

Public Health Outreach Project Description

Title: Public Health Information Initiative: Web-Based Access To Information Resources

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Organization: University of Wisconsin–Madison Health Sciences Libraries, Madison, Wisconsin

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Objectives:

- (1) Assess information needs of public health nurses connected to county public health departments and practicing in the State of Wisconsin.
- (2) Train public health nurses to more effectively use the Internet in problem solving, in communicating with colleagues throughout the state and nationwide, and as a continuing education tool.
- (3) Identify document delivery options in providing “just-in-time” information to remote health departments:
 - Items located in the Health Sciences Libraries collection will be faxed either the same day or next working day depending upon the urgency of the situation.
 - For items not held in the Health Sciences Libraries collection, we will make every effort to obtain the material from other collections.
- (4) Measure access and use of resources and consultation services available from the Health Sciences Libraries.
- (5) Gather useful fill/nonfill data from participant requests to support collection development at the Library.

Target Audience:

Public health nurses connected to county public health departments in 17 counties within the southern regional district of Wisconsin.

Needs assessment (methodology and results):

- (1) Conduct a self-administered technical/resources assessment prior to the project.
- (2) Identify Internet Service Providers for each public health department; accounts are set up for one year of free Internet service.
- (3) Install equipment and consult with nurses to make sure they get connected. Steps include equipment setup, installation of software and initial testing of Internet access.
- (4) Conduct a test by sending e-mail/broadcast messages to uncover technical/training issues and to make sure that e-mail contact is in place.
- (5) Develop and introduce the Health Sciences Libraries customized public health web site.
- (6) Review data collected at project onset. Make sure that follow up data are gathered for those participants who indicated little or no use of Internet resources.

- (7) Regularly communicate either via phone or e-mail with participating nurses.
- (8) Analyze results of the pre-and post project and workshop evaluations.

Overall the “*Public Health Information Initiative: Web-Based Access to Information Resource*” project made nurses aware of Internet resources available to them in making decisions related to their work and in continuing their own education. Training sessions made them aware of the need for up-to-date equipment and the importance of connectivity.

Intervention:

The Health Sciences Libraries (HSL) at the University of Wisconsin-Madison, in collaboration with the UW School of Nursing, developed a test region to examine information needs of public health nurses in a 17-county region. This project is assumed that public health nurses need “just in time” information to satisfy information needs related to environmental issues, nutrition, child and maternal health, immunization and issues related to an aging population, such as home health care. The project was carried out with the voluntary assistance of Wisconsin public health nurses connected with the county departments of public health. Collections numbering over 3500 active serial titles and over 149,600 monographs in hard copy located at the Health Sciences Libraries, numerous online databases, including full-text databases available via Internet access, as well as access to a customized public health web site, <http://www.medsch.wisc.edu/chslib/pubhea/>, supplied the foundation for providing the “just in time” information requested by the participants. The project builds on existing strengths of partners involved and encourages shared resource distribution. Health Sciences Libraries Outreach Team provided the technical, teaching, on-site demonstrations, reference service, and document delivery support. Public health nurses upgraded their computers, agreed to communicate regularly with members of the project team, and fulfill evaluation obligations.

Training and other materials developed:

PowerPoint slides consist of:

- Goal of the Workshop
- Objectives of the Workshop
- What you can do on the Internet
- Why Search the Internet
- Tips for Finding Information on the Internet
- Formulating a Search Strategy
- Boolean Operators
- General Health Sources
- MEDLINE via PubMed and IGM
- MEDLINEplus
- Nursing Sites
- Listservs/Discussion Group
- Public Health Sites

- Other Health Sources
- News Services/Product Recall
- Search Engines

“Homework “ preparatory assignment was sent to the nurses to ensure they knew the basics of using the Internet and e-mail

Pre-and post evaluation questionnaire

Customized Public Health Information Initiative web site

Website (developed as part of project and how maintained):

The Health Sciences Libraries developed a customized web site

(<http://www.medsch.wisc.edu/chslib/pubhea/>) to provide public health nurses convenient access to information. This web page provides links to specific health-related databases that assist public health nurses in decision-making skills, communication with colleagues throughout the state and nationwide, and continuing education resources. The Outreach Librarian currently maintains this web site.

Evaluation (methodology and results):

Data was collected, using a ten-question survey, on participants’ information-seeking behaviors, knowledge of resources, and computer literacy.

Post-project questionnaire –

Likert scale responses were asked for:

1. To what extent does the following factors (accessibility, ease of use, expense, familiarity, quality, timeliness) influences your use of information resources? [Summary: Large extent--Ease of use and timeliness]
2. How often do you use the following computer databases (CDC Wonder, Internet resources, MEDLINE & CINAHL)? [Summary: Often -- CDC Wonder]
3. How often do you use the following communication systems (E-mail/Bulletin Board, ListSers)? [Summary: Often -- E-mail/Bulletin Board]
4. Do you have other e-mail accounts (AOL, CDC e-mail, HotMail, Yahoo)? [Summary: CDC e-mail]
5. How often do you use e-mail (Daily, Several times a week, Several times a month, Once a month, Never)? [Summary: Daily]
6. Think about the last information need. What kind of information were you looking for (Factual materials, Statutory issues, Patient care issues, Maternal/child issues, General health issues)? [Summary: Factual materials]
7. What resource(s) did you use to find this information (E-mail, Office files, MEDLINE, Colleague, Government documents, Professional publications, Newspaper, Practice guidelines)? [Summary: Office files and Professional publications]
8. How much time did you spend to get a satisfactory answer? [Summary: 30-60 minutes]

9. How often have you used the Internet in the last 3 months excluding e-mail use? [Summary: Weekly]

Also asked:

1. If we were to continue this project what sorts of training or personal consultation would you benefit from? [Summary: Answers varied]
2. How has this project impacted you personally? Why? [Summary: Answers varied]
3. How has this project impacted you professionally? Why? [Summary: Answers varied]

Workshop questionnaire--

Likert scale responses were asked for:

1. Content was well organized. [Summary: Agree]
2. Written materials were helpful. [Summary: Strongly Agree]
3. Effective use of audiovisuals. [Summary: Strongly Agree]
4. Effective demonstration. [Summary: Agree]
5. Program objectives were met? [Summary: Agree]
6. Instructors knowledge re: content. [Summary: Strongly Agree]
7. Instructors were well prepared and organized. [Summary: Strongly Agree]
8. Instructors responded well to questions. [Summary: Strongly Agree]
9. Overall program met my expectations. [Summary: Agree]
10. Overall I will now be able to search for health information more effectively. [Strongly Agree]

Also asked:

1. What was one aspect of this training session that was most helpful? [Summary: Answers varied]
2. To help us improve this session, are there any areas covered in this workshop that you're still unclear about? [Summary: Answers varied]
3. In your own words how has this workshop improved your knowledge? [Summary: Answers varied]

Poster Sessions/Exhibits/Presentations/Publications:

Mays, T. "Public Health Information Initiative: Web-Based Access to Information Resources," 3 Sources, June/July 1999. 17(3): 3-6.

T. Mays ... [et al.]. Poster session entitled, "Public Health Information Initiative: Web-Based Access to Information Resources," at MLA, Chicago, IL, May 17, 1999.

T. Mays ... [et al.]. Poster session entitled, "Public Health Information Initiative: Web-Based Access to Information Resources," at the Wisconsin Nurses Association, Milwaukee, WI, October 30, 1999.

T. Mays ... [et al.]. Poster session entitled, “*Public Health Information Initiative: Web-Based Access to Information Resources*,” at the University of Iowa Libraries’/ University of Iowa Center for Teaching’s symposium, Iowa City, IA, November 11, 1999.

T. Mays ... [et al.]. Poster session entitled, “*Public Health Information Initiative: Web-Based Access to Information Resources*,” at the Wisconsin Public Health Association, Madison, WI, June 15, 2000.

Partnerships:

University of Wisconsin-Madison Health Sciences Libraries in collaboration with the University of Wisconsin-Madison School of Nursing and the Wisconsin Department of Health and Family Services developed a test region to examine information needs of public health nurses in a 17-county region.

Marketing:

Yvonne Eide, RN, MS, regional public health consultant sent a group e-mail message to the grant participants informing them of the customized Health Sciences Libraries Public Health web site and the upcoming workshops.

Formal written invitations were sent to each public health department in December 1998 announcing upcoming regional hands-on workshops.

On September 24, 1998, Karen Dahlen (former director) discussed the project at the annual meeting of the National Association of County and City Health Officials + Association of State and Territorial Health Officials (ASTHO/NACCHO) in St. Louis. As part of a round-table discussion supported by the CDC and the National Library of Medicine, Karen reported on outcomes of the project including information regarding the four additional sites that requested to be a part of the project.

Administrative issues:

Outreach Librarian. Hiring an Outreach Librarian took longer than expected. The Outreach Librarian did not start the position until September 1998, almost a year into the subcontract. Once up to speed the newly hired Outreach Librarian continued the negotiations with the Internet Service Providers, scheduled and completed the first round of site visits with the public health departments, developed and organized the training workshops.

Identifying Internet Service Providers (ISP) for all southern Wisconsin counties. Arrangements with ISPs have been difficult. Monthly charges range from \$9.00 to \$29.95 per month. All the participating public health departments received free Internet connection for a year with the exception of one department who moved to new offices in the middle of the subcontract and lost contact with the Outreach Librarian. There are still public health departments that have not acquired adequate hardware to access the Internet.

Computer accessibility. At most public health departments there is only one computer with Internet access. Although there are many staff members at each department, access to computers is often difficult and inconvenient. Analysis reveals that the on-site demonstrations and the workshops made the nurses aware of the need for more computers in the office, the importance of connectivity to the University and the potential networking capability through the Internet.

Challenges Faced:

Training

Exploring the Internet independently / knowing the basics. As nurses and others began registering for the workshops, a number of them indicated that they needed the basics, such as, learning to use the mouse and an explanation of the browser's icons. After telling the nurses that knowledge of Internet basics was highly recommended, the Outreach Librarian encouraged them to explore the Internet before class and that their problems would be addressed at the workshop. It became obvious that the majority of possible attendees probably needed more direction. Additionally, there was not enough class time for going over the basics in any depth. The Outreach Librarian devised a "homework" assignment that would prepare the participants for a beyond-the-basics course. For an added incentive, door prizes were offered to those successfully completing their homework. Approximately one-third of the participants did this assignment.

Training workshops. The hands-on workshops should have been held in the first or second quarter of the subcontract (certainly no later than the third quarter). Use of available Internet resources and Loansome Doc probably would have been much more extensive.

Data collection. Data was collected, using a ten-question survey, on participants' information-seeking behaviors, knowledge of resources, and computer literacy. The pre-project and the post-project questionnaires could have been better written. Ideally, they should have been the same so legitimate statistical comparisons could be made. Also the surveys could have been much shorter and more focused.

Loansome Doc usage. The use of Loansome Doc has fallen below anticipated use. A large section of the workshop involved walking the participants through the process of searching MEDLINE via PubMed, identifying and marking a desired article or two, and using Loansome Doc to order it/them. Afterwards, participants indicated that they felt able to do this independently.

E-mail usage. Nurses are still not using e-mail as an integral part of their work. Low usage may have been caused by CDC Wonder's difficult interface. At each workshop session, attendees were encouraged to use their e-mail services. Those interested in other e-mail options were quickly shown how to sign up for free Internet e-mail (e.g. HotMail).

Communication / Equipment / Telecommunications

Organized and easy communication among the participants was lacking. They could have provided much support for each other. Getting participants to sign up for a free, easy-to use e-mail service very early on in the process would have facilitated communication. In addition there should be greater emphasis on using these two modes of communication with colleagues. A listserv could have been implemented which would provide both a practice opportunity and a sharing group workspace.

The Richland County Public Health Department computer had several problems that prevented easy Internet access. First, the Health Sciences Libraries automation staff installed a 56K modem. This presented other problems that had to be resolved before the goal of easy access could be reached. Briefly, the hard drive was re-cleaned and reformatted, Windows95 was correctly installed and configured as was the 9600-baud modem for CDC Wonder e-mail and the 56K modem for Internet access, CDC Wonder, and other software packages. After two site visits and approximately 16 hours to complete the Richland County Public Health Department now has quick speed to the Internet.

Were Project Objectives Met?

The objectives of this project have been met. Nurses knowing how to find reliable information quickly can assist them in making informed work-related decisions.

Sustainability:

The Health Sciences Libraries would like to expand this project to eventually cover the entire state. What we learned from this pilot program will guide the library in refining future implementations.

Anecdotes or Other Observations:

We would like to let our participants speak on how this project impacted their professional practice. Below are some of their comments:

- It will give me greater freedom
- Info available to Public Health office to disseminate to the general public
- Helps find answers immediately
- I may join a listserv. I will be able to get info from the computer-published research.
- Widened my knowledge
- Absolutely will be much more efficient in resource locating
- This has made me more aware of all that is at my fingertips
- I am more apt to use it