

THE ANDALUSIAN PUBLIC HEALTH SYSTEM VIRTUAL LIBRARY. FOUR YEARS ON

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Aim

The Andalusian Public Health System Virtual Library (Biblioteca Virtual del Sistema Sanitario Público de Andalucía, BV-SSPA) set up in June 2006 was determined by the II Quality Plan 2005-2008.

It is an Andalusian Government strategic action line in the key process *Guarantee the Knowledge Exchange into the Health System* which was established by the Strategy IV, Knowledge Management, in this II Quality Plan, as it says: *To Define and Develop a Scientific Documentation and Information Strategy for the Public Health System* with the following purposes:

- To allow that health professionals could identify, find and obtain the necessary document resources for their task development.
- To help citizens to find non-biased, comprehensible and established information so they can participate in an active way in decisions which could affect their health.
- To coordinate the Andalusian Public Health libraries with the aim of sustaining an institutional network for the expansion of the Virtual Library services to every health professional.
- To establish strategic alliances with organizations for the performance of its objectives.
- To promote the Andalusian Public Health System Knowledge Management.

Andalusia is a region with more than 8 million inhabitants, with 95,000 health professionals into the following institutions:

- 41 hospitals:
 - 13 hospitals with more than 500 beds. Big ones.
 - 18 hospitals with 101 to 499 beds: Medium
 - 10 hospitals with less than 100 beds: Small
- Primary Healthcare centres: 1.500
- Other centres: 10

With that panorama the Andalusian Government aimed to create a Centre for Information and Scientific Documentation, that is, the BV-SSPA, which coordinated all of the health sciences documentation centres.

This Quality Plan also established the Structure of this Virtual Library:

- A Steering Committee composed by members of the Health Government Organizations.
- A Technical Committee, composed by technical professionals from the Public Health System, mainly librarians.
- A Library Network, composed by every library of the Public Health System

- A Centre for Health Information and Documentation, composed by BV-SSPA full-time staff.

Methods:

As indicated above the Andalusian Public Health System (SSPA) is composed by 41 hospitals and other centres (investigation, primary care, etc.). So the situation encountered by the BV-SSPA was really complicated:

Every Organization had its own library which bought its own resources and offered its services to its users; all of this, by themselves.

With the creation of the BV-SSPA, the first step was to create a collaboration network to obtain the expected results:

- Rationalization of the collection to avoid duplication. Once the BV-SSPA subscribes the electronic resources for the whole system, the centres don't renew their individual subscriptions for the same titles. And in a second step any centre won't be allowed to subscribe any electronic resources.
- Evaluation of the journal collection. The Subscription Group evaluates the collection comparing it to the subscription that hospitals really have and decide if the subscription is relevant for every resource.
- Instant access to journals. As we subscribe bigger amount of resources, we are strong enough to deal with suppliers. All the signed licenses are without embargo.
- Scale economies: With the same budget, more resources are subscribed and for more users.
- Access to the same information all over the SSPA.
- Library services to primary healthcare and hospitals without library. With the previous model, professionals from primary healthcare centres and hospitals without library could not access the scientific information of the system.
- Partnerships with Institutions. Since the BV-SSPA is stronger it can associate other institutions such as universities, investigation centres, etc...
- Elimination of connection problems. Every professional of the Health System can access to this library from its workplace.
- Home access (remote access), requiring only an internet connection.

Once the situation (year 2005) was analyzed, work groups were created so every librarian could contribute with their experience and know-how to this project. The first working groups were:

- Electronic Resources' subscription.
- Interlibrary Loan Service.
- Learning
- Web and metaresearcher
- Standard, quality group
- Communication and marketing

CENTRAL PURCHASING OF ELECTRONIC JOURNALS

The situation in 2006, concerning the health information resources was as follows:

Number of print journals:	5.267
Number of repeated journals:	2.961 – 56,22% from the total amount was repeated as every hospital subscribed its own resources.

The first step was to subscribe in a centralised way, the electronic information resources for the whole system. In 2006, the BV-SSPA worry was to cover assistance needs, which had been previously detected through the user studies, which make us to initiate the subscriptions of 975 journals following quality criteria.

This collection was progressively increased during these 4 years, including other areas such as pharmacy, stem cells and genetics.

- Subscribed titles in 2007: 975
- Subscribed titles in 2008: 2.404
- Subscribed titles in 2009: 2.431

At present the BV-SSPA has the biggest electronic health science resource collection in Spain. Thanks to its commitment with quality and user service to detect and determine their needs, its electronic collection reaches the amount of 2.431 subscribed titles from the most prestigious national and international editors, covering not only assistance needs but also researching and learning for healthcare, management, health economics, stem cells, pharmacy and nursing areas.

69,02% of these journals have impact factor and 91,10% of them is in the first or second quartile in Health Sciences.

However the BV-SSPA offer it not limited to these resources as it integrates the International Initiatives of Open Access, providing its users with access to 7.055 journals and 18 freely accessible biomedical data bases.

The presentation of these resources is arranged, in a coherent and easily findable way format through the appropriate tools, such as the metasearcher which facilitates the resource integration, recovering the information with only a search; a link solver which allows the full text access; all this offered in a Web Page easy to use by librarians, health professionals, researchers, teachers, or patients/citizens: a virtual environment inside the Web 2.0 and Social Media Strategies where the visitors can take part with his contributions and where his offers and suggestions are gathered.

SERVICES

Our services are destined for clinical healthcare, education and researcher professionals as all of them can access the BV-SSPA:

- A reference attention service
- Consult of the documents from the own physical collection

- Consult of the collective computerized catalogue
- Scientific information researching guides
- Alert services
- Document Supply Service
- Learning Service, for users, citizens and librarians on the virtual library usage and how to access the information.
- Information Exchange Forum

It is remarkable the work with the Document Supply Service, as in 2006, the Work Group started to draw up the regulations of this service. These regulations established the rules to implement this service in a centralized way from the BV-SSPA which was definitively installed in 2009.

This service receives all the article requests from and for the Andalusian Health System. The BV-SSPA reached several agreements with other National, International Libraries in order to supply our user with the articles they ask for.

Other services which are also offered by the BV-SSPA are the Contact Form on our Web Page, where users can communicate their suggestions, gratitude, complaints and ask for help on how to enter the BV-SSPA or do a search; and the learning platform where several learning courses are proposed to our users.

REMOTE ACCESS

To guarantee the success of our virtual library it was essential that all users could access all the library resources independently of the user's location.

Each centre has its own private healthcare professionals' database and its own server technology. That means that the BV-SSPA had to develop a different plug-in for each institution in order to be able to connect them with the federated authentication system. The aim was to reach remote access to all our resources as IP access was guaranteed since healthcare professionals could access everything from their workplace thanks to the intranet. We installed a federated authentication and authorization system called PAPI and a PAPI rewriting proxy. PAPI is a system for providing access control to restricted information resources across the Internet. It keeps authentication as an issue local to the organization the user belongs to.

The installation of this system in February 2008 was a success in terms of usage as it meant an increase of 147% of the BV-SSPA usage in 2008.

COMMUNICATION AND MARKETING PLAN

We understood it was necessary to have a Communication and Marketing Plan to promote the knowledge and usage of the BV-SSPA among the Health System Professionals, and the diffusion of this project was necessary to involve them. Not only Librarians, but also Managers, Doctors, Nurses, everyone who could be concerned by the change this central purchasing would mean:

- The BV-SSPA has been presented in every institution of the Health System. These presentations consisted upon an introduction to the project by the Director, followed by a session on how to use this resource.
- The BV-SSPA also participates in National Health Congress with its own stand where the librarians from the Health System explain its functioning to the attendants. In this stand we have two computers to make searches and we have merchandising at our disposal to deliver to the participants.
- It also takes part in National Congress related to the Information and Documentation, that is, the National Congress of Information and Documentation in Health Sciences, where it actively participates.
- In 2008, the BV-SSPA organised the 2nd European National Digital Libraries of Health Conference with the attendance of the people in charge of these libraries, from UK, Norway, Belgium, France and Spain.
- Last November 16th 2009, the BV-SSPA launched its profile in Social Media such as Facebook, Twitter, Slideshare, Flickr and Del.icio.us where it is in touch with users and everyone who could be interested in knowing this service or obtaining information about Health Resources, Events and New Technologies. These tools allow a bidirectional relation with the user. That fact has increased our visibility in and outside our boundaries, as many people from other communities in Spain are following us. As an example, by this date, we have 831 followers in Facebook.

Results:

CENTRAL PURCHASING

The BV-SSPA reached in 2009 the subscription of 2,431 electronic reviews, 8 data bases and other scientific information resources. None of the APHS centres can subscribe individually, the BV-SSPA is the only intermediary in the Andalusian Public Health System for contracting the health electronic resources.

This year a new metasearcher was installed to make all this information more findable and facilitate the use of these resources to our professionals.

In 2010 a new Web 2.0 page is being launched with different sections for citizens and health professionals. In this page the patients acquire relevance as they have a specific profile where we group the resources they can access from our page. In the Health Professional section we created a feature called Thematic Areas, integrating under separated sections the resources destined to different group of professionals: Nursing, Public Health and Primary Healthcare.

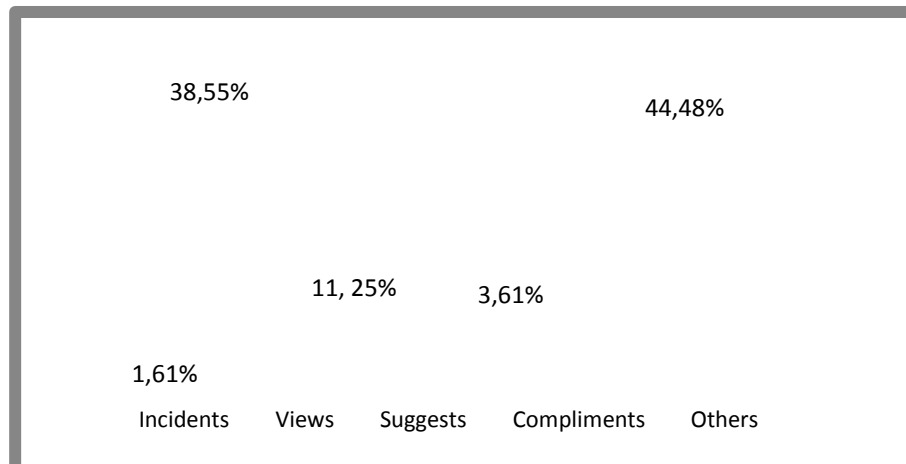
SERVICES

The Document Supply Service was definitively implemented in 2009, focusing all the article orders from and for the Andalusian Public Health System, fulfilling the recommendations of the International Federation of Library Association (IFLA).

The total amount of requests was 3.943, answering positively, 3.542, that is 89,93%.

Concerning the Web Contact Form, 249 questions were received during 2009. Most of them asking for information about how to access outside the Corporative Network and the validation system:

1. Consult typology



The courses offered by the e-learning platform were:

- Bibliographic searches for Health Professionals
- Bibliographic searches for Nursing
- Clinic sessions about BV-SSPA
- Bibliographic recovery techniques for Health Professionals
- Bibliographic recovery techniques for Nursing Professionals.

Several tutorials are also at the disposal of the users.

REMOTE ACCESS

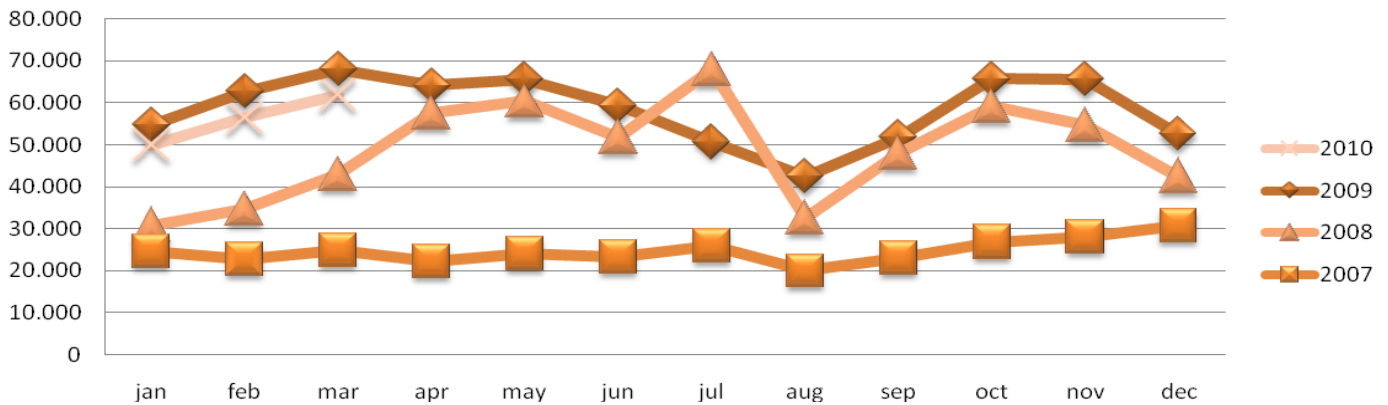
The application which allows the remote access for the Professionals of the Andalusian Health Systems is available for the whole Health System.

By now, the BV-SSPA has 19.758 remote access users.

The number of discharges in 2009 were 703.571, a 20,7% plus than 2008 when we had 583.0138. The downloads in 2008 have doubled due to the remote access activation.

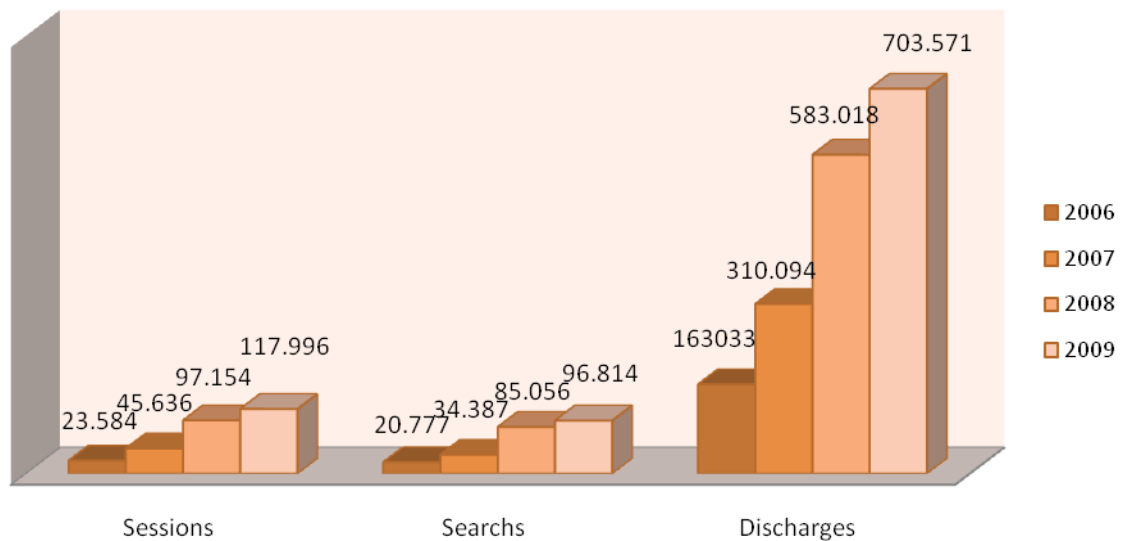
2. Comparison of the monthly downloads since 2007 to 2009

Monthly discharge evolution 2006-2010



3. Comparison the number of sessions initiated in Gerion, the number of searches and the articles downloads by our users.

BV-SSPA Usage



Conclusions:

This Regional Government initiative has been strategic for allowing our health professionals the access to the most prestigious information resources, through the most advanced services, to help to take decisions, encouraging the healthcare, teaching and research activity.

The success of the Virtual Library is its accessibility for everyone in the Health System, regardless their workplace, professional status and available time since the only necessity is an internet connected computer.

The BV-SSPA has become the undisputed medium for the Health Research and Clinical Healthcare in our region, being consolidated as the Knowledge Manager into the Andalusian Public Health System.

We face the future with new projects and taking advantage of new technologies and social networks.

One of these projects is the Institutional Repository called HypatiaSalud. It will contain the whole intellectual, scientific production generated by the Andalusian Public Health Professionals as result of their healthcare, research or managing activity.

It will allow to deposit, manage, preserve and provide access to this documentation with the aim of making possible its availability possible to both society and professionals.

Another initiative that we are currently carrying out is the Analysis of the Andalusian Public Health Research Activity, to make easier taking decisions to Health Managers.

We are also planning the drafting of a normalised licence model for the contracting of electronic resources. Specifically we will affect several items in the licenses we are presently signing, such as:

- The Interlibrary Loan Clauses
- Spanish laws to be applied.
- Licences versus Institutional Repository
- Title maintenance
- Normalized statics

This has been a project which came true thanks to the perfect machinery composed by an Institutional and Professional Commitment (from Health Professionals, Librarians and Managers). The Institutional Guidelines and the fact of having an specific budget destined to the Virtual Library of Health makes clear that it is an strategy of the Andalusian Government, which has turned into a National Reference in this kind of initiatives. This was shown last year, in 2009, when it was designated to coordinate the National Health Virtual Library Viability Project. The Ministry of Health and Social Policy issued this Project to study the National Health System Virtual Library creation viability, in order to guarantee relevant scientific information access equity. This work has been carried out during 2009, with the collaboration of all the Virtual Libraries' representatives from every Autonomous Community.

The BV-SSPA leadership is also patent with the fact that it is organizing the next National Conference of Health Science Information and Documentation in Cadiz, in 2010:

<http://www.jornadasbibliosalud.net/>