Executive Report

IV Session of the Scientific Committee of BIREME

December 3rd, 2018

São Paulo – December 2018

Index

The Latin American and Caribbean Center on Health Sciences Information (BIREME/PAHO/WHO) was established in São Paulo, Brazil in 1967 as the Regional Library of Medicine by means of an Agreement between the Government of Brazil and the Pan American Health Organization and with a technical cooperation model based on the essential functions of a medical library. Since 1982 the denomination changed to reflect the expansion of the technical cooperation model, including the outstanding role of providing regional and international visibility to scientific and technical production in health in Latin America and the Caribbean (LA&C). On March 3, 2018, BIREME celebrated 51 years of uninterrupted work with the mission of contributing to the development of health in LA&C countries by means of the democratization of access, publication and use of scientific information, knowledge and evidence.

BIREME is one of the three specialized centers of PAHO/WHO, in addition to PANAFTOSA (Pan American Foot-and-Mouth Disease Center) and CLAP (Latin American Center for Perinatology, Women's and Reproductive Health). Its nature is regional and the work it carries out is at the service of LA&C.

Following is a summary of the aspects related to the institutionality, governance, financial sustainability and main products and services of the Center's technical.

1 Institutionality

1.1 Status of the Center

At the 56th Meeting of the PAHO Directing Council, held in Washington, DC, USA, from 23 to 27 September 2018 the document (Annex CD56/INF/22) with the status of the Pan American Centers was presented.

1.2 Governance

The resolution of the Directing Council of PAHO (CD49.R5) established the structure of the new legal framework constituted by the Statute of BIREME which is under implementation pending the Headquarters Agreement of BIREME in Brazil, to be established between PAHO and the Brazilian Government.

The Statute of BIREME also determines the new structure of governance of BIREME, with the following composition:

A) BIREME Members defined in the categories: a) Member States: all Member States, Participating States, and PAHO Associated Members; b) Participating States: the WHO Member States besides those that are PAHO Members; and c) Participating Organizations: public international organizations with specific qualification related to information and scientific and technical communication. The participation of new members shall be defined by PAHO;

B) Advisory Committee: permanent body of BIREME formed by PAHO and the Government of Brazil as permanent members and by five of BIREME Members as non-permanent members. The non-permanent members were elected as following:

- At the 56th Directing Council (CD56.R4): Guyana, México and Uruguay for a three-year mandate (2019-2021);
- At the 29th Pan American Sanitary Conference (CSP29R9): Barbados and El Salvador for a three-year mandate (2018-2020);
- At the 54th PAHO Directing Council (CD54.R5): Argentina, Jamaica and Peru for a three-year mandate (2016-2018);
- At the 53rd PAHO Directing Council (CD53.R5): Panama and Trinidad and Tobago for a three-year mandate (2015-2017);
- At the 28th PAHO Pan American Sanitary Conference (CSP28.R5): Cuba, Ecuador, and Puerto Rico for a three-year mandate (2013-2015);
- At the 51st PAHO Directing Council (CD51.R2): Bolivia and Suriname for a three year mandate (2012-2014);
- At the 49th PAHO Directing Council (CD49.R6): Argentina, Chile, and the Dominican Republic for a three-year mandate (2010-2012) and Jamaica and Mexico for a two year mandate (2010-2011).

The role of this Committee is to make recommendations to the Director of PAHO on the programming functions, the working plan and the financing of BIREME.

Six sessions of the Committee occurred in compliance with the implementation of the new institutional framework of BIREME, following Resolution 5 of the 49th PAHO/WHO Directing

Council (CD49.R5). The VII Session was held on November 7th-8th, 2018. The following table shows information on dates and participants of previous meetings:

Session	Date	Location	Participants
VII AC	November 7th-8th 2018	BIREME	PAHO (EIH a.i., BIR) Countries (Brazil, **Argentina**, Barbados, El Salvador, Peru)
VI AC	February 2nd 2017	BIREME	PAHO (AD, KBR, BIR) Countries (Argentina, Jamaica, Panama, **Peru**, Trinidad and Tobago)
V AC	December 3rd 2014	BIREME	PAHO (AD, KBR, BIR) Countries (**Cuba**, Ecuador)
IV AC	November 26th 2013	BIREME	PAHO (KMC, BIR) Countries (**Brazil**, Bolivia, Cuba, Ecuador, Puerto Rico)
III AC	December 5th 2012	BIREME	PAHO (KMC, BIR) Countries (Argentina, **Brazil**, Bolivia, Chile, Dominican Republic, Suriname)
II AC	October 25th 2011	BIREME	PAHO (KMC, PWR/BRA, BIR) Countries (Argentina, **Brazil**, Chile, Dominican Republic)
I AC	August 31st 2010	PAHO/HQ	PAHO (D, AD, DD, AM, KMC, LEG, PWR/BRA, BIR) Countries (Argentina, **Brazil**, Chile, Dominican Republic, Jamaica, México)

Note: Country in bold indicates the Chair of the Session

The VI CA Final Report is available.

C) Scientific Committee: permanent body of BIREME formed by at least five scientific information specialists appointed by the Advisory Committee of BIREME. Its function is helping to maintain and improve BIREME's capacity to follow the development of methodologies, technologies, products, services, and events that characterize the national and international systems of information and scientific communication and the challenges for their contextualization in the LA&C. The process of indication of its members by the national authorities, appraisal, and nomination of members of the Scientific Committee was concluded in December 5th 2012, in the III Session of the Advisory Committee. The four members named were indicated by Canada, Honduras, Trinidad and Tobago and Brazil and, a fifth member from the National Library of Medicine of United States.

Three sessions of the Scientific Committee were held. The fourth session is planned to take place on December 3, 2018. The following table shows information on dates and participants of previous meetings:

Session	Date	Location	Participants
IV CC	Planned to occur on December 3rd, 2018	BIREME	PAHO (EIH a.i., BIR) Countries (Brazil, México, Jamaica, Colombia, Cuba and Costa Rica)
III CC	December 8th, 2017	BIREME	PAHO (AD, KBR, BIR) Mexico, Jamaica, **Cuba**, Colombia, Costa Rica and Brazil
II CC	August 14th 2014	BIREME	PAHO (AD, KBR, BIR) Countries (Brazil, **Honduras**, Trinidad and Tobago, National Library of Medicine (USA)
I CC	July 25th 2013	BIREME	PAHO (AM, KMC, BIR) Countries (**Brazil**, Canada, Honduras, Trinidad and Tobago, National Library of Medicine (USA)

Note: Country in bold indicates the Chair of the Session

The III CC Final Report is attached.

D) Secretariat: permanent organ of BIREME, formed by the Director and the technical and administrative teams of the Center, with 37 collaborators. It is responsible for the management and execution of the programming functions of BIREME's biennial work plan 2018-2019 that was developed in coordination with the PAHO/WHO Department of Evidence and Intelligence for Action in Health (EIH).

2 Biennial Work Plan (BWP)

2.1 BWP 2018-2019

BIREME's Biennial Work Plan follows PAHO structure which is organized by Initiatives, Projects and Tasks under the Expected Result 4.4.3 (Implementation of the regional knowledge management strategy) of the Program and Budget approved by PAHO in accordance with the following.

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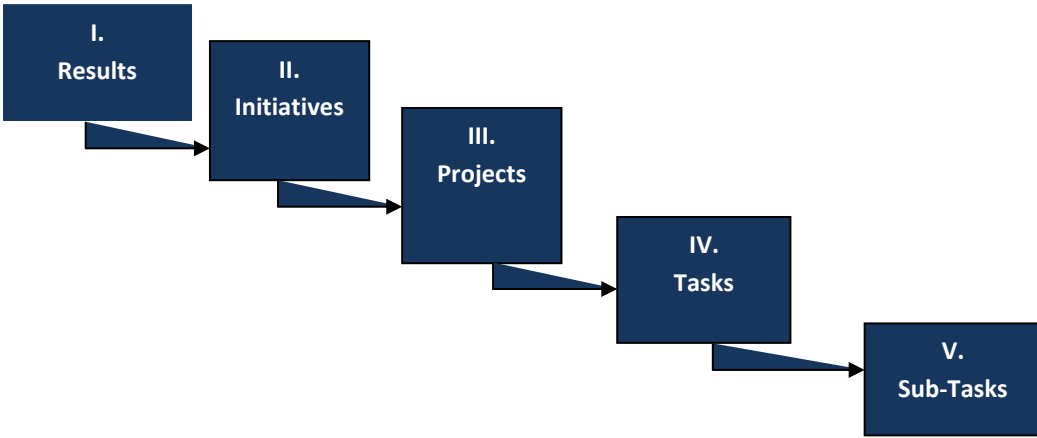
Summary of BIREME Initiatives and Projects

The following table presents the Initiatives and Projects of the BWP 2018-2019 in a structured form.

Initiatives and Projects
BIR 01 - Information and knowledge management
Strengthening of the Collaborative Network for Information Management
Thesaurus DeCS compatible with MeSH, interoperable with UMLS and extended with other terminology categories
VHL as strategy to access scientific and technical health information for LA&C
LILACS as the main index of scientific and technical output of LA&C
Management of reference information sources of the VHL
Experts and Institutions Directory
SciELO Public Health Collection developed, expanded and strengthened
Ethics Research Committee Management Platform - ProEthos
Global Index Medicus (GIM) operating in coordination with the Regional Offices and WHO Headquarters in Geneva
Support for priority Portuguese speaking countries (key countries)
Target audience trained in scientific communication topics
Distance Learning (EAD) and Open Educational Resources
Promotion of access and use of health information
Bibliographic control and visibility of the scientific and technical output in health of LA&C
BIR 02 - BIR 02 - Information Services
Knowledge translation service to reduce the gap between scientific knowledge and practice in health
VHL reference and user service
Customized information services - MyVHL
Full-text document access service
VHL search and retrieval interface
Information for Primary Care Teams - Blue Memory
Information for Primary Care Teams - SOF
BIR 03 - Intelligence in Health Sciences Information
Terminologies in health sciences to support the organization and exchange of scientific and technical knowledge
Infometrics of the scientific and technical output of LA&C published in LILACS
Search tool for scientific and technical information contextualized in health information systems
Publication of national, thematic and regional profiles of the scientific output of LA&C integrated into the VHL
Knowledge showcases in priority health topics
BIR 04 - Leadership and Management of BIREME
BIREME institutional framework implemented and in full operation
Implement CRICS10
Management System implemented according to PAHO institutional structure, recommendations and rules
Risk assessment and mitigation plans clearly defined and executed
BIREME's communication plan developed and implemented
Effective HR Management
Compliance with PAHO procedures and recommendations related to the administrative management of the Center
IT infrastructure available and up-to-date according to PAHO-driven standards and management methods
Development and monitoring of BWP
Planning and financing of general operating expenses
Learning plan implemented

A summary of some of the progresses in each initiative of the work plan is provided as follows.

Initiative BIR.01 – Knowledge management

- The VHL model continues to be developed and adapted to the new needs of the Network. The model is applied to over 100 national, thematic and institutional VHL initiatives in 30 countries. The new VHL Network portal will be launched at and will have as its function to support the application of the VHL Model of health information and knowledge management as well as a space for the VHL Collaboration Network.

- The Regional Initiative Traditional, Complementary and Integrative Medicines VHL of the Americas (MTCI Americas VHL) was launched in 2018 with the participation of 14 countries (http://mtci.bvsalud.org) and the Nursing VHL was renewed also involving several Latin American countries and Portugal. (http://bvsenfermeria.bvsalud.org)

- LILACS was updated weekly with contributions from its Collaboration Network, reaching 835 thousand records indexing articles from over 900 journals and other types of documents. The management of LILACS updating, maintenance and publication processes keeps fully integrated into the new system "Integrated Service of Management of Referential Sources (FI-Admin)" developed by BIREME

- The DeCS is updated annually, according to the MeSH update maintained by the NLM, in the English, Portuguese and Spanish languages. The Spanish version of LA&C has the collaboration of the Faculty of Medicine of the University of Chile and the Spain version with the collaboration of the *Instituto de Salud Carlos III*. In 2016 the MeSH translated into French was added to the VHL, in addition to the translation of the exclusive DeCS categories (Public Health, Homeopathy, Health Surveillance and Science and Health) in collaboration with Rouen Hospital in France with early updates. DeCS has been extended with new descriptors related to cross-cutting priority themes (gender, ethnicity, human rights and equity). Descriptors related to eHealth and Universal Access and Coverage in Health are in the final stage of being incorporated into the thesaurus.

- The technical cooperation of BIREME has been maintained in the development of regional and international projects such as ProEthos, for the systematization of the activities of the research ethics committees, CARPHA, for access to evidence in health by the countries of the English Caribbean and the Global Index Medicus, for organizing and accessing scientific production in low- and middle-income countries.

- The technological platform for managing the VHL and its sources of information is being constantly updated using modern technologies and open source platforms.

- An interface for visualizing the data of authors and institutions is being developed, according to the publications available in LILACS, promoting a directory of experts and

institutions based on the DeCS/MeSH issues chosen in the document indexing process.

- We plan to launch during CRICS 10 the management and publication service of open educational resources, integrated to the CVSP and the VHL, as well as the thesaurus management service.

- In 2018, around 400 researchers, health professionals and postgraduate students were trained in Scientific Communication through face-to-face courses in Brazil and other countries of the Region.

✓ **Initiative BIR.02 – Information Services**

- Online courses on access and use of information were developed in the Virtual Campus of Public Health (CVSP from the Spanish acronym) to support health decisions, in Spanish and Portuguese language. More than 18 thousand students have already participated at the course, from January 2017 to October 2018.

- In 2018 there were six face-to-face activities of access to the VHL oriented to health decision-making informed by evidence, for students, librarians and health professionals in Brazil (3), Peru (1), Haiti (1) and Uruguay (1).

- The Regional Portal of the VHL is in regular operation and update and registered in 2018 (until September) more than 7.3 million sessions (accesses, searches) that were close to 33 million pageviews. In addition, the Knowledge Showcases were included in this Portal to highlight relevant information on priority issues for the Region, such as the case of Zika, Yellow Fever and Measles;

- The User Service regularly addressed the demands on access and use of the services offered by BIREME through the VHL and developed many search strategies to subsidize systematic reviews and other types of research.

- Fourteen instructional projects were developed for distance courses on the diagnosis, prevention and treatment of diseases of the neglected diseases in the Americas, such as Rabies, Trachoma, Visceral Leishmaniasis, Tegumentar Leishmaniasis and Helminthiasis, Schistosomiasis. These courses are available in the Virtual Campus of Public Health.

- The Virtual Services of the VHL (MyVHL) were launched in August 2017 allowing users to identify themselves to use selective information dissemination services. These services also allow knowing peoples' profile of interest on the VHL, making it possible to offer specific services by user segment. MyVHL has already over 20 thousand active

users, with an average of 1,900 users using services monthly. During CRICS 10, the MyVHL app for mobile devices will be launched for Android and iOS operating systems.

- The e-BlueInfo APP - Information Platform for Health Practice: Information for health in the palm of the hand, which will have documents intended for primary health care professionals in Brazil and Peru, is scheduled for launch during CRICS10.

- A project is being developed to renew the information search and retrieval interface in the VHL, according to the niches of its target audience: health professionals, students, researchers and managers.

✓ **Initiative BIR.03 - Intelligence in Health Sciences Information**
- Specialized tools have been adopted in data management, quality and visualization, allowing to improve the metadata stored in LILACS and generate and visualize infometric indicators of the scientific and technical health output in LA&C.

- A new conceptual model and a new systems architecture are under development to promote a framework for the governance of the data available in the VHL information sources

- Techniques of extraction, transformation, aggregation, analysis and visualization of data were applied to generate indicators of the scientific and technical production stored in LILACS and Medline related to the Research Institutes of the State Secretary of Health of São Paulo and to the areas of Human Resources in Health, Health Systems and Services and Water Systems and Basic Sanitation in 2030 Agenda and contribution indicators of LILACS Cooperating Centers.

- The VHL Infobutton service has been developed, which follows international standards for the exchange of data with Electronic Health Record Systems, promoted by HL7 (Health Level Seven International), which allows the recovery of the scientific evidence available in the VHL in accordance with the context of the patient's medical history. A proof of concept is being developed with the PAHO/WHO Collaborating Center Hospital Italiano de Buenos Aires.

- A DeCS/MeSH suggestion service is being developed, based on title and summary of documents, which facilitates the process of indexing documents and contribution for the future development of automatic indexing system.

- ✓ **Initiative BIR.04 – Leadership and Management of BIREME**
  - ▪ Effective operation of the Governance Committees of BIREME (Advisory and Scientific Committees) with the participation of professionals from government institutions and specialists from the countries of the Region in coordination with the recommendations of PAHO/WHO Directive Committees;
  - ▪ The management of BIREME continues to be effective and in line with the policies and procedures of PAHO / WHO within the framework of its new institutional framework in process of implementation. The CNPJ (*Cadastro Nacional de Pessoa Jurídica*) of BIREME is updated in the national bodies, mainly in the *Receita Federal*;
  - ▪ Implementation of 3 (three) internal groups (Committee of the Scientific Program, Satellite Events and, Management and Logistics) for the development of the activities for the realization of the 7th Session of the Regional Coordination Meeting of the Virtual Health Library (VHL7) and the 10th Session of the Regional Congress on Health Sciences Information (CRICS10) in São Paulo, Brazil, from December 4 to 6, 2018 according to the lines of action and budget estimated in the event management mechanism of PAHO/WHO (EMT - Event Management Template) already internally formalized;
  - ▪ BIREME's formal communication channels are dynamic and operational (institutional page, intranet, facebook, twitter and news bulletin) with highlight for the 6 (six) texts monthly published in 3 (three) languages (Spanish, English and Portuguese) in the BIREME Bulletin ((http://boletin.bireme.org/), which is being disseminated to the institutions that are part of the VHL and LILACS Networks, governmental entities and throughout PAHO/WHO;
  - ▪ Regular actions for the development of competences and strengthening of the organizational climate such as training programs with the support of HRM of PAHO/WHO Headquarters and of External Consultancy, work gymnastics twice a week (with the support of local university, UNIP - *Universidade Paulista*) and the monthly Cafes with Ideas that include the activities of exchange of information and knowledge for learning and the celebration of birthdays collectively;
  - ▪ BIREME's IT infrastructure was updated with 10 (ten) desktops, 2 (two) notebooks and 1 (one) projector for the DIR BIR office and connectivity remains effective. The facilities for technical cooperation and ADM are aligned with the rules of PAHO/WHO. The backup and monitoring of the products and services of the technical cooperation continue in continuous improvement. In addition to the access system to the building

where BIREME is located, a specific access system to the 12th floor was also implemented, aiming at improving security of the facilities; and

- The 18-19 PTB continues to be monitored with the support of biweekly meetings to follow project developments and the respective use of regular and non-regular financial contributions (grants) and the corresponding operation of PAHO/WHO ERP system, the WD/PMIS.

BIREME continues its repositioning in Latin America and the Caribbean and during 2018 missions were carried out with emphasis on priority countries Haiti, Paraguay, Guatemala, Honduras and Nicaragua), as well as others such as Cuba, Panama, United States, Trinidad and Tobago, Colombia, Peru and Uruguay.

2.2 BIREME financial structure

The establishment of a stable and balanced structure for financing BIREME was one of the main motivations for the BIREME's institutional reform. The Statute of BIREME foresees that this structure of financing is analyzed and recommended by the Advisory Committee of BIREME, also recommending the financial contributions from Brazil and from PAHO, and from the participating members of BIREME.

The following table shows the distribution of financial contributions received in 2018.

Types of Funds	U$	%
Contribution PAHO HQ - 2018	$1,929,000.00	47%
Technical Cooperation Projects	$ 510,403.31	13%
Resources PAHO BRA as support to BIREME's Work Plan	$ 125,000.00	3%
WHO Funds	$ 25,000.00	1%
Contribution MoH - 2018	$ 918,459.49	23%
Balance from Biennium 16/17 Services and Projects	$ 563,337.69	14%
TOTAL	**$ 4,071,200.49**	**100%**

In the last two biennia (2016-2017 and 2018-2019) the financing of the BIREME Biennium Work Plan (BWP) reached a balance between the regular contributions of its main institutional partners and non-regular contributions from regional technical cooperation projects also within the framework of the Terms of Cooperation of PWR Brazil in the country (16%). These projects also

result in Products and Services for the use of the countries in the Region. PAHO/WHO and the Ministry of Health (MoH) of Brazil maintained their contributions for the improvement and technical cooperation of BIREME in 47% and 37% respectively. From the affiliation of new members to BIREME, as established in its Statute, the funding sources will be diversified. At the same time, BIREME is making efforts to mobilize additional resources through projects, agreements and services as foreseen in its proposal for a Resource Mobilization Plan to guarantee the financial sustainability of the Center.

3 Technical Cooperation: main products and services

BIREME promotes the democratization of access, use and exchange of scientific and technical health information, contributing to strengthen health systems and services in the countries of Latin America and the Caribbean (LA&C), in convergence with national and regional strategies of the 2030 Agenda and Universal Health Coverage. Founded in 1967 as a specialized Center of the Pan American Health Organization / World Health Organization (PAHO/WHO), BIREME guides its initiatives, projects, products and services by means of lines of actions with all LA&C countries, Portugal, Spain and Portuguese speaking countries in Africa and Asia, involving more than one thousand academic and governmental libraries and over two thousand institutions in the health area.

Increasing the visibility of the scientific production in health from LA&C countries by promoting the registry and indexing of their scientific and technical literature in regional, national and international databases, adopting Open Access strategies, producing data survey for assessing scholarly communication in health, and developing web technologies and interfaces for information search and retrieval are part of the actions promoted by BIREME**.**

Additionally, **developing capacity to make evidence-informed decisions in health**, such as training activities on the access and use of evidence to guide policy and decision making in health

and implementing instructional design for distance learning courses integrated to the Virtual Campus of Public Health (CVSP from the acronym in Spanish).

Developing and implementing actions on knowledge management to strengthen health national policies and strategies by improving the capacity of institutions on knowledge management; developing information products and services designed to facilitate the information access and knowledge application in order to meet the strategic priorities and health objectives.

Applying knowledge discovery process to extract potentially useful information and generate indicators on health scientific and technical literature from data available in the Virtual Health Library (VHL) information sources).

Moreover, **developing Knowledge Translation products and services** to bridge the research-to-practice-gaps by means of special services on search, analysis, synthesis and application of scientific knowledge to support health decision-making processes and helping to reduce the so-called "know-do-gap". And equally important, **implementing Knowledge Platforms to integrate and manage research data** ease measurement and analysis of research activity and facilitate the access to comparative information on the countries' priority health issues.

Regional Program & Products

VHL -Virtual Health Library

The VHL (http://www.bvsalud.org) is the main program for health scientific and technical

information management in LA&C promoted and coordinated by BIREME since 1998. It is a regional public good built and operated collectively between institutions and
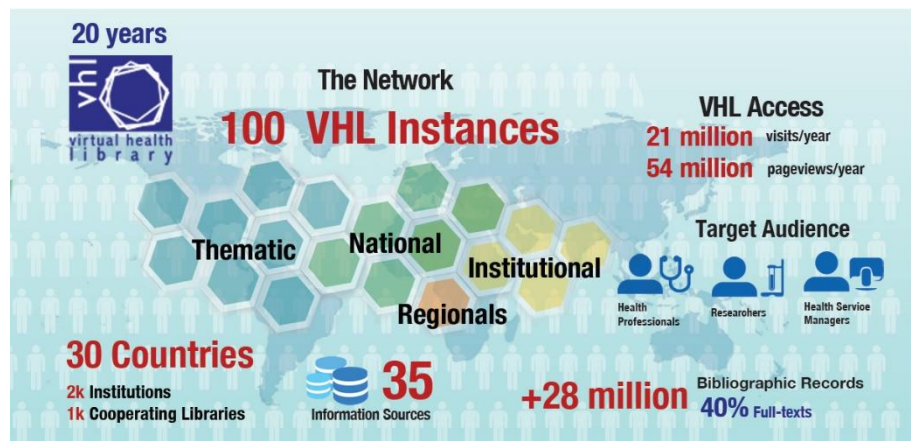
professionals from 30 countries in the production, intermediation and use of scientific and technical information in health. The VHL is a wide network of open access sources of health information with over 1 million visitors per month (aimed mainly at students, researchers and decision makers) from all regions in the world, especially from the LA&C. Some characteristics that define the VHL are:

- VHL Regional Portal - integrated and free access to the collection with over 30 information sources, products and services in health of the VHL Network;
- National VHL Instances – countries' portals aiming at national health priorities;
- Thematic VHL Instances - portals aimed at priority areas such as Public Health, Social Determinants of Health, Cancer Prevention and Control, Dentistry, Nursing and many others
- Institutional VHL Instances – portals aiming at the organization and dissemination of scientific and technical information produced by health or educational institutions as Ministry of Health, Secretary of Health, Institute of Health and Health Sciences Colleges
- Interoperation with networks and information systems: CVSP, SciELO (Scientific Electronic Library Online), EVIPNet (Evidence-informed Policy Network) and the National Library of Medicine of the United States (NLM).

LILACS - Latin American and Caribbean Literature in Health Sciences

LILACS (http://lilacs.bvsalud.org) is the most relevant and comprehensive index of scientific and

technical literature in health of LA&C countries. For over 30 years LILACS has been contributing to increase the visibility, access and quality of health scientific output in the Region:
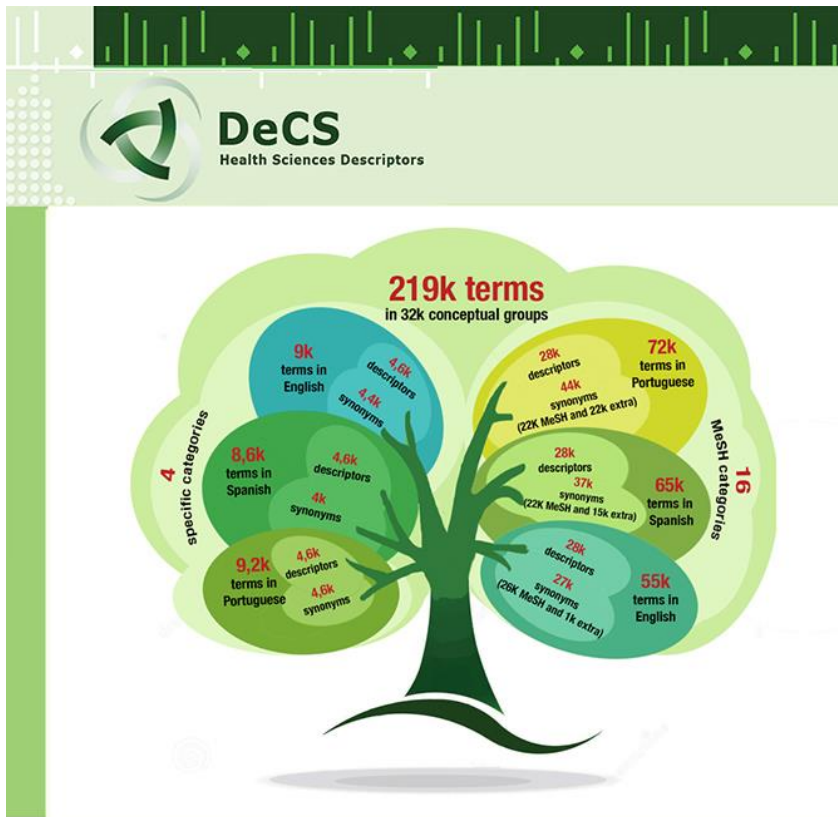
- It is available in open access and receives more than 1 million visits per month, aimed mainly at students, researchers and health professionals;
- It gathers over 830 thousand documents published in LA&C region, including articles of 923 journal titles, theses, monographs and gray literature;

- LILACS complements MEDLINE/PubMed and increases the visibility and impact of the scientific production of LA&C – around 923 LA&C journals are indexed in LILACS;
- LILACS is cited in thousands of systematic reviews as research source for Latin-American primary studies.

DeCS – Health Science Descriptors

DeCS (http://decs.bvs.br or http://decs.bvsalud.org) is a controlled vocabulary that maintains and regularly updates the terminology in health sciences in Spanish, Portuguese and English.

- Available online in open access, aimed mainly at students, researchers and health professionals, and by means of a no charge license of use upon request
- It receives circa 300 thousand visits per month
- It is the only yearly updated standard vocabulary for indexing scientific and technical health literature in Spanish and Portuguese in the world
- It includes the translation of the Medical Subject Headings (MeSH/NLM) into Portuguese and Spanish
- DeCS is an extended and enriched thesaurus with additional categories maintained by BIREME, such as Public Health, Health Surveillance, Homeopathy, and Science and Health, also translated into French
- The translations of MeSH/NLM into Portuguese and Spanish are integrated into the Unified Medical Language System (UMLS/NLM) of the USA

- DeCS provides Web services that facilitate the use of the MeSH/DeCS terms for indexing contents in health information systems
- It is a tool that allows searching MEDLINE and other VHL information sources by subject headings in Spanish, Portuguese, French, and English
- DeCS is an ever-growing vocabulary through annual updates and by receiving suggestions
- The translations into Spanish and French rely on the collaboration of the Central Library of the Medical School of the University of Chile; *Biblioteca Nacional de Ciencias de la Salud* (BCNS) of *Instituto de Salud Carlos III* (ISCIII) of Spain's *Ministerio de Economía y Competitividad*; and *CHU Hôpitaux de Rouen*, France. The French MeSH terms are translated by *Institut National de la Santé et Recherche Médicale* (INSERM), France.

CRICS - Regional Congress on Health Sciences Information

CRICS, since its first edition in 1992, is one of the most important and consolidated international congress on scientific information and periodically addresses the state of art in the areas of information,

knowledge and scientific evidence management. It includes scientific communication, library science, information science, methodologies and information technology and its applications for national research systems, education and health.

The VHL Regional Coordination Meeting which is the most important exchange forum of the VHL cooperative network is held as a preliminary event to each CRICS and analyzes the VHL status of development at regional, national, thematic and institutional levels.

Both events are coordinated by BIREME in cooperation with the national and local institutions of the host countries.

The 10th edition of CRICS will be held in Sao Paulo, Brazil, on December 4 to 6, 2018, with the theme Advancing Towards the 2030 Agenda: Contributions of evidence and knowledge. In this

framework, VHL7 and several satellite events will be held (Scientific Editors Meeting, the RedDes Meeting, The use of information technologies for Primary Health Care, PAHO/WHO K-Centers Meeting and PAHO/CVSP Meeting).

For more information access the website: http://www.crics10.org.

Institutional relationship

BIREME develops technical cooperation initiatives with institutions and organizations at local, national, regional and international levels. Some of them are listed below:

- Government institutions related to health, science and technology, environment and other areas – Ministries, Science and Technology National Councils, Secretaries and State and Municipality Departments
- Research Foundations
- Academic institutions in the health sciences area, scientific editors of LA&C journals, researchers, authors, and Health Sciences graduate students
- Organizations, Scientific Associations and Societies on Public Health and related areas.

Human Resources and Cooperative Network

BIREME's intellectual capital is composed by professionals with expertise in information management, development of methodologies and technologies for the management of scientific and technical information, and an administrative infrastructure which includes information technology and building infrastructures.

The Center follows the strategic planning of the PAHO/WHO, also considering policies, procedures and internal controls to assure transparency and accountability.

Moreover, the cooperative work undertaken through the networks of individuals and institutions in information and knowledge management and sharing present in 30 countries with around 2400 institutions stands out. The network offers flexibility on expansion and inclusion of new members, as well as interchange of ideas, experiences and self-organization knowledge.

The main Networks which BIREME coordinates, promotes and interoperates with are:

- Cooperating Centers of the VHL information sources and services and users of information systems and methodologies developed by BIREME – there are more than one thousand libraries of institutions in LA&C countries;
- Thematic and National VHL, such as BiblioSUS (libraries that operate in the Unified Health System of Brazil), EnfAmericas (International Networks of Nursery in the Americas), RENICS (Health Sciences Information National Network, Argentina) Traditional, Complementary and Integrative Medicine network (MTCI); Developers network (RedDes); Open Educational Resources network (REA)
- Associated networks: CVSP, SciELO, EVIPNet, and PAHO/WHO Collaborating Centers, especially INFOMED-Cuba and Hospital Italiano de Buenos Aires, Argentina.

BIREME and its products and services applied on successful initiatives

✓ **One-stop-shop portals to fit specific information needs and target**

▪ **Caribbean Public Health Agency - CARPHA**

In a coordinated initiative led by CARPHA, the

CARPHA EvIDeNCe Portal is under development using the VHL search interface. This portal aims to provide a single one-stop-shop solution, where a single query through this interface will produce consolidated user-friendly results. It is a way to make available both published journal articles and grey literature to health technical staff, health authority policy and planning staff, health system stakeholders and university staff.

▪ *Programa Telessaúde Brasil Redes* [Telehealth Brazil Networks Program]

Development and management of information sources such as "Questions and Answers" as a

result of Teleconsulting service offered to the Health Primary Care Network of Brazil. It is a concrete example of knowledge translation, since the answer is straightforward, with an appropriate language aimed at professionals who referred the question and based on the best evidence available. There are more than one thousand questions and answers available at http://aps.bvs.br, which are mainly accessed by primary care teams of the Brazilian Health System. A new portal and an application are being developed to be launched at CRICS10.

- **Global Index Medicus**
- The Global Index Medicus (GIM) provides worldwide access to biomedical and public health literature produced by and within low- and middle-income countries. The main objective is to increase the visibility and usability of this important set of resources.
- The material is collated and aggregated by WHO Regional Office Libraries on a central search platform allowing retrieval of bibliographical and full text information. Through the GIM portal, users can search across 1.914.206 bibliographic and full text records produced by these countries, a 4% increase on the number of registries since the last Advisory Committee meeting (VI AC).

✓ **Customized web solutions to improve health information management**

- **REBEC – Brazilian Registry of Clinical Trials**

REBEC (http://www.ensaiosclinicos.gov.br/), coordinated by ICICT/Fiocruz, is the first clinical trials registry database in Portuguese language in accordance with ICTRP/WHO criteria. BIREME is responsible for the technological platform development – OpenTrials – used by REBEC, which is free and open source software available for download, use and customization by any country or region.

- **Annotated Medicines Hyper Lists**

The MedList is a component of the Regional Platform for Innovation and Access to Health Technologies (PRAIS - http://www.paho.org/prais), coordinated by PAHO HSS/MT Area. It aims at managing and publishing Drug Lists.

- **ProEthos Plataform**

The ProEthos Platform is coordinated by PAHO AD/KBR area and aims to facilitate the review process of ethics committees and organize them with the support of information and communication technologies (ICT).

- **BRISA – Regional Database of Health Technology Assessment Reports of the Americas**

The technological platform and the registry methodology for organization and dissemination of the reports were developed by BIREME, in coordination with the Technical Unit of Medicines and Technologies in Health of the PAHO/WHO Department of Health Systems and Services (HSS), which acts as the Secretariat of RedETSA - Health Technology Assessment Network of the Americas.

The reports are published by Ministries of Health and other institutions in charge of these evaluations in Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, El Salvador, Peru and Uruguay and are available online, through the BRISA website (http://sites.bvsalud.org/redetsa/), which allows retrieving them by searching by titles, abstracts, keywords, etc. All the reports are classified by DeCS terms, maintained by BIREME, enhancing the recovery of these contents in the Portuguese, Spanish, English and French languages.

Another BRISA facility is that users can access ETS reports using filters by main topic, publishing institution, country of publication, language and year of publication. They also have the possibility of retrieving related contents available in the databases of the Virtual Health Library, such as Medline and LILACS.

- **Repository of Legislation on Risk Factors in Non-Communicable Diseases**

The epidemic of Noncommunicable Diseases (NCDs) is directly related to tobacco use, the

harmful use of alcohol, unhealthy diet and physical inactivity. The exposure of the population to these four risk factors can be reduced with regulatory measures based on evidence and aimed at protecting the health of the population.

The REGULA Initiative of the Department of Noncommunicable Diseases and

Mental Health (NMH) of PAHO aims to strengthen the institutional capacity of the national health authority in the Member States to regulate the risk factors of NCDs in the Region of the Americas. Americas.

With the idea of supporting the Member States in the implementation of these activities, the Department of Noncommunicable Diseases and Mental Health (NMH) with the collaboration of the Office of the Legal Counsel (LEG) of PAHO, carried out in 2015 a study of systematization and legal analysis of the legislation on NCD risk factors in 19 countries in Latin America (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela).

In order to make the legislation compiled by NMH available to Member States, to promote its permanent updating, as well as to promote an efficient mechanism of systematic dissemination and to promote analysis by comparison, the Repository of Legislation on Risk Factors in Non-Communicable Diseases was developed. -Transmissible, in coordination with BIREME, available at http://sites.bvsalud.org/legislacion/factores-de-riesgo/

✓ **Fostering information and knowledge management on health organizations**

   ▪ **Ministry of Health of Brazil**

There are many technical cooperation projects between BIREME and the Brazilian Ministry of Health, taking into account several technical cooperation agreements between PAHO and the

Brazilian government. In addition to the development of the national VHL

(http://brasil.bvs.br/), thematic web portals such as Public Health (http://saudepublica.bvs.br),

Infectious Diseases
(http://www.bvsdip.
icict.fiocruz.br), Primary

Health Care (http://aps.bvs.br) and others (see other VHL web portals), BIREME has promoted, in the context of technical cooperation, some innovations for the VHL as a mobile interface and web accessibility in accordance with the W3C (World Wide Web Consortium). The first portal of the VHL that reached the highest level of accessibility standards (W3C Level AAA) was the institutional VHL of the Ministry of Health of Brazil (http://bvs.saude.gov.br/).

- **SES-SP – Secretary of Health of the State of São Paulo**

SES-SP coordinates the Knowledge and Information Network of Research Institutes of São Paulo

State and operates an institutional VHL with BIREME collaboration. Informetric analyses are applied in order to monitor the scientific and technical output of those

Institutes.

- **SMS-SP - Secretary of Health of the Municipality of São Paulo**

Besides the SMS-SP VHL, BIREME also collaborates with the implementation of *Programa*

Telessaúde Redes do Município de São Paulo,
which is integrated to the nationwide initiative. This
is an example of knowledge management strategy
applied at the municipality level.

✓ **Promoting capacity building and continuous learning in health**

- **Scientific Communication courses**

Courses on Scholarly Communication in Health Sciences aimed at researchers, scientific editors, health professionals, graduate students and other stakeholders cover topics such as writing of scientific papers, actors of the editorial chain, business models of health journals, Open Access,

journal selection, authorship and coauthorship, ethics in scientific experimentation and writing, peer review, conflicts of interest, assessment of scientific journals, traditional and alternative metrics and novel trends in scholarly publishing.

- **Distance learning courses**

Development of instructional design of distance learning courses and integration of scientific evidence as basis for the contents of several courses, such as: *Leishmaniasis visceral en las Américas, Geohelmintiasis: prevención, tratamiento y control*, *Profilaxis Post Exposición de la Rabia*, *Políticas informadas por evidencias.* Recently, the self-study course on *Acceso y Uso de la Información Científica en Salud* [Access and Use of Scientific Information in Health] in Spanish was launched, and it is available at the Virtual Public Health Campus (CVSP).

✓ **Selective dissemination of information to empower users and promote equitable access to information**

- **Specialized Search Service**

Literature clipping, drawn up in cooperation with experts, aimed at the most diverse needs, as a showcase of the scientific production of the country or area on priority issues such as infection by Zika Virus, Safe Water and Sanitation on the 2030 Agenda for Sustainable Development; build search expression and documentation for systematic reviews; support in the development and localization of documents for policy informed by evidence in cooperation with working groups.

- **Infometrics and data visualization for knowledge discovery**

- The use of techniques and tools related to data management, data quality, data and text mining, advanced analytics and data visualization in order to promote quantitative analysis of bibliographic data available and extract potentially useful information.
- The informetrics can be applied for several aspects of health scientific production such as publication year, publication country, main research subjects, journals, publication language, and authorship (individual, institutional and research groups.

- **MyVHL – Customized Information Services**

MyVHL is a free service that stores information and user preferences to offer personalized services such as:

a) Creation of collections of selected documents of the VHL;

b) Definition of topics of interest to receive alerts of new documents;

c) History of searches carried out in the VHL;

d) Alerts of new content by automated email, according to the interest profiles created by users

e) List of favorite links; Y

f) User's own publications.

MyVHL is available to any user through their Facebook or Google account or the MyVHL service itself.

We intend with this service to personalize the delivery of information according to the needs of the user in a systematic and pro-active way and allow that among the millions of documents available in the VHL, rescue and keep what he needs to respond to his priorities.

- **e-BlueInfo: Information Platform for Health Practice**

With the aim of reducing the iniquity of access and use of information and scientific evidence by professionals and health managers, the application for mobile devices (APP) e-Blueinfo aims at:

a) Promoting the use of information and scientific evidence in health care services;

b) Providing information and scientific evidence relevant to professionals and health managers to support their work processes and decision making; Y

c) Offering app users a solution that facilitates and expedites the access to relevant information in their area of knowledge.

The content accessed through the app must be selected by experts and reviewed periodically to facilitating its use by professionals and managers in health care practice. These contents will be easily accessed on any mobile device (smartphone), allowing the user to search and view the documents.

- **VHL Infobutton**

Using the international standard Infobutton, established by the Health Leven Seven International (HL7), the VHL Infobutton allows Electronic Health Record Systems to interoperate data with the VHL to search for scientific evidence related to the context of the patient's clinical history, using the data from ICD-10, SNOMED-CT, DeCS/MeSH, gender and age. Concept tests are under

development with health institutions to improve the service and add new functionalities such as natural language processing.

BIREME as a reference center in scientific and technical information and communication, has ensured to the countries of the Region the continuity of the governance, development, operation, and innovation of products, services, events, information systems, methodologies, and technologies of scientific and technical information following the international state of the art. Thus, BIREME contributes systematically and efficiently to sustain, strengthen, and increase the capacities and infrastructures of scientific and technical information and communication in LA&C Region.

The progress of BIREME's operation is made evident by the fact that the technical cooperation by means of the VHL and Associated Networks is present in 30 countries and it includes over two thousand institutions.