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Asia-Pacific Operational Framework for Linking HIV/STI Services with Reproductive, Adolescent, Maternal, Newborn and Child Health Services

July 2007

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Foreword

The global commitment to Universal Access to comprehensive HIV prevention, treatment, care and support by 2010 will remain hollow without extraordinary steps to strengthen the health system. Fostering linkages within the health sector — for a start — brings all service delivery points to bear to better detect and treat HIV and AIDS among population of men, women and children who may be at high risk but are unaware of their status.

Buttressing the linkage of a set of services, each with a constituency of users who may be exposed to HIV, is a systematic scale up of services with a vast scope for expansion. Such linkages utilize the strength of each channel — through sexually transmitted infections, reproductive health, adolescent, maternal, newborn and child health services — to bolster the health system's overall response to one of 21st century's most harrowing epidemics.

Effective delivery for better prevention, treatment, care and support of HIV and AIDS requires also the support of nongovernmental organizations and communities. They are an indispensable part of the millennium agenda to advance public health and achieve greater public good, especially in halting a growing epidemic. Where there is systemic engagement of communities, including adults and children living with HIV, groups most at risk, young people and local leaders, there is a greater ownership of the agenda, greater recognition and greater action to bring about changes and new practices.

It is with the overarching goal of enhancing universal and equal access that regional offices of WHO, UNICEF, UNFPA and the UNAIDS Secretariat in the Asia Pacific region convened a Joint Forum with governments and civil society on 6–10 November 2006 in Kuala Lumpur, Malaysia. The Joint Forum comprised two back-to-back meetings:

- Biregional Consultation on Integrating Prevention and Management of STI/HIV/AIDS into Reproductive, Maternal and Newborn Health Services

- The 6th Asia-Pacific UN Prevention of Mother-to-Child HIV Transmission Task Force Meeting Towards Scaling Up Comprehensive PMTCT in Asia-Pacific

This alliance of efforts between United Nations agencies and different health departments marked the start of dialogue toward an integrated or linked response. More specifically, it aimed to increase synergy between national HIV programmes and maternal, neonatal and child health care (MNCH) programmes, which covered a range of services related to women and children, including the prevention of mother-to-child transmission (PMTCT) and prevention of HIV among women.

For the most part, the growing feminization of AIDS, with the proportion of women among those infected with HIV increasing in every region, including Asia Pacific, provided a compelling case for an intensified MNCH response. And it was recognized that the health system alone could not resolve the larger, multiple vulnerabilities that fuel women's HIV risks: gender inequality; unequal access to education and health services; and poverty and high but often unreported incidents of domestic and sexual violence. It brought forth a call by delegates for the greater involvement of male partners and greater support from communities to engender male behavioural changes, as well as a supportive environment for such changes. These include changing traditional perceptions of masculinity and discriminatory attitudes to AIDS.

The two meetings subsequently led to a third consultation among a select group of countries, a combination of those with concentrated and generalized epidemics, including the two most populous nations in the Asia Pacific region, to provide guidance on adapting an integrated or linked response according to local realities. The outcome of these inclusive and consensus-based discussions was the Asia-Pacific Operational Framework for Linking HIV/STI Services with Reproductive, Adolescent, Maternal, Newborn and Child Health Services, a regional document that served as a practical reference for national and subnational actions.

It is our hope that this series of joint efforts will not only impact HIV, but contribute to the attainment of the Millennium Development Goals, all of them intricately linked, and serve an agenda we share: towards the greater well-being for all.

These joint efforts also mark a concerted step towards the renewal of interest in primary health care, the beginning of a complex journey to ensuring HIV and other STI are an integral part of an expanded, sustainable health response that engages all departments and stakeholders.

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Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ANC	Ante-Natal Care
ARH	Adolescent Reproductive Health
ARV	Antiretroviral therapy
BCC	Behaviour change communication
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IDU	Injecting Drug User
IEC	Information, Education, and Communication
IUD	Intra-Uterine Device
MARP	Most At-Risk Populations
MNCH	Maternal, Neonatal and Child Health
MSM	Men-who-have-sex-with-men
NACO	National AIDS Control Organization (India)
NCHADS	National Center for HIV/AIDS, Dermatology and STD (Cambodia)
NCMCH	National Center for Maternal and Child Health (Cambodia)
NGO	Nongovernmental Organization
OPD	Outpatient Department
PEP	Post-Exposure Prophylaxis
PITC	Provider-Initiated Testing and Counseling
PLHIV	Person/People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
PPC	Post Partum Care
QA	Quality Assurance
QC	Quality Control
RCH	Reproductive and Child Health Services Programme (India)
RH	Reproductive Health
RHAC	Reproductive Health Association of Cambodia
RTI	Reproductive Tract Infection
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
VCT	Voluntary Counselling and Testing

Abstract

Distinct interventions are needed to improve reproductive health (RH), adolescent reproductive health (ARH), maternal, neonatal and child health (MNCH), and prevention and management of HIV and other sexually transmitted infections (STI). Yet common underlying causes and shared solutions provide the basis for linkages that can strengthen all services and increase the reach of HIV prevention and testing. This Operational Framework provides information about how to create these linkages and what factors to take into account in doing so. The emphasis is not on creating all possible linkages, but on doing what is possible and advisable given local factors such as epidemiology, current skill sets, the current organization of the health system, resources available, and health system usage patterns. In settings with low HIV prevalence, for example, outreach to specific populations may be more important than forming linkages between two broad-based services. Especially when resources are limited, linkages that add information (such as prevention messages or a simple screening) will be easier to implement than linkages that require extensive clinical judgment for referral or clinical treatment. Central policies are needed to support the introduction of linkages, but they should incorporate community input and allow for local-level modification and ownership. If these factors are taken into account, linkages between RH, ARH, MNCH and HIV/STI services have great potential to achieve efficiency gains and increased targeting of client populations.

1. Introduction

1.1 THE PURPOSE OF THE OPERATIONAL FRAMEWORK

This document provides guidance to countries for the strengthening of linkages between RH, ARH, MNCH, and the prevention and management of HIV and other STI. Particular emphasis is placed on linkages that will improve HIV/STI prevention and outcomes, and allow RH, ARH and MNCH services to benefit from the strengthening occurring in HIV/STI programmes. Lessons learnt and future directions appropriate to the Asian region are cited.

1.2 ORIGINS AND CONTEXT OF THE OPERATIONAL FRAMEWORK

The severity of the HIV/AIDS pandemic and the enormous scale of the response to it have forced a re-examination of health systems. With all the effort pouring into HIV prevention and treatment, many in the health sector are looking to maximize the benefit of this activity for the sector as a whole.

One mechanism to achieve this is via linkages (Figure 1). This Operational Framework seeks to address this possibility in an Asia-Pacific regional context. The Operational Framework arose from three regional consultations. The first, a Consultation on Integrating Prevention and Management of STI/HIV/AIDS into Reproductive, Maternal and Newborn Health Services, was held jointly with the 6th UN Asia-Pacific PMTCT Task Force Meeting in Kuala Lumpur, Malaysia, on 6-10 November 2006. In response to the comments of participants at this meeting, and based on a technical guidance paper,[1] a Framework was drafted for consideration by participants at an informal consultation held in Guilin, China on 9-11 May 2007. The current Operational Framework is the product of the three meetings.

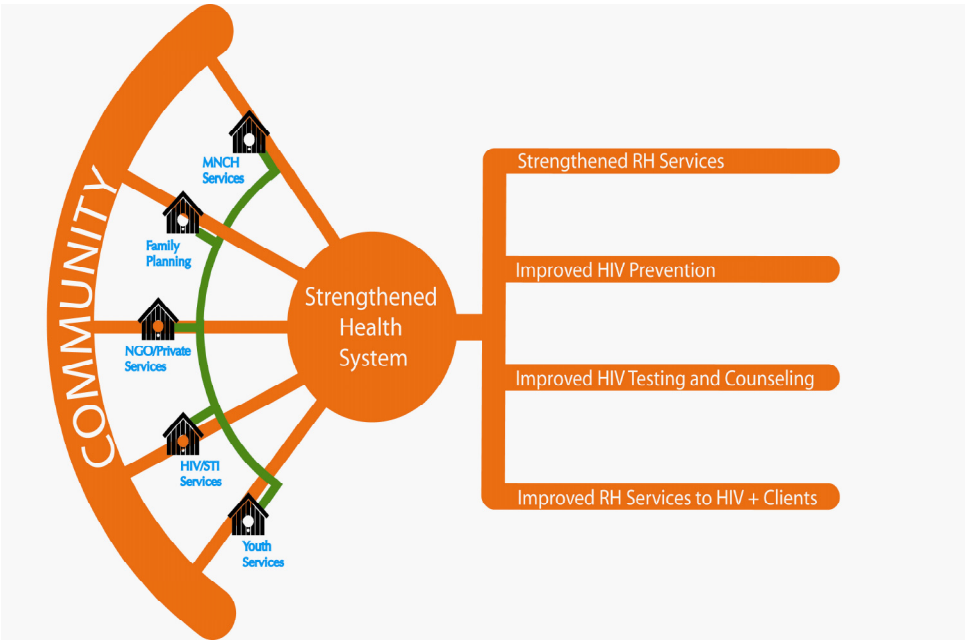


Figure 1. Linkages can strengthen health care outcomes

Clients access various parts of the health care system from their community. Linkages between these distinct health services can strengthen health outcomes (right), particularly for needs related to RH, ARH, MNCH and HIV/STI services, which have common underlying causes and shared solutions.

Numerous studies and reports have discussed efforts to link RH, ARH, MNCH, and HIV/STI interventions. Notably, "The Resources for HIV/AIDS and Sexual and Reproductive Health Integration site" (www.hivandsrh.org) lists over 500 selected resources supporting integration of HIV prevention and treatment and promotion of sexual and reproductive health. Advocacy on this topic has included the New York Call to Commitment: Linking HIV/AIDS and Sexual and Reproductive Health[2] and the Glion Call to Action on Family Planning and HIV/AIDS in Women and Children.[3]

This document is consistent with the WHO Framework[4] for implementing the WHO Global Reproductive Health Strategy.[5] The Strategy focuses on five core elements:

- improving antenatal, delivery, postpartum and newborn care;
- providing high quality services for family planning, including infertility services;
- eliminating unsafe abortion;
- combating STI, including HIV, reproductive tract infections (RTI), cervical cancer and other gynecological morbidities; and
- promoting sexual health.

Not all settings that provide RH services deliver all five core elements. In particular, RTI/STI services often fall at least partly under the department responsible for HIV/AIDS. This can, however, act as a starting point for collaboration.

1.3 ASIA-PACIFIC CONTEXT

Asia includes over 60% of the world's population, with three countries (China, India and Indonesia) together containing almost half the world's population. The countries in the region range across the entire economic and health spectrum, with enormous variations in figures for contraceptive use, fertility rate, maternal mortality ratio, antenatal care coverage, skilled attendance at birth, and infant mortality. Cases of curable STI are estimated at 48 million for South and South-East Asia and 6 million for East Asia, which totals almost half of the global burden.[6]

An estimated 4.9 million people are living with HIV in Asia-Pacific, and 960 000 people were newly infected in 2006. The number of people receiving antiretroviral therapy in Asia rose from 70 000 in 2003 to 280 000 by the end of 2006; the latter figure represents over 19% of the treatment need. Notable HIV prevention successes in the region include Cambodia and Thailand, which both used government-driven 100% condom use programmes to sharply reduce HIV incidence. Cambodia, Myanmar and Thailand have generalized epidemics (prevalence over 1%), leading to significant transmission from husband to wife and from mother to child. Several other countries have high prevalence in certain vulnerable groups such as sex workers, injecting drug users, and men who have sex with men. Finally, a number of countries in the region have not reported high HIV prevalence in any groups. As is true elsewhere, women in the region are both biologically and sociologically more vulnerable to HIV infection.

The Pacific region has a lower and more dispersed population, making isolation a key determinant of health. Lack of resources and low technical capacity are common, and rates of teen pregnancy and the prevalence of certain STI (especially chlamydia and syphilis) are both high. An estimated 81 000 people are living with HIV in the region, with three quarters of these in Papua New Guinea, which has an estimated adult HIV prevalence of 1.8%.

Experiences with linkages between RH, MNCH and HIV services in the Asia-Pacific region are discussed in section 5.

2. Why are linkages useful?

2.1 LINKAGES IMPROVE BOTH HEALTH SYSTEMS AND THE EXPERIENCES OF THEIR CLIENTS

The design of health systems is driven by two, sometimes competing, imperatives. Integration or linkages aid the client by making multiple services available in a single location, but integrated systems can be more challenging to administer.

Before exploring these issues further, the choice of terminology in this Framework needs to be explained. According to one common definition of integration:

> "Any two services can be considered to be integrated when they are offered at the same facility during the same operating hours, and the provider of one service actively encourages clients to consider using the other service during that visit. According to this definition, integrated services may or may not be offered in the same physical location within the facility, and may or may not be offered by the same provider."[9]

Although this definition of integration is usefully flexible, the term "integration" remains problematic because many people interpret it to mean a merging of services that requires a restructuring of the health system. After this introductory section, this Framework therefore favours the use of the term "linkages" rather than "integration". Services can have different degrees of linkage, with integration interpreted by some as representing a state of 100% linkage. These more ambitious integration steps are not ruled out, but it is more realistic to begin with linkages.

Integration or linkage efforts have many potential benefits. They can increase efficiency by reducing duplication and overheads, allow targeting of distinct populations with a comprehensive set of services, and bring a more client-centered approach to health care. Clients can receive multiple services in a single visit. This increases their benefit from the health system and reduces associated transport and opportunity costs.

For these reasons, ambitious international rhetoric has long supported service integration, notably in the 1978 Alma Ata declaration and at the 1994 International Conference on Population and Development.[10] But implementation of integration approaches has struggled in the face of entrenched vertical programmes.[11] Vertical programmes have clearly defined objectives and minimum packages, making it easier for both national programmes and international partners to track specific inputs and the resultant outputs. But such programmes are not well suited to integration.

The choice between ambitious integration and vertical programmes is a false one, however. Rather than aiming for a full integration or merging, defined linkages can be created between distinct programmes to capture the best of both fully integrated and fully vertical systems. Linkages can involve such activities as referrals, joint activities, and information exchange between distinct services. Creating and maintaining linkages requires cooperation and input at all levels of the health system. But once linkages are in place, they can result in a seamless experience for health care clients, even while preserving the clear responsibilities and lines of command typical of vertical programmes.

2.2 LINKAGES ARE NEEDED IN DIFFERENT DIMENSIONS

A fully functioning health system requires various types of linkages. Links at the central government level provide a policy basis for linked field interventions. Vertical links ensure efficient referral between different levels of the health system, such as between health centre and referral hospital. Gender links help to bring men and women together in a health care setting so that both are involved in behavior change, and couples can make decisions together. Links from community to health care centre are essential to encourage health-seeking behavior and to increase timely usage of the health care system. Links across time require the use of health records and the implementation of RH measures that target each stage in the life cycle, including adolescence, the period before conception, during pregnancy, delivery and the postnatal period for both mother and child.

Finally there are horizontal links between different services at the same facility. Much of the subsequent discussion is focused on these horizontal links, although the same links may equally be present vertically.

2.3 LINKAGES ARE PARTICULARLY APPROPRIATE FOR HIV/STI, RH AND MNCH SERVICES

Based on the presence of common underlying causes and shared solutions RH, MNCH, and HIV/STI services have a high potential for linkages:

- All address sensitive issues of human sexuality, require providers to take a pragmatic and empathetic approach to human behavior, and benefit when providers can encourage responsible behavior and behavior change.[12]
- The demand for RH, MNCH and HIV/STI services is increased for those confronting gender inequities, poverty, migration, sexual violence, and difficulties in accessing medical facilities and education. Approaches and advocacy efforts to help increase access for vulnerable populations can be shared by the various services.
- Target groups are overlapping, as are the prevention methods used, such as condoms.
- RH, MNCH and HIV/STI services all require excellent community outreach in order to be effective.
- There are medical justifications for linkages, such as the increased likelihood of HIV transmission due to some RTI/STI, or the decreased risk of HIV transmission to children if the family planning needs of HIV+ clients are satisfied, or that ARV prophylaxis treatment is available during delivery for pregnant women tested HIV positive.
- Finally, people living with HIV (PLHIV) require specialized family planning and MNCH advice, especially if they are on antiretroviral therapy or being treated for opportunistic infections.

2.4 LINKAGES CAN HELP STRENGTHEN RH SERVICES

These thematic links suggest that HIV services may be able to help strengthen MNCH, adolescent reproductive health (ARH) and RH services, which are often under funded. One obvious starting point is prevention, diagnosis and treatment of RTI/STI, which are a central component of RH, and affect reproductive choices and outcomes. But treatment of RTI/STI[13] is usually managed by the government department responsible for HIV prevention and treatment. The second obvious point of overlap is Prevention of Mother to Child Transmission (PMTCT; see section 4.2.3).

Thus the HIV programme can easily justify including RH and MNCH services in joint technical, logistics and procurement activities. These activities can include:

- the development and dissemination of standardized protocols;
- capacity-building activities;
- improvement of counselling skills to cover partner notification;
- access to shared laboratory services;
- training in surveillance; and
- improved opportunities for resource mobilization and allocation.

The HIV department can bring its experience in analyzing service gaps and ensuring essential services for universal access so that these principles now also cover all STI prevention and management.

2.5 LINKAGES ARE NEEDED TO INCREASE COVERAGE AND EFFECTIVENESS OF HIV PREVENTION

There is a largely unexploited potential for HIV and STI prevention counselling within many parts of the health system, especially RH/MNCH. The diffusion of HIV prevention messaging across various health services can blur the lines between HIV and non-HIV services, thus reducing the stigma that may accompany the use of an HIV-specific facility.

If linkages are in place, prevention messages can reach all those using a health service, no matter what their original entry point may have been. Multiple delivery points for prevention and behavior information help reinforce the original message.

2.6 LINKAGES ARE NEEDED TO INCREASE REFERRALS FOR HIV TESTING

Despite the emphasis on HIV testing and PMTCT, in many high prevalence countries only one in ten people are estimated to know their HIV status. A vast proliferation of HIV testing sites is not, however, the solution. HIV testing and counselling sites require staff who are well versed in the 3 C's — confidentiality, counselling (both pre- and post-test), and consent from the client — and the site must have mechanisms to ensure quality control and the integrity of logistics, supply and data management systems. Replicating all of these features at a new site in the medical system is likely to be more costly than establishing a referral system. Effort is therefore needed to maximize referrals to the limited number of HIV testing centres, both from the community and from any possible entry point in the medical system.

Getting tested with proper counselling motivates clients no matter the result. Testing and counselling inspires those who are HIV negative to remain negative, and encourages those who are HIV positive to protect others from infection and to seek timely treatment for themselves. (Note that these positive outcomes have been demonstrated most clearly for men in African countries with high HIV prevalence.) For communities, greater testing and counselling helps to reduce stigma and denial and mobilizes support.[14]

The demonstrated efficacy of HIV testing and counselling as an HIV prevention measure[15] and the improved availability of treatment only increased the pressure to expand testing options beyond the original stand-alone clinics. WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) now recommend that general medical staff offer HIV testing when it is medically indicated.[16] This process of provider-initiated testing and counselling (PITC) has attracted some controversy as there is concern that medical staff may pressure their clients into having an HIV test.[17] In the linkage context, there is concern that clients may avoid ANC clinics if they think that the clinics will pressure them to take an HIV test. But many welcome PITC as an effective way to broaden entry points to testing[18] and to normalize the process of HIV testing. HIV testing and counselling, particularly voluntary counselling and testing (VCT), is especially recommended for most-at-risk populations (MARP: based on self-identification or a standardized STI risk assessment), while PITC is recommended for those with tuberculosis, STI, and suspected symptomatic HIV infection as per country context.

2.7 LINKAGES ARE NEEDED TO INCREASE THE QUALITY OF RH, ARH, MNCH, AND FAMILY PLANNING SERVICES TO HIV+ CLIENTS

Health care staff generally understand the importance of HIV prevention and the treatment of HIV+ clients with antiretrovirals (ARVs) and for opportunistic infections. But the other health needs of HIV+ clients are more often neglected. Many factors — such as immunosuppression, coinfections, complicated drug regimens, and HIV discordance in couples — mean that HIV+ clients have unique health care needs. This is particularly true during pregnancy and childbirth. Each country should have guidelines so that HIV+ pregnant women can, based on their CD4 counts or viral load, receive the appropriate ARV regimens and opportunistic infections drugs, make an informed choice between vaginal delivery and caesarean section, and receive respectful and informed counselling on options for pregnancy termination and ARV prophylaxis treatment to reduce the risk of mother to child transmission.[19] In addition, although family planning messages are rarely targeted at HIV+ mothers,[20] a sensitive effort at doing this is critical to any PMTCT effort and to programmes seeking to ensure the reproductive rights of HIV+ women.

3. The Framework of Service Linkages

Based on the enormous need to strengthen RH services, HIV prevention, and HIV testing, the following Framework outlines key functional linkages that allow RH, MNCH, and HIV/STI services to help reinforce each other (see also Figure 2). The steps needed to operationalize the framework are outlined below and in Table 1 as a series of interventions.

3.1 FRAMEWORK GOAL

The goal of this framework is to improve RH, ARH, PMTCT, STI and HIV/AIDS services through maximizing the linkages and synergies between RH/ARH/MNCH services and RTI/STI/HIV/AIDS services.

3.2 FRAMEWORK OBJECTIVES

The specific objectives of the proposed framework are to provide guidance and facilitate countries to:

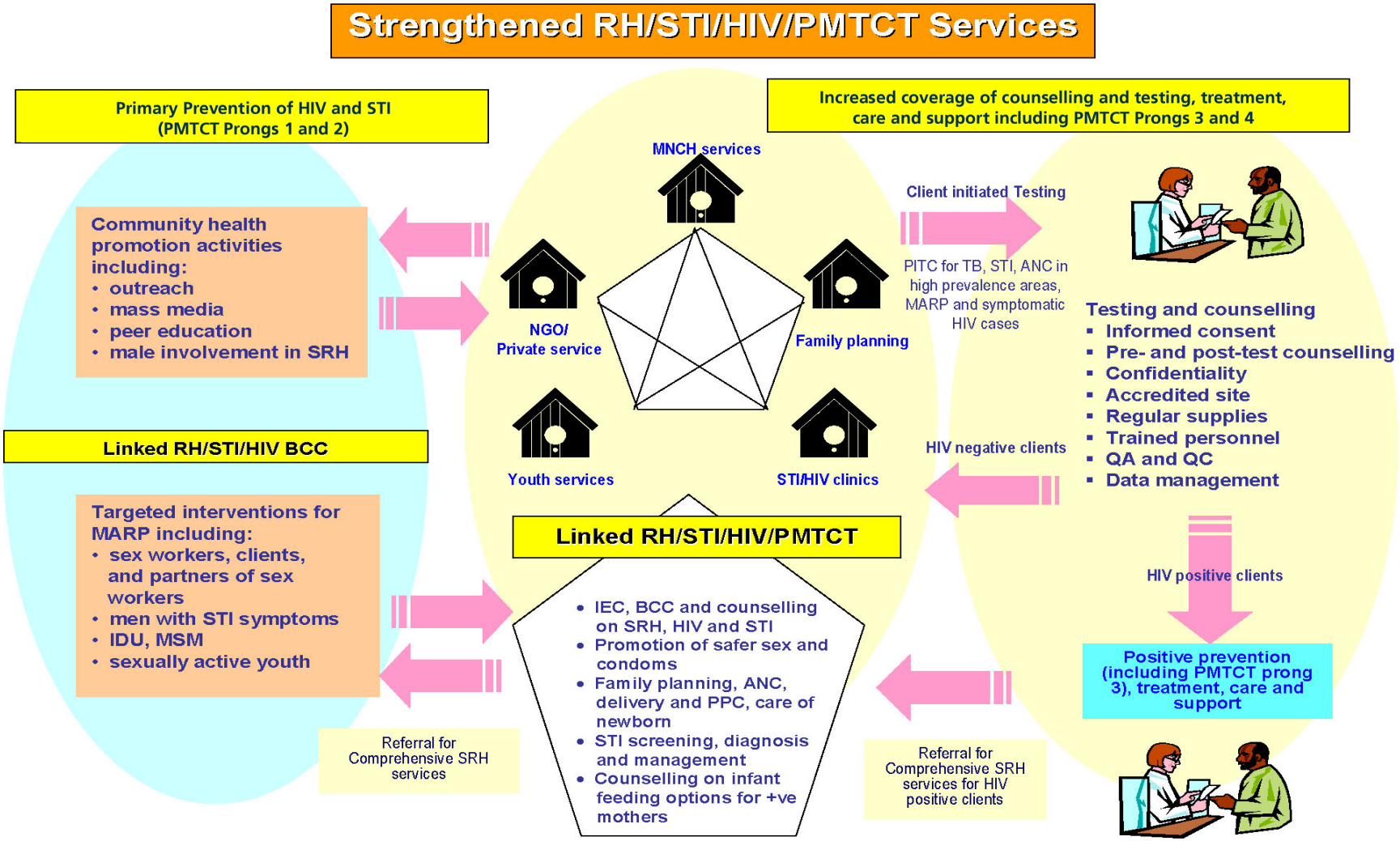
1. Strengthen RH, ARH, MNCH, family planning and PMTCT services by pursuing joint activities with RTI/STI/HIV/AIDS services, including strategies involving accessing new funding opportunities;

2. Strengthen comprehensive prevention of HIV (including PMTCT) and RTI/STI by using multiple health services, including RH, ARH, MNCH, and family planning services, and increasing community participation;

3. Increase access to HIV and STI testing and counselling for women, men and MARP by using multiple health services, including RH, ARH, MNCH, and family planning services.

4. Increase the quality of RH, ARH, MNCH, and family planning services to HIV+ clients.

Figure 2. Framework for Linkages of Reproductive, Maternal and Child Health Services and STI/HIV Prevention and Management



4. How to establish linkages

4.1 A VARIETY OF LINKAGES ARE POSSIBLE

The formation of linkages between RH, ARH, MNCH and HIV services can realize a variety of different goals. Key actions that link sexual and reproductive health and HIV prevention and treatment, for example, can help people to learn their HIV status and access services, promote safer and healthier sex, optimize the connection between HIV/AIDS and STI services, and integrate HIV/AIDS with MNCH.[21]

A variety of practical linkages are possible. Table 1 lists some of these possibilities and the associated benefits, problems and issues. Some of these links are more likely to involve training and guidelines that are internal to a particular service. This Framework emphasizes actions that will help achieve the linkages listed in Table 1a, which are likely to involve referrals or at least require cooperation between different services.

4.2 THE EXACT CHOICE OF LINKAGE STRATEGIES WILL BE COUNTRY SPECIFIC

4.2.1 Epidemiology and resources help determine which of many linkages should be implemented

The specific linkages that are appropriate for any given country should be determined from a client perspective, and should not be adopted blindly. Indeed, adoption of inappropriate linkages can cause harm if resources are diverted to complex interventions that have limited impact. The case for integration is weakened under at least three circumstances:

- when interventions targeting specific populations are judged to be more effective than linkages that may target more general populations;
- when there is a risk that staff will not be able to reach the required minimum standards for delivery of the new service; and
- when staff providing STI services are limited to syndromic management of vaginal discharge (see section 4.2.2 and comments in Table 1a).

TABLE 1A. Possible Key Linkages Between STI/HIV/AIDS control and reproductive, maternal and child health services

Service setting	Input from other services	Possible benefits	Risks and comments
1. ANC clinic	1a. HIV prevention, testing and counselling	• Reinforce primary prevention of HIV in HIV+ women and their partners (PMTCT Prong 1) • Prevent Mother-to-Child Transmission in HIV+ women (PMTCT Prong 3) • Access to treatment for HIV+ mother, partner and child (PMTCT Prong 4) by HIV/AIDS services • Opportunity to conduct partner notification and HIV testing and counselling by trained counsellors	• Relative efficacy of different PMTCT prongs differs according to a country's HIV prevalence • Couples and family visits allow a whole family to be reached • Often ANC provides counselling but blood is sent to distinct laboratory for testing • Locating the entire HIV testing and counselling process in ANC clinic is probably justified only in high prevalence settings, and even then the quality of the process must be assured • Giving protection messages to female ANC clients will only be effective if the women are empowered to act and/or other groups with power (e.g. community leaders and male partners) are also reached
	1b. Screening, diagnosis and treatment for RTI/ other STI	• Prevent STI-related problems for both mother and baby • Successful STI treatment reduces HIV transmission risk • Opportunity to refer for HIV testing and counselling, and to conduct partner notification and HIV testing and counseling by trained counsellors	• Particularly appropriate services include syphilis screening, and ocular prophylaxis for newborns where gonorrhea prevalence is greater than 1% • The limitations of the syndromic approach and low STI risk of some ANC groups mean that misdiagnosis (and inability to do accurate partner notification) is likely. Thus, referral for proper diagnosis of symptomatic cases is preferred if available. The syndromic approach is more successful for genital sores in males and females and urethral infections in males • STI+ cases should be referred for HIV testing and counselling

2. Family planning clinic	2a. HIV prevention, testing and counselling; supply of condoms and education on dual protection	• Opportunity to reach a sexually active population with HIV prevention messages and condom promotion (PMTCT Prong 1) • Raise awareness of difference between protection against pregnancy and against HIV/STI • Prevention of unplanned pregnancy in HIV+ women (PMTCT Prong 2)	• Couples counselling can allow these services to reach both men and women • Family planning clients do not generally include those at highest risk for HIV infection • Condoms are less effective than some other family planning methods • These prevention messages should be emphasized to all individuals and couples, even if they use a primary form of birth control other than condoms
	2b. Screening, diagnosis and treatment for other STIs	• Successful STI treatment reduces HIV transmission risk • STI diagnosis can enable specific contraceptive choices (e.g. for IUD)	• Family planning clients do not generally include those at highest risk for STI • See comments in 1b. regarding syndromic approach
3. STI clinic	• HIV testing and counselling	• Provides another means to reach high risk populations with HIV prevention methods and messages	• Similar groups are at high risk for infection with both HIV and other STI
4. Outreach services to MARP (e.g. sex workers and clients, IDU, MSM) that are already providing HIV testing and counselling	• RH services: contraception, family planning options; supply of condoms; messages about dual protection	• Increased benefit from outreach efforts	• MARPs are reached mostly by NGO focused on HIV/STI, but their RH needs also need to be addressed. • MARP in other settings need both RH and HIV services
5. Programmes with adolescent reproductive health services	• HIV testing and counselling	• Increased benefit from outreach efforts	• Young people in other settings need both RH and HIV services
6. Sites of first contact for victims of sexual violence	• Screening, diagnosis and prophylaxis for HIV. • Screening, diagnosis and management for other STI and pregnancy	• Improved RH management of victims of sexual violence • Provision of PEP	• Need to ensure all potential service providers are included (e.g. emergency room, NGO, private practitioners)

TABLE 1B. Additional opportunities for strengthening RH and HIV management via RH–HIV service linkages

Service setting	Input from other services	Possible benefits	Risks and comments
1. Post-partum services, OPD, MNCH	Family planning: information on birth spacing, family planning options, increase in HIV risk post-partum, breastfeeding, RTI prevention	• Susceptibility to HIV infection is normally increased after childbirth but can be reduced by fully discussing family planning options	• A referral may be required for clients to receive a full range of family planning options
2. AIDS care and treatment services	• Family planning: advice on family planning and breast-feeding options, supply of condoms, dual protection and how HIV infection alters these options • Sex life counselling and pregnancy planning • ANC: pregnancy care options for HIV+ clients	• Improves effectiveness of PMTCT Prongs 2 and 3 • Improved positive prevention including protection for discordant couples • Clients can receive family planning advice tailored to their HIV status	• Providers must recognize that clients remain sexually active after a positive HIV test result • A referral may be required for clients to receive a full range of family planning options • Poor advice may infringe reproductive rights of HIV+ clients
3. HIV testing and counselling services	3a. Family planning: discussion of simple family planning options; supply of condoms; messages about double protection	• Strengthens HIV prevention messaging by harmonizing it with family planning messaging	• A referral may be required for clients to receive a full range of family planning options
	3b. Testing and treatment for other STI (e.g. via OPD and private providers)	• Successful STI treatment reduces HIV transmission risk in a sexually active population	• Similar groups are at high risk for infection with both HIV and other STI
	3c. ANC: counselling HIV+ clients for PMTCT	• PMTCT messaging reaches those who need it most	• Particularly important when ANC or PMTCT coverage are limited

Based on these and other considerations, the relevant factors for determining which linkages to implement include:

- Epidemiology, such as HIV and STI prevalence;
- Current skill sets and capacity of providers;
- Current organization of the health care system, including mutual interests of various services;
- Resources available for training and supervision; and
- Usage patterns for particular health system services such as family planning, ante-natal care (ANC) and HIV testing and counseling.

These factors should allow estimates of the feasibility and cost of the linkage (based on the current capacity of providers) and of the potential benefit to clients (based on usage patterns for particular health system services). Interventions should be pursued only if they result in a benefit that justifies the cost. If family planning coverage is already high, for example, it is difficult to justify the expense of adding it to an HIV testing and counseling clinic. And if unintended pregnancies are a greater threat to survival than HIV, it is better to strengthen the core family planning programme rather than add HIV-related interventions to it.

Lower prevalence can reduce expected efficiency gains (i.e., the number of cases detected or treated will not be enough to justify the cost). In areas with concentrated but not generalized HIV epidemics, adding HIV testing and counselling to family planning clinics may not be warranted based on the complexity of the intervention and the low numbers of HIV+ women reached.[22] But the converse — introducing simple family planning options into HIV services — may bring a clear benefit by strongly reducing parent-to-child transmission. (This may also bring family planning within reach of vulnerable groups, such as sex workers, their clients, men with symptomatic STI, and adolescents, who do not normally make use of family planning/MNCH services but may be drawn to HIV testing and counselling services by specific outreach campaigns.) For the family planning clinic, meanwhile, introducing HIV prevention messaging might be a better priority than adding HIV testing and counselling.

4.2.2 Adding clinical skills requires more resources and effort than adding information

There is a hierarchy of difficulty of linkages: introducing prevention messaging is easier than introducing new types of clinical referrals, which is in turn easier than introducing new types of clinical diagnosis or treatment. The difficulty of the linkage to be added must match the human resources and training available locally.

The preference for adding information (such as prevention messaging) rather than clinical linkages is especially relevant for those contemplating adding STI interventions to family planning or ANC clinics.[22,23,24] Clinical linkages are certainly not without merit: Proper STI screening of women in family planning or ANC clinics is desirable if the disease prevalence warrants it and the resources are available, as this allows the detection of asymptomatic STI in women. Furthermore, if screening of all clients is not warranted, clients can be chosen to be referred for diagnosis based on an STI risk assessment (having more than one sexual partner over three months, having had sex with a new partner in the last three months, and having a partner with genital tract symptoms (dysuria, discharge, or sores)). Of particular note, routine screening of ANC clients for syphilis is a high priority and a proven, cost-effective intervention.[25]

But for cervical infections (e.g., gonorrhea and chlamydia), many clinics will only be able to conduct syndromic management. This approach misses many cases (low sensitivity due to many asymptomatic cases) and identifies many false-positives (low positive predictive value due to other causes of vaginal discharge).[25] The other limit in linking to STI services is that ANC and family planning services are rarely used by men and sexually active but unmarried women, yet these two groups are the ones more likely to have STI. In general, epidemiology should determine which groups should be targeted with highest priority; as more resources become available the programmes can be expanded to reach other groups.

4.2.3 Prevention of mother to child transmission (PMTCT) strategies involve more than preventing vertical transmission, and must be tailored to the country situation

Prevention of mother to child transmission is an excellent example of the need for country-specific strategies. PMTCT properly consists of four related strategies:

Prong 1: Primary HIV prevention in girls/women and their partners

Prong 2: Prevention of unintended pregnancies in girls/women who are HIV-infected

Prong 3: Prevention of mother to child transmission (during pregnancy, delivery, breast feeding)

Prong 4: Follow-up, care and support for HIV-positive mothers, their children and partners

For countries that do not have a generalized HIV epidemic, the emphasis should usually remain on Prongs 1 and 2. Prongs 1 and 2 should be promoted within family planning/MNCH/RH services, with repeated ANC visits providing an ideal opportunity to deliver prevention messages multiple times. The presence of Prong 2 acts as a reminder that family planning services are an essential and cost-effective[26] part of any PMTCT programme, although many PMTCT programmes lack family planning messages or do not emphasize targeting them to HIV+ mothers.

The emphasis on Prongs 1 and 2 in low prevalence countries may be modified, however, when the epidemic is more concentrated or is increasing in particular social groups or geographic areas (e.g. the Papua province of Indonesia). Additionally, some countries (such as Bhutan, Indonesia, Sri Lanka, and Viet Nam) have added a risk assessment procedure so that some but not all women are referred from ANC or family planning services to an HIV testing and counselling service. Such assessments may be based on factors such as the presence of STI and recent risk behaviors in either the client or their recent sexual partners.

For countries with generalized epidemics (HIV prevalence >1%), Prongs 1, 2, and 4 remain essential, and Prong 3 now becomes critical. Effective PMTCT under Prong 3 should link any mother who tests positive to teams who provide:

1. ARV treatment during delivery to reduce the likelihood of HIV transmission to the baby;

2. Postpartum care and treatment for the mother; and

3. Counselling on infant-feeding options.

Ante-natal care and PMTCT can also be an entry point for testing and treatment of entire families. Couples counselling can involve men in reproductive decision-making and combine messages about HIV prevention, especially HIV risks during and after pregnancy due to changes in the partner's sexual behavior, with messages about delivery warning signs. Men can be recruited by appealing to their role as family decision-makers and protectors of the family's health and well-being.

Men should also be persuaded to come for an HIV test when their pregnant wife tests HIV positive in an ANC clinic. This step is often underemphasized, but is particularly important in Asia where male risk behaviours (e.g. men who buy sex and/or have multiple sex partners) and the relatively low socioeconomic status of women constitute key drivers of HIV and AIDS. Referral slips that request the attendance of the male partner at a pregnancy consultation can be an important intervention in a comprehensive HIV prevention strategy.

4.3 ADDING LINKAGES IS NOT WITHOUT RISKS

Linkages can only be established if those delivering services have the capacity and training to allow efficient implementation. Adding too many complications to an already overburdened system can compromise the programmes that were already working. For example, a health care worker may do more harm than good in new tasks if they lack the required sensitivity to deal with marginalized groups.

In this situation, it may be better for the linkages to be referrals that follow a very simple algorithm. Linkages should also be designed to minimize the risk of substandard services, such as compromised HIV confidentiality or low empathy for HIV issues in a family planning clinic, or poor family planning advice in an HIV testing and counselling centre.

Introduction of HIV services may drive people away from a previously successful RH clinic if stigma is a significant problem, and poorly handled partner notification can result in disastrous gender-based violence in some communities. Indeed, problems with stigma may be worst in low prevalence areas, where linkage benefits may be lowest. These examples also illustrate why community input is needed as early as possible in the planning of linkages (see below).

RH programmes are often perceived as being for married women and thus are not a good entry point to HIV/AIDS services for other groups. Additional efforts are still needed to reach men and particular vulnerable groups, particularly in a setting of low HIV prevalence.

4.4 LINKAGES MAY ACTUALLY INCREASE THE NEED FOR OUTREACH

Successful linkages between HIV testing services and MNCH/RH may increase the numbers of clients being tested for HIV. But this should not be taken as a sign of unqualified success. In a low prevalence setting, the majority of clients of family planning, ANC, and RH services are not those most at risk for HIV infection. Thus there is a compelling, concurrent need to lobby for outreach to MARP — such as sex workers and their clients, injecting drug users, men with symptomatic STI, and men who have sex with men — and their sexual partners. Indeed, it may be important to resist the relatively easier solution of linking two existing services rather than taking on the more difficult but more effective process of creating new outreach services for MARP.

The most effective outreach programmes may be those run by NGOs, as MARP may be suspicious of government programmes. Efforts are still required to link clients of these targeted approaches to the rest of the health care system, and to make the health care system attractive and accessible to MARP. This will require involving MARP in needs assessments, training general health staff on non-stigmatizing approaches, and including IEC and behaviour change communication for MARP and commodities such as condoms and clean needles (where appropriate) in any programme.

Efforts to reach men (e.g. in the workplace, at events popular with men, or in outreach to clients of sex workers) and adolescents are similarly a high priority. Effective linkages from STI clinics are one effective way to channel at-risk men, MARP and adolescents to HIV testing and counselling. Youth-friendly services should, as a matter of high priority, offer both HIV and RH services as their clients are at high risk for both unplanned pregnancies and HIV/STI infection.

4.5 ESTABLISHING LINKAGES REQUIRES ACTION CENTRALLY BUT WITH CRITICAL INPUTS FROM THOSE DELIVERING AND RECEIVING SERVICES

The process of establishing linkages requires action at several levels. These levels and the associated actions are listed below and in Table 2.

4.5.1 Form a policy at the central level

Linkages are most apparent at the point of service delivery, but for this to happen there must be joint effort at a central, policy level. This process does not involve administrative integration or reorganization but requires communication and cooperation in developing policies.[27] The starting point is a recognition of the common issue that logically unites the relevant sectors. A technical working group can do a rapid assessment of existing linkage policies (including PMTCT activities) and other relevant factors (see Table 2 and section 4.2.1). Policy development should be informed by a mapping from both the provider perspective (current management and service delivery structures, staff motivation, attitude towards HIV and AIDS, responsibilities and operating procedures) and the client perspective (where do people access care and why, what services should they be offered, what referrals are offered already, and the ways in which stigma and discrimination in health care settings discourage utilization of these services).[28] Relevant epidemiology should be overlaid on this functional mapping.

Political commitment can be solidified by explaining win-win scenarios to policy-makers, programme managers and service providers. The resulting policies are not simply a statement of good intentions. Rather, they should include:

- the rationale for the policy;
- the goals and objectives;
- the components of the planned programme;
- indicators of success;
- a monitoring and evaluation plan;
- institutional arrangements and lines of responsibility; and
- sources of funding for the new activities.[29]

The bodies negotiating the linkages must then have the ability to allocate resources to the newly planned activities. Stakeholders should consider whether current funding channels will undermine linkage efforts, and whether greater donor coordination would be needed.

TABLE 2. Process for Establishing Functional Linkages Between HIV/STI and Reproductive, Maternal, Neonatal and Child Health Services

Stages	Elements	Providers/Actors	Coordination mechanisms
A. Develop central policy	• Form technical working group focusing on HIV/STI–RH linkages • Review existing relevant policy(s) • Conduct rapid assessment/gap analysis, e.g. service mapping, epidemiological profile, service utilization and cost-benefit analyses, to identify extent of current HIV/STI–RH linkages and strategies for establishing/extending these • Advocate to raise political commitment in favor of collaboration • Agree on the broad parameters of new linkages to be made and the expected results	• Ministry representatives • Donors • Provincial and district health care representatives and staff • NGO/civil society representatives • PLHIV and other client representatives	• Linkages are via communication and partnership rather than a merging of authorities
B. Develop operational plan	• Consult extensively with providers, clients and community for feedback on policy, including client surveys and exit interviews • Identify services requiring revised service delivery mechanisms, training and resources for facilitating linkages • Prepare costing and identify funding • Draft standard operating procedures and consultation checklists for service providers (including a minimum service package with essential information to be provided) and an implementation guide for programme managers • Develop indicators for monitoring and evaluation of linkages (e.g. increased uptake of services, increased referrals)	• Ministry representatives • Donors • Provincial and district health care representatives and staff • NGO/civil society representatives • PLHIV and other client representatives	• Health care personnel from different services and different vertical levels collaborate on national multisectoral coordinating committees; this includes joint work planning and monitoring

C. Develop and implement the plan locally	• Form local coordinating body, or make use of existing coordinating body • Identify local barriers and any modifications needed for local roll out of operational plan • Identify service providers who will carry out new tasks • Train providers and conduct orientation sessions for relevant professional organizations and private practitioners • Commence delivery of linked services • Put monitoring system in place	• Local political leaders • Representatives from other sectors • Provincial and district health care representatives and staff • NGO/civil society • PLHIV and other client representatives	• All health services affected by the change are represented on the local multisectoral coordinating committees • Health staff from different services collaborate in trainings and sharing of skills • Decentralization and local commitment and ownership are essential
D. Inform and link to community	• Conduct community awareness and advocacy campaign, including engagement of young people and other MARP, to inform them about the new/revised services and their benefits and to tackle issues of stigma and discrimination • Provide support and outreach services to client groups to encourage uptake	• Health staff • Civil society • Social workers • Peer support groups • Religious organizations • Health promoters	• Community representatives link to health providers via common membership on multi-sectoral coordinating committees • Community-based services link the community members to facility-based services

4.5.2 Translate the policy into an operational plan

Once the specific, desired linkages between two or more services are identified, a single broad policy agreement between these sectors must be translated into a single, more detailed operational plan (see Table 2 for details). Practical tools to be developed at this stage may include standard operating procedures for service providers, including a minimum service package, a checklist for consultations and trainings. (The use of checklists can result in significant increases in the number of services utilized per visit.[30]) This process should include participatory input from RH, MNCH and HIV/STI providers and clients so that the proposed activities are practical and achievable. An inclusive planning process can create broad ownership, thus increasing the likelihood of subsequent success. The plan should be flexible to account for local variation. In Kenya, for example, the national plan contained four potential levels of integration and the appropriate level was chosen locally, based on staff abilities at the local clinic.[31]

4.5.3 Implement the plan locally with coordination, staff identification, and training

Local coordination and communication mechanisms will be needed; these can be new structures or new functions added to established coordination bodies. These coordination bodies should oversee the modification of action plans to suit local staffing capacity and known service gaps.

Linkages can be created either by increasing the skill set of a single provider or by creating referral systems between distinct services. (Other variants are used in some PMTCT programmes, such as HIV testing and counselling staff visiting ANC clinics, or referral of blood samples but not clients.) It is important to make the choice between these two possibilities clearly and early. Education, information, and simple supplies (e.g. condoms) may be simpler to add to a site, whereas clinical treatment may require referral. Referrals should be defined as either horizontal or vertical (i.e. to a higher level of the health system). Vertical referral may be more appropriate in low prevalence settings where staff may encounter cases infrequently.

It must be clear how staff will be compensated for increased workloads. An important part of this compensation is the awareness among staff that they are providing a more valuable set of services to their clients. The staff who will carry out the activities must then be identified and trained, with particular attention to duties that require new skills in sensitivity, empathy, confidentiality, and combating stigma. Monitoring and evaluation should focus on outputs and outcomes that are directly attributable to the establishment of linkages, such as the number of referrals or increased uptake of a particular service.

4.5.4 Perform community outreach

Finally, a communication strategy is needed to raise awareness in the community about changes and improvements in service delivery. This is the step that results in clients accessing services, so it is essential that it not be forgotten. A team at the community level is needed for health promotion in HIV/STI prevention, with the involvement of local mass organizations, youth groups, religious groups, civil society and self-support groups.

4.6 LINKAGES CAN AID IN RESOURCE MOBILIZATION

Establishing linkages requires resources, but it can also aid in mobilizing resources. Funds that are identified as being specific to one service can be accessed by other services if they address linked goals. For example, HIV-specific resources can be accessed by RH and MNCH services that have HIV-related activities, and used to strengthen the RH and MNCH programmes. The Global Fund to Fight AIDS, TB and Malaria represents one possible source of funds for such collaborations, although thus far RH personnel have had little or no input into the Global Fund proposal process at the country level.[32]

5. Country Examples

The Asia-Pacific region has already seen notable examples of linkages between HIV/STI services and RH/MNCH. Thailand and other countries have included both PMTCT and syphilis screening in ANC settings, and China provides condoms to family planning clients. Addition of RTI/STI diagnosis and management to family planning settings has been attempted in Indonesia, although the clinical training proved challenging.[33]

Cambodia provides an unusual example of full integration, with the merging in 1998 of the National AIDS Control Program (NAP) and National Clinic for STI and Dermatology (NCSD) to form the National Center for HIV/AIDS, Dermatology and STI Control (NCHADS). This required determination and strong leadership from the Ministry of Health. Somewhat easier but no less important has been the initiation of linkages between NCHADS and the National Center for Maternal and Child Health Center (NCMCH). A tradition of STI management in ANC settings provided the initial link. Joint training between NCHADS and NCMCH for STI management, including coordination of drug supplies, started in 1999. The two departments developed PMTCT guidelines in 2002 and have since expanded the PMTCT programme to a total of 69 sites. On the NGO side, the Reproductive Health Association of Cambodia (RHAC), which initially focused only on RH, has successfully brought HIV interventions to its clients.[34]

India is in the process of linking activities between Phase 3 of the National AIDS Control Programme (NACP 3) and Phase 2 of the Reproductive and Child Health Programme (RCH 2). Limited linkages existed for PMTCT and antenatal screening for syphilis, but the impetus for further linkages was based on the need for national guidelines on the prevention, management and control of RTI/STI. Technical guidance came from the National Institute for Research in Reproductive Health, the Indian Council of Medical Research, WHO, UNFPA, and Family Health International. Two expert groups from the National AIDS Control Organisation (NACO) and RCH were brought together in the process of reviewing existing guidelines, comparing them with health system realities (based on a rapid assessment), and drafting new guidelines. These guidelines kept in mind the variability in the settings of the two programmes and yet brought them together with uniform protocols for the management of RTI/STI. Implementation guidelines are now being developed, along with training modules and pilot testing led at distinct sites by either NACO or RCH.

6. Operationalizing the Framework

This Framework was developed through a partnership between country participants and representatives of United Nations agencies. Operationalizing the Framework should likewise occur via partnership. United Nations and other development agencies can act as honest matchmakers to bring together different health system actors, and they can provide funding to initiate the process. This can be used by local actors to do a rapid assessment, develop a country Framework based on the rapid assessment and this Regional Framework, and conduct pilot tests that can act as demonstration projects for potential replication.

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Endnotes

1 *WHO/UNICEF/UNFPA/UNAIDS (2007) Linking sexual, reproductive, maternal and newborn health – the circle of life.*
http://www.unicef.org/eapro/AsiaPIntegrationFramework.pdf

2 *New York Call to Commitment: Linking HIV/AIDS and Sexual and Reproductive Health*
www.unfpa.org/icpd/10/docs/ hiv_aids_rh_call_commitment.doc.

3 UNFPA (2004) *The Glion Call to Action on Family Planning and HIV/AIDS in Women and Children*, 3-5 May, 2004.

4 WHO. 2006. *Accelerating progress towards the attainment of international reproductive health goals: A framework for implementing the WHO Global Reproductive Health Strategy.*

5 WHO. 2004. *Reproductive Health Strategy.*

6 WHO. (2001) *Global Prevalence and Incidence of Selected Curable Sexually Transmitted Infections: Overview and Estimates.*

7 UNAIDS/WHO (2006) *AIDS Epidemic Update*, with adjusted Asia-Pacific estimated total in the light of new estimates in India, 2007.

8 WHO (2007) *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector.*

9 Fleischman Foreit, K.G., K. Hardee, and K. Agarwal. (2002) *When Does it Make Sense to Consider Integrating STI and HIV Services with Family Planning Services.* Intnl. Fam. Planning Perspect. 28:105-107.

10 *Programme of Action. International Conference on Population and Development*, Cairo, Egypt, 1994.

11 Lush, L., J. Cleland, G. Walt, and S. Mayhew. (1999) *Integrating reproductive health: myth and ideology*. Bull. World Health Org. 77:771-777.

12 Lule, E. / World Bank (2004) *Strengthening the Linkages Between Reproductive Health and HIV/AIDS Programs*.

13 WHO (2005) *Sexually transmitted and other reproductive tract infections*.

14 WHO (2003) *Increasing Access to HIV Testing and Counseling. Report of a WHO Consultation*. 19-21 November 2002, Geneva, Switzerland.

15 Van de Perre, P. 2000. *HIV voluntary counseling and testing in community health services*. Lancet. 356:86-87, and references therein.

16 UNAIDS/WHO (2004) *Policy statement on HIV testing*. www.who.int/hiv/pub/vct/en/hivtestingpolicy04.pdf

17 Bass, E. *WHO and UNAIDS set controversial course for HIV testing*. Lancet. 16:760.

18 Sangiwa, F. (2007) FHI's contribution to HIV counseling and testing scale-up. From a panel discussion on Expanding and Diversifying HIV Testing and Counseling: Findings from the Field. Available at www.popcouncil.org/pdfs/horizons/ctpanel/sangiwa.pdf

19 See, for example, Chalermchockchareonkit, A. (2005) *Manual of Operating Procedures and Care Plan for HIV-Infected Pregnant Women and Prevention of Mother to Child Transmission Using Antiretroviral Drugs*. Department of Obstetrics and Gynecology, Siriraj Hospital, Mahidol University, Bangkok, Thailand.

20 Rutenberg, N., and C. Baek. (2004) *Review of Field Experiences: Integration of Family Planning and PMTCT Services*. Population Council.

21 WHO/UNFPA/UNAIDS/IPPF (2005) *Sexual and Reproductive Health & HIV/AIDS: A Framework for Priority Linkages.*

22 Dehne, K., and R. Snow. (1999) *Integrating STI Management into Family Planning Services: What are the Benefits?*

23 Shelton, J.D. (1999) *Prevention First: A Three-Pronged Strategy to Integrate Family Planning Program Efforts Against HIV and Sexually Transmitted Infections*. Intnl. Fam. Planning Perspect. 25:147-152.

24 Askew, I., and N.B. Maggwa. (2002) *Integration of STI Prevention and Management with Family Planning and Antenatal Care in Sub-Saharan Africa—What More Do We Need to Know?* Intnl. Fam. Planning Perspect. 28:77-85.

25 Schmid, G. (2004) *Economic and programmatic aspects of congenital syphilis prevention.* Bull. WHO 82:402-409.

26 Best, K. Family Planning: *Considerable Impact at Relatively Low Cost.* (2004) Network. 23:25. Family Health International.

27 Lush, L. (2002) *Service Integration: An Overview of Policy Developments. Intnl Family Planning Perspect.* 28:71-76.

28 UNFPA/IPPF (2004) *Integrating HIV Voluntary Counseling and Testing Services into Reproductive Health Settings. Stepwise Guidelines for Programme Planners, Managers and Service Providers.*

29 Sanders, R., K. Hardee, and C. Shepherd. (2005) *Implementing integrated Family Planning and HIV/AIDS Policies and Programs: Tools and Resources.*

30 Sanogo, D., R. Vernon, J.R. Foreit, A. Seck, A. Ndoye, L. Ndoye, C.B. Diop, B.M. Mboup, and O. Sarr. (2005) *Using Systematic Screening to Increase Integration of Reproductive Health Services Delivery in Senegal.* USAID/Population Council.

31 Aradhya, K.W. *Integrating Family Planning into VCT Services.* (2004) Network. 23:12-15. Family Health International.

32 Dickinson, C. (2006) *Integration between Sexual and Reproductive Health and HIV and AIDS and Malaria: Opportunities and Strategic Options for the Global Fund to Fight for AIDS, Tuberculosis and Malaria.* IPPF/Population Action/Global AIDS Alliance/ International HIV/AIDS Alliance/Interact.

33 Budiharsana, M.P. (2002) *Integrating Reproductive Tract Infection Services Into Family Planning Settings in Indonesia.* Intnl. Fam. Planning Perspect. 28:111-112.

34 Best, K. Cambodia: *Clients Find Everything They Need in One Place.* (2004) Network. 23:17. Family Health International.

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9789290613138