenecks to integrated service delivery in the context of EMTCT and Paediatric HIV Care & Treatment • Summarize working groups' proposed solutions, key considerations for implementation and recommendations for effective integrated service delivery and facilitate discussion and feedback.	Moderated Plenary Panel	Facilitator: Dorothy Mbori Ngacha Chinyere Omeogu Presenters: MOH, Tanzania MOH, Nigeria
12:15	Lunch break		
13:15	Session 10: ISDM Summary and Discussion (90 minutes) Objectives: • Achieve consensus on the main conclusions of the workshop, building on the summary from the previous session	Plenary	Facilitator: Chewe Luo, UNICEF Lisa Nelson, WHO Presenters: TBD
14:45	Session 11: Closing Remarks (30 minutes) Objectives: • Recognize the invaluable contributions of the participants to furthering understanding of how to deliver integrated services • Pledge commitment to supporting the plans for strengthening delivery of integrated services	Plenary	TBD: UNICEF, WHO, GSG, UNFPA, EGPAF, J&J
15:15	End of day		

ANNEX 3: INTEGRATED HIV/SRH SERVICE DELIVERY MODEL WORKSHOP PARTICIPANT LIST

ORGANIZATION	FIRST NAME	LAST NAME	E-MAIL
Ethiopia			
National Network of Positive Women	Eyelachew	Etsub	eyelachewetsub@gmail.com
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