This document presents the background and underlying concepts of the Virtual Health Library (VHL) project that the Latin American and Caribbean Center on Health Sciences Information (BIREME) has been implementing throughout the Region since 1998 as the technical cooperation strategy for ensuring equitable access to scientific and technical information in the years to come. It summarizes the main achievements to date in the construction of the VHL, as well as those expected over the next two years. It also proposes areas for discussion and formulates recommendations for the adoption of the VHL, urging the SPP to issue recommendations on the theory and practice of the VHL and to seek the political support necessary for the full implementation of the project.
1. Introduction ............................................................... 3
2. The Virtual Health Library: Definition and Contents .......................................................... 3
3. Constructing the Virtual Health Library ........................................... 5
4. Results at the End of 1999 .......................................................... 6
5. Expected Results at the End of the Year 2000 ........................................... 7
6. The VHL and the Future of Technical Cooperation in Health .......................... 7
1. Introduction

Broad and equitable access to scientific and technical health information is a prerequisite for the full development of health in the Region. Ensuring that activities in planning, administration, research, education, health promotion, and health care are based on scientific and technical information is one of the major challenges in the search for health for all in the Region. The Virtual Health Library (VHL) is the response to this challenge.

Since the endorsement and support of the VHL by the IV Pan American Congress on Health Sciences Information in Costa Rica in April 1998, this strategy is being successfully disseminated and implemented through PAHO's cooperation in scientific and technical health information. This strategy seeks to gradually give the countries of the Region equitable access to relevant, up-to-date health information. To this end, the VHL makes intensive use of information technology, especially access to products and services over the Internet, with a view to overcoming the constraints that have characterized the systems for the organization and dissemination of information.

2. The Virtual Health Library: Definition and Contents

The VHL is a network of health information resources on the Internet. Its development and operation is decentralized and carried out by national and regional institutions of acknowledged repute in the field of health—in particular, the national networks of libraries and documentation centers that make up the Latin American and Caribbean health sciences information network, whose development, coordinated by the Organization through BIREME, has been a major component of technical cooperation in scientific and technical information over the past decade. The VHL represents a renewal and expansion of this technical cooperation model.

The VHL is being established and implemented with compatible methodologies, employing selection criteria and quality control that distinguish it from other information sources on the Internet. It constitutes a reliable source where producers and intermediaries can make their products and information services available and users can interact with or navigate to appropriate information sources that satisfy their information needs. The result is a gradual coming together of producers, intermediaries, and information users. The VHL is intended as mechanism for articulating and realizing this phenomenon.

The principal information sources in the decentralized collection of the VHL can be broken down into the following categories:
Bibliographic databases based on the LILACS and MEDLINE systems that ensure universal access to the most relevant world literature in the health sciences, including the intellectual output of the Latin American and Caribbean countries. To these will be added up-to-date directories of health institutions and specialists in the Region, events in the field of health, and statistical databases on the health situation at different geographical levels.

Collections of electronic publications, including scientific journals, government documents, the reports of international agencies, annals of congresses, theses, and manuals. The VHL will arrange for electronic publication of the most important full texts in the field of health, facilitating access to them from bibliographic databases such as LILACS and MEDLINE. The electronic texts will also contain links to other texts and/or national and international databases.

Information sources oriented in form and content to the decision-making processes of the various government agencies, as well as the community of health professionals and the general public. In addition, the VHL will broadly and systematically organize information sources to support health education courses in a wide range of formats and for the most varied purposes.

Points of access and services for the selective dissemination of information to keep users continually up-to-date in their particular areas of interest. These services will utilize e-mail and websites to communicate with users.

Direct communication between individuals, as one of the most promising aspects of the VHL to meet information demands and needs. This medium also includes news broadcasts, as well as video- and/or teleconferencing.

Integrated operations and navigability, with both up-to-date catalogs for locating health information resources and a controlled vocabulary—Descriptors in the Health Sciences (DCS), which contains health concepts in Spanish, English, and Portuguese.

Constructing and implementing the VHL by incorporating this complex of information sources represents a new model or paradigm for the management of scientific and technical health information. The adoption of the VHL paradigm thus represents a substantial change in the organization and operation of scientific and technical information systems at the national and regional level. Some of the challenges that must be met are:

Making the electronic information sources fully operative, which calls for expertise in information methodologies and technologies.
Expanding the network of partnerships, which chiefly involves bringing information producers and brokers together through an innovative process that eliminates the middleman. This process is characterized on the one hand, by direct user interaction with information sources, and on the other, by greater demand for the preparation and organized publication of information sources that enable users to save time.

Overcoming these challenges is a key aspect of the VHL. That is, as a technical cooperation program, the VHL incorporates the process of learning and capacity-building, in addition to the activities linked with its construction and operation. The decentralized construction of the VHL in the countries of the Region will spur the development of expertise in new information and communication technologies.

3. Constructing the Virtual Health Library

As a specialized center of PAHO responsible for the promotion of the VHL, BIREME is emphasizing two major lines of action. The first is related to the timetable and respective stages over the next five years, and the second to the implementation of the VHL at the geographical and thematic level.

The construction of the VHL involves three major periods of activity:

- 1999-2000, marked by the launching of the VHL, which basically implies adoption of the paradigm and limited operation of some information sources. This process can be implemented using a geographical and/or thematic approach. During this period, technical cooperation consists largely of promotion and training activities.

- 2001-2003, the stage in with the VHL gains momentum. Here, new institutions and/or information sources are independently added to the VHL at the geographical and/or thematic level. Technical cooperation activities during this period are characterized by the promotion and articulation of independent initiatives.

- 2003 and beyond, in which the VHL will serve as the point of reference for health information products and services in the Region. During this period, technical cooperation in scientific and technical information takes on its own dynamic, which coincides with the operations of the VHL.

Constructing the VHL involves the development and operation of information sources that are decentralized both thematically and geographically (including the national, subregional, and regional dimensions):
Geographically, all the countries will participate in the VHL, gradually operating their information products and sources in an integrated manner compatible with that of the other countries. In this dimension, technical cooperation is characterized by the development of national capacity, which includes creating new forms of coordination and organization to facilitate broad participation by the institutions responsible for generating information and the users of that information in the VHL. An important aspect of technical cooperation is the preparation, implementation, and monitoring of national plans, especially during the implementation of the VHL. Moreover, projects and programs for technical cooperation among countries should be implemented at the subregional level to take advantage of the synergy between groups of countries.

Thematical, the construction of the VHL makes use of the forces, capacity, resources, and initiatives linked with areas of health that foster the creation, development, and operation of networks of specialized information sources, whose numbers should grow significantly, especially during the implementation of the VHL. The geographical and thematic development of the VHL is complementary.

In the regional geographical dimension, the VHL is enlarging its virtual space by integrating decentralized initiatives both geographically and thematically. Thus, in the virtual space of the VHL it will be possible to navigate the full network of information sources of the countries of the Region. In other words, technical cooperation will be extended by the very operations of the VHL.

4. Results at the End of 1999

As of October 1999 the VHL has achieved the following:

- The majority of countries in the Region have engaged in activities to promote the VHL, which include the formation of national advisory committees for its implementation.

- Fourteen countries, specifically Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Honduras, Mexico, Nicaragua, Peru, Uruguay, and Venezuela, have taken the first steps toward adopting the VHL.

- Fourteen Brazilian and four Chilean journals in the health sciences are being published in the VHL, and by the end of 1999 five of the major public health journals of Spain and Ibero-America will be added, including those of Brazil and Mexico.
• Approximately 40 information, informatics, and health professionals in the Region have received formal training in the implementation of the VHL.

• Three thematic areas of the VHL—adolescence, toxicology, and public health—are in the implementation phase and will serve as models for the development of other areas in the near future.

• The I Regional Coordination Meeting of the Virtual Health Library will take place at PAHO Headquarters in December 1999.

5. Expected Results at the End of the Year 2000

With the launching of the implementation stage of the VHL, BIREME projects the following scenario for the end of the year 2000:

• At least 15 countries will be operating the VHL, providing access to basic information sources at the national level or on specific subject areas.

• At least 7 subject areas will be available in the VHL at the regional level.

• All people with direct or indirect access to the Internet in the Region will be able to access the relevant scientific and technical literature produced in the Latin American and Caribbean countries.

• Some 50 of the best health science journals from the countries of the Region will be published in the VHL.

• At least 5 countries will systematically publish their official documents, databases, and other government texts on health in the VHL.

• Between 300 and 400 producers and brokers of scientific and technical information will be trained to create and operate information sources in the VHL.

• At least 50 national meetings will be held to coordinate and promote the VHL.

• A gateway or locator will refer users of the VHL to all scientific and technical health information resources of certified quality in the Region.

6. The VHL and the Future of Technical Cooperation in Health

This scenario opens up the prospect that in the next 3 to 5 years the VHL will become the Region's classified database for scientific and technical knowledge in health.
This means that, for the first time in history, there will be a mechanism that will permit universal access to all the relevant sources of health sciences information in Latin America and the Caribbean. This will represent an extraordinary contribution to progress in health.

For this initiative to become the cornerstone of a new cooperation strategy in the field of health sciences information, it is essential that the Member States of PAHO give a mandate and political backing to the Secretariat that will enable it to forge ahead with the construction of the VHL. The inclusion of this topic as an agenda item during the present session of the Subcommittee on Planning and Programming is aimed at promoting discussion within the Governing Bodies of PAHO to elicit recommendations and the political backing for this initiative at the highest level of the Organization. It is suggested that the following topics be considered for discussion in this forum:

- How to sensitize national authorities to the importance of scientific and technical health information as an essential input for the development of health in the next century as well as to the VHL's potential as the most important platform for maintaining a continuous flow of health information to the health systems and society in general?

- How to promote the VHL in the national health systems so that disparities in the access to information among users of all types are not exacerbated but reduced?

- How to incorporate the concept and instrumentarium of the VHL as new strategy for the management and dissemination of scientific and technical health information in technical cooperation programs at the national and regional level and among countries?

- How to strengthen BIREME and the national centers that coordinate and operate the VHL to make them more efficient and effective?

It is hoped that this presentation and discussion within the SPP can lead to conclusions that will orient activities in these and other areas that may arise in the debate.