Public Health Outreach Project Description

Title: Training Partners for Tennessee Public Health
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Organization: Eskind Biomedical Library (EBL)/Vanderbilt University Medical Center
Date: 6/99-11/00

Objectives:
1) develop and expand partnerships between EBL and public health organizations in the target region;
2) provide instruction, training, and support in the use of online resources and services such as Internet Grateful Med, PubMed, and Loansome Doc to targeted members of the public health community;
3) increase public health professionals’ awareness of National Library of Medicine grant opportunities and other methods of bringing online connectivity to their home organizations; and
4) provide an online forum for public health professionals to access relevant resources and communicate with each other.

Target Audience:
The target geographic area was the entire state of Tennessee. The target population for the proposed project consisted of individuals working in metropolitan, county, and state public health departments, local public health institutions, and public/private community-based public health organizations in Tennessee.

Needs assessment (methodology and results):
We conducted an extensive needs assessment of the Tennessee public health community. We developed an encompassing questionnaire using input from a focus group of partners as well as extensive partner and internal review. The resulting assessment was distributed through our partner contacts across the state and local county; partners oversaw the assessment return, and return rates were very high—about 70% overall. The following table outlines surveys distributed and returned.

<table>
<thead>
<tr>
<th>Agency</th>
<th># Distributed</th>
<th># Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHEC program</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Independent County HD*</td>
<td>50</td>
<td>21</td>
</tr>
<tr>
<td>Nashville &amp; Davidson County HD</td>
<td>300</td>
<td>179</td>
</tr>
<tr>
<td>TN Department of Health</td>
<td>400</td>
<td>334</td>
</tr>
<tr>
<td>Misc.</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Collected at exhibit(s)</td>
<td>N/A</td>
<td>14**</td>
</tr>
<tr>
<td>**Total</td>
<td>775</td>
<td>562</td>
</tr>
</tbody>
</table>

*HD= health departments
**not factored into survey return rate

Intervention:
Teleconference: The teleconference, held on 17 April 2000, was the sentinel event of our training program and served as an advertising and instructional vehicle. The program was broadcast to sites in Chattanooga, Cookeville, Jackson, Johnson City, Knoxville, Memphis, Nashville (3 sites) and Union City.

The teleconference consisted of 5 segments; speakers discussed 1) the importance of information to public health, 2) the Training Partners project and the format of the training sessions, 3) the Training Partners mailing list and registering for a Loansome Doc account, 4) the Health Information Tennessee Web site, and 5) the process of applying for “Internet
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Connections for Health Institutions’ funding. We were fortunate to have many high state officials as speakers. Speakers included the State Commissioner for Health, the Director of the Bureau of Health Services Administration, the Director of Community Systems, the Director of the Community Health Research Group, a university-based epidemiology research unit, and the Associate Director of Vanderbilt University Medical Center’s Informatics Center.

Training sessions: We began our training sessions after the teleconference. We held an initial test session with several state health department employees and used the feedback from this session to tailor our plans for the program.

For the bulk of the training sessions, participants connected to state-administered health departments traveled to the EBL for 2-day sessions of 4 hours each. We arranged to provide on-site training at the local Nashville and Davidson County Health department as well. We also provided a special session on environmental health resources for interested attendees.

Between 26 April 2000 and 6 June 2000, we trained 148+ participants connected to state-administered health departments as well as the local Nashville and Davidson County Health Department (DCMHD). Training sessions were held in either the Eskind Biomedical Library’s 14-workstation training room or the DCMHD 12-station training room. Workstations had Internet access, and each training segment allowed substantial time for hands-on practice and questions. The training sessions covered the following resources: PubMed/Internet Grateful Med, Internet applications and searching, Model Program Web sites, CDC Wonder, Health Information Tennessee, NCHS and other statistical resources, and electronic document delivery.

Web site: The project Web site contains project, partner, training, document delivery, and teleconference information as well as a list of annotated and categorized links to relevant public health sites. Sites are categorized under headings that represent the kinds of data/information used most frequently by the public health community: directory information, environmental data, health data, grey literature, legal/legislative data, management information, model program information, published medical literature, training and in-service materials, employment resources, and grants and funding information. The site also contains an interactive query feature through which public health workers can submit questions to the project team.

Mailing list: The project Web site contains instructions for signing on to the project mailing list. As of November 2000, there are approximately 36 mailing list members, and list traffic is very light.

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

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Project personnel review the site every quarter to verify link and information currency. Additionally, project news (e.g. long-range assessment) is added to the site as it is generated.

Evaluation (methodology and results):

We have employed a three-part evaluation process. Training session participants completed a pre-evaluation before attending a session as well as an identical post-evaluation. Six months after the training sessions, participants completed a long-range assessment that repeated many of the same pre- and post-assessment questions as well as queried them about increases in their information seeking or knowledge of resources. Evaluations were not anonymous so that we could assign each a unique identifier in order to track increases/decreases in knowledge across time.

Pre-assessment questions included:
- Name, job title, work address and phone, email
- Rate yourself as a computer user (beginner, intermediate, advanced, expert)
- Rate your knowledge of: CDC Web site, CDC Wonder (health statistics), Electronic document delivery, Model program web sites, Health Information Tennessee (HIT), Internet Grateful Med (MEDLINE), National Center for Health Statistics, PubMed (MEDLINE), Internet applications (Adobe PDF software, video/audio applications, etc.), TN Department of Health Web site (no knowledge, some knowledge, sufficient knowledge to use, considerable knowledge, expert)
- What is your personal objective for this training?
- For what kinds of questions do you generally use Internet resources (MEDLINE, HIT, etc.) to find answers?
- Where do you usually look for answers to the questions you listed?
- What kind of information/answers would be most useful to you: Directory/contact information (phone numbers/addresses, schedules for official meetings, events), Grants information (proposal requests), Health data (statistics, demographic information, trends, incidence, prevalence, etc.), Environmental data (air quality, water quality, etc.), Legislative/legal data (laws and administrative codes, Tennessee Code Annotated, etc.), Management information (information for planning, budgeting, supervising), Training, in-service, demonstration materials (tutorials, explanatory material), Model program/intervention information, Published medical literature (information found in MEDLINE and other databases), Information about your computer (software programs, etc.)

Post-assessment questions included:
- Name, address
- Rate your knowledge of the following after the training sessions: CDC Web site, CDC Wonder (health statistics), Electronic document delivery, Model program web sites, Health Information Tennessee (HIT), Internet Grateful Med (MEDLINE), National Center for Health Statistics, PubMed (MEDLINE), Internet applications (Adobe PDF software, video/audio applications, etc.), TN Department of Health Web site (no knowledge, some knowledge, sufficient knowledge to use, considerable knowledge, expert)
- Did you gain awareness of any of the following information/answers: Directory/contact information (phone numbers/addresses, schedules for official meetings, events), Grants information (proposal requests), Health data (statistics, demographic information, trends, incidence, prevalence, etc.), Environmental data (air quality, water quality, etc.), Legislative/legal
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data (laws and administrative codes, Tennessee Code Annotated, etc.), Management information (information for planning, budgeting, supervising), Training, in-service, demonstration materials (tutorials, explanatory material), Model program/intervention information, Published medical literature (information found in MEDLINE and other databases), Information about your computer (software programs, etc.)

- Was your personal objective for this training met?
- Which segment of the training taught you the most: Web Browsers, Health Information TN, Medical Literature Databases (MEDLINE), Electronic Document Ordering/Delivery, CDC Wonder, Model Programs
- How could these sessions be improved?
- How far did you travel to attend this training?
- Were the sessions worthwhile? Why/why not?

Long-range assessment questions included:
- Name, address
- Now that it’s been about 6 months since the training sessions, rate your knowledge of the following after the training sessions: CDC Web site, CDC Wonder (health statistics), Electronic document delivery, Model program web sites, Health Information Tennessee (HIT), Internet Grateful Med (MEDLINE), National Center for Health Statistics, PubMed (MEDLINE), Internet applications (Adobe PDF software, video/audio applications, etc.), TN Department of Health Web site (no knowledge, some knowledge, sufficient knowledge to use, considerable knowledge, expert)
- How many colleagues have you helped to use these resources?
- Are you using any of the following information/answers: Directory/contact information (phone numbers/addresses, schedules for official meetings, events), Grants information (proposal requests), Health data (statistics, demographic information, trends, incidence, prevalence, etc.), Environmental data (air quality, water quality, etc.), Legislative/legal data (laws and administrative codes, Tennessee Code Annotated, etc.), Management information (information for planning, budgeting, supervising), Training, in-service, demonstration materials (tutorials, explanatory material), Model program/intervention information, Published medical literature (information found in MEDLINE and other databases), Information about your computer (software programs, etc.)
- Which of the following are you presently using in your work: Web Browsers, Health Information TN, Medical Literature Databases (MEDLINE), Electronic Document Ordering/Delivery, CDC Wonder, Model Programs
- Do you use the Training Partners for Tennessee Public Health Web site?
- Are you subscribed to the TPTPH mailing list?
- Do you seek information yourself more often since the training session?
- If yes, which resource do you use most frequently?
- Please list any previously unknown resources presented in the training that you now use routinely.
- Do you think your attending the training sessions was worthwhile?
- Please estimate the amount of material that you retained from the hands-on training (10% 20% 40% 60% 80%)
- What was the most valuable thing you learned during the training sessions?

Teleconference assessment questions included:
- Did the program meet the stated objectives?
- Is the teleconference medium a satisfactory method to gain awareness of new electronic resources for public health?
- What was your main goal in viewing/attending this teleconference? Were your expectations met?
-What part(s) of the conference were most valuable to you?
-Are you likely to pursue or implement technologies presented/discussed at this teleconference?

We will also analyze questions received the project Web site; as of Nov. 2000, we have received only a few questions; most requested mediated searching assistance. The Web site assessment will record the resources used in answering questions via the interactive query page to tabulate the usefulness of various Web resources. Statistics will also record how many questions were submitted, how many were answered in total, how many were answered using Web resources, how many were referred to other agencies, and how many questions were not answered.

We will analyze the percentage of questions answered using online resources, the time spent answering them, and several other research parameters. We will note the percentage of questions answered using the various sources. Questions will be divided into five categories:

a) questions answered using online resources available for free;
b) questions answered using fee-based online resources;
c) questions answered using non-electronic resources available in the library;
d) questions answered using non-electronic resources requiring document delivery; and
e) questions not answerable using any available resource.

**Poster Sessions/Exhibits/Presentations/Publications:**

- Tennessee Public Health Association Annual Meeting 1999 and 2000
- Tennessee Department of Health Annual Recruitment Fair and Community Development Conference 1999 and 2000

**Partnerships:**

We developed partnerships with the Tennessee Department of Health, the Metropolitan Nashville/Davidson County Public Health Department, the Area Health Education Centers (AHEC) Program of Tennessee, the Knox County Health Department, and the University of Memphis Center for Health Policy. This group of partners gave us broad representation across the state and included both rural and more urban areas. Partners acted as consultants and assisted with reviewing, distributing, and collecting the needs assessment as well as with registering trainees and teleconference attendees.

**Marketing:**

We initially marketed the project by sending project information via mail to relevant public health organizations and agencies in Tennessee. We also publicized the project through attending the Recruitment Fair and Tennessee Public Health Association (TPHA) annual meetings and contributing content to the TPHA newsletter. Partner contacts also helped to promote the project, and the Web site acted as another promotional vehicle.

We publicized the teleconference by faxing announcements to regional health departments and promoting it on the Web site and mailing list.

**Administrative Issues:**

Our partnerships provided the project with legitimacy and buy-in from the community. Partners were also instrumental in distributing and collecting the needs assessment and in promoting the teleconference.
Challenges Faced:
Major challenges faced include maintaining skills learned in the target population. Though training sessions were well attended and evaluated favorably, our trainees have not heavily utilized the project’s electronic document delivery service, Web site question feature, or mailing list. In the rush of day-to-day work, it is difficult to make time to apply new skills, and without application, skills and knowledge generally fade.

Another challenge was training individuals with a wide disparity of skills; some trainees were approaching the Internet for the first time, while others were experts. Since our partners handled the actual scheduling of their staff’s attendance at the sessions, we could not group trainees by experience level, and instructors had to be alert regarding their pacing and trainees’ abilities to follow along with the material.

Were Project Objectives Met?
Our overriding goals in this project were to make public health professionals aware of the applicability and relevance of online information resources to their work and to measure the usage and usefulness of online information available to public health professionals. Our specific objectives for reaching these goals were met in large part. We did develop and expand partnerships between EBL and public health organizations in the target region. Through our training sessions we provided instruction, training, and support in the use of online resources and services such as Internet Grateful Med, PubMed, and Loansome Doc to targeted members of the public health community. The project teleconference helped to increase public health professionals’ awareness of National Library of Medicine grant opportunities, and the project mailing list and Web site continue to provide an online forum for public health professionals to access relevant resources and communicate with each other.

Even though the project has been successful and well-received, there are still large segments of the Tennessee public health community which are not aware of many electronic resources, and keeping information skills vital in the trained population remains a difficult issue. We have not received many questions via our Web page, so any analysis of the usefulness of available resources for meeting public health information needs must be on a very small scale.

Sustainability:
We will continue to maintain the project Web site and mailing list after the project’s completion, and we will use the EBL’s existing electronic help services to answer any questions received from Tennessee public health professionals.

To address the problem of knowledge fade, the EBL has been awarded a nine-month extension of this contract. In the extension we will test methods of instruction and information integration that focus on building in-house centers of expertise rather than on broadly raising general awareness. Based on results of our long-range training assessment and lessons learned in the project period, we will also offer refresher sessions that focus on resources/concepts of interest to trainees.

Anecdotes or Other Observations: