



# VHL Guide 2020

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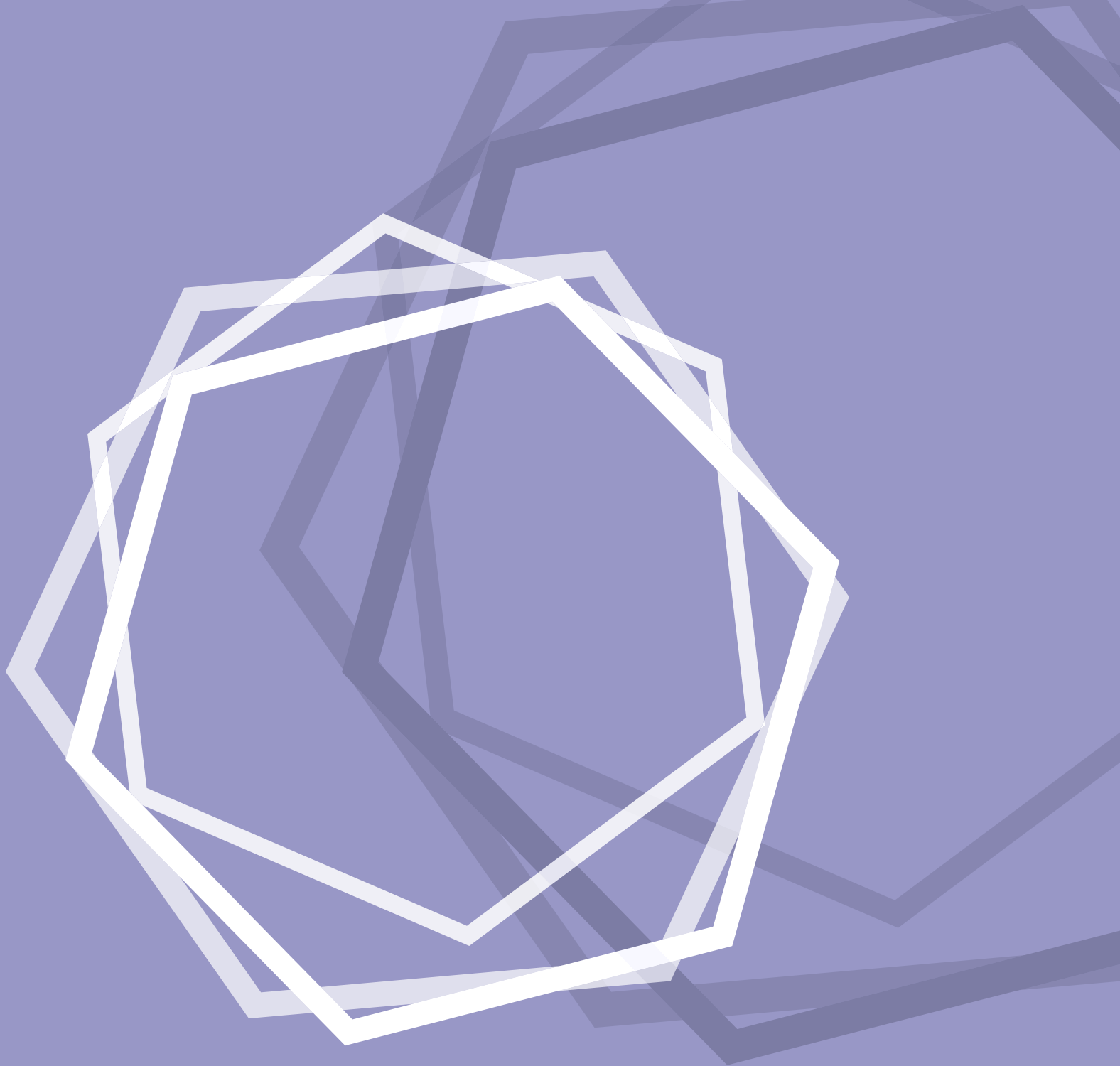
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# VHL Guide 2020

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# VHL Guide 2020

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# 1 About the VHL Guide

The **VHL Guide** is the publication that presents the foundations of the **Virtual Health Library (VHL)** as a model for managing health information based on collaborative and networked work.

The VHL is coordinated and promoted by **BIREME - Latin American and Caribbean Center on Health Sciences Information of the Pan American Health Organization/ World Health Organization (BIREME/PAHO/WHO)**, whose model is applied in technical cooperation to cooperating institutions mainly from Latin American and Caribbean countries (LA&C), and extends to other regions and countries, such as Spain, Portugal and Africa.

## 1.1 To whom it is addressed

The VHL Guide is intended for health information professionals and other related areas, interested in how to participate and/or collaborate in the construction of the VHL.

The guide is not intended to provide guidance on specific methodologies and technologies for the construction of information sources of the VHL and its instances. In this case, we recommend consulting the respective operating instructions manuals indicated in this document.



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### LEARN MORE

The **VHL 2020 Guide** updates its previous versions:

**VHL Guide 1999** - Prepared for the I Regional Coordination Meeting of the Virtual Health Library (VHL1), held at PAHO headquarters, in Washington D.C., on November 30, 1999.

VHL Guide 2001 - Prepared for the II Regional Coordination Meeting of the Virtual Health Library (VHL2), held in Havana, Cuba, on April 23 and 24, 2001.

VHL Guide 2005 - Prepared for the IV Regional Coordination Meeting of the Virtual Health Library (VHL4), held in Salvador, Brazil, on September 19 and 20, 2005.

VHL Guide 2011 - Elaborated on the occasion of the 12 years of VHL evolution and launched in March 2011.

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## 2 About the VHL

### 2.1 What is the VHL

The Virtual Health Library (VHL) is an information management model based on collaborative and networked work, applied to the creation, organization and dissemination of information and scientific and technical evidence in the field of health, made available online for access by users through the VHL portals.

In this way, the VHL contributes to facilitate and promote broad access to scientific and technical information on health, in accordance to this model (VHL Model).

#### VHL Mission

To provide access to information and scientific evidence in health to users throughout the entire spectrum of health sectors, contributing to narrow the gap between knowledge and practice in countries of Latin America and Caribbean.



### 2.2 History of the VHL

The VHL is the result of the evolution of technical cooperation in health sciences information conducted by BIREME/PAHO/WHO since its creation, when it developed the essential functions of the Regional Biomedical Library, promoting access to scientific and technical information, as well as the shared use of collections and services among libraries.

The collaboration of libraries to develop and offer information products and services has been the strategy adopted by BIREME since its creation in 1967. The first collaborative service was the bibliographic commutation (providing copies of documents). The first BIREME cooperation agreements with libraries were established in the early 1970s, and with the creation of the Latin American and Caribbean Literature in Health Sciences (LILACS), the network expanded to all countries in the region through cooperating libraries and coordinating centers.

At the end of the 1970's, this model expanded, adding to the library the function of information and indexing center, when BIREME assumed the coordination of bibliographic control of scientific and technical literature on health in LA&C. This action was decisive in initiating the movement to systematically promote regional and international visibility of the scientific and technical production in health in the region. In 1982, this network constituted the Latin American and Caribbean System on Health Sciences Information, coordinated by BIREME.

In the late 1980's, the functions of bibliographic control of scientific production and bibliographic research services began to be operated entirely in a decentralized manner, under the responsibility of cooperating institutions, strengthening national capabilities in infrastructure and human resources for health information management.

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From the 1990's on, with the expansion of internet access, the model of information management and exchange of knowledge in health culminated in a new process of online operation of information sources by the cooperating institutions, allowing users' access to this data more agile. It is in this context that, in 1998, the VHL was launched at the IV Regional Congress in Health Sciences Information (CRICS4) held in San José, Costa Rica, and approved by the LA&C countries through the Declaration of Costa Rica "**Hacia la Biblioteca Virtual en Salud**" (Towards a Virtual Health Library).

With the emergence of the VHL as a model of strategy and information management based on decentralized, collaborative, and networked work, the name of the Latin American and Caribbean System on Health Sciences Information was gradually being replaced by the Latin American and Caribbean Network on Health Sciences Information, or simply the VHL Network.

Learn more about the history of the VHL at: <http://red.bvsalud.org/modelo-bvs/en/history-of-the-vhl/>

### 2.3 The three pillars of the VHL

The VHL is formed by three pillars: the **institutions**, the **contents** (information sources) and the **users**.



**Figure 1:** *The three pillars of the VHL: the institutions, the contents and the users*



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### 2.3.1 The Institutions

Based on the collaborative network model, with decentralized operation, the VHL is developed by institutions working in the field of health information, whether public, private, non-governmental organizations and government bodies of management, research, teaching and/or health services. This network of institutions, also called the VHL Network, is one of the pillars of the VHL.

The institutions share the responsibility for producing the contents that are available at the VHL portals, counting on the work of information professionals who work in information centers, libraries, archives, documentation centers, evidence centers, among others.

As of 2019, self-employed professionals in the field of health information became part of the VHL Network as collaborators, expanding the scope of the network beyond the institutions.

By being part of the VHL Network, the institutions and information professionals expand the visibility of scientific production, promote equitable access to information, develop capacities for information management and promote the exchange of knowledge among their peers, in addition to collaborating to consolidate the VHL as a public good of reference for information and knowledge in the area of health in the LA&C Region.



#### LEARN MORE

The VHL Directory provides information on each member of the VHL Institutions Network. To consult it access:  
<https://bvssalud.org/en/centros>

### 2.3.2 The Contents (Information Sources)

The contents generated, selected, and systematized by the network of institutions and information professionals constitute the second pillar of the VHL, being its driving force.

In the VHL, these contents, organized and made available to respond to users' information needs, are called **Information Sources**. Information sources are represented through databases, directories and catalogues.

Each type information source has its metadata structure to describe the content (the information) and ways to access the full text.

### 2.3.3 The Users

As the *raison d'être* of any library or information service, users form the third pillar of the VHL, being the essential for the fulfillment of its mission. The users of the VHL are managers, researchers, students and clinical, teaching and health care professionals.

It is with a focus on users that the institutions responsible for the contents made available at the VHL continually work to improve and promote their information sources. They continuously promote studies that identify and anticipate information needs, establishing an open channel of communication with users.

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## 2.4 Forms of participation and collaboration with the VHL

According to their capacities and interests, the institutions can assume three different functions in the participation and collaboration with the VHL:

### Coordinating Center

The institutions that take the function of coordinating center are responsible for leading a group of other institutions (cooperating centers and/or participating units), supporting the training and communication of this group at national, regional or thematic level.

### Cooperating Center

The institutions with the function of cooperating center are committed to collaborate with content for VHL products and/or services, mainly carrying out activities related to the updating of information sources.

To become a cooperating center, the institution must have human resources for the activities of provision, selection, processing and indexing of contents.

### Participating Unit

The institutions associated with the VHL Network as Participating Units are committed to promoting and disseminating the access and use of VHL products and services to their users.

In general, the participating units do not cooperate in the operation of the VHL information sources, albeit participating in the network as promoters and supporters.

**Figure 2:** *Functions of the institutions in participation and collaboration with the VHL*

The participation of institutions in the network is formalized through a document of commitment and institutional justification, such as a term of membership, protocol of cooperation or even a meeting minute. Each country establishes the best instrument to formalize the participation of its institutions at the VHL Network.

The participation of autonomous information professionals at the VHL Network is voluntary, to collaborate with a service or source of information.

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## 2.5 Regional coordination of the VHL

The VHL is promoted and coordinated regionally by BIREME/PAHO/WHO, which carries out technical cooperation activities in information management and scientific knowledge, aiming to strengthen and expand the flow of scientific information as an essential condition for health development.

To enable the management and operation of information sources, the regional coordination of the VHL, exercised by BIREME, includes the following attributions:

- to develop methodologies and technologies for the management and operation of VHL information sources and flows;
- to develop the conceptual model of the VHL;
- to promote exchange between producers, intermediaries and users of health information at the VHL;
- to offer technical cooperation for the development of national capacities for the management and operation of the VHL;
- to operate the regional multilingual portal of the VHL <<https://bvsalud.org/en/>>, which integrates the information sources of the VHL Network through a research service designed to conform the unique regional index; and
- to promote and disseminate the VHL, LILACS, DeCS and other products and services resulting from its technical cooperation.

BIREME's work at the regional level is carried out through the VHL Network and other complementary networks, such as the Network of Referral Professionals, which brings together librarians specialized in developing strategies for searching information at the VHL; the Indexing Network, which gathers librarians specialized in representing themes or content of a document, for its description and identification, and subsequent cataloging of documents, according to the LILACS methodology; and the Network of Developers - RedDes, which brings together technology professionals dedicated to the development and support of tools and systems used by the VHL, among others.

### 2.5.1 VHL coordination meetings

The main regional meeting of coordination, exchange of information and experiences, evaluation, and recommendation for the development of the VHL is the **Regional Coordination Meeting of the VHL**, traditionally held in conjunction with the **Regional Congress in Health Sciences Information (CRICS)**. This event is coordinated by BIREME with the main objective of evaluating actions and defining strategic objectives for the future. At each event, its participants write a declaration reiterating the commitments made to the VHL, encouraging the participation of society in its development to favor dissemination of scientific and technical information on health.

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In addition to this conference, meetings are held to discuss technical, methodological and/or operational topics, aimed at groups of cooperating centers, librarians, network coordinators, developers, editors etc. The main objective of these meetings is to involve the network in discussions and actions to improve the collaboration and participation of the groups in the development and updating of VHL products and services.

The coordinating centers of national or thematic networks, in turn, also have the freedom and commitment to promote their own coordination meetings and technical meetings.

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## 3 The Instances of the VHL Network

### 3.1 What is an instance of the VHL Network?

An instance of the VHL Network is an initiative developed by a group of institutions using the VHL information management model - the VHL Model. All the production, selection, organization, and systematization of content carried out by this group is materialized through a VHL Portal, which can be developed in different areas, such as **geographic, thematic, institutional** or others.

### 3.2 How to develop an instance in the VHL Network

For the development of an instance of the VHL Network, it is initially necessary to:

- define its main objectives;
- define its scope, main subjects and related themes;
- identify its target audience and their main information needs;
- identify the institutions that have scientific production on the defined scope and structure a network of collaboration/governance structure;
- define which contents and information sources respond to the identified problems, and create and/or collaborate with these contents and information sources to make up the collection of the VHL portal; and
- develop the VHL portal to organize and provide the identified information sources.

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### 3.2.1 Governance structure

Once the institutions that will collaborate in the development of a VHL instance are mapped, they are organized following a pre-defined governance structure, taking different functions, namely:

#### Coordination and/or Executive Secretariat

- ✓ Represented by an institution that has favorable political, economic, and human and technological resources conditions to lead the operation of the VHL Network instance.
- ✓ Responsible for monitoring the actions deliberated by the Advisory Committee, expressed in its project and action plans, especially related to the promotion of cooperative and networking work for the operation of information sources.
- ✓ Responsible for promoting the effective operation of the Advisory Committee, including the organization of periodic face-to-face and/or remote meetings.

#### Advisory Committee

- ✓ Formed in an equitable manner by a group of institutions of the scope to which the VHL Network will be developed, represented by its specialists. It is recommended that different profiles of institutions compose the Advisory Committee, (research, academia, government, scientific societies etc.) to consider the needs and interests of different types of users.
- ✓ Responsible for the projects and work plans that define the priority lines of action of the VHL, as well as its development, continuous evaluation, and definition of quality criteria for information sources.
- ✓ Responsible for guiding the creation of groups for specific themes, such as the Selection Committee for the evaluation of scientific journals, thus contributing to the quality and representativeness of relevant scientific literature at the VHL.
- ✓ It is the deliberation forum of the VHL instance.

#### Technical Committee

- ✓ Composed by information and information technology professionals from institutions that make up the VHL Advisory Committee.
- ✓ Responsible for the operation of information sources and their continuous updating.
- ✓ Its composition can be validated by the Advisory Committee.
- ✓ Also called Executive or Operational Committee.

**Figure 3:** Governance structure for the VHL instances

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### **3.2.2 Definition of the action plan**

The representatives of the Advisory Committee, with the support of the Executive Secretariat, must develop an initial concept project and specific action plans to guide the activities of the instances of the VHL Network . In general, they include actions to maintain and update information sources and the portal, communication and dissemination actions, inter-institutional technical cooperation activities etc. Projects must set priorities according to the needs and available resources, as well as the distribution of responsibilities and networking.

The planning, definition of scope, schedule, budget, execution, monitoring and closure of projects and/or action plans with documentation of the activities developed are important tools for strengthen the VHL, positioning it favorably in technical cooperation actions and financing opportunities together to development agencies, ensuring and strengthening its sustainability.

### **3.2.3 Organization of cooperative and decentralized work**

The responsibility for the management and operation of the collections of information sources developed within the scope of the VHL Network is shared by the participating institutions. It is up to them to define their form of insertion and participation in the development of projects/action plans. The definition of these different roles is made explicit and consolidated in the Matrix of Responsibilities, a document that indicates the coordinating institution and which are the cooperating organizations of each information source of the VHL Network instance.

### **3.2.4 Portal Development**

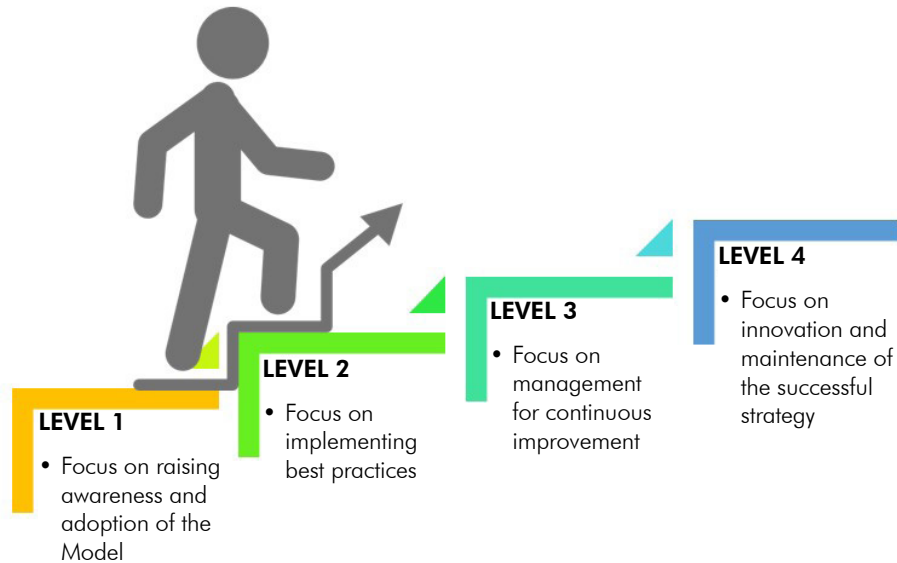
The portals of the instances of the VHL Network give users the visibility of the contents organized in information sources, as well as allow them to get to know the institutions responsible for the project and their management and organization mechanisms. In this way, they reflect and express the accomplishment of a work aligned with the three pillars of the VHL.

The development of a portal is based on standards that aim to allow the integrality and convergence of the communication between instances - between them and the regional portal of the VHL and its users. These standards are applied to the different elements that make up a portal: information architecture (navigation structure and organization of information sources), accessibility standards (access by as many people as possible, regardless of their physical conditions), interface design (content formatting for different access devices), visual programming and the technology to be implemented.

### 3.3 VHL maturity model

The VHL maturity model is a way of evaluating the instances of the VHL Network in the adoption of methodologies, technologies and good practices recommended in this guide. This model defines a structure of evolution at successive levels, the passage of which is necessary to reach full maturity in the adoption of the VHL Model.

The instances of the VHL can be classified into four different levels of maturity:



**Figure 4:** VHL Maturity levels

The definition of the maturity level is done through a self-assessment process. Periodically, the coordinating institutions of the VHL instances are invited by BIREME (VHL Network regional coordinator) to perform this activity, where aspects related to governance, organization and updating of contents and technological platforms used are observed. As a result of this process:

- the coordinators of the VHL instances can identify the quality level of their structures, as well as aspects that must be developed in search of continuous improvement; and
- BIREME receives development indicators from the Network that subsidize its regional coordination activities of the VHL and technical cooperation in information management and scientific knowledge.



#### LEARN MORE

About the Maturity Model for the VHL. Visit:  
<http://red.bvsalud.org/modelo-bvs/en/vhl-maturity-instrument/>



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## 4 Information Sources

### 4.1 What are Information Sources?

At the VHL, the contents are organized as shelves in a library, grouping different resources into collections according to their characteristics: scientific and technical literature, journals, legislation etc. Each one of these collections at the VHL is called Information Source.

The scope of the information sources at the VHL extends the composition of the traditional libraries collections, allowing the inclusion and exchange of scientific literature with collections of other natures, such as full texts of scientific evidence in the form of systematic reviews, technological assessments, multimedia, learning objects, and factual information, such as events and news.



#### SUMMARIZING

Information Sources are represented through databases, directories, and catalogues. They should be created according to the information demands and needs of the users - or the target audience of the VHL.

### 4.2 The operation of Information Sources

Information sources are produced and operated in a decentralized and online manner, which enhances their visibility and accessibility, promotes cooperation between institutions and avoids duplication of work. For this purpose, they are created, organized, and operated according to pre-defined methodologies. At the VHL, each type of information source has its own methodology, which includes manuals, guides and systems that facilitate its implementation.

The development of methodologies and systems is performed by BIREME in collaboration with the VHL Network. The adoption of international standards and norms widely adopted in their areas and the use of open-source tools following standards of information architecture, accessibility, and responsiveness is recommended. The sharing of flows and processes in the use of methodologies and technologies within the VHL values the transparency of interactions among all network participants and strengthens the concept of interoperability in the management of information sources.

In the instances of the VHL Network it is recommended that each source of information be coordinated by an institution, according to the responsibilities matrix. The coordinating institution is responsible for the integrity of this information source following the corresponding methodology.

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## 4.3 Types of content organized in the Information Sources

The adoption of a form of content organization, standardized in Information Sources, creates a common language that facilitates the identification, operation, and retrieval of these resources in different instances of the VHL Network.

The forms of organization of the different types of content in VHL Information Sources are described below. In addition to their main characteristics, links to more information on the methodologies and technologies associated with them are also indicated.

### 4.3.1 Scientific and technical publications (bibliographic databases)

At the VHL, scientific and technical publications are organized in databases used for the bibliographic control of the scientific and technical production on health of the LA&C countries. The bibliographic databases are composed of references of several types of documents, such as journal articles, books, theses, papers presented at scientific events, technical and scientific reports, projects, and other non-conventional documents.

**LILACS** - Latin American and Caribbean Literature on Health Sciences is the main database of scientific and technical production in the field of health published in Latin American and Caribbean countries, as well as the main source of information for the VHL. LILACS is coordinated by BIREME and has the collaboration of the cooperating centers that integrate LILACS Network.

Moreover, the institutions of the VHL Network can, in a decentralized manner, create databases specialized on topics of interest to the field of health. These databases not only use the LILACS Methodology but also complement the LILACS database. In these cases, the responsibility for defining the scope of the database, establishing the operation flow and updating it belongs to the coordinating institution of the database.

LILACS and other bibliographic databases are operated through the VHL Information Sources Management System (FI-Admin) using the LILACS Methodology.



#### LEARN MORE

About the LILACS Methodology: <http://red.bvsalud.org/lilacs/en/>  
LILACS Portal: <https://lilacs.bvsalud.org/en/>

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### 4.3.2 Journal collections

Data on the scientific journals and collections of journals in the Network libraries are made available at the VHL through the information source **Portal of Scientific Journals in Health Sciences**, which registers and organizes collections of serial publications, allowing the creation of a collective catalogue of the VHL Network libraries. This catalogue contains the bibliographic description of journal titles (title, ISSN, publisher, city, periodicity etc.), and information on the availability and form of access to the journal's full text in electronic format, contributing to the visibility and access to the full texts of the articles, in addition to promoting the rationalization of resources among the entire Network.



About the Portal of Scientific Journals of Health, access:  
<http://red.bvsalud.org/en/secs-serials-in-health-sciences/>

### 4.3.3 Events

Scientific events such as congresses, seminars, conferences, and symposia are registered in the **Health Sciences Events Directory**. The main objective of this source of information is to report scientific events in the field of health, presenting basic information about them to promote the exchange of knowledge among professionals and specialists on up to date themes and ongoing research.

The Events Directory at VHL is operated through the FI-Admin system and the DirEve methodology.



About the DirEve Methodology, visit:  
<http://red.bvsalud.org/en/direve-science-health-events-directory/>

### 4.3.4 Legislation

The Legislation at the VHL is provided in an information source called **LEYES - Latin American and the Caribbean Basic Health Legislation**. LEYES is a regional thematic database produced in a network by institutions in the areas of legislation and health that contains the references of the legislation in health and may also contain the full text or link to it.



The LEYES database is operated by means of an FI-Admin application, from the LeisRef methodology and data interoperability processes. To learn more about the LeisRef Methodology, visit:  
<http://red.bvsalud.org/en/leyes-health-legislation/>

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### 4.3.5 Questions and Answers

Contents such as Questions and Answers (known by the acronym FAQs, Frequently Asked Questions) are registered at the VHL following the model of the information source originated from the *Programa Telessaúde Brasil Redes*, called **Formative Second Opinion - SOF**. Currently, this source is exclusive for Primary Health Care (PHC) themes, written in Portuguese and contextualized to the Brazilian Unified Health System (SUS).

The questions are questions from family health teams, which were previously answered based on the best evidence, by the Teleconsultation service of the *Programa Telessaúde Brasil Redes*. The answers are adapted and formatted as a source of information, from teleconsultations selected for their relevance and pertinence to PHC topics in SUS.

#### LEARN MORE

The SOF is available at the instance VHL APS of Brazil <<https://aps.bvs.br/>> and integrated to the regional VHL index. To learn more, visit: <https://aps.bvs.br/segunda-opiniao-formativa/>

### 4.3.6 Educational Resources

At the VHL, educational materials and contents, such as courses (complete or in part), support materials, software (for the creation, registration, and organization of educational resources and for the development of online learning communities), and implementation resources, such as intellectual property licenses, among others, are provided at the VHL through **Educational Resources Repositories**.

From the production and organization of this type of content by the LA&C countries, they are gathered and offered, freely and openly, at the portal of the *Red de Repositórios de Recursos Educativos Abiertos CVSP/BVS*, available at <https://sites.bvsalud.org/rea/>.

#### LEARN MORE

To learn more about this initiative, visit: <http://red.bvsalud.org/en/educational-resources/>

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### 4.3.7 Internet resources

Internet resources, such as websites, portals, blogs, databases, repositories, and other types of resources with information on health are organized in a catalogue called **LIS - Health Information Locator**.

The main objective of LIS is to provide quick visibility and access to scientific, technical, and factual information on internet resources. With content evaluated according to quality criteria, the LIS complements the flow of scientific communication with non-conventional materials, which are generally not published in scientific communication channels or should only be published after a validation period.

#### LEARN MORE

The LIS at the VHL is operated through the FI-Admin system and the LIS Methodology. For further information, visit: <http://red.bvsalud.org/en/lis-health-information-locator-in-english/>

### 4.3.8 Multimedia resources

Images, videos, and presentations published on the Internet and freely accessible, produced by the VHL network and/or on themes that make up the VHL' scope of action are offered through the information source Multimedia Resources Catalogue. The Multimedia methodology is an adaptation of the LILACS Methodology with fewer fields and developments than others to provide a better description of the specific characteristics of this type of publication.

#### LEARN MORE

The multimedia resources are registered through the FI-Admin system and the Multimedia for WordPress plug-in, using the LILACS Methodology. For further information please visit: <http://red.bvsalud.org/es/multimedia/>

### 4.3.9 Reports of experiences

Testimonials, reports of relevant situations and cases, that can serve as reference and lessons learned for managers and health professionals are made available at the VHL through the information source Reports of Experiences. In it, it is possible to provide and integrate different formats of complementary narratives: a main text that contextualizes the central axis in question, videos of testimonials from managers who share their experience at the head of the project, photos and a content selected to go more in-depth into the material.

#### LEARN MORE

For additional information, visit: <http://red.bvsalud.org/relatos-de-experiencias/>

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#### 4.3.10 Search strategies

Bibliographic search strategies contribute to the development of systematic reviews, definition of health policies, situation analysis, production of evidence maps, infometrics, definition of thematic structure for a VHL Network Instance, construction of research filters, among other applications.

For this reason, search strategies developed by specialists for the retrieval of information on different themes at the VHL and other information sources are made available in the Repository of Search Strategies <https://bvsalud.org/queries>. This repository has the following objectives:

to give visibility to the search strategies elaborated by the VHL Referral Referential Network, in different health themes;

to enable the reuse of searches by different audiences, in different places and contexts; and

to promote the cooperation and contribution among members of the VHL Network, associated networks, and specialists for the updating of published search strategies, and the publication of new strategies in different information contents.



To learn more about Search Strategies as an information resource at the VHL: <http://red.bvsalud.org/refnet/>

#### 4.3.11 Terminology and controlled vocabulary

In the VHL, controlled terminologies and vocabularies have the role of defining a common language for content description and retrieval. **Health Sciences Descriptors (DeCS)** is the main controlled vocabulary of the VHL, having been created by BIREME to serve as a unique language for indexing scientific journal articles, books, congress proceedings, technical reports, and other types of materials, as well as to be used in the search and retrieval of scientific literature subjects in the information sources available at the VHL. The concepts that comprise the DeCS are organized in a hierarchical structure that allows the execution of research in broader or more specific terms, or even in all the terms that belong to the hierarchical structure.

Furthermore, instances of the VHL Network can also develop terminological instruments, such as glossaries, thesauruses, and controlled vocabularies.



To learn more about DeCS, visit: <https://decs.bvsalud.org/en/>

### 4.3.12 Information Sources: summary chart

The chart below summarizes the information sources of the VHL, their methodologies and associated systems, as well as the types of content contemplated in them.

**Table 1:** Types of content and their respective information sources at the VHL

Name of Information Source	Name of Methodology	Content Management System	Resource for Search Interface	Type of Content	To know more:
<b>LILACS and other regional, national, and thematic bibliographic databases</b>	LILACS	FI-Admin	iahX bibliographic-wp-plugin	Scientific and Technical Publications Reference data from books, journal articles, grey literature, etc., with the possibility to access the full text, when available)	<a href="http://red.bvsalud.org/lilacs/en/">http://red.bvsalud.org/lilacs/en/</a> <a href="https://lilacs.bvsalud.org/en/">https://lilacs.bvsalud.org/en/</a>
<b>Portal of Scientific Journals in Health Sciences</b>	SeCS	FI-Admin	Own Interface	Journal Collections Bibliographical description of the titles of journals with information on availability and form of access to the full text	<a href="http://red.bvsalud.org/en/secs-serials-in-health-sciences/">http://red.bvsalud.org/en/secs-serials-in-health-sciences/</a>
<b>Directory of Events</b>	DirEve	FI-Admin	direve-wp-plugin	Events Basic information on congresses, seminars, conferences, etc.	<a href="http://red.bvsalud.org/en/direve-science-health-events-directory/">http://red.bvsalud.org/en/direve-science-health-events-directory/</a>
<b>LEYES – Latin American and the Caribbean Basic Health Legislation</b>	LeisRef	FI-Admin	iahX leisref-wp-plugin	Legislation References in health legislation	<a href="http://red.bvsalud.org/en/leyes-health-legislation/">http://red.bvsalud.org/en/leyes-health-legislation/</a>
<b>SOF – Formative Second Opinion</b>	SOF	FI-Admin Wordpress	iahX bibliographic-wp-plugin	Questions and Answers Primary Health Care	<a href="https://aps.bvs.br/segunda-opiniao-formativa/">https://aps.bvs.br/segunda-opiniao-formativa/</a>
<b>Educational Resources Repository</b>	Educational Resources	FI-Admin	oer-wp-plugin	Educational Resources Educational content, such as courses and support material; tools such as software for creation, registration and organization of educational resources and online learning communities; etc.	<a href="http://red.bvsalud.org/en/educational-resources/">http://red.bvsalud.org/en/educational-resources/</a>
<b>LIS – Health Information Locator</b>	LIS	FI-Admin	lis-wp-plugin	Internet Resources Sites, applications, social networks, knowledge windows, image banks, infographics, among other internet resources	<a href="http://red.bvsalud.org/en/lis-health-information-locator-in-english/">http://red.bvsalud.org/en/lis-health-information-locator-in-english/</a>
<b>Multimedia Resources Catalogue</b>	Multimedia	FI-Admin	fi-multimedia-wp-plugin	Multimedia Resources Videos, images, animations, presentations and audios, among other open access resources published on the internet	<a href="http://red.bvsalud.org/es/multimedia/">http://red.bvsalud.org/es/multimedia/</a>
<b>Reports of Experiences</b>	Reports of Experiences	Wordpress	Own interface	Reports of Experiences Testimonials, report of situations, relevant cases and lessons learned	<a href="http://red.bvsalud.org/en/">http://red.bvsalud.org/en/</a>
<b>Search Strategies Repository</b>	RefNet	Wordpress	Own interface	Search strategies in information sources at the VHL	<a href="https://bvsalud.org/queries/?l=en_US">https://bvsalud.org/queries/?l=en_US</a>
<b>DeCS – Health Sciences Descriptors</b>	DeCS	FI-Admin	Own interface	Controlled trilingual vocabulary in health sciences	<a href="https://decs.bvsalud.org/en/">https://decs.bvsalud.org/en/</a>

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## 4.4 Quality of Information Sources

The VHL, as a mechanism for the development of health through equitable access to information and scientific and technical knowledge, assumes an absolute commitment to the pursuit of quality and reliability. The reach and maintenance of this quality standard is guaranteed by the adoption of policies, criteria, and procedures for the production of each different type of information source.

As a characteristic product of science, scientific publications have internationally consolidated criteria for quality assurance and control. Among these criteria, peer review, editorial committee, regularity of publication, periodicity, among others, stand out. However, there are publications contained in the VHL information sources that are not submitted to these criteria, which does not mean that they have inferior quality. Oftentimes, these publications dispense with this evaluation process because they are institutional documents, such as reports, briefings etc. Among the variables considered in the evaluation of these publications are the institutional linkage of the document, its indexing in national and international databases, reliability, and significance of the published data etc.

Aiming to contribute to improving quality of publications and scientific journals of the Latin American and Caribbean region, one of the lines of action of the regional coordination of the VHL Network is the training of editors and others involved in the editorial flow on all the stages and best practices related to management of scientific and technical journals, from submission of articles to their final publication.



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## 5 Products and Services Associated with the VHL

### 5.1 FI-Admin

FI-Admin is the system for Management of Information Sources of the VHL.

FI-Admin has the functions of bibliographic description and indexing of different types of content, such as journal articles, monographs, theses and dissertations, videos, events, internet sites and legislation. Using this system, it is possible to manage the following information sources:

- LILACS and other regional, national, and thematic bibliographic databases;
- LIS - Health Information Locator;
- DirEve - Events Directory;
- Multimedia resources;
- LEYES - Latin American and the Caribbean Basic Health Legislation;
- Educational Resources; and
- Portal for Scientific Journals in Health Sciences.



#### IMPORTANT

The FI-Admin replaces some systems previously used, such as LILDBI-Web, LIS, DirEve, LILACS-Express Editor and the TITLE base for Scientific Journals in Health Sciences.

For more information access: <http://red.bvsalud.org/en/fi-admin-en/>

### 5.2 Integrated search interface (IAHx)

It is a VHL search service with a multi-language interface, which retrieves content from different information sources in an integrated way. It offers resources for the refinement of search results through filters (clusters) and search by DeCS/MeSH navigation, among other resources.



#### LEARN MORE

To learn more about search services go to: <http://red.bvsalud.org/en/vhl-research-interfaces/>

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### 5.3 Knowledge Windows

The Knowledge Windows are a VHL resource that seeks to highlight selected documents and information resources on a relevant health theme. It has the same function as a showcase itself, drawing attention to a selected and representative set of contents related to a theme, which may or may not be associated to an instance Portal of the VHL Network.

The Knowledge Windows follow their own methodology, giving direct access to documents indexed in the information sources of the VHL, links to pre-defined search strategies; external information sources; fundamental websites and pages for the theme in question, or even, updated contents via RSS, such as blogs, epidemiological bulletins, and news. It also gives information in different formats, such as videos, infographics, infometrics, or any other resource that provides the researcher with fast and reliable access to relevant information.



To learn more about Knowledge Showcases, visit: <http://red.bvsalud.org/vitrines-do-conhecimento/>

### 5.4 e-BlueInfo

e-BlueInfo is an application for mobile devices that facilitates the access of Primary Health Care (PHC) professionals to a specific collection of documents of interest and relevance to a specific target audience and/or health system. This collection, selected nationwide, is composed of resources from VHL information sources.



To learn more about the e-BlueInfo app, visit:  
<https://e-blueinfo.bvsalud.org/en/>  
<https://boletin.bireme.org/en/2019/01/28/e-blueinfo-information-in-the-palm-of-the-hand/>

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## 5.5 My VHL

My VHL is a service aimed at VHL users. It consists of a space that stores user information and preferences, allowing them to create and store lists of selected documents, indicate topics of interest to receive alerts of new documents, history of searches made at the VHL, list of favorite links and the user's own publications.

### LEARN MORE

My VHL <<https://platserv.bvsalud.org/>> is connected to the Regional VHL Portal.

Additional information at:

<https://boletin.bireme.org/en/2017/08/30/myvhl-a-customized-information-product/>

<https://boletin.bireme.org/en/2018/05/27/advances-in-the-use-and-development-of-myvhl/>

## 5.6 Evidence Maps

Evidence Maps provide a visual overview of existing studies or reviews in an area or sub-area, in terms of the types of interventions evaluated and the results measured. The evidence is mapped and applied in a framework that graphically highlights gaps, where there are few or no review studies and where there is a concentration of studies.

The methodology for producing evidence map was adapted by BIREME based on the methodology of the International Initiative for Impact Evaluation - 3ie <<http://www.3ieimpact.org>>. The maps are developed based on infometric analysis - by type of review, by clinical application, by outcomes, among other parameters.

The main purposes of the Evidence Maps are:

- to give visibility to available scientific evidence;
- to identify research gaps (evidence) and redundancies (multiple studies of similar issues);
- to contribute to the establishment of research priorities in the area; and
- to facilitate the use of available evidence by managers and health care professionals.

### LEARN MORE

To learn more about Evidence Maps, visit:

<http://red.bvsalud.org/mapasdevidencias-2/>

<https://www.youtube.com/watch?v=IBFBMceKWJQ>

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## 6. Promotion and Dissemination of the VHL

The promotion and dissemination actions are considered an integral part of the development of the VHL. These actions position the VHL as an up-to-date and reference space in accessing information, knowledge, and scientific evidence, and sensitize the target audience about the strategic importance of the VHL. They are also mechanisms to strengthen technical cooperation and expand partnerships with other networks.

The main lines of action in promoting and disseminating the VHL are presented below.

### 6.1 Courses and training

Courses and training on the VHL are activities developed in partnership with the VHL Network in both face-to-face and online modes. These activities are directed at professionals in the areas of health and information professionals, in the geographic and thematic scope of the VHL.

The qualifications meet the demand of countries and the region for training and foster the VHL in universities, research institutes, hospitals, secretariats, and other public agencies with a focus on health care and the training of professionals.



#### LEARN MORE

The training events of the VHL Network are disclosed and are available at:  
<http://red.bvsalud.org/eventos-rede-BVS>

### 6.2 Participation in events

The promotion of the VHL in the main events in the field of health, library and information science must be a constant activity. The participation in fairs, exhibitions, congresses, conferences, seminars, forums, workshops, among other types of events, are opportunities to demonstrate the information sources and resources of the VHL, whether with the presentation of scientific-technical works or through booths in these events.

### 6.3 Production and reporting of news

The drafting and dissemination of news about the VHL and its contents contributes to its promotion and expands the communication channels with users and potential partners. In this direction, several features, communication and social interaction tools should be considered, such as newsletters, hotspots, blogs, social media, among others.

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## 6.4 Conducting studies and publications

Publications such as books, guides, and reports systematically document and disseminate the work carried out within the scope of the VHL with producers, users, and intermediaries of health information.

Moreover, as the work object of a large volume of information, technology and health professionals distributed in the VHL Network, the VHL is the target of a large number of researchers on its different facets. These studies feedback into the work plans of the VHL and its instances by indicating paths and solutions for the challenges encountered in its mission.

### LEARN MORE

To know about the studies, publications and statements already made for and on the VHL visit: <http://red.bvsalud.org/modelo-bvs/pt/publicacoes-sobre-a-bvs/>

## 6.5 Preparation of graphic products

To support the above-mentioned action lines, the VHL makes use of different graphic products to visually communicate concepts, projects, products and services through pamphlets, banners etc. The manufacture of these products is carried out in a decentralized manner by the VHL's Institution Network using the materials available at: <https://logos.bireme.org/>.

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