



Outreach for rural public library staff: an effective means for consumer health information dissemination*

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Abstract

In May 2004, the Sidney Memorial Public Library, located in rural upstate New York, was awarded a Health Information System grant from the National Library of Medicine. The objectives of the three year project included: increase access to quality health-related information for end users, including consumers, physicians, and health care workers; provide training to local hospital staff, health care providers, and end users in effective utilization of the databases and resources provided by the National Library of Medicine; provide document delivery as required to rural health care providers; and evaluate the effectiveness of a health information outreach training program for rural library users, consumers, and health care providers. The library collaborated with the Rural Health Network of South Central New York and with the George Miner Mackenzie Medical Library of Bassett Research Institute in Cooperstown, NY to complete the project.

We provided computers and training for health care staff in the local county hospitals, and provided training for paraprofessional library staff in the area's public libraries. We also provided training to local community groups either at the local libraries or at their facilities. We found that in terms of reaching health care consumers, it appeared to be more effective to target the public library staff and local community groups for training, rather than to train the health care staff located in the county hospitals.

Our project demonstrates the potential a modest training effort can have in rural settings.

With increased electronic access to all kinds of information, it is important to ensure that health care consumers are finding and using reliable, authoritative sources. Librarians and library staff have an important role to play in this regard, and can help to empower their communities by bridging the gap between consumers and health information.

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Background

In this age of increased electronic access, patients and health care consumers have more opportunity than ever before to access information regarding all aspects of their health care. Studies have found that patient care is enhanced when patients are well-informed about their conditions. When patients took the initiative to obtain their own information, improved patient outcomes have been documented. (Roter, 2000)

In 2006, 113 million adults or 80% of American Internet users searched for health information online. Most of those information seekers started with a search engine and did not check the date and source of the information obtained. (Pew, 2008) Health care consumers aren't always adept at finding accurate and reliable information. In fact, some individuals aren't able to evaluate the information they find, and have significant misconceptions about health issues after they've located inaccurate information online. (Kortum, 2008)

Issues such as disparities in information access, particularly between rural and urban health care practitioners and consumers, have also played a role in terms of reliable information provision in the health care arena. In order to achieve equity in access to health information and to enhance information-seeking behaviors among rural consumers and providers, efforts for training and outreach programs have been advocated. (Dorsch, 2000) Access to authoritative health care information via the Internet may help to diminish some of those historic disparities.

In many communities, especially in rural areas, public libraries serve as cultural and community centers. They can also serve as health information hubs and offer a forum for access to health information (AAAS, 2002). Many of these libraries are not professionally staffed, and there are differing levels of expertise when it comes to knowledge regarding the use of the Internet and health information. As observed by Wood and colleagues, "Some public libraries, especially smaller, more rural, or less economically advantaged libraries, seem to benefit significantly even from modest resources... almost all seem to appreciate training for librarians about health information (including NLM databases) on the Internet." (Wood, 2000) As reported previously in the literature, hands-on training in the participants' own environments can be particularly effective. (Ruffin, 2005) It appears that training public library staff in rural settings can play a role in helping health care consumers to locate reliable health information on the Internet.

Based on some of this background information and an informal needs assessment within the community, the Sidney Memorial Public Library (located in rural upstate New York) applied for and was awarded a Health Information Systems Grant from the National Library of Medicine (NLM). The grant, which started in 2004, enabled the implementation of training opportunities for health care providers and library staff. The project also provided for the hiring of a medical librarian to oversee the project, the purchase and installation of computers for four county hospital sites and clinics, a laptop for the Rural Health Network (RHN), training for library and RHN staff at NLM, travel, funds for promotional items, supplies, and document delivery. A full report of the project has been published elsewhere; this paper will focus on the training efforts with public library staff.

Training Efforts

At the start of the project, a medical librarian was hired to serve as the outreach coordinator. Shortly after she joined the staff, she and two Sidney library staff members attended 2 full-day training sessions at the National Library of Medicine in Bethesda, Maryland. Workshops included: an introduction to the NLM Gateway and Clinical Trials, Pubmed, and MedlinePlus. These staff members then became the primary trainers in the library, and trained the remaining staff members at all three of the Sidney library branches.

The library offered regularly scheduled workshops on how to search MedlinePlus (the consumer health resource produced by NLM) for interested patrons. These workshops were advertised through local media such as newspapers and radio stations; signs were posted throughout the community and the library; notice was given on the library's website and in the monthly library newsletter. A total of 115 sessions were offered; 488 patrons attended.

Besides these workshops, the library staff also hosted health fairs, and invited local community groups to participate. The local hospital staff offered blood pressure and cholesterol screening at these events. Healthy snacks were provided (courtesy of the Friends of the Library group), and promotional items from the National Library of Medicine such as pedometers, mugs, pens, and notepads were given out as door prizes. A travelling laptop laboratory was used so that patrons could practice accessing the NLM's resources; library staff were on hand for training and for guidance.

Additionally, the trained Sidney staff members offered one-on-one and one-on-two training in neighboring community libraries. We found that training library staff in their own environments was particularly appreciated, not only because of the alleviation of time pressures due to the necessity of travel to a training site, but also because trainees felt more comfortable in their own work settings, using their own equipment. In this familiar setting, they were free to bookmark web pages on their own computers, which they could then use for future reference. Scheduling was also easier, as trainees could juggle keeping the library open with the opportunity for training. A total of 67 staff were trained in 27 sessions at their libraries.

Staff members at the Rural Health Network also attended training sessions on the effective use of the resources available from the National Library of Medicine. The grant provided for a laptop for the RHN, which they use at community events such as local county fairs, to demonstrate the NLM resources to interested parties. The Rural Health Network also offers community classes on a regular basis on topics such as the role of nutrition in managing diabetes. They now include a session on using MedlinePlus to find health information.

The library director presented preliminary results of the project at the New York Library Association conference in October 2005, as well as a workshop on using the internet for finding consumer health information. At the close of the project, in September 2007, the library director gave a summary presentation of the project for all interested library directors in a four county region.

As mentioned earlier, the grant provided for purchase of promotional items: approximately 3500 purple pens with the logo "*MedlinePlus.gov Trusted Health Information for You*" were distributed throughout the community; plastic sleeves were purchased to display printouts from the MedlinePlus news items features. These were posted in the rest rooms above the

hand driers and updated on a weekly basis. The grant also provided a \$50 incentive for library staff that were trained at their libraries. The majority of library staff reported these funds were used to purchase materials which were related to health promotion, such as new reference texts. Many of the libraries who were exposed to the training adopted a direct link on their homepage to the MedlinePlus website, in order to steer their patrons to authoritative health information.

Outcomes

While one of the primary objectives and the initial focus of the project were to provide training to health care providers in the regional hospitals, we found that there were inherent challenges with this approach which we underestimated in the planning and implementation phases. Administration changes, closure due to bankruptcy, busy clinician schedules, and unmotivated and unreceptive information technology staff made training in the hospital settings difficult. We shifted our emphasis to training public library staff in the small rural libraries, and found that it was very effective in terms of reaching consumers.

Our training efforts were focused primarily on two counties in the upstate New York region. At the start of the project we surveyed library staff in these counties and found that on average, 20% of the reference queries in these libraries were related to health information. We interviewed 66 library staff members approximately one year after the one-on-one trainings, and three years after the initial baseline assessment. Thirty-one of the interviewed library staff had not received training; they reported that only 13% of their approximately 15,000 reference inquiries in the preceding year were health related. Thirty-five of the interviewed library staff members had received the training and they reported that approximately 28% of the 25,000 reference inquiries they addressed in the preceding year were health related. It appears that over the three years of this project, the overall fraction of reference inquiries about health did not seem to change. It is not known if library staff that had more health questions were more likely to embrace the offer to receive one-on-one training or if the training increased utilization of these library staff for health inquiries. Nonetheless, those trained seemed to field twice as many health questions as those who were not. Each trained library staff member had fielded approximately 200 health reference questions of behalf of patrons in the year after training.

In one of the counties in our region, 91% of library staff reported using Google or print sources (averaging 5-10 years old) for patron health queries when we surveyed them at the beginning of the study. After the comprehensive training effort which we implemented in that county, library staff were almost 19 times more likely to use the National Library of Medicine's authoritative consumer website for answers to patron health queries. (Flaherty, 2009)

There were many anecdotal reports by patrons of their new awareness of the NLM resources. One woman reported to the circulation staff at the Sidney library that she had adopted a new exercise routine, based on information she had read from the MedlinePlus news features which were posted in the rest rooms. Another gentleman reported that he was changing his habits in terms of water consumption to prevent kidney stones, also based on information he had seen in the news features. It is difficult to estimate how many patrons used the information or adopted lifestyle changes based on what they learned in the library, but we did learn that some found the information useful and adopted healthier habits based on what they discovered through the MedlinePlus news feature.

Summary

In 2008, the National Library of Medicine added the term “*Consumer Health Information*,” defined as “*Information intended for potential users of medical and healthcare services. There is an emphasis on self-care and preventive approaches as well as information for community-wide dissemination and use*” to their comprehensive list of Medical Subject Headings (National Library of Medicine, 2009). There are an increasing number of articles on this topic in the medical literature, and as consumers become more responsible for their own care, access to reliable information will become even more vital.

Librarians are helping to bridge the gap between consumers and health information. In one Cancer Center’s Patient Education Resource Center, librarians provided new resources and information for 95 percent of the patients. (Rauscher, 2006) According to the manager of the Center, “...even though the information is supposedly so accessible and everything is on the web, people still need the help of a professional to find information that is relevant to them that is current and accurate and authoritative.”(Volk, 2006)

In our modest research study, we found that trained library staff received a higher fraction of health inquiries, and were far more likely to use a credible source to locate information for their patrons. There appears to be potential for great efficiencies in getting high quality health information to the public by training library staff in these settings. Even in these rural libraries, training one library staff member can lead to 200 reliable and authoritative responses to health queries on an annual basis.

Given that 1 in 9 people with a high-speed Internet connection do health research on a typical day and that it is estimated that 75-80% of all Internet users look for health information online (Pew, 2008), it is imperative to learn more about how that information is used, and whether public librarians and library staff can play a role in ensuring that consumers are finding authoritative, reliable health information on the Internet.

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