

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
Americas

BIREME

Latin American and Caribbean Center
on Health Sciences Information

Report: BIR IT 06/21

Executive Report

VII Session of the Scientific Committee of

BIREME

September 30, 2021

São Paulo – September 2021

Summary

1	Institutionality.....	5
1.1	Status of the Center	5
1.2	Governance.....	5
1.3	Recommendations - IX AC (Dec/17/2020).....	10
1.4	Recommendations - VI SC (Dec/04/2020).....	10
2	Biennial Work Plan (BWP)	12
2.1	Summary of BIREME's Initiatives and Projects.....	14
	Initiative BIR.01 - Information and knowledge management	14
	Initiative BIR.02 – Information Services	21
	Initiative BIR.03 - Intelligence in Health Information Sciences	25
	Initiative BIR.04 – BIREME Leadership and Management.....	27
2.2	BIREME’s financial structure	31
3.	CRICS – Regional Congress on Health Science Information	34
4.	Human Resources and cooperative work.....	35
5.	Concluding remarks.....	37
	ANNEX 1 – BIREME’s Products and services	38
	ANNEX 2 - Main events in which BIREME has participated in 2021.....	42

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, 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 health output in Latin America and the Caribbean (LA&C).

BIREME is one of the three specialized PAHO/WHO centers, besides PANAFTOSA (Pan American Foot-and-Mouth Disease Center) and CLAP (Latin American Center for Perinatology, Women's, and Reproductive Health). It has a regional nature and the work it carries out is at the service of Latin América and the Caribbean.

On March 3, 2020, BIREME celebrated 54 years of uninterrupted work with the mission of contributing to strengthening health systems and services in Latin American and Caribbean (LA&C) countries by means of the democratization of access, publishing and use of information, knowledge, and scientific evidence in convergence with national and regional strategies of the 2030 Agenda and Universal Health Coverage.

BIREME conducts its initiatives, projects, products, and services by means of following lines of actions involving more than 1,000 academic and governmental libraries and over 2,000 health institutions.

Increasing the visibility of the scientific health output in 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, collecting data to assess scholarly communication in health, and developing web technologies and interfaces for information search and retrieval.

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, scholarly communication, and implementing instructional design for online learning courses integrated to the Virtual Campus of Public Health (VCPH).

Developing and implementing knowledge management activities to strengthen national health policies and strategies by improving the institutions' capacity 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** to ease measurement and analysis of research activity and facilitate the access to comparative information on the countries' priority health issues.

Below lies a summary of the aspects related to the institutionality, governance, financial sustainability, and main achievements of BIREME in 2021, as well as a description of its products and services of the Center's technical cooperation.

1 Institutionalality

1.1 Status of the Center

At the 59th Directing Council of PAHO/WHO, scheduled to be carried out in virtual session on September 20-24, 2021, the presentation of the usual document on the situation of the Pan American Centers is not foreseen. However, BIREME will be cited in the Annual Report of the Director of the Pan American Sanitary Bureau and regarding the election of three Members to integrate its Advisory Committee.

1.2 Governance

The resolution of PAHO's Directing Council (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 non-permanent members. The non-permanent members were elected as follows:

- At the 58th Directing Council (CD58.R6): Colombia and Costa Rica for a three-year mandate (2021-2023);
- 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.

Nine sessions of the Advisory Committee (AC) 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 IX Session occurred online on December 17, 2020. The X Session will occur online on October 7, 2021.

Next, information about the dates and participants of previous meetings:

Session	Date	Location	Participants
IX AC	December 17, 2020	Online	PAHO/WHO (EIH, BIR) Countries (Brazil, Barbados, El Salvador, Guyana, Mexico, and Uruguay)
Ad-Hoc	July 30, 2020	Online	PAHO/WHO (EIH, BIR) Countries (Brazil, Barbados, El Salvador, Guyana, and Uruguay)
VIII AC	October 24-25, 2019	BIREME	PAHO/WHO Countries (Brazil , Barbados, El Salvador, Guyana, México, and Uruguay). Note: Mexico was not represented in the session.
VII AC	November 7-8, 2018	BIREME	PAHO/WHO (EIH a.i., PAHO Brazil, BIR) Countries (Brasil, Argentina , Jamaica, Perú, El Salvador, and Barbados.
VI AC	February 2, 2017	BIREME	PAHO/WHO (AD, KBR, BIR) Countries (Brazil , Argentina, Jamaica, Panamá, Perú, and Trinidad & Tobago)
V AC	December 3, 2014	BIREME	PAHO/WHO (AD, KBR, BIR) Countries (Cuba and Ecuador)
IV AC	November 26, 2013	BIREME	PAHO/WHO (KMC, BIR) Countries (Brazil , Bolivia, Cuba, Ecuador, and Puerto Rico)
III AC	December 5, 2012	BIREME	PAHO/WHO (KMC, BIR) Countries (Argentina, Brazil , Bolivia, Chile, Dominican Rep., and Suriname)
II AC	October 25, 2011	BIREME	PAHO/WHO (KMC, OPS BRA, BIR) Countries (Argentina, Brazil , Chile, and Dominican Rep.)
I AC	August 31, 2010	PAHO HQ	PAHO/WHO (D, AD, DD, AM, KMC, LEG, OPS BRA, BIR) Countries (Argentina, Brazil , Chile, Dominican Rep., Jamaica, and Mexico)

Note: Country in bold indicates the President of the session.

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 on 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. In the VI Session of the Advisory Committee, new members of the Scientific Committee were selected for their professional characteristics related to Scientific Communication, Research, Information Management, Education and Knowledge Management and Information Technology for three years term and could be reappointed for another three years.

Six sessions of the Scientific Committee (SC) were held. The VI Session was held online on December 4, 2020. The VII Session will occur online on September 30, 2021.

Next, information about the dates and participants:

Session	Date	Location	Participants
VI SC	December 4, 2020	Online	PAHO/WHO (EIH, BIR) Countries (Brasil, Argentina, United States, México, The Netherlands y Perú)
Ad-Hoc	August 28, 2020	Online	PAHO/WHO (EIH, BIR) Countries (Brazil, Argentina, United States, and México) Note: The specialists from The Netherlands and Peru justified their absence.
V SC	November 28-29, 2019	BIREME	PAHO/WHO (BIR) Countries (Brazil, México, Jamaica, Colombia, Cuba, and Costa Rica). Note: the specialist from Jamaica informed that would not be able to participate in this session.
IV SC	December 3, 2018	BIREME	PAHO/WHO (EIH a.i., BIR) Countries (Brazil, México , Jamaica, Colombia, Cuba, and Costa Rica)
III SC	December 8, 2017	BIREME	PAHO/WHO (AD, KBR, BIR) Countries (México, Jamaica, Cuba , Colombia, Costa Rica, and Brazil)
II SC	August 14, 2014	BIREME	PAHO/WHO (AD, KBR, BIR) Countries (Brazil, Honduras , Trinidad & Tobago, and US National Library of Medicine)
I SC	July 25, 2013	BIREME	PAHO/WHO (AM, KMC, BIR) Countries (Brazil , Canada, Honduras, Trinidad & Tobago, and US National Library of Medicine)

Note: Country in bold indicates the President of the session.

D) Secretariat: permanent organ of BIREME, formed by the Director and the technical and administrative teams of the Center, with 38 collaborators. It is responsible for the management and execution of the programming functions of BIREME's Biennial Work Plan (BWP) 2020-2021 that was developed in coordination with the PAHO/WHO Department of Evidence and Intelligence for Action in Health (EIH).

The recommendations of the Governance Committees, both Advisory and Scientific, are considered in the preparation of BIREME's BWPs. Next, we mention the recommendations made by both committees in the meetings held at the end of 2020.

1.3 Recommendations - IX AC (Dec/17/2020)

- I. Strengthening the search for financing and the sustainability of BIREME with PAHO's support.
- II. Making the presentation about BIREME in a parallel event of PAHO Directing Council, in order to inform the Center's results to the Member States.
- III. Increasing BIREME's promotional spaces.
- IV. Identifying activities so that the excellence products developed by the Center can receive attention both in the country (Mexico) as well as in other PAHO Member States.
- V. Strengthening links with Country Offices and national counterparts to support the identification of financing sources and development of technical cooperation projects

1.4 Recommendations - VI SC (Dec/04/2020)

- i. Increasingly involve SAA in projects with BIREME, as well as with the CGDI, which is closely familiar with the Center's work, as an important and strategic move, even emphasizing the recommendation of the last meeting.
- ii. Take advantage of increased access to databases to further disseminate BIREME's products and services.
- iii. Involve BIREME in the working group on combating fake news, which is being created, to support the dissemination of correct and quality information, which is a priority issue at the Ministry of Health.
- iv. iv. Strengthen scientific communication for researchers and communities
- v. Promote the exchange of data, following the FAIR principles (Findable, Accessible, Interoperable and Reusable)
- vi. Intensify the use of Artificial Intelligence.
- vii. Emphasize the dissemination of products such as MyVHL, e-BlueInfo and partnering with undergraduate students in medical and health sciences (such as Felsocem). The same with regard to indexing work. This work, if carried out by international publishers, would have a very high cost, and BIREME offers it to users free of charge.
- viii. Improve the alignment of BIREME's product and service with open science.

- ix. Involve data processing (instead of classic articles and portals) in the development of BIREME's product and service.
- x. Strengthening BIREME's role, representing LA&C in the GoFAIR initiative (reference GoFAIR Brazil Office - <https://www.go-fair.org/go-fair-initiative/go-fair-offices/go-fair-brazil-office/>)
- xi. Including scientific integrity training in courses. Not only ethics, but research integrity, to ensure that they have been done well, in addition to scientific publishing.
- xii. Approaching the use of artificial intelligence in tools to support how to trust the published information or how to have strategies to guarantee the quality of the information.
- xiii. Developing a strategy for the dissemination of new contents of knowledge showcases.
- xiv. Considering podcasts to inform about new releases or content.
- xv. Enabling new course formats in addition to the current modalities.
- xvi. Emphasizing the dissemination of BIREME through the projects with the various departments of the Brazilian Ministry of Health (CGDI, DAP, etc.).
- xvii. Advocating and expanding open access to information in terms of government strategy.
- xviii. Once again, having a leadership role on evidence-informed policies in Brazil, together with EVIPNet Brazil, considering knowledge translation tools - evidence maps - that involve evidence synthesis such as PICS, food and nutrition.
- xix. Promoting and lead the initiative to discuss the taxonomy of qualitative studies to support searches by applying the same rationale of quantitative studies to qualitative studies, especially when developing systematic reviews of qualitative studies.

Progress on these recommendations have been incorporated into this report.

2 Biennial Work Plan (BWP)

BIREME's Biennial Work Plan for the 2022-2023 biennium (BWP 22-23) is being finalized and will be approved by PAHO/WHO Director and Executive Management by the end of November 2021. Its structure continues to be characterized by four main initiatives and approximately 40 Projects or Products and Services (P/S) associated to seven Immediate and Intermediate Results (20.1, 21.2, 22.3 and 26.01, and 120.01, 120.02 and 121.03 of the mirror categories) of the PAHO/WHO Strategic Plan for 2020-2025, the Sustainable Health Agenda for the Americas (SHAA 2030) and the Sustainable Development Goals (SDGs) of the 2030 Agenda.

Seventy two percent of the BWP 20-21 was completed until the end of August 2021, and it may be observed that despite the COVID-19 pandemic, the development of the Center's products and services progressed satisfactorily. Many of the products developed by BIREME in conjunction with its collaboration networks were focused on supporting countries with scientific and technical information aimed at responding to the COVID-19 pandemic.

The following table presents the initiatives and their products and services for BWP 20-21 in a structured way.

BWP20-21
Initiatives and projects
BIR01 - 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 model of management of scientific and technical information on health applied in AL&C
LILACS updated and available as the main index of scientific and technical output of LA&C
Referential sources of information updated and available in the VHL
Experts and Institutions Directory published in the VHL
SciELO Public Health Collection developed, expanded and strengthened
Ethics Research Committee Management Platform - ProEthos available to the countries
Global Index Medicus (GIM) operating in coordination with the Regional Offices and WHO Headquarters in Geneva
Bibliographic control and visibility of the scientific and technical output in health of LA&C broadened
BIR02 - Information Services
Services that contribute to reduce the gap between scientific knowledge and health practice developed
VHL reference and user services strengthened
Personalized information services expanded and improved - MyVHL
VHL search and retrieval interface
e-BlueInfo app implemented and with information for health teams
Capacity building in scientific communication in the Region
Distance Learning (EAD) and Open Educational Resources (OER) developed and available in the VHL
Promotion of access and use of health information in the Region
BIR03 - Intelligence in Health Sciences Information
Infometrics of the scientific and technical output of LA&C published in LILACS
VHL Infobutton service operating in health information systems
Impact analysis on the use of information products and services developed by BIREME
Open data of the VHL referential sources of information
LILACS promoting Open Science in LA&C
BIR04 - Leadership and Management of BIREME
BIREME Institutional Framework strengthened with the recommendations of its Governance Committees and PAHO Regional Strategy (ASSA 2030)
Management System implemented in accordance with PAHO's institutional structure, recommendations and rules
Risk management and mitigation response plans approved and executed
BIREME's communication strategy implemented and effective
Effective HR Management
PAHO procedures and recommendations related to the administrative management of the Center implemented
IT infrastructure available and up-to-date according to PAHO-driven standards and management methods
BWP developed and monitored
Planning and financing of general operating expenses
Learning plan implemented
CRICS XI and VHL VIII implemented
Project Management to support the development of agreements with focus on the mobilization and monitoring of funds
Report and Visibility of successful experiences related to SDG3 / Agenda2030

Table: BWP 2020-2021; new P/S highlighted in yellow

2.1 Summary of BIREME's Initiatives and Projects

A summary of some of the progress on each work plan initiative appears below.

Initiative BIR.01 - Information and knowledge management

▪ **LILACS** has been updated daily with contribution from its Collaboration Network. It reaches more than 972,000 records, indexing articles from 912 journals and other types of documents, an increase of 4,6% in records since the VIII Session of the AC. The management of the update, maintenance, and publication processes of LILACS is integrated into the system "Integrated Service for the Administration of Referential Information Sources (FI-Admin)" developed by BIREME. This system has been updated monthly with new functionalities, corrections, and improvements to improve the bibliographic description and the cataloging and indexing process. In 2021 there were more than 110 analysis, support, and development activities, which resulted in 34 updates. Improvements were made in the first semester of 2021 in the Electronic System of Evaluation and Selection of LILACS Journals, with 14 analysis, support, and development activities, which resulted in 20 updates to improve the systematization of the work processes between scientific editors, committee selection and evaluators through a Web platform.

▪ As part of the celebration of **35 years of the LILACS database**, the [35-year LILACS commemorative website](#) was launched in October 2020 with the collaboration of the LILACS

network, which sent historical data, testimonies and photos that document this story and the new selection and permanence criteria for LILACS scientific journals. Considering the



updating of the criteria, in 2021 the criteria applied in the LILACS Brazil collection were updated and adapted and the book Good practice guide for LILACS journals is being organized with 3 chapters already written and translated (Portuguese, English and Spanish).

In the first semester of 2021, all the planned trainings were carried out:

- Training on VHL Information Sources for the Brazilian Network: 4 sessions held with 186 participants from 8 countries, including Portugal and Mozambique
- Training on VHL Information Sources for the AL&C Network: 4 sessions held with 327 participants from 18 countries

- LILACS coordination meetings: 4 meetings held with 130 participants from 18 countries;
- Indexing of documents according to the LILACS methodology: 4 sessions with 407 connections from 18 countries in Latin America and the Caribbean and Mozambique, Spain and Switzerland;
- Good practices in the editorial processes of scientific journals for LILACS: 4 sessions with 654 participants from 21 countries

The LILACS Indexers Network was very active and 11 working meetings were held that resulted in 4 trainings carried out, published documentation and 579 publications from 30 cooperating centers were reviewed regarding the adequacy of the indexing carried out by the professionals of the network.

Among the activities carried out with LILACS editors, a pilot project to strengthen and monitor five Honduran journals is being carried out. (4 meetings with about 65 participants).

- **The VHL model** for information and knowledge management in health continues to be developed and adapted to the current needs of the Network, and is applied in more than 70 national, thematic, and institutional VHL initiatives (instances) in the countries of the Region. The evolution of the VHL Model is constant, conceptually and technologically, always aligned and based on collaborative and networked work. In 2021, one of these important improvements refers to the creation of a new instrument to assess the maturity of VHL instances in the countries, subject areas and/or institutions: the **VHL Maturity Instrument**, which is a way of evaluating



instances of the VHL Network in the adoption of methodologies, technologies and good practices based on a self-

evaluation process. As a result of this process, the coordinators of the VHL instances can identify the level of quality of their structures, as well as the aspects that they must develop in search of continuous improvement, considering four dimensions/pillars: (1) Governance, (2) Organization and Contents Updating, (3) Communication and User Services, and (4) Systems and Technology.

- To support the VHL Network in the management and of its VHL instances, since 2020 BIREME coordinated an Action Plan for Strengthening the VHL Network, working with the countries of the region in prioritizing activities. In 2021 the Plan was followed up with new activities based on the evaluation of the maturity of each VHL Instance. The plan was adhered by

20 countries and one of the most important results of this action is the improvement of the VHL portals including the organization and highlighting of content related to COVID-19, reactivation of collaboration networks and updating of the information sources.

- The technological platform for the management of the VHL and its information sources continues to be updated, using modern technologies and open source platforms. The VHL platform is made up of an ecosystem with 30 applications and web services. In 2021 there were more than 150 analysis, support, and development activities, which resulted in 152 source code updates.
- The VHL information sources management system has 90 bibliographic databases and 73 of them rely on the contribution from the network with a total of 1,070,036 bibliographic records. For other information sources: 1,134 multimedia resources, 258 internet resources; 226 events, and 276 journal data.
- The **Regional initiative of the Traditional, Complementary and Integrative Medicines of the Americas VHL** (TCMI Americas VHL) will have 17 countries as participants in 2021

(<http://mtci.bvsalud.org>).

The TCIM America Network continues to be very active and developing different



information products such as: Window of Knowledge, Evidence Maps and international webinars about the integration of TCIM in health systems.

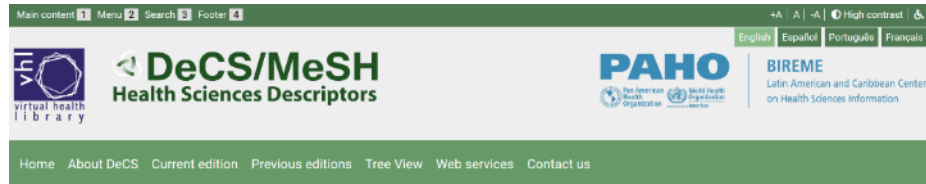
- The **Nursing VHL** (<http://bvsenfermeria.bvsalud.org>) continues to innovate and include several Latin American countries and recently, Portugal. In the second semester of 2020, two Windows of Knowledge were launched, including a panel with indicators of the nursing literature



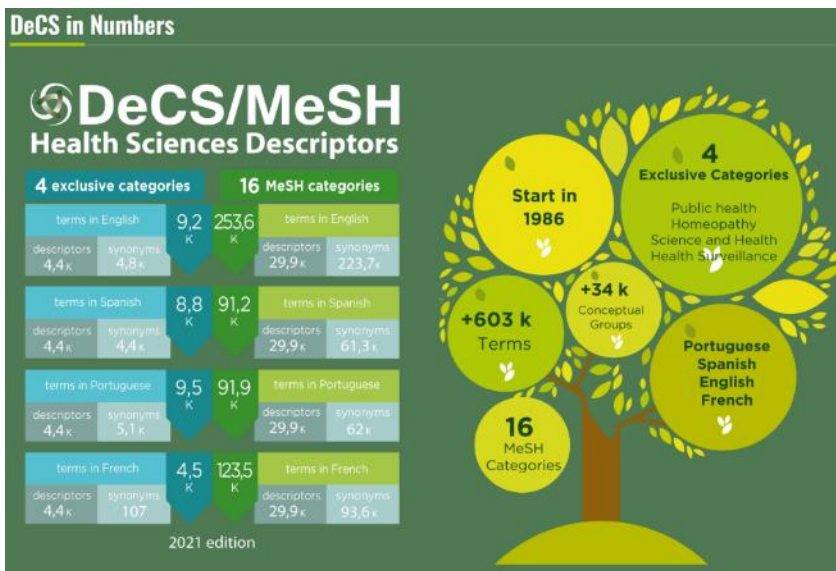
available in the BDNF regional database. The network was very active

within the framework of the “Nursing Now” initiative, launched by the WHO. In July 2021, two important events of the Nursing VHL Network were held: the launching of the Nursing VHL Portugal, which marks the first country outside the Americas to join the project; and the 1st Meeting of the International Advisory Committee, with the participation of actors of recognized leadership in the Ibero-American Nursing scene, formalizing the constitution of the committee. In August of the same year, the 20th Meeting of the Advisory Committee of the VHL Nursing Brazil was also held, in the context of the 72nd Brazilian Congress of Nursing, with an average of 45 participants connected throughout the meeting.

- The **Health Sciences Descriptors (DeCS)**, in its Portuguese acronym) continues to be updated annually, in accordance with the MeSH update maintained by the NLM, in the English, Portuguese, and Spanish languages. The Spanish version for LA&C has the collaboration of the *Facultad de Medicina de Universidad de Chile* and the Spanish version for



Spain, the collaboration of the *Instituto de Salud Carlos III*. In 2016, the MeSH translated into French was incorporated into the VHL, in addition to the translation of the exclusive DeCS categories (Public Health, Homeopathy, Sanitary Surveillance and Science and Health) in collaboration with the *Hôpital de Rouen* in France, with annual updates. Since the DeCS/MeSH 2019 version, the new thesaurus management system has been developed and is in operation,



integrated into the FI-Admin system, with the ability to manage multiple vocabularies in multiple languages, replacing the legacy system of more than two decades. In the same system, the vocabulary of Environmental Health and Public Health Engineering was also maintained, under the responsibility of Brazil's *Fundação Nacional de Saúde*

(FUNASA). The DeCS/MeSH 2021 version in the English, Portuguese, Spanish, and French languages has been published in the first semester and in September the update and translations have started according to the MeSH 2022 version.

- BIREME coordinates the review and update proposal of the exclusive category Public Health and it has the support of an Expert Committee in each of its 8 subcategories. The Committee has made recommendations regarding the update proposal and BIREME, starting in September, promoted a public consultation for evaluation and feedback from DeCS users. According to the result of this public consultation, BIREME and the experts will consolidate all the recommendations to update the Public Health category in the DeCS/MeSH 2022 edition.
- Last August, a proposal was developed to create a new exclusive DeCS category related to TCIM. The proposal is being analyzed by experts from the TCIM VHL network and BIREME

will consolidate the recommendations received for the creation of this category in the DeCS/MeSH 2022 edition.

- The MeSH 2021 version incorporates 277 MeSH descriptors and 12 exclusive DeCS descriptors, alters 109 (of these 61 are exclusive DeCS terms) and removes 17. It also updates 129 scope notes and 1,209 indexing notes. Considering the pandemic, the incorporation of 14 descriptors related to COVID-19 and SARS-CoV-2 stands out. From the visualization of the metadata of authors, institutions, and DeCS/MeSH terms applied in the indexing of documents in LILACS, a directory of experts and institutions on certain health topics was generated.
- Through the FI-Admin system, the contribution of the Cooperating Libraries Network to a growing number of databases of different types is managed: bibliographic (90 were created), multimedia resources, legislation, internet resources, events, educational resources, thesauri, scientific journals, and institutions.
- The management and publication service of **open educational resources** continues to be integrated into the VCPH and the VHL with more than 13,000 resources.
- In the context of health legislation, the legislation base on risk factors remains available, within the scope of the REGULA initiative, in coordination with the Legal (LEG/PAHO) and Health Systems and Services (HSS/PAHO) Departments from PAHO Headquarters, with 900 normative acts available. Another normative base is under development on the subject of Migration and Health. In 2021, the new LEGISALUD Argentina platform was also launched, with more than 33,000 normative acts, which had the support of BIREME in migration activities, and metadata standardization, as well as the development of the new web platform.
- The objective of the **self-learning Course on Scholarly Communication in Health Sciences**, hosted in the VCPH, is to promote the publication of scientific research results and

clinical observation in the countries of the Region. After its launch in November 2019 up to date, it has over 17,000 enrolled and nearly



9,000 from 10 LA&C countries who have completed the training. Of the professional categories that took the course, nursing professionals are in first place, followed by general practitioners and specialist physicians. The success of the Spanish language course led



the Brazilian Ministry of Health to include its translation into Portuguese in the TA6/TC95. The translated course was launched in April 2021 and to date has more than 1,200 enrolled and more than 200 approved from Brazil and other Portuguese-speaking countries.

- In addition to the online course, in 2021 we have participated in eight national and international congresses and webinars, presenting lectures on scholarly communication topics, with an emphasis on **open science**.

- The **GRADE International Guide Base (BIGG)** launched in 2019 continues to be updated and is available for access on the VHL regional portal. It reaches more than 1,300 registered guides (September 2021) and its collection classified according to the goals of SDG3.



- A new database dedicated to studies of systematization of evidence for health policies was developed, named **PIE - Policy Informed by Evidence**, which is already available in the VHL and has more than 590 studies including policy briefs, deliberative dialogues and other types of content that systematize the evidence.



- The **BRISA/RedTESA database** offers access to more than 2,200 health technology assessment reports, published by more than 30 institutions in 13 countries of the Americas. Due to the COVID-19 pandemic, a special section has been created at the base with more than 320 evaluation reports on medicines, medical devices, and protection. Comparing the period from January to August 2021 with 2020, there is a growth of 222% in the number of users and sessions and 183% of pageviews. A project to develop the new RedETSA portal is underway, in coordination with the Medicines and Health Technologies area of PAHO Headquarters (MT/HSS), including new functionalities, such as Technical Sheets of the member countries.



- **BIREME's technical cooperation 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, supporting the teams from Argentina, Honduras, Guatemala, and Peru in the implementation of the platform, as well as the PAHO Headquarters, in coordination with the Regional team of Bioethics, for the use of ProEthos in

PAHOERC – PAHO/WHO Research Ethics Committee. In 2021, the ProEthos platform continued to be updated to improve and develop new functionalities, according to user experience by the PAHOERC team. In coordination with the Regional Bioethics team, ProEthos is being implemented by the WHO Research Ethics Committee, for adoption in Geneva. In the interest of the WHO, the platform was evaluated and updated to meet all technical cybersecurity requirements. Besides Geneva, other WHO Regional Offices showed interest in adopting ProEthos to support member countries in AFRO and EMRO.

- **CARPHA EvIDeNCe Portal** for access to health evidence for the English Caribbean countries. The MedCarib database continues to be specially updated with about 170 documents on COVID-19 in the Caribbean. The level of access to the portal was kept, considering 2020 and January-



August 2021. In August 2021 there was an online FI-Admin training (for entering records into the MedCarib database) for the countries: Belize, Grenada and Suriname. The Caribbean Subregional VHL initiative is also being discussed.

- The **Global Index Medicus (GIM)** aims to organize and disseminate technical and scientific production in low- and middle-income countries. It is an initiative developed by



BIREME in coordination with the WHO headquarters in Geneva and the WHO Regional Offices. The GIM offers access to more than 2.1 million bibliographic references, of which 67% full text, available in the LILACS, AIM, IMEMR, IMSEAR and WRIM databases, representing

respectively the regions of the Americas, Africa, WHO Eastern Mediterranean, South-East Asia and Western Pacific. In 2021, GIM has grown by around 3.4% with more than 74,000 new bibliographic references. Its search interface has grown 88% in number of users and sessions and 65% in pageviews in 2021, as compared to 2020. Twenty-five percent of the pageviews in 2021 refer to documents related to COVID-19 and SARS-CoV- 2, representing an increase of 38% compared to 2020. At the request of the WHO, BIREME has contributed to the development of the global base of scientific literature on COVID-19. The WHO COVID-19 Database search interface was launched in April 2020 and continues to be updated daily. The curatorship of the data is the WHO Library team's responsibility, which coordinates a global network of volunteers and specialists for the identification, selection, and organization of the documents. The monthly growth of the

database is over 20,000 documents. To date, there are more than 344,000 documents available, of which 81% in full text, including bibliographic references from international databases such as Medline, Scopus, Web of Science, Proquest, Embase, LILACS, WPRIM, Elsevier, preprints from bioRxiv, medRxiv, SSRN, chemRxiv, SciFinder, and SciELO Preprints and gray literature of national and international organizations. The accesses to the database demonstrate its visibility and global impact, with accesses from 235 countries and territories, according to Google Analytics. Comparing the last 8 months of 2021 with the previous period of 2020 there was a 16% increase in the number of users and 13% increase in sessions. Since its launch, there have already been more than 1.3 million users, 1.6 million sessions and 3.6 million pageviews.

At the request of the WHO Regional Office for Africa, BIREME supported the migration and standardization of more than 18,000 bibliographic references of the African Index Medicus (AIM) for the "Integrated Service for the Administration of Referential Information Sources (FI-Admin)" of the VHL. This technical cooperation was carried out within the framework of the GIM initiative, in response to the permanent unavailability of the information systems previously used by AFRO due to cybersecurity issues. A search interface dedicated to AFRO was also created, updated weekly through interoperability with FI-Admin. The support for migration of the library collection managed by AFRO to the new system used by AIM is under evaluation for the next biennium.

Initiative BIR.02 – Information Services

- The self-learning course on access and use of health information is an initiative of BIREME to support decisions informed by health evidence, available at the Virtual Campus for Public Health, published in Spanish and Portuguese versions. These courses have reached, since their inception in 2016, more than 31,000 enrolled. This course is aimed at all those who work directly or indirectly in the health area. The links for the courses are:



Acesso e Uso de Informação Científica em Saúde (Portuguese)

<https://aulas.cvspbrasil.fiocruz.br/course/view.php?id=18>

Acceso y Uso de la Información en Salud (Spanish)

<https://cursos.campusvirtualsp.org/course/view.php?id=142>



- The **VHL Regional Portal** in operation and regularly updated, registered in 2021 (Jan-Jul) the visit of 7 million users in more than 14.5 million sessions (accesses and searches), which in turn, resulted in 47 million of pageviews.



	Accesses to the VHL Regional Portal		
2021 (JUL)	Sessions	Pageviews	Users
Search via iAHx	7,821,188	25,924,152	4,684,995
Search via Google	1,174,220	2,963,701	927,103
VHL Regional Portal	1,410,760	3,676,677	778,565
LILACS Portal	514,230	700,131	284,438
Serials Portal	266,787	769,782	212,776
HIL Portal (LIS)	14,830	55,991	13,300
MyVHL	56,644	175,159	41,849
Total	11,258,659	34,265,593	6,943,026
Monthly average	1,608,380	4,895,085	991,861

- The “**Window of Knowledge**” methodology continues to be regularly updated as a VHL resource that highlights selected content on relevant and / or priority topics, at any given time, with the intention of

facilitating access to these content for the users who enter to search the VHL. In 2021, one new and four updated Windows of Knowledge were highlighted in the VHL Regional portal: Coronavirus Disease - COVID-19 that is periodically



updated, the ASSA 2030, World Hepatitis Day, and Breastfeeding Day. In the context of Brazil VHL, the Window of Knowledge Natural History of COVID-19 was developed. Besides Brazil, other countries in the network are also applying the methodology to develop their own Windows of Knowledge, such as Colombia, El Salvador, Paraguay, Panama, Peru, and Uruguay.

- The **User’s Service** keeps active the platform "Ask the librarian" provided on different pages and services of the VHL, such as in the COVID-19 Window of Knowledge and the search result pages. From January to August 2021, we had about 660 requests with support information and access to methodologies developed by BIREME and demands to subsidize systematic reviews and other types of research.

- The **Reference Network** was very active during last year, we had five virtual meetings in Portuguese and four meetings in Spanish, where around 500 participants were trained in techniques for building search strategies that resulted in about 150 expressions registered up to August 2021. The strategies developed are applied to generate and/or update filters in the VHL search system, in the Windows of Knowledge and health topics in interfaces such as Evid@Easy. The COVID-19 topic has 35 filters available on different issues such as rehabilitation, vaccines, reinfection, complications, and others. The [Search Strategies Repository](#) has recorded 658 filters.

- The **VHL Personalized Services (MyVHL)** that allow users to identify themselves to use selective dissemination of information services, have made it possible to know the profile of interest of the public visiting the VHL portal, making it possible to offer specific information by user segment. MyVHL has more than 54,000 active users, an increase of 17.4% in the last 8 months. From December 2018 to date, there were more than 3,900 App installations, a growth of 22% in the last 8 months. More than 1,800 users receive weekly email alerts with documents available in the VHL similar to their profiles of interest.



- **e-BlueInfo is an App** that brings information for clinical practice into the hands of primary health care professionals. Brazil, Peru, Guatemala, and El Salvador participate in the initiative,



publishing selected and updated content in the App.

Since its launch in December 2018, there are more than 13,500 installations, a growth of 150% in the last

8 months. In April, BIREME launched, in coordination with the participating countries, version 2.0 of e-BlueInfo, which included dissemination activities at the national and regional level. In addition to the modernization of its interface, the App also offers new services, such as a collection of Guidelines published by PAHO and WHO on different topics (Workforce, Traffic accidents, Sexual and reproductive health, etc.), a recovery mechanism for scientific evidence using ICD-10 coding, documents related to the countries' information available in the VHL, and other types of content such as legislation and videos and the possibility of consulting, once authenticated, the user's favorite documents and the documents visited. The App also increased the visibility of the national institutions that make up the initiative, through an information page for each country and the visual identification of the logo and banners of the national institutions. Comparing January to August 2021, with the same period of 2020, e-BlueInfo shows a growth of 564% in the number of users, 327% of visits and 547% of pageviews. Due to the pandemic, all participating countries have entered documents on COVID-19 in the context of their health systems and services, as well as they have expanded the information available in the App with new collections of documents. Colombia and Paraguay have recently adopted the use of the App. Between June

and August, Colombia organized its Local Content Committee, made up of the National Institute of Health and the University Foundation of Health Sciences, in coordination with the PAHO/WHO Office to publish collections of documents on Surveillance and Risk Analysis in Public Health. In September, the Paraguay officially launched its collections of documents in Primary Health Care, thanks to the coordinated work of its Local Committee made up of the Ministry of Public Health and Social Welfare, Paraguay's National Institute of Health, and the PAHO/WHO Representation. The following countries are discussing the adoption of e-BlueInfo: Costa Rica, Cuba, Guyana, Honduras, Mexico, Nicaragua, and Panama.

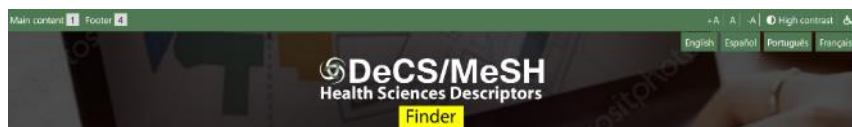
- A **new search resource in the VHL, named Evid@Easy**, which works as a guided search for evidence through specific filters that represent the stages of the decision-making process, has been available since March. It is possible to retrieve evidence of 62 health topics related to the Sustainable Health Agenda for the Americas, Neglected Diseases, Communicable Diseases and SDG3 - Health and Well-being. There are more than 23,000 users of the tool up to date.



- The VHL search interface has received new information services and has increased the types of content available. The integration of repositories of preprints has been consolidated as a source of information available in the VHL, started in 2020, together with the possibility of linking the preprints with their respective peer-reviewed manuscript and accepted for publication in a scientific journal. This link is being tested in the WHO COVID-19 search interface, making it possible to trace between preprints and their published versions. Still in the same interface, semantic information extracted by means of natural language processing algorithms from the titles and summaries of Medline records related to COVID-19 has been integrated, using the SemMed platform of the US National Library of Medicine. In addition to providing a quick visualization of the semantic relationships between biomedical thesaurus concepts belonging to the Unified Medical Language System (UMLS), the user can also semantically retrieve similar documents. Another service available since April is the consultation of citation data from an indexed document in the VHL bibliographic information sources through the Dimensions Badge service. VHL users can easily see how many citations a publication has received, as well as explore the appointment data using the free Dimensions platform itself.

Initiative BIR.03 - Intelligence in Health Information Sciences

- **Specialized tools have been adopted in data management, quality and visualization**, allowing to improve the metadata stored in LILACS and to generate and visualize infometric indicators of the scientific and technical production in health of LA&C. A new conceptual model and a new systems architecture, oriented to Data Lake and data as services, are under development to promote a framework for the governance of the data available in the VHL information sources, through techniques of extraction, transformation, aggregation, analysis and visualization of data to generate indicators of the scientific and technical production stored in LILACS and MEDLINE.
- The beta version of the open metadata portal of the VHL information sources has been developed, which guides users on how to collect bibliographic description data from the more than 33 million documents on health sciences available on the web. The VHL, through open protocols and standards in XML, JSON, CSV and RIS formats. The collection can be done manually through the search interface or by automated programming mechanisms using available web services. There is a continuous effort by BIREME to improve this service in light of the FAIR principles, so that the bibliographic description metadata is **F**indable, **A**ccessible, **I**nteroperable and **R**eusable.
- The **Infobutton VHL service** has been developed, which follows international standards for the exchange of data with Electronic Health Record Systems, promoted by the HL7 (Health Level Seven International), which allows retrieving the scientific evidence available in the VHL in accordance with the context of the patient's medical history. This service is available in the version 2.0 of the e-BlueInfo App, allowing health professionals to access the evidence available in the VHL related to the ICD-10 codes and, in the future, SNOMED-CT. The possibility of integrating the Infobutton VHL into Brazil's e-SUS system, maintained by DataSUS, as well as with other health entities to expand the use and improvement of this service, is still under discussion with the Brazilian Federal Government.
- An **identification service for DeCS/MeSH terms** present in the title and summary of documents is integrated into the document indexing process in the FI-Admin system, facilitating the indexing process with future contribution to the development of an automatic indexing system.
- The **DeCS/MeSH Finder** web service was launched in February 2021, which automatically locates any descriptor, synonym, or qualifier of the controlled vocabulary in a given



text in a fraction of seconds. It was developed thinking about the needs of researchers

during the process of writing and sending scientific articles, editors who need to review manuscripts submitted to journals, and information science professionals who work in the processes of indexing health content. in which BIREME has invested in the development of this service.

- The **Evidence Map Methodology** adapted by BIREME was applied in the development of evidence maps, with emphasis on maps on clinical effectiveness of integrative health practices (PICS, in its Portuguese acronym) to meet a demand from the Brazilian Ministry of Health, and they are supporting to the National PICS Policy of Brazil, as well as the agenda of suggested topics for new research. Until August 2021, 24 evidence maps were produced and published in the VHL, and another 10 evidence maps are in the final phase of production with the participation of groups of experts on the issues. In relation to maps about COVID-19, the following have been published: Contributions of the MTCI to the confrontation of COVID-19 (in Portuguese, English, and Spanish), Ozone therapy applied to COVID-19, and the Map about of Interventions for the sequelae of COVID-19.



- BIREME developed a new platform for the publication of personalized surveys on the different types of website pages, in order to obtain the users opinion about the published content and the available functionalities. The use of this platform, named **IM (Impact Measurement)**, is promoting a new way of measuring and analyzing the impact of information products and services. It has been in operation on the pages of the Regional VHL and its search interface since March 2021 and has more than 330 participating users. To date, considering the responses given in relation to the pages of the VHL portal (it does not include the search interface):

Questions - VHL Portal	%
agree that the available content meets their needs	82%
are satisfied with the information found in the VHL about COVID-19	77%
believe that the content of the VHL is updated	89%
believe that the content retrieved in the VHL is reliable	89%
managed to locate what they needed	80%
would recommend the use of the VHL to their colleagues	93%
are satisfied with the operation of the pages	84%
agree that the general layout of the content is understandable and well organized	77%

Regarding the search interface:

Questions - search interface	%
agree that the available content meets their needs	56%
believe that the content of the VHL is updated	55%
believe that the content retrieved in the VHL is reliable	61%
achieved find what they needed	67%
are satisfied with how the pages work	53%
agree that it is easy to find DeCS/MeSH descriptors for their search	57%
know how search filters work	60%
consider filters useful to start a search	50%
say they know how to use all search resources well	66%
agree that search filters are relevant	83%
agree that the use of DeCS/MeSH descriptors brings better search results	79%
consider advanced search easy to use	64%
consider it easy to search	75%

These results demonstrate the need to deepen knowledge about the needs of users and their difficulties, as opportunities for improvement that BIREME must consider for the next biennium. In conjunction with the IM, BIREME is also promoting the redefined use of access statistics, associating them with the demand for technical and scientific information in different health contexts, promoting changes, for example, in the Knowledge Showcases and on the home page of the Regional VHL.

- New functionalities are being developed in the "Integrated Service for the Administration of Referential Information Sources (FI-Admin)" to contemplate the relationship between the bibliographic description data of a technical-scientific document, with its open research data available in a repository, as well as other associated digital assets, such as images, videos, audios, etc. With this, the LILACS database will promote the link between the indexed technical and scientific literature and the open data of associated research, when available.

Initiative BIR.04 – BIREME Leadership and Management

- The BWP 22-23 is in the finalization process and will be approved by the Director and Executive Management of PAHO/WHO by the end of November 2021. Its structure continues to be characterized by four main initiatives and approximately 40 Projects or Products and Services (P/S)
- The BWP 2020-2021 continues to advance, even though BIREME staff have been in emergency telework since March 2020, aligned with PAHO/WHO procedures and policies and linking their P/S, activities and tasks to the Organization's long-term Strategic Plan (2020-2025). It has four initiatives, 37 P/S and 206 activities.

- The BWP 20-21 in September/2021 has been implemented in 72.1% and continues to be monitored, even with the preparation of studies and periodic controls on the formalization of its financing sources and with the support of bimonthly meetings to monitor products, services and projects and the respective use of regular and non-regular financial resources (grants) and the corresponding operation of the PAHO/WHO/WD/PMIS system.
- Close communication with the Ministry of Health of Brazil (MoH) in coordination with PAHO Brazil for the formalization of Terms of Cooperation (TC) for the development of projects, products, and services for the improvement of BIREME and for national technical cooperation and regional. The respective financial contributions, which are formalized through TCs, are made viable annually. The effective efforts to route from TA6 to TC95 and from TA2 and TA3 to TC93 are highlighted, the latter, for the extension of TC93 for another five years (Feb/2022-Feb/2027) in the final formalization process.
- BIREME's management continues effectively and in line with the policies and procedures of PAHO / WHO and its banking services coordinated with PAHO / WHO Brazil, given that BIREME's bank account in the Bank of Brazil (BB) was closed in March 2020 and the ongoing process of the full implementation of the new BIREME institutional framework
- Within the framework of its new institutional framework in the process of implementation, BIREME's Statute is still pending formalization and its CNPJ (National Registry of Legal Entity) is updated together with the national bodies, mainly in the Federal Revenue, which strengthens the Center's institutional framework in Brazil.
- BIREME's operation strengthened in the country, which requires, through the Ministry of Foreign Affairs and in coordination with the Ministry of Health, the rescue and formalization of BIREME Headquarters Agreement in Brazil to enable in good time the annual reviews of the Government of Brazil for the improvement of BIREME.
- Virtual activities continue to support the development of competencies and strengthening the organizational climate, such as training programs with the support of HR from PAHO/WHO Headquarters and External Consultancy, workplace gymnastics twice a week (with the support of a local university, *Universidade Paulista*) and the monthly *Cafés con Ideias* meetings, that include information and knowledge exchange activities and birthdays celebration collectively.
- The global COVID-19 pandemic brought numerous challenges for individuals and organizations that, due to teleworking caused by the public health emergency, had to re-evaluate their way of working and interacting, so that their intellectual capital and operations would act in harmony, and necessarily with the support of ICT. Thus, BIREME launched the Administrative Report on Human Resources, named *Fique por Dentro*, which



in August published its 54th edition. More information about it is available in the following link (<https://boletin.bireme.org/pt/2021/08/30/informativo-fique-por-dentro-e-os-destaques-da-bireme-opas-oms/>)

- BIREME/PAHO/WHO has an IT infrastructure that responds to technical cooperation demands by making available a set of servers installed in a datacenter a few kilometers from its physical facilities and with direct access to the international Internet through the Academic Network of São Paulo (ANSP). There are around 300 technical cooperation instances hosted on these servers which have an internal and external monitoring system, to guarantee their high availability. In addition, the backup system is periodically reviewed and improved, helping to minimize impacts in the event of incidents. Another important point is information security, and in this context, BIREME has been developing a set of best practices to guide the implementation and updating of the systems used in technical cooperation. Aligned to ITS/PAHO policies the equipment (notebooks) for all staff are being updated. More information about it is available in the following link (<https://boletin.bireme.org/en/2020/05/30/the-it-infrastructure-of-bireme-and-the-use-of-icts-in-teleworking/>).

- Even during the emergency teleworking due to the global COVID-19 pandemic, BIREME achieved significant results with national counterparts and BIREME teams, due to its efforts in project management and effective communication, albeit at a distance, which It even allowed the achievement of results in consensus, planned financial disbursements and also the formalization of new projects. Thus, in the 2020-2021 biennium, BIREME also has PAHO's regular resources, with more than 20 projects in terms of cooperation in coordination with PAHO/WHO Brazil and more than 10 projects with Departments of the Central Office and Country PAHO Offices and also with the WHO in Geneva ensuring a broad and effective management of the financing sources of the BWP 20-21 projected for the Center.

- BIREME has several formal communication channels dynamic and in full operation, e.g., its institutional website (in Spanish, English and Portuguese), Intranet, [Facebook](#), [Twitter](#) and news bulletin) with emphasis on the six texts published in three languages



(Spanish, English, and Portuguese) monthly in the [BIREME Bulletin](#), which is in its 59th edition. The Bulletin is disseminated to the institutions that are part of the VHL and LILACS Networks, government entities, and throughout PAHO/WHO.

- [BIREME's institutional website](#) was updated and now operates on a Drupal platform, such as the web pages of PAHO Headquarters, Country Offices and Centers. The new BIREME



website includes information about the Center, its mission, objectives and history, governance, its main products and services (described in Annex 1), news, and main institutional supporters, in three languages. It publishes news about the launching and update of products

and services, and technical cooperation activities with weekly updates.

- BIREME's products and services are usually presented at face-to-face events that take place in the Region. In 2021, given the situation of the pandemic, this has not been possible, however it is worth noting that BIREME has still been able to participate in national, sub-regional and regional events. In Annex 2 we present a list of the main events in which BIREME's staff has participated in 2021.
- BIREME's presence on social media continues to be even more active, with daily updates on the progress of BIREME's projects, products, and services, and sharing relevant information from PAHO and WHO on COVID-19 and the health campaigns of the Organization.
- Communication plans are being implemented within the framework of projects that have BIREME's contribution, in such a way as to disseminate the products and services that are incorporated and the progress in the different stages of the project.
- Communication activities with the focal points in PAHO Country Offices to disseminate BIREME's information products and services, supporting their implementation at the local level and advocating with national authorities.

2.2 BIREME's 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 2020 and 2021.

Sources	Fund type	2020	2021	Total
		Received	Received	
1 PAHO HQ Contribution – 20-21	ACP	635,001	807,001	1,442,002
2 BIREME and Ministry of Health Brazil - TC 93	PVC	753,078	0	753,078
3 Projects in the context of TCs with PAHO Brazil	NVC	332,134	34,000	366,134
4 WHO	WHO	65,510	196,498	262,008
5 NLM/NIH	BSS	170,715	0	170,715
6 Secretary of Health	NVC	0	3,429	3,429
7 Balance of Biennium 2018-2019	18-19	1,248,886	0	1,248,886
8 Developments with Technical Areas of PAHO/WHO - Other Cost Centers	OCC	30,000	25,000	55,000
9 Developments with countries of the Region - Other Cost Centers	OCC	21,500	30,000	51,500
		3,256,824	1,095,928	4,352,752

Observations:

1. Regular funds from PAHO in 2020 and 2021 U\$ 1.442,000 (FF)
2. TC93 Improvement of BIREME
3. TCs: 60 (CONASS), 68 (CNS), 71 (Hanseníase), 91 (DECIT), 95 (CGDI/SE/MS and BVS ECOS), 98 (Nutrición) and 76 RedETSA_BRISA
4. Global Index Medicus (GIM/AFRO) and WHO COVID-19 database
5. Indexing services 1SEM2020
6. SMS-SP.
7. BSS and TCs 60 (CONASS), 87 (FUNASA), 93 (Improvement of BIREME), 95 (CGDI/SE/MS) and 98 (MTCI/PICS)
8. Regional (CDE, HSS, NIC, EIH and FPL)
9. Countries (ARG and ELS)

Contribution in pipeline:

- TA2/TC93 is being formalized with the MoH, including its regular contribution for 2021 (approximately U\$750,000)

Regarding the Terms of Cooperation (TC) with the Ministry of Health of Brazil (MoH), through PAHO/WHO Brazil:

TC93/TA2

[Term of Cooperation 93](#) is directed to the "Development and Improvement of the Latin American and Caribbean Center for Information on Health Sciences in the context of Information and Knowledge Management in the 2030 Agenda and Universal Health" in particular for the

strengthening, improvement and implementation of its program of technical cooperation and institutional sustainability as a Specialized Center of PAHO/WHO in scientific and technical information in health.

TC95/TA6

The [VI Additive Term to the 95th Technical Cooperation Term \(TA6/TC95\)](#) between the Ministry of Health of Brazil and Brazil's Office of the Pan American Health Organization/World Health Organization (PAHO/WHO Brazil) is oriented to the Improvement of the Management of the Executive Secretariat of the Ministry of Health of Brazil. This TC has the participation of the technical areas of PAHO Brazil and BIREME/PAHO/WHO, which cooperates specifically with a result related to the management of information and scientific and technical communication in health, more specifically in the context of the information sources of the VHL and the national network of libraries that contribute to the Brazil VHL, libraries of the BiblioSUS network, thematic Virtual Health Libraries such as the Primary Health Care VHL and institutional VHL, such as the Ministry of Health VHL. Moreover, it includes components that aim to expand bibliographic control and improve the quality of the description of scientific and technical output in Brazil and expand access and use of scientific knowledge within the Unified Health System (SUS) through products of knowledge translation. In summary, it is about bringing clinical practice closer to knowledge and scientific evidence generated through academic research for the continuous improvement of health services.

The financing of the BIREME 2020-2021 Biannual Work Plan (BWP) has regular contributions from its main institutional partners and non-regular contributions from regional technical cooperation projects within the framework of the TCs with PAHO/WHO Brazil in the country. These projects also result in products and services for use by the countries in the Region. PAHO/WHO and the Ministry of Health of Brazil maintained their contributions for the improvement and technical cooperation of BIREME. As of the affiliation of new members, as established in the BIREME Statute, the sources of financing will be able to diversify. At the same time, BIREME is making efforts to mobilize additional resources through projects, agreements, and services as envisaged in its proposed 2020-2021 Resource Mobilization Plan to guarantee the Center's financial sustainability.

Other bodies with which BIREME maintains a close relationship and with which specific projects are maintained are the São Paulo Municipal Health Secretariat, the Oswaldo Cruz Foundation (Fiocruz), the National Commission of Health Secretaries (CONASS), the National Commission

Municipal Health Secretaries (CONASEMS), the National Health Commission (CNS) and the National Health Foundation (FUNASA), among others. Some of the projects carried out are within the framework of the TC that PAHO Brazil has with the Ministry of Health, such is the case of TC60 (CONASS), TC68 (CNS), TC91 (DECIT), and TC98 (TCIM/PICS and Nutrition).

During 2021, resources were mobilized with other Ministries of Health of the Region, always in coordination with the PAHO country office, such is the case of Argentina and Nicaragua.

This also resulted in global alliances and activities, mainly with projects in coordination with the Library and Digital Information Networks Unit at WHO Headquarters, as is the basis "COVID-19 - Global Literature on Coronavirus Disease"

3. CRICS - Regional Congress on Health Science Information

The CRICS11 and BVS8 events (in person or virtual) is subject to the availability of financial resources and also to the COVID-19 global pandemic.

CRICS, since its first edition in 1992, is one of the most important and consolidated international congresses on scientific and technical information and periodically addresses the state of the art in the fields of information, knowledge and management of scientific evidence. It includes topics of scientific communication, library science, information science,



methodologies and information technologies and their application in national research, education and health systems.

The VHL Regional Coordination Meeting, which is the most important exchange forum of the

VHL cooperation network, is held as a preliminary event to the CRICS and analyzes the development status of the VHL at the regional level. national, thematic and institutional.



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

BIREME is in charge of the organization of the CRICS (Regional Congress of Information in Health Sciences), which its eleventh edition should have been held in 2020, however, due to the pandemic it has been postponed and will be an opportunity to exchange with the scientific community all the advances built with our collaboration networks.

4. Human Resources and cooperative work

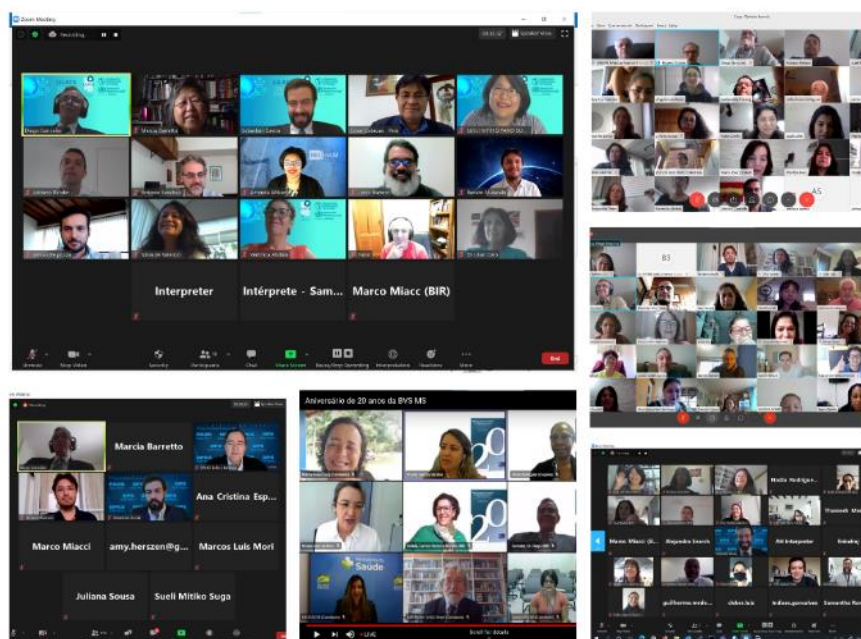
BIREME's intellectual capital continues to be made up of professionals with experience in information management, the development of methodologies and technologies for the management of scientific and technical information, and an administrative infrastructure that includes information technology and management infrastructure. Two link categories characterize the personnel contracts: PAHO/WHO (2 collaborators) and HSP/SPDM (36 collaborators).

The Center maintains its Personnel Plan aligned with PAHO/WHO strategic planning, taking into account policies, procedures, and internal controls to ensure institutional alignment with transparency and the commitments of all its personnel.

Something that BIREME keeps highlighting is the cooperative work through networks of individuals and institutions for the management and exchange of information and knowledge present in 30 countries with more than 2,000 institutions. This networking offers flexibility in the expansion and inclusion of new members, as well as the exchange of ideas, experiences, and knowledge.

During the COVID-19 pandemic, work with human resources was a priority for BIREME, which is why frequent virtual meetings were held in order to maintain individual well-being and teamwork, besides a strengthened organizational climate.

Although BIREME has a small work team, it is strengthened thanks to its work strategy with networks of cooperating centers of LILACS and



VHL, Network of Referees, thematic networks such as Nursing, Traditional, Complementary and Integrative Medicine and also the alliances that it maintains, such as those already historical with the US National Library of Medicine (NLM), *Biblioteca Central de la Facultad de Medicina de la Universidad de Chile*, the *Biblioteca Nacional de Ciencias de la Salud* (BCNS) of the *Instituto de Salud Carlos III* (ISCIII) del *Ministerio de Economía y Competitividad da España*, *CHU Hôpitaux de Rouen*, France, the *Institut National de la Santé et Recherche Médicale* (INSERM), France, Epistemonikos, FELSOCEM and new ones such as those of the Academy of Integrative Health & Medicine (AIHM), among others. PAHO/WHO collaborating centers such as INFOMED/Cuba, Fiocruz, *Instituto Lauro de Souza Lima/Brazil*, *Hospital Italiano de Buenos Aires/Argentina*, *Centro Universitario de Farmacología* (CUFAR)/Argentina, and *Gerencia de Medicina Complementaria del Seguro Social de Salud (EsSalud)/Perú* also contribute to the development of collaborative products and services.

5. Concluding remarks

The progress of BIREME's operation is evidenced by the elements that distinguish it, such as its ability to:

- Interacting with networks of institutions and health professionals, which remained active even in teleworking conditions;
- Effectively supporting to increase the visibility of the scientific output of LA&C;
- Maintaining updated the DeCS, the controlled and structured vocabulary using health terms in four languages and following international standards;
- Generating open access and open software methodologies and technologies;
- Developing local capacities for the access, production, and management of information;
- Contributing to projects at the global, regional, subregional, and national levels.
- Its ability to maintain the progress of its work plan even in emergency situations such as the COVID-19 pandemic.

BIREME as the PAHO/WHO reference center for scientific and technical information and communication, ensures the countries of the region continuity of governance, development, operation and innovation of products, services, events, information systems, methodologies, and technologies. of scientific and technical information in accordance with the international state of the art. It contributes in a systematic and efficient way to support, strengthen, and improve the capacities and infrastructure of scientific and technical information and communication in the Region.

The year 2021 has continued to be marked by the emergency situation of COVID-19, however, BIREME has kept in its operation through teleworking and providing the results that have been planned in its 2020-2021 BWP and considering the recommendations from its governance committees.

ANNEX 1 - BIREME's Products and services

REASONS TO USE BIREME'S PRODUCTS AND SERVICES

- BIREME has more than 50 years of tradition, knowledge, and experience in health science information management.
- It is a not-for-profit specialized international Center, which aims to improve the health of the people of the Americas.
- It is part of PAHO/WHO, the oldest international health organization in the world.
- It has solid partnerships with government and academic institutions.
- It offers innovative information products and services that follow international standards and state-of-the-art information methodologies and technologies.
- Provides access to up-to-date, reliable, and relevant content.

WHAT ARE BIREME'S PRODUCTS AND SERVICES?

VHL - Virtual Health Library

The VHL facilitates access and provides visibility to a wide collection of health information sources through Regional, National and Thematic Portals (Instances) that apply the VHL Model of health information management.

<https://bvshalud.org>

LILACS - Latin American and Caribbean Literature on Health Sciences

The main and most wide-ranging database of scientific and technical literature in health published in LA&C countries. It indexes journals, books, theses, technical reports, and other types of documents.

<http://lilacs.bvshalud.org>

Health Science Descriptors (DeCS/MeSH)

A thesaurus of Health Science Terminology in Portuguese, Spanish, English and French.

<https://decs.bvshalud.org>

DeCS Finder

Automatically locates any DeCS / MeSH controlled vocabulary descriptor, synonym, or qualifier for a given text.

<https://decsfinder.bvsalud.org/dmfs>

Global Index Medicus (GIM)

Biomedical and public health literature produced by and within low-middle income countries.

<https://globalindexmedicus.net>

VHL Network

Libraries that apply the VHL Model for the development of VHL Instances (Portals) in a country, region, thematic area or institution.

<https://red.bvsalud.org>

My VHL

Custom service for organizing and storing documents according to the user's profile and area of interest, available on the web and as a mobile app.

<http://platserv.bvsalud.org>

e-BlueInfo

Mobile app that provides health practice information for health professionals at the palm of their hands.

<http://e-blueinfo.bvsalud.org>

Windows of Knowledge

A service that brings together, organizes, and highlights selected information from the VHL and other sources of information, which are relevant for priority health issues.

http://bvsalud.org/post_vitrines

Evidence Map

Graphical representation of the evidence that exists in a particular area, classified by types of evaluated interventions and measured results. It has a dual function: to synthesize the available evidence and to identify knowledge gaps.

<http://mtci.bvsalud.org/mapas-de-evidencia>

PIE

Collection of documents that contribute to policy decision-making processes, based on the best available scientific evidence.

<http://sites.bvsalud.org/pie>

BIGG

International database of guides, protocols and clinical guidelines that apply the GRADE system for evidence assessment.

<http://sites.bvsalud.org/bigg>

VHL InfoButton

Service that recovers scientific evidence that is available in the VHL related to the context of the patient's clinical history.

BRISA

Regional Base of Health Technology Assessment Reports of the Americas.

<http://sites.bvsalud.org/redetsa/brisa>

LEYES

Health legislation in LA&C countries.

<http://sites.bvsalud.org/legislacion>

REA

Open educational resources in health sciences

sites.bvsalud.org/rea/bireme

EVID@Easy

Tool for the guided search of evidence in the VHL to facilitate decision-making in health.

<https://bvsalud.org/evideasy/>

IM (Impact Measurement)

Platform for the publication of users' opinion polls personalized to the different types of website pages.

In-person and online courses

Training opportunities in information management, knowledge management, access and use of information and scholarly communication in health, through in-person courses and online courses available in the Virtual Campus for Public Health (Campus Virtual de Saúde Pública).

<https://www.campusvirtualsp.org>

CRICS

Regional Congress on Health Sciences Information (CRICS)

<https://www.crics10.org/>

ANNEX 2 - Main events in which BIREME has participated in 2021

- Webinar “Estrategias para prevención de mortalidad materna, Organizado por la Universidade Federal do Piauí y la Secretaría de Salud del Estado de Piauí 27 de enero de 2021.
- I Reunión de la Red de Indizadores LILACS. Organizado por BIREME/OPS/OMS. 18 de febrero de 2021.
- Capacitaciones sobre Fuentes de Información de BVS para la Red Brasileña de Información en Ciencias de la Salud. Organizado por BIREME/OPS/OMS. De 04 de marzo al 5 de agosto de 2021
- Reuniones de coordinación de LILACS 2021. Organizado por BIREME/OPS/OMS. De 9 de marzo al 13 de julio de 2021
- I Reunión de la Red BVS AL&C. Organizado por BIREME/OPS/OMS. 11 de marzo de 2021.
- I Reunión de la Red BVS Brasil – Plan de Acción 2021. Organizado por BIREME en 18 de marzo de 2021.
- Webinars sobre Buenas prácticas en los procesos editoriales de revistas científicas para LILACS. Organizado por BIREME/OPS/OMS. Realizado en 2, 16 y 23 de marzo de 2021.
- Sesiones virtuales sobre indización de documentos según Metodología LILACS. Organizado por BIREME/OPS/OMS. De 25 de marzo a 25 de noviembre de 2021.
- PubliCIENT 2021. Evaluación por pares abierta: mayor transparencia en la comunicación científica. 26 de marzo de 2021
- “Conhecendo a BIREME” no Programa de Pós-Graduação em Enfermagem da Fundação Universidade Federal de Sergipe. 15 de abril 2021
- II Reunión de la Red BVS AL&C. Organizado por BIREME/OPS/OMS. 22 de abril de 2021.
- II Reunión de la Red BVS Brasil. Organizado por BIREME/OPS/OMS. 28 de abril de 2021.
- Relanzamiento oficial del Aplicativo e-BlueInfo Guatemala. 23 de abril de 2021.
- Lanzamiento virtual Curso Introducción de la comunicación Científica en portugués. 27 de abril de 2021.

- Lanzamiento de la Primera Rueda (Virtual) de la Comunidad de las Prácticas Integrativas y Complementares en Salud (PICS). Organizado por IDEASUS/Fiocruz y CABSIN. 29 de abril de 2021.
- Curso de Pós-Graduação em Odontologia do ICT-UNESP. A importância do Acesso Aberto na comunicação científica. 31 de março de 2021.
- Curso de Pós-Graduação em Pesquisa Clínica da Santa Casa de São Paulo. Reprodutibilidade dos Resultados de Pesquisa. 4 de maio de 2021
- V Congreso Internacional de Atención Primaria en Salud. CIAPS 2021. Modalidad virtual. Piauí, Brasil. 5 al 7 de mayo de 2021.
- Lanzamiento Nueva Plataforma Tecnológica LEGISALUD Argentina: acceso libre y universal a la Legislación COVID 19 en el contexto de la emergencia sanitaria". 20 de mayo 2021.
- Conferencia magistral para la Sociedad Veracruzana de Salud Pública do México. "La información y evidencia en salud para la toma de decisiones: ¿dónde encontrarla?". Veracruz México. 20 de mayo 2021.
- III Reunión de la Red BVS AL&C 2021. Organizado por BIREME/OPS/OMS. 20 de mayo de 2021.
- VI Congreso Internacional de Educación Médica. Organizado por la Asociación Peruana de Facultades de Medicina. De 26 hasta 29 de mayo de 2021.
- III Reunión de la Red BVS Brasil 2021. Organizado por BIREME/OPS/OMS. 26 de mayo de 2021.
- Curso de Pós-Graduação da UFR sobre Redação Científica. Avaliação por pares aberta. 16 de junio de 2021
- Congreso Internacional Políticas Públicas Sistema Único en Salud. CINPSUS 2021. Modalidad Virtual. Brasil. 18-20 de junio de 2021.
- VI Seminario Internacional de Información para la Salud – SINFORGEDS. Organizado por la Universidade Federal do Ceará. De 22 hasta 25 de junio de 2021.
- V Jornada LatinRev. Innovaciones y Proyecciones de las Revistas Académicas y Científicas. 1º de julio de 2021.
- Ceremonia Central de XXII Aniversario Universidad. Senhor de Sipan, Lambayeque, Perú. Conferencia magistral "La información en salud: un pilar fundamental en la formación universitaria". 5 de julio 2021.
- Lanzamiento de la BVS Enfermería Portugal. 9 de julio de 2021.

- Reducción de Mortalidad Materna. Modalidad virtual. Conferencia: Informaciones sobre mortalidad materna y Agenda 2030. Piauí. Brasil. 12 de julio 2021.
- Reunión del Comité de la BVS Enfermería Internacional. 16 de julio de 2021
- II Cumbre Mundial de Medicina Tradicional y Complementaria, hacia una medicina integrativa. Organizada por Colegio Médico de Perú. 17 de julio de 2021.
- 73° Reunião Anual da Sociedade Brasileira para o progresso da Ciência. Mesa Ciência Aberta: a construção do conhecimento participativa e transparente. 23 de julho de 2021
- 20° Reunião do Comitê Consultivo da BVS Enfermagem Brasil. 25 de agosto de 2021.
- 80 Aniversario de Sérgio Arouca. Organizado por Fiocruz. 27 de agosto de 2021
- III CONGREPICS. Congresso Nacional de Práticas Integrativas e Complementares em Saúde – Brasil. 2 al 7 de septiembre de 2021.