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INTRODUCTION

The accompanying article in this report, "Public Health Outreach Forum: Report," describes the planning process and the program that constituted a forum held at the National Library of Medicine (NLM) on April 4 to 5, 2001. The forum brought together health sciences librarians who had been funded from 1998 to 2001 to conduct information outreach to the public health workforce, along with selected public health professionals. There were twenty-seven such projects represented at the forum: twenty-one of these were funded by NLM through the Partners in Information Access to Public Health Professionals, the remainder were funded through other mechanisms by the National Network of Libraries of Medicine (NN/LM). The cost of each project, on average, was slightly less than \$50,000.

The forum was planned to provide a structured format in which to share experiences of reaching out to the public health community from a health-sciences-library base. The underlying intent was to elucidate the collective knowledge and experience gained from this work, which could not be gained from any one project alone. NLM and the Forum Steering Committee were particularly interested in what lessons could be learned from the body of work already done that could be applied toward future outreach efforts. The forum was not intended as a way to evaluate the individual projects. Most of the projects were complete

Public Health Outreach Forum: lessons learned

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or near completion at the time of the forum. The projects had provided different services, in different settings, to diverse audiences—from training emergency medical system personnel in Alaska about accessing information resources to exhibiting NLM and other resources for school nurses in Pennsylvania—so there was no attempt to compare them according to some a priori metric, which did not exist.

PROJECT PROFILES

Though the forum was not intended to evaluate the outreach projects, the steering committee did want to proceed with knowledge of what the projects accomplished, the approaches and methods used, and the similarities and distinctions of the projects. These background data would be essential to understand what this body of work represented and how to characterize it. This, in turn, would perhaps tell where health sciences librarians felt prepared to reach out to provide information service to the public health community. To this end, the steering committee developed a project profile template for the project coordinators to complete. The profile asked for open-ended responses concerning such items as: objectives, target audience, needs assessment (method and results), interventions, training material development, Website development, evaluation (method and results), promotion and communication, partnerships, challenges faced, and sustainability issues. This profile was useful to the extent that the same areas were addressed by all projects. It was less useful than the committee had naively hoped, due to the wide variability in the level of detail reported. This variability made it difficult to do a detailed analysis of project profiles, and we concluded that the results from such an analysis would not be useful given the effort needed to do it.

Instead, a subgroup of the steering committee compiled summaries of selected sections of the project profiles. The sections on needs assessments, Websites, outcomes, partnerships, and challenges were the ones that stood out. Needs assessments, outcomes, and partnerships appeared to be areas where people were often unsure what to do or how to proceed. The section on Websites was noteworthy, because almost all projects reported the development of a site, though this was not a requirement. The steering committee wondered about duplication of effort, overlap of information resources, use of the sites by project participants, and maintenance of the sites after the funding ended. The section on challenges provided a good summary of typical problems faced by the projects. Hearing about others' problems is not only interesting but is often an effective way to gain insights into how to deal with them. There is not space to restate these profile section summaries here, but they can be referred to at the partners' Website.

PANEL DISCUSSIONS

The steering committee determined that these areas—assessing information needs, identifying outcomes (and objectives), and partnerships (and sustainability)—were the ones that people were less well equipped to deal with. We decided that more could be gained from the forum, if we focused the panel discussions on these problem topics. Providing Web-based information became another focus for somewhat different reasons: not that people appeared to be baffled about what to do but, on the contrary, that perhaps there was not enough attention paid to cost versus benefit before a Website was developed and that duplicative effort and ongoing maintenance were unresolved issues.

Committee members then developed questions on these topics for each panel to consider. Each panel discussion was structured around these questions. The questions are listed in the accompanying article. Key points from each panel discussion are available in summary form on the partners' Website.

LESSONS LEARNED: REFLECTIONS ON THE PANELS

A distillation of the discussions leads to the following key points or lessons learned from each panel.

Assessing information needs

- Health sciences librarians are used to meeting needs for knowledge-based information using such familiar tools as PubMed. But the public health workforce presents a bewildering array of needs. Knowledge-based information is only one of many, and it is never at the top of the list for public health practitioners. Population-based data* are examples of commonly needed resources.
- Many health sciences librarians are understandably uneasy assessing needs or using the tools needed to meet those needs that they themselves are not familiar with, and this is often the case in public health where information needs range far from clinical information. Consequently, meaningful needs assessment is sometimes short circuited in favor of offering what is familiar, even if that is not what is needed.
- The public health workforce is generally not used to high-level information service. Asking such a population what their information needs are may not lead to a rich set of responses. It is a case of not knowing what they are missing. A one-time assessment is likely to prove unsatisfactory. Instead, an iterative approach—

* The Community Health Status Indicators Website, provider of such data, may be viewed at <http://www.communityhealth.hrsa.gov>.

repeated assessments—is more likely to bear fruit. Exposure to unfamiliar information resources can awaken an awareness of previously unknown and deeper, possibly more significant, information needs.

- The public health workforce does not need bibliographic references. They do need carefully filtered and synthesized information that can be applied to solving problems.

- Information needs vary by work group (e. g., whether epidemiologist, public health nurse, or environmental health specialist) and within work groups, by level of professional training (e.g., whether graduate or professional level, undergraduate specialty, associate degree, or certification).

- One model of information service will not suffice. Training public health practitioners to be self-sufficient will meet some needs, but other models of intermediation (e.g., circuit rider) could meet many more needs.

Objectives and outcomes

- Effective outreach is driven by clearly defined objectives, which follow from understanding information needs. If a meaningful assessment of needs is not accomplished, then meaningful objectives will not be defined, and imagined outcomes may not be realized (or actual outcomes may be overlooked).

- Though they may sound good (“increase access to relevant information resources . . .”), measuring vague or general objectives is difficult. Thus, determining whether they have been accomplished or not is difficult. Specific objectives require knowledge of specific needs of the target audience.

- There is evidence from the accumulated project experience that assessing needs should be an iterative process. Successive assessments imply that objectives will shift as a result. As objectives shift, they are likely to become sharper and more definable.

- Successful outcomes almost always require constant, clear, and repetitive communication with project participants.

- Constant or frequent presence, along with communication, increases the chance of success.

- There are levels of outcomes: (1) raising awareness of information resources and their application, (2) increasing access and decreasing barriers to use, (3) affecting use by building information skills, and (4) changing information seeking so as to affect job performance.

- Even with awareness, access, and skill, there are other factors that will affect use. Incorporating the use of external information resources into established work patterns is, after all, a change in behavior for many public health practitioners. Changing behavior requires considerable motivation, which may include endorsement or adoption by opinion leaders, for ex-

ample. An implication of this is that at least some objectives need to recognize the importance of reaching key people. This need increases the difficulty of doing outreach.

Partnerships and sustainability

- Information outreach does not necessarily mean a partnership exists between the parties involved in the transaction. It is a service and, as such, may be one way. It can result in a relationship that may be built upon to establish a partnership.

- A partnership requires mutual goals and shared resources. It implies a commitment and some level of risk to both parties.

- Unidirectional outreach is probably not sustainable, but, as long as goals are shared and given priority, a partnership can be.

Fulfilling information needs through Web resources

- There is a natural hierarchy to public health—from local to state health departments to, most often, the U.S. Centers for Disease Control and Prevention (CDC). Project Websites seeking to provide informational support for local and state public health workers should recognize these professional networks and facilitate their functioning by being as integrated as possible with sites that are core to the target audience.

- Whether the issue is air or water quality or disease outbreak or incidence, it is overwhelmingly local. Local data and information are key to public health.

- Customized information “toolkits” for practitioners are needed. These could be developed for different work groups, for example, or in conjunction with the Healthy People 2010 objectives. A toolkit would consist of source documents (e.g., practice guidelines), news and announcements, legislative updates, search interfaces to relevant data sets, directory and contact tools, and preformatted searches to selected databases.

RESEARCH QUESTIONS

A number of research questions emerged from the discussions that took place at the forum. A brief selection is provided to indicate the range of issues considered.

- What are the information-seeking behaviors of several different segments of the public health workforce?

- How many public health workers have adequate access to interlibrary loan and document delivery services? What is the level of demand and usage pattern?

- How can information service supplement or be integrated with distance-learning offerings?

- What levels of information service, from self-service to full service, are more effective in what settings?

- How can health sciences library services be better integrated with public health systems?

- What kind of training is necessary for health sciences librarians to assume roles in public health, and what forms may this training take?
- How can the long-term impact of information skills training be evaluated?

Many of these questions are large and complex. How any of them are to be addressed was not part of the forum. But the agencies and organizations that comprise the Partners in Information Access for Public Health Professionals will likely consider how to address many of them, perhaps in partnership with schools of information science and public health. Others interested in the emerging field of public health informatics will be needed too. A multidisciplinary and multipronged approach will be necessary if this research is to result in knowledge that will be meaningful to both the public health and health sciences library communities.

CONCLUSION

Overall, the forum highlighted an issue of which several committee members had been only vaguely aware. There are different approaches to undertaking information outreach. One approach is more library-centric. This approach seeks to promote a library's services to a new audience. The services and the offerings are largely determined beforehand. In this approach, assessing needs may not play a significant role or may be used to fine tune what is promoted. The other approach views the target audience as central and the librarian as a supporting member of the user team. In this view, the librarian's job is to determine what the real information needs of the audience are, assist in deciding which needs will be acted upon, and resolve how the needs will be met. Assessing needs is central to this approach. The former model makes existing services available. An evaluation process is integral to the latter model—from assessment, to implementation,

through feedback—which can lead to a refined approach. However, both implementation and results may be less certain and harder to predict.

Does NLM-funded outreach favor one model over the other? Clearly, both are allowed and, in fact, there is no distinction made between them. We raise the issue here, because we are convinced the two approaches are different enough to make comparing them difficult and subtly misleading. As we have mentioned several times, it comes down to knowing what the intended reader or user needs and being able to respond appropriately. One of the challenges in reaching out to the public health community is that the standard armamentarium of the health sciences library can be expected to meet only a portion of the diverse information needs of this audience. We suggest that a thorough understanding of information needs—even if we do not know how, or are unable, to respond to some of them—should underlie all outreach. This suggestion is based on a view that outreach does more than provide library service; it also facilitates a connection between a target audience and other needed services when they are available and educates when they are not.

The steering committee continues to collect feedback from attendees as to the usefulness of the forum. NLM will use the results of the forum and this feedback to inform future solicitations for outreach projects. We hope that librarians currently engaged in providing services to the public health community will benefit from the exchange of ideas at the forum and lead the way in improving both access to and content of information available to public health practitioners. We further hope that many more librarians will join the ranks of those reaching out to support and improve public health practice. Librarians who do so will play an important role in helping to reach the Healthy People 2010 objectives.

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