Integration Revisited

Marc Mitchell, Susannah Mayhew and Irina Haivas

Background paper to the report *Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals*

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Marc Mitchell
Susannah Mayhew
Irina Haivas

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This background paper was prepared at the request of the UN Millennium Project to contribute to the report *Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals*. The analyses, conclusions and recommendations contained herein are the responsibility of the authors alone.

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Introduction

Debate over how best to provide health services in resource-poor settings has been ongoing for decades. The ideal of 'primary health care' delivered through basic functioning services was constrained by economic realities, so 'comprehensive' PHC became 'selective' PHC. The deficiencies of being too selective were also recognized, and by the 1990s the language of 'integration' had spawned a series of 'integrated' packages including integrated sexual and reproductive health (SRH) services and, more formally, the Integrated Management of Childhood Illness.

Donor-supported health systems and structures struggled to develop in ways that promoted these different service delivery concepts. The World Bank played a leading role in the 1990s 'health sector reforms', although initiatives like decentralization and systems strengthening were seen by many as old wine in new bottles. More recently WHO has again been reasserting its leadership role in the global health arena, producing occasional papers, manuals and reports of its vision of health systems and service integration. The *2000 World Health Report on Health Systems* recognizes the centrality of well designed and functioning health systems to the delivery of health services. It defines a range of systems functions (service delivery, resource generation, financing and stewardship) and takes a broad view of a 'system' as "all the activities whose primary purpose is to restore or maintain health" – activities which may or may not require some level of integration.

This paper is informed by these concepts and debates, but it also seeks to provide a more innovative perspective that starts not with services or with systems, but with individuals – the people our services and systems are supposed to be caring for. We consider both services and systems from this primary perspective. We define our service ideal as a 'continuum of care' over a person's life-cycle – it is, in other words, a vision of longitudinal integration of client-centered services over time. This requires systems inputs at a range of levels and over time to support the delivery of packages of services that are each well connected and have information, clients and perhaps even resources, flowing between them. We focus on the tangible elements of systems that are necessary for a continuum of care, including finance sourcing and structuring, human resource inputs and management, supplies and procurement issues, information management and referral systems. Within these we also focus on the less tangible *people* components – hierarchies between medical staff, personalities in priority setting, tensions in decision making levels – that influence organizational processes and decision-making structures and flows, including regulation of standards of care, and ultimately determine how health system structures function.

This paper explores what we need from systems, donors and policy makers in order to achieve a continuum of SRH care, giving attention to special issues that are particular to sexual and reproductive health services and require a different systems response from that of other services. Section 1 discusses what is meant by integrated services – a continuum of care over time with appropriate systems support – and what we are aiming for. Section 2 considers how we may achieve this, outlining steps to define a matrix of services that provide the envisaged continuum of care. Section 3 discusses key policy and donor inputs and commitments. The conclusions provide pointers on the way forward.

1 Looking into the future: How do we want it to be?

We begin our discussion of integration with a vision of the future; a vision where services and systems are designed to meet the needs of the client[1].

1.1 Service Model

Fatima climbed into the back of the minibus, headed towards home. She closed her eyes for a moment, breathing deeply as the bus darted in and out of traffic. After seven weeks of uncertainty, Fatima was relieved to find out that she was not pregnant. Her cousin had finally convinced her to visit the health center located just down the street from the secondary school. Fatima had been nervous all morning. She remembered her experience two years before, just after her fifteenth birthday, when she went to the reproductive health clinic to get information on birth control. She had been interrogated by the middle-aged woman behind the desk, who admonished her for being 'promiscuous' and 'too young to be having sex anyway'. Fatima had been sent home, after being told curtly that she would need parental consent before receiving any services.

Despite her initial anxiety, today's visit had been much different. Arriving at the health center, Fatima walked through an unremarkable entrance. Knowing how much people in her community indulge in gossip, she was relieved to see that the consulting room was completely private this time. She immediately felt at ease. Not only did the young doctor explain to her in detail the various birth control options available to her, but she talked with Fatima at length about the importance of pursuing her education and delaying marriage. Together, they looked through a number of pamphlets about STIs and HIV/AIDS. Fatima learned to her surprise that HIV cannot be transmitted by mosquitoes or by sharing plates with an infected individual, and that the center offered free and confidential HIV tests to all adolescents. At that point, there was a knock on the door. The woman who had signed her in earlier handed the doctor a small, yellow slip of paper. The pregnancy test had come back negative. Fatima looked at the clock that hung above the examining table. It was 8:24 a.m. She would be at school before the opening bell rang at 8:40, and for the first time in what seemed like an eternity, she would be able to concentrate on her work.

This story about Fatima is fictitious, but it highlights the goal of integration: to provide each client with a *continuum of services* that meets all of her or his needs in a convenient and affordable way. For Fatima, who came for a pregnancy test, it means talking with her about other reproductive health issues such as family planning, sexually transmitted diseases and the importance of education for young women. For a pregnant woman coming for her antenatal visit, it means talking about the pregnancy but also checking if there are other problems such as partner violence, nutritional problems or the need for condoms to prevent HIV infection during pregnancy. In addition, it implies discussing about her relationship with the father of the child and about the effects of her pregnancy on her employment or schooling. For a woman bringing her child for immunizations, it is asking about his feeding and about her health status. Is she feeling tired or depressed? Is she using family planning? For a man who comes because of a

[1] The authors wish to acknowledge the work of Ellie Feinglass who wrote the description of Fatima.

chronic cough, it may mean asking about HIV (if the cough suggests TB) and from there, sexuality and condom use. For each of these patients integration represents something different, but for all of them it means going beyond the narrow focus of the visit and looking at the wider range of related health and social needs. Patients need integrated services that provide them with respectful treatment and a continuum of care, rather than a variety of services that focus narrowly on the particular complaint they came in for and overlooking other potential problems, whether related to this main complaint or not.

Integration does not mean that all problems can or should be treated by the same person or even at the same clinic, although this would be preferable. Instead, it means that there is a mechanism in place to coordinate care so every person gets access to all the needed services in a convenient and affordable way. For example, a pregnant woman coming for antenatal care should also have opportunities for STI/HIV testing and provision of condoms as well as malaria prophylaxis and other nutritional advice.

A second dimension of integrated services is *integration over time.* This is an important element of the life-cycle approach to care provided to clients. Each visit by a client to a clinic should not be treated as though they had never been seen before – continuity of care is particularly important in sexual and reproductive health. A woman coming for an antenatal visit should have a record available to the health provider about previous visits, previous pregnancies and previous health problems. The provider should have access to information about her children and their health, about her family planning history and about her past nutrition. The antenatal visit should be linked to good postpartum and FP care and good pediatrics for the child so that at each visit, the patient receives the appropriate care for that specific moment, but based on what has happened previously and what lies ahead for this person. This is particularly important for the treatment of chronic disease such as diabetes, hypertension, or HIV/AIDS. Care must be linked over time, from one visit to the next, to ensure continuity of care and provision of appropriate advice and services. This may mean noting repeated symptoms of violence against women. For family planning, this means recording contraceptive side-effects and following up clients through outreach if they do not come back to the clinics. For HIV/AIDS, this continuum starts from counseling and extends to testing, then treatment and follow-up care. Continuum over time calls for a continuum of information to support the patient and client. At each point, the provider(s) must have access to records about the entire process Achieving this continuum over time requires information systems that support this process so that both clients and providers have access to past as well as current clinical and social information. One approach to this, the use of electronic health records, is being strongly promoted in wealthy countries; as technology becomes more affordable and widespread, many middle income countries can also consider this approach.

This model of integration focuses on a continuum of service, whereas previous discussions of integration tended to focus on the integration of a single purpose program, such as family planning, with one other single purpose program, such as Safe Motherhood or STIs. Even WHO emphasizes the integration of programs rather than services in some of its reports (see for example WHO Technical Report Series 861, 1996). There certainly are merits to integrating programs, but this does not necessarily deliver integrated services. When the same clinic and staff see only family planning clients on Monday, do immunizations on Tuesday, antenatal care on Wednesday and STI clinic on Thursday, the programs may be integrated but the services are

not. A woman coming on Monday should be able to get all her needs met at the same time, whether they are for family planning, immunizations, or STI testing.

Integration of services has been promoted on a worldwide basis since the Conference on Primary Health Care that took place in Alma-Ata (now Almaty, Kazakhstan) in 1978. In the landmark document that was produced at this conference, health was declared as a fundamental human right and the mechanism to realize that right was primary health care.

Alma-Ata Declaration, 1978

[Primary health care includes] "education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs; [and] involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors."

This commitment to integrated services was reaffirmed by the international community in 1994, at the International Conference on Population and Development in Cairo. The Cairo conference Programme of Action led to a flurry of activity in the donor and sexual and reproductive health (SRH) program communities, in an attempt to reconsider 'integration' of SRH services as a major component for achieving sexual and reproductive health and rights. The need to be seen acting quickly on this agenda, addressing HIV transmission urgently, and meeting short-term political targets frequently resulted in 'integration' being interpreted narrowly as the 'adding-on' of STI prevention and treatment to family planning services that were usually vertical, by retraining FP staff. There was some tinkering with existing health service structures, but no commitment to providing support systems that would ensure integrated services were possible at the point of delivery (e.g., coordinating contraceptive and STI drug supplies; mainstreaming STI management training into nursing curricula rather than leaving it as a one-off donor-funded 'in-service training' exercise; integrating reporting and supervision mechanisms).

ICPD Programme of Action, 1994

"All countries should strive to make accessible through the primary health-care system, reproductive health to all individuals of appropriate ages as soon as possible and no later than the year 2015. Reproductive health care in the context of primary health care should, inter alia, include: family-planning counseling, information, education, communication and services; education and services for pre-natal care, safe delivery and post-natal care; prevention and appropriate treatment of infertility; abortion as specified in paragraph 8.25, including prevention of abortion and the management of the consequences of abortion; treatment of reproductive tract infections; sexually transmitted diseases and other reproductive health conditions; and information, education and counseling, as appropriate, on human sexuality, reproductive health and responsible parenthood. Referral for family-planning services and further diagnosis and treatment for complications of pregnancy, delivery and abortion, infertility, reproductive tract infections, breast cancer and cancers of the reproductive system, sexually transmitted diseases, including HIV/AIDS should always be available, as required. Active discouragement of harmful practices, such as female genital mutilation, should also be an integral component of primary health care, including reproductive health-care programmes".

What does this mean for SRH

From the point of view of sexual and reproductive health, the goal of providing a continuum of care to patients implies an appropriate array of client-focused services, supported by operational referral networks and patient records. The focus on the client is one of the main rationales behind integration, pushing reproductive health services to be able to reach various categories of clients and develop a client-centered thinking by tackling staff attitudes and hierarchies. If this is to be achieved, however, the various systems needed to support such services must be in place; in many countries, this will require a reorientation of planning and management. Clinical staff, supervisors, program planners and funding agencies including Ministries of Finance will need to understand the implications of a client centered integrated approach and develop new ways to monitor and allocate responsibility in this type of environment. Information systems must be developed that support the needs of the client and provider as well as providing information on disease incidence and service outputs. Referral systems must be strengthened since specialist services will always be required, even with an excellent network of primary health care. Integrated services are implicit in SRH. And integrated services require integrated support structures. (WHO Study Group, 1996). For this reason, we turn next to look at the types of integrated support structures that are needed to support integrated services.

1.2 Systems Model

1.2.1 The Goal is Integrated Services

Decentralization and sector-wide approaches have attracted considerable donor attention in recent years. Such health sector reform elements have often been part of bigger aid and development structures like Structural Adjustment Programs, Poverty Reduction Strategy Papers (PRSPs) and changes in donor financing. The attention given to sector wide or system level issues creates the risk of an over-emphasis on the integration of *systems* rather than remembering that the point of reference should be the integrated *services* sought by individuals. Systems

cannot be ignored because they affect how services are delivered, but the ultimate goal of systems is that they deliver good services and this must be kept in perspective. Systems can affect service delivery both positively and negatively. Integrated services may or may not require all or part of the health system to be integrated. The goal is integrated *services*; whether and how the *system* should be integrated (as distinct from coordinated) will be largely context-specific.

ICPD still provides the definitive vision of 'holistic SRH' as noted in the previous section. Clearly all these services cannot be provided at the same level of facility (e.g., EmOC, vasectomy and abortion cannot be provided at a rural health post) but an individual seeking care has multiple needs across the levels, some preventive and some curative. This is where the system comes in – it is the system that determines effective linkage (or non-linkage) between levels and services. It is the system that ensures that properly trained staff and properly stocked and equipped facilities are in place. If the system is weak, or fragmented by multiple vertical programs, it fails to realize the necessary links between services needed by an individual and therefore fails to provide support for a continuum of care.

The health 'system' is made up of many components that must support service delivery. There are iterative connections between policy, management and service delivery – all need to support each other. A systems lens allows us to understand these linkages and examine where improvements need to take place.

For example, in a 'linked response' or a 'continuum of care' model, different levels of integrated services are provided at different levels (e.g., FP, ANC, STI/HIV education, counseling and maybe testing at primary health clinic; surgical contraception, STI diagnosis, HIV treatment, abortion etc. at a hospital), but the staff are able to assess an individual's needs and refer the same individual across different levels of the systems as needed. A well functioning system ensures that referral mechanisms are in place and that patient information is also referred so that other providers have a complete picture of the patient's needs and care requirements. A well functioning system ensures that patients are referred in a timely manner to other services that are well equipped and functioning. Thus there is a fundamental relationship between systems and services, key elements of which are discussed in the following section.

1.2.2 The Systems-Services Relationship

Although the goal of integration is the integration of services rather than systems, careful attention must be paid to the systems that would support such services. In many cases, this will require new integrated approaches to systems as well, but this will depend on the specific system (e.g., finance, policy and planning) and the specific environment in which the systems are used. For integration to be successful, policies that support the integration must be in place. Various policies reflect various changes, such as changes in priority setting, structure, financial management, personnel and information. The following highlights some of the key considerations in the design of systems that will support integrated health services such as the ones that have been presented in the previous chapter.

1.2.2.1 Priority Setting

In an environment of vertical programs, priority setting is decided by each program with little concern about the relationships between programs. One does not need to make trade offs between malaria control and reproductive health, since both are implemented according to a national or local plan and resources such as funding, staff and vehicles are earmarked for use by the particular program that funds them. In contrast, in an integrated environment, it is not each program, but rather the managers that make the resource allocation decisions, acting across multiple types of programs to meet national, regional or local needs depending on the level of decentralization. These decisions about priority setting require clear policy decisions to ensure that resources are used effectively.

Ideally, we would like to find a metric that will help local managers to determine priorities in an effective way. This has been the focus of considerable attention with tools such as cost effectiveness using disability adjusted life years (DALYs) as a measure of health outcomes to set priorities. Unfortunately, none of these metrics has developed sufficiently to give unbiased formulae for allocation. Use of DALYs in particular tends to undervalue SRH interventions due to its focus on disease and disability (Cohen, 2004). In the absence of a metric that fully values SRH, there has been concern and some evidence that it will not be adequately funded. One of the reasons for this is that one seldom asks the question, "Who is setting the priorities?" Are they set by medical specialists whose focus is treatment of disease, by bureaucrats who often want to maintain the status quo, or by donors whose priorities reflect the political process in their own countries? Ideally, the people who are the users of health services would set the priorities, but it is unclear how such a process would take place and even whether the population has the technical knowledge needed. Therefore, local health managers should set priorities on behalf of the local population they serve, but in practice it is often difficult to identify what the population wants. This is especially true for SRH since decision makers tend to be men while the beneficiaries of SRH programs tend to be women.

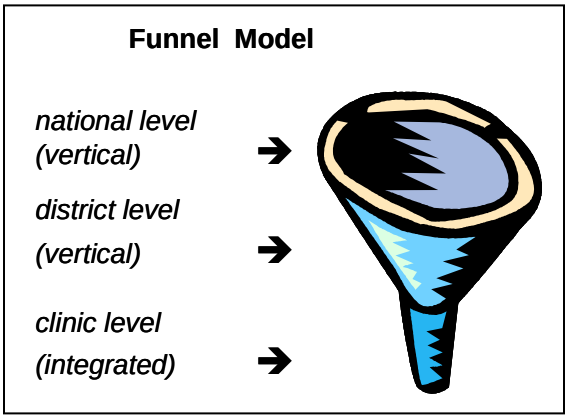
Donor organizations have played a substantial role in priority setting. The rise of vertical programs was in part a response to the donor community's need for demonstrable, short term results linked to earmarked donated resources[2]. By funding FP or safe motherhood programs, donors could effectively make these into priority programs. In an integrated environment, donors have tried to find more subtle ways to reflect their priorities in the countries where they work with funding mechanisms such as sector-wide approaches (SWAps). They achieved this largely by insisting that countries must agree to a highly demarcated set of measures. These measures, including the Millennium Development Goals (MDGs), seek to hold countries accountable for specific health outcomes (determined by the donors) while giving them decision making authority over how to implement the integrated programs. Unfortunately, this approach, like the earlier one, is highly influenced by the international political agenda, which is why the MDGs include "Promote gender equality and empower women" and "Improve maternal health" but do not include other elements of SRH including family planning. Donor organizations have legitimate concerns that their funds are used appropriately and effectively to achieve the goals

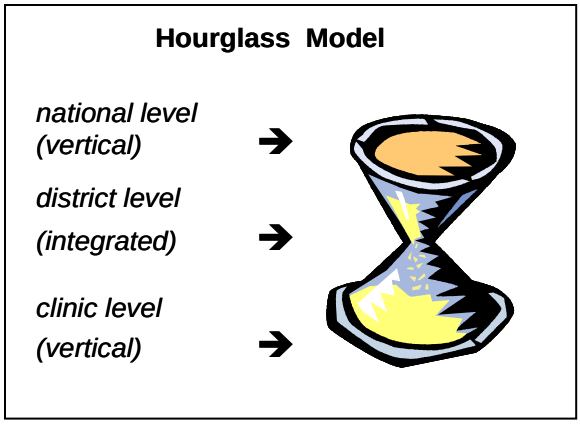
[2] Vertical programs were also a result of the very limited resources available in health and the belief that vertical programs could be managed more economically.

for which they are allocated. Nevertheless, the current process that addresses these concerns is far from transparent and is highly dependent on the architecture of macro-aid mechanisms like Poverty Reduction Strategy Papers (PRSPs) and development goals like the MDGs. We need a serious reappraisal of the macro-aid reforms and the role of international and donor agencies in health care, requiring some profound self-reflection on the part of international institutions and donor governments about what they are supporting, why, how and for how long.

1.2.2.2 Organizational Structures

To integrate programs and services to a meaningful extent, the organizational structure must be changed to reflect the changes in lines of authority, financing and staffing patterns. The form that an organization takes should reflect the way that it operates. These structural changes are fundamental and cannot be achieved by simply pushing peripheral staff to integrate while managers try to maintain the status quo at the national level and protect their span of control established through vertical programs. An earlier article on integration (Mitchell, 2004)described two structural models of integration, the funnel and the hourglass, in which the functions of local managers were "integrated" while national and sometimes local staff remained in vertical structures. These models do not support integration since they undermine the efforts to deliver integrated services by preserving the control of vertical managers at the national and in the hourglass model, at the local level. In the funnel model, the clinic level worker has a hopeless task of trying to deliver integrated services while adhering to the directives of multiple supervisors with differing priorities and demands. This model, which was common during the early years of Primary Health Care, following the Alma Ata declaration, overwhelmed the front line health worker, who was unable to accomplish all the various vertical tasks in an integrated manner and had no way to determine local priorities. In the hourglass model, the district manager has little authority over those delivering services since they have the opportunity to report directly to their vertical program managers at the national level. Neither of these models is effective. For successful integration, SRH services need a fundamental review of their management and organization from national policy levels down, and the structure must reflect these new realities.





Integration is especially difficult for SRH services because they cut across the traditional divisions of preventive and curative dimensions of MOH structures. In many elements of SRH, including obstetrics, HIV/AIDS, adolescent health and family planning/demography, there remains a need for technical specialists at Ministry level to provide quality standards, set policy and review treatment guidelines. These technical specialists cannot remain in line management positions if

staff at all levels are to be effective in delivering integrated services. This change is often resisted by senior managers or specialists who do not want to give up control and by donors who have generally not considered how the health sector is supposed to manage and coordinate many different program inputs at the level of service delivery. This has resulted in systems that cannot adequately support integrated SRH services. Effective integration of services requires effective integration of structures, including the national and regional or district levels.

1.2.2.3 Referral Mechanisms

Integrated services must be able to refer patients from a primary care facility to other levels of care, whether a hospital, a specialty clinic or a particular type of diagnostic facility, and also between private and public facilities. Unfortunately, this component of care is seldom functional. Effective referral systems require: (1) health staff who know where and how to refer patients; (2) transportation that is accessible and working, including having fuel; (3) communications between levels to facilitate referrals; and (4) a client-centered information system that travels with the patient.

Increasingly, the demand for an effective referral network for programs such as Safe Motherhood and Road Traffic Accidents is pushing health planners to find innovative ways to provide these four elements. Innovative approaches to client centered information systems and provider knowledge of referral networks are being developed to store and transfer medical records and provide referral and treatment guidelines to primary health care workers through the use of battery powered hand held computers[3]. Private vehicle owners who receive payment vouchers for transporting patients sent through a referral or in need of emergency transport can address the issue of transportation.

Effective referral systems must also be able to transfer information across the system. Patient records must be available at referral points and providers at each level must know what is available at other referral points in the system so that referral can be done efficiently. A typical system, in which a patient in need of surgery may be referred from a community level facility to a health center and finally to a hospital, is a waste of resources and puts the patient's life in jeopardy with unnecessary delays.

Many of these approaches use public-private partnerships in the delivery of referral services. For instance, dedicated transportation for this purpose has repeatedly proven unsustainable in limited resource environments. Due to conflicting demands for scarce transportation, ambulances may be subject to abuse by physicians, politicians and other programs, and thus they are seldom actually available for referral. Availability often is accomplished through abrupt cancellation of other scheduled activities such as outreach clinics or information sessions, causing communities to lose faith in the government system. It is far better to develop referral networks that do not rely on dedicated transportation but rather draw on the resources of the private sector.

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[3] Personal communications, D-tree®. The paper produced by Millennium Project Task Force 10 provides further examples of information communication techniques.

Grameen Bank in Bangladesh

One innovative approach to increasing access to emergency communications in rural areas has been a program of the Grameen Bank in Bangladesh that provides rural communities with cellular phones on a 'pay as you go' basis. Loans are given to an individual in the community (often a midwife) who then buys the phone and sells its use to her neighbors, similar to the use of a pay telephone. Rural communities thus have access to telephone communications for routine use as well as for emergency communications for referrals or advice.

1.2.2.4 Financial Management

Program integration cannot happen without financial integration; if the money is integrated, the program will be integrated. While there are separate allocations for each type of activity, those activities will remain vertical. Increasingly, integration is occurring at the national level through mechanisms such as SWAps and basket funding and at the local level through the decentralization process. Although not without its own dangers (see the earlier discussion of setting priorities), the integration of funds is a prerequisite for the integration of services.

One concern of integrated financial management is that is more difficult to track the funds which can lead to wastage or corruption. Integrated financial systems do make it more difficult to link specific funding streams to specific health outcomes, but this does not necessarily imply a reduction in fiscal accountability. Rather, it implies the need for a stronger financial control system that can maintain accountability through more rigorous accounting practices than are often found in government or even private health systems. Since local managers in an integrated environment have more discretion, good financial control becomes even more important to maintain transparency and ensure the effective use of funds for the intended purposes.

A proficient financial control system must ensure that funds that devolve to local government authority are used for health. In many countries, health sector reforms promote a decentralized model that provides funding in block grants to local government authorities who then make decisions about how it is used. Since the competence and priorities of these local politicians may vary, some might neglect the most needed purposes and instead use the money for short-term more visible achievements that serve their reelection efforts. At the national level, mechanisms must be in place to ensure that the funds intended for health or other social sectors are uniformly used for this purpose.

1.2.2.5 Supplies and /Procurement

Many managers have had the unfortunate experience of seeing a successful contraceptive logistics system become less effective as it was integrated into the general pharmaceutical distribution system. The two systems may have been integrated with the intention of improving the efficiency of one system by combining it with the other more efficient system, but instead the opposite happens. As a general rule, any two systems being integrated will be pulled down to the operating efficiency of the less efficient system and so systems should be integrated only when they are both operating at the same relative level of efficiency.

Logistics systems do not necessarily need to be integrated in order to deliver integrated services. As an example, consider the supermarket[4]. The success of the supermarket is that it provides the client with a full array of goods at the same time in the same place: a continuum of goods. However the supply chain of a supermarket is not integrated, but relies on many independent (vertical) suppliers who each deliver their goods directly to each store. Stock-outs are rare in a supermarket because of the use of excellent supply management systems with good information, transportation and communications. While this model may not be the best for health centers in India or Tanzania, it makes the point that integrated services can be delivered effectively with vertical supply chains, if these are working well. Therefore, the decision on whether to integrate the supplies and procurement should depend on local conditions and not on a pre-set prescription.

In integrated supply systems, both the scale and complexity increase significantly since the number and diversity of products are expanded. If a supply system does not have the physical, managerial, or information capacity to manage a large complex logistics system, keeping the supply system more vertical, like a supermarket, might be better. However, if the current system is functioning well and has room for expansion, the manager can achieve significant cost savings through centralized procurement and integration of warehouses and transport.

1.2.2.6 Information Management

Integrated services require integrated information that is based on the needs of the client. This cannot be achieved simply by combining existing vertical systems, but rather by developing a system that has the capacity to track the progress of each patient over time and provide the physician, other health workers, the managers and the patient with information about clinical progress and administrative processes. This patient-centered information system allows both the continuity of care required for quality service delivery and the data base from which to analyze program effectiveness by analyzing and aggregating patient data over time. This approach is discussed further in section 2.1.3.2: Client centered information.

In addition to client information, integrated systems need information for surveillance, planning, management and evaluation. One of the difficulties of an integrated system is that single purpose indicators such as “children immunized” or “contraceptive prevalence rate” can be lost as programs strive for more comprehensive measures of performance. While client centered holistic measures can be useful, there still remains a need for single purpose measures that track progress in a particular dimension of service delivery and should continue to be used by program managers. However, new measures are also needed that capture the holistic nature of integrated services. Attempts at this have begun, but there are still no measures that are robust, easy to collect and in widespread use; work to develop these measures is urgently needed.

[4] This is different from the “supermarket approach” discussed in WHO Technical Report Series 861, which describes the combination of multiple services in a single clinic.

1.2.2.7 Human Resource Management

Health care is delivered through people. If we are to implement a continuum of care, health care staff need support that enables them to provide services in a different way. Yet, discussions about health systems and service delivery often overlook the issues of human resources.

For staff to function effectively, they must have a clear understanding of their roles and how they fit into the overall program. Because staff in integrated programs have multiple responsibilities and each will have more experience in some areas than in others, they must support each other and work together as a team in order to achieve organizational goals and objectives. To be able to function as a team, staff must understand the program's goals and objectives and how their roles contribute to them. Managers must allocate time and effort to achieve this shared understanding and team-building and must provide adequate opportunities for staff to learn about their responsibilities and the ways in which they contribute to achieving organizational objectives.

One way that roles, responsibilities and relative priorities are assigned and reinforced in organizations is through the incentives given to staff. When nurses are told that the priority is preventive services, but nurses who work in hospitals receive higher pay and higher status, this message is undermined. This problem becomes particularly important when multiple programs are integrated wherein staff who will now have similar responsibilities have received different pay. Unless this discrepancy is redressed, there can be considerable resentment among the staff. Public service regulations may pose significant challenges in remedying this situation, but for effective integration, staff with equivalent responsibility must receive equal pay.

Another key to successful integration is that staff must be rewarded for both specialized skills and general knowledge, which are prerequisites for delivering a continuum of care. To best serve the clients, staff must have sufficient knowledge of all routine services offered. Staff with special skills should be supported and encouraged to use those skills, whether they are handling clients who have been referred for unusual or difficult problems, training other staff, or helping to maintain the quality of services in a specific technical area. A hazard of integration is a loss of special expertise and thus a decrease in the quality of individual services. This decline can be avoided by recognizing and supporting such expertise, so that staff can learn from each other, instead of creating a homogeneous cadre of mediocre staff. Excellence at all levels should be recognized and rewarded.

Supervision in an integrated environment poses special problems. Because supervisors in an integrated setting will be looking at many types of services, they need a wider range of technical, supervisory and management skills. While some technical skills can remain the domain of specialists, one cannot have separate supervisors for each activity. Health workers can have a difficult time prioritizing their activities and often become overburdened and discouraged when they have to respond to multiple supervisors working independently, because each supervisor may be unaware of the demands other supervisors place on the health worker. Thus, it is important that each health worker has just one supervisor, who can help them make allocation decisions as well as technical ones. Note that in the earlier discussion of models of integration

(see page 10), this was one of the issues of the hourglass and funnel models of integration in which health workers have multiple supervisors each of whom is competing for the health workers' time. The need for single, multipurpose supervisors adds to the training that supervisors require in order to maintain the quality of clinical services and strengthen the management of an integrated program.

Just as supervisors' training is especially critical in an integrated environment, so is that of others in the system. Unfortunately, training programs in an integrated system tend to combine sessions for each vertical program without regard for how they all fit together. Just as integrated care is more than the sum of specialists care, training must be more than a marathon in which every specialist crams everything they know into a half day session, leaving the participants bewildered and frustrated. Staff must understand what is meant by a continuum of care and what this will mean for them. They need to understand how to deliver services as part of a clinical team rather than individually. One way to achieve this is with a case-based (rather than disease based) training program that facilitates the understanding of integrated service delivery as it focuses on the specific needs of individual clients. Case-based training teaches providers to assess each client individually and offer the appropriate services for that client. When developing the training curriculum, it is also important to identify the combination of skills that staff and supervisors will need in order to support each other, to ensure that the entire staff at a service site delivers high-quality services to their clients.

1.3 Special Issues/Priorities for Sexual and Reproductive Health

In addition to the health systems issues discussed in the previous section, there are three types of special considerations for SRH services: the particular type of orientation or approach that SRH services require if they are to be appropriately supported; systems considerations for reaching a particularly diverse set of population groups with different SRH needs; and systems issues associated with the particular service requirements of specific SRH needs. Finally, the issues of SRH rights are discussed and their implications for systems responses. The point of reference underlying all these discussions is the continuum of care provided for the client.

1.3.1 Service Orientation

1.3.1.1 Life-cycle approach

SRH needs are rather different from many other health needs for two reasons. First, they deal with *health* (FP and pregnancy have nothing to do with disease) as well as illness (STI/HIV). Second, they deal with health issues that occur, not in a time-limited way like colds or malaria, but throughout people's life cycles. Children become adolescents who go through puberty becoming sexual beings in need of SRH advice and services; young women become pregnant for nine months at a time over a period of several years; and both men and women are sexually active for decades before they die, requiring contraception, testing and treatment for STI/HIV.

These requirements mean that services must offer a genuine continuum of care – as described earlier – if they are to appropriately and adequately respond to people's changing needs, so both services and information systems must be client-centered.

In some areas of reproductive health we have made great progress with this concept. Antenatal clinics routinely use client centered records for both the mother and fetus and often include information about the birth outcome. In some countries, the same cards are used for each pregnancy, so that past obstetric history is available to the provider and client. Sometimes family planning history is also kept. Innovative approaches such as the use of colored maps have contributed to the success of programs in Indonesia and Bangladesh. This approach is typically used for only a few areas such as obstetric care and could be expanded to many other areas of SRH so providers can meet the needs of each patient over time as well as at each visit.

1.3.1.2 Confidentiality

Confidentiality is important for all health services, but it is absolutely essential for services dealing with sensitive topics like discussions on sexual behavior, HIV and violence against women. If others overhear such sensitive consultations there is a higher risk of harm to clients, including emotional harm, increased stigma and even violence from partners or community members.

A number of studies find that SRH providers have not always been able to ensure privacy (Population Council, 1995; Kisubi et al., 1997; Mayhew, 1999). Where examination rooms are only screened with a curtain, for example, or where initial screenings take place in public, women may be reluctant to ask for an HIV test or contraception or to disclose violence. In addition, in rural areas it may be particularly difficult for women to feel safe disclosing sensitive information, since nurses are often from the same communities and may know both the woman and her partner or family.

Allowing providers the flexibility to spend some time with clients when needed may be an important issue to facilitate the establishment of trust and confidence between them (Population Council, 1995; Kisubi et al., 1997; Maggwa, 1997). Sympathetic, non-judgmental provider attitudes are equally important. There are countless studies showing that judgmental and hierarchical provider attitudes negatively affect utilization of services, especially in sensitive areas of SRH. Instilling client-centered and rights based approaches to delivering health care should be an integral part of training for health workers, but many countries have a long way to go before it is institutionalized. NGOs and quasi-private service providers are often well advanced in implementing these approaches, partly through providing positive working environments for staff and enforcing strict provider guidelines. Population based surveys on perceptions of Marie Stopes Clinics, for example, find that they are highly appreciated by clients who feel that they are treated with respect and their confidentiality is maintained.

1.3.2 Diverse Target Populations

In addition to particular considerations of confidentiality and a life-cycle approach, SRH services must take into account the most appropriate ways of reaching diverse target populations who are in different stages of their life cycle and who live and work in different contexts. Integrated services must be appropriately packaged for different groups, recognising that the needs of adolescents are different from those of married, child-bearing women and from sexually active men. Much integration activity has focused on STI/HIV and MCH/FP services reaching mostly married, fertile women. Specialist SRH services for adolescents and for men have been neglected. Without adequate services for men, the effectiveness of women's sexual and reproductive health services is limited. Even if the public sector is unable to provide all these services to all population groups, a complete view of the health system must encompass all such services and ensure that NGOs or the private sector can fill service provision gaps – WHO refers to this responsibility of the system as a 'stewardship' function (WHO, 2000).

1.3.2.1 Adolescents

The reproductive and sexual health needs of adolescents have long been neglected, despite wide acknowledgement that adolescents are sexually active, that they are socially and biologically more vulnerable to STI/HIV infection as well as pregnancy and that they do not like to use the same facilities as their parents. The public sector may have difficulty providing a separate tier of services just for adolescents – though some public facilities offer services on particular days or at particular times just for adolescents. The key challenge for the health system is to ensure that such initiatives are present – even if contracting or encouraging non-government organizations to deliver these services is necessary.

Over the last few years, adolescents have been seen as the 'window of opportunity' in breaking the HIV pandemic, prompting promotion of adolescent reproductive health (ARH) programs. The polarization of AIDS programs away from other sexual and reproductive needs, however, especially since the recent influx of Global Fund and US funding, has often led to a focus in ARH programs on 'abstinence only' and 'being faithful' messages, with condoms promoted only for 'illicit' or undesirable sex. These approaches stigmatize condoms and fail to acknowledge the socio-cultural contexts in which adolescent sexual decision making takes place, in which gender and power hierarchies play a large role. 'Sugar daddies', for example, are a particular phenomenon in Africa where school girls are very often under pressure to accept favors from older men in return for sex. Gender equality in terms of young and adolescent girls being able to refuse sexual advances or to negotiate safe sex and the use of condoms is very low. Girls are therefore at risk of unwanted pregnancies (which often results in having to drop out of school) and at risk of contracting STI or HIV (especially in South Africa, where having sex with a virgin is alleged to be a cure for HIV infected men).

The country context defines what services it is possible and necessary to provide for adolescents. In Pakistan, for example, it is extremely difficult to reach girls with information about puberty and sex, since their movements and behavior are heavily restricted. Adolescent boys, by contrast, are sexually active at relatively young ages, usually through homosexual activity with older men.

Reaching youth and challenging gender inequality in South Africa

In South Africa, where more than 25% the population is infected with HIV and sexual activity among youth remains high, Christian Aid runs integrated adolescent health programs. These not only provide condoms, health advice and counseling and referral to other services for STI/HIV treatment, they also try to address the underlying gender inequities by getting boys and girls to challenge their own constructions of each other and promote the dignity and self-esteem of each. Contrary to the charges of right wing groups that claim that condom promotion increases youth promiscuity, Christian Aid found that well-run, holistic adolescent reproductive health (ARH) services that include open discussion of sexual behavior as well of promotion of condoms and advice on other SRH services led to increased awareness among youth of the risks of unsafe sex and reported changes in behavior (Christian Aid 2003). Similar positive experiences have been reported in Latin America by dedicated ARH programs such as Profamilia.

Innovative solutions have been found, through for example school-based sessions and outreach work. Lady Health Workers successfully reach isolated women in Pakistan (RHI, 2002). Out of school youth pose a particular challenge and do have different needs, though programs such as Christian Aid's in South Africa (see box) are accessible to youths both in and out of school.

1.3.2.2 Women

Women are the focus of much reproductive health service delivery, but women are not a homogeneous group. Married fertile women of childbearing age, married infertile or subfertile women, unmarried sexually active women and post-menopausal women all have differing health needs and risks. A life-cycle approach helps define which services are best provided to whom. Providing an integrated package of antenatal care (including STI/HIV screening, condom promotion and other health needs) will benefit the women attending (pregnant, often married), but may not reach other groups of women, such as those who are unmarried or not pregnant but sexually active, and will not contribute to STI/HIV decline if male partners are not traced or otherwise treated (Lush et al., 1999; Mayhew et al., 2000). Patient confidentiality and non-judgmental attitudes of service providers can help encourage unmarried women to utilise RH services, although young, unmarried women often feel more comfortable in specialist services for adolescents and young people.

Services for post-menopausal women are frequently neglected but should encompass advice on nutrition, sexuality, STI/HIV issues, weight loss etc. as well as increasing risk of chronic disease as age progresses. Asia and Latin America, where many countries experienced early fertility decline, anticipate that 18% their populations will be over 65 by the year 2050. These elderly populations will contain many more women than men because of longer female life expectancies.

Historically, elderly widows in Asian societies have constituted one of the most vulnerable sectors of the population and the fact that their number is destined to rise sharply over coming decades requires a particular response from health care providers.

1.3.2.3 Men

Reproductive health needs of men are frequently neglected by the public sector, so men often seek health care for serious sexual health problems like STIs from the private sector. Men are often assumed to have sexual health needs rather than reproductive ones. This has contributed to the polarisation of STI/HIV services for the men away from reproductive health services that are considered the preserve of married, child-bearing women. The key challenge for the health system is how to better include men in reproductive health services, both for themselves and their partners.

Men and boys do not attend FP or MCH clinics; despite recorded benefits of male reproductive health services on the sexual and reproductive health of both men and their partners, men's reproductive health services continue to be limited. This is particularly so for HIV+ men who have virtually no access to reproductive information and advice (Askew and Berer, 2003; Paiva et al., 2003). A study in Brazil showed that 43% of HIV+ men wanted children and 83% of them were engaged in sexual relations, but they had insufficient knowledge of how to prevent HIV transmission to infants or where to seek advice and support and found service providers judgmental (Paiva et al., 2003).

Projects that have included reproductive health services for men have proved popular in countries as diverse as Brazil, Columbia and Ghana (IPPF, 1989; Chibwana et al., 1993; Finger, 1994; Mbizvo and Basset, 1996). Bangladesh has successfully integrated male STI services into existing women-centered family welfare centers and the Directorate of Family Welfare is in the process of scaling up this initiative (Population Council, 2004). In each country, these services were found to help address gender issues in sexual and reproductive health and decision-making, treatment of male partners of STI infected women, promotion of male FP and improved male understanding of the benefits of female contraception.

Many cultures insist that men make decisions on behalf of women even when it is the women's health that is involved, so family planning, antenatal care and the use of condoms for disease control are all decisions that are often made by men on behalf of women. Delay in referral of women in labor is often a function of the men's reluctance to make decisions to seek care. Although the long-range goal may be to give women more say in these decisions, in the short run it is imperative that we involve men in programs that promote a better understanding of these issues and address how men can contribute to the good health of women and children through their decisions and behaviors. MotherCare's activities in Latin America have been successful for a number of years, notably in Bolivia where men have been engaged in pregnancy, labor and delivery (Kaune and Seoane, 1998). An innovative project in India (see box) also shows that involving men in maternity care can be achieved.

Involving men in maternity care in India

The Population Council's Frontiers program conducted an intervention among users of antenatal clinics of the Employees' State Insurance Corporation (ESIC) in New Delhi. The package included individual and couples counselling during antenatal and postnatal visits, screening of pregnant women for syphilis and syndromic management of other STIs. Compared to control groups, intervention groups saw an increase in male participation in their wives' antenatal and postpartum care. Couples' knowledge of dual protection increased, knowledge of pregnancy danger signs and FP use postpartum were significantly increased, and couples reported a much higher degree of joint-decision making regarding family health and FP issues. Almost three quarters of men in the study joined their wives during ante- and post-natal visits and many also during labor and delivery. High satisfaction with these services was reported by both clients and providers. (Varkey et al. 2004)

1.3.2.4 High risk groups

Much of preventive health is concerned with the concept of "high risk groups," with different groups being high risk for different problems. Today, with the intense focus on the HIV/AIDS epidemic, high risk generally refers to groups at risk of sexually transmitted infection, such as truck drivers, migrant workers or commercial sex workers. Adolescents are also a high risk group for the reasons discussed under Section 1.3.2.1. This section focuses on adults at high risk of unwanted pregnancy, STI and HIV infection.

Services for truckers and other mobile populations like rural migrant mine-workers require particular, usually more vertical, responses. HIV and other infectious diseases are known to spread along major transport and travel arteries. Initiatives to reduce the spread of HIV along key truck routes have, of necessity, been vertical in nature, targeting the truckers using the routes and the bar workers and sex workers stationed along the routes. Targeted interventions have included expanded promotion of condoms in bars and rest-stops, aggressive educational and advertising campaigns and innovative interventions such as educational sexual health board-games for sex workers. Such targeted interventions are necessary for transient populations like truck-drivers who seldom spend more than one night in the same place, although they may be frequent visitors. The sex workers and bar workers, however, also need more holistic services to meet their other health needs.

Women at high risk of HIV (e.g., sex workers) also have RH needs including contraception, safe abortion, condoms, STI screening and treatment (Delvaux et al., 2003). As with men, these have often been provided in a polarized way, with the focus of services for commercial sex workers often being on their sexual needs rather than their reproductive health needs. Research from Ethiopia (see box) shows the benefits of holistic care to this group. Clinics set up for CSWs in Cambodia also provided an entire range of services, including child care and general primary health care as well as contraceptives, sexual health screening and pregnancy services (Douthwaite, 2004).

In South Africa, where mining firms have been severely hit by high levels of HIV/AIDS among their workforce, many mines have established health clinics for their (usually male) workers that deal with a range of health needs, but take particular care of sexual health and HIV/AIDS treatment and care. These services do not usually take account of the needs of spouses of HIV+ miners, who return home regularly; neither are most services in the miners' home villages able to cope with the needs of sick wives. There is a need to ensure that specific services for mobile population groups are able to deal more holistically with the needs of returning migrants and their partners.

Vulnerability is also associated with family members who remain behind. Women may be left as de facto heads of household with few or irregular remittances from those who are away. Their needs for basic food, clothing and school fees or may be met by creating new social networks and even by exchanging sex for economic gain while their partners are away. Thus, although HIV risk is known to be elevated among migrants (and therefore their primary sexual partners in the 'home'), there are also numerous reproductive health risks (such as unwanted pregnancy and STI) among those (usually women) left behind.

Integrating health needs of commercial sex workers

A project to reduce HIV/AIDS infection among commercial sex workers (CSWs) in Addis Ababa, Ethiopia, recognized that it had to go beyond merely addressing the sexual health of CSWs. The project recognised that the sex workers also had a reproductive need not to get pregnant because that led to time out of work. This need was incorporated into the sexual health services provided to CSWs and the result was a significantly increased condom use rate – underlining the greater efficacy of holistic services where clients feel that all their needs are taken seriously. (Aklilu et al., 2001).

The increasing numbers of young females who migrate is of particular concern, because of their vulnerability to sexual exploitation. Lower levels of literacy and education among migrants compared with indigenous urban dwellers may make them harder to target with prevention messages, thus increasing their risk. Furthermore, overcrowding and poor sanitation typify migrant areas, so risks of infection with tuberculosis and other non-sexually transmitted diseases are also elevated. In Uganda, for example, rates of infection with not only TB but also malaria, cholera and hemorrhagic fever were attributed in part to the effect of migration in increasing the likelihood of transmission. Comprehensive health services may need to be strategically placed to access these populations.

1.3.2.5 Refugees and war victims

Refugees, internally displaced people and war victims provide a particularly difficult challenge to health systems, especially with regard to SRH. The number of refugees in the world at the end of 2000 stood at 16 million, of whom 9 million are in Asia and 4 million in Africa. The main systems issue is whether and how to provide services to populations that may be either transient or long-term and who have distinct needs. The health needs of new refugees or war victims are

often met by external campaigns through organizations like Medecins Sans Frontieres, that are emergency-based and short-term. National health systems rarely want the burden of providing for displaced or foreign nationals in addition to their main civilian populations. Nevertheless, there are potential public health hazards that need addressing, including TB, STI and HIV/AIDS, requiring a whole systems view.

Infectious disease can spread fast where there is poverty, powerlessness, lawlessness and social instability: conditions that are often at their most extreme during humanitarian emergencies. In addition, exploitation (including rape or violence) among refugees increases their vulnerability and risk for reproductive health problems. Where physical and social infrastructures have been broken down, women and girls in particular are vulnerable to rape because male family members are not around or cultural norms have been abandoned. All refugees, particularly children and adolescents, are vulnerable to weakness and disease. Health service infrastructures for refugees may be temporary and inadequate. Reproductive health needs often fall low on the priority list in refugee camps (in the face of deaths from starvation, cholera etc.), but without adequate RH services women's mortality rates will rise. Health care in refugee settings must be holistic in its response to all women's needs, not just their immediate survival – if a woman is already weak and ill, her inability to prevent herself becoming pregnant could cost her life.

Systematic rape and other forms of sexual violence are increasingly used as weapons of war to destabilize the national and cultural identities of civilian populations (UNFPA, 1998; UNHCR, 1999; Amnesty International, 2003). Young women and girls, particularly if unaccompanied, are most vulnerable to rape (Djeddah, 1999). Estimates suggest that during the Rwandan genocide in 1994 250,000 to 500,000 women and girls were tortured, physically abused and raped (HRW/AI); in Bosnia 20,000 to 50,000 women were raped (Date-Bah et al., 2001); a study in Sierra Leone reported 1862 victims of sexual abuse by armed rebels (Human Rights Watch, 2001). Health systems (camp-based or longer-term systems) must deal with the consequences of such abuse. Clearly, the health needs of such populations are highly complex, involving both physical treatment and psychological and emotional support. These services require sensitive providers and good referral systems, but determining when the national health system should be providing these and when short-term emergency services should, is often difficult to resolve. Abused women usually want to see female providers, but health services are often dominated by men (especially in tertiary and specialist services). Rape victims who test positive for HIV may have no means of receiving, or paying for, treatment. Amnesty International recently took up the cases of women infected after being raped by soldiers during the conflict in Rwanda/Burundi. They argued that women had a right to access to free ARVs because they had been assaulted by States Parties (in this case the government soldiers) and that the State therefore bore ultimate responsibility for the crime and so had a duty to provide this treatment.

One of the difficulties with treating displaced persons and refugees is that the host country is often reluctant to divert scarce resources from its own population to help this group of "foreigners." International agencies are seldom able to provide sufficient funding either, so the resources available are typically adequate only for basic shelter and food. Developing health structures that contribute to and build on the infrastructure of the existing health system will encourage governments to take a greater interest in their construction and maintenance, seeing

the care of refugees as a way to attract external resources for infrastructure development that will be used by the local population after the crisis is over.

1.3.3 Specialist Service Considerations

Not all SRH problems can be dealt with by the primary health care provider – some may require referral to a tertiary level of care. Referrals to tertiary care require properly functioning referral/transport systems and client-based information flows.

1.3.3.1 Surgery

A major tertiary service is surgery, whether on an emergency basis as in obstetric care or as a non-emergency service such as tubal ligation, vasectomy, or surgery to repair gynecologic problems. Each of these problems requires very specialized care; one of the challenges of an integrated program is to ensure that people who need such services can receive them by referral up the system. For some problems, such as prolapsed uterus and vagino-vesicular fistula which are relatively common in at least some populations (Khattab and Younis, 2000), tertiary care is needed for surgical repair due to the complexity of the surgery and good follow up is also needed to ensure that the problem does not recur.

Appropriate screening is also necessary to ensure that these conditions are adequately cared for. Health workers must be aware of these issues and understand how to screen for them. In the case of emergency care such as obstetric problems, efficiency in recognizing a problem and then arranging transportation can mean the difference between life and death for both mother and baby. The challenge here is that the health worker must not only be in a position to act quickly when needed, but also understand the need to sensitize the population to this issue, and to work with the local midwives and community leaders to ensure that a woman in need of a cesarean section can receive it promptly. Recent evidence suggests that the best way to achieve this is for all women to deliver under the supervision of a trained attendant at a facility where either cesarean section or emergency transfer is available.

1.3.3.2 HIV/AIDS

The two key sets of issues around HIV/AIDS related services that health systems must support are the role of PHC/SRH services in routine screening and prevention of HIV and the specialist reproductive, sexual and other health needs of HIV+ people.

Screening and prevention

There have been many attempts to integrate HIV/AIDS prevention into family planning clinics through the promotion of condoms. While this type of integration obviously offers an appropriate venue for discussions of HIV counselling, this type of integration has been difficult to achieve in practice. One reason is that while condoms are the mainstay of infection prevention, they are not regarded as an effective contraceptive despite recent research that has shown that widespread switching from oral contraceptives to condoms would incur only a small difference in the

incidence of unwanted pregnancies (Ali et al., 2004). Studies from South Africa, Kenya, Tanzania and Zambia, where dual protection was promoted, found an increase in providers' and clients' knowledge about the benefits of condoms for both pregnancy and STI/HIV prevention, with some increase in condom use (Myer et al., 2002; Kuyoh et al., 1999; Chikamata et al., 2002; Richey, 2003). A similar study among sex workers in Addis Ababa found that promoting condoms for pregnancy prevention resulted in increased condom use overall (Aklilu et al., 2001).

Promotion of condom use for pregnant women, not usually a part of antenatal care (ANC), is urgent in settings where HIV prevalence is high and a significant proportion of pregnant women become infected during pregnancy, and is now recommended by WHO (Villar et al., 2001). The main systems challenge here is to ensure regular condom supplies at all possible outlets (including social marketing and the private sector) and the appropriate training of SRH staff in the importance of promoting and providing condoms to all clients.

Health needs of HIV+ people

An important component of integration is a client-centered approach by service providers that responds to all a client's needs. People with HIV experience 'health' and 'illness', including sexual and reproductive functions, differently from HIV negative people and have particular needs relating to these issues. HIV and other STI infections lead to adverse RH outcomes, including pregnancy and delivery complications, miscarriage and stillbirth, infertility and perinatal transmission of HIV and gonorrhea to babies (Askew and Berer, 2003). HIV+ women experience antenatal care and delivery differently from HIV negative women (e.g., HIV testing, antiretroviral treatment options, caesarean delivery) (Knauth et al., 2003; Askew and Berer, 2003). TB, anemia and malaria in pregnancy may be worse for HIV+ women (Knauth et al., 2003).

For pregnant women who are HIV+ and know their status, prevention of mother-to-child transmission can be provided through antenatal and delivery services. There is ongoing research into how these services can best be offered (Askew and Berer, 2003). Ensuring safe pregnancy and delivery requires provision of appropriate antiretroviral regimens, nutritional supplements, counseling and psychological support, prophylaxis and treatment of opportunistic infections. Postpartum care includes decisions on appropriate infant feeding practices, ongoing antiretroviral treatment and treatment of opportunistic infections (Askew and Berer, 2003). In Kenya and Zambia, training of MCH personnel in some of these techniques has had a positive effect on provider confidence in supporting HIV+ mothers (Horizons, 2002).

Not all HIV+ women who become pregnant wish to continue their pregnancies; in these circumstances safe abortion should be offered as a reproductive right (de Bruyen, 2003; Berer, 2003). Although in a number of countries this is now possible, women in many places experience delays or refusals undermining their health as well as their rights (de Bruyen, 2003).

As noted earlier in the section on men, reproductive advice and support for HIV+ men (who are or wish to be fathers) is virtually non-existent.

1.3.3.3 Victims of violence against women

The health sector, and in particular of SRH services, can play and important role in responding to women victims of violence. Many women will not seek help from the police or support agencies, but the majority will access reproductive health services at some point in their lives, often during pregnancy, so health workers may be heir only source of help. Moreover, there is increasing evidence of specific links between violence and adverse sexual and reproductive health outcomes.

Violence against women that is perpetrated by a husband or other intimate male partner – often termed "domestic violence" – takes a variety of forms, including physical, sexual and emotional violence (King et al.2002). Forced sex is associated with a range of gynecological and reproductive health problems, including HIV infection, other sexually transmitted diseases (STD), unwanted pregnancy, vaginal bleeding or infection, fibroids, decreased sexual desire, genital irritation, pain on intercourse, chronic pelvic pain and urinary tract infections (Garcia-Moreno and Watts, 2000; Maman et al., 2000; Campbell, 2002). Emotional and physical violence by intimate partners also limits the degree to which women can refuse sex, control when sexual intercourse takes place, or use condoms. Family planning programs have long documented that violence and the fear of male violence greatly limit married women's ability to use contraception (Dixon-Mueller, 1993; Ezeh et al., 1993; Chibwana et al., 1993; Adongo et al., 1997; Bawah et al., 1999). Abuse is linked to unwanted pregnancies, especially in adolescent girls (Campbell, 1998).

Globally, surveys find that from 16% to over 50% of ever-partnered women have been physically assaulted by an intimate partner (King et al., 2002). In many instances, violence begins or increases when a woman becomes pregnant. The proportion of ever pregnant women reporting ever having been physically assaulted during pregnancy is 10% in Zimbabwe and at least 6.7% in South Africa (Watts, 1998; Jewkes et al., 1999; Campbell et al. *in press*). In Butajira in Ethiopia, 77% of 164 currently pregnant women reported physical abuse during pregnancy, with 28% being punched or kicked in the abdomen (Gossaye et al., 2003). In each of these studies, in the great majority of cases the perpetrator was the father of the child.

The link between violence and women's sexual and reproductive health is generally inadequately addressed at the *service* level (Heise, 1996; Garcia-Moreno and Watts, 2000). First and foremost, reproductive health providers must be able to validate a woman's experience, ensuring that she does not feel judged or blamed for the violence she reports. This can make a a huge psychological difference – particularly in settings where violence is commonly condoned. Health workers must themselves receive proper training and support, however, since many of them are from the very communities that perpetuate violence and may have experienced it themselves or may hold the opinions dominant in that community. More routine investigation (e.g., documenting repeated injuries consistent with violence, including repeated miscarriages, fetal distress or bruising of the abdomen; properly filing rape cases for use by courts if charges are pressed) provides opportunities for service providers to better understand the potential causes of presenting problems, to think about how their services can respond to the specific needs of women experiencing violence, and where possible to refer women to support services.

There are strong caveats to integrating violence-response activities. In particular, issues of

patient privacy and confidentiality are absolutely paramount – if these are not respected, the service provider could be placing women at greater risk. A further complication is the fact that providers themselves may be victims of violence. If they are to deal with providing services to other victims, they must first be helped to confront their own experiences and emotions – no easy task and one whose importance is seldom recognised.

1.3.3.4 Abortion

No consideration of special SRH needs can be complete without consideration of issues around abortion. Abortion has always been a highly contested and controversial element of health care because of the strong moralistic and religious arguments that are brought to bear on it. The key health system challenges around abortion include non-judgmental attitudes from providers, prompt advice, counselling and referral for treatment, and the recognition that a related continuum of services such as adolescent contraception and availability of emergency contraception must be made more available and accessible.

An estimated 46 million abortions occur each year; of these approximately 20 million are performed in unsafe conditions because of poorly trained providers, unsanitary conditions and dangerous methods of self-inducement (WHO, 1998; AGI, 1999; IPPF, 2000). WHO estimates that between 70,000 and 200,000 women die each year from complications of unsafe abortions, accounting for at least 13% of global maternal mortality. Most deaths occur in South Asia, sub-Saharan Africa and rural areas of Latin America, where unsafe abortion may account for up to 50% of pregnancy related deaths (WHO, 1998).

Internationally, opinion on the right to abortion has been divided and inconsistent. In humanitarian law, however, the right of women to safe abortion does appear to be upheld in many instances.

The Mexico City Policy (also called the “Global Gag Rule”) that severely restricts US funding to organizations using their own funds to counsel on, refer for, or conduct abortions or advocate for changes in restrictive abortion laws was re-instated by the Bush Administration, depriving major providers of family planning services in the poorest countries of critical funds. In Zambia, where one in five adults is infected with HIV and nearly 70% the population is under the age of 24, the largest family planning agency has been deprived of funding from the US, its main contributor, to devastating effect. In Ghana, where adolescent unmet need for FP is high as is adolescent abortion, the country’s largest FP provider to adolescents lost its funding in September 2003, jeopardizing the future of its wide network of clinics (PAI, 2003, 2004). Nepal has the highest maternal mortality rate in Asia, of which an estimated 50% is caused by unsafe abortion. Local family planning and human rights organizations successfully lobbied the government to legalize abortion, but thus lost their US funding and now cannot afford to provide safe and legal abortion care to the poorest women most at risk of death from unsafe abortion.

Abortion Policies at Cairo and Beijing

At Cairo, abortion was one of the most heavily debated elements of the ICPD Programme of Action. The Program, accepted by over 180 nations, makes provision for access to safe abortion where the law of the country allows it; in countries that do not allow it, access must still be provided for safe post-abortion care. It also calls for "…[a]ll governments and relevant intergovernmental and non-governmental organizations … to strengthen their commitment to women's health, to deal with the health impact of unsafe abortion as a major public health concern and to reduce the recourse to abortion through expanded and improved family planning services" (ICPD PoA para 8.25).

The Platform for Action of the Beijing Conference on Women in 1995 makes explicit reference to ICPD paragraph 8.25 and further calls for governments to "consider reviewing laws containing punitive measure against women who have undergone illegal abortions" (Platform of Action para 106). The Five Year Review and Implementation of ICPD Programme of Action meeting in 1999 again underlined the need for governments to tackle the problem of unsafe abortion (para 63). A range of human rights treaties have been referenced to show that restrictive abortion laws violate women's human rights as described in the Universal Declaration of Human Rights (articles 1, 3, 12, 19, and 27.1). In particular, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (the only human rights treaty that affirms the reproductive rights of women and targets culture and tradition as influential forces shaping gender roles and family relations) has produced a General Recommendation that suggests "legislation criminalizing abortion should be amended, in order to withdraw punitive measures imposed on women who undergo abortion" (General Recommendation No. 24 on Article 12 (Women and Health) Paragraph 31).

1.3.4 SRH Rights

1.3.4.1 The language of rights applied to SRH

Both the ICPD and Beijing Programmes of Action drew their language from human rights treaties, maintaining that women's sexual and reproductive health and rights were human rights. This means that States have obligations under international law to live up to standards of due diligence to respect, protect and fulfil the rights of women, men and adolescents with regard to sexual and reproductive health and rights. They must invest progressively in health systems to improve their functioning and ensure equal access to services for all population groups. The rights of women and adolescents as well as men to adequate, accessible services for SRH are affirmed in the International Human Rights Conventions, including the International Covenant on Economic, Social and Cultural Rights; International Covenant on Civil and Political Rights; Convention on the Elimination of All Forms of Discrimination Against Women; Convention on the Rights of the Child, and numerous UN declarations. The 2002 IPPF Charter on Sexual and Reproductive Rights outlines how these international treaties apply to SRH. Cairo and Beijing declarations went further, to acknowledge that for these rights to be met, a broad-based, holistic

service response is needed for sexual and reproductive health issues and the integration of a constellation of services is advocated.

Given that women and adolescents are often particularly vulnerable biologically and socially to STI/HIV infection, greater effort needs to be made to address SRH conditions in these groups. There are particularly powerful rights-based arguments for ensuring adequate knowledge, information, choice and access to services that allow *all* people to make appropriate decisions regarding their sexual and reproductive intentions (UN, 1995; Article 19, 1996).
An approach to sexual and reproductive rights within health systems should have two phases. First, uphold rights using the formal (treaty based) legal frameworks to monitor government's fulfillment, respect or violation of citizens' right to health. Second, undertake more incremental activities that take the core principles (equality, inclusiveness, progressive realization) that can be applied by providers of health and other services to ensure that individual rights are respected and protected throughout the health system.

1.3.4.2 Using human rights frameworks

Legal frameworks are most obviously applied in the SRH field for cases such as rape that constitute crimes under existing laws. For rape occurring in peacetime civilian settings, medical personnel can play an important role in properly recording information that can be used in court if charges are pressed. Rape occurring in times of conflict or as systematic military strategy can be prosecuted under international humanitarian law as war crimes or crimes against humanity (e.g., in the International Tribunals for Rwanda and Former Yugoslavia). Again, medical practitioners have an important role in documenting evidence. Local health professionals' groups and NGOs can also help monitor existing and emerging health policies and hold governments accountable for international treaties they have signed. For example, in Nepal health professionals and human rights groups joined forces to document the extent and effect of unsafe abortions and successfully lobby the government to legalize abortion on the grounds of discrimination against women and unfair and degrading treatment in the light of the Nepal Government's ratifying of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) Treaty (CREHPA, 2000).

1.3.4.3 Systems and service-level responses

At the service level, 'rights' are about issues ranging from ensuring privacy and respecting patient confidentiality (especially, for example, regarding HIV status disclosure and responding to women victims of sexual violence) to identifying the most effective interventions and providing equitable access to those interventions (Cook et al., 2003). At its most empowering, a rights-based approach to health should identify the underlying injustices that create or sustain ill-health. The approach of UNICEF in addressing the high maternal mortality rates among indigenous populations in Peru is a fine example (see box below) of where the health system was redesigned to better fulfill the rights of indigenous women.

Rights based approaches in Peru

Maternal mortality rates among indigenous women in Peru have been consistently higher than among other Peruvian women. Traditional programs that considered the problem as strictly a health care problem were not making any headway in reducing maternal mortality in this group. UNICEF and its local implementing partners used a rights-based approach that looked at disparities and exclusion in several sectors (health, education) and examined indigenous cultural rights and the status of women in general. A causal analysis determined that the principal reasons for high maternal mortality among indigenous women were rampant gender inequality combined with social and cultural barriers to accessing health care facilities, which in turn were culturally inappropriate and even offensive to indigenous women.

UNICEF, local NGOs and health workers worked together and met with women to elicit their needs and preferences, then met with state and local health officials to design a health care delivery system that respected the women and their culture. The dual approach included strengthening the capacity of the rights holders to understand that health care is a right and then helping them to design a strategy to assert and claim this right while simultaneously working with the duty bearers to improve their capacity to fulfil their obligations. UNICEF and its partners worked with local women's organizations on advocacy and awareness-raising campaigns, while facilitating meetings between Andean women and government health care officials. Power dynamics were shifting: marginalized women were being 'heard' for the first time. (Hawkins et al. 2004)

2 Moving backwards- how can we get to the services we want?

Having described our vision of the future, we now turn to a view of what is needed to make this future a reality. We start with the lessons learned, both positive and negative from the rich experience of the past 26 years since the Alma Ata Declaration was first adopted. Based on these lessons, we look to how integrated services can be effectively implemented through the description of an operational model based on the establishment of a matrix of services appropriate to the needs of the client and the resources, systems and structures available to the country in which services are being delivered. In this we are not suggesting that this is the only route to effective service integration; rather that it is a simple to use way to design and deliver services that provide a continuum of care to clients.

2.1 Lessons Learned

2.1.1 Roadblocks to Integration

We begin by looking at the most common roadblocks to effective integration: lack of sufficient management expertise, inadequate attention to monitoring and evaluation, and weak accountability for senior and mid level managers. Obviously these are not unique to integration, but pose special challenges in an integrated environment where each of these elements becomes more difficult and more central to good program implementation.

2.1.1.1 Management expertise

A major roadblock to the integration of services is the need for enhanced management capacity at each level of the health structure. If this expertise is not present, the value added of integrated systems is lost. One reason for this need for better management is the demand for effective allocation of resources across multiple types of outputs. Since resources are never fully adequate to fully fund all needed services, decisions must be made on almost a daily basis about which types of programs and outputs will get priority. In many countries local priority setting has not been successful. For instance, five years after Cairo, Nepal, Ghana, Senegal and Jamaica had still seen little progress in implementing national priority programs at local level (Hardee et al., 1999). The way to tackle this issue is to ensure better planning and control at the operational level, where priorities are set. In Tanzania, managers were unclear about their role in an integrated environment and lacked technical understanding of how the concept of integration should be operationalized, so most districts felt they were not prepared to take the initiative and assume the task of decision-making (Oliff et al., 2003). The situation is similar in Kenya, where the District Health Management Teams identified the lack of capacity as one of their main impediments to successful policy implementation (Oyaya and Rifkin, 2003).

Another way in which integrated services are more complex to manage is at the level of supervision and training. Integration means that staff will be expected to provide many types of service to each client and to have the capacity to refer a patient further for more specialized help, if needed. They will not only need training for a wider variety of skills, but they will also have to be able to correctly assess their own skills. A nurse who previously provided only family

planning services may now be asked to also do antenatal care, HIV counselling, or initial assessment of a woman in labor. The nurse will need to be trained and supervised in her new skills. She will also have to know when she can manage a patient herself and when to seek additional specialized help. A number of countries including Ghana, Kenya, South Africa and Zambia reported problems with the supervision and follow-up of staff training and dissemination of clinical guidelines (Mayhew et al., 2000). In Tanzania, district managers complained that they did not have the necessary skills and knowledge for quality assurance and the clinical supervision of integrated programs (Oliff et al., 2003).

Management expertise also requires the ability to act as an effective liaison and maintain good communication channels with other managers, both vertically and horizontally, as well as with the community. Top managers have often failed to strengthen links and support for lower managers, as for example in the Philippines (Lakshmiranarayan, 2003) where regional health staff see themselves as agents of the central government rather than supportive of the local officials as they struggle to implement a decentralized and integrated program in each municipality.

Integration can bring many benefits to the clients being served and to the managers in the system if the expertise is available to make the system work, but if the necessary skills are not available at the local and national levels, integration makes a bad program worse, benefiting no one.

2.1.1.2 Monitoring and evaluation

One of the key lessons learned in the past decade about successful program management is the importance of monitoring results on a regular basis. Programs that have clearly defined objectives and simple systems for measuring their performance on a routine basis are much more likely to achieve their objectives. A good example is the Expanded Program of Immunization (EPI), which had remarkable success in increasing childhood immunization rates worldwide through the use of a single focused indicator: measuring “children age 12-24 months who are fully immunized.” Another focused indicator for monitoring is the use of “contraceptive prevalence rates in married women of reproductive age.” Looking at these indicators on a regular basis provides managers with frequent objective feedback on performance, so that they can adjust plans as needed. Neither of these indicators is perfect, but each measures a very important program outcome that correlates closely with the ultimate program impact. EPI and FP programs are largely vertical, and the indicators also measure a vertical outcome.

Measuring the progress of integrated programs raises problems, because they provide multiple services to clients, thus entailing more complex performance indicators that are in turn more difficult to assess. Further, because the goal of integrated programs is to meet client needs rather than to deliver a number of outputs, assessing these programs requires more subjective measures such as patient satisfaction or meeting reproductive intentions, which are harder to collect in a verifiable way. This compounds the issues of management capacity (since it more difficult to both develop a monitoring program and to track results on a day to day basis) and accountability (since it is more difficult to attribute results to specific activities or programs). Nevertheless, headway is needed and recent attempts by WHO to develop more sophisticated approaches to measurement are welcome.

Another issue in monitoring integrated services is that most monitoring involves only the public sector, even when the private sector is the largest provider of care. The involvement of the private and non-health sectors calls for an evaluation of their performance in service provision as well, which is typically not done, and is difficult to pursue unless a strict system of accountability and quality control of the private sector is in place (Mayhew et al., 2003). Further, since many NGOs rely on funding from donors who each have their own set of reporting requirements, it becomes almost impossible even for the NGOs themselves to develop monitoring systems that track integrated program outputs rather than donor-specific indicators (Mayhew, 2004).

2.1.1.3 Managers' accountability

Integration focuses on individual needs rather than program deliverables, making the tracking of outputs, quantification of results and monitoring of performance more difficult. Since it is more difficult to measure results, it is also more difficult to hold managers accountable to their supervisors or to funding agencies than in narrowly focused vertical programs. The same problem applies to funding and logistics, since managers have more discretion in an integrated program to use funds and commodities as they are most needed rather than according to a preset plan with narrow definitions of how funds and commodities can be used. It is for this reason that donors have long preferred vertical programs, in which they are able to track resources, indicators and people. Despite the rhetoric supporting integration, donors have maintained rigid and quantitative accountability requirements and have not put efforts into developing the wider qualitative indicators that are needed for integrated programs.

This has left little space and flexibility for broader strategies. For example, donors' reproductive health programs have mainly focused on expanding women-centered FP and less on issues like male sexuality or reproductive rights (Mayhew, 2002). Since many developing countries are largely donor-dependent, donors' preference for segregated activities has seriously impeded integration. Examples include Kenya and Ghana, where the World Bank and USAID have used vertical family planning logistical systems for STD drug distribution, and Zambia, where UNICEF favored integration of syphilis screening for pregnant women in the safe motherhood program, but not other aspects of STDs/HIV control (Lush et al., 1999). Donors must understand their role in supporting integration, especially in the countries that largely depend on their funding.

Although program integration often reduces the accountability of managers to donors and central managers, it can increase the accountability of providers to the client or the population, provided that the client is given a voice (WHO Study Group, 1996). Since the goal is to meet client needs, clients are in a better position to decide whether their needs are being met. However, when clients continued to be neglected, as is often the case even in integrated programs, the lack of managerial accountability to supervisors can make local accountability worse, since it is now difficult to identify the source of the problem. In the same way, absent local ability to have a voice in service delivery, integration coupled with decentralization can also favor corruption by increasing the number of people who have access to power and funds with little ability to

actually track where funds are going or whether appropriate services are being delivered (Mitchell and Campbell, 1999).

2.1.2 Potential risks of Integration

While integrated services are the goal for effective client centered service delivery, attempts to integrate services pose risks to existing programs that are functioning well, albeit in a uni- focal environment. Our purpose in describing these potential risks is not to discourage health planners and managers from integrating services, but rather to be aware of some of the potential pitfalls in order to avoid them.

2.1.2.1 Loss of focus on or within SRH

Integration gives more discretion and responsibility to local managers for priority setting and the allocation of resources to meet local needs. This is good if local managers perceive reproductive health as a high priority, but it also involves the risk that some managers might not see reproductive health as a priority and therefore will direct fewer resources towards certain services or to reproductive health as a whole. In the Philippines, for example, in the absence of central mechanisms to guide the prioritization process at local level some local governments ignored national priority health areas such as FP and for religious reasons they denied women access to contraceptive services (Lakshminarayanan, 2003). Such a situation can appear at all levels, as it was noted in Kenya, where there has been a shift toward the HIV/AIDS program, causing a decrease in the focus on FP, which is still a major need (Aloo-Obunga, 2003).

The risk is similar in the context of sector-wide approaches on a larger scale. The priority setting and monitoring tools used in sector wide programming (such as DALYs) are largely quantitative and disease-oriented, and this tends to undervalue integrated reproductive health services, which are mostly preventive and qualitative and in which many interventions are not disease-based (Lubben et al., 2002; Mayhew et al., 2003). As a result, SRH might lose focus on the larger agenda of SWAps, and maintaining it as a priority calls for strong advocacy at all levels.

Another factor that influences prioritization of SRH is that program integration is often part of a larger sector wide reform, including decentralization. The shift from centralized single-focus program management to decentralized integrated management raises issues of local capability to allocate resources, set criteria for prioritization and ensure equitable representation, especially since local leaders are a heterogeneous group that is hard to categorize. In Uganda, decentralization at the district level involved all sectors, not only health, which resulted in managers spending funds previously allocated to health for activities that were unrelated to health. The subsequent lack of resources and support for reproductive health called for government involvement (Merrick, 2000). The challenge of distributing decision-making authority is to make sure that the priority areas are not neglected at lower levels, while leaving room for adjustments according to specific local circumstances.

Program planners and managers must be clear, specific and realistic in defining integrated services. A list of country-specific core indicators should be developed. These indicators are

likely to be nationally defined, to safeguard key priority areas, but should allow for some adjustment to local contexts.

2.1.2.2 Loss of specialized technologies or skills

Integrated services do not mean that there is not a need for specialized skills. There will still be a need for malaria specialists, for experts in FP, for obstetricians. These types of specialists have been associated with vertical programs and in many situations the program managers of vertical programs are also the technical specialists in the particular area in which they work. Even at a local level, not all staff must have equal knowledge of all fields. What is needed instead is for multipurpose health workers to provide most services and to have the backup of persons with specialized skills such as midwifery, family planning, or infectious disease.

The problem is that at the national level, where much of the higher level expertise is concentrated, managers of integrated programs may not appreciate the need for these specialists, and the specialists, no longer empowered to manage a program directly, may no longer wish to work in the system. In Tanzania, malaria is the largest single cause of morbidity and mortality, accounting for approximately one in three deaths in children under 5 years of age and a quarter of deaths of those above 5 years as well as the leading cause of outpatient visits and hospitalizations (MOH Tanzania, 2000). Unfortunately, despite the impact of malaria in Tanzania and the particular expertise needed for an effective control program, the total staff of the national malaria unit in Tanzania is 11 people, including the driver. The result of the integration of malaria into the overall health program is that critical expertise has been lost.

One issue is where to put this vital expertise within the structure of an integrated program. Some countries have created a technical unit within the central Ministry of Health where specialists in reproductive health, infectious disease and other such areas are housed. This makes sense but often those who now are managing integrated and often decentralized programs don't know that these specialists exist. Another problem is that these specialists, without an earmarked budget for their programs, often do not have funds for travel or other activities so they do not have a way to make their expertise available to the program managers who need it. At the local level, e staff trained in one type of program for which there is no longer a demand are often moved into other positions for which they are not really qualified. In countries as diverse as India and Papua New Guinea, male tuberculosis workers were "integrated" into the general health program, which in reality meant they no longer had a job. The disease remains a problem, but the skills of the staff which were to go into the community and trace contacts of infected people are no longer in demand.

If programs are to be successful, they must conduct planning that monitors, tracks and preserves specialized skills and services while making them available in an integrated services environment. Operational standards and guidelines could do much to ensure this, in particular clarifying the roles and required numbers of providers and specialists at different levels.

2.1.2.3 Logistics and procurement

For health sector reforms, integration has been an appealing solution to reduce duplication, cut costs and increase efficiency by combining the logistics circles for various supplies and by providing a common support service rather than fragmented services. Another reason for switching away from vertical logistics systems is that since these systems are often largely supported by donors, they may function well under donor support but may become unsustainable without it (Merrick, 2000). Implementing the integration of logistics systems has turned out to be more complex and difficult in practice. These difficulties arise because integrated logistics systems involve dealing with more products, more locations and more purchase methods, making it harder to assess and quantify the needs. Moreover, funding sources are more difficult to manage, since they may require various conditions, schedules or accountability procedures (Bates, 2000).

In some instances, vertical supply systems, such as for contraceptives, have been more successful than integrated ones, in part due to the focus and support of donors, as a study of Zambia, Ghana, Kenya and Tanzania found (Bates et al., 2000). When vertical systems are performing well, one runs the risk that integration will reduce rather than increase the operating efficiency, and make commodities less available due to problems with management capacity and prioritization. This is of particular concern with expensive drugs that must have uninterrupted supplies, as in the case of contraceptives or ARVs.

Before multiple logistics systems are integrated, they must all be brought up to a similar (high) level of efficiency since the integration of two systems that have different levels of efficiency will have a negative impact on the better functioning one and thus pull down the whole system (Mitchell, 1994).

2.1.3 Requirements for Effective Integration

The above discussions of the roadblocks to, and potential risks of, integration highlighted a number of issues that policy makers and program managers pursuing integration must consider if integration is to be effective: the need for clear, specific planning including the delineation of staff roles and responsibilities at each level of service delivery; keeping in focus the aim of integrating services at the level of the client; maintenance of strong, functioning health systems for logistics and procurement; and support of motivated, competent staff in transparent decision-making roles. Particularly important requirements for achieving effective integration are discussed below.

2.1.3.1 Integration at the client level

Integration means delivering a broad package of services to meet each client's needs, but this does not mean that all services are offered to all people at each facility by each staff member. Different groups of clients may have very different needs, and trying to be all things for all people at the same time and place will not work. Several studies have shown that integrating STI

clinics with MCH clinics can have benefits but can also exclude whole populations from attending. As noted above, integrating FP/MCH/STI is beneficial for many women, especially married women, but does not reach unmarried women or men, who are the main transmitters of STI including HIV/AIDS. Unmarried adolescents are typically reluctant to attend the same services as their parents for reasons of confidentiality. The organization of service delivery must take such situations into account, and as a result some services may be delivered separately, or offered at special times or with separate waiting areas. In Kenya, providers felt that although it is good to integrate FP/RH with HIV/AIDS, that voluntary HIV counseling and testing (VCT) should be delivered separately since men might not be willing to attend the women's clinic (Gichuhi, 2004).

Your clients determine what and how you integrate

In order to ensure a continuum of care for each client in the context of having separate services for certain subpopulations, there must be special integrated packages for different categories of clients. Integration thus happens at the level of each client and the client receives a continuum of care despite the fact that s/he is addressing a separate service.

This type of approach follows the model for district health services presented in the WHO Technical Report on Integration of Health Care Delivery (WHO Study Group, 1996).

2.1.3.2 Client centered information

Central to client-centered integration are client-centered information systems. Most information systems today are designed to meet the needs of the provider or manager rather than the patient. Data is collected and reported by service outputs such as number of bed-days in a hospital, number of immunizations given, or new and continuing FP clients, rather than by patient. Typically, the only patient record is the inpatient chart that is poorly kept up and often missing. Each visit by a client to a provider is like the first with little information available about patient history, medications or desires. What the patient needs is integrated data about him or her, kept in a format that is available to providers to support patient care.

One key to successful delivery of integrated services is the capacity to track the progress of each patient over time, providing the physician, other health workers, the managers and the patient with information about clinical progress and administrative processes. This patient-centered information system allows both the continuity of care required for quality service delivery and the data base from which to assess program effectiveness through the aggregation and analysis of patient data over time.

One example of this type of record is the antenatal card that many countries use. The pregnant woman keeps the card and brings it to each visit. The provider uses it to measure progress and note any new findings. A similar approach for child health is the growth chart and immunization record for children. In each case, the data is integrated at the level of the patient rather than the

provider. While these card systems work well for their individual programs, they do not integrate the data about an individual beyond the narrow program focus. A pregnant woman with another medical problem that did not affect the pregnancy would not have a similar record beyond the antenatal chart, and often even the second pregnancy of the woman would begin again with a new card.

The use of electronic health records (EHRs) for this purpose has increasingly been of interest. Going well beyond a traditional medical record, an EHR also provides epidemiologic, administrative and management data to improve both the quality and efficiency of the care and even monitor costs. This electronic patient record enables the follow-up of patient care for chronic diseases, including HIV/AIDS, even when patients go to multiple providers. It also provides a way to identify patients who need service and have missed appointments. While this approach is still too expensive for most countries, recent advances in technology are beginning to make it feasible in middle income countries. In the Bahamas, for example, an EHR system is being tested for use in all outpatient facilities (see the box below). One organization is working on a model that would make this technology available to low income countries through the use of low cost hand held computers.

Advances with electronic record systems in The Bahamas

The Bahamas has had a very intense and successful HIV/AIDS treatment program that began in 1985, two years after the first case of AIDS was reported there. Starting with prevention of mother-to-child transmission, they have reduced hospitalization due to HIV infection and are scaling up their treatment program to include all infected patients. They have relied on a manual record system that is meticulously kept by clinic staff but are in the process of adapting a comprehensive electronic medical record system developed by the Canadian government that will give them the ability to track patients (HIV and others) and report results across multiple clinics located on multiple islands in the country. While the approach is not yet fully functional, the pilot tests indicate that it is both feasible and beneficial to patient care and data collection and well within the reach of other middle income countries.

2.1.3.3 Realistic and specific planning and priority setting

In many countries, health planning has become an art form in which planners fantasize about what they would like to accomplish and then write it down as though it were all going to happen in the next 12 months. After Cairo, in an attempt to follow the set agenda, many developing country governments designed plans that not only overestimated their country's potential for change, but also were not specific enough to be implemented at the service delivery level. Most of the perceived barriers to integration actually come from poor planning.

Plans are not wish lists; rather they are guidelines derived from the best realistic guess of what can and should be achieved in a given period of time based on local conditions and assumptions about likely resource availability. Since resources are always limited, part of the planning process is to set priorities, understanding that the activities that are labeled as low-priority might

never be completed. In an integrated environment these issues become even more critical. Both planners and implementers face a wider array of potential activities than in a vertical program and the decisions on how to identify the highest priorities and how to allocate resources to program them efficiently become more complex. Without good direction at the planning stage of how to allocate resources, implementers might either do what is most expedient, or start down a long list of activities until they run out of money, setting priorities according to the position in the list rather than importance. Section 3.2: *Priority Setting within a Changing Aid Architecture* discusses the politics and challenges involved in ensuring transparent, efficacious priority setting at the national level.

Plans that are unrealistic or too general create confusion at the level of implementation around defining tasks and roles, operationalizing integration or monitoring progress. In Kenya, for example, the district health management teams indicated that the gap between policy makers and policy implementers and top-down planning is impeding the systematic implementation of integration (Oyaya and Rifkin, 2003).

Effective planning outlines specific steps to achieve realistic goals and is open to adaptation

An effective plan in an integrated environment specifies what the most important activities or goals are and why, and provides a detailed outline for achieving them. The objectives should be reachable, and indicators of progress measured on a regular basis to ensure that the program is actually able to achieve them. One implication of this approach is that as things change, plans must adapt to changes. Constant monitoring is important in serving this purpose, because it can identify changes in the environment or slow progress on planned activities, and thus enable plan adjustments. Examples that call for a change in the initial plan would include a particularly rainy season that has made travel difficult and increased the incidence of malaria, a budget cut due to national economic issues, or a doctor's transfer.

This approach is developed more fully in Section 2.2 The Matrix of Services on page 41.

2.1.3.4 Flexible management and planning

In most developing countries the infrastructure and environment are not very stable, so unanticipated challenges are likely to come up, thus making flexibility an essential characteristic of any successful program. Flexibility is also required at all levels of planning. Since integrated programs are more complex, so are the changes that such programs might have to deal with in the long term. Whether internal or external, these changes are harder to anticipate for integrated programs, so planning integration needs to create flexibility for future adjustments. For managers to be able to deal with problems quickly and efficiently as they arise, the integrated programs must be flexible (Mitchell, 1994). It is of course easier for programs that had been flexible prior to integration to integrate services. An example is Bangladesh, where flexibility was mentioned as an important advantage that NGO programs had over government programs, and one of the reasons that explained why NGOs were faster in adopting integration (Hardee et al., 1999).

Integration of services must be flexible at all levels of planning and in terms of how quickly to proceed. Due to inadequate resources, training or infrastructure, a phased approach to implementation may be more effective because it gives more time for programs to adjust services to the systems, to build capacity and to incorporate specific local contexts (Merrick, 2000).

It is the task of managers to look at the bigger picture to assess whether a phased process would be appropriate, and then to plan the process by designing clear and attainable goals for each phase. In the short run, it may be more realistic and feasible to seek out a level where some integration is in place and functioning, rather than attempting to reach 100% integration all at once. The goal of integrated services is to make most services available to most clients at each visit, but this is not always possible, at least at the early stages of the integration process. It is better to be partly integrated than not at all, but it is also important not to lose sight of the ultimate goal, and not to stop integrating half way.

2.1.3.5 Strong health systems

A building must rest on a strong foundation if it is to last a long time: integrating systems does not make weak systems strong. The same is true of health programs. The foundation of a strong health program is a strong set of management systems, and when management systems are not strong programs are ineffective and unable to deliver good quality services. In order to be effective, programs must be supported by several systems that operate properly, including information, financing, logistics, personnel, planning and monitoring systems.

This is true for any kind of program, whether vertical or integrated, centralized or decentralized, private or public. Moving from vertical to integrated, or from public to private, does not necessarily make these systems work better; in fact, it can make them worse. In many countries, these systems are not strong in either the public or private health sector, leading to significant inefficiencies in these programs. Underinvestment in health systems has been a significant cause of their underperformance in most poor countries, and simply changing the structure of these systems through integration without adequately supporting them may make them even less effective. Weak management systems need to be strengthened directly. Moreover, all these systems are interdependent, so in order to have them all functioning well, each system must receive equitable attention and must be considered in the context of the other systems.

Investing in strong health systems is a priority

An assessment by UNFPA in Cote d'Ivoire (Reynolds et al. 2002) found that weak public health systems and underinvestment in health did not improve after the integration of FP into the overall health system. At the time of the study, only 30% of public facilities offered FP services; issues such as untrained staff, stock-outs of contraceptives, and other management problems were cited as a major reason for the low use of modern contraceptives (10%), high rate of maternal death (597/100,000), and high rates of adolescent pregnancy (12.9%). This situation underlines the need for strong management systems in order to support reproductive health, whether it is integrated or not.

Integration is accomplished by the people who make up human resources. In an integrated service environment, job definitions are more complex, since each staff member needs to have a broader base of knowledge in order to address a wider array of problems presented by each client. Each staff member must also understand the referral network, so that problems that cannot be immediately addressed can be referred for appropriate care. For example, when an antenatal care nurse receives a patient who also has dental problems, she must be able to assess this problem and refer her patient further. For this to happen, the staff at all levels must first be knowledgeable about the meaning of integration and about their own role in the delivery of integrated services. Effective work also involves team work and shared goals: staff must develop a good understanding of what their responsibilities are within the integrated program and how they contribute to the overall goal. Team work is not always a characteristic of health programs, especially among doctors, who often see their role as independent of others and are reluctant to use the referral network appropriately, as for example was noted in the Dominican Republic (Miller et al., 2002). In Ghana, absenteeism and medical hierarchies have been a barrier to implementation, as nurses or young doctors were reluctant to perform tasks when the senior doctor was not present at the site (Mayhew, 2000).

For many staff, integration can be very threatening, so they must receive good training for the new tasks they are expected to perform if they are not to become dysfunctional, as happened with former FP field workers in Bangladesh whose jobs were dropped in favor of community based service (Bates et al., 2003).

Involve staff in changes to their roles and responsibilities: Lessons from South Africa

Staff must be considered when designing policies. A study in South Africa showed that although changes intended to improve the health sector were not in themselves detrimental, no attention was paid to bringing on board the staff who would implement the reforms. This lack of ownership, coupled with a failure to understand the conditions for implementation and a lack of support given to the staff implementing change who were already working in hard conditions with low morale, actually resulted in deteriorating quality of services and a number of staff leaving for new countries (Penn-Kekana 2004). Integration often involves new roles and responsibilities: staff must be consulted and involved in decisions as well as supported in their implementation.

In an integrated environment, training is not only about acquiring skills, but also about learning a new attitude; staff needs to develop a client-centered focus so that they see their role as a problem solver for their clients rather than merely as a specialist dispensing services at their convenience. This has been a major issue in many countries where nurses and doctors who do not respect their clients are unwilling to alter their schedules or behaviors in the interest of the patient (Mayhew, 2000).

In order to have good service provision, staff must be motivated and rewarded properly and on equal terms. Since the outcomes in any integrated program are harder to measure, it is more difficult for managers to set rewards appropriate to behavior. It may take longer to see a patient in an integrated system, since one is asking not only about the presenting problem but others as well. If we reward efficiency, we may push staff away from the continuum of service that is the

hallmark of integration. Ideally, we would like to reward staff who focus on patient satisfaction and meeting client needs, but these are difficult to measure on a regular basis. Furthermore, when managers merge positions with equivalent responsibilities but unequal salaries, they must make sure that the pay scales are made uniform (Mitchell, 1994).

Although integration can be a challenge for staff, it can also have significant benefits. Reorganizing services through program integration can give managers the opportunity to relocate staff if needed, or change job responsibilities that might otherwise be difficult to achieve. Since it is not uncommon that there are staff shortages, integration can provide an opportunity to reallocate staff to achieve a more even distribution of personnel and skills. This can be particularly effective if the teamwork that is necessary for effective integration can be achieved, with staff building on each others skills and knowledge to contribute to the overall success of the program (Mitchell, 1994).

2.1.4 Other considerations

2.1.4.1 Accomplishments of Family Planning Associations (FPAs)

Although Family Planning Associations (FPAs) are often seen as vertical while Ministries of Health are seen as integrated, the FPAs have, in many cases, done a better job of providing integrated services to their clients, albeit of a limited array of interventions. One good example is Profamilia in Colombia. Although Profamilia does not offer all types of medical services, they have made a very strong effort to provide their clients with a wide array of reproductive health services based on surveys that asked their clients what their needs were. In addition to their core services of FP, SRH and fertility and menopause services, they also have programs for family law and domestic violence, internally displaced persons, youth and men.

Family Planning Association of Kenya successes

The Family Planning Association of Kenya (FPAK) is an NGO with urban and rural clinics that started as FP and later evolved into "women's health" clinics, providing a variety of services including cancer screening. It is notable that 96% of the women ever screened in Kenya had their Pap test done in a FPAK clinic, mainly due to the quality of service delivery and the comprehensive approach. For providing wider services, FPAK used the advantages they already had with FP, such as access to a population of sexually active women, infrastructure, logistics, trained and motivated personnel, good quality of care, geographical accessibility and equipped labs. Despite the fact that these clinics still need to work towards reaching more categories of women, their accomplishments are a good example of functioning integration (Claeys et al 2003).

The key is that Profamilia provides an array of integrated services to their clients that is consistent with the clients' needs and with Profamilia's capacity to provide high quality services on a continuing basis. For services that are not offered by Profamilia, referrals are provided to other facilities that offer these services, so that the client is provided a continuum of services appropriate to their needs.

No organization, particularly a private one, can provide all services to all people. However, integrated services are not limited to the public sector, and some NGOs have taken the lead in providing models of integrated services. Health systems have a role in ensuring that information flows and referrals also occur between NGO and public sector facilities to ensure a continuum of care.

2.1.4.2 Efficiency of integrated services

Since integration allows for the use of the same resources for multiple purposes, it would seem that integrated services are more efficient than vertical programs. For example, rather than having dedicated vehicles for malaria control, tuberculosis control, child health and family planning, it might be more sensible to use a single vehicle for all these functions. These potential cost savings are still unproven[5], and we may discover that integrated services, while certainly better for the client, are not more efficient.

The added complexity of managing an integrated program requires more training and more skilled managers and staff to make the program work well and many of the predictions about cost savings assume that resources (such as a vehicle) are not fully utilized and therefore there would be only a limited cost of expanding its use. But if in fact these resources are fully utilized by a vertical program, then integrating will not necessarily lower costs. Using the same vehicle example, if each program is fully utilizing its own vehicle, then integration might not lower the total number of vehicles needed. For this reason, integration may or may not be more efficient, thus calling for further studies to understand the circumstances in which integration does increase the efficiency of resource utilization.

2.2 The Matrix of Services

Integrated services can provide many benefits to the client, but also, as described in the previous section, they can be more complex to plan and manage and thus run the risk of losing some of the momentum that has been achieved in some single purpose programs. In an effort to gain the benefits of integration, we have developed an approach to planning and monitoring integrated services called the Matrix of Services. This approach, first developed in cooperation with The World Bank Institute, presents a step-by-step process for managers that helps to identify the specific services that will be included in an integrated program at each level of the health system. This process requires the development of standards of service that define the staffing requirements, pharmaceutical and supply needs, equipment and physical infrastructure that will be required at each level of the infrastructure for each type of service to be offered. The steps in the process are:

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[5] WHO, in their 1996 Technical Report on Integration of Health Care Delivery, state, *Integrated health services are cost-effective* (WHO Study Group, 1996, p 17), but in the opinion of the authors do not offer substantive evidence for this statement beyond the theoretical reasons stated above.

1. Prioritize program interventions
2. Develop standards of service
3. Inventory facilities and communities
4. Develop costing standards
5. Initiate the workplan
6. Monitor facility improvement and service delivery
7. Use feedback to inform systems and policy inputs.

These steps assume that the relevant *systems* inputs are functioning and adequate. Systems inputs must also be systematically assessed and should be informed by the feedback loop that is Step 7.

1. *Prioritize program interventions*

Countries and organizations are seldom in the position of being able to plan and fund all the activities they would like. Clearly this is true with regard to health programs, including reproductive health programs, where the costs of some types of interventions are very high and budgets are traditionally very limited. For this reason, all organizations make decisions about the relative priorities of different types of programs, and base their funding on this prioritization of importance. This process may be either explicit or implicit and many factors are included in this prioritization process including disease or condition prevalence, impact on the population, political concerns, international opinion and experience of past activities. However, the process of prioritization is frequently done without benefit of evidence of what is most important, cost-effective or successful. There have been many attempts to develop a single index to use as the basis of prioritization. Whereas mortality was the earliest one, more attention is now on indicators such as DALYs or QALYs that incorporate both mortality and morbidity into a single measure.

Objective measures such as mortality, burden of disease and cost-effectiveness are important in defining priorities, but many other factors are also included in the final decision making process. Programs that are highly visible or have strong constituencies often get a higher priority and more funding, so policy makers and planners must consider the political implications of their proposals and how to solicit the types of support that are required for successful implementation.

2. *Develop standards of service*

Standards of service delivery define what will be done for each type of client or service and serve as the essential basis of training, budgeting and monitoring.

The first step in developing standards is to decide what services will be offered at each level of the health structure. For example, at what service delivery level will IUDs be provided? Will the safe motherhood program rely on village midwives and referral of difficult cases, or will it use supervised deliveries at the health center? Will community-based distribution (CBD) workers do counseling? The decisions about who will provide what services and where, define the array of services to be provided at each level of the system and determine the referral network that will be required for effective programs.

An example of a matrix for safe motherhood services is shown in Table 1.

Table 1

Matrix for
Ante/post natal care, normal deliveries, management of emergencies

Community/Household (outreach workers)	**Clinic** (or lowest level fixed site facility)	**Health Center**	**District Hospital** (referral services)
register pregnancies home deliveries recognize problems and arrange transport postpartum FP	antenatal check-ups TT vaccination obstetric first aid IV fluids, antibiotics postpartum FP	basic obstetric care emergency obstetric care post abortion care	comprehensive emergency obstetric care ectopic pregnancy

Every country will have a unique matrix of services, depending on its infrastructure and on its the decisions about how and where services are to be delivered. In the example above, the decision has been made to have uncomplicated births in the community with a trained midwife, but some countries will choose a program in which all deliveries are done in health facilities rather than the community. Similarly, the above example limits caesarian sections to the hospital, but in countries where health centers are staffed by doctors, it may be possible to do caesarian sections at the health center level. A completed matrix of services showing services for other elements of reproductive and primary health is shown in Table 2.

Table 2: Illustrative Matrix of Services, Including Reproductive Health and Other Primary/Preventive Services

Level of services ---------- Intervention	Community/Household (outreach workers)	Clinic (or lowest level fixed site facility)[6]	Health Center (a) outpatient surgery only (b) in-patient surgery	District Hospital (referral services)
Family Planning	community counseling distribution of condoms and oral contraceptives	manage/refer problems provide injectables	manage/refer problems IUDs, Norplant surgical contraception (b)	infertility
RTI control and management	information on safe sex recognition of symptoms	counseling symptomatic screening symptomatic treatment	testing full treatment of asymptomatic problems	diagnostic procedures specialized treatment HIV screening
Ante/post natal care normal deliveries, management of emergencies	register pregnancies home deliveries recognize problems and arrange transport postpartum FP	antenatal check-ups TT vaccination obstetric first aid IV fluids, antibiotics postpartum FP	basic obstetric care emergency obstetric care (b) post abortion care	comprehensive emergency obstetric care ectopic pregnancy
Adolescent health	programs to educate parents, school health programs education to teens	counseling, family planning information and commodities, pregnancy and abortion information/referral	counseling, family planning information and commodities, pregnancy and abortion information	HIV counseling and testing, abortion services, FP, counseling
Gender based violence	education of men and women about FGM and intimate partner violence (IPV), awareness of outreach workers to identify potential cases	awareness program for local leaders of dangers of FGM, IPV, awareness of staff to identify potential cases of IPV	awareness program for local leaders, counseling in cases of FGM, IPV and referral to specialist services	counseling in cases of FGM, IPV and referral to specialist services
Abortion/Post Abortion Care	information about family planning and abortion services	information and counseling of patients seeking abortion, diagnosis and referral of patients in need of abortion/ PAC	information, counseling and services for patients seeking abortion, diagnosis and treatment of patients in need of PAC, referral of complicated cases	treatment of complex abortion and post abortion cases
Nutrition	identify, treat anemia counsel pregnant women vitamin A, iron, folate, growth monitoring	manage supplementation program, treatment of acutely malnourished children	treatment of acutely malnourished children, diagnosis of chronic malnutrition due to TB, HIV, etc.	referral of patients with suspected HIV
Management of child illness	feeding advice, Vitamin A home treatment for fever/malaria/diarrhea care seeking (early recognition and referral)	assess and classify ORT & feeding for diarrhea antibiotics for ARI antimalarial drug for fever (in malaria areas)	assess & classify cough, diarrhea, fever, nutritional status; treat cough, fever/ malaria, diarrhea, blood in stool, ear problems. referral severe cases	manage severe cases

[6] Note: services offered at lower levels would normally be offered at higher levels as well, when appropriate, and are not repeated in higher-level cells.

Having defined the array of services at each level, the manager can determine the staffing requirements (including specialized training) and equipment needed for each output and for each level of service delivery. If, for example, Norplant is to be given at all health centers and hospitals, staff with specialized training, equipment for Norplant insertion and a sterile room with adequate privacy will be required, as well as local anesthesia and take-home materials for clients about possible side effects and where to go to get help, if necessary. Standards also address client-centered quality measures such as waiting times, cleanliness of facilities and responsiveness to client needs.

The matrix format highlights both non-clinic interventions and clinic-based activities, giving a more complete picture of the overall program. It also emphasizes the connections between the various parts of the system in areas such as referrals and communications.

The hallmark of this development of standards is the required level of specificity. By establishing specific requirements for staffing, training, equipment, supplies and facilities at each level of the system for each type of intervention, the manager can estimate the capital and recurrent costs of a package of services. This level of specificity is also helpful in monitoring service delivery.

3. ***Inventory facilities and communities***

After defining the standards of service in terms of staffing, equipment and physical facilities, the manager needs to assess what is currently present at each facility, in order to determine what will be needed to bring each facility up to standard, so a physical inventory of each facility is required. Many managers are reluctant to do this physical inventory, insisting that the information is already available or that transportation is difficult or expensive, but a visit to every facility is an essential step in the process because such visits often uncover issues of which managers are unaware. Managers need to make sure that the regular supervisory staff will repeat this inventory as part of the regular supervisory process, but the supervisors may require assistance to understand the concept at first.

Once information is collected about the current situation at each facility, managers can develop a plan for bridging the gap between what is already available and what is needed at each facility to reach the previously set standards. This plan will include training, equipping, development of improved logistics systems and other management interventions.

4. ***Develop costing standards***

Financial constraints must not be overlooked, primarily because accurate information on the real costs of implementation is not available. Without adequate cost data, it is very difficult to plan for future program implementation or expansion. One of the advantages of the matrix approach to planning is that the level of specificity that is required to set standards of service provides the basis for developing costing standards using a bottom up approach to costing.

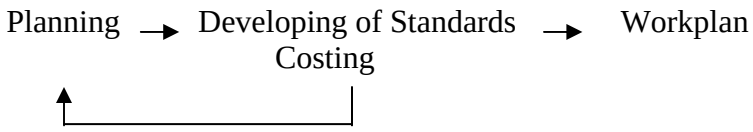
The bottom up approach requires outlining the specific inputs included in each type of program to be costed and then using the standards of service from the matrix to determine the costs of

each package of services. For instance, having defined the staffing levels needed for each type of service at each level of the system, one can use salary data to calculate the costs of these staff. The same is true for other inputs such as drugs, equipment and transportation that are defined in the process of setting standards of service. The result is information about the cost of each element of each program.

Next, this information is combined with the inventory of facilities that identifies which elements (staff, supplies, etc.) each facility needs to bring it up to the standard that is set in step 2, and managers are then able to accurately estimate the costs to bring each facility up to the standards of care that have been previously established. Thus, they can develop an accurate budget and a realistic timeline for implementation.

The planning process is a cyclic one in which managers develop plans and then reconsider them in terms of what is realistic. Having done the costing of program implementation, planners may need to reassess the feasibility of their proposed matrix before they proceed to the next step:

Figure 1: The Matrix development process



For example, while they may wish to make caesarian sections available at each health center or each district hospital, they may find that this is not realistic given the available budget or staffing.

5. ***Initiate the workplan***

At this stage, a manager should be able to create a realistic workplan that is within the budgetary and manpower constraints and is directed at the priority issues in reproductive health. Although needs vary according to the location and specific situation, as a general rule managers should focus on three key areas in implementing their workplan: staff, supplies and equipment (including pharmaceuticals and contraceptives) and the physical facilities.

Service delivery begins with the person delivering the service. Staff must be technically competent to provide the array of services, but also committed to providing the client the best service possible. Effective training, good supervision, appropriate incentives and from role modeling by senior staff in the organization will promote staff competence and commitment.

Adequate drugs, supplies and equipment are essential. Excellent work in the area of logistics management and assistance is available through a wide variety of sources. Inept management, inappropriate financial priorities and corruption must be addressed to ensure an uninterrupted supply necessary for the full array of services.

Facilities must be functional but not necessarily beautiful or expensive. They must be clean, provide privacy and a feeling of security for staff and clients, and ensure safekeeping of equipment and supplies. Community-based distributors need a suitable site for contraceptive distribution and for counseling clients, most often the clients' homes. In addition, with the exception of community based services, reliable sources of water and energy are also required.

6. ***Monitor facility improvement and service delivery***

The monitoring system includes four components and associated indicators: (1) number of facilities that meet the standards; (2) whether the workplan is on schedule, and where it is not; (3) whether the budget developed in steps 3 and 4 above is on target, and what the variance is; and (4) whether the population has benefited from the inputs. With the exception of the last indicator, the data for this monitoring comes from the operational information collected through the implementation process, with periodic inventories being done of all facilities. In the case of population benefits, the methodology will be determined by the type of benefit that was identified in step 1 of this process and data collected as needed.

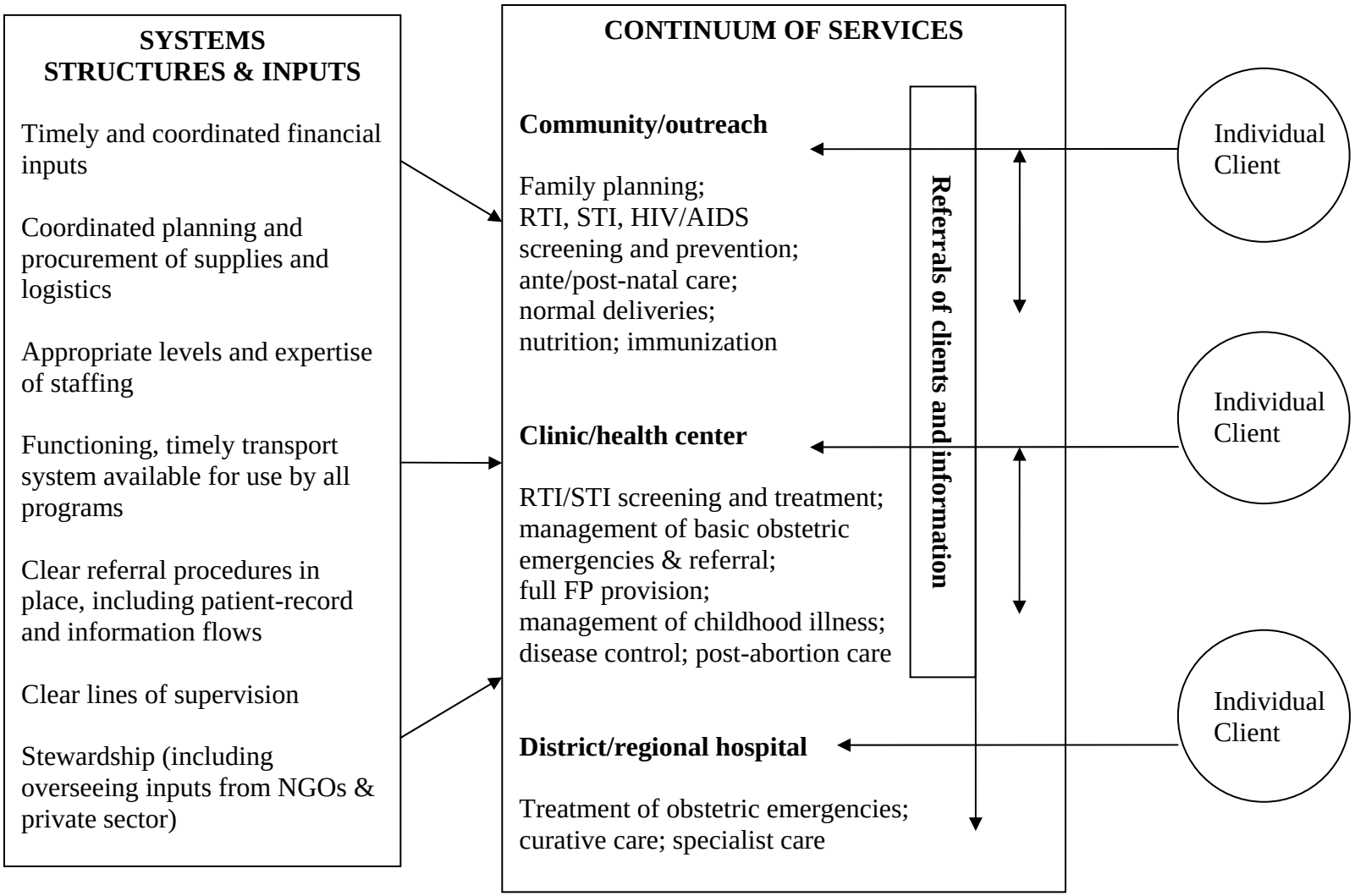
Much work has been done on building up comprehensive monitoring and evaluation systems for SRH services, including by WHO, the London School of Hygiene and Tropical Medicine and NIDI (Douthwaite et al., 2002).

7. Use feedback to inform policy and systems inputs

Good delivery of integrated services requires that service managers and providers be able to convey their needs, knowledge and experiences to systems managers and ultimately to policy makers to ensure that there is continuity between service needs and adequate systems responses. An example based on what is currently happening in parts of South Africa is an emergency transport system for referrals that is not working properly because the system is only partially decentralized. Control of the ambulances remains at provincial level, where they are physically kept, although it is the district hospitals that use them. When a hospital wants an ambulance, it has to call the provincial manager to release one: the process can take hours. Having identified a serious problem such as this, the doctors who are trying to treat emergency obstetric complications who do not get to their hospitals on time because of delayed ambulances, need formal mechanisms through which they can document their experiences and the reasons for the problem. Only with formal, regular linkage to systems and policy decision makers will the system be able to adjust to meet the service requirements necessary for a continuum of care.

Figure 1 shows the relationships between systems and services in a continuum upon which the matrix of services is built. At whatever service level clients enter, they will be connected to the next level (up or down) of care through referrals. This continuum is made possible by the systems inputs at each level, including the 'stewardship' function that WHO (2000) defines which involves the systems managers overseeing and coordinating the inputs from non-public sectors as well as overseeing the proper support and functioning of all the other inputs and structures.

Figure 2: THE SYSTEMS-SERVICES CONTINUUM OF CLIENT CARE



8. Tools and guidelines

Table 3 summarizes some useful tools and guidelines that already exist for many of the steps outlined above. Policy and program decision makers and managers can draw on these, but will also need to develop their own program- or country-specific tools based on international standards. The table serves as a checklist: managers and decision makers who need to diagnose what is needed at each level to achieve a systems and service continuum should use these tools to address each of the seven steps discussed in this section.

Table 3
Tools and guidelines for implementing
A matrix approach to operationalize a continuum of care

Steps to define and plan a matrix of services	**Existing tools and guidelines**
1. Prioritize program interventions	WHO Health Metrics indicators (see www.who.int/healthmetrics/) WHO 15 Key SRH Indicators (WHO 1997a and 1997b) Alan Guttmacher Institute/UNFPA (2003) *Adding It Up*
2. Develop standards of services	National and WHO professional standards Application of these to each service delivery level in the country
3. Inventory of facilities and communities	Checklists should be developed for infrastructure/equipment needed at each level identified above to achieve standards identified in 2. above
4. Develop costing standards	International guidelines (WHO, World Bank) on specific interventions. Need to be applied to each element identified in 2. above
5. Initiate workplan	Source material for planning and logistics
6. Monitor facility improvement and service delivery	Horstman et al. (2002) manual and indicators lists for monitoring and evaluation of SRH programs WHO list and definitions of 15 key SRH indicators (WHO 1997a, 1997b)
7. Feedback to inform systems and policy inputs	Formalize regular feedback through reports and face-to-face meetings between managers and policy/program decision makers

3 Special Considerations for Donors and Policy-Makers

Several issues dealt with in this section have also been addressed by the Health System Task Force papers. They are included here briefly because they have particular importance for SRH services.

3.1 Changing Face of Donors and Development Aid

This paper has identified a vision of integration and the range of barriers to achieving it. Donors have often been part of the problem, but they are also, emphatically, part of the solution in a world where the poorest countries remain heavily dependent on external aid.

The nature of donor support and financing structures is constantly changing. The last decade has seen a decline in funding from traditional European and North American bilateral and multi-lateral aid agencies and a rise in aid and development contributions from newer economies like Japan and from non-donor actors like development banks and other quasi-private and private bodies such as the Gates Foundation and pharmaceutical firms (Mayhew, 2002). The architecture of aid is also changing with increasing attention given to promoting local 'ownership' of development strategies by placing the responsibility for planning and setting priorities on recipient national governments (through sector-wide approaches and budget support) and on decentralized government bodies (through devolution).

Bilateral and multilateral aid agencies are subject to political constituencies; their particular political and economic influences color such donors' aid and development strategies. The most obvious example of the political nature of aid is the "Gag Rule" of successive US Republican administrations. At a more technical level, political realities have resulted in donors developing stringent accountability and transparency requirements that often lead them to favor vertical programs. In some countries, this has led to a dichotomy of approaches, in which many SRH donors claim to favor integrated service delivery yet continue to support clearly defined and 'ring-fenced' programs (e.g., USAID and UNFPA support for FP programs and AIDS programs). This is compounded by 'reform' donors' support for sector-wide approaches and budget support that encourage a holistic approach to planning and priority setting. The resulting parallel channels of funding (non-specific sector-wide channels and program-specific earmarked channels) can create considerable difficulties at decentralized implementation levels (both district and sub-district).

Increasingly, SRH programs are receiving funds from foundations that are linked to commercial enterprises, such as drug companies, as part of the move toward Public Private Partnerships. While well intentioned, these organizations continue to have a market driven perspective that may conflict with health needs of the 'beneficiary' populations. This is further compounded by the politicization of development funds in recent years, leading to a view that health care is a commodity rather than a right, and that access issues should be redressed by market changes rather than government policy.

A further change is the substantial funding being given to non-government organizations to deliver health services, in particular SRH services. Many NGOs, especially in Latin America, have been pioneers in the delivery of SRH services and continue to provide key services. In other countries, including Ghana, NGO service statistics are merged with public-sector statistics and closer coordination occurs at the systems level, with NGOs providing inputs and services where the public sector is weak or constrained. Not all NGOs are so focused on service delivery, however; some have instead a strong bias toward special interests and policy agendas such as sexual abstinence or denial of information to youth that run counter to the evidence about which approaches are most effective. There is ongoing debate about whether NGOs are in fact more accountable, representative of the population, efficient or transparent than other organizations (Green and Matthias, 1997; Mitchell et al., 1999; Lewis and Wallace, 2000; Edwards and Fowler, 2002).

Donors have multiple faces and interests; they finance and support not only specific sexual and reproductive health services, but also fundamental public sector systems and structures and increasingly non-public sector actors and structures. National policy makers need to work with and balance all of these. The diversity and broad reach of actors who now have an influence on health service delivery create a number of challenges that must be addressed if the efforts of donors and policy makers are to result in better, more integrated, health services. These are taken up below.

3.2 Priority Setting within a Changing Aid Architecture

The nature of aid is changing with a growing emphasis on locally defined priorities in preference to priorities directed by donor programs. New aid and development initiatives like NEPAD (New Partnership for Africa's Development) and the PRSPs were supposedly developed in broader consultation with those they were intended to benefit and their associated strategies and target indicators are intended to be defined by national governments of recipient countries in consultation with their donors. In the health sector, the current trend is towards sector-wide approaches (SWAps) and budget support. The SWAp is intended to improve coordination of donor assistance by bringing all donors together to deliver support within a common national *systems* framework and do away with donor-specific programs. Budget support goes a step further: donor monies come direct to the treasury, which then disburses as it sees fit, according to national government priorities, to the different sector ministries. The key issue with these systems-level changes is how to balance the macro national or sector-wide priorities reflected in PRSPs or SWAps with the micro priorities and technical needs of specific sectors, such as health, and of services within those sectors, such as SRH services.

The abolition of programs that SWAps appears to entail has prompted concern that the gains made by many strong, long-established MCH/FP programs will be lost through the watering down of specific program priorities and the disappearance of specialist staff and supervision lines (Elson and Evers, 1998; Standing, 1999; Krasovec and Shaw, 2000; Mayhew, 2002). This concern has led to strong reproductive health donors (notably USAID and UNFPA) withholding their funding from the SWAp, and continuing their vertical programs. Donors like USAID and UNFPA have moved to become more engaged with SWAp processes, but are constrained by

their own procedures, which do not allow them to 'pool' funding. This has created an operational distance between SRH donors and donors like DFID and the World Bank who are pushing SWAps and budget support; this distance may ultimately be detrimental both to a sustainable improvement of health systems and to long-term improvement of reproductive health services.

Donors and government decision makers who develop sector-wide strategic plans are defining the way health structures are financed and organised. If SRH services are to be delivered through the public sector (as most still are in Africa), then SRH donors and program specialists must be aware of, and engage with, sector-wide decision making and consultation processes. Safe motherhood advocates have been quicker to see SWAps, with their goal of strengthening system wide planning and financing, as of potentially great benefit to them (Goodburn and Campbell, 2001). There is a growing body of evidence that unless SRH stakeholders are proactive there is a real danger that SRH program needs will not be reflected in sector-wide integrated plans and resource allocation priorities; instead only the key SRH targets (e.g., contraceptive supplies, HIV prevention) will receive attention or, worse, none at all (Elson and Evers, 1998; Standing, 1999; Krasovec and Shaw, 2000; Mayhew, 2002). Early SWAp experiences in Uganda and Ghana are examples of SRH resource-allocation being left out of initial SWAp planning (Krasovec and Shaw, 1999; Mayhew and Adjei, 2004). The box below provides a detailed case example from Ghana. There may well be a need for continuing targeted SRH program support within the SWAp structure, including maintaining specialist lines of supervision and technical support to ensure service quality.

Current priority setting mechanisms are often inadequate and not transparent. While it will always going to be difficult to bring all medical specialists to the negotiating table (if the FP expert is there, a fistula expert or an appendicitis expert may also expect to be there), donors and governments must, nevertheless, be committed to formalizing mechanisms that ensure broad consultation. Traditional evidence-based tools are focused on either economic or burden of disease (DALY) criteria. Although WHO is moving away from these measures, the systems discourse is still focused on measuring disease burdens and cost-effectiveness. Several authors argue that there is a need for priority-setting to consider reproductive *health* rather than disease, although health is not well reflected in traditional measures (Allotey and Reidpath, 2002; Reichenbach, 2002). The ICPD threw down the challenge by upholding values that are not easily quantified: equity, client-centered services and empowerment of women. The challenge has not yet been met and in the current absence of adequate SRH indicators that go beyond disease (or its absence), it may be necessary to use proxies, including qualitative and small-scale research findings and recommendations from health program staff (AGI, 2004; Mayhew and Adjei, 2004).

The problem of incorporating and balancing specific health service needs with general systems requirements becomes more acute in the face of multi-sector development targets like those for implementing the Poverty Reduction Strategy Papers (PRSPs). Priority setting mechanisms must be truly consultative and consider a broad range of evidence. At an international level, this could include a more proactive role for international professional associations such as FIGO (the International Federation of Gynecologists and Obstetricians) and the Commonwealth Medical Trust. Unless donors are committed to ensuring this, the real and specific needs of health services (integrated or otherwise) will be lost in the generalities of system needs ('procurement

policy in place'; 'more staff trained'). The systems goals, targets and operational strategies must be rooted in a service reality if they are to improve health services.

Priority setting for sexual and reproductive health
In Ghana's Sector-Wide Approach

Ghana's health sector reforms were driven primarily by donors (DFID, World Bank) whose focus was the Millennium Development Goals (MDGs). The MDGs do not address sexual and reproductive health per se but instead contribute to the separation of AIDS from maternal health and from the rest of sexual and reproductive health. In Ghana, this has resulted in little recognition of sexual and reproductive health needs in the national program of work and the sector wide goals, which focused primarily on the MDG targets. This was partly the result of key sexual and reproductive health donors and program specialists being reluctant to be involved in (or simply not properly aware of) the planning and development of sector-wide indicators, which meant that SRH priorities were not represented at priority setting negotiations. A further problem was the lack of suitable indicators for measuring preventive sexual and reproductive health needs.

After SRH issues were neglected in early versions of the SWAp, donors in Ghana moved to be more inclusive in recognition that the sector plans can only improve health services if the technical needs of specific services are understood and taken into account. SRH donors are now invited to SWAp and other national planning meetings and have been more proactive in presenting their data and experiences. (Mayhew and Adjei 2004)

The key challenge for SRH donors and advocates is to find ways of measuring their programs that respond both to the vision of holistic, life-long sexual and reproductive health care described at ICPD and to national and international planning and cost-efficiency demands. Developing such measures may require collaboration among SRH specialists, health economists and a range of other disciplines.

3.3 Financing

Weak public sector services and persistently inadequate public sector funding of health services have led donors and governments to try a number of financial reform initiatives over the years, including cost recovery (user fees), health insurance, community financing, linkages with an expanding but largely unregulated private sector and a range of other quasi-private set-ups (Huff-Rouselle and Pickering, 2001; Hill, 2002). Experiences to date have been equivocal and what works best in different contexts is still the subject of much debate. The underlying messages are that under-funded systems do not work no matter what we try and that solutions for financing must be context specific.

3.3.1 Private partnerships and social marketing

Initiatives to privatize and separate the financing and service provision functions of health care (e.g., contraceptive social marketing or contracting of maternal health services) were intended to expand access to SRH services. The second generation of SWAps (e.g., in Ghana and

Bangladesh) has included explicit linkages with the private sector in recognition of its importance as a service provider and to try to bring it within a national framework (Austen, 2001). Private clinics and social franchises deliver contraceptives and related FP services in Latin America, Asia and parts of Africa (Berman and Rose, 1994; Montagu, 2002) and services such as maternity care in India, Cambodia and other parts of South and Southeast Asia (Bhatia and Cleland, 2001; Huff-Rouselle and Pickering, 2001). Contraceptives and some drugs (notably for STI treatments) are increasingly procured or accessed through the private sector. In Ghana contraceptive social marketing accounts for 61% of the condom market with the Planned Parenthood Federation of Ghana (PPAG) accounting for a further 25%, leaving only 14% in the public sector. Similarly, STI treatment is mostly at private sector clinics and pharmacies (Mayhew et al., 2001; Austen, 2001; Wilkinson, 2001). While FP or VCT for HIV have been successfully franchised, not all RH services (such as maternal health care or holistic youth services) are suitable for such commercial 'branding'. A recent review of public-private partnerships for SRH indicates that there is little evidence of their benefits, although there is some evidence that condom promotion has increased where private sector or social marketing initiatives were prevalent (Peters et al., 2004).

Despite these initiatives, there are a number of concerns over commercialization of health care. Private facilities are driven more by markets than by need and in Tanzania, for example, the private sector has not improved equity of access or coverage (Benson, 2001). Many issues of regulation have yet to be resolved and government regulation of the private sector is notoriously difficult. It must be tackled, however, in the face of reports of large variations in the quality of private sector SRH services (Ranson and John, 2001; Nandraj et al., 2001).

Finally, Ambegaokar and Lush (2004) warn that commercial sales of contraceptives and other health-related products, even if they increase coverage, do not provide a complete package of care (which would include further information such as different types of contraceptives and side effects).

3.3.2 Cost recovery: user fees and health insurance

The introduction of cost-recovery schemes has formed a large part of international aid policies requiring reform of public services. Two forms have been particularly popular: user fees and health insurance.

In the public sector, user fees for cost recovery were often introduced for drugs and supplies, to help secure flows and resources. Evidence for the efficacy of such as strategy is very mixed, but in general user fees in public services are agreed to have negative equity implications for the poor (Creese and Kutzin, 1995; Sen and Koivusalo, 1998; McDonagh and Goodburn, 2001). A number of countries have reported a decline in service use after introducing user fees (e.g., Zambia, Nigeria, Honduras, China, Bangladesh), though others have reported little change (Godwin, 1991; Fielder and Suazo, 2002; Bogg et al., 2002; Kaufman and Jing, 2002; Schuler et al., 2002). In China, the introduction of fees-for-services in 1985 led to significant declines in utilization of skilled attendance at delivery and hospital delivery; increased adverse pregnancy outcomes were also recorded in women paying out-of-pocket as opposed to those covered by

insurance. (Bogg et al., 2002). The move to user fees in rural China led to a decline in preventive care (antenatal care, STI screening and health education about HIV preventive behaviors) relative to curative care, for which fees can be collected more easily (Kaufman, et al., 1997; Fang, 2004). In Brazil, the focus on more expensive curative services for income generation led to an increase in unnecessary cesarean sections (CHANGE, 1998).

Health insurance is another way countries have addressed the lack of public-sector funds for health. A study from Thailand cautioned that private health insurance initiatives should be closely regulated by government, rather than left to the markets, in order to limit unnecessary demand for inappropriate services (e.g., breast cosmetic surgery), encourage the supply of beneficial services that were not yet demanded by consumers (e.g., provision of information on/screening for sexual/gender related violence) and to ensure provision of services demanded but not yet supplied (e.g., HIV treatment and abortion services) (Teerawattananon and Tangcharoensathien, 2004).

Community health insurance is a variation on the health insurance theme. It has become increasingly popular as a form of cost-recovery that offers some measure of protection for the poorest and is being piloted in a broad range of countries including Uganda, Malawi, Bolivia and India (PHR Special Initiatives, undated; Ranson and John, 2001). The evidence on its efficacy is mixed, and points to the need for governments to be involved in regulating the efficiency, cost-effectiveness and access to these schemes. A study of hysterectomy care through a community health insurance scheme in Gujurat indicated a huge range of quality of care from excellent to dangerous; the study suggested that community schemes should be helped to identify which facilities provide the best care and contract directly with these (Ranson and John, 2001).

3.3.3 Coordinating fragmented financing

It is clear that absolute levels of funding must increase if service delivery is to be improved. Exactly how this can be done in extremely resource-poor settings cannot be conclusively answered, but donors need to be aware of the consequences and effects of supporting a diversity of initiatives. A disparate range of financing for SRH services in one country (e.g., contraceptive social marketing, private maternity care, community and private health insurance) could mean that financial management becomes more fragmented, and hence more complex to plan, manage and monitor, requiring new skills and resources for already overstretched managers and systems. Financial inputs need to be streamlined at the national and/or district levels if they are to be used to maximum effect. In terms of adequate funding of SRH services, the issue of earmarking sufficient funds at the district level remains a pertinent issue.

3.4 Decentralization

Decentralization[7] and a focus on the district health system is underway in a great many countries. It is intended to strengthen accountability and improve responsiveness of services. Decentralization essentially involves devolving financial and decision making powers from central government to district health services and autonomous hospitals (which together form the 'district health system'). The difficulties noted in section 3.1, regarding keeping SRH service needs on the national and international priority setting agenda, are compounded at the district level. Even where international and national commitments may safeguard SRH services and support, if district leaders are not concerned with these services they may not receive support at district level.

In countries that have moved towards financial decentralization, it is other ministries, typically the Ministry of Labor (e.g., where there is compulsory health insurance) and the Ministry of Local Government (e.g., where there is devolution) who are the primary budget holders, and the Ministry of Health may no longer hold full control of all public sector health functions (Collins, 1994). This will be exacerbated where the Ministry of Health is weak or where other Ministries hold a negative perception of the Ministry of Health (Fielder, 1998; Bossert et al., 1998). Decentralization may lead to the under-funding of SRH activities if they have to compete with other health and non-health priorities and if SRH advocates are weak (Elson and Evers, 1998; Krasovec and Shaw, 1999; Standing, 1999).

3.4.1 Equity

Decentralization was developed as a strategy in the name of *equity*, which is a major concern in the decentralization of finances. There are reported inequities between rich and poor regions in countries where national allocation formulae did not take differential wealth-bases into account (Aitken, 1999). If the source of funding is predominantly local, for example, as under the devolution model applied in Mexico, rich regions with more resources and local tax returns may do much better than poorer ones while SRH services in poor regions suffer (Gonzalez-Block et al., 1998). Thus, devolution of financial autonomy may only work for SRH if principles of equity are protected through national needs-based resource allocation formulas or through national allocations to priority programs that have particular implications for equity such as HIV/AIDS care and prevention of mother-to-child-transmission which are expensive and are often most needed by the poor. In Uganda, for example, after decentralization was first introduced there was massive decline in PHC spending, badly affecting SRH services, so conditional grants are now issued to ring-fence essential health package and support costs (Krasovec and Shaw, 1999; Austen, 2001).

[7] It should be recognized that "decentralization" encompasses a large range of different types (from deconcentration to full devolution) affecting different systems components, most commonly decision-making powers and resource flows.

In one of very few detailed studies of resource allocation under decentralization, Bossert et.al. (2003) illustrate that local districts in Zambia were taking advantage of increased decision-making powers in their resource allocations and many districts chose not to follow national expenditure guidelines. This resulted, in general, in significant declines in real per capita expenditure at the district level (though these occurred in an overall climate of economic decline), with richer regions consistently spending about 20% more than poorer ones.

3.4.2 Logistics

Decentralization usually affects the logistics system including supplies distribution and storage, cost recovery, monitoring and related decision making. Decentralization has often involved streamlining or 'integration' of disparate vertical programs including SRH components. A number of the major SRH donors who remain outside SWAp initiatives have voiced concerns over the implications of reforms for contraceptive and drug logistics (Bates et al., 2000). A USAID funded study of contraceptive logistics in Ghana, Kenya, Zambia and Tanzania found that vertical contraceptive logistics are most effective for improving product availability and that health sector reforms like decentralization could disrupt these specific logistic functions (Bates et al., 2000). Vertical logistics can still support integrated *services* if logistics performance is good. To achieve this, governments and donors must plan the details of the logistics system and implementation within the specific reform context.

A number of countries (including Bolivia, Philippines, Zambia and Uganda) report a lack of drugs and equipment for SRH services as a result of decentralized funding and decision making because poorer regions are unable to meet priority targets or because reproductive health was not a priority (Standing, 1997; Collins et al., 2000; Jeppsson, 2001; Lubben et al., 2002). Brazil has attempted to overcome this with a 'top-up' allowance for poorer regions where decentralized resources like user fees and local taxes are insufficient to allow constant SRH supplies (Collins et al., 2000). A number of countries (e.g., Philippines, Ghana) retain procurement of drugs and contraceptives at the national level (Mayhew, 2003; Management Sciences for Health, 2001) in an attempt to maintain logistics supplies.

3.4.3 Human resources and capacity

Many countries have underestimated the extent of capacity-building that is needed for regional and district administrations to allow district/regional managers to carry out new responsibilities such as supervision, training and planning (Jeppsson and Okuonzi, 2000; Wang et al., 2002; Mayhew, 2003). Countries as diverse as Ghana, Kenya, Zambia, Bolivia and the Philippine report a lack of experience and capacities at the district level, resulting in management shortcomings, confusion of responsibilities and deterioration of SRH services (CHANGE, 1998; Mayhew et al., 2000; Lubben et al., 2002).

Wang et al. (2002) found mixed evidence of the efficacy of deconcentrating or de-linking recruitment and payment of human resources, particularly where decentralized management is weak. In both the Philippines and Zambia transfer of funds from central to local governments

was not accompanied by decentralization of the technical support system (management and supervision) and led to a loss of expertise and deterioration of quality of care. In addition, changes in health workers' salaries and benefits resulted in lowered morale and performance (CHANGE, 1998; Bosman, 2002).

An example from Honduras of good practice for inclusive planning that is sensitive to the needs of decentralized management staff is shown in the box below.

Good practice management planning in Honduras

For decentralization to work well, senior managers and policy makers must choose which management and technical functions to transfer to lower levels and to whom those functions will be transferred. In Honduras ASHONPLAFA, the principal provider of FP services, analyzed their process of decentralization. They found that decentralization of responsibility from central to regional management for activities such as income generation, marketing and IEC campaigns worked well, so plans are underway to decentralize more responsibility including operational planning and evaluation. Management styles and skills of regional managers at ASHONPLAFA were found to differ, with some still depending on the center for direction; thus, technical assistance and management training are being provided for regional managers as they take on new responsibilities. Sociopolitical and managerial contexts may influence the extent to which districts/managers take up their autonomy once it has been conferred on them (Atkinson 2000; Management Sciences for Health, The Manager ERC, 2001).

Devolution also has the potential to support local systems of political patronage and nepotism, with ensuing negative effects on the career development and motivation of personnel (Mayhew, 1999; 2003). Since decentralization often involves some form of integration of programs, there are major implications for staff currently deployed in vertical programs (FP, HIV/AIDS etc.) who currently benefit from privileged resources such as cars, offices and training opportunities. Integration means a loss of these things, risking the subsequent loss of power and staff motivation. Donors and policy makers must be aware of these risks and support sensitive planning and management negotiations.

3.4.4 Integrating SRH component needs

Decentralization has often been linked with integration because it is at the district and sub-district levels that services are seen to be integrated. However, decentralization needs to retain elements of verticality for SRH (and other health) components that require highly specialized tertiary care and vertical referral systems such as specialist laboratory services for STI and HIV/AIDS or hospital theaters for emergency obstetric care. If emergency obstetric care is to reduce maternal mortality, it requires a functioning referral system and quality tertiary care[8]

[8] The nature of integrated needs for emergency obstetric care are the subject of the background paper by Millennium Task Force 4.

(UNICEF/WHO/UNFPA, 1997; Maine et al., 1997; Campbell et al., 1997; PPMN, 1997), which may require cooperation in service delivery and financing between decentralized districts, if some districts cannot offer all the required levels of care. Resource allocation is highly political, so mechanisms are needed to systematically assess the extent and distribution of any gains from inter-district collaboration. Shared allocation of resources might be considered, for example where there are substantial population differences between districts, districts could subsidize each other. This authority might need to be held at the regional, provincial or state level. Some countries, notably in Latin America, already have national resource allocation mechanisms that are meant to ensure that distribution at the district level is equitable (Collins et al., 2000). Specific technical issues around provision of anti-retrovirals (ART) for pregnant women have large infrastructure implications (specialist administration, laboratory monitoring, etc.) that can only be borne (if at all) at the tertiary level (Austen, 2001).

Other SRH components may benefit from more integrated decentralized planning. For SRH components delivered at the primary health level (FP, STI screening, primary health care, etc.) decentralization may allow greater client-responsiveness and accountability. For example, a pilot study in Kenya showed that decentralization of syphilis screening facilities for pregnant women to the primary care level was logistically feasible and cost effective (87.3% of sero-active women were treated on site and 50% of partners returned to the clinic for treatment) in the context of SRH programs (Jenniskens et al., 1995). The extent to which PHC health workers should be trained as 'polyvalent workers', however, is still open to debate.

3.4.5 Donor coordination of parallel systems

The evidence above suggests a need to retain vertical logistics and referral systems between different levels of care which are integrated to the extent possible at each level. It has also highlighted the risk that SRH services may deteriorate when decision making and resource allocation have been more integrated at decentralized levels. Some donors have decided to continue supporting and funding existing vertical programs (e.g., FP, AIDS, polio immunization). While it can legitimately be argued that earmarked funds provide necessary security for the funding and resourcing of sexual and reproductive health services that might not otherwise be a district priority, problems arise when donors continue to fund their work programs as distinct parts of, or actually separate from, the main health service delivery system. This strategy creates a parallel functioning of two different systems (the mainstream system funded from central government and earmarked programs often funded by external donors), which results in highly complex administration and reporting systems with substantial duplication. For example, donor funded program activities (e.g., training of FP providers in STI diagnosis or of ANC nurses in ARV provision) are rarely incorporated the district's regular activities, causing disruption to routine service delivery.

If such disruption at the management and service delivery levels is to be avoided, donor inputs must be coordinated at the district and national planning levels. Donors and policy makers must ensure that authority at district level is clear and must support the building of district management capacity to plan and implement coordinated services, logistics and referral systems.

4 Conclusions

This paper is a contribution to the debate on what integration is and how it could be achieved. It does not provide a list of services that could or should be integrated at different levels, nor a series of magic actions to achieve such integration. It is not possible to provide this type of 'blueprint' because integration is so highly context specific, depending on local infrastructure, systems organization, staff skills and availability, epidemiology and reproductive health profile, target populations and other factors. Nevertheless, we review lessons learned over the past two decades and provide a step-by-step approach to developing a context-specific matrix of services. We have taken pains to highlight a number of key issues that are central to all integration initiatives, in particular: the need for strong, well functioning general health systems and the need for client-centered information systems and functioning referral systems for both clients and their medical records between service levels. Finally, we recognize that people are central to efforts to provide better integrated services, and therefore staff at all levels must be supported to make competent, transparent decisions regarding the continuum of care they offer.

Defining integration: the continuum of care

Integration of services and integration of systems are two different things. The *goal* that we are trying to achieve is integration of services that incorporates a "continuum of care" for each client. The *means* to achieve this service integration is the integration of systems in order that the structures, incentives and operating systems support the planning and delivery of integrated services. This is consistent with the terminology used by WHO in its Report on Integration in which integration of *service tasks* is differentiated from integration of *management and support functions* (WHO Study Group, 1996). One implication of this is that integrating systems in the absence of changes in service delivery is not sufficient, though it is unfortunately a common occurrence. Rather than initiating integration by merging systems, it is more effective to plan for service integration and then design systems that can support these services.

Integration does not mean that all problems can or should be treated by the same person or even at the same clinic, but that there are referral mechanisms (for clients and their medical records) in place that ensure that each client receives a full range of needed care in a convenient and affordable way. Different populations (adolescents, men, women) need different types of services and these needs may best be met in specialized clinics with specially trained personnel. What is needed is not a "one size fits all" approach but rather an integrated referral network that facilitates the delivery of appropriate services for each client. From the point of view of SRH, continuum of care implies an appropriate array of services that is client-focused and supported by operational referral networks and patient records.

Not only will different groups of clients need different types of services, but individual clients will need different types of service during their lifetimes. This life-cycle approach forms the basis of the continuum of care over time. For this goal to be realized, mechanisms that maintain patient records from one visit to the next are needed so that care can be based on a person's past medical history as well as the particular concerns raised at each visit.

Special issues with integration of SRH services deserve special consideration. Confidentiality and privacy are essential if we expect clients to be forthright about their sexual preferences, behaviors and history. Legal opinion and social customs may conflict with medical opinion with regard to abortion, adolescent health and violence against women including female genital mutilation. Stigma associated with specific diseases, occupations or social class may interfere with effective care of patients. These issues cannot be avoided if we are to succeed in achieving the goals stated by WHO and UNFPA and adopted by most countries in the world.

Supporting integrated systems

Systems and policies (including priority setting, structure, financial management, personnel and information management) must support integrated services. This does not necessarily mean that all systems have to be integrated at all levels; there may be some management support systems that are best left vertical, depending on local conditions. Rather, what is necessary is that systems support rather than block the integration of services at the point of care.

The delivery of integrated services requires detailed planning at both the strategic and operational levels to ensure that referral mechanisms are in place, management systems are operational and staff have the resources and training needed for effective delivery. Typically, operational planning and management is not sufficiently emphasized with the result that integration occurs in a haphazard rather than systematic way. Tools such as the matrix of services presented in this paper are needed to develop practical approaches to the delivery of integrated services.

Influence of donors and policy makers

Because of the complexity of priority setting in an integrated health environment, fairer and more democratic mechanisms must be developed to ensure that the needs of the client are met. Neither donors nor bureaucrats nor technocrats should be allowed to have undue influence on the decision making process, and better tools must be developed that incorporate technical, political and community considerations into the process. Technocrats in particular must recognize that current measures such as cost-effectiveness and MDGs, and mechanisms such as SWAps, PRSPs and performance based programming, may not sufficiently recognize local needs and constraints, nor necessarily lead to the equitable distribution of SRH services among the population. Donors and policy makers should fund and support the development of better indicators to measure the holistic, qualitative, empowering elements of SRH as envisaged at Cairo and find better, more objective ways to collect and use evidence.

Donors have an important part to play in the development of integrated SRH services. Donor funding, with its targeted use and its need for programmatic accountability has been one reason for the persistence of vertical programs in many countries; changes to this approach are needed if service integration is to occur. There is a renewed need for long-term commitment by donors in the development of effective referral and support systems. Accountability and monitoring must be adapted to the special requirements of integrated services. Finally, because of the need for governments and NGOs to be more transparent in an integrated system, donors and other health

actors must themselves be more transparent not only in terms of their funds, but also in terms of their actual goals and long-term commitments.

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