“Unlocking the Power of Electronic Health Information for Public Health Workers in Kansas”

Technology Grant

2003 Access to Electronic Health Information

University of Kansas School of Medicine – Wichita

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March 1, 2003 to August 31, 2004

October 14, 2004
REPORT OF ACTIVITY DURING LAST QUARTER OF THE PROJECT
The quarterly report for the third quarter of 2004 will not be submitted, per Claire Hamasu’s approval. During the last quarter, which was June 1, 2004 through August 31, 2004 activity involved completing grant reports, working with accounting details, and securing the subcontract payment.

NARRATIVE DESCRIPTION

1. **Summary/Introduction:**

The goals of this project were to reach public health workers in Kansas with current, reliable, authoritative and reviewed medical public health information. Four avenues were used to reach this goal: a web site was developed, a CD was produced as a take home tool, presentations were made at annual conferences, and each county health department was mailed a packet of our information including the CD. Our objectives and goals were met because we reached public health workers in Kansas, when they had a strong need for this information. We were thanked repeatedly at each conference for bringing this information together in one web site, for presenting at the conferences to disperse this information, and for providing the CD as a take home tool.

This grant enabled us to educate Kansans about public health by demonstrating the value of our created web site [www.kspublichealth.org](http://www.kspublichealth.org) and by presenting searching techniques for PubMed, MedlinePlus, Clinical Trials, Healthy Products Database, TOXNET, and Haz-Map. Each presentation was tailored to the needs of each specific audience and attendees departed with a CD as a take home tool.

2. **Geographic region/number of counties:**

Public health workers from Kansas where impacted by this project. Each county in the state of Kansas received a packet of our information, so each county was reached. In addition, our presentations were held in the following counties, which are major population centers in Kansas:

- Johnson County, Kansas
- Sedgwick, County, Kansas
- Riley County, Kansas

Additionally, persons from the following states were reached through our presentations:

- Colorado
- Missouri
- Nebraska
Finally, our CD’s were delivered to persons attending the International Public Health conference, so our CD’s traveled throughout the world, some of the countries the CD’s went to were:
- Hong Kong
- Canada
- United Kingdom
- India

3. **Collaborations/Partnerships:**

All partnerships are in good standing. Positive connections were made with each of the following organizations and we can now contact any of the partner organizations for future projects/interactions/engagements. We have specific personal contacts at each organization and they are aware of our library services and can contact us for future informational needs, for speakers at their meetings, for future grants as partners, as medical librarians. Various organizations indicated they would post our web link on their web page.

This sponsored project is in partnership with and serving the needs of:
- The Kansas Association of Local Health Departments
- The Kansas Environmental Health Association
- Kansas Department of Health and Environment
- Kansas Public Health Association
- Kansas State Nurses Association
- Kansas Veterinary Medical Association

In addition we made contacts with the following organizations (which were not in our original grant proposal):
- Kansas Veterinary Technicians
- Kansas Society for Clinical Laboratory Science
- Kansas State University College of Veterinary Medicine, Medical Students Epidemiology Class
- University of Kansas School of Medicine – Wichita, Medical Students: Health of the Public Class
- University of Kansas School of Medicine – Wichita, Kansas Public Health Leadership Institute
4. **Training:**
In the final report, provide a summary of the training events and participants:

- Total number of sessions conducted as part of the project: 12 sessions
- Total number of sessions in which half or more than half of participants were from minority populations: none
- Total number of participants in the project’s sessions: 535
- Breakdown of participants by:
  - Health care or service provider: 446
  - Health sciences library staff member: 56
  - Public/other library staff member: 33
  - Member of the general public: none

5. **Training sites:**
Provide a brief description of training sites.

The training sites were held mainly at annual conferences for annual statewide meetings – some were hotel conference centers and some training sessions were held in auditoriums. In addition, we held training sessions in academic medical center conference rooms.

6. **Exhibits:**
List all the exhibits connected with the projects (if applicable). Include the meeting name, dates, location, estimated number of contacts made, demonstrations given and general impressions of success.

Janet Aswell, Kansas Outreach Liaison sponsored an NN/LM booth and handed out 30 of our CD’s. Our information was distributed and is now in various counties beyond the United States, some of the countries were India, Canada, Hong Kong and the United Kingdom. Very exciting that the information from this grant has been promoted internationally!

Additionally, CD’s have been distributed in the course packets for The Kansas Public Health Leadership Institute, which is a project of the Kansas Department of Health and Environment, the Department of Preventive Medicine and Public Health at the University of Kansas School of Medicine – Wichita, the St. Louis University Heartland Center for Public Health Workforce Development, the Kansas Health Foundation, and the Association of Teachers of Preventive Medicine.
Location: Wichita, Kansas. 
55 scholars. This is an excellent format to reach public health leaders in Kansas who have connections with the Kansas public health workforce.

7. **Resource materials:**
The following materials were developed for training.

Web site: [www.kspublichealth.org](http://www.kspublichealth.org) 
Bookmark 
Letter 
CD packet, which includes the information on the CD, informational design on CD and on the CD case. 
Camtasia video recording software was used to pre-record the presentations.

The web site [www.kspublichealth.org](http://www.kspublichealth.org) which we developed for this grant, is posted on both the PI’s and the Co-Pi’s medical library’s web site. 

The URL was submitted to the National Training Center and Clearinghouse (NTCC) for inclusion in the Educational Clearinghouse ([http://nnlm.gov/train/](http://nnlm.gov/train/)) on October 11, 2004 at 1:57 CST.

8. **Web sites:**
The web site [www.kspublichealth.org](http://www.kspublichealth.org) continues to be updated with current information. The web site will remain live at this web address through August 2005. At that time, the web site will become a part of the University of Kansas School of Medicine – Wichita’s medical library web site [http://wichita.kumc.edu/library/](http://wichita.kumc.edu/library/)

9. **Document delivery and reference service.**
These services were not provided as part of this grant.

10. **Approaches and interventions used:**
All training sessions were a direct result of our initial needs assessment and interviews with leaders in major public health workers organizations in Kansas. Training sessions were incorporated into the major identified Kansas public health workers conferences. Contacts with each organization had been made during the initial writing of the grant as letters of support were secured. Additionally we were invited to present our information at The Kansas State University College of Veterinary Medicine and at the University of Kansas School of Medicine – Wichita and at the Annual Meeting of the Kansas Society for Clinical Laboratory Science.
Marketing and promotion was handled through the conference printed programs; our presentation was listed as one of the breakout sessions. In addition, marketing information was submitted to the University of Kansas School of Medicine – Wichita’s marketing pieces and to the Kansas State University’s College of Veterinary Medicine marketing piece.

The PI and the Co-Pi were in constant communication and tailored each presentation to the specific audience. Our presentations were based on our knowledge of the current public health topics and our knowledge of medical information for public health workers. Each organization was contacted prior to their annual meeting and asked about appropriate topics for the presentation. In addition, we selected medical topics based on the pre-conference schedule. The PI and Co-Pi worked very diligently to keep abreast of the ever-changing public health information. We communicated and coordinated our separate presentations, which were put together onsite, the night before we presented.

The web site was developed and updated for each presentation as the wealth of public health information continued to emerge. The web site contains eleven categories of information with pull-down menus within each category. The web design is clean and designed for simple ease of use. There is a wealth of information within the entire web site. There are brief descriptions of each of the one hundred and fifteen links on the web site. Camtasia, a video recording software was used to pre-record the presentations. By using Camtasia, we saved grant finances that would have been earmarked for unreliable and varied Internet connections at each conference. By using Camtasia, we could present with confidence and still demonstrate web and NLM searching techniques.

11. Evaluation:
The project was evaluated by the PI and the Co-Pi continuously throughout the project and continuous improvements were made each step of the way. Improvements included updating the web site with ever-changing information, evaluating information to be presented at each upcoming presentation, and presentation style and length of presentations were also continuously evaluated.

Formal evaluation took three avenues:
An evaluation form was completed by meeting attendees at the close of each presentation. The feedback from these evaluation forms indicates that there is an immediate need for public health information and we are right on target with each audience. The information we have compiled through the web site and demonstrated with NLM databases is of utmost important to meeting attendees. It is timely, accurate, specific, authoritative and meets their needs.
Pre-Evaluation Data:

- Prior to this presentation, were you aware of MedlinePlus?
  - Yes 29%
  - No 71%

- If yes, have you used MedlinePlus?
  - Yes 67%
  - No 33%

- Is MedlinePlus a resource you will use in working with colleagues/people you serve?
  - Yes 95%
  - No 5%

- Would you refer family/friends to MedlinePlus?
  - Yes 99%
  - No 1%

- Prior to this presentation were you aware of PubMed, TOXNET, or Clinical Trials?
  - Yes 11%
  - No 89%

- If yes, have you used PubMed, TOXNET, or Clinical Trials?
  - Yes 58%
  - No 42%

- Based on the information presented today, how likely are you to access our web site?
  - Likely 93%
  - Maybe 7%
  - Not Likely 0%

This evaluation data overwhelmingly indicates that meeting attendees became aware of NLM databases through our presentations and will now refer to PubMed, TOXNET, Clinical Trials and MedlinePlus for themselves and for the customers that they serve. We successfully achieved the results we set forth.

1) A printed postcard evaluation was included in the CD take home packet which was distributed to meeting attendees at the close of each presentation and mailed to each Kansas County Health Department. The postcard evaluation was mentioned three times during each presentation and our need to have it returned for our grant. We received six postcards in the mail. This may indicate that once meeting attendees return to work, follow through from the meeting is an uncertain phenomena. I would not recommend this sort of evaluation for future projects. Evaluations we received indicate that we successfully met our project objectives.

Postcard evaluation:

- Did you view all or part of the CD?
  - Yes 83%
  - No 17% (computer was low end and too slow)

- Did the CD provide new and/or helpful information?
  - Yes 100%

- You may have obtained this CD from several sources:
  - 66% attended a presentation
34% received in mail
0% Given by a colleague

- If you viewed the CD, did you also follow up and visit the web site at www.kspublichealth.org?
  Yes 80% No 20%

- What area of public health are you most associated with?
  66% Local health department
  34% other

2) The third form of evaluation was an online link to an evaluation form that was directly on the CD. The form could be printed and mailed in, or submitted electronically. Two of the online evaluations were received. Once again, this may indicate that follow after a meeting becomes uncertain, and this isn’t a valuable way to evaluate. The evaluations that we received indicated a successful outcome of meeting our project objectives.

<table>
<thead>
<tr>
<th>Online evaluation:</th>
</tr>
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<tbody>
<tr>
<td>Did you view all or part of the CD?</td>
</tr>
<tr>
<td>Yes 100%</td>
</tr>
<tr>
<td>Did the CD provide new and/or helpful information?</td>
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<tr>
<td>Yes 100%</td>
</tr>
<tr>
<td>You may have obtained this CD from several sources:</td>
</tr>
<tr>
<td>50% attended a presentation</td>
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<tr>
<td>50% received in mail</td>
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<tr>
<td>0% Given by a colleague</td>
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<tr>
<td>If you viewed the CD, did you also follow up and visit the web site at <a href="http://www.kspublichealth.org">www.kspublichealth.org</a>?</td>
</tr>
<tr>
<td>Yes 100%</td>
</tr>
<tr>
<td>What area of public health are you most associated with?</td>
</tr>
<tr>
<td>50% Local health department</td>
</tr>
<tr>
<td>50% other</td>
</tr>
</tbody>
</table>

12. **Problems or barriers encountered:**

One of the challenges was learning how to use new technology. There were difficulties, when we transferred our separate files, which we each had prepared at different geographic locations onto one computer. We had many programs and several versions of software, even though both IT departments intended to load the “most recent” version on our laptops. The first time we transferred all files onto our laptop for the presentation, many hours were consumed. Each time we presented, we transferred files this way and with practice, transferring the files became easier. We definitively learned about technology. In addition we later tried to transfer files using ftp between our academic institutions, but this took an equal and lengthy amount of
time, as protocols and involving networking departments added to the challenge. The PI determined that this process was not more efficient or faster.

Another challenge was the duplication of CD’s. The original company that the PI had contacted and planned to use for CD duplication, did not meet my standards, so at the very last minute, the PI was frantically finding another CD duplication company to produce the CD’s in a three day turnaround. There is no sense marketing an inferior product (CD), so this was remedied.

A barrier we encountered early on was the timeframe that we had established when submitting the grant proposal. This was an issue, because the paperwork took much longer than expected and then we were very rushed for time in the web development and CD production. We worked many hours and many days nonstop to meet the grant deadlines, which were not flexible due to annual conference meeting dates, where we were presenting. When submitting future grant proposals more lead-time should be built into the proposal.

13. **Continuation plans:**
We will continue to update the web site and it will be incorporated into the Farha Medical Library’s web page at http://wichita.kumc.edu/library/, effective August 2005. The PI and Co-Pi will contribute their efforts to this endeavor. Future presentations may be requested and we will consider each one on an individual basis. Our knowledge of public health and technology has been greatly enhanced and we are very willing to share this knowledge with others.

14. **Impact:**
The PI and Co-Pi have had a tremendous impact by getting public health information into the hands of public health workers at the point of need. We have provided a very valuable service based on the feedback we have received. Our libraries and library staff have gained a better understanding of the realm of public health and our administration looks more favorably upon us due to our successful grant project.

15. **Recommendations for Improvement:**
The PI and Co-Pi recommend that the evaluation form be filled out by meeting attendees, directly following the training session. This type of evaluation is sufficient.

Our training, promotional materials, web site development, CD development and working together as two multi-type institutions were each excellent experiences. I would not change any of that.

16. **Responses to follow-up questions (attached):**
FOLLOW-UP QUESTIONS
1. Were your original project goals and objectives met? If not, why not?

Yes, our project goals and objectives were met and we were very satisfied with our excellence in this project and getting the word out to public health workers in Kansas. See #1 of Summary/Introduction for further information.

2. What significant lessons were learned which would be of interest or use to others conducting outreach projects? Which strategies were the most effective in implementing the project?

Grant work takes significant time and becomes at times a full-time position and at other times a significant part-time position. The balance between being a Director of a Medical Library (for the PI and for the Co-Pi) while administering a grant is a challenge, but very worthwhile and very rewarding. I would highly recommend grant work and am excited about future grant possibilities. The PI and the Co-Pi both enjoyed the networking with health care leaders/workers in our state. We both gained significant new technology skills and benefited from the challenges of technology.

The most important strategy in implementing this project was the communication between the PI and the Co-Pi. We are geographically distant, but relied on email and worked well together by keeping in constant communication. This was a model project between two multi-type libraries in geographically distant areas.

We received an excellent response rate from meeting attendees, as they were rewarded with chocolate and CD take home packets as they turned in their evaluation forms and exited the meeting room.

3. If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?

Due to the tight timeframe, between receiving the funding and delivering the first presentation, which included building an entire web site, developing and producing a CD and learning new software programs, for the next grant, I would build in more lead time.

4. What advice or recommendations would you give to anyone considering a similar outreach effort?

Grant work is exciting, challenging and leads to many opportunities that are not available within the scope of directing a medical library. This project empowered us to write several articles, which were published, to network with healthcare leaders/workers outside of our institutions, and to represent our institutions in new ways.

We encourage medical librarians to apply for a grant and they too can have an impact on the health of the public!