using a variety of interfaces, the ever-changing environment of the Internet, and the time commitment required to become familiar with tools and resources. The survey also indicated which Internet tools and resources have been used most heavily and how the Internet has affected librarians’ work practices. However, it remains to be established whether patrons’ or librarians’ use of the Internet has significantly helped them meet their information needs. Additional investigation into this and other issues related to the use and impact of the Internet is required.

REFERENCES


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Online SERHOLD updating for the Pacific Northwest


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The Pacific Northwest was the first National Network of Libraries of Medicine (NN/LM) region to update SERHOLD data entirely through the Online SERHOLD Updating System, developed by the Serial Records Section at the National Library of Medicine (NLM). This article describes the early experiences of the NN/LM Pacific Northwest Region (PNR), also called the Regional Medical Library (RML), in using the online system. The current procedure is delineated, and cost and time statistics are provided.

BACKGROUND

The NN/LM PNR was one of the two beta testers of the Online SERHOLD Updating System in the summer of 1993. The testing process provided an opportunity to become familiar with the ease, speed, and accuracy of the system. One time trial showed that a competent computer user at least somewhat knowledgeable about serials could make up to 120 SERHOLD changes per hour, given the SERLINE unique identifiers (UIs) for the titles to be updated.

Among the five states in the region, one system was updating with OCLC Online Computer Library Center, one with the Western Library Network (WLN), and three with a PC-file program developed at the RML in the mid-1980s. The RML had paid a modest amount (a total of $4,500.00 was divided among the five states based on number of SERHOLD titles) to one library in each state to take lead responsibility for preparing data within that state. With an estimated 12,000 SERHOLD changes per year region-wide, direct entry into SERHOLD appeared to offer a considerable cost savings, especially if university students (a low-cost labor pool) could do the updating. Not only did the system appear to be cost-effective, but also the built-in checks and error messages that were apparent during the beta test suggested that

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the accuracy of SERHOLD entries would be improved.

There was no question that the new system would be preferable in terms of time. The more up-to-date and accurate SERHOLD is, the better the DOCLINE routing, the less time library staff must spend finding sources for documents, and the faster health professionals receive their information. The online system had the potential to reduce the lag time for SERHOLD updating (the delay between the time a library changes its holdings and the time DOCLINE can use the holdings information for routing) from as long as eighteen months down to a few weeks. The new system also would give the RML the capability to fix any critical problem within hours of its discovery.

After testing the system, the RML staff developed a plan, with the help of the region’s Resource Sharing Committee, to convert the entire region to the online system as quickly as possible. The plan was approved by the Regional Advisory Committee.

The plan called for the RML to accept, at any time, SERHOLD data from any library in the region, and to complete updating, without charge, within a few weeks of receipt. The rationale for the plan follows: When a library enters its holdings into SERHOLD, that library is helping the region and the country by making its holdings information publicly available. Other libraries (and, by extension, health professionals and patients) consequently gain. Therefore, it is in the region’s and nation’s best interest to encourage libraries to keep data current by eliminating the barriers of inconvenience, cost, and time.

States have pursued interesting variations in planning for online SERHOLD. The states using the PC-file program changed their mechanism of updating very little; libraries merely send update forms to the RML rather than to a state coordinator and can send the forms at any time rather than by an annual deadline. The state using WLN to update SERHOLD decided to reverse the process and use a SERHOLD tape to update WLN. The union-list chair for that state group, with the help of the RML resource-sharing coordinator, successfully applied to the state library for an LSCA grant to write a conversion program, which was completed in mid-1994. The state using OCLC is continuing to do so. A library need fill out only one update form for both systems; SERHOLD updating is carried out by the RML, and then the forms are sent on to the state coordinator for OCLC updating.

The online system was adopted very quickly within the region. The first record was entered into the system in October 1993; by November, libraries in all five states were submitting data to the RML for direct entry. By June 1994, the region’s libraries had entered more than 9,000 changes—half of all entries made nationwide with the system at that point.

**ONLINE SERHOLD UPDATING IN PRACTICE**

**Update request format**

For many years, on an annual basis, and without charge, the RML has provided individual library SERHOLD printouts, which are used by libraries to check SERHOLD data. These have been mailed out to all SERHOLD participants in the region, along with the update form specific to the needs of that state. The RML continues to provide this printout and these forms. The forthcoming cost data do not include this traditional RML service.

Under the new plan, the RML accommodates as many individual needs and abilities as possible and therefore accepts SERHOLD data in a variety of formats: changes marked on the library’s SERHOLD printout; a paper SERHOLD update form (Appendix); an electronic equivalent of the paper form, available by e-mail or on the region’s World Wide Web server (http://www.nnlm.nlm.nih.gov/pnr/etc/serftext.html); or a Web interactive update form that is completed online and then sent automatically to the RML resource-sharing coordinator (http://www.nnlm.nlm.nih.gov/pnr/etc/serform.html).

All of these formats call for the SERLINE UI, the easiest entry into the online SERHOLD system. The UIs for journal titles can be found on NLM’s Locator system, which is accessible without charge. Although the RML requests that libraries find and provide such numbers, special circumstances are accommodated and titles or ISSN’s also are accepted.

**Staff and time needed for SERHOLD updating**

Undergraduate students are hired (at least $6.00 per hour) to carry out SERHOLD updating. The RML resource-sharing coordinator works closely with students at first, providing approximately three hours of training, reviewing random changes, and personally handling the more difficult changes. After students complete a month of practice, almost no changes need to be referred to the coordinator, largely because the system offers so much information and help.

For a sample of 1,000 changes, the average speed was 71 changes per hour (including time for paperwork, making connections, etc.). No separate time studies were conducted for additions, modifications, and deletions.

**Costs of SERHOLD updating**

For present purposes, costs are assumed to be $10.00 per hour ($6.00 per hour for student labor plus an estimated $4.00 per hour for other costs, such as the coordinator’s time, printer paper, and telephone calls to clarify confusing update forms). Although this amount does not cover all the potential costs, the
work cited is comparable to what the RML had expected of the paid state coordinators before the online SERHOLD program became available. An important factor in holding down costs is free access; NLM does not charge for use of the online system, and all access is made over the Internet.

For the sample studied, each SERHOLD change cost fourteen cents. (For comparison purposes, the 1994/1995 WLN Schedule of Charges lists ninety-five cents per record for a manual holdings addition and fifty cents per record for a manual holdings update.)

In the PNR, nonresource libraries averaged forty-eight SERHOLD changes each in 1993. (The number is expected to increase as libraries get used to the idea that any change can be made easily and quickly.) Therefore, the estimated average total annual cost for online SERHOLD updating for one nonresource library is $6.72. As an example of statewide costs, for all thirty SERHOLD libraries in Idaho—none of them resource libraries—the statewide annual total for SERHOLD updating is $201.60. This is less than 25% of what the RML previously had paid the Idaho SERHOLD coordinator for collecting the input forms and making up the state’s PC-file disk.

CONCLUSION

The Pacific Northwest’s experience shows that the Online SERHOLD Updating System is easy to use, inexpensive, and efficient. Use of the system enables timely availability of up-to-date SERHOLD records, which, in turn, make DOCLINE routing more effective than it has been in the past. The RML staff encourages other health library groups to consider using the online system.

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APPENDIX

NN/LM PNR SERHOLD update form

Today’s date: ____________
Your library’s name: __________________________
Your library’s 3-letter SERHOLD code: ____ (Example: SWW)
Action wanted (circle one):

A  add serial title and holdings
M  modify holdings
D  delete serial title and holdings

Serial title: __________________________
SERLINE UI: _________________________ (Example: SR0007646)
Holdings statement should read: __________________________

A maximum of 50 characters and spaces is possible.

Examples: 1-.1976- 1-6,8.1950-1955,1957 .1984-
Last 3 years Current year only