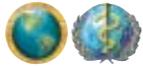




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LAC HR SCALING UP HEALTH SYSTEMS TO RESPOND TO THE CHALLENGE OF HIV/AIDS IN LATIN AMERICA AND THE CARIBBEAN

Special Edition No. 8

SPECIAL EDITION

SCALING UP HEALTH SYSTEMS TO RESPOND TO THE CHALLENGE OF HIV/AIDS IN LATIN AMERICA AND THE CARIBBEAN

No. 8



LATIN AMERICA AND CARIBBEAN REGIONAL HEALTH SECTOR REFORM INITIATIVE

SCALING UP HEALTH SYSTEMS TO RESPOND TO THE CHALLENGE OF HIV/AIDS IN LATIN AMERICA AND THE CARIBBEAN

Washington, D.C.

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TABLE OF CONTENTS

Foreword	vii
Part I: Current and Future Responses of Health Sector Reform to HIV/AIDS in Latin America and the Caribbean	1
Introduction	3
Chapter 1: Magnitude of the HIV/AIDS Pandemic and Patterns of Transmission in Latin America and the Caribbean	7
Chapter 2: Evolution of Health Systems' Functions	11
Chapter 3: Aligning the Steering Role Function of Health Authorities	13
Chapter 4: Addressing the Challenges posed by HIV/AIDS to the Financing of Health Systems and Services	19
Chapter 5: Provision of Health Services	25
Chapter 6: Health Systems and Services Research of HIV/AIDS Comprehensive Programs	43
Chapter 7: Synergy in the Responses and Resources to Confront the HIV/AIDS Pandemic	45
References	53
Part II: LAC HSR Initiative Regional Forum 2002 The Challenge of the HIV/AIDS Pandemic for the Reform and Strengthening of Health Systems and Services in LAC	63
1. Purpose of the Meeting	65
2. Outcomes and Results	66
3. Keynote Address	66
4. Abstracts of Panel Presentations	70
5. Summary of Discussions from the Working Groups	79
6. Concluding Remarks	81
Annex 1: Meeting Agenda	83
Annex 2: List of Participants	87

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FOREWORD

The HIV/AIDS pandemic is occurring at a time of great health system change in Latin America and the Caribbean. Over the past decade, many countries in the region have undergone significant health sector reforms, often as a part of broader, economically-driven state reforms. The reforms have focused on decentralization and separation of functions and have attempted to improve economic efficiency. At times, these changes have led to fragmentation within the health sector. The advent of HIV/AIDS brings a new challenge to health systems. Prevention of and care for HIV/AIDS require a comprehensive and integrated response involving many aspects of health systems, including public health responsibilities, financing, social protection in health and service provision. In an era of separation of functions, providing adequate health services for those infected with the disease has already proven a major challenge to the health systems of many countries in the region.

The **Latin America and Caribbean Regional Health Sector Reform Initiative**, developed by the Pan American Health Organization (PAHO) and the United States Agency for International Development (USAID), seeks to promote more equitable and effective delivery of health services by supporting regional activities. It uses a participatory approach, working in partnership with key decision-makers in the region to build capacity to assess health sector problems and to design, implement and monitor reforms. The implementing partners are PAHO and USAID-funded programs—Partners for Health Reform*plus* (PHR*plus*) and Management & Leadership (M & L) Program.

With these matters in mind, the Latin America and Caribbean Regional Health Sector Reform Initiative (LAC HSR), along with its partners, decided to hold a Regional Forum on the topic. The Forum, entitled «The Challenge of the HIV/AIDS Pandemic for the Reform and Strengthening of Health Systems and Services in Latin America and the Caribbean», took place in February 2002 in Ocho Rios, Jamaica. The **scope and purpose document**, sent in advance of the meeting to those invited, is included in the present document.

As a pioneering effort, the meeting brought together two fields: specialists in the prevention and care of HIV/AIDS and other infectious diseases, and decision-makers who work with health systems, services and health sector reform. Throughout the three-day meeting, these two groups shared their expertise and worked toward an understanding

of the steps that must be taken to effectively combat the HIV/AIDS pandemic in the region. **Descriptions of each presentation** follow this introduction, and the **agenda** and **list of participants** are included in the annex.

In preparation for the meeting, advisors from PAHO and Partners In Health, a NGO affiliated with the Program in Infectious Disease and Social Change at Harvard Medical School's Department of Social Medicine, worked together to create a **background paper** that would serve as a starting point for the discussion. After reviewing comments from Forum sponsors and participants, we developed a revised version of that paper, also included in this document. It is important to note that the background paper was a first attempt to bring together the issues associated with HIV/AIDS and health sector reform. As such, it was not possible to include all perspectives on these issues, nor should it be considered a comprehensive assessment of health systems, financing, insurance, or HIV/AIDS care. It is especially important to note that the document does not discuss fully the substantial resources (financial and other) needed to implement an effective and comprehensive HIV/AIDS program. For most countries in the region, resources are limited; research and documentation on how best to secure additional resources and/or prioritize available resources ought to be addressed in the immediate future. One promising prospect on this front is the Global Fund to Fight AIDS, Tuberculosis and Malaria, which was founded in January 2002 to attract, manage and disburse additional funds to counter these diseases. The Global Fund opens a window of opportunity for enhancing comprehensive HIV/AIDS care in Latin America and the Caribbean.

The Regional Forum was the beginning of the discussions and debates that will take place as Latin America and the Caribbean continue to determine workable strategies to combat the HIV/AIDS pandemic. We are committed to ensuring that all people living with HIV/AIDS will one day be able to receive the comprehensive care and treatment they need, while those who are not infected are protected from the risk of contracting the disease. By balancing economic realities with a genuine commitment to integrated HIV prevention and care, we can together strengthen health systems to accomplish this goal.

PAHO, July 2002

PART I
CURRENT AND FUTURE RESPONSES OF HEALTH
SECTOR REFORM TO HIV/AIDS IN LATIN AMERICA
AND THE CARIBBEAN

INTRODUCTION

In attempting to address the HIV/AIDS pandemic, the region of Latin America and the Caribbean (LAC) is facing a formidable challenge. At this writing, more than 1.8 million people are already living with HIV/AIDS: 1.4 million in Latin America and 420,000 in the Caribbean (1). The Caribbean, with an adult HIV prevalence of 2.2% (1) has the second highest rate of HIV infection in the world (2), second only to sub-Saharan Africa. Certain countries—including the Bahamas, Belize, Brazil, Bermuda, Dominica, Guatemala, Haiti, Honduras and Jamaica—are at an advanced stage of the pandemic or at great risk of its rapid escalation (3). But the gravity of the situation is of great concern throughout the region.

Health systems all over Latin America and the Caribbean are suffering the consequences of a lack of organization and planning for the increase in the demand for—and use of—services. The advent of a new infectious disease undermines already limited capacity to ensure access to quality care for everyone according to established standards. Few governments in the region have managed to implement the necessary policies and expend resources for a comprehensive response to HIV/AIDS. The HIV/AIDS pandemic is occurring at a time when most countries throughout the region are reducing social spending, thus damaging already resource-constrained health facilities and health systems by limiting funding.

With very few exceptions, the fight against AIDS in LAC has focused almost exclusively on the prevention of HIV transmission (4). Heavy emphasis on primary prevention was an appropriate public health approach during the first phase of the pandemic. Although the reduction of new infections remains of paramount concern, the arrival of effective treatment, the dramatic increase in the number of people living with HIV/AIDS, and concerns about global health equity have created a demand for services that target the medical, emotional and social needs of people living with HIV/AIDS and their families, as well as to caregivers.

The magnitude of the crisis has created a growing consensus across the world among governments, international agencies, and medical institutions that a comprehensive global HIV/AIDS strategy must be developed immediately (5). In its June 2000 document, *Building Blocks: Comprehensive Care Guidelines for Persons Living with HIV/AIDS in the Americas*, the Pan American Health Organization (PAHO) (3) recognized the need for a comprehensive strategy for HIV/AIDS care, defined as «a multidisciplinary integrated approach to providing care and support services for people living with HIV/AIDS, their family members and the community at large» (3). Concurrently, the World Bank organized

the Caribbean Group on Cooperation in Economic Development, which focused on HIV/AIDS as a key development challenge and publicly recognized that the pandemic threatens to reverse the region's development achievements of the last three decades.

The achievements of the UN Special Session on HIV/AIDS in June 2001 in New York represented a milestone in the struggle against this pandemic. Industrialized and developing countries alike, from North to South, jointly committed to a ten year endeavor to apply new strategies that integrate preventive programs with care, support, and treatment of all people living with and/or affected by HIV/AIDS. This concept is based on the idea that the separation between prevention and care is a highly artificial one. Scientific evidence supports the view that «prevention, care, support and treatment for those infected and affected by HIV/AIDS are mutually reinforcing elements of an effective response and must be integrated in a comprehensive approach to combat the epidemic» (2).

As a follow up to the UN General Assembly Special Session on HIV/AIDS, Caribbean heads of government stated, in the Nassau Declaration issued a month later, that they are also devising ways to support each other's national HIV/AIDS programs and to jointly negotiate affordable prices for the antiretroviral (ARV) drugs used to treat the disease. The Caribbean region has taken a more proactive approach to the HIV pandemic.

The issue of HIV/AIDS in the Americas was similarly given due attention by the Governing Bodies of PAHO/WHO at its 43rd Directing Council meeting in September 2001. The Council urged Member States to give high priority to fighting this pandemic, seeking to link comprehensive care models with sound primary prevention strategies and facilitate inter-agency, inter-institutional and inter-sectoral responses at national and regional levels (6).

PAHO recognizes that a truly comprehensive HIV/AIDS care strategy is multifaceted and that the creation of comprehensive programs should not be considered a diversion of available resources but rather a «strategy to widen their impact.» Prevention programs have traditionally been the primary focus of funds allocated for HIV/AIDS and should remain a cornerstone of the comprehensive strategy. They should be tailored, however, to reflect the epidemiology of the epidemic, which varies between and within countries.

In that context, WHO–Headquarters (7) recently initiated a broad process of regional consultations on «The Global Health Sector Strategy for Strengthening the Health Sector Response to HIV/AIDS,» aiming to generate technical consensus on essential elements of this strategy and anticipate implementation challenges and practical implications for action—at global and regional levels—on how to better assist authorities of Member States in combating HIV/AIDS.

PAHO/WHO and USAID are leading organizations in the fight against HIV/AIDS in LAC. Both of them have recently stated, through PAHO's Executive Committee (8) and USAID's Administrator, respectively (9), that confronting the HIV/AIDS pandemic is a high priority issue in order to ensure health, sustainable development, human rights, and well being for the people of the Americas. Both of these organizations are adopting the UN-recommended «prevention-care-treatment» integrated strategy, as presented in USAID's *Prevention-Care Continuum* and PAHO's *Building Blocks Guidelines*.

However, these comprehensive care models do not develop spontaneously. A number of systems related to the steering role of the health authority, the financing of the health system, and the definition of the guaranteed portfolios of health entitlements by private and social insurance schemes have to be realigned to bring this about. Similarly, a number of organizational changes in the provision of care have to take place to make it possible.

In the face of these new challenges and responsibilities that have emerged from the UN special session and other recent international meetings (10), the Latin America and the Caribbean Health Sector Reform (LACHSR) Initiative's partner organizations and projects launched a Regional Forum on The Challenge of HIV/AIDS for the Reform and Strengthening of Health Systems and Services in the Latin American and Caribbean Region between February 20-22, 2002. The forum also served the function of regional consultation for WHO/AMRO to «consolidate issues, actions and processes needed to strengthen health sector response to the HIV/AIDS epidemic (11).»

This document was prepared as background for Regional Forum discussions and aims to identify some of the salient issues related to the need to scale up health systems to better face the challenges of the HIV/AIDS pandemic. It was intended to stimulate discussions and foster debate with regard to what strategies should be pursued to make health systems more responsive to this emerging health problem and how best to build the institutional capacity and develop the necessary infrastructure for sustainable systemic solutions to this growing demand for care and resources.

CHAPTER 1:

MAGNITUDE OF THE HIV/AIDS PANDEMIC AND PATTERNS OF TRANSMISSION IN LATIN AMERICA AND THE CARIBBEAN

Worldwide, the HIV pandemic continues to grow. At the end of 2002, an estimated 42 million people globally were infected with HIV (12). In addition to causing tremendous human suffering for those living with HIV and for their families, AIDS has become a major cause of social, political, and economic instability.

Although the pandemic in the Americas has not reached the crisis levels seen in sub-Saharan Africa, there are an estimated 3 million people living with HIV in the region. The Caribbean has the highest adult HIV prevalence in the world (2.2% of adults) outside of sub-Saharan Africa. At the end of 2002, there were an estimated 980,000 adults and children living with HIV/AIDS in North America (with an estimated 45,000 newly infected during 2002), 440,000 adults and children living with HIV/AIDS in the Caribbean (with 60,000 newly infected during 2002), and another 1.5 million living with the disease in Latin America (with 150,000 newly infected during 2002) (12, 13). Prevalence varies from country to country: in Haiti, for example, adult prevalence may exceed 6%, while in Cuba the prevalence is less than 0.03% (13, 14).

The HIV/AIDS pandemic is a threat to development. A recent study conducted by the United Nations Development Program found that if the rising incidence of the disease is left unchecked, it will lead to a fall in gross domestic product and a decline in the level of domestic savings (15). Furthermore, HIV/AIDS in the Americas could result in the creation of a «missing generation,» as has already occurred in sub-Saharan Africa; there, much of the middle or working age population has died from the disease, leaving children (often orphans) and the elderly as survivors. Without the working age population, there are few teachers, physicians, farmers, factory workers and others to propel development of the most affected countries.

Table 1 shows the magnitude and range of HIV burden across the Americas. Although national prevalence data tends to simplify the complex nature of the pandemic within a country and among different groups at risk, it nonetheless provides an overview of the situation in the region.

The patterns of HIV transmission vary widely within Latin America and the Caribbean. Although it is not easy to determine the nature of risk, there are predominant regional patterns of transmission. Over the past decade, the ratio of men with HIV to women with

HIV has narrowed considerably, to about 3 to 1 in Latin America and 2 to 1 in the Caribbean (16). Men who have sex with men, often bisexual, appear to feature prominently in the increasing feminization of the epidemic. In several countries, the spread of HIV through the sharing of injecting drug needles is of growing concern, notably in Argentina, Brazil, Chile, Paraguay, Uruguay, the northern regions of Mexico, Bermuda and Puerto Rico (16).

Table 1: Adult and Female Prevalence of HIV/AIDS in the Americas, end of 2001 (15-49 years) (13, 17)

Country	Adult Prevalence (%)	Women Infected (% of Infected Adults)
Haiti	6.1	50.0
Bahamas	3.5	44.3
Guyana	2.7	50.0
Dominican Republic	2.5	50.8
Trinidad and Tobago	2.5	33.0
Belice	2.0	45.5
Honduras	1.6	50.0
Panama	1.5	34.8
Barbados	1.2*	N/A
Jamaica	1.2	40.0
Suriname	1.2	50.0
Guatemala	1.0	42.9
Argentina	0.7	23.0
Brazil	0.7	37.7
Costa Rica	0.6	25.5
El Salvador	0.6	27.4
United States	0.6	20.2
Venezuela	0.5*	N/A
Colombia	0.4	14.3
Peru	0.4	N/A
Canada	0.3	25.5
Chile	0.3	21.5
Ecuador	0.3	26.8
Mexico	0.3	21.3
Uruguay	0.3	22.6
Nicaragua	0.2	26.8
Bolivia	0.1	26.8
Cuba	0.03	26.0

Note: For the adult prevalence column, for each of these countries the 1999 prevalence published by UNAIDS was applied to the country's 2001 adult population to produce the estimates given in the table. For Paraguay not enough data were available to produce an estimate of HIV prevalence for end 2001. No country specific models were produced for countries marked with an asterisk.

The mode of transmission of HIV in the Caribbean is predominantly heterosexual. Haiti is the most affected country in all of the Americas. In some areas of the country, as many as 13% of pregnant women tested anonymously for HIV were found to have HIV in 1996 (18). In the Dominican Republic, the prevalence of HIV among pregnant women was around 1.4% in Santo Domingo, 1998; between 1.1 and 10.7% of sex workers tested positive that same year, depending on the sentinel site (19). While most cases of HIV in the Caribbean have occurred as a result of heterosexual transmission, HIV prevalence is high among men who have sex with men. In Jamaica, the prevalence of HIV among men who have sex with men is estimated at 30% in the capital city (20). Injection drug use remains a ranking cause of HIV transmission in Puerto Rico, where up to 45% of drug injectors have HIV (21). Cuba has managed to contain the spread of HIV; with an adult prevalence of 0.03% in 2002, Cuba has the lowest prevalence in the Americas and one of the lowest in the world. Of those currently infected, 77% are men, of which 80% have been infected through homosexual contact (22).

Since HIV was first detected in Mexico, the epidemic has affected mostly men who have sex with men: seroprevalence studies conducted by the National AIDS Council (CONASIDA) between 1993 and 1995 showed that 32% of those identifying themselves as homosexual were HIV-positive, while 23% of bisexuals were infected (23). This compares with a very low prevalence among heterosexuals, including commercial sex workers (estimated at 0.35%) and patients with a history of other sexually transmitted infections (STIs). Between 1990 and 1997, HIV infection was found in 0.35% of sex workers tested in 18 states (24). Among pregnant women in Mexico, the prevalence of HIV was below 0.5% (23).

In Central America there is a great deal of variation in the predominant mode of transmission. In Costa Rica, the burden of disease is borne by men who have sex with men— about 60% of HIV infections occur as a result of homosexual or bisexual activity (25). In contrast, in Honduras, Guatemala and Belize, HIV is more frequent among heterosexuals, and is rising rapidly. In Honduras, the mode of transmission for 78% of HIV cases is heterosexual sex (26). In Belize, data from 1995 show that the prevalence among pregnant women attending antenatal services was 2.3%, more than double that noted the previous year (27). In Guatemala, infection rates of 11% have been documented among sex workers in the coastal city of Puerto Barrios while in the highlands no HIV infections were recorded in the period 1998-1999 (28). In Panama, 1.5% of adults were estimated to be living with HIV/AIDS by the end of 1999 (29). Nicaragua's population has a low infection rate— around 0.2% among adults— but HIV infection has been steadily increasing (30). In El Salvador, sentinel studies suggest seroprevalence among pregnant women to range between 0.18 and 0.26%, but rates of infection among STI patients may be as high as 6% (31).

At this writing, the Andean region has a low prevalence of HIV infection. However, behaviors which may put this population at risk for HIV have been well documented. In the Colombian highlands, the virus is mainly spread via sex between men; in a 1999 surveillance study in Bogota, there was an 18% HIV prevalence rate among men who have sex with men. The largest sentinel study, also conducted in 1999 in 11 cities, found prevalence rates at 0.2% in pregnant women and 0.6% in female sex workers (32). In Lima, Peru, pregnant women had 0.3% HIV prevalence in 1999. In Bolivia, sentinel surveillance among pregnant women in 2001 found prevalence rates of 0.15 to 0.87% (33). Among commercial sex workers, the prevalence in a survey conducted in La Paz in 1998 was 0.1%, which is likely to be an underestimate of the true prevalence among this group because the study was performed to measure the effects of a prevention program (34). Ecuador's last surveillance data—from 1993—reflected a 3.6% prevalence among

those attending an STI clinic in Guayaquil; among pregnant women, 0.3% tested positive in 1992 (35). Venezuela conducts little systematic surveillance, but a study in 1996 among men and women in mining communities revealed an HIV prevalence rate of 1.0% (36). The study's authors speculate that while this rate is consistent with limited national data, HIV infection is probably more widespread in the mining communities than elsewhere in the country due to poverty levels in these areas.

Of all Latin American countries, Brazil has by far the greatest number of people living with HIV (12). Since the government expanded the provision of antiretroviral therapy, however, both death rates and incidence have decreased (37, 38). While sex between men once accounted for the majority of the earlier cases, sex between women and men is since 1993 the primary cause of HIV transmission. While national data from 2000 reflect a 0.4 to 0.7% HIV prevalence among pregnant women, 2.2 to 3.1% of patients tested positive in STI clinics (39).

Unfortunately, very little is known about the distribution of HIV in the Southern Cone. Chile does perform sentinel surveillance on pregnant women and STI patients, and between 1994 and 1999 HIV prevalence was never greater than 0.1% among pregnant women. Prevalence at STI clinics ranged from 0 in some regions to a high of 3.5% in Santiago in 1999 (40). Between 1998 and 2000, HIV prevalence among pregnant women in Argentina declined from 0.75 to 0.46%; however, data from several sentinel sites suggests that seroprevalence increased in the prison population and among STI patients during the same time period (41). Little data is available for Uruguay, where sentinel studies of pregnant women have not been carried out since 1991. Several surveillance studies of other risk groups in the capital city of Montevideo indicate that HIV prevalence is around 21% in transvestites and around 22% in injection drug users (42). Injecting drug use accounts for an estimated 40% of reported new infections in Argentina and 28% in Uruguay; in both countries, an increasing number of women with HIV are either injecting drug users or sexual partners of male drug users (16).

The more we learn about HIV and its different patterns of transmission, the more we recognize the diversity of the pandemic. This is especially true for the Latin American and Caribbean region where prevalence, patterns of spread, and responses to the pandemic offer a greater variety than any other geographical region of the world (43). Coupled with the diversity of health systems, it is likely that throughout the region the challenges for national AIDS strategies will vary.

CHAPTER 2:

EVOLUTION OF HEALTH SYSTEMS' FUNCTIONS

Few governments and societies in the region have managed to ensure the necessary policies, resources, and capabilities for a comprehensive response to HIV/AIDS.

As a result of state reforms over the past two decades, the essential health responsibilities of the government or health authority have been undergoing significant changes. Many countries have documented a growing trend towards separating the functions of financing, insurance coverage and service delivery (44). The emergence of different public and private actors and markets in health financing and service delivery, and greater demands for complex care caused by emerging problems (such as HIV/AIDS or dengue) and persistent problems (such as tuberculosis and malaria) are presenting new challenges for health systems. The situation, however, is compounded by longstanding problems that include institutional inefficiency in the health sector, persisting inequities in coverage and access, as well as rising costs and poor quality of services (45).

In general, it is possible to identify four factors that are associated with a low response capacity of health systems. Each is important to consider when designing specific strategies to cope with HIV/AIDS:

- Segmentation refers to the coexistence of health subsystems that have different arrangements for public and private financing, provision of services, and population coverage. Access to these organizations is usually determined by income level and capacity to contribute monthly fees.
- Fragmentation refers to the existence of many entities that are not integrated within the same subsystem. This situation elevates transaction costs throughout the entire system and makes it difficult to guarantee equivalent conditions of care for persons served by different subsystems.
- A predominance of direct payment, whether partial or total, at the point of service or for medications, indicates that the probability of receiving care depends partially or totally on each person's capacity to pay. This type of financing leads to a high degree of inequity in the system and a high proportion of out of pocket payments, which is evidence of lack of protection in health.
- A weak steering role suffers from an inherent lack of explicit formulation regarding the basic set of services guaranteed by different insurance schemes and, as such, is a barrier to the establishment of an equity field between users and service providers.

To adequately prepare the response of health systems in the Latin American and Caribbean region to cope with the HIV/AIDS pandemic, these weaknesses must be addressed in the context of a complete redefinition of the health systems functions.

Since the 1970s and 1980s, the majority of countries in Latin America and the Caribbean have implemented state or public administration reforms that have had a profound impact on all governmental policies—especially those of social protection. The reforms have ostensibly been geared towards decentralization, separation of functions, and increased economic efficiency. Most of them have come about as a result of the global trend of economic liberalization and have attributed priority to market regulation functions rather than enhancing public responsibilities of steering the system, ensuring access to services and delivering essential public health functions.

The majority of specific health sector reforms have focused predominantly on financial and institutional changes and on organizational readjustments of public system administration that were allegedly going to improve the effectiveness and quality of services. However, these changes have taken place without producing structural transformations that could have improved access to, or equity in, social protection. Therefore, the improvement in the effectiveness and quality of services has often not occurred (46).

These organizational changes of health systems and the nature of the work of the health sector has been coupled with a growing awareness of the importance of other sectors, such as decent housing, food security, and education, in improving the health status of the population. As a result, health sector reform has progressively come to include a series of basic, well differentiated functions. The growing tendency is to avoid concentrating all of these functions in a single institution as in the past, and to create instead a series of complementary institutional mechanisms to conduct differentiated functions in a separate and specialized manner.

As a result, the health authorities of different countries have begun to exercise a coherent steering role function, which incorporates a set of «proper and unavoidable» responsibilities (47). The steering role of health authorities is defined as the simultaneous exercise and articulation of the political and technical administration of the health sector and of intersectoral relations, with direction over the construction of social goals in health.

Functions of this steering role include:

- Leadership over the political consensus and negotiation processes of all decisions that have an impact on the health of the population and on the allocation of its resources.
- Management of financial and health spending based on criteria of distributive equity and solidarity.
- Guarantee of insurance to attain universal coverage of social protection in health.
- Reconciliation of service provision to guarantee the functioning of an integrated network that improves user access and quality of care in a mixed public and private environment that includes health care units of varying complexity.
- Continuous evaluation and monitoring of the health indicators of the population and of the health sector development.

CHAPTER 3:

ALIGNING THE STEERING ROLE FUNCTION OF HEALTH AUTHORITIES

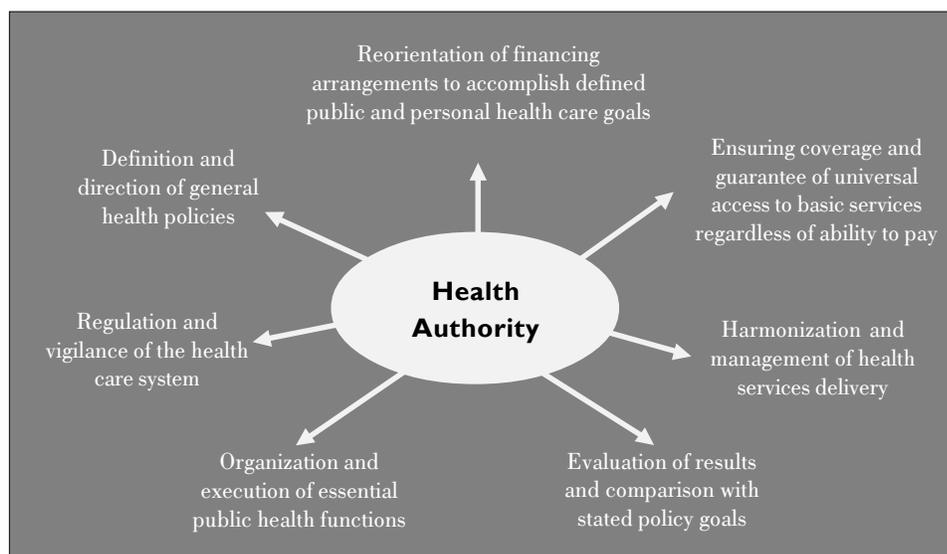
Taking a steering role in health includes identifying substantive tasks that cannot be delegated and that belong to the health authority. These are a fundamental obligation of the ministries of health: the state agencies responsible for safeguarding public welfare. The developments described above precipitated the need to reconfigure and adapt the responsibilities of the ministries of health to strengthen their steering role and define which responsibilities cannot be delegated (48).

This steering role of the ministries of health is critical in facing the challenges associated with HIV/AIDS. Its scope depends on the degree of public sector responsibility and of decentralization of the health care system. In general, as suggested in Graph 2 (next page), the principle areas of the health authority are the following:

This broad division of sectoral functions involves old as well as new functions and responsibilities, and requires the ministries to strengthen and, in many cases, retool their operations, their organizational structures, and the professional profiles of their managerial, technical, and administrative staff to cope with HIV/AIDS. Any overhaul of the structure and functions of the ministries of health must also adapt the technical capacity and cumulative experiences of their staff at all levels to the new demands and realities. Ultimately, it is through a rethinking and analysis of the products, processes and users of services from the ministries of health that countries can initiate institutional changes and move forward with the organizational transformation of the steering role in health as demanded by health sector reform. These goals can be accomplished through health sectoral management, which refers to the ability of the ministries of health to (48):

1. Formulate, organize and direct the execution of national policy through defining viable objectives and feasible goals;
2. Prepare and implement strategic plans articulating the efforts of public and private institutions in the health and other social sectors;
3. Establish participatory mechanisms and consensus building; and
4. Mobilize the resources necessary to carry out the proposed actions.

Graph 2: Dimensions of the Steering Role Functions of the Health Authority (46)



In order to face the challenge of HIV/AIDS, ministries of health have begun to develop their institutional capacity to implement the following broad groups of activities:

- a. Analysis of the current health situation, including demographic and epidemiological trends, population health needs and demands, with emphasis on identifying inequalities of both burden of disease and access to services, taking into account political, economic and social determinants of health, and monitoring the dynamics and effects of health sector reform.
- b. Development of methods and procedures for prioritizing problems, populations, programs and interventions, based on the criteria of equity, effectiveness, cost and impact.
- c. Formulation, analysis, adaptation and evaluation of the public policies that impact on health and other sectoral policies.
- d. Building national consensus on the strategic development of the sector, leading to the design of a national health policy.
- e. Direction, involvement and/or mobilization of political actors and resources that influence the formulation and implementation of national health policies within the health sector and in other sectors.
- f. Encouraging health promotion and social participation in health at the national level.
- g. Fostering political, technical, and/or financial cooperation among multilateral and bilateral agencies to mobilize international cooperation in health.
- h. Promoting greater sensitivity in public health through economic and development policy forums organized by regional, sub-regional, and national agencies.

A main product of the exercise of health authority is the protection and promotion of health, which lies at the core of the execution of essential public health functions (EPHF) (48) under the purview of the state. This responsibility can be delegated or shared by several levels and institutions within the state apparatus, but the basic mission of the

ministries of health is to ensure that these functions are carried out as effectively as possible.

The essential public health functions have been defined as conditions that permit better public health practice at the central, intermediate and local levels. Carrying out these functions in connection with the health authority comprises a wide range of operations:

- a. Development of national programs for the prevention and control of disease and disability;
- b. Environmental risk protection;
- c. Promotion of healthy behaviors;
- d. Emergency preparedness and response in disaster situations;
- e. Quality assurance in service delivery and universal access to health services;
- f. The establishment of national mechanisms for evaluating processes, results and impact, as well as the development of information systems to monitor the health situation and to manage and operate health services;
- g. The formulation and implementation of policies in health research, technology development, and dissemination of scientific and technical information that will improve the quality and equity of health services and living conditions.

Thus, with a view towards reinserting public health into the agenda for transforming the health sector and strengthening the leadership of the health authority at all levels of the state, PAHO initiated steps that led to the launching of the Public Health in the Americas Initiative, designed to define and measure the performance of EPHF that is the work and responsibility of the health authorities of the countries in the region of the Americas.

The purpose of sectoral regulation (48) is to design the normative framework that protects and promotes the health of the population and guarantees compliance with regulations. Lines of action for exercising the regulatory role of the health authority include:

- a. Development and refinement of national health legislation and its necessary harmonization with the health legislation of countries participating in regional integration processes.
- b. Analysis and sanitary regulation of basic markets allied with health such as public and private insurance, health services, technology and other health inputs, social communication, consumer goods, public establishments and the environment.
- c. Technical analysis and regulation of health services delivery, certification of professional practice in health disciplines, and oversight of training and continuing education programs in the health sciences.
- d. Establishment of basic standards for health care, development of quality assurance and accreditation programs for health service institutions.
- e. Health technology assessment.

There are many ways to implement regulatory functions—through legislative processes, specific executive powers of the president or ministers, or by decrees and resolutions—and the ministry of health may exercise varying degrees of leadership in decision making, such as through the use of national health councils, inter-ministerial commissions, or federal/regional/local boards. In some cases, semi-autonomous bodies, such as superintendent's offices and special regulatory agencies, have been created.

Health legislation specific to HIV/AIDS has been developed and integrated into existing health legislation in certain LAC countries, including Argentina, Brazil, Bolivia, Costa Rica, Honduras, Nicaragua, Paraguay, Panama, and Peru (49). Legal responses to the pandemic vary throughout the region. Argentina provides antiretrovirals to persons living with HIV/AIDS through the social security system, private insurance, and a special fund for people who are not included in the first two schemes. Brazil uses public funds to provide antiretrovirals to all persons living with HIV/AIDS. In Mexico, the social security system is providing antiretroviral therapy to people living with HIV/AIDS, and new programs are under way to provide antiretrovirals to the uninsured population using public and private sources. Recent Colombian judiciary order has mandated that persons living with HIV/AIDS receive antiretrovirals through the social security system. The Costa Rican Supreme Court issued an order in 1997 to provide antiretrovirals for all persons in the country living with HIV/AIDS (50), which was followed by a 1999 document that addresses the constitutional guarantee of basic rights to all persons (51).

Legislation on access to health care is a necessary component for increasing access to HIV/AIDS care. Nonetheless, the application of such legislation is rarely universal (43) and, often, such legislation is honored in the breach. Further, the time frame for implementing legislation varies across countries. Learning from current legislative strategies in the surrounding regions allows legislative members from other countries to better address the demands placed on the authorities by the pandemic, and to recognize how cultural, religious, political, and economic factors may impede the development and implementation of HIV/AIDS legislation in these different countries.

The function of evaluation is to determine the gap between achieved outcomes and previously specified objectives, with the explicit or implicit aim of revising goals or improving processes as deemed necessary. This function is important because it has been shown that the results of measurements and comparisons obtained with appropriate and effective tools contribute significantly to ultimate improvements in the equity, efficiency and quality of health systems. Included in this function are procedures or mechanisms for evaluating technologies and pharmaceuticals, the development of indicators designed to monitor sectoral reform processes, as well as surveys of patients and of public opinion.

The purpose of evaluation and monitoring is to ensure that work is progressing as planned and to anticipate or detect problems in implementation, such as flow of supplies or effectiveness of training. Evaluation focuses on assessing progress in meeting set goals or program performance. It involves an assessment of inputs (human and capital resources available for program implementation) and program operation variables (who is to do what, where, when and how). It also involves an assessment of impacts and outcomes that may include changes in knowledge, attitudes, behavior, risk factors, disease and disability (3).

Monitoring and evaluation should be an important component of HIV/AIDS comprehensive care programs, and should attempt to answer a number of questions (3):

- **Appropriateness:** Does the HIV/AIDS comprehensive care system as a whole respond to the main health needs of the target population?
- **Acceptability:** Are the services provided in a manner that is acceptable to the population and encourages their appropriate utilization?
- **Accessibility:** Are the services provided in such a way that problems of access (geographical, economic and social barriers) are minimized and equity is promoted?
- **Effectiveness:** Do the services provide satisfactory outcomes both from the clinicians' point of view and that of the clients and their families?

- Efficiency: Is each service provided such that the maximum output is obtained from the resources expended, and does the mix of services represent the best value for money with regard to the health needs of the target population?
- Equity: Are the health needs of different sectors of the target population met in a fair and just way?

The commitment of governments and public authorities is critical for exercising leadership in coping with HIV/AIDS in the domains of stewardship, long term planning, resource mobilization, and harmonizing all the components of an integrated approach to HIV/AIDS.

CHAPTER 4:

ADDRESSING THE CHALLENGES POSED BY HIV/AIDS TO THE FINANCING OF HEALTH SYSTEMS AND SERVICES

Historically, health systems have been classified into three general groups, based on their principal sources of financing: national health services, systems of social security, and systems financed largely by the private sector (52).

- a. **National Health System:** Under a national health system, all citizens are guaranteed access to health care, usually by law. These systems are often funded by contributions from formal sector workers through taxes (sometimes with additional charges deducted from payroll) and by sliding scale fees from informal sector workers or the unemployed. In these systems, the services tend to be broad («almost everything to almost everyone»), and are administered by a public agency responsible for both the financing and the provision of health care.
- b. **Social Security Systems:** In these systems, both employees and employers are obliged to contribute a percentage of their income to a social security fund controlled or supervised by the government. In exchange, the employees receive a set of services, which may be provided by the government or by a private provider contracted by the government. Social security systems are often characterized by a separation of functions between financing and provision of services, and health coverage is limited to contributors and their dependents.
- c. **Private System:** In health systems run by the private sector, the ideology of individual responsibility predominates. A person enrolled in a private system either pays a premium for health insurance related to his or her individual health risk, or enrolls as an employee of a firm by sharing the cost of an insurance plan that covers the entire group. The cost of such group coverage is determined by actuarial calculations based on the group's risk, for which they receive, in return, a set of fixed services or covered benefits. These private managed care systems are characterized by multiple funders, insurers, and providers, and by differential coverage based on contracts and premiums. In Latin America and the Caribbean, market inspired «innovations» for decreasing costs and increasing efficiencies have been eagerly adopted by policy makers as part of health care reforms (53, 54), which have met with a groundswell of popular and political protest building against privatization and other recently introduced market reforms (55). It has been argued

that as the United States market has become saturated, health care corporations have turned their attention to developing countries where they are exporting managed care programs that are coming under increasing scrutiny in the United States (56).

Although these three financing mechanisms continue to be of importance in Latin America and the Caribbean, reforms of health systems over the past 20 years have created new financing schemes and mixed types of insurance systems in almost all the countries of the region. In some countries, for example, non-profit insurance companies have been created as private prepayment systems that attempt to introduce elements of cost sharing among its members. In other countries, social security systems are becoming national health services, and vice versa. The complexity and segmentation of these changes pose huge challenges for ministries of health.

In essence, the possibilities of various combinations of financing and the existence of differentiated financing schemes e.g., public benefits not linked to specific contributions, compulsory social security type health insurance plans based on member contributions, insurance provided by mutual aid societies and similar organizations, and private insurance or prepayment schemes, render the ministry of health responsible for:

- Establishing the policies needed to ensure that the various financing modalities have the necessary complementarity to permit equitable access to quality health services for all;
- Modulating and correcting any deviations that may occur in sectoral financing; and
- Developing the capacity to monitor the sectoral financing process.

To this end, many countries are putting effort into improving their information systems for financing and expenditures in health and supporting the use of national health account methodologies to track the volume and flow of funds and obtain better information that can help make resource allocation decisions.

During the last two decades, many reforms were introduced into health systems financing in LAC, aiming to limit or reduce public spending, in order to address the requirements for fiscal adjustment, but also in search of mechanisms to compensate the losses of funds generated by the adverse macroeconomic conditions. Much of the attention in LAC in terms of health financing was a shift to market driven, managed care systems and increased dependency on user fees, leaving informal sector workers and the unemployed without adequate access to health care and bearing all the financial risk of becoming sick (57-59). Since many of the health sector reforms occurred as part of broader macroeconomic state reforms, most of the changes were introduced without any assessment of their potential impact on access to health care or utilization of any of the current guiding principles of health sector reform (60).

Recently, as a result of poor health outcomes and the financial instability of health systems in LAC, financial reforms have begun to lead to a new orientation towards health policy:

- The creation of autonomous national funds, separate from the ministries of health, that pool public revenues from general taxes, specific taxes collected for health purposes, and contributions from workers and/or employers (when social security health funds are merged with general state funds appropriated for health). This may involve a single public insurance system or the coexistence of several insurance systems, public and private, which compete with or complement one another.

- The increase in the share of public financing that comes from the taxes collected by mid-level and local state entities and/or from resources transferred from the central government as block grants and earmarked for activities in health.
- The design and establishment of a compulsory publicly financed package of guaranteed services that explicitly states what the rights are, in terms of health services, pharmaceuticals and other health related products, that a covered person must have stipulated in case of a disease or injury.
- The increase of private health insurance—and some prepaid service schemes—financed with resources from the beneficiaries and/or their own employers, when applicable. This has become a part of total sectoral financing in some of the countries of the region, at least with respect to certain types of coverage that complement the compulsory plans established by the state.

4.1 INSURANCE AND SOCIAL PROTECTION IN HEALTH

The original function of health insurance is to share risks among beneficiaries and protect health system users from the risk of having to pay catastrophic medical care costs, but health insurance has also grown into a for profit industry. Since illness itself is relatively uncontrollable, insurance cannot protect one from the risk of becoming sick, only from the risk of having to pay for the often highly expensive care and treatment associated with the illness or accident. Insurance reduces the risk that each individual beneficiary faces by pooling together the risks of all people in a specific group. In a given period of time, for a given group of people, a predictable number of illnesses or accidents will occur. If it is assumed that each person in the group has an equal chance of becoming ill during that time period, then each person faces the same individual financial risk associated with that illness. If each person in the group contributes to the insurance scheme, the sum of those contributions will be used to finance the medical costs for whoever in the group needs it during the time period. Since people are generally risk averse, it is better to pay a predictable nominal cost than run the risk of having to pay a potentially catastrophic cost upon becoming sick.

Since the costs of caring for those with HIV/AIDS can be extremely high, it is especially important that both those with the disease and those deemed at risk for contracting HIV—potentially, the entire population—are included in risk pooling arrangements. Such insurance schemes would have to cover a large group of people to effectively balance out the risks associated with HIV/AIDS: if the group is too small or includes a disproportionate number of people with HIV/AIDS, individual contributions would likely be too high. Public insurance schemes that cover the entire population of a country, therefore, are likely the best mechanisms to protect people from the financial risks associated with the disease.

Even though health system reforms have been in progress over the last fifteen years, the reality is that a large proportion of the population of Latin America and the Caribbean still find themselves excluded from mechanisms of social protection against the risk of becoming ill or the consequences of being ill.

The concept of extension of social protection in health (ESPH) comprises strategies for including those who are excluded from health care and strategies aimed at improving conditions of access to health care for those who, despite being included in some social protection system, have incomplete or inadequate coverage. There are three conditions that must be fulfilled in order for ESPH to operate as a guaranteed right in practice:

- Access to services: The supply that is needed for the provision of health services exists and people can physically and financially access these services.

- Financial security of the household: The financing of health services does not constitute a threat to the economic stability of families nor to the development of their members.
- Quality of care: Health care is provided with quality and in a way that respects the racial, cultural, and economic characteristics of users as defined through a process of social dialogue.

Examples of different strategies that have been used to extend social protection in health include:

- *Establishing special social insurance regimens with contributing schemes.* This has been practiced in various countries. These plans are oriented to satisfy the demands of specific population groups or specific areas that have been targeted for attention. The main obstacle to success here stems from the lack of sustainability (by being generally financed by extraordinary resources—that is, by services from international financial institutions), and from not being integrated adequately with other sectoral activities.
- *Voluntary insurance schemes with government subsidy.* Insurance plans resolve the problem of exclusion from health care to the degree that the public authority continues to finance the process. If, however, the provision of services to this group is different from other standard social insurance regimens it can be perceived as inequitable.
- *Limited expansion of supply.* This refers to the provision of specific services to certain targeted population groups. The principal disadvantages here are the possible lack of financial sustainability and the lack of coherence with other provisions of service.
- *Community based systems of social protection.* Their principal characteristic is direct management by potential users. In the Americas, the experience generally relates to communities with such levels of exclusion that they do not have other alternatives, given the absence of mechanisms of social protection in health. An additional problem here is the impact of high cost illness (for example, HIV/AIDS), which can rapidly use up financial reserves.
- *Gradual development of unified systems.* It is customary to combine a public subsystem, which the majority of the population can access, and a supplementary private subsystem (private health insurance), with concomitant access to the services of the public system. This modality combines diverse sources of resources (general taxes from the three levels of government, special taxes, and contributions).

For PAHO/WHO, the fight against social exclusion is directly related to its mandate to reduce inequalities of access to health services and to improve equitable financing of those services. In addition, the organization has defined it as a priority task to help achieve universal access to health services, thus making the goal of health for all possible.

Poverty itself is one of the most important determinants of exclusion from health care. In the absence of social protection systems, poverty not only inhibits access to quality health services, but the poor also live and work in environments that expose them to greater risks of becoming ill and of dying—for instance, communicable diseases are concentrated among the poor. This gives rise to a vicious cycle of exclusion, which compounds other problems including lack of access to other basic services, illness, employment, education, and housing.

4.2 EXTENDING INSURANCE COVERAGE AND EXPANDING ACCESS TO HEALTH SERVICES

The reduction of exclusion from health care also requires concurrent efforts in the areas of access, insurance, and provision of services, in such a way that actions developed in each of these domains can be consistent and reinforce one another (61). The challenge for health insurance lies in finding the appropriate balance between compulsory insurance plans financed publicly and/or by solidarity schemes and those financed privately. Attempts are being made to avoid transaction costs and the risks of inequality that can be created by segmented schemes. In Latin America and the Caribbean, more private insurance schemes remain generally fragmented and weakly regulated.

The evidence seems to indicate that the existence of a public insurer with a dominant position is a powerful factor for regulating the health insurance market and reducing the risk of exclusion. The use of a combination of services guaranteed by public financing, designed in accordance with epidemiological information and surveillance, has been shown to be a useful instrument for extending coverage and contributing to a more efficient allocation of resources in different countries. The more its contents are unified and integrated—independent of whether the management of the insurance is done publicly or privately—the more its impact increases. In systems of mixed insurance, the public authorities face the challenge of directing the competition between insurers towards extension of coverage of a guaranteed package to populations without coverage and towards the supply of services that are not covered—often termed «complementary services.»

When planning to expand access to health services, ministries of health and other concerned parties must contend with certain challenges associated with the provision of direct health services and other public goods, and with a system of protection against the economic and social roots of disease. Some of the most important underlying causes are the geographical, social, and economic barriers that hamper access to timely and quality health care to the poor, and the lack of appropriate health care delivery models.

CHAPTER 5:

PROVISION OF HEALTH SERVICES

The area of service delivery is key in responding to the population's demand for health care. Nevertheless, the provision network is only the more visible part of the complex aggregate of institutions, norms, and values involved in the functions of steering, financing, and insurance—themselves elements that impose conditions on the functioning of the provision network.

Depending on the degree of development of the social security health system in each country, the state may or may not be responsible for overseeing the delivery of a guaranteed package of basic health services for all inhabitants or certain population groups. Where this responsibility exists, it generates a role that is usually relegated to the ministry of health—that of guarantor of the insured benefits, with mechanisms to help it comply with the social mandate that is usually a part of the national constitution. The public, private, or mixed nature of service providers that participate in these compulsory package plans also gives rise to different sets of issues that have to be addressed. Typically, ministries of health—or their decentralized provincial or state agencies—are ill equipped to deal with these aspects of insurance. Therefore, in many countries, ministries of health have to build the institutional framework required to implement the delivery of a guaranteed package. Specifically, their range of capabilities needs to be expanded to enable them to:

- a. Define the contents of guaranteed basic insurance plans that are compulsory for citizens covered by a single or several social security plans operated by the public sector.
- b. Monitor the administration of these plans by public and private health insurance and/or service delivery institutions (through supervisory authorities or similar agencies), guaranteeing that no beneficiary of the compulsory social security health plans is excluded from the insurance scheme because of risks associated with age or preexisting conditions.
- c. Develop the capacity to purchase public and/or private health services through additional payment options that will make it possible to implement the guaranteed plans included under the existing social security arrangements.

5.1 COMPREHENSIVE CARE

The advent of the HIV/AIDS pandemic has challenged health systems. To better manage the challenge of HIV/AIDS, especially in light of the recent health sector reforms in the LAC region, countries may need to strengthen various aspects of their health systems.

PAHO has recognized that HIV/AIDS care should be comprehensive, providing both prevention and treatment, and addressing the needs not only of those living with HIV but also their families and caregivers. The following recommendations summarize the elements of an operational approach to meet the varied needs of persons with HIV and their families (3, 62, 63):

- Increasing access to HIV/AIDS prevention programs throughout the health system.
- Clinical management: early and accurate diagnosis, including testing, rational treatment and follow up care.
- Nursing care: promotion of adequate hygiene practices and nutrition, palliative care, home care and education to care providers at home and family, promoting observance of universal precautions.
- Counseling and emotional support: psychosocial support, including stress and anxiety reduction, risk reduction planning, and planning of the future for the family.
- Social support: information, provision or referral to peer support, welfare services (food, improved housing, school fees for children), legal counsel and protection of social and economic rights.

Few if any countries in Latin America and the Caribbean have this comprehensive approach in place, and they will need significant political leadership and resources to meet this goal. The key components to providing such care are health infrastructure, sufficient numbers of trained personnel, and the access to and control of drugs and diagnostics.

There are several elements that define what needs to be included in comprehensive AIDS prevention and treatment programs. Promoting the highest quality of HIV care means viewing HIV programs as a necessary continuum, from prevention, including testing and counseling, to treating those infected for opportunistic infections and those with advanced HIV disease with highly active antiretroviral therapy (HAART), and to providing palliative care at the end of life. These activities are in progress at different levels throughout Latin America and the Caribbean but need to be supported and expanded to provide a comprehensive program that establishes equity in access to HIV/AIDS prevention, care and treatment.

Comprehensive care broadens the impact of prevention—helping to make sure that people who are not infected remain so and that those who are already infected do not transmit HIV to others. Comprehensive care programs encompass a wide range of services, which not only enhance primary prevention efforts but also have secondary and tertiary preventive value in and of themselves (3).

HIV/AIDS comprehensive care should be available and provided at all levels of the health system, including home care, community based care, primary care, secondary care, and tertiary care. Each of these levels can be considered points along a continuum of care framework for people living with HIV/AIDS, based on a logical sequence of developments that help prioritize actions and establish bridges for interventions of increasing complexity to be carried out at different levels of the health system. But for the comprehensive care network to operate properly, there needs to be:

- a) definition of roles and functions within each of the elements of the HIV/AIDS care continuum;
- b) establishment of the appropriate services and mobilization of the necessary resources to perform these roles and functions; and
- c) construction of bridges between each of the elements of the HIV/AIDS care continuum (3).

The delivery of HIV/AIDS comprehensive care is possible only through the provision of a wide range of interventions throughout the entire health system. However, the great majority of countries do not provide such services in their local health systems. At best they may develop these services progressively. On the other hand, some areas may have sufficient resources to permit an expansion of the available responses within each level of care. The complexity and sophistication of the services will vary as a result of the health infrastructure and availability of financial, technical, and human resources. But even in areas where resources are limited, it should be possible to provide a standard of care that ensures the maintenance and improvement of the quality of life and productivity of people living with HIV/AIDS (3).

In order for HIV/AIDS comprehensive care programs to be effective and sustainable, certain standards of care need to be agreed upon and applied. These standards should reflect the optimal and desired levels of the quality, access and coverage of HIV/AIDS care (63). Once established, standards have to be translated into indicators for monitoring and evaluation purposes.

5.2 IMPROVING QUALITY AND CONTINUITY OF CARE

While a great deal is known about the spread of HIV in the Latin American and Caribbean region, filling in existing gaps in our knowledge of the epidemic will improve the ability of countries and communities to respond adequately to the spread and impact of HIV/AIDS. Critical to this response is improving the monitoring and surveillance of this infectious disease. Prevention efforts also need upgrading: these efforts must include increasing access to voluntary HIV counseling and testing (VCT), prevention of mother to child transmission (MTCT) using antiretrovirals, adequate treatment of sexually transmitted infections, increased availability of condoms and sex education, and improved screening of blood products. Additionally, as the number of people with HIV/AIDS continues to grow, efforts are needed to improve treatment of common opportunistic infections, as well as to provide antiretroviral agents for those who meet clinical criteria for enrollment. Improvement of prevention and treatment as complementary strategies will better equip Latin American and Caribbean countries to handle the demand placed on the health sector by HIV/AIDS and its related conditions.

5.2.1 SURVEILLANCE

The historical reporting of AIDS cases has several limitations. Since AIDS case notification lags as much as a decade behind HIV, relying overmuch in such reporting can be misleading. Poor diagnostic facilities, confusion about case definitions, and the reluctance to formally record AIDS as the cause of death due to its related stigma have all contributed to underreporting. Strengthening the AIDS surveillance sector demands shifting from AIDS to HIV case reporting. Active HIV surveillance should seek to test blood, saliva, or urine samples from people of different population groups. In places where access to effective treatment is still not available, anonymous surveillance can produce relatively unbiased

results, since it avoids the common encounter of test refusal among those who do not want to know their status.

5.2.2 BLOOD BANKS

Maintaining a safe blood supply has always been an important element in the prevention of blood borne diseases. In the face of a growing HIV/AIDS pandemic, and given the high potential of transmission of HIV through blood and blood products, blood banks have a critical role to play in protecting the integrity of blood supplies, exercising increasing vigilance over blood donations, and improving quality of transfusion services.

The types of donors affect the quality of the blood supply. It is generally accepted that volunteers who donate blood repeatedly without remuneration comprise the safest category, compared to people who are paid for their blood or who give blood for a particular patient (replacement donors). The practice of paying donors runs the risk of attracting impoverished persons who see selling their blood as a way to earn income. In the LAC region, the proportion of countries that report universal voluntary, non-remunerated donors is still small. The vast majority of the units of blood obtained in the region continue to be provided by replacement donors, and even though the marketing of blood products is prohibited by law in most countries, the existence of sizeable pockets of remunerated donors remains a major obstacle to safe transfusion (64).

Increased coverage and better quality of screening can help reduce the risk of transfusion acquired infections. In the early 1990s, using available data for the LAC region on the proportion of donated blood that was screened and the prevalence of positive markers to estimate the burden of infection associated with transfused blood, it was possible to show that there was clearly a difference in quality in blood products from countries with less than 100% coverage in screening (64). According to a report on the safety of blood supply for infectious diseases for several South American and Central American countries between 1994 and 1997, the risk of receiving an infected blood unit and acquiring a transfusion transmitted infection was reduced over time in 10 of the 12 countries studied due to improvements in screening coverage (65). The evidence shows that the countries are making strong efforts to screen for HIV. Data on transfusion medicine showed that in the year 2000, 16 out of 21 Latin American and 18 out of 21 Caribbean countries surveyed reported 100% screening for HIV (66, 67). Even though a great deal of progress has been made in the last decade in expanding coverage and improving quality, both excellent and sub-optimal performance can be found, suggesting that continued monitoring and reporting should be considered a priority to maintain a safe blood supply in the region (67).

The quality of screening is also important and can be affected by the lack of quality control mechanisms or properly trained personnel. Blood banks in different countries and even within a country may follow different laboratory procedures and use different types of equipments and reagents. In addition, due to the «window period» after infection but before seroconversion, other mechanisms besides simple serology are required to track sero-negative repeat donors. However, the lack of systematic follow up of donors and recipients and the absence of a national registry of donors in LAC countries hamper efforts to address this gap.

The Caribbean has been battling the growing HIV/AIDS pandemic for decades, and has accumulated significant experience in mobilizing efforts to build and maintain safer and more efficient blood banking services. As early as 1987, a major regional thrust to maintain supplies of blood free of HIV was launched to complement national initiatives, through the establishment of a special AIDS unit at the Caribbean Epidemiology Centre

(CAREC), a subregional public health center that is administered by PAHO, and has a mandate from 21 Caribbean governments to assist with the strengthening of laboratory and epidemiological services across the sub-region. By 1989, all public sector blood banks in CAREC member countries have been screening donated blood for HIV, and CAREC has continued to provide advice and assistance to other countries on strengthening reliable HIV diagnostic capabilities. In the 1990s, reviews of blood banking services expanded the scope of concern with regard to issues that could affect blood safety, such as infrastructure, national and regional standards and guidelines, accreditation, budgetary flexibility, cost effective operations, and continuous quality management (68).

To scale up the response of health systems in face of the growing pandemic, there is a need to focus on the following areas: universal coverage of screening, external evaluation of the performance of serological testing, the promotion of voluntary, non-remunerated and repeated blood donation, and the establishment of strategic partnerships and mechanisms for coordination with other institutions (69). The Regional Blood Safety Initiative, launched by PAHO in 2001, and the partnership between PAHO and the International Federation of Red Cross and Red Crescent Societies are examples of large scale joint efforts to provide safe blood throughout the Americas (70, 71). The HIV/AIDS pandemic poses special challenges for national health systems and services and health authorities as they try to fulfill their non-delegable responsibilities in guaranteeing access to sufficient quantities of safe blood for those in need. To this end, it is of paramount importance that there should be a reliable national blood program, based on a national blood policy that takes into consideration a wide array of legal, financial, organizational and technical issues (72).

5.2.3 PREVENTION AND VOLUNTARY COUNSELING AND TESTING

Comprehensive HIV strategies need to be grounded in effective prevention interventions, and prevention cannot be effective in the absence of measures to improve HIV care. Although prevention and care continue to be discussed as separate and ever competing priorities, there is ample evidence that effective care can improve the efficacy of prevention: a continuum of prevention and care activities constitute our most effective tools in combating HIV (73). The acknowledgment that there is the need for better prevention is important (74), and it is also time to turn our attention to the close to 2 million people already living with HIV in Latin America and the Caribbean (12).

While the social impact of HIV is particularly severe in the poorest countries, AIDS mortality has dropped precipitously in affluent countries, in large part because of access to HAART (75-77). The majority of AIDS assistance to the heavily burdened countries has consisted of the promotion of education and condom distribution to prevent HIV transmission. It has taken two decades to acknowledge that «we still have no good evidence that primary prevention works (78).» Many of those at greatest risk already know that HIV is a sexually transmitted pathogen and that condoms could prevent transmission. Their risk stems less from ignorance and more from the precarious situations in which hundreds of millions live; gender inequality adds a special burden, and is the main reason that, globally, HIV incidence is now higher among women than among men (79, 80). Clearly, the prevention strategies currently in use will not deflect HIV incidence among the poorest populations, even though these prevention strategies have proven effective in more affluent settings and merit greater support. Other complementary strategies, including vaccines, are needed if the most vulnerable are to be protected.

Prevention programs need to be supported by relevant theoretical models and by appropriate methodological approaches such as peer education and small group intervention in order to be effective. There is no one standard approach that can be used at all times

and under all circumstances, and care should be taken to avoid simplifications and generalizations that might reduce effectiveness. While HIV/AIDS programs focusing on men who have sex with men are vital, sexual identities are more complex than what is often assumed. Prevention efforts need to be tailored to a widespread—but hidden—bisexual behavior in Latin America and the Caribbean.

Voluntary counseling and testing is an intervention that can serve as a point of entry for further services, such as prenatal care or prevention and treatment of STIs and tuberculosis (TB), delivery of HAART, as well as ongoing prevention work at the community level, such as decreasing stigma and discrimination against people affected by HIV/AIDS. Creating linkages between VCT and the programs that provide condoms, treatment of opportunistic infections, prevention of MTCT, and provision of HAART decrease stigma (73) and may enable people to change their risk behavior—such as by adopting safer sex skills. Sentinel surveillance data from 1991 to 2001 suggest that HIV prevalence among pregnant women has stabilized or perhaps begun to decline in the Dominican Republic (where estimated adult HIV prevalence was 2.5% in 2001). These findings appear to correlate with evidence of increased condom use among female sex workers and a reduction in the number of sexual partners among men (16).

Counseling mitigates fears of dying and abandonment. But without the promise of medical care, little incentive exists for people deemed at risk of HIV infection to seek VCT—especially when the consequences of a positive test include rejection or isolation. The offer of treatment can dramatically change the utilization rates of clinical services such as VCT (81). Programs offering VCT must act to target the populations at highest risk, and in some cases must deal with stigma around sexual orientation and drug addiction, including treatment of addiction. Brazil's prevention programs for injecting drug users have resulted in a substantial decline of HIV prevalence among this population group in several large metropolitan areas. In addition, a national survey showed that condom use among injecting drug users rose from 42% in 1999 to 65% in 2000—another indication that Brazil's sustained education and prevention efforts are bearing fruit (82).

Some studies suggest that knowledge of one's HIV status promotes the use of condoms, particularly among discordant couples (83). However, because in many areas there may not be an established AIDS program, it is important to use all opportunities to make voluntary counseling and testing available. In Haiti, a group in Port au Prince demonstrated the feasibility of using the TB program as a site for VCT (84).

Interventions aimed at individuals may be reinforced, in certain settings, by initiatives at the social level, such as mass media campaigns, and school and workplace programs that mobilize communities to create a supportive environment for reducing risk and vulnerability. But a study conducted in Nicaragua showed that health education alone does not always suffice, as «the presence of health education materials seemed to lead to lower frequency of condom use (85).» Other interventions can bring together groups from different sectors to address structural and environmental factors that can increase HIV transmission, such as socioeconomic and gender inequality, poverty, racism, and lack of protection of human rights.

Prevention programs should involve members of target audiences in the development of strategies, messages, and materials. To do this, it is essential that operational issues within the community are assessed with regard to medical and public health needs, logistics, attitudes, cultural practices, and access to services. Pilot or model projects are essential in demonstrating what prevention programs have success at reaching the most vulnerable populations.

5.2.4 SEX EDUCATION AND CONDOM DISTRIBUTION

Improved access to sex education and condom distribution are also critical to successful prevention strategies. Sex education efforts among the young need to be greatly expanded. Comprehensive sex education should begin early in life, be age and developmentally appropriate, and should promote a positive attitude towards sexuality. Sex education must provide people with a knowledgeable base of human sexuality. In addition, it is recognized that sexual information alone is not adequate to create behavioral changes and adoption of healthier lifestyles. To be effective, sex education must include skills development in addition to acquisition of knowledge (86).

A regional survey by UNICEF of 20 Latin American and Caribbean countries indicated that 28% of those surveyed had little or no information about sex education or the means to prevent HIV infection (87). Condom use is also of importance, since condoms, when used correctly and consistently, are effective in preventing HIV transmission and certain STI infections in men and women (88). The same UNICEF survey revealed that 62% of those interviewed were aware of the use of condoms to prevent HIV transmission. Individual countries should strive to increase the availability and distribution of condoms. Such efforts have been impressive in countries like Brazil where, after a 1993 World Bank loan, health authorities distributed over 180 million condoms (89).

5.2.5 FAMILIES AND CHILDREN

Meeting the needs of families and children either orphaned or impoverished as a result of the illness of parents is a critical element of a comprehensive strategy. More than 3.2 million children around the world are living with HIV/AIDS (12), including 40,000 in Latin America and 20,000 in the Caribbean (13). It is estimated that among the 14 million who have lost parents to HIV/AIDS, 330,000 live in Latin America (130,000 of them in Brazil) and 250,000 in the Caribbean (200,000 of them in Haiti) (13, 82). Developing and managing effective systems of care and support for large numbers of children affected by HIV/AIDS is one of the major challenges in countries with high HIV prevalence. Countries are encouraged to develop a surveillance and monitoring system to track the economic, social, and demographic impact of the problem, and to provide governmental assistance of care and support programs for orphaned and other vulnerable children.

5.2.6 MOTHER TO CHILD TRANSMISSION OF HIV

In 2001 alone, an estimated 10,000 children were newly infected in Latin America and 6,000 in the Caribbean (12). Most of these infections took place in the perinatal period. Mother to child transmission of HIV remains a major public health problem, particularly in poor resource settings, where the majority of cases of HIV/AIDS occur. In addition to preventing HIV infection among women of childbearing age and to providing them with family planning options to reduce fertility among HIV-positive women who do not wish to have children, action is needed at several levels to reduce MTCT.

The prevention of MTCT is thus a critical component of an AIDS control strategy, especially when women account for 50% of HIV positive adults in the Caribbean and 30% in Latin America (12). Even in Brazil, where access to AIDS care is among the best in the world, the AIDS care network is poorly integrated with OB/GYN and pediatric services, and pregnant women are not always offered VCT (90). In other Latin American countries, such as Peru, there are laws to provide antiretrovirals to HIV-positive pregnant women (91). However, the high cost of these medications and insufficient perinatal testing networks make the law impossible to implement.

Where a long course of antiretrovirals is administered and elective cesarean section is performed, the risk of MTCT is less than 1% (92). Although zidovudine chemoprophylaxis alone has substantially reduced the risk of perinatal transmission, in the United States antiretroviral monotherapy is now considered suboptimal for treatment; combination drug therapy is the current standard of care (93, 94). In addition, antiretroviral therapy that successfully reduces HIV-1 RNA levels to below 1,000 copies/mL substantially lowers the risk of perinatal transmission (95-97) and limits the need to consider elective cesarean delivery as an intervention to reduce transmission risk (95). On the contrary, where no drugs are administered and the infant is predominantly breastfed for about 24 months by his/her HIV-positive mother, the risk of infection is generally around 30-35% (98, 99).

The majority of the public health and policy literature on mother to child transmission of HIV, however, reflects a disproportional effort on prophylactic measures and an absence of those that promote the health and survival of the mother through increased access to effective HIV treatment for pregnant and lactating women who need it (100). While some countries often consider the use of antiretroviral monotherapy for the prevention of MTCT, this mode of therapy has been developed without considering the possibility of providing HAART to pregnant and lactating women. Treating these women with HAART decreases perinatal transmission and protects the infant from infection throughout the postnatal period. As a comprehensive global AIDS strategy is developed, focus on the reduction of maternal viral load will also decrease the high rate of adult transmission in the community and prolong the disease free survival and ongoing social contributions of women of childbearing age.

Such services are usually lacking, unfortunately, in countries across Latin America and the Caribbean. However, certain countries such as Jamaica, Bahamas, Haiti, Honduras, Brazil, El Salvador, Argentina, Mexico, and Guatemala are investing in strengthening the health sector to address the demand for preventing MTCT of HIV. The benefits of this approach are already evident in Bahamas, where maternal to child transmission rates have dropped by more than half (28% to 12%) since the new program began (101).

While coverage of antenatal services varies across Latin American and the Caribbean, it is estimated that 83% of women are attended at least once during pregnancy by skilled health personnel (doctor, nurse or midwife) (102). The proportion of women never attended during pregnancy is as high as 40% in Guatemala (103), 30% in Costa Rica (104), Ecuador (105), and Peru (106), and 20% in Haiti (107) and Nicaragua (108). Expanding currently available maternal and child health services, and strengthening those which are less well equipped, should be a priority to expand the prevention of mother to child transmission of HIV.

An equally important aspect of mother to child HIV prevention is the prevention of breastmilk associated HIV transmission. Several infant feeding recommendations have been developed to prevent postnatal transmission of HIV. Infant formula remains the safest method of infant feeding for children of HIV-positive mothers. However, in many areas of Latin America and the Caribbean, access to clean water and formula are limited and the improper use of infant formula or formula contaminated with unsafe water jeopardize the health of the child in other ways. Studies of breast milk transmission of HIV from women being treated with HAART are ongoing in East Africa and these studies may yield important data relevant to infant feeding. As more funding is available to treat HIV in poor resource settings, research and health policy will need to be focused on treating women with HAART both as a means of improving women's health and as a way of reducing MTCT (100).

5.2.7 SEXUALLY TRANSMITTED INFECTIONS: A CHALLENGE FOR HIV PREVENTION

The relationship between sexually transmitted infections and HIV has been shown in various cross sectional and case control studies since the 1980s (109). Physical damage to the skin or the mucosa or biological interactions are responsible for enhancing HIV transmission. Both ulcerative and non-ulcerative STIs promote HIV transmission by augmenting HIV infectiousness and HIV susceptibility. The risk estimates found in numerous prospective studies range from 2.0 to 23.5 (110). Syphilis, gonorrhoea, and chlamydia are associated with serious complications and sequelae in the infected person and can be transmitted from an infected women to her child either in utero or during childbirth, and have also been identified as facilitating the transmission of HIV; trichomoniasis has also been linked to the transmission of HIV (111). Estimates suggest that in Latin America and the Caribbean there were, in 1995, 36.1 million new cases of these four major curable STIs (and often asymptomatic in women), with a prevalence of 1.3 million of syphilis, 1.7 million of gonorrhoea, 6.5 million of chlamydia, and 8.9 million of trichomoniasis (111). Given the greater frequency of non-ulcerative STIs, it has been suggested that these may be responsible for more HIV transmission than genital ulcers (110).

The identification and treatment of STIs in areas of high HIV prevalence has been shown to reduce the transmission of HIV (112, 113). Trends in the increase of STIs among certain groups in Latin American and Caribbean countries are reason for concern, and prompt the need to increase control efforts. For example, the prevalence in Bolivia for syphilis in the general population was 0.1% as of 2000, but the prevalence for syphilis among sex workers was 7.82% (114).

In a case control study conducted in the Central Plateau of Haiti, traditional risk factors for STIs, such as age and number of sex partners, were observed, but socioeconomic risk factors for STIs featured prominently in this group (115). Risk factors for chlamydia and/or gonorrhoea included: domestic servant as occupation, age less than or equal to 30, difficulty in transport to clinic, greater than one lifetime sex partner, problems getting food, and problems finding employment. Programs designed to prevent the transmission of HIV and other STIs need to improve access to diagnosis and treatment of curable STIs and to increase opportunities for women who are economically vulnerable.

5.2.8 TUBERCULOSIS AND OTHER OPPORTUNISTIC INFECTIONS

Once the immune system of a HIV positive person is weakened by the virus, a comprehensive program should provide prophylaxis, diagnosis and treatment of opportunistic infections (OIs) (116), to both prevent transmission and help persons with HIV remain healthy and live longer, productive lives.

Therefore, the treatment of opportunistic infections in persons already infected with HIV is critical. Particular attention should be given to tuberculosis, as it is the most common opportunistic infection in people living with HIV (117). For example, among 200 patients presenting with HIV disease in a rural clinic in Haiti, 46% had active pulmonary tuberculosis (73). Patients with HIV and TB co-infection who are treated for their TB often remain asymptomatic for several years.

The incidence of most of HIV/AIDS related opportunistic infections is declining with the introduction of HAART. It has immediate consequences in improving quality of life and survival of people living with HIV/AIDS. However, the benefits do not have the same

magnitude for all persons in vulnerable groups. This difference in survival among vulnerable groups is probably related to access to healthcare or to utilization of HAART. This finding provides further evidence of our need to improve delivery of healthcare services to all segments of society.

One potential group to target is those infected with tuberculosis. HIV promotes TB's progression from latent infection to active tuberculosis. While non-HIV infected persons have only a 5 to 10% lifetime risk of activating latent TB (118), HIV-positive persons have a 5 to 10% per year likelihood of progressing to the active disease (119, 120). Infection with HIV is the most potent risk factor for the conversion of latent tuberculosis into active tuberculosis. The more people in a community with active tuberculosis, the greater the likelihood TB will be transmitted to both HIV infected and uninfected persons (121).

Treatment of co-infected TB-HIV patients can be based on existing directly observed therapy (DOT) programs to treat TB. Studies conclusively show that DOTS treatment regimens, which utilize isoniazid and rifampin, supplemented by pyrazinamide and ethambutol (or streptomycin), are effective in treating TB in HIV infected patients (122-125).

The widespread treatment with HAART of people living with HIV/AIDS will likely result in a significant decrease in the incidence of TB. Before HAART, patients with HIV and TB often died quickly of AIDS—typically within 2 years—even when treated for TB (126, 127). But in settings where many patients do not have long standing HIV when diagnosed, such as Haiti, such patients respond well to conventional TB treatment, often showing few symptoms of their HIV infection for long periods of time. In such circumstances, treating TB first—or ruling out active TB before enrolling patients in an antiretroviral treatment programme—is recommended (73).

The DOT model of delivery for HAART is compelling for several reasons:

1. A widespread, successful, global infrastructure has already been established for DOTbased tuberculosis treatment programs, through which HAART might be effectively delivered.
2. Substantial overlap exists between those infected with tuberculosis and with HIV, since tuberculosis is the major opportunistic infection of HIV disease in poor country settings.
3. DOT is costeffective in poor, lowwage settings, as it is labor rather than resource intensive and requires only community health workers with little training.
4. The tight control on drug dispensing in DOT blocks the development of a black market in antiretroviral drugs and minimizes drug resistance. This matter, in particular, is of considerable importance to those seeking efficacious AIDS treatment, as well as to pharmaceutical companies, which need protection from a black market when providing drugs at deeply discounted prices.

TB education, active case finding, and preventive therapy for people living with HIV/AIDS are as critical as the treatment of those infected with TB. The DOTS strategy is used successfully in many Latin American and Caribbean countries and can provide a point of entry to the HIV program. In rural Haiti, the DOT workers who administer TB therapy are also employed to work with AIDS patients to assure compliance in treatment. Actually, this TB program is the foundation on which the HIV infrastructure was built (73).

5.2.9 HIGHLY ACTIVE ANTIRETROVIRAL THERAPY

Highly active antiretroviral therapy, or HAART, is the gold standard for the treatment of HIV infection. HAART is the combination of drugs from two or more of the three different classes of antiretrovirals—nucleoside reverse transcriptase inhibitors, protease inhibitors, and non-nucleoside reverse transcriptase inhibitors. The ultimate goals of antiretroviral therapy are to prolong life and to avoid continued immune destruction and concomitant opportunistic infections. By decreasing HIV related symptoms, HAART contributes to increased quality of life.

Treatment is essential to extend the lives of people living with HIV. In the United States and Europe, HIV mortality has dropped 90% (75-77) since the advent of HAART in 1996 (128). In Brazil, one of the first countries outside of Europe and North America to have implemented a large scale HIV treatment program, the HIV mortality has dropped more than 70% (37, 38). The Brazilian National AIDS program's access to prevention and treatment has stabilized the epidemic in Brazil. In 1991, South Africa and Brazil had the same HIV prevalence; today, Brazil boasts an HIV prevalence 300 fold lower than that of South Africa. This effect is likely due to lowering patients' viral load (129). In Cuba, since the introduction of HAART in 2001 for all HIV-positive patients who meet certain clinical criteria, there has been a decrease in the number of deaths from AIDS and in the incidence of opportunistic infections related to HIV/AIDS. This has resulted in a drop of the number of patients hospitalized at the Institute of Tropical Medicine—from 90 per month in 2000 to 12 per month in 2001 (22). However, data from the United States suggests that once the perception of risk is reduced by initiating therapy, the level of high risk activity will begin to rise (130). Although there is no evidence of the existence of this phenomenon in poor settings—mostly because few AIDS patients are receiving effective therapy—the possibility that this may occur emphasizes the need to link treatment and prevention in a single, comprehensive AIDS program.

Directly observed therapy with antiretroviral drugs can improve adherence and thus durability of viral suppression. Following the experience with DOT for tuberculosis in rural Haiti, Partners In Health trained community health workers in the administration of HAART, in the recognition of important side effects, and in the provision of social support (73). Patients with HIV who begin HAART receive daily visits from a community health worker who observes the first dose of therapy; the second daily dose is taken without supervision. Linking the operational delivery of HAART to a well known public health strategy (DOT) has achieved low rates of antiretroviral resistance to date. Of the 40 patients tested in 2002, 88% had virologic suppression; of the 5 without viral suppression, only three had significant drug resistance (131). The benefits of such a strategy include patient adherence, timely management of side effects and slowed development of drug resistance, but more work is needed to evaluate the use of DOT as a model by which to administer HAART to persons with symptomatic AIDS in a rural setting in the developing world.

5.3 ACCESS TO DRUGS AND DIAGNOSTICS

Critical to the continuity of AIDS care is access to HIV/AIDS antiretrovirals and related drugs (132). The importance of providing drugs under a structured framework and the complex nature of drug supply management cannot be underestimated. Drug supply systems in developing countries are often under equipped and haphazardly organized (133). This creates scenarios in which drug interruption is likely because drug procurement and distribution capacities are weak (133). When a formal gateway for getting drugs to people

is not in place, an expected outcome is the illegal push of drugs into the black market. Therefore, it is imperative that structured drug procurement and distribution systems are implemented. Bringing such systems into the public health sector is feasible, and current models such as those for TB can serve as examples (133).

Strengthening drug supply management is particularly complex as the drugs involved are often not generic drugs or low cost antibiotics; they are also under patent protection law. Nevertheless, there are existing mechanisms that can be helpful in systematizing and simplifying drug supply management for HIV while linking them to public health goals. These include the Global Alliance for Vaccines and Immunization (GAVI), the Mectizan Donation Program, the Global TB Drug Facility (GDF), and the Green Light Committee (GLC) of the Working Group on DOTS-Plus for Multidrug Resistant Tuberculosis (MDR-TB). These programs have accomplished procurement, quality control, and distribution through a set of conditions that have pushed forward specific public health goals. Currently, a variety of initiatives are under way to address the problem of bringing HIV drugs within the reach of the Latin America and Caribbean poor. These include the UN's Drug Access Program, MSF's agreement with the generic pharmaceutical industry, and the research based pharmaceutical industry's commitment to supply drugs to individual countries at reduced prices. There are 14 major manufacturers of AIDS drugs, along with several other firms producing medications for TB and STIs.

In order to make AIDS drugs available in the LAC region, it is important to question and evaluate the role that different contributing groups have in this process, particularly the research based pharmaceuticals and the generic industry. The pharmaceutical industry has recently enforced dramatic price cuts in their antiretrovirals for poor resource settings (5). These cuts, which are negotiated on an individual country basis (134), have occurred following particular policy changes.

Some pharmaceutical companies offer donations instead. The largest known contribution to date is the Mectizan Donation Program announced in 1987 by Merck. Although almost 200 million treatments for river blindness—each being one dose of ivermectin per year—have been given thus far, with an average of 25 million people being treated annually, the quantity donated to date is not nearly enough to tackle the current AIDS problem. In addition, financing AIDS treatment programs in the LAC region with pharmaceutical companies' reduced drug pricing is unfeasible (5). One way to solve the pricing barrier is by involving the considerably lower cost drugs than the generic industry offers to produce.

The extent of involvement that the generic industry will have in AIDS treatment in Latin America and the Caribbean should be based largely on the quality of their drugs and the presence of patents in the countries where the antiretrovirals will be distributed. Where patents do exist, voluntary licensing will have to be attained. Stimulation of market mechanisms and incentives will be important in maintaining overall prices at a desired low level and keeping the generic industry interested. Essential to implementing this approach is that the proposed drug management systems assure drug quality and distribution. There are currently several agencies with rigorous experience in this field. These include the International Dispensary Association (IDA), UNICEF (135), and Médecins Sans Frontières (MSF). The IDA and UNICEF in particular have larger capacities and are more equipped to deal with both quality control and drug procurement. New agencies responsible for overseeing AIDS drug management and distribution can turn to these for examples.

In 1999, recognizing the potential gravity of a drug resistant airborne infectious disease such as MDR-TB, the World Health Organization resolved to address the principal obstacles to developing effective treatment programs in highly affected areas. The WHO program

needed to address constraints that were very similar to those facing the AIDS pandemic: inadequate infrastructure to implement complex clinical regimens; the potential threat of developing further drug resistance; and the cost and supply of medications. To overcome these obstacles, an organization now known as the Green Light Committee was formed. This body fulfills two key functions:

- a) by pooling demand and creating a competitive market environment, it leveraged massive reductions in drug prices while assuring quality; and
- b) by making access to preferentially priced drugs conditional upon program requirements, it ensured rational use and minimized drug resistance.

A scientific committee encourages the development of adequate program infrastructure and clinical supervision throughout the application process. Government funding proposals are reviewed in light of criteria associated with international guidelines for MDR-TB management. All projects that are approved are quality assured through their duration and monitored for continued compliance.

The results have led to significant price reductions for drugs, of up to 99% (136). The funds saved on procurement are then available for investment in expansion and control projects. The GLC faced a paradoxical challenge: increase access to medicines by decreasing prices, and increase regulatory control over these same drugs. Market consolidation achieved the first goal, and program requirements enforced by a regulatory body with technical assistance met the second. The strength of this model derives from the ability of an international oversight committee to apply rigorous conditions to access for medications. Such stringent controls minimize the opportunity for resistance to develop by ensuring that the tuberculosis program involved has appropriate algorithms for treatment. To impose controls without technical assistance would ultimately restrict access, rather than promote rational use of pharmaceuticals. Accordingly, any project initially unable to qualify is provided technical assistance to meet eligibility requirements.

In 1999, PAHO, recognizing the importance of addressing the problem of access to strategic health supplies, which includes access to essential drugs used in the treatment of HIV/AIDS, TB and malaria, established the Regional Revolving Fund for Strategic Public Health Supplies (the PAHO EPI Revolving Fund). This fund is used by member states to ensure the continued supply of quality vaccines and associated medical supplies at low cost. During 1999, the Division of Disease Prevention and Control, and specifically its technical units of AIDS and Sexually Transmitted Infections and Communicable Diseases, developed a list of priority products that were required by regional programs to tackle the spread of HIV/AIDS, TB and malaria. A revolving fund mechanism was designed that would facilitate the purchase of quality supplies by participating states through the Procurement Unit (AGS/P) at PAHO at competitive prices. As purchases were executed through the fund by participating states, the capital of the fund would increase facilitating future procurement (137).

Activities that have been executed in support of the Fund objectives included: definition of a list of products (that include ARVs, drugs used in the first line treatment of TB, drugs used in the first and second line treatment of malaria) to be supplied under the fund according to general criteria; development of a database to disseminate information on prices of ARVs in the Americas; and organization of regional meetings have taken place to finalize product selection and treatment protocols for ARVs. Future activities include the characterization of possible drug use levels in specific regions of the Americas, particularly in the area of ARVs. PAHO has also begun a process of pre-qualifying generic suppliers of pharmaceuticals to ensure quality of supply through Organization (137).

Negotiations for lower prices of antiretrovirals on a regional basis and taking advantage of the benefits of the economies of scale in drug procurement constitute an important area of activity in HIV/AIDS control. For instance, the Latin American and Caribbean Horizontal Technical Cooperation Group (HTCG), made up of national AIDS program directors from 12 countries from the region, seeks to ensure that a price break is made available not only to countries that can buy in quantity but also to smaller countries that are currently paying premium prices for their ARVs. Even though the members of the group are for the most part unable to buy these drugs together—national regulations make such joint purchases difficult unless the countries involved already collaborate in a trade agreement—the HTCG hopes to convince drug companies to offer lower prices standardly throughout the region (138).

Additionally, within the framework of the Accelerated Access Initiative, 16 Caribbean countries (CARICOM and the Dominican Republic) successfully completed price negotiations with representatives of research and development manufacturers of ARVs, during the 14th International Conference of HIV/AIDS in Barcelona in July 2002. The negotiations culminated in the signing of a joint Statement of Intent by CARICOM / Dominican Republic and pharmaceutical companies, following a series of technical and price negotiating meetings during the last few months in the Caribbean and at WHO Geneva, coordinated by CARICOM, and facilitated by PAHO/WHO and UNAIDS. Price negotiations were executed in the Bahamas in late June, and were based on the elaboration by CARICOM countries of a regional framework for Accelerated Access to Antiretrovirals in the Caribbean, and a regional treatment and care plan for people living with HIV/AIDS. On presentation of the framework document to the pharmaceutical companies, a commitment was sought from the companies to consider the Caribbean as a region, and not as a group of individual countries. Subsequent to technical discussions, the pharmaceutical companies expressed their continued support to the regional initiative and the continued strengthening of public/private partnerships in the region (139).

During the actual price negotiations that followed, Caribbean countries achieved historic success in obtaining for the first time a uniform low regional price (US\$ 1,152) for the first line treatment (AZT + 3TC + NVP) of HIV/AIDS. The price is the same as that of sub-Saharan Africa, is available on a regional basis (CARICOM and the Dominican Republic), irrespective of country development indices. It constitutes a reduction of approximately 90% relative to the cost of the same treatment in the US (US\$ 10,500). Furthermore, a second option for first line treatment (AZT + 3TC + EFZ) was offered to approximately 90% of people living with HIV/AIDS in the Caribbean at the reduced cost of US\$ 1,220 (although Merck's tiered pricing policy has meant that the latter price will not be available in Barbados and the Bahamas). The landmark success that Caribbean countries have achieved in obtaining low unified prices for ARVs in the Caribbean was highlighted on several occasions at the 14th International Conference on HIV/AIDS (139).

Although these international initiatives are encouraging, a coherent global model for the purchase and delivery of ARVs and other AIDS related drugs has yet to be detailed, and funding will also continue to be a subject of concern. Nevertheless, in addition to global and regional initiatives, individual countries are also looking into ways to improve expanded access to effective therapies for HIV/AIDS, TB, and opportunistic infections, and to creating programs aimed at drug price reductions. Within a systematic approach to procurement, distribution, and quality control, national health systems will additionally have the opportunity to improve not only their drug management but also their overall health services.

Brazil, burdened with a severe HIV pandemic, has created one of the most extensive ARV programs in the Americas, providing double and triple combination therapy free of charge to some 58,000 people with high viral loads or full blown AIDS. Its medical establishment has in addition created a model (140, 141)—similar to that of the South African HIV Clinicians Society (142)—that endorses the treatment of symptomatic patients as well as those asymptomatic (either with less than 200 CD4+ T cells/mm³ or with fewer than 350 CD4+ T cells and viral loads of greater than 100,000 copies). National legislation guarantees access to ARVs for all affected Brazilians who are covered by the social security system, which provides health care to private and public sector employees and their families and to all HIV-positive pregnant women and their newborns. With funding from its own treasury and a World Bank loan, Brazil's projected 1998 budget for ARVs and monitoring topped \$545 million. Many credit the two year old program for the dramatic 32% decrease in AIDS related mortality in São Paulo state, one of Brazil's highest HIV prevalence areas between 1996 and 1997 (138).

Likewise, Argentina's ARV program owes its existence to the passage of a federal law that provides the most advanced drugs available to HIV infected citizens through the national social security system. But the Argentinean program goes a significant step further in its creation of a special fund to pay for ARVs for those not covered by social security, such as street vendors, small businesspeople, and the unemployed, and for low income pregnant women. Some 11,000 HIV-positive Argentineans receive ARV therapy through these two sources and through private insurance plans (143). Although they must shoulder these expenses, large countries such as Brazil and Argentina have also found ways to control some of the costs of their programs. Negotiating bulk prices with the pharmaceutical firms that manufacture ARVs helps make these drugs much more affordable. For example, Argentina now pays 33 cents for zidovudine (AZT) pills that once cost \$2 each (143).

Cuba is one of the few developing countries to provide comprehensive health care and treatment for people living with HIV/AIDS. Since 1997, pregnant women living with HIV receive AZT to prevent mother to child transmission of the virus and breastmilk substitutes. Since 2001, all Cuban HIV+ patients who meet certain clinical criteria are eligible for HAART (22). While from 1986 until 1993 Cuba relied on controversial HIV sanatoria to contain the epidemic, this strategy has shifted to a combination of in-patient and ambulatory care. Currently, people diagnosed with HIV are referred to one of the regional sanatoria for 3 to 6 months and receive clinical and psychological evaluation. Their health is closely monitored and they receive treatment for opportunistic infections. They are fed with a high calorie diet, receive education on safe sex practices, are enrolled in a physical education program, and receive mental health therapy when indicated. During this time their salaries are continued. People diagnosed with HIV can instead opt to stay at home and receive ambulatory care and special food rations. In this case they have to attend a day hospital every day for clinical and psychological evaluation, safe sex education, and health education. After these first months, all HIV+ patients are monitored on an outpatient basis by their family doctor. The progression of the infection is monitored by CD4 counts and viral load tests every 3 to 6 months (22).

Mexico's National AIDS Program estimated that 55% of over 20,000 people living with AIDS at the end of 1997 did not have social security, and thus had no access to affordable antiretroviral treatment. To redress this problem, the Mexican government has joined with non-governmental organizations, private pharmaceutical companies, academic institutions, and other partners in an initiative to increase access to antiretrovirals. The initiative, known as FONSIDA, now provides free treatment to all HIV infected children under 18 as well as to pregnant women who test positive for HIV and are not covered by private insurance or social security.

In determining access to antiretroviral therapy, it is advisable to have consensus meetings of national experts in each country in order to establish guidelines for setting priorities for patients to be treated. If there is insufficient money to treat all the eligible patients, the threshold for treatment initiation should be determined. In this way, fewer patients would be treated but all would be receiving optimal therapy (3).

One of the consequences of limited access to HIV treatment is the black market for antiretrovirals. A survey of 14 African countries demonstrated that procurement of ARVs in black markets exists in all of them (144). Because antiretrovirals are expensive but are available in the private sector, these drugs are often used inappropriately by patients who cannot afford continuous therapy. Many physicians who treat patients with HIV report anecdotally various patterns of antiretroviral use that are influenced most heavily by economic necessity. Patients may take medications for 2-3 months and suspend therapy when they feel better. Others receive treatment through an NGO or «recycling project» but must pay for expensive laboratory analyses to remain on treatment and therefore suspend or sell their treatment to pay for a laboratory test. The public health threat to this type of inconsistent access is the development of antiretroviral resistance. Maintaining consistent access to drugs is critical to the success of HAART as well as to the protection against antiretroviral resistance.

5.4 HUMAN RESOURCES AND MANAGEMENT

There have been significant gains in the number of trained medical personnel in the region in the last 20 years. The number of physicians in Latin America and the Caribbean has risen from 9 to 14 per 10,000 persons between 1980 and 1997 (145). There have been similar gains in the numbers of nurses (4.2 to 7.6 per 10,000 in 1980 and 1997 respectively). However, in comparison with the number of physicians and nurses in North America (27.5 and 96.7 per 10,000, respectively) this number, as well as the level of training, will need to be significantly augmented to improve the access to and quality of care. Since patients treated successfully with HAART are less likely to be hospitalized, but rather managed in an ambulatory setting, it is particularly important that nurses assume a significant responsibility of care. Increased training and human resources to better respond to the AIDS pandemic will greatly improve both prevention and treatment efforts.

Current and future health care providers will need increased training in counseling and sex education prevention strategies. In order to improve access to such services in a comprehensive manner, AIDS prevention strategies should be linked to family planning centers, maternity clinics, and/or other sites dedicated to targeting groups that may be at risk for HIV exposure. Additionally, this would provide a venue for health care providers to become better equipped at dealing with co-morbidities. Training strategies in Huancavelica, Peru, have been very effective in the field of modern family planning methods (146). Such models will allow future projects to adopt effective training methodologies and evaluation strategies for ongoing assessment of the quality of training and care provided.

One important resource for the training of health professionals is the existing expertise within Latin America and the Caribbean. Indeed, Brazil has offered to transfer technology for drug development and train professionals from the developing world (147). Similarly, Cuba has been helping to meet medical needs by supplying physicians and other health care workers to 17 developing countries and by training physicians and nurses from poor

resource settings from Latin America and the Caribbean, and is now considering supplying antiretrovirals produced in Cuba to other countries in the region (14, 22, 148).

Increased education and training efforts should be geared towards doctors, community health workers, nurses, and laboratory personnel (5). Some training areas that need further development and expansion are:

- Standards for monitoring signs and symptoms of HIV/AIDS: Increasing education among health professionals on these areas is of paramount importance, especially in settings where laboratory facilities are limited.
- Regimens, potential drug interactions, and toxicities: In poor resource settings, where medical doctors are often scarce, few of them are skilled in the use of antiretrovirals (5, 34).
- AIDS treatment in an ambulatory setting: It reduces cost of providing care, allows for efficient treatment delivery, timely detection and management of side effects and lower abandonment rates.

Training models currently exist in poor resource settings in Latin American and the Caribbean. Partners In Health, in association with local community based organizations, is developing training programs on complex treatment regimens for HIV/AIDS and multidrug resistant tuberculosis in Haiti's rural areas and in the slums of Lima, Peru (73, 149). These experiences have proved that trained nurses and community health workers can effectively administer complex regimens and monitor side effects. Who will be involved in overseeing treatment will largely depend on the resources available to each particular country.

Finally, PAHO and affiliated institutions can provide training guidelines and recommendations for evaluations to each country. This would allow program coordinators to gain access to the best current methodologies to address the burden on the health care sector by the HIV/AIDS pandemic.

5.5 PAYMENTS TO PROVIDERS

In the area of service provision, the challenge lies in reorienting the service delivery model and introducing the appropriate incentives so that providers act in such a way as to reduce or eliminate exclusion. This can occur through manipulation of various provider payment mechanisms.

Payments to individual providers (150):

- Fee for service (FFS): Under a FFS system, providers are paid a fee for each service provided. Providers tend to maximize their income by maximizing the number of services they provide; in this scenario, there is not an incentive to provide disease prevention services, since these activities rarely generate earnings for the provider. In addition, FFS may encourage a provider to overuse costly complex technology, since he/she carries no personal financial risk for doing so. FFS is very common throughout the Region.
- Salary: Providers are paid a salary that is not dependent on the number of patients seen or the volume of service provided. In this case, since payment is based on time worked, providers have an incentive to minimize costs, which can result in reducing the number of patients served and the number of treatments provided.

- **Capitation:** Providers receive a fixed payment per person regardless of the amount of services rendered. Providers have an incentive to maximize the number of patients and to minimize the number of services provided to each patient. Capitation, widely used in the United States, is becoming increasingly common in the LAC region.

Health service delivery is probably the area where reforms have been most pronounced, being driven by two concomitant phenomena:

1. The decentralization and/or deconcentration of sector activities, particularly those related to the delivery of public health services and personal health care;
2. The growing private sector participation in the delivery of health care included under guaranteed coverage plans of social security systems.

With these new trends, health care provision has been partially or totally transferred to the intermediate levels (states, departments or provinces) and/or local levels (municipalities or counties) of the state, or to deconcentrated, autonomous regional agencies devoted exclusively to health services delivery.

Now that ministries of health are delegating responsibility for direct management of health care (which used to be delivered through hospitals and outpatient clinics of their own networks), this has left a large gap between their old functions in service delivery and the new role demanded of them under decentralization and privatization. As a result, ministries of health need to undertake a series of new tasks for which they have to develop institutional capacity:

- a. Define the criteria for allocating the resources to be channeled to the decentralized public agencies and/or establishments, based on the criteria of need, performance and impact, which can be accomplished by direct transfer, or on the criteria for resource allocation by the ministry of finance or the treasury.
- b. Harmonize the plans of action and management of the various decentralized public health service delivery agencies in the country.
- c. Define the content of the basic package of public health services for which the state is responsible and, based on the criteria of complementarity, define the distribution of responsibilities and resources among the various spheres of public action (central, intermediate and local).
- d. Furnish technical cooperation to the decentralized service providers to guarantee a streamlined process for the transfer of authority and the development of the institutional capacity necessary for the full exercise of their functions.
- e. Define mechanisms for the redistribution of current and capital expenditures to compensate for any inequities generated by the decentralization process.
- f. Establish mechanisms for contracting/purchasing or for service agreements that will serve as the basis for resource allocation, based on series of performance measurements expressed in terms of processes and results.

As managers or overseers of the work of decentralized public agencies engaged in service provision, rather than direct administration of service delivery, these new institutions are faced with having to prioritize their tasks, based on their new capabilities.

CHAPTER 6:

HEALTH SYSTEMS AND SERVICES RESEARCH OF HIV/AIDS COMPREHENSIVE PROGRAMS

The demand for HIV/AIDS services in the LAC region has placed great pressure on the health care system to upgrade and expand its operations. If a comprehensive approach, which includes HAART, is to be adopted for AIDS care, the readiness of each health care system to assume this task will determine the speed and effectiveness in which health outcomes are improved. These efforts need to be done along with Health Systems and Services Operational Research related to HIV/AIDS (151). Each country's varying degree of structural health care capacity requires that operational research be considered on a national basis. The process of evaluation should be continual and dynamic in order to meet current health system needs and demands. However, the ultimate goal of focusing on operational research is to provide better clinical and programmatic outcomes, greater access to services, lower cost, and greater social justice in health outcomes (152).

In performing operational research, PAHO's *Building Block Framework* can serve as a guide for the multi-tiered strategy necessary to assess the status and evolution of healthcare systems and services of a country as it scales up. Such an approach can lead to sustainable, locally appropriate solutions to the barriers found in the process of evaluation.

To effectively assess the influence of the health sector on therapeutic outcomes, it is important that evaluations occur frequently, always addressing the most recent stage of the healthcare system and providing alternative solutions. As data is analyzed and solutions are implemented, the steady undertaking of operational research will ultimately help countries deal with the dynamic modifications and demands placed on the health care sector. Such changes will culminate in the development of the most effective guidelines for each region. Where the political will exists for programmatic expansion and improvement, the international community should assist in providing rapid upgrade. Within this strategy, the Global Fund to Fight AIDS, TB and Malaria has a major role.

An HIV/AIDS and opportunistic infections recording and reporting system (registry) should be established for the evaluation of in country programs. A good information system will allow for the dissemination of data to other countries and regions. Sharing of information ultimately allows for the improvement of other health care systems and benefits other patients. To create this registry, data management is crucial and feasible in areas that have few available technological resources. The data collected through this mechanism can be used to follow direct patient care, provide key epidemiological information, and help manage drug supply (149), thus ensuring adequate performance of the health sector.

Operational research, including the assessment of the quality of community based services and of DOT, may cast light on which regimens are best suited to a particular region (5). Assessment of laboratories will be essential to the treatment of HIV/AIDS with antiretrovirals. Therefore, a review of the local, national and supranational laboratory facilities and capacity for quality control need to take place in order to assure that quality standards are met. This remains true even if viral load and CD4 counts are not used: if symptom based management is deemed the best option for a particular setting, it is important to ensure that sluggish laboratory response does not compromise timely treatment of advanced HIV disease. Studies should be done to correlate the clinical criteria with laboratory based CD4 and viral load measurements. If such laboratory capacity is not available within the country, a network of international reference laboratories may prove valuable in extending the reach of services.

If a DOT approach is the chosen option for the administration of HAART, it should also be formally evaluated within the local context and compared to other treatment delivery and patient monitoring programs. In short, information stemming from operational research can improve the clinical management of patient care as long as the preparation of this type of research does not delay access to treatment.

Just as operational research can be used to enhance the ability of the health care system to provide quality care, it can also serve to persuade decision makers that prevention and treatment strategies for HIV/AIDS are feasible. In conclusion, operational research can and should answer questions about the effectiveness of integrating HIV/AIDS treatment with current prevention programs and about the safe, efficient and effective use of HAART, thus propelling wider use of these life saving drugs (153). The two fundamental needs, treatment and prevention, are complementary arms that need to work synergistically to mount an effective response: alone neither is sufficient or sustainable. Political will is coalescing behind the need to provide care for the millions infected.

CHAPTER 7:

SYNERGY IN THE RESPONSES AND RESOURCES TO CONFRONT THE HIV/AIDS PANDEMIC

The current state of access to quality AIDS care is variable throughout Latin America and the Caribbean, and there are differing models for how to fund health care in order to achieve equitable access to comprehensive care. With regard to financing, the challenge lies in organizing the different sources of financing, with the goal of achieving solidarity, in order to equitably address the needs of people living with HIV/AIDS. Empirical evidence collected from many different models of organization of health systems confirms the conceptual notion that «a sound combination of financing mechanisms would best help to achieve financial sustainability and at the same time improve access and utilization of health services (60).» Although the specific strategy must be designed within the macroeconomic and social policies of each country, the mechanism of unified funds with public regulation, social control and accountability (i.e., in the collection of funds from taxes, quotas, and other sources, and in allocating them under criteria of equity) seems to be conducive to financial sustainability, managerial efficiency, and reduction of social exclusion in health.

Currently, only in the U.S., Canada, Brazil, Costa Rica, Panama, and Cuba do a majority of people with AIDS have access to treatment. In Costa Rica, the government's health service covers 100% of the population, and about 950 people with AIDS receive antiretroviral medications. In neighboring Panama, about 60% of all people with AIDS are covered by a government program, which provides their medications (154). Cuba manufactures its own antiretrovirals [such as zidovudine (AZT), stavudine (d4T), didanosine (ddI), zalcitabine (ddC), saquinavir, and nelfinavir] and provides treatment, nutrition, and housing to HIV-positive people. Brazil, the country with the highest number of HIV infected persons in the region, addressed the problem early in the pandemic with a comprehensive AIDS program written into law in 1996. In 1994, the World Bank had predicted that Brazil would have 1.2 million HIV-positive people by 2000 (155). However, the national AIDS program with its extensive network of prevention services, prompt diagnosis of opportunistic infections, and free access to antiretroviral therapy has dropped the death rate by 50% since 1996; stabilized the number of new infections at 20,000 per year; and is home to 90,000 HIV-positive persons—more than tenfold lower than World Bank predictions. Without the AIDS program in Brazil, the prevalence of HIV in Latin America would be nearly double what it is today (134).

While countries such as Brazil, Cuba, and Costa Rica provide the most equitable access to health services, other models in the region include the delivery of HAART by non-governmental organizations, such as in rural Haiti (73), or the provision of HIV care by the social security system in combination with other sources, such as in Mexico. Several Latin American countries—including Brazil, Argentina, Colombia, Costa Rica and Mexico—are working both individually and collectively to make ARVs a standard treatment option for their population. Many of the ARV programs that have emerged in the region were born of tireless advocacy by grassroots organizations seeking to convince health officials that these medications could be made affordable and accessible through government intervention (138).

Since HAART became available in 1995, many countries have worked hard to gain access to these life prolonging drugs. There are large differences across the region in the ability to provide treatment. Some countries cannot even provide some of the most common drugs for opportunistic infections, while other countries are providing the best available combination therapies to treat AIDS. Brazil's comprehensive national program and drug procurement strategy is a model example in the access to antiretrovirals. Increased local production of ARVs has greatly contributed to falling prices and greater treatment capacity. In addition to making drugs affordable, it is essential that systems be in place to ensure the quality of drugs and their uninterrupted delivery. This means fortifying laboratories. Efforts to provide treatment can fortify prevention strategies and work synergistically.

In order to foster further discussion on what care can be provided in relation to resource availability, three different scenarios are proposed. Appropriate and feasible care alternatives that correspond to the different levels of the health system are outlined in a *Building Block Framework* (3). The minimum standard of care that countries should strive to achieve is delineated in Scenario I. The increasing range and specialization of services that are possible with an increase in resources (physical and infrastructure resources, financial resources, technical resources, support services) and skills (trained health providers) are presented in Scenarios II and III. The proposed scenarios are:

- **Scenario I:** In this setting, testing and basic medications, such as isoniazid prophylaxis to prevent the activation of latent TB or palliative care, are available in a limited amount at all levels of the health system (primary, secondary, and tertiary). Interventions are focused on secondary prevention activities, such as prophylaxis of opportunistic infections or avoidance of potentially harmful behaviors, to avoid further physical deterioration and provide symptomatic relief. Antiretroviral therapy is available for the prevention of mother to child transmission of HIV at the secondary level of the health system.
- **Scenario II:** In this setting, testing and drugs are available at all levels, including some ARVs at the secondary level of the health system. All Scenario I services are provided plus the etiologic treatment of opportunistic infections. Some excessively expensive drugs, such as antitumoral medications, are not available at the primary and secondary levels of the health system.
- **Scenario III:** In this setting, all of the above services are provided plus all ARV therapies and specialized services.

In each building block, elements should be read from top to bottom: the elements are arranged in a sequential fashion with the first illustrating the initial care component that needs to be addressed. Ideally, all components should be provided within each level of the

health system. The core foundation of services in Scenario I should be in place before moving to the next level. The achievement of all services within a particular scenario should be a stimulus to move to the next level. The ultimate goal is to obtain the standard of care presented in Scenario III. In particular, it is indispensable to guarantee financing with solidarity and sustainability, not only for health services but also for the people.

According to the WHO-HQ 2001 Document for the Consultations of Global Health Sector Strategy and the Regional Consultations (156), by 2005 the following targets should be met:

- 1) Declaration of political commitment and funds from all regions;
- 2) Development of institutional mechanisms for human and resource development and capacity building in all fields related to HIV/AIDS and STI prevention and control;
- 3) Ensuring integration of HIV/AIDS and STI prevention and care packages into the health care delivery system;
- 4) Maintaining comprehensive and multisectoral information, education and communication programs; and
- 5) Creating the capacity to apply operational research in various aspects related to HIV/AIDS/STI health response.

As was postulated by Jonathan Mann (157) and others early in the pandemic, the major risk factors for contracting HIV are poverty and lack of respect for human rights.

PAHO and the WHO formally recognized in 1998 that any strategy to combat AIDS must take into account these factors (3):

- Respect: For human rights and individual dignity.
- Accessibility and Availability: Appropriate care is provided at the local level.
- Equity: Care is provided to all persons living with HIV/AIDS regardless of gender, age, race, ethnicity, sexual identity, income and place of residence.
- Coordination and Integration: To ensure a continuum of care across providers and levels of care.
- Efficiency and Effectiveness: Efficacious care is provided at reasonable social costs demonstrated through ongoing monitoring and evaluation.

Political leadership is the cornerstone of a successful response to the AIDS pandemic. Because of the strong history in Latin America and the Caribbean of social movements and the importance of such social movements in global AIDS policy, health systems upgrade and reform should involve religious and political leaders in the development process and the media in forming public opinions. Latin American countries such as Brazil, Costa Rica, and Cuba, although of varying socioeconomic and political status, have demonstrated the importance of political commitment in crafting a successful AIDS policy. Each of these countries has developed a nationally driven, locally appropriate and feasible package for HIV/AIDS in which local realities and national concerns were integrated into the framework of prevention strategies, health information dissemination, and AIDS care and treatment programs. In this regard, it is important that the expertise that has been developed by governments, ministries of health, and NGOs within Latin America be shared with other countries in the region as they begin to build new or scale up existing AIDS programs. The Pan American Health Organization has called for regional alliances against HIV/AIDS at

both economic and political levels, and joint actions to fight the pandemic through the Shared Agenda for Health in the Americas (158).

However, the structure of the majority of national health sectors in Latin America and the Caribbean presents a barrier to comprehensive AIDS care. Programs in HIV/AIDS and STIs operate vertically in ministries of health and in isolation from other national health programs. This vertically isolated approach results in missed opportunities for education and prevention, diagnosis and testing, prophylaxis and early treatment.

For example, since tuberculosis is one of the most common opportunistic infections in people living with HIV in TB endemic countries (117, 121), national TB programs and national AIDS programs should join forces. The control of HIV/AIDS often places little or no emphasis on the treatment of serious HIV related diseases—TB being the most prevalent, deadly, and easily treatable one. TB programs, meanwhile, have focused on implementing the DOTS strategy without regard to escalating HIV infections, which call for more intensive TB case finding, more widespread preventive treatment of people with latent TB infection, and better links between HIV testing and access to TB prevention and care. A tuberculosis program presents opportunities for the diagnosis of HIV as well as the administration of TB therapy to affected persons and treatment of latent TB infection in contacts who may be HIV-positive—particularly sexual partners—and thus at high risk of getting active infection. Intensified case finding, rigorous diagnosis, and effective treatment of TB in HIV infected patients will prolong the patients' lives and decrease the further spread of TB. Therefore, TB and national AIDS programs, as well as other national health programs, should be eager to cultivate opportunities for collaboration.

Another obvious area for multisectoral cooperation in AIDS prevention is in maternal and women's health. Voluntary testing and counseling should be performed in prenatal centers. Early identification of HIV infected women is crucial for the health of such women and for care of HIV exposed and HIV infected children. Knowledge of maternal HIV infection during the antenatal period enables HIV infected women to be treated with appropriate antiretroviral therapy, as well as with prophylaxis against opportunistic infections for their own health, and the provision of antiretroviral therapy during pregnancy and labor and to their newborns, to reduce the risk for mother to child transmission of HIV (93, 159).

HIV/AIDS comprehensive care programs meet the medical, emotional, social and economic needs of people living with HIV/AIDS, their family members, and caregivers. They also help them to live longer and more dignified lives, provide family members and caregivers with invaluable support, and offer society a greater understanding and acceptance of HIV/AIDS. In addition, these programs support and strengthen already established HIV/AIDS prevention programs, thereby enhancing the efforts to avert the spread of HIV (3).

Whether speaking in legal or epidemiological terms, it can be argued that comprehensive care of HIV/AIDS throughout Latin America and the Caribbean constitutes a global public good. It serves to buttress the idea that individuals should have the opportunity to benefit from, and contribute to, collective resources. Given the transnational nature of the pandemic, the externalities of HIV/AIDS control need to be framed at both national and regional levels and be reflected in funding strategies that include the hardest hit countries in the region for the good of the Americas.

Latin America and the Caribbean can focus both on demonstration projects and institutionalized public programs to explore the feasibility of different delivery mechanisms

of antiretrovirals and make appropriate recommendations that can be applied to other settings. Through a balanced strategy of prevention, treatment, and care, morbidity and mortality of HIV/AIDS in poor resource settings could be promoted and advanced, while supporting planning, capacity building, technical assistance, and program monitoring that will strengthen national health systems. Each of those projects and programs should be integrated in a global operational research and surveillance system, designed to study the problems and limitations of the HAART protocol in poor resource settings, to seek solutions, and to create a manual addressing these challenges and making appropriate recommendations for other settings. These projects and programs would need to address the effective management of drug procurement, including GNP certification, transport, registration, and clinical management of drug supply, especially important for countries where antiretrovirals are off-patent or where compulsory license has been put in place resources.

The precedents for such a massive management strategy already exist. The experience of multilateral agencies with the Expanded Program of Immunizations (EPI) demonstrated a powerful management tool for coordinating diverse global partners. The work of Merck on African riverblindness with the Mectizan Donation Program is a successful publicprivate distribution partnership. The massive mobilization for the eradication of polio uses existing immunization infrastructure and private resources to deliver vaccines and maintain cold chains. The Global Alliance for Vaccines and Immunizations (GAVI) coordinates private and public sector agencies in humanitarian efforts. The Green Light Committee of Multidrug Resistant Tuberculosis (GLC-MDR-TB) has developed protocols for lowering the cost of second line antituberculosis drugs while restricting its distribution to programs around the world that meet minimum quality criteria. Each of these efforts overcame the challenges faced by an AIDS drug procurement and distribution plan. The successes and failures of these strategies need to be analyzed, their attributes distilled into a clear vision, and their limitations addressed with a new plan.

In order to make HIV diagnostics and therapeutics available at an affordable cost in countries that do not have the infrastructure and technical ability to manage the drugs and make them available to those who need them most, a multifunctional body capable of providing access to antiretroviral medications and technical support, and of carrying out monitoring functions to promote the rational use of the drugs, can be established. Such an entity would provide technical support by a cadre of HIV physicians and public health specialists that will be constituted in collaboration with other HIV-focused organizations.

The current barriers to effective AIDS treatment programs are analogous in many ways to the conditions of the MDR-TB epidemic, so that the management of MDR-TB treatment programs through the mechanism of the Green Light Committee (GLC) can offer practical lessons for the challenge of delivering HIV/AIDS treatment to poor communities worldwide. Beyond parallel concerns of cost, objections center on the problem of inadequate local infrastructure and management capacities. Given infrastructure weakness and institutional inefficiency, it could be argued that even if drugs for HIV were available at no cost, the systems for delivering them to those in need might still not be there. Situations like this reflect real gaps in poor countries' health care delivery apparatus. Yet, their existence is not an excuse for inertia and resignation and non-traditional infrastructure and institutional capacity are present, and proven mechanisms for scaling up delivery exist.

An international pooled procurement program and scientific regulatory body modeled in this way could provide a framework for the rational introduction of antiretroviral therapy. Using economies of scale and quality control mechanisms, such as pre-qualification, a single agent can procure AIDS drugs at preferential prices. Drugs from this effort could

be procured from both the research based pharmaceutical industry and the generic drug industry. Six major research based pharmaceutical organizations have already engaged in reduced price access to ARVs for developing countries through the Accelerating Access Initiative. Additionally, there are at least 25 generic manufacturers engaged in some level of ARV production. Finally, procurement must include testing kits and laboratory reagents. Ten companies are involved in rapid HIV testing systems, three companies in viral load systems, and at least eight companies in providing CD4 cell count systems. There are no systematic efforts to unify the diverse resources of at least 52 sources in a coherent framework. The GLC-HIV would provide one stop shopping for overburden ARV programs that includes technical assistance. In the process of procurement, patents should be respected in full compliance with existing laws.

Applicant programs would need to demonstrate the ability to meet strict requirements based on international guidelines established through a scientific panel. Programs that express need but do not have the infrastructure can be supported through technical assistance, grants, and loans. Most importantly, access to antiretroviral therapy would remain conditional on political commitment to prevention efforts. Through a mutually supportive process, national AIDS plans can be designed and implemented to reflect the need to care for those infected and prevent future spread. Treatment is a catalyst and a complement for prevention programs.

A multifunctional program of this type aimed at combating HIV/AIDS would provide LAC countries with resources to overcome infrastructure constraints, access affordable antiretroviral therapy, and technical assistance to maximize the effectiveness of treatment and prevention. Using access to medicines to influence policy can also provide the best protection against irresponsible prescribing practices and poor quality drugs, and strengthen adherence monitoring programs. This would minimize the development of drug resistance and provide a future mechanism for the distribution of AIDS vaccines and new pharmaceutical products as they become available. Finally, such a program could become a clearinghouse for operational research into best practice for ARV intervention in poor resource settings. Data from participating sites can be aggregated and analyzed, operational research can be implemented across regions, and new regimens can be tested through institutional partnerships.

The obstacles to the provision of care are significant, but the tools exist to overcome current barriers. The United Nations, PAHO/WHO, World Bank, and other international aid organizations have the capacity and leadership to support the implementation of comprehensive care programs, oversee access to treatment and prevention, address the needs of those already infected, as well as bolster the public health commitment to preventing future spread.

In support of a new way of approaching the fight against HIV/AIDS, UN Secretary General Kofi Annan called for the urgent implementation of the Global Fund to Fight AIDS, Tuberculosis and Malaria (*160*), including the allocation of significant amounts of financial resources to scale up the response of health systems and services to the HIV/AIDS pandemic. In both the short and long run, governments, NGOs, and international cooperation organizations will be able to access this fund and make feasible specific actions for health sector reform and health systems strengthening with high impact on HIV/AIDS, tuberculosis and malaria prevention, care, and treatment (*161*). This would include the eminently important issue of assuring access to all needed medications for millions of patients, including antiretroviral therapy, as one of the fundamental elements of the comprehensive strategy to combat the pandemic (2).

Within the last year, international agencies like WHO, PAHO and other UN organizations have held high profile meetings and/or passed important resolutions related with many aspects of the HIV/AIDS pandemic that this paper has addressed. At the 54th World Assembly in May 2001, WHO called upon all Member States to scale up their response to HIV/AIDS, ensuring that HIV/AIDS is one of the highest priorities on the health and development agenda, and to allocate sufficient resources for the response to HIV/AIDS (162). The Executive Board of WHO, at the 109th Session in December 2001, noted the evolution of the global strategy for health sector responses to HIV/AIDS, with reference to the resolution adopted in May 2000 considering this strategy to be a part of the United Nations system's strategic plan for HIV/AIDS for 2001-2005 (163). At the 43rd Directing Council and 53rd Session of the Regional Committee held at PAHO in September 2001, Member States of the Americas were urged to heighten their national response, promote greater intersectoral involvement, broaden the coverage and scope of prevention and care services, and continue to fight the stigma and discrimination associated with HIV/AIDS (164).

The way ahead is paved with challenges that require commitment, cooperation and creativity from all stakeholders. With all the interest that has been generated among international technical collaboration and financing agencies, academic and research institutes, as well as political and social actors from the public and private sectors, there is a real opportunity for all parties to work in solidarity, building a comprehensive, integrated approach to the reality of HIV/AIDS. In line with this vision, ideas and materials from the 2002 Regional Forum will be used to fuel the resurgence of momentum for the global community to come together—to engage in dialogue and act on measures that can ultimately make a difference to the outcome of a pandemic that is not only a health burden but also threatens political stability, economic development, and social cohesion.

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PART II
LAC HSR INITIATIVE REGIONAL FORUM 2002:
THE CHALLENGE OF THE HIV/AIDS PANDEMIC
FOR THE REFORM AND STRENGTHENING
OF HEALTH SYSTEMS AND SERVICES IN LAC

*(PROCEEDINGS OF THE MEETING, OCHO RIOS, ST. ANN, JAMAICA,
FEBRUARY 20-22, 2002)*

1. PURPOSE OF THE MEETING

PAHO/WHO and USAID are leading organizations in the fight against HIV/AIDS in Latin America and the Caribbean. Both recently stated, respectively through PAHO's Executive Committee¹ and USAID's Administrator², that confronting the HIV/AIDS pandemic is a high priority issue to ensure health, sustainable development, human rights and happiness for the people of the Americas. Both are adopting the UN recommended «prevention-care-treatment» integrated strategy, as presented in USAID's «Prevention-Care Continuum» and PAHO's «Building Blocks Guidelines.»

The Latin American and Caribbean Regional Health Sector Reform (LAC HSR) Initiative's partner organizations and projects, in the face of new challenges and responsibilities that have emerged from the UN special session and other recent international meetings³, launched a «Regional Forum on the Challenge of HIV / AIDS Pandemic for the Reform and Strengthening of Health Systems and Services in LAC.» This event also served as the WHO/AMRO Regional Consultation to «consolidate issues, actions and processes needed to strengthen health sector response to the HIV/AIDS epidemic.»⁴

The objectives of the Initiative's Regional Forum / WHO-AMRO Regional Consultation were to:

- Address the issue of how to scale up health systems to combat HIV/AIDS and on discussions about the issue with regard to the Global Health Sector Strategy from regional, sub-regional and national perspectives;
- Conduct an in depth discussion on how to improve health sector response to HIV/AIDS;
- Generate specific strategies for health systems development and reform to face the HIV/AIDS challenge that fit LAC realities;
- Boost cooperation between governments, NGOs, technical and financial cooperation agencies and donors in the area;
- Enable the Initiative partners and other organizations to establish a system for providing technical assistance and for monitoring and evaluating the countries' efforts on focusing specific aspects of their own health sector reforms to face the HIV/AIDS pandemic; and
- Identify potential incorporation of activities related to health sector reform and HIV/AIDS in a possible second phase of the LACHSR Initiative.

¹ Resolution CEI28.R16.

² Testimony before the House of Representatives on May 17, 2001.

³ The Ibero-America Summit of Heads of State - November/2000; The Caribbean Partnership Against HIV/AIDS - February/2001, among others.

⁴ WHO (2001), Regional consultations on «The Global Health Sector Strategy for Strengthening the Health Sector Response to HIV/AIDS.»

2. OUTCOMES AND RESULTS

A **background document** was written to guide discussions at the meeting and then was revised to reflect comments on the issues raised. The revised paper aims to provide a strong theoretical basis and evidence based «lessons learned» to guide the development of an appropriate, pragmatic integrated approach to the reality of HIV/AIDS in LAC. This paper will also be used as a source of reference for PAHO/WHO technical cooperation activities in the countries of the Region to help combat the pandemic.

This **publication**, which is composed of a summary of the meeting, abstracts from each presentation and the working paper, has been published as one of the Initiative's Special Edition publications document. It is also available electronically in the **Clearinghouse on Health Sector Reform (<http://www.americas.health-sector-reform.org/>)**. The publication is intended for use by ministries of health in LAC countries, social security institutes, HIV/AIDS related NGOs, PAHO's PWRs, USAID country offices, PHRplus and MSH central and field offices, and other international agencies and organizations. Highlights of the forum were featured in a special edition of «Reform in Motion» (the newsletter for the dissemination of information on health sector reform in Latin America and the Caribbean) that was dedicated to the topic of HIV/AIDS in LAC.

The participants at the regional forum, and other experts from the region, both in HIV/AIDS prevention and control programs and in different aspects of health systems management, now constitute a **special networking group**. This networking group is dedicated to exchanging lessons learned, experiences and knowledge, and to facilitating follow ups to the discussions and updates on strategies, through the Initiative's Clearinghouse.

Overall, the Forum contributed to a better understanding of current and future needs for care; existing and proposed models of care; standards of care and indicators for intervention; policies and actions as part of a global strategy; and strategies for implementing the recommendations of experts.

3. KEYNOTE ADDRESS

*Global Fund to Fight AIDS, Tuberculosis and Malaria:
Perspectives from Latin America and the Caribbean*

Paulo Teixeira, MD, Director of the Brazilian STD/AIDS Program – MOH

Good afternoon, ladies and gentlemen.

At the outset, I would like to warmly greet and congratulate the organizers of this meeting for the initiative of putting together a conference on the role of HIV/AIDS in the reform and strengthening of public health services and systems in Latin America and the Caribbean. I am confident it will bear prosperous fruits for the years to come. I would also like to thank the Pan American Health Organization, an old time ally of the Latin America and the Caribbean region, for the invitation to be here and address such a distinguished audience on the Global Fund to fight AIDS, Tuberculosis and Malaria, a topic that, despite being widely spoken about, is very little understood.

The Fund has in fact raised great hopes among specialists and non-specialists alike that a new era of international engagement has begun in the fight against the terrible epidemics of AIDS, tuberculosis and malaria. Are these expectations justified or can they be dismissed as being haughtily exaggerated? In order to properly offer tentative answers to these questions, I plan today to shed some light on the Fund's history, current situation and main challenges ahead, pinpointing the most relevant debates and emphasizing the

achievements that can be secured when developing countries adopt a pro active organized stance towards their industrialized brothers.

I must say my words today are not those of the Head of the Brazilian AIDS Program. However difficult the separation may be, I am standing here as the representative of the Latin America and the Caribbean region on the Global Fund, chosen through a wide process of consultation before national governments in December 2001. As such, this lecture is aimed both at informing as well as suggesting a wider agenda for debate for the region. At last, I do not intend to be fully comprehensive nor to exhaust the issue. The following words are meant to give all of you a general idea over the nuts and bolts of an enterprise bound to reshape the landscape of countries ravaged by the three diseases.

The Global Fund to fight AIDS, Tuberculosis and Malaria came into formal being on the 28th of January 2002. It was designed to serve as a financial mechanism rather than an implementing agency, managing, disbursing and attracting from 7 to 10 billion dollars annually in additional resources through a new public-private partnership to assist in the reduction of infections, illness and death related to HIV/AIDS, tuberculosis and malaria in countries in need. It was, therefore, envisioned as a new way of doing business: a global public-private partnership that brings together existing endeavors in a more coherent and accelerated way, a true joint endeavor between countries both industrialized and under development, private sector and civil society, including the participation of persons living with aids, TB and malaria. It is supposed to epitomize a novel approach to international health issues with an intense emphasis on the achievement of results, independent technical validation of proposals, together with efficient processes for utilizing resources. In effect, the Fund is not meant to replace current efforts; on the contrary, support for current efforts should also be increased. As of now, the Fund is still very far from its purported goal; insofar approximately only 1.9 billion dollars have been pledged, and, of this total, a modest 700 million dollars will be available to deployment this year.

The Fund, however, was not created overnight. The concept of an international funding mechanism to tackle HIV/AIDS, TB and malaria was launched at the Okinawa G8 Summit in July of 2000, and was adopted at the G8 Summit in Genoa 2001. It was championed by the UN Secretary General Kofi Annan, together with many national leaders, at the first UN General Assembly Special Session on HIV/AIDS, held in June 2001, in New York, and a initial gathering of interested parties was convened by the Secretary General few weeks after the Conference to start the necessary arrangements.

The process of transforming such an exquisite idea into reality proved to be a daunting task and took the efforts, for more than 6 months, of dozens of public health experts, international law specialists, diplomats, country representatives and other people to put together a system that, while retaining the original concepts upon which it was launched, could encompass the widely varying views of its interested stakeholders, achieve the difficult balance between political contingencies and technical imperatives, and retain a minimum form of legitimacy before the governments and peoples it is supposed to assist. What follows is an attempt to summarize, for the sake of time and expediency, the history of a process that is by no means simple and clear as it may apparently seem.

The first phase can be said to have encompassed the months between the end of the UNGASS-AIDS, in late June 2001, until 14 December 2001. During this period, the Global Fund slowly took format, based on vision and political leadership provided by the Transitional Working Group (TWG), a fairly informal assembly of approximately 43 representatives—from donor and recipients countries, non-governmental and community based organizations, international agencies, foundations and other private sector parties—in charge of taking the decisions necessary to make the Fund a tangible reality. The TWG

had to deal with a vast agenda, and engaged in negotiations to design basic guidelines concerning the Fund's operations, such as legal status, management structure, financial systems and general eligibility criteria for funding proposals. It was headed, upon indication by Secretary General Kofi Annan, by Dr. Chrystus Kyionga, former Minister of Health of Uganda and met three times, one in October, one in November and the last one in December. It was assisted, in its day to day businesses, by a small standing secretariat, comprised of specialists ceded from governments and international organizations alike, able to provide the TWG with the necessary technical support and input required for its decision making. The secretariat operated, in the meanwhile, in Brussels, in facilities leased at no cost by the Belgian Government.

Besides the scheduled meetings of the TWG, extraordinary regional consultation meetings, held in mid-November, took place in Africa, Asia, Latin America and Eastern Europe, and thematic consultations among NGOs/civil society, the private sector and academia. Their aim was to provide the TWG with the greatest possible amount of external advice so as to amass technical expertise in specific areas, strength its legitimacy and widen its perspectives. The Latin American consultation, sponsored by UNAIDS, Trinidad and Tobago and Brazil, was held in São Paulo, Brazil, and counted with the participation of dozens of national officials from all over the region besides representatives from non-governmental organizations and international institutions. A set of recommendations, approved at the end of the conference, was subsequently taken to Brussels by Brazil and Trinidad and Tobago.

The TWG completed its work at the meeting held on the 13th and 14th of December, in Brussels. It dealt with several issues and, among them, I should highlight the definition and approval of its present organizational structure, and the election of the Board of Directors that will govern the Fund during its first two years of operation. It was decided the Fund will be constituted by 4 different bodies: a global Partnership Forum, a smaller, decision maker Board of Directors, a standing Secretariat headquartered in Geneva, Switzerland, and an ad hoc group of experts that will gather a few times a year in a Technical Review Panel to review the host of funding proposals received from countries.

In fact, debates on the governance configuration were based on the assumption that the Fund should break new ground and reflect a new partnership among stakeholders involved in the fight against AIDS, TB and malaria. This was a major point of inflexion in the course of debates and I shall return to it at a later moment. The TWG dissolved itself and was replaced by an interim arrangement, the Oversight Committee, responsible for wrapping up outstanding issues and taking the necessary logistical measures in preparation to the first meeting of the Board of Directors, which happened in January 28th. The Oversight Committee was disbanded, then, and the Board of Directors immediately took control over the Fund. At the January meeting, the Board reviewed the TWG's recommendations, made refinements, as needed, and adopted an all encompassing framework document on aspects pertaining to the Fund's functioning.

Difficult, complex talks pervaded the process through which the Fund was designed and eventually set up. Political constraints played a major role as events unfolded. Concessions were made at the very last minute and a few number of issues polarized most of the debate among the TWG. Amid them, two stand out as being crucial to the relationship between the Fund and the countries it will supposedly assist. The first of them deals with the composition of the Board of Directors, and the second explores the apparent and unreasonable contradiction, in face of financial restraints, between actions in the fields of prevention and treatment.

Contrary to all expectations, Brazil and other fellow countries managed to secure the equitable representation of donor and recipient nations in the Board of Directors, each group having been allocated seven seats each. In another exceptional victory, it was agreed the Board would also include two NGOs, one from the North and the other from the South. Private sector donors, as foundations and companies, will have two seats too. WHO and UNAIDS, representing the many UN agencies involved in the fight against these diseases, and the World Bank, as the Fund's trustee, will have non-voting seats on the Board. In addition, the Board will include a person living with or affected by HIV/AIDS, TB or malaria, in a non-voting seat. The term of Board members is fixed at two years, with each constituency responsible for selecting its representatives.

Developing country seats are based on the six different geographical divisions employed by the WHO, plus an extra seat for Africa. As of now, the Board comprises the following members: United States, United Kingdom, Sweden, Japan, the European Commission, Italy and France, on the donor side, China, Nigeria, Pakistan, Thailand, Uganda, Ukraine and Brazil, on the recipient side, Anglo American and the Gates Foundation, on the private sector side, and, finally, the German Institute for Medical Mission and the Health Rights Action Group, from Uganda, on the NGO side. Besides UNAIDS, WHO and the World Bank, the Academy for Educational Development has been selected to the last non-voting seat, serving as the representative of the community of people living with AIDS, TB and malaria. Uganda has been elected to serve as Chairman and Japan as vice Chairman.

This is the first time NGOs and developing countries will have a voice and vote under the same conditions as donor governments in an international fund. Traditionally, international funds such as the IMF, the World Bank, the Vaccines Fund and the Environment Fund have been structured in such a way as to guarantee that votes are always proportionate to the amounts contributed by each individual donor country, preventing in this way beneficiary countries from being able to have a say in the management of available financial resources. Moreover, it was also decided that the priorities of each country in the implementation of public health policies with Fund money will remain the responsibility of the beneficiary countries and not of the donor countries, as is generally the case of the majority of the international funds. National Country Coordinating Mechanisms (CCMs) will be responsible for devising full fledged strategies and submitting funding proposals, after ample and all inclusive consultations with the various social actors, including civil society, universities and international agencies, involved in the struggle against these diseases in their respective home countries.

The TWG also debated for a long time how the Fund should spend the financial resources it will eventually collect. In other words, the crux of the matter revolved around whether the Fund should or should not support actions in the field of treatment and care, including the delivery of antiretrovirals. Fortunately enough, and thanks to the unyielding support of civil society organizations and the very effective lobby of a coalition of donor and recipient countries, the notion that prevention and treatment actions are indivisible sides of the same solution has prevailed and the Fund will abide by that concept. This was a major breakthrough for developing countries, specially for the poorest and most affected of them, unable in general to find resources to deliver life saving antiretrovirals to their populations.

Currently, the Fund is now getting ready to decide on which proposals to finance at the next meeting of its Board of Directors, to be held on the 23rd-24th of April in New York. The Secretariat has recently issued a call for proposals and has set March 10th as the deadline for this round of funding. Subsequent ones will follow throughout the year. Latin America and the Caribbean must be represented with numerous, strong and comprehensive proposals, so as to guarantee the Fund will have the expected robust impact in the region.

We must be very attentive so as not to miss the right timing, and Brazil is entirely open to assist any country in both the elaboration and implementation of its national proposal. Initially, we have come to know that Cuba, Guatemala, Honduras, Dominican Republic, Peru, Haiti, Panama and Saint Vincent and Grenadines have commenced working on the their national proposals, and we compel other governments to follow suit.

The road ahead is both perilous and rewarding. There are indeed many challenges the Fund, donors and the international community at large must face if this enterprise is to become indeed a turning point in the fight against aids, tuberculosis and malaria. Doubts have been mounting over the capacity of recipient countries to implement the proposed actions in the fields of treatment and care, specially in delivering antiretrovirals in large scale. Nevertheless, such doubts have been proved false and misleading, specially when confronted to the stories of success of Thailand, Brazil and others. ARV delivery in poor resource settings has been increasingly de-stigmatized, and the prospects to roll back AIDS, TB and malaria are brighter than ever, specially when one takes into account the fact the Fund will also finance the construction of national health structures to make such delivery a reality to the millions and millions of infected and affected people.

It is obvious, however, that the Fund is still in its very early stages. There is still much to be learned, and there are lessons to be drawn that come exclusively with time and experience. Nevertheless, it must be our constant and unfailing duty to keep up the pressure over the international community and maintain visibility of and momentum around the Global Fund. History is full of attractive initiatives that ended up as being massive failures. The right mix of pressure and political commitment on our part will, however, be crucial to assure the Global Fund to fight AIDS, Tuberculosis and Malaria fulfill its promises and become a model of international engagement to be followed.

4. ABSTRACTS OF PANEL PRESENTATIONS

Panel 1: Frame of Reference on the Global and Regional Strategies for Coping with HIV/AIDS.

Moderator: John Junor, Minister of Health, Jamaica

The Global Health Strategy for Strengthening the Health Sector Response to HIV/AIDS

Winnie K. Mpanju-Shumbusho, *Director HIV/AIDS: Advocacy and Partnerships, WHO*, described the Global Health Sector Strategy (GHSS). The goal of the GHSS is «to slow down the epidemic, reduce the impact of HIV/AIDS on human suffering and on development of human social and economic capital». The objectives of this strategy are: to curb the HIV/AIDS pandemic by lowering the risk of HIV transmission, to improve the duration and quality of life of those already infected, and to alleviate the impact of HIV/AIDS on individuals, households and local communities. She defined roles for the different levels of the health sector (community, district and national) in responding to the pandemic, emphasizing that the key roles and functions of the health sector (at all levels) are stewardship, resource generation, financing and service provision. In discussing how to strengthen the health sector's response to HIV/AIDS, Mpanju-Shumbusho encouraged the development of public and private cooperative efforts, such as establishing mechanisms for effective collaboration between the government, the private sector, NGOs and civil society. She concluded by raising key questions that need to be addressed by the GHSS in the future.

The Present Situation of HIV/AIDS and the and Challenges of Differential Responses vis-à-vis Different Phases of the Pandemic in the Americas

Stephen Corber, *Director, Division of Disease Control and Prevention, PAHO*, provided an overview of HIV/AIDS in the region, emphasizing that HIV/AIDS treatment and prevention programs must work at both the individual and population levels, since «what causes AIDS and what causes an AIDS pandemic are two very different, difficult problems». Corber discussed HIV infection patterns, noting that they are influenced by broad issues such as poverty, cultural and gender roles and the legality of high risk activities. He stressed the importance of epidemiological surveillance in the creation of country specific HIV/AIDS programs; surveillance must collect information on the number and distribution of AIDS cases, HIV infection rates (collected through anonymous testing of different populations) and prevalence of high risk behaviors. Corber also presented information on successful interventions in the Region: screening blood before transfusions (all countries), successful prevention of mother to child transmission resulting in declining HIV infections (the Bahamas) and the efforts to provide treatment with antiretroviral therapy (Brazil). He concluded by emphasizing the importance of making HIV/AIDS programs relevant to specific high risk groups.

The Challenge of the HIV/AIDS Pandemic for the Reform and Strengthening of Health Systems and Services in Latin America and the Caribbean

Daniel López-Acuña, *Director, Division of Health Systems and Services Development, PAHO*, discussed the aims of the Regional Forum: to improve health sector response to HIV/AIDS, to increase cooperation between governments, NGOs and other agencies, and to establish a system for technical assistance, monitoring and evaluation. López-Acuña noted that for the past 15 years, efforts to confront the HIV/AIDS pandemic in the Region have focused on prevention as the primary strategy. He emphasized that future efforts need to integrate prevention programs with care, support and treatment—in fact, that HIV/AIDS programs need to recognize a continuum between prevention and treatment. López-Acuña also reviewed the functions of health systems, noting that recent health sector reforms have taken place without (1) structural transformations to improve access to and equity in social protection and (2) improving effectiveness and quality of services. He discussed various strategies to extend social protection in health: special social insurance regimens, voluntary insurance schemes, limited expansion of supply, community based systems and the gradual development of unified systems. López-Acuña emphasized that AIDS care must incorporate respect, accessibility and availability, equity, coordination and integration and efficiency and effectiveness. He concluded by encouraging inter-country collaboration to confront the HIV/AIDS pandemic in the Region, noting that the challenges ahead will require commitment, cooperation and creativity.

Panel 2: Perspectives on Prevention and Treatment of HIV/AIDS.

Moderator: Luiz Loures, Associate Director of Europe and the Americas, UNAIDS

*Latin America and the Caribbean. Prevention, Care, Treatment & Support.
Where Do We Go From Here?*

Paul De Lay, *Director, Office of HIV/AIDS, USAID*, used the public health paradigm of providing «...the most cost effective interventions that will serve the largest number of vulnerable persons» as a backdrop for his discussion on the goals of primary prevention—to reduce risk behaviors and to reduce the efficiency of transmission. He presented the USAID Rapid Response targets for 2007:

- Reduce HIV prevalence rates among those 15-24 years of age by 50% in high prevalence countries;
- Maintain prevalence below 1% among 15-49 year olds in low prevalence countries;
- Ensure that at least 25% of HIV/AIDS infected mothers in high prevalence countries have access to interventions to reduce HIV transmission to their infants;
- Help local institutions provide basic care and support services to at least 25% of HIV infected persons; and
- Provide community support services to at least 25% of children affected by AIDS in high prevalence countries.

De Lay also discussed the reasons that there have been so few successes with prevention interventions—in many settings these interventions have been ad hoc and non-strategic, too small to have any impact, have had timeframes that are too short; there has been inadequate support for commodities, and little information collected to measure success or failure. He highlighted three successful prevention interventions that have managed to overcome these problems in the Dominican Republic, Jamaica and Haiti. Finally, he discussed the value of incorporating care and treatment into HIV/AIDS programs, but we must acknowledge that there are issues to consider in order to truly expand these services. These challenges must be addressed and should not be perceived as unsolvable obstacles to implementation:

1. Current treatment regimens can be undefined and complex;
2. Countries can lack adequate infrastructure, with minimal lab capacity and few trained health workers. (Ideally, treatment protocols should be developed that can use as much of the existing infrastructure as possible in order to assure expanded access);
3. There are serious ethical and moral problems surrounding equity of access to treatment;
4. Nutritional requirements can be as critical as antiretroviral treatment;
5. Treatment programs will have to be sustainable—treatment is lifelong and the number of patients being treated will accumulate quickly; and
6. Even with plummeting drug costs, in some settings antiretroviral treatment continues to be expensive, especially relative to per capita health care expenditure. Even as care and treatment programs are introduced and expanded, the need for prevention remains.

Community Based Approaches to HIV Treatment and Prevention

Paul Farmer, *Professor, Department of Social Medicine, Harvard Medical School/ Partners In Health*, discussed the necessity of considering prevention and treatment as inseparable, complementary strategies for combating the pandemic, since:

- Many of those at the greatest risk of HIV infection already know that HIV is a sexually transmitted pathogen and that condoms could prevent transmission;
- The risk of HIV in vulnerable populations stems less from ignorance than from the precarious situations in which millions live;
- Gender inequality adds a special burden to women living in poverty; and
- Prevention programs ignore the 40 million people who are already infected.

He used the example of his work in Haiti to describe the feasibility of providing treatment in poor settings. He reviewed the demographics of Haiti, illustrating the extreme poverty of the country and the lack of adequate access to health services for the majority of the population. In his clinic (Clinique Bon Sauveur, in central Haiti), over 120 patients have been treated with highly active antiretroviral therapy (HAART); Farmer described the clinic's use of directly observed therapy (DOT), most commonly used for the treatment of tuberculosis, to treat these patients. He stated that the DOT-HAART project had been extremely successful—all patients had responded with weight gain and improvement of health, and less than 10% required a change in drug regimen due to side effects. The DOT model for delivery of HAART is compelling:

- It builds on infrastructure already established for DOT based tuberculosis treatment programs;
- There is substantial epidemiological overlap between those infected with TB and HIV;
- DOT is cost effective in poor, low wage settings because it is labor rather than resource intensive; and
- Tight control and just distribution of drugs helps prevent development of a black market.

Farmer concluded by discussing the challenge of access to antiretrovirals in the context of health systems reform. He described the efforts of Brazil and Cuba to manufacture certain of these drugs and illustrated that, with pressure from countries and outside organizations on the pharmaceutical industry, the cost of drugs can be reduced (and, in fact, has been steadily decreasing since 1996).

Panel 3: The Steering Role of Governments and Health Authorities in Strengthening Health Systems' Response to the HIV/AIDS Pandemic.

Moderator: Carol Dabbs, Team Leader, Population Health and Nutrition, USAID

Nina Arron, *Director, HIV/AIDS Policy, Coordination and Programs / Health Canada*, discussed the Canadian HIV/AIDS epidemic in light of recent changes in the Canadian health care system. In Canada, health care is publicly financed and privately delivered; there is an interlocking set of provincial and territorial health insurance plans, which cover all medically necessary hospital, in-patient and out-patient physician services. In responding to HIV/AIDS, the Canadian Strategy on HIV/AIDS (developed in 1998) has three policy directions: enhanced sustainability and integration, increased focus on those most at risk and increased public accountability. Arron proposed that governments and health authorities develop national/provincial/regional policy frameworks and strategies that engage people living with HIV/AIDS and those at risk, position HIV/AIDS within a broad social context and challenge the status quo. She also proposed that governments expand partnerships and increase responsiveness and flexibility—as she said, to «mobilize with passion».

Lidieth Carballo, *Viceminister of Health, Costa Rica*, described the HIV/AIDS situation in Costa Rica, where the universal social security system provides access to health services for the entire population. In 1985, the National Advisory Board of HIV/AIDS Comprehensive Care was created; this Board was signed into law in 1998. The Board, headed by the Minister or Vice Minister of Health, includes representatives from the Ministry of Education, the Ministry of Justice, the Costa Rican Social Security Fund, the University of Costa Rica, various NGOs and people living with HIV/AIDS. The Board recommends national plans and strategies to the Ministry of Health, and works with the Ministry to coordinate the financing and evaluation of the national HIV/AIDS program. The National Strategic

Plan for HIV/AIDS Comprehensive Care 2001-2004 developed the following priorities: strengthen adherence to antiretroviral therapy for patients with AIDS; implement a mass media HIV prevention campaign; implement prevention strategies that have been proven to work with vulnerable populations; provide formal training in HIV/AIDS for heads of schools; add sex education to the curriculum for children and young adults; establish a national pre-natal HIV prevention program; and strengthen programs for the diagnosis, care and prevention of sexually transmitted infections.

Judy Seltzer, *Principal Associate, Management Sciences for Health*, discussed the various functions of leadership: scanning, focusing, aligning/mobilizing and inspiring. She developed the idea of «managers who lead»; for health systems, this means evaluating results achieved, conducting, regulating and modulating sectoral reform, reorienting financing arrangements, overseeing and enforcing health insurance coverage, and discharging essential public health functions.

Panel 4: Social Protection in Health for People Living with HIV/AIDS.

Moderator: Mauricio Bustamante, Executive Director, Andean Health Organization

Pedro Crocco, *Director, STEP, International Labor Organization*, discussed HIV/AIDS in the labor world. He noted that HIV/AIDS affects the labor world in various ways: it decreases the labor supply, dramatically reduces the income for numerous workers, increases the cost of labor for employers (because of absences due to illness), causes a loss of competencies and experience, and may result in discrimination and stigmatization for workers who are HIV-positive. Crocco detailed a repository of practical recommendations from the ILO, which include: a recognition of the problem of HIV/AIDS in the work environment, elimination of discrimination, equality between men and women, an environment of healthy work, social dialogue, and assistance and support. He discussed the rights and responsibilities of both employees and employers, and emphasized that HIV testing should be voluntary, confidential and should never jeopardize a person's job.

Roberto Muñoz Bustos, *FONASA, Chile*, discussed Chile's efforts to provide social protection in health for people living with HIV/AIDS. He reviewed the epidemiological situation in the country, characterizing it as being both urban and rural and predominant in bisexual men (though there is a trend for increased prevalence in women and heterosexual men). Chile's national HIV/AIDS plan—Plan for Universal Access with Explicit Guarantees (Plan AUGE)—guarantees access to health care, quality care, opportunity and financial protection. Law 19.779, passed in December 2001, assures prevention, diagnosis and control of HIV from a standpoint of dissemination and promotion of the rights and responsibilities of people living with HIV/AIDS, confidential and voluntary HIV testing, and no discrimination in work, education or access to health care. Muñoz also discussed the price reduction (by 60%) for antiretroviral drugs negotiated by MINSAL and INDUSTRIA. He concluded by describing the challenges for the future: achieve 100% coverage for people living with HIV/AIDS, avoid disparities between public and private services and provide equity in access by improving the quality and opportunity of care in the various regions.

Gabriela Hamilton, *Ministry of Health, Argentina*, discussed Argentina's HIV/AIDS situation as well as its efforts to provide social protection in health for those living with the HIV/AIDS in the country. In 1999, only 36% of the population had insurance; those without coverage face both financial and geographic barriers to care. Hamilton reviewed Argentina's laws pertaining to HIV/AIDS, noting especially Decree 446/00, which established the national program guaranteeing (?) antiretroviral medication; as of 2001, 15 drugs were included in the national compendium.

Panel 5: New Strategies to Mutually Reinforce the Integration of Prevention, Treatment, Care and Support for People Living with and/or Affected by HIV/AIDS.

Moderator: Jorge Pérez, Subdirector, Institute of Tropical Medicine «Pedro Kouri», and Director, Cuban National AIDS Program

Fernando Zacarías, *Program Coordinator, Division of Disease Prevention and Control, PAHO*, noted that care and prevention are not in separate realms, explaining that primary prevention is only the first step in comprehensive care. Provision of care happens at different levels, which must be well linked and coordinated. Comprehensive care includes care at all stages of the disease: asymptomatic (awareness, counseling and prevention), acute (prophylaxis of opportunistic infections and treatment of clinical conditions), chronic (management of sequelae and reduction of viral load), and finally, terminal (palliative care). Zacarías presented the «building-blocks» approach to HIV/AIDS/STI care, which integrates available resources and levels of care into different «scenarios». Scenario I (few resources) includes the minimum standards of care; the ultimate goal is to reach Scenario III (more resources). He concluded by commenting that the challenge of HIV/AIDS is a cycle of no resources, no services, no knowledge, and no priority; the response to the challenge, therefore, must tackle each of these individually.

Peter Figueroa, *Epidemiologist, Ministry of Health, Jamaica*, described the HIV/AIDS situation in Jamaica and highlighted Jamaica's achievements in HIV/STI control. The country has a comprehensive program in place, with the involvement of many different sectors. In recent years, they have expanded STI clinics, contacted investigators and trained thousands of health staff, both private and public. He presented data illustrating that reported cases of syphilis have declined, the use of condoms has increased and the spread of HIV has been slowed. However, he cautioned, HIV/AIDS continues to spread in Jamaica. AIDS is a development problem and not simply a health problem, Figueroa commented. Therefore, the response must be multisectoral and not limited to health. Social stigma and discrimination must be actively combated, policies towards marginalized groups must be reviewed and most importantly, capacity and leadership to implement programs must be built both at the national and parish levels.

Mirtha Sendic Sudbrack, *Ministry of Health, Brazil*, discussed redefining the paradigm of the public health policy to combat the pandemic, which would include: a new profile of the pandemic, decentralization of the care model, universality and diversity, equity, social inclusion, fight against structural violence, intersectorality, social control and monitoring and evaluation. She emphasized the importance of comprehensive care, encompassing prevention (especially for marginalized populations), treatment and social assistance, and care and support.

Bilali Camara, *Medical Epidemiologist, PAHO/WHO - CAREC*, reviewed the past 20 years of the HIV/AIDS pandemic in the Caribbean and discussed the factors that were driving the pandemic in Caribbean countries:

- Social, cultural and behavioral: dysfunctional gender relations, limited life skills for sex education, cultural and religious taboos, discrimination and stigmatization of people with HIV, insufficient condom use and monogamy, commercial sex work due to poverty, discriminatory policies and lack of equity and substance abuse;
- Economic and development: poverty, inequitable income distribution, limited skills and poor socialization, rapid urbanization and ghetto formation, migration, and limited genuine multi-sectoral response;
- Bio-medical, ethical and access to care: limited access to care for some populations, limited standards and systems of care for people living with HIV/AIDS, attitude of

health workers towards people living with HIV/AIDS, and limited legal and ethical frameworks for issues surrounding living with HIV.

To confront these factors, Camara recommended that future health sector reform efforts should develop performance indicators to measure success in terms of integration of HIV/AIDS policies in health institutions and should improve of coverage and quality of care for people living with HIV/AIDS.

John Novak, *United States Agency for International Development*, discussed the integration of treatment, care and support for HIV/AIDS programs, given that the future needs of resources to combat the disease are steadily growing. He emphasized that regardless of stage of pandemic and level of resources available, prevention programs should always be a priority in a national response to HIV/AIDS. Furthermore, he said, integration is a means to an end—not every aspect of prevention programs can be linked to care activities. Since integration requires increased resources to implement, provider staff must be involved in the early design of the program. Novak concluded by listing resources for monitoring and evaluation of integration programs—the UNAIDS Handbook on Monitoring and Evaluation of National Programmes, the WHO/USAID/HRSA/UNAIDS working group for development of standard indicators for treatment, care and support programs, and future (2003 and 2005) UNGASS reports.

Panel 6: Improved Access to Integrated HIV/AIDS Related Diagnosis and Treatment Resources and Drugs, Including Antiretroviral Therapy.

Moderator: Judith Sullivan, Health Specialist, Canadian International Development Agency

Badara Samb, *Global Coordinator of the Accelerating Access Initiative, WHO*, described the Accelerating Access Initiatives, a public/private partnership among developing countries, five pharmaceutical companies and five UN agencies to increase access to a comprehensive package of care and support for people living with HIV/AIDS. Specifically, the Initiative aims to (1) increase availability and access to HIV related drugs and technologies and (2) strengthen national capacity for sustainable and comprehensive continuum of services for the prevention of HIV infection and care and support for people living with HIV/AIDS. Samb said that it was in the interest of countries to provide antiretroviral drugs to people living with HIV/AIDS: among 74 countries worldwide, 38 care plans of action have been developed and 17 negotiations with pharmaceutical companies have been finalized. According to her, universal access to antiretrovirals is not a dream in the developing world; it requires a dynamic process that includes simplifying and standardizing treatments, increasing domestic and international funding, increasing expertise and working towards further price reduction. She concluded by listing the various financing mechanisms available to move ahead with the Initiative, including loans, debt relief and the Global Fund.

Griselda Hernández Tepichin, *Ministry of Health, Mexico*, discussed the advances in HIV/AIDS comprehensive care that have been realized in Mexico. In 1992, antiretrovirals (ARVs) were provided to those covered by the social security system, in 1999 ARVs were provided to children, for the prevention of MCTC and to 1000 adults, and in 2002, 1500 more adults were treated (though this can be increased to 3000). In 2001, Mexico's Accelerating Access Initiative reduced the cost of efavirenz and indinavir by 80% through negotiations with pharmaceutical companies GSK and Roche. Tepichin described these successes as an opportunity for health sector reform in the country. She said that future health sector reform strategies will effectively federalize the health sector, strengthen the steering role of the Secretariat of Health, realize a major functional integration of service provision, separating it from financing, and will increase civil participation.

Dr. José Ricardo Marins, *Ministry of Health, Brazil*, described the Brazilian policy on free and universal access to antiretroviral treatment for people living with HIV/AIDS. The major aspects of the program are: (1) national network of public alternative care services, (2) national networks of laboratory support, and (3) national antiretroviral logistic control system. Since implementation of the program in 1996, mortality has been reduced by 40-75%, morbidity has been reduced 60-80% and the country has saved US\$1.1 billion. The country has also had successes in adherence—a recent study in São Paulo found that there was 69% adherence and that the major factor associated with adherence was the quality of the medical service. Marins concluded by describing the major challenges for the future: improve diagnosis of HIV infection, expand the CD4 and viral load networks, monitor adherence and viral resistance and monitor quality of HIV care.

David Lee, *Deputy Director of Center for Pharmaceutical Management, Management Health Sciences*, described the pharmaceuticals and health supplies management cycle with respect to antiretroviral therapy, which includes:

- Selection: standard diagnosis and treatment guideline and essential drug list;
- Procurement: group purchasing or group price negotiation, product and service quality assurance;
- Distribution: public (integrated vs. vertical) and public-private sector distribution models;
- Use: patient care seeking and adherence to treatment, provider (prescriber and dispenser) incentives and adherence to guidelines;
- Management support: assessment of current or «reforming» health supplies management system, evidence for program decision making, information system, human resource development, technical assistance.

Lee also talked about the need for a policy and legal framework, including a national drug policy, legislation and regulations to address local needs for an antiretroviral therapy program. The framework ought to address registration requirements and procedures and define who can prescribe/dispense, who can be treated and how, and where treatment will occur.

Arachu Castro, *Instructor, Department of Social Medicine, Harvard Medical School/ Partners In Health*, discussed the promise of a mechanism such as the Green Light Committee for improving access to drugs, including highly active antiretroviral therapy. She reviewed existing challenges in access to drugs—inadequate infrastructure to implement complex clinical regimens, potential threat of drug resistance, and the cost and supply of antiretroviral drugs. Castro also reviewed existing models for drug supply management, most notably the Green Light Committee for Multi-drug Resistant Tuberculosis (GLC for MDR-TB). GLC for MDR-TB has been able to: reduce prices through pooled procurement, stimulate the generic industry, increase access and control and involve a wide array of stakeholders. Castro proposed that the GLC model could be used for increasing access to HIV/AIDS drugs; specifically, a GLC could:

1. pool demand and create a competitive market environment,
2. make access to drugs conditional upon program requirements, and
3. provide technical assistance. Additional benefits would include: acceleration in prevention efforts, decrease in poor quality drugs, and improvement in overall

performance of health systems. Demonstration projects and institutional public programs could demonstrate the feasibility of creating a GLC for HIV/AIDS.

Panel 7: Resource Allocation and Funding for HIV/AIDS.

Moderator: José Colón, Sub-Secretary of Technical Planning, Secretariat of Public Health and Social Assistance, Dominican Republic

Logan Brenzel, *Senior Health Economist, USAID/LAC/RSD-PHN*, discussed different ways in which resource constraints impact the selection, phasing and timing of responses to the HIV/AIDS pandemic. She provided an overview of the health context in the Region, noting that total health expenditures as a percent of GDP have decreased slightly while out of pocket spending has increased dramatically. Brenzel also discussed the resource requirements and cost estimates for HIV/AIDS care and support. Scaling up the response to HIV/AIDS will require tradeoffs: among target groups; among types of prevention, care, treatment and support interventions; between HIV/AIDS and other priority health services; and between health and non-health priorities (intersectoral allocations). She discussed the role of cost effectiveness analysis in allocating scarce public health resources, and presented two alternative views that are being discussed presently regarding allocation of public resources to HIV/AIDS interventions: (1) to maximize healthy years of life, or (2) to achieve the maximum number of HIV cases averted. She commented that resource constraints in the LAC Region are real, and this will affect what types of services can be provided and who will benefit. As a result, rationing of services will occur. Brenzel concluded by emphasizing the importance of ensuring that financing of interventions do not exacerbate inequalities, minimize the financial burden on families, and are organized in the most efficient way possible.

Joan Rovira, *Senior Health Economist, World Bank*, discussed the World Bank's position on priority setting and resource allocation for HIV/AIDS. The World Bank's position has usually been that «effective prevention interventions should be a priority of national HIV/AIDS programs», while HAART should only be considered once other most cost effective interventions have been secured to the majority of the population. He walked the audience through the World Bank AIDS Simulation Exercise for the Caribbean, concluding that:

- Costs are high, especially with HAART;
- Some version of prevention and basic care is affordable in all countries;
- Basic care is not an option—it is a cost of the pandemic; and
- HAART is a luxury for most Caribbean countries.

Rovira discussed the assumptions underlying economic analyses as methods for resource allocation, noting that they often fail to recognize the value laden nature of priority setting. He suggested that economic analyses be used as a tool to make values and assumptions explicit and encouraged the use of existing cost effectiveness initiatives developed by the WHO, PAHO and NEVALAT.

Tania Dmytraczenko, *Technical Officer/Health Economist, Partnerships for Health Reform Plus*, reviewed the use of macroeconomic impact studies, meso-economic expenditure estimates and microeconomic costing in evaluating the financial resource implications of HIV/AIDS. Macroeconomic impact studies measure the impact of the pandemic in terms of loss of production and loss of disability adjusted life years (DALYs). Meso-economic expenditure estimates use national health accounts (NHAs) for HIV/AIDS—which tracks the flow of resources in the health sector from the sources of financing to the use of health

funds in the treatment and prevention of HIV/AIDS—to provide critical information of how resources for the pandemic are mobilized, managed and distributed to beneficiaries. Dmytraczenko used the example of Rwanda to illustrate the use of NHA for HIV/AIDS. Finally, she discussed microeconomic costing, which can be used to inform decision making at the program level, using a study on the cost of antiretroviral treatment in Mexico as an example. She concluded by emphasizing that costs are determined by a country's epidemiological profile, the policy environment, the structure of the health system and the service delivery model.

5. SUMMARY OF DISCUSSIONS FROM THE WORKING GROUPS

Working groups met for three two hour sessions, and discussed a range of issues associated with scaling up health systems' responses to HIV/AIDS.

Questions for Working Groups

Session One: In the exercise of the leadership or steering role of Ministries of Health and health authorities at the sub-national levels, what are the key issues that need to be addressed in the reorganization and reform of health systems in order to facilitate the adoption/implementation of strategies for the prevention and care of HIV/AIDS?

Using experience from your countries, propose specific strategies/approaches that will improve the response of health systems to HIV/AIDS in the following function areas:

1. Developing institutional capacity in the context of decentralization to cope with:
 - a. The growing trend towards the separation of functions in financing, insurance coverage and service delivery;
 - b. The appearance of new/multiple public and private actors and markets in health financing and service delivery;
 - c. The greater demands for complex care associated with HIV/AIDS and the relationship between HIV/AIDS and other emerging/reemerging diseases (e.g. malaria, tuberculosis, dengue, hepatitis).
2. Overseeing the harmonization of the provision of health services in an environment of segmentation and fragmentation—i.e. with the co-existence of subsystems and entities that are not integrated within the same subsystem, addressing:
 - a. Different arrangements for financing;
 - b. Different levels of membership/ coverage;
 - c. Different types of service provision.
3. Discharging essential public health functions in the areas of:
 - a. Epidemiological surveillance;
 - b. National programs for disease prevention and control;
 - c. Health promotion and environmental protection.
4. Exercising the regulatory role in:
 - a. Developing and refining national health legislation;
 - b. Regulating health services delivery (certification, training and continuing education);
 - c. Establishing basic standards of care (quality assurance and accreditation programs).

Session Two:

1. According to societal expectation, competencies and institutional responsibilities, what are the specific roles that the various sectors should play in the provision of social protection in health for people living with HIV/AIDS?
2. In accordance with the situation of the health systems, the health sector reform and the development of community based responses in your country, what are the necessary actions to adopt the «Building Blocks» approach for providing comprehensive care to people living with HIV/AIDS?
3. What specific role should bilateral and multilateral, governmental and non-governmental organizations play for improving access to treatments, including antiretroviral therapy? Please indicate any areas in which joint actions are necessary, as well as those in which overlap or duplication might lessen efficiency.

Session Three: How do the innovative principles introduced by reforms in the financing of the health sector impact (positively or negatively) on the perspectives of extension and/or guarantee of access for PLWA at all necessary levels of service provision and care? What other innovations should be introduced and/or stimulated in order to assure this access?

Consider, at least, changes in:

1. Definition of collections of guaranteed services/packages of insured benefits;
2. Transfer of resources from the national/federal level of government to all the state/provincial and local/municipal levels; and
3. Increase of private insurance.

Highlights of Working Group Discussions

The working groups, each composed of eight to ten members, discussed a wide range of potential solutions to the challenges posed by the questions. In the face of decentralization, some groups suggested that governments should try to mobilize grassroots organizations and encourage the involvement of NGOs, ensuring that there is adequate representation from people living with HIV/AIDS. Groups emphasized that NGOs ought to be funded to enhance their ability to provide care and in some cases ought to be specifically trained to carry out HIV/AIDS prevention and treatment, in accordance with agreed upon standards of care.

Some groups felt that local and regional governments need to be involved in planning and structuring an overarching coordinating mechanism. One such mechanism could be «Regional Health Authorities». These authorities could bring together boards of regional health groups to integrate issues associated with comprehensive HIV/AIDS care into what the boards are already doing. This could be one means of building consensus around the need for standards of care; if all relevant stakeholders are involved in the discussion and development of such standards, they would be more likely to enforce them.

In strengthening the health sector's regulatory role, groups suggested that civil society—perhaps including people living with HIV/AIDS as a designated lobbying force—needs to be involved as much as possible. Developing and enforcing standards of care and procedural guidelines for health workers was seen to be a priority. One way to enforce standards of care at the local level could be through public HIV/AIDS care «report cards», through which civil society could hold the public sector responsible for how (their) public money is being spent.

In addition, some groups discussed the needs associated with the development of an adequate national surveillance system. The «pathway» of reporting HIV and AIDS cases needs to be clearly identified. One group emphasized that the ministry of health should ensure that this pathway works, periodically examining the reporting process to ensure that there are no impediments to timely reporting. One group discussed the need to provide some incentive to the person/group that collects surveillance information, perhaps by ensuring that whoever is collecting the information will also be able to use that information for their own purposes.

In discussing the Building Blocks approach, the groups suggested that there ought to be increased community involvement; community members could serve as advocates and peer educators, for example. Some groups suggested that there needs to be more technical assistance—for example, a drug management supply system may need to be developed, which would require that legal issues be resolved regarding who can dispense medications.

Importantly, all groups recognized the need for commitment at the highest level of the government. One group recommended that HIV/AIDS be presented as a «development» issue rather than a health issue, as a means of convincing governments of the absolute need for such a commitment. Ministries of health, or even national governments themselves, need to issue a mandate for the inter-sectoral coordination necessary to ensure that prevention interventions are provided universally and that comprehensive care is provided to all people with HIV/AIDS in the country. It was suggested that a specific «coordinator» might be identified to carry out this task, and that, furthermore, an obligatory coordinating role or function ought to be defined for local and regional governments.

Finally, the groups strongly supported protection for people living with HIV/AIDS, in the form of legal protection from losing a job due to HIV status or being denied schooling, medical protection from unstandardized care (care ought to be the same in both public and private facilities) and financial protection from the high cost of treatment.

6. CONCLUDING REMARKS

The meeting concluded with remarks from **Carol Dabbs**, **Daniel López-Acuña**, **Stephen Corber**, **Winnie K. Mpanju-Shumbusho** and **Yitades Gebre** (MOH-Jamaica), reaffirming the spirit of commitment and collaboration that inspired the design of the forum/consultation.

The closing ceremony acknowledged the broad participation for the event and paid tribute to all the national, international, institutional and individual entities that helped make the event a success. Reference was made to the richness brought by participants from 22 countries of the Region of the Americas—of which 11 were target Initiative countries—and by the representation from 18 international collaboration organizations, including multilateral/bilateral and technical/financing cooperation agencies, national as well as sub-national levels of government, and different sectors of civil society.

While conceding that the meeting succeeded in constructing an enabling environment and common language to bring together two important and complex sub-domains—HIV/AIDS vis-à-vis health sector reform—all the speakers agreed that much more needs to be done to meet the emerging challenges.

Carol Dabbs (USAID) noted that approaches from health sector reform have real applicability in strengthening health systems to combat HIV/AIDS and believed that the challenge posed by the pandemic can be addressed through the work of the Latin American and Caribbean Regional Initiative.

Daniel López-Acuña (PAHO/WHO) pointed out that the fight against HIV/AIDS will act as a «point of intensification» for the new generation of reforms that will be addressing issues such as the steering role of health authorities, essential public health functions, social protection and quality of care. He expressed confidence that the drive to reduce transmission and alleviate suffering in an integrated approach to HIV/AIDS will act as a catalyst, pushing the international community to «think outside the box» in search of solutions that value compassion as well as efficiency.

Winnie K. Mpanju-Shumbusho (WHO) commended the meeting for being a significant milestone in the regional consultation process for developing the global strategy, with far reaching benefits that will go beyond the Region. She believed that the rich experiences gathered would be useful for WHO as it strives to forge a more meaningful role and move into the implementation phase involving communities and civil society at the forefront.

Stephen Corber (PAHO/WHO) remarked on how the phenomenon of HIV/Aids will stimulate diagnosis and research, linking clinical medicine with public health, and the impact it will have on societal attitudes with regard to health and the plight of marginalized communities. He concurred that the meeting served as a vehicle to integrate the efforts from different sectors and disciplines in mainstreaming the prevention, care and treatment of HIV/AIDS so that more people will benefit, and that it is important to continue working towards this common goal.

Yitades Gebre (MOH-Jamaica) summed up the general sentiment that, armed with a wealth of knowledge and lessons learned, it is now incumbent upon technical leaders in the health sector to move on to the next phase, with a firm commitment to action, on a regional basis, as one community.

ANNEX 1: MEETING AGENDA

February 20 (Wednesday)

- 08:30 - 09:00 *Welcome and Registration*
- 09:00 - 09:45 *Opening Ceremony: Manuel Peña (PAHO/WHO), Alex Dickie (USAID/JAM), John Junor (Minister of Health - Jamaica)*
- 09:45 - 10:30 *Key Note Speaker: Paulo Teixeira, The Global Fund Against AIDS, TB and Malaria (GFATM): «The Role of the Global Fund Against AIDS, Tuberculosis and Malaria in Coping with the HIV/AIDS Pandemic, Improving Human Development of Nations and Supporting the Development of a Health Sector Strategy»*
- 10:30 - 11:00 *Coffee Break*
- 11:00 - 12:30 *Panel 1: «Frame of Reference on the Global and Regional Strategies for Coping with HIV/AIDS»*
Moderator: John Junor (Minister of Health-Jamaica)
- Winnie K. Mpanju-Shumbusho Director HIV/SAP/WHO: «The Global Health Strategy for Strengthening the Health Sector Response to HIV/AIDS»
 - Stephen Corber - Division of Disease Control and Prevention / PAHO - «The Present Situation of HIV-AIDS and the and Challenges of Differential Responses vis-à-vis Different Phases of the Pandemic in the Americas»
 - Daniel Lopez-Acuña - Division of Health Systems and Services Development / PAHO: «The Challenge of the HIV/AIDS Pandemic for the Reform and Strengthening of Health Systems and Services in LAC»
- 12:30 - 14:00 *Lunch Break*
- 14:00 - 15:00 *Panel 2: «Perspectives on Prevention and Treatment of HIV/AIDS»*
Moderator: Luiz Loures (UNAIDS)
- Paul Delay (HIV/AIDS Division USAID)
 - Paul Farmer (PIH/Harvard)

- 15:00 - 16:30 *Panel 3: «The Steering Role of Governments and Health Authorities in Strengthening Health Systems Response to the HIV/AIDS Pandemic» Moderator: Carol Dabbs (USAID)*
- Nina Arron (Health Canada)
 - Judy Seltzer (M & L Project/MSH)
 - Lidieth Carballo (Vice Minister of Health-Costa Rica)
- 16:30 – 17:00 *Coffee Break*
- 17:00 – 18:00 *Work Groups-Session 1*
- 18:00 –18:30 *Plenary Session- Work Groups*
- 18:30 *Welcome Cocktail (Portland Room)*

February 21 (Thursday)

- 9:00 - 10:15 *Panel 4: «Social Protection in Health for people living with HIV/AIDS»*
- Moderator: Mauricio Bustamante (Convenio Hipólito Unanue)*
- Pedro Crocco (ILO)
 - Roberto Muñoz, (FONASA-Chile)
 - Gabriela Hamilton (MOH-Argentina)
- 10:15 - 10:45 *Coffee Break*
- 10:45 -12:30 *Panel 5: «New Strategies to Mutually Reinforce the Integration of Prevention, Treatment, Care and Support for People Living with and/or Affected by HIV/AIDS»*
- Moderator: Jorge Pérez (MOH-Cuba)*
- Fernando Zacarías (PAHO/HCA)
 - Peter Figueroa (MOH-Jamaica)
 - Mirtha Sendic Sudbrack (MOH-Brazil)
 - Bilali Camera (PAHO/CAREC)
 - John Novak (USAID)
- 12:30 - 14:00 *Lunch Break*
- 14:00 - 15:45 *Panel 6: «Improved Access to Integrated HIV/AIDS Related Diagnosis and Treatment Resources and to Drugs, Including Anti-Retroviral Therapy»*
- Moderator: Judith Sullivan (CIDA)*
- Badara Samb (WHO)
 - Griselda Hernández Tepichin (MOH-Mexico)
 - Jose Ricardo Marins (MOH-Brazil)
 - David Lee (MSH)
 - Arachu Castro (PIH/Harvard)
- 15:45 - 16:15 *Coffee Break*
- 16:15 - 18:00 *Work Groups - Session 2*
- 18:00 - 18:30 *Plenary Session - Work Groups*
- 19:00 *Performance - Ashe Troupe of Jamaica*

February 22 (Friday)

09:00 - 10:15 *Panel 7: «Resource Allocation and Funding for HIV/AIDS»*

Moderator: José Colón (MOH-Dominican Republic)

- Logan Brenzel (USAID)
- Joan Rovira (The World Bank)
- Tania Dmytraczenko (PHRplus Project)

10:15 - 10:45 *Coffee Break*

10:45 - 12:45 *Work Groups - Session 3*

12:45 - 14:00 *Lunch Break*

14:00 - 14:30 *Plenary Session - Work Groups*

14:30 - 15:30 *Summary of Discussions and Conclusions / Recommendations*

Group rapporteurs and resource persons

15:30 - 16:00 *Coffee Break*

16:00 - 16:30 *Closing Ceremony: Carol Dabbs (USAID) Daniel Lopez-Acuña (PAHO/WHO), Stephen Corber (PAHO/WHO), Winnie K. Mpanju-Shumbusho (WHO), Yitades Gebre (MOH-Jamaica)*

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