

University of Kansas School of Medicine – Wichita

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**B. ATTACHMENT 2**

**CHECKLIST OF MANDATORY QUALIFICATION CRITERIA FOR THE LEAD INSTITUTION**

**RFP: Access to Electronic Health Information**

Institution Name: \_\_\_University of Kansas School of Medicine - Wichita\_\_\_\_\_

Library's LIBID (if applicable): \_\_\_KSUUKW\_\_\_\_\_

Please fill in or check the appropriate answer to each of the following statements.

1. The institution is an NN/LM member.

YES  NO \_\_\_\_\_

2. The institution:

(a) is a DOCLINE participant

YES  NO \_\_\_\_\_

**OR**

(b) has submitted an application to become a DOCLINE participant

YES \_\_\_\_\_ NO \_\_\_\_\_

**OR**

(c) is a LOANSOME DOC participant in order to provide document delivery service to the targeted population for the duration of the project.

YES  NO \_\_\_\_\_

3. The total amount being requested does not exceed:

a) \$10,000 (including indirect cost) for a Single Institution

YES \_\_\_\_\_ NO \_\_\_\_\_

**OR**

b) \$40,000 (including indirect cost) for a Group of Institutions

YES  NO \_\_\_\_\_

## **C. Projective Narrative**

### **Statement of Work**

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

#### **1. Abstract**

The purpose of this grant is to improve knowledge of and access to electronic health information for public health workers in Kansas. The University of Kansas School of Medicine – Wichita Medical Library and the Kansas State University College of Veterinary Medicine Medical Library, two multi type libraries, will use technology to educate public health workers about human and animal health information. Grant funds will be used to develop a web site of current, relevant and authoritative information. CDs will be designed, produced and distributed to draw public health workers to the Web site. Travel will be funded to four key annual meetings of public health workers in Kansas where we will make presentations.

This is a cost-effective multi-disciplinary approach to reach public health workers, who for this grant will be identified as local health department workers, nurses, veterinarians, and sanitarians in Kansas. We will reach our target audience of 2,024 persons, by presenting at key annual meetings, where public health workers are a guaranteed audience and by direct mailing CDs to each of the 99 county health departments in Kansas.

Partnerships have been formed with and annual meetings include the Kansas Public Health Association, the Kansas State Nurses Association, the Kansas Association of Local Health Departments, the Kansas Veterinary Medical Association, the Kansas Association of Sanitarians, and the Annual Immunization Conference.

The anticipated outcomes are increased knowledge of NLM databases on the part of public health workers, increased ability to search the Internet for pertinent online medical information, dissemination of knowledge by public health workers to their colleagues and to the general public health community, family and friends.

Feedback will be solicited with an evaluation form for annual meeting attendees, an evaluation on the CD and web site, and a postcard evaluation enclosed in the CD packet.

This project will teach public health workers how to access PubMed, MEDLINEplus, Clinical Trials, TOXNET, and Internet resources so they can teach others where to find timely, reliable, and authoritative information. This project will unlock the power of health information systems to improve the health of the people of Kansas.

## **2. Introductions and Background**

For this project, public health workers are identified as local county health department workers, nurses, veterinarians, and sanitarians. Public health workers have a significant need for current information and they have a great impact on human and animal health as global public health issues surface. Prime examples of recent public health issues are anthrax, E. coli, bioterrorism, small pox, and West Nile virus. A healthy relationship must be maintained between the health of the environment and the health of human and animals living in the environment. Diseases may be spread from animals to man and man to animals (zoonoses), which directly impacts human health. Access to current information is key to maintaining healthy people and animals. NLM recognizes the role of public health workers who need reliable, timely, and authoritative information.

The University of Kansas School of Medicine – Wichita and the Kansas State University, College of Veterinary Medicine are two leading institutions that can together directly impact the knowledge of and access to electronic health resources in Kansas. This is an excellent opportunity to utilize both the human and veterinary component of medicine to increase awareness of and connectivity to electronic resources for public health workers and the citizens of Kansas.

### **3. Identification of Need**

Major organizations that serve public health workers in the state of Kansas were contacted and inquiry was made to establish a need for improving access to electronic health information. Organizations and partnerships include: the Kansas Public Health Association, the Kansas State Nurses Association, the Kansas Association of Local Health Departments, the Kansas Veterinary Medical Association, the Kansas Association of Sanitarians, and the Annual Immunization Conference.

The terms MEDLINE, PubMed, MEDLINEplus, Clinical Trials, and TOXNET are not universally known or familiar to the key organizations and their members that were contacted. Each organization expressed a need for health information and stated their current resources are minimal and funding is poor. There is a lack of knowledge about how to locate current, reliable, and authoritative information. There is an immediate need for health information by health public health workers in Kansas, due to the critical time element in treating health issues.

Computers with Internet connections have become available recently in workplaces of most public health care workers. The next step is to provide public health workers with the knowledge of and access to health information on the Internet. The practice of public health spans environmental and health disciplines. Consequently public health workers need access to diverse and complex information from many sources. The goal of this project is the development of multiple products with a variety of access to online resources to meet the public health workers informational needs.

Through communication with Sally Finney, Executive Director of the Kansas Public Health Association, the principle investigator, Ms. Coady discovered that their members need information systems, which would provide electronic health information and environmental health information. Electronic information is becoming increasingly important as they have various needs in diverse settings.

The principle investigator, Ms. Coady, contacted Terri Roberts, JD, RN, Executive Director of the Kansas State Nurses Association. The Kansas State Nurses Association sponsors two annual conferences, which provide information updates to nurses: the State Nurses Association Annual Meeting and the Annual Immunization Conference. The director reported that nurses are unfamiliar with electronic resources; they need patient care information, professional journal information, and education to become savvy connecting to appropriate web sites to locate specific information. The vastness of information on the Internet is a hindrance to nurses, as many are unsure where to begin looking and how to quickly find health information. PubMed, MEDLINEplus, Clinical Trials and TOXNET would fill this need for health information for nurses. For example, the topic of “Immunizations/Vaccines” on MEDLINEplus would be a perfect example of pertinent online information to demonstrate to nurses.

Through the PI’s communication with Edie Snethan, Executive Director of the Kansas Association of Local Health Departments and Pat MacDonald, Director of Community Education at Sedgwick County Health Department in Wichita, Kansas, and the following information was gathered. Local county health department workers’ greatest need for health information is communicable diseases and controlling potential communicable diseases. They

also need information for patient care and for environmental issues. Health department workers need information on public health issues as they arise. In a 2001 report and assessment of communicable disease protocols in Kansas counties, seventy of ninety-nine counties (mostly rural) have no current plan of action for communicable disease. Information is needed about who to contact, how to limit a communicable disease outbreak, sources for immunizations, and how to administer immunizations. Bioterrorism issues would be included as part of a communicable diseases protocol. Local health department workers need information on consumer health topics and immunization information especially in non-English language. This is an exciting opportunity to share the new Spanish version of MEDLINEplus. The MEDLINEplus topics “Bioterrorism” and “Immunization/Vaccines” are also relevant to county health workers.

Gary Whetstone, Trustee of Kansas Veterinary Medical Association and a Veterinarian at Countryside Pet Clinic in Andover, Kansas was contacted by the PI to learn that Veterinarians as public health workers have difficulty finding health information. There is a need for veterinarians to learn to search PubMed, especially for literature reviews prior to publishing articles. Veterinarians need guidance learning how to use PubMed effectively. Dr. Whetstone stated that wading through thousands of articles on PubMed due to his ineptness of narrowing the search is frustrating. There is a definite need for public health information for pet owners. Veterinarians give verbal pet care information without referring pet owners to a web site or to written information. If veterinarians were familiar with MEDLINEplus they could relay this information directly to pet owners. An excellent example on MEDLINEplus is the topic “Pets and Pet Health”. The additional MEDLINEplus topic “Farm Safety” is a huge resource for the rural and agricultural population in Kansas.

First Vice President of the Kansas Association of Sanitarians, Angels Kohls remarked that sanitarians need electronic access to health information in order to assist with water and waste inspection systems, lead hazardous investigations, food protection, and emergency preparedness. They need fast and accurate access to authoritative, current and reliable information. The MEDLINEplus topics of “Water Safety” and “Food Safety” are excellent resources for sanitarians and for the public they serve.

#### **4. Identification and Description of Target Population and Geographic Area Covered**

##### **A. Kansas Public Health Association:**

According to Sally Finney, Executive Director of the Kansas Public Health Association:

1. The 400 members of the Kansas Public Health Association are employees of the State Health Department, local county health departments, nonprofit agencies, and nonprofit health clinics. As public health professionals they work with diverse populations in varied settings.
2. Kansas Public Health Association members are located throughout the state of Kansas.
3. Connectivity to the Internet varies, but all state and all local health departments have Internet connectivity.
4. There are no workstations available for public access to the Internet.
5. The number of workstations available for staff access to the Internet varies from institution to institution.
6. Health information resources currently available vary from organization to organization. Kansas State agencies provide some resources. Kansas Department of Health and Environment provides some print information and limited online information. Disease surveillance information is available.
7. Limited and varied health information services are provided by members of the Kansas Public Health Association, depending on the individual organization they are affiliated with. (Nonprofit agencies, nonprofit clinics, local health departments, State Health Department).

##### **B. Kansas State Nurses Association:**

According to Terri Roberts, Executive Director of the Kansas State Nurses Association:

1. There are 1500 Kansas nurses who are members of the Kansas State Nurses Association, which is the largest and oldest nursing organization in Kansas. In addition to their conference, the Kansas State Nurses Association is the sponsor of the Annual Immunization Conference.
2. Nurses in the Kansas State Nurses Association come from cities and towns across the state of Kansas.
3. Most nurses have Internet connectivity both at work and at home.
4. There are no workstations available for public access to the Internet.
5. Most nurses' computer workstations have Internet access along with patient record information.
6. Currently health information resources are minimal and poor. Nurses rely on nursing journal articles, but lack of time deters them from reading professional nursing journals.
7. Currently health information services are provided through the education office in hospitals and clinics. This information isn't readily accessible to nurses at the point of patient care.

##### **C. Kansas Association of Local Health Departments**

According to Edie Snethan, Executive Director of Kansas Association of Local Health Departments and Pat MacDonald, Director of Community Education at Sedgwick County Health Department in Wichita, Kansas:

1. There are 99 health departments in Kansas, which are organized by county. There are 105 Kansas counties. Several counties share a health department office. In Kansas, each county health department is locally organized and managed. Local health department staff varies

from county health office to office. The health department agency heads and health information officers may be physicians or nurses. Environmental workers and clerical staff may or may not be part of each county health department, depending on size and geographical location. Nurses are the largest group of employees in county health departments.

2. Local county health departments are located throughout the state of Kansas.

3. Connectivity to the Internet is in place in each county health department in Kansas.

4. There are no public workstations in health departments that are available for public access to the Internet.

5. Each county health department has at least one computer with Internet access. Number of computers per county health department varies by health department.

6. Resources vary by each county health department. The Kansas Department of Health and Environment provides some health information. The Public Health Information Exchange (PHIX) provides a secure site for state and local health alerts. The Kansas Public Health and Environmental Information Library is a collection of print and video resources.

7. County health departments provide various health services based on size and location, but many departments provide limited information on immunizations and septic tanks.

#### **D. Kansas Veterinary Medical Association**

According to Gary Whetstone, DVM, Trustee of the Kansas Veterinary Medical Association and veterinarian at Countryside Pet Clinic in Andover, Kansas:

1. There are 1100 veterinarians who are members of the Kansas Veterinary Medical Association.

2. Veterinarians who are members of the Kansas Veterinary Medical Association live throughout the state of Kansas.

3. Connectivity to the Internet varies from veterinary clinic to clinic and has improved over the last several years. Some clinics have no computers, some have computers but no Internet connection, some clinics have computers with Internet connections, and some veterinarians have Internet connections both at home and at the office.

4. Veterinary clinics in Kansas do not have workstations available for public access to the Internet.

5. The number of workstations available for staff access to the Internet varies from clinic to clinic. In larger clinics the probability increases for more than one workstation and for Internet access on workstations.

6. Health information resources for veterinarians currently available come from affiliations and/or with paid membership in Veterinary organizations. For example: Veterinarian Information Network, the Veterinary Medicine Association, and Kansas State University referral hospital and clinic. The Veterinary Information Network has specific resources that are available to members:

- medical abstracts
- continuing education credit
- online Grand Rounds
- open forum discussions where veterinarians can submit and respond to animal care concerns.

The American Veterinary Medical Association has a Web site with a professional and a consumer portion, but their Web site is not as widely used due to user unfriendliness. CDC and the American Animal Hospital Association are mentioned as possible sources that are accessed on occasion, when seeking information.

7. Veterinarians provide verbal health information to their clientele. Veterinarians are frequently asked questions about human health, especially spread of disease between pets and humans.

#### **E. Kansas Association of Sanitarians – KAS**

According to Angela Kohls, 1<sup>st</sup> Vice President of the Kansas Association of Sanitarians.

1. The Kansas Association of Sanitarians has 125 members. They are concerned with public health issues of environmental health dealing with lead, food and water safety (septic systems, lagoons, water systems).

The 125 members include sanitarians, state food inspection staff, International Association of Food Protection members, and some faculty at Kansas State University.

2. Sanitarians are located throughout the state of Kansas.

3. Most sanitarians have Internet connectivity. If connectivity is not at work, it will soon be at work. Some sanitarians have Internet connectivity at home. Some have Internet connectivity at home and at work.

4. No workstations are available for public access to the Internet.

5. The number of workstations with Internet connectivity varies from organization to organization.

6. Sanitarians typically phone their colleagues for information. They phone State District Offices for water information. Food inspectors call their immediate supervisor. If sanitarians use the Internet, it would be the last method of choice because they are uncertain how to search specific web sites for appropriate information.

7. Food inspectors, who inspect grocery stores, restaurants, and food processing facilities, provide educational classes for specific food handling workers who need education. Federal regulation information comes from the Food and Drug Administration.

#### **F. University of Kansas School of Medicine – Wichita, Wichita, Ks.**

1. The University of Kansas School of Medicine – Wichita has 700 faculty, 250 residents, 120 medical students, and 200 staff. The library provides services to the university and to the people of Kansas. Through library systems we also provide services to other libraries.

2. Library services are provided to the people of Kansas.

3. Connectivity to the Internet abounds.

4. Workstations with Internet public access are generally not available due to usage by medical students and residents.

5. Nearly all university staff have connectivity to the Internet

6. Health information resources include online subscriptions, books, journals, Internet access, databases, web pages, and knowledgeable library staff.

7. Library services provided are reference, interlibrary loan, circulation, outreach services, and formal and informal classes on database searching and computer instruction.

### **G. Veterinary Medical Library, Kansas State University, Manhattan, Ks.**

1. Kansas State University, College of veterinary medicine has a four-year professional curriculum for a total of 400 students (enrollment is limited to 100 per class year). In addition, in 2002, there are 9 interns, 17 residents, 35 graduate students, 6 postdocs, 106 faculty, and 121 classified employees. The Veterinary Medical Library services are available to the entire Kansas State University of over 20,000 students plus faculty and staff. The VM Library also provides service to the people of Kansas, Nebraska, other states (especially veterinarians) and has a limited international clientele. The wide demographic range is partially due to the low number of only 27 veterinary medical libraries in the United States.
2. Library services are provided to the people of Kansas and other unaffiliated users.
3. There is extensive connectivity to the Internet.
4. There are seven workstations in the Veterinary Medical Library available for public access.
5. All five staff in the Veterinary Medical Library have individual access to the Internet and there is one workstation for VM Library student employees.
6. Health information resources include online subscription, books, journal, audiovisuals, Internet access, databases, web pages, and knowledgeable library staff.
7. The VM Library provides reference, interlibrary loan, circulation, outreach, fee based services for unaffiliated users, formal and informal classes, orientations, database search instruction, mediated searching for CVM faculty and other researchers at Kansas State University. Lonesome Doc is being implemented.

## 5. Project Objectives

The following objectives will be met:

1. Web Development: A web site will be constructed that compiles NLM and additional online resources.
2. Training: Training will be provided to designated populations with presentations at four annual meetings for nurses, public health workers, veterinarians, and sanitarians.
3. CD Development: A CD will be developed, designed, produced and distributed to facilitate access to electronic health information, which supports our training and Web site.

In order to increase public health workers access to electronic health information, they must understand what information is available. As Parry's 2001 article in the Journal of Medical Internet Research states, "It is becoming increasingly important for health professionals to have an understanding of health informatics." The Internet provides a medium complete with challenges and opportunities for health professionals, medical librarians, and consumers. The amount of information available to the Internet user has expanded exponentially and continues to increase. Users need knowledge and skills to sift through the vast amount of information on the Internet. By showing users pertinent, easy to use, authoritative web sites, they can form ideas about information sources on the web.

The Position Statement from the American Association of Colleges of Nursing in the 1998 Journal of Professional Nursing states that, "Advances in health-related technologies call for enhanced knowledge and application of computing and other technical skills." Having seen search demonstrations at the annual meetings, the public health workers can visualize technical Internet searching skills. The workers can then duplicate the search strategies at their own computer workstations. Specific Web sites for Internet searching will be of immediate use to users. By compiling selected electronic information into a CD, specific access instructions will be easily available. According to Field's 2002 article in the Australian Journal of Advanced Nursing, "Technological advances provide exciting opportunities for the delivery of education to those who have not previously been able to access on-campus learning, usually by barriers of distance and cost." We will reach public health workers by mailing CD's to each of the 99 county health departments. Public health workers will be reached regardless of distance and cost barriers, which may hamper their attendance at state meetings. Demonstrating search strategies at specific Web sites and through CDs are commonly accepted library practices for teaching electronic resources. As people are successful in their Internet searches, searching competence develops. User friendliness and ease of use are two important factors that play a vital role. NLM's PubMed, MEDLINEplus, and Clinical Trials all have intuitive interfaces that assist the user.

Public health workers will learn to access and evaluate Internet resources. The public is demanding greater access to health-related information and public health workers are well positioned in their community to share this information. Calabretta states in her 2002 article in the Journal of the Medical Library Association, "Americans are turning in increasing numbers to the Internet for information related to their health." As public health workers gain Internet skills, they can share the information with their colleagues, with the general public (through community

service groups, churches, schools) and with family and friends. Educating public health workers will help improve access to health information in the state of Kansas.

As professional medical librarians, the PI and Co-PI have the knowledge, expertise, and experience to teach public health workers how to search the Internet, where to search, what resources to compile on a web site and CD, and how to present the information at conferences throughout our state. This proposal is submitted with confidence and competence.

## 6. Methodology

The following methods will be enacted to reach our objectives:

1. **Web Development:** A Web site will function as a directory of on-line public health resources. It will provide links to databases, organizations, guidelines, directories, libraries, PDA resources, dictionaries, Public Health Grand Rounds, and tutorials.
2. **Training:** The PI and Co-PI will make presentations at four key meetings to train public health workers on how to search the Internet. Specific searches will be demonstrated and the ease of using the Internet will be illustrated. NLM databases will be demonstrated. During the presentation, the Web site will be referred to as a directory of online resources. The CD with compiled information will be given as a handout and to draw public health workers to our Web site and instruct in the Web site's use. Public health workers will be encouraged to access the CDs at their workplace for their own use, to consult with medical libraries, to further explore health information with their colleagues, and to share information with colleagues, the public, family and friends. Medical libraries will be listed as contact points to link public health workers with medical information, thus developing ties to local, state, and regional health information. All public health workers (nurses, county health department workers, veterinarians, and sanitarians) that we interact with will be coached to refer their colleagues and the public, to public libraries for Internet access, when Internet access is not available at work or home.
3. **CD Development:** The interactive CD will provide a compilation of information from the Web site, instructions on connecting to PubMed, MEDLINEplus, Clinical Trials, TOXNET, databases, tutorials, PDA resources, video clips, Public Health Grand Rounds, dictionaries, directories, and medical library links. By incorporating this information on the CD, the user will have the opportunity to walk through and access the information from their desktop. The CD will refer users to our Web site where information will be updated.

CDs will be professionally produced in Wichita, Kansas. CDs are a means of capturing large volumes of information into one resource, and they enhance the dispersal of information to a large number of people. The CD will have a colored label, and a colored CD insert in a slim line CD package. A letter explaining the significance of the grant and an evaluation in the form of a postcard will be included. The CD packet will be assembled in a clear recloseable poly bag. CDs will be produced in batches, prior to the annual meetings, so new information could be added feasibly if there are significant health breakthroughs during this grant project.

CDs will be distributed to conference attendees at the close of the presentations at the key annual meetings of public health workers. CDs will be mailed to each of the 99 County Health Departments in the state of Kansas. Mailing is a guaranteed method of reaching every county health department. Thus the information will be available to those who may not have the opportunity to attend the core meetings where we are presenting. The local county health departments do not meet collectively; hence they will be targeted through a

mass mailing. Local county health department workers may then access the CD for pertinent health information and be linked to medical libraries for back-up assistance

Expected Outcomes:

1. Web Development: By seeing and using the Web site, public health workers will increase their awareness of the Web and knowledge of Web resources. The Web site will provide a basis for users to understand what kinds of Internet information is available. By providing the compilation of information on the Web, users have a database of selected resources at their fingertips, and don't have to select their own web sites through trial and error. This Web site will be a directory for Kansas public health workers.
2. Training: Public health workers will become familiar with Web resources and can return to their communities to share the power and excitement of searching the web. They will be encouraged to share this information with their colleagues, the general public and with family and friends. Public health workers will tell the public about NLM and Internet web sites at the point of need by the consumer. Public health workers have stated a need for consumer health information and as they become familiar and comfortable with Internet use and information, they will share these resources with the public. The public is also demanding greater access to health-related information. The message will then be delivered to the public and shared among the general public.
3. CD Development: The CD will serve as a take-home tool to facilitate access to public health Internet resources and to draw people to the Web site. The CD will provide a means to walk public health workers through learning at their own computer, as computer assisted training.

Public health workers will know how to make informed health care decisions based on improved access to timely, reliable, authoritative electronic information.

This grant process will unlock the power of health information systems to improve the health of the people of Kansas.

The following implementation schedule shall be followed upon notification of the grant award.

1. Develop and design web pages January – March 2003  
Ms. Coady, MLS and Ms. Willard, MLS will collect and organize information for web pages.  
Ms. Brownell, Ph.D. Educational Technology Manager at the University of Kansas School of Medicine – Wichita, will post and design web pages.
2. Develop and design CDs April - June 2003  
Ms. Coady and Ms. Willard will develop and organize content for CD  
Ms. Brownell, Ph.D. will design CD  
Ms. Coady and Ms. Willard will edit and seek revisions

3. Develop and prepare presentations for annual meetings July 2003  
Ms. Coady and Ms. Willard will prepare presentations for annual meetings and tailor for each diverse audience.
4. CD will be produced in Wichita, Kansas July-August 2003
5. Produce and package CDs, inserts, letter, postcard evaluation. August 2003
6. Make presentations at key annual meetings as part of the official program:
  - Kansas Public Health Association Annual Conference  
September 23 –25, 2003 Overland Park, Kansas  
350 attendees
  - Kansas Association of Sanitarians Annual Conference  
Will hold a joint meeting with Kansas Public Health Association in 2003  
September 23-25, 2003 Overland Park, Kansas  
75 attendees
  - Kansas State Nurses Association Annual Conference  
October 19-21, 2003 Topeka, Kansas  
400 attendees
  - Annual Immunization Conference  
Sponsored by the Kansas State Nurses Association  
November 12-14, 2003 Wichita, Kansas  
350 attendees
  - Kansas Veterinary Medical Association Annual Meeting  
Joint meeting with: Kansas State University, College of Veterinary Medicine 66<sup>th</sup>  
Annual Conference  
June 6-9, 2004 Manhattan, Kansas  
750 attendees
7. Mail 99 CDs with instructions, inserts, letter, and postcard evaluation to each county health department in the state of Kansas December 2003
8. Compile evaluations Ongoing
9. Share data with key Kansas organizations that partnered for this grant. Ongoing
10. Web pages will be updated as needed to remain current during the grant Ongoing

## 7. Evaluation Plan

Three methods of evaluation will be implemented.

- A print evaluation form will be filled out and collected directly following the presentations at the four key annual meetings of public health workers.
- A print evaluation postcard will be included in the CD packet, which will be distributed following our presentations and mailed to the county health departments.
- There will be an electronic link to an evaluation directly on the CD and on the web site. This evaluation form can be submitted electronically or can be printed and mailed.

We will evaluate the health information needs and behaviors of the public health workers. Inquiry will be made about the usefulness of information and products/services particularly of PubMed, MEDLINEplus, and Clinical Trials. We will solicit recommendations for future services/products for their specific group and identify needs that could not be met.

The print evaluation form used following our presentations will gather information related to public health workers initial reaction to electronic information presented. Information gathered will be similar to a pre-test evaluation. Questions about prior familiarity or knowledge of systems (PubMed, MEDLINEplus, Clinical Trials), usage of systems prior to today's presentation, do they have a professional need for such systems, do they have consumer or patient use for these systems, would they recommend the systems to colleagues, the public, family and friends, and what are their needs for additional services and products.

The evaluation postcard included in the packet, an evaluation form on the web site and on the CD, will be used to gather post-test information, to assess if the information they learned from the CD and web site are retained and used. Questions posed: if they used the web site and CD, what portions were most helpful to them in their work, are they using PubMed, MEDLINEplus, Clinical Trials, if not, why not, if they have showed their colleagues, the public, family and friends, this electronic information, if so which pieces are most useful, what are their future needs and recommendations for products and services.

These evaluation methods will show us how our objectives have been met. This grant proposal enables us to question, learn, plan, observe, analyze and report on "Unlocking the Power of Electronic Health Resources for Public Health Workers in Kansas".

Continuing education credit could be offered through NLM for PubMed –MedlinePlus- Clinical Trials training at the annual meetings where we are presenting. Our institutions would be in compliance with continuing education requirements as stipulated by NLM as the provider.

Recommendations for future services and products:

- Fund travel to six health departments in Kansas, at central locations for hands-on training of state and county health department workers
- Attend additional key annual meetings in Kansas, as need arises.
- Potential abstract, poster session or program at MLA 2004
- Expand this grant process and method to include other health professionals, organizations, and libraries.
- Update and revise CD and mail to an extended audience.
- Funding of public computer workstations located in each local county health department, with Internet connectivity to search PubMed, MEDLINEPlus, Clinical Trials, TOXNET, local, state and federal government web sites.

## **8. Publicity/Promotion**

Partnerships have been formed with selected state organizations and annual meetings include the Kansas Public Health Association, the Kansas State Nurses Association, the Kansas Association of Local Health Departments, the Kansas Veterinary Medical Association, the Kansas Association of Sanitarians, and the Annual Immunization Conference. CDs will serve as take home promotions to remind people of our services. CDs will be mailed to each of the 99 county health departments in Kansas.

The selected state organizations will market our services to their members as part of their official state meetings. After our presentations we'll be available for specific questions and to distribute our CD packet.

Our marketing will take place when individuals explore our Web site, by direct mailing to each county health department, by word of mouth, through our presentations, and through evaluations as we solicit feedback. We will announce our activities over appropriate list serves.

Public health organizations in the State of Kansas can link to the Web site to provide their audiences with a compendium of public health resources. The Web site will also be listed with all of the major search engines, making it easy for individuals to find our Web site.

## 9. Personnel

Teresa R. Coady, MLS, principal investigator has sixteen years of experience as a medical librarian developing library services and directing libraries. Ms. Coady endorsed PubMed early in its web launch, published an article about PubMed, and subsequently managed the transition from SilverPlatter to PubMed at the University of Kansas School of Medicine – Wichita. In choosing to switch to and use NLM databases, the critical factors are its ease of use, the ongoing enhancements, the accessibility on the Internet, and the free user access. Ms. Coady has experience seeking electronic products, negotiating contracts, implementing services, teaching, presenting, and marketing library services to faculty, residents, medical students, staff, and the public. Ms. Coady has experience managing library projects and will successfully complete grant project responsibilities.

As the Co-PI, Gayle Willard has successfully obtained, implemented and evaluated grants. Undergraduate and graduate degrees in education have provided necessary skills for teaching and training various adult populations and the ability to set objectives and assess outcomes. The MLS degrees and the Certificate of Advanced Study in Management have provided a solid basis for advancement in the Academy of Health Information Professionals to the distinguished level. Ms. Willard has extensive expertise in the area of animal health and information and has participated in conferences at the international level. At Kansas State University, Ms. Willard serves on the Institutional Animal Care and Use Committee as the information consultant for the university and works closely with the University Compliance Officer, Dr. Jerry Jaax. A heightened need for timely and accurate access to electronic health information resources has been made increasing important during the past year. According to Dr. Jaax, a bioterrorism expert, too often, the people at the forefront of the detection of a medical crisis (public health care workers) are unaware of the vast array of resources available to them. The Co-PI has a solid basis of teaching search techniques from “Index Medicus” to PubMed, combined with enthusiastic awareness of the need for outreach, and a personal passion for MEDLINEplus and Clinical Trials.gov for the public. Ms. Willard, as Co-PI, displays the necessary qualifications to complete the statement of work and project responsibilities of this proposed grant.

Melody Brownell, Ph.D., Manager of Educational Technology has ten years of college teaching experience in the fields of Biology and Biochemistry. Dr. Brownell has spent the last four years creating learning materials for the Web and assisting faculty with implementation of on-line learning. She has graduate certification in Instructional Design and works with the design and management of the on-line Masters of Public Health program at the University of Kansas School of Medicine – Wichita.

GRANT PERSONNEL							
NAME	ROLE ON PROJECT	TYPE APPT. (MONTHS)	%EFFORT ON PROJECT	INST. BASE SALARY	SALARY REQUESTED	FRINGE BENEFITS	TOTAL
Teresa R. Coady	Principle Investigator	12	15	44,090	6,614	1,922	8,536
Gayle K. Willard	Co- PI	12	6	64,506	3,870	824	4,694
To be named student worker	Clerical	12	5	6,240	312	0	312
				TOTAL	10,796	2,746	\$13,542

**10. Facilities /Institutions Support**

See attached letters from:

S. Edwards Dismuke, MD, MSPH, Dean, University of Kansas School of Medicine – Wichita

Tom Knapp, Director of Information Technology, University of Kansas School of Medicine – Wichita

Donald C. Robertson, Associate Dean for Research and Graduate Affairs,  
College of Veterinary Medicine, Kansas State University

Sally Finney, Executive Director, Kansas Public Health Association, Inc.

Eddie Snethan, Executive Director, Kansas Association of Local Health Departments

Terri Roberts, JD, RN, Executive Director, Kansas State Nurses Association/Annual Immunization Conference

David S. Whetstone, DVM, Trustee, Kansas Veterinary Medical Association

Angela Kohls, First Vice President, Kansas Association of Sanitarians

## **11. Continuation of Activities after Project Completion**

This grant will reach a population of 2,024 public health workers in Kansas. It is the first round of public health workers we could reach, as there is room to develop this for additional populations.

The Web site developed as part of this grant, will be managed as part of the University of Kansas School of Medicine's Library and integrated into our library activities.

Librarians will be available for public health workers to contact and refer to, as further information is needed.

Evaluation data will be sent to the contact person at each organization that is involved in this grant.

PDA resources will be explored as technology and information for public health workers are developed.

## **12. Other NLM or NN/LM support**

### **GRANTS:**

Willard, Gayle K.

2002 U.S. Department of Health and Human Services, National Network of Libraries of Medicine, "Enhancing access to biomedical information via Ariel," \$9,956.

2002 U.S. Department of Health and Human Services, National Network of Libraries of Medicine, "Public Health and Veterinary Medicine Outreach Grant," \$2,500

University of Kansas School of Medicine – Wichita  
Teresa R. Coady, MLS  
Manager, George J. Farha Medical Library  
1010 North Kansas  
Wichita, KS 67214-3199  
Phone 316-293-3437  
Fax 316-293-2608  
[tcoady@kumc.edu](mailto:tcoady@kumc.edu)

Cost Proposal

**B. Budget Form****ATTACHMENT 3****Budget**

Submitted by: \_\_\_\_\_ Teresa R. Coady, MLS

Date Submitted: \_\_\_\_\_ September 27, 2002

Period Covered: \_\_\_\_\_ January 1, 2003 through June 30, 2004

EXPENDITURE CATEGORY		AMOUNT
Personnel		
Teresa R. Coady, MLS	15% of 44,090 salary + fringe benefits \$1,922	\$ 8,536
Gayle K. Willard, MLS, AHIP	6% of 64,506 salary + fringe benefits \$824	\$ 4,694
Student worker to be named	5% of 6,240 salary	\$ 312
Equipment		\$ 5,046
Lap Tops	2 @\$2,523 ( 1 – KUSM-W, 1 K-State)	\$ 800
PDA's	2 @ \$ 400 (1 – KUSM-W, 1 K-State)	
Supplies		\$ 425
CD Inserts	2,024 @ \$.21	\$ 364
CD Labels	2,024 @ \$.18	\$ 117
Poly bag, reclosable	2,024	\$ 63
Padded mailing envelopes and mailing labels	99	
Communications:		
Line Charges for presentations at four annual meetings		\$ 400
Postage to mail 99 @ \$1.34		\$ 133
Return Postage Paid Postcards (evaluation forms) 1500 @ \$.315		\$ 472
Reproduction		\$ 51
Printing 2,024 letters explaining grant @ \$ .025		\$ 250
Printing 2,024 Post-test postcard evaluation forms		\$ 48
Printing 1,925 pre-test evaluation form @ \$ .025		
Other Costs		\$ 2,000
Educational Technology Design for CD, insert and CD label		\$ 500
Web Site Design, Maintenance and Updates		\$ 250
Graphic Design Time for Postcards		\$ 1,680
Duplication of CDs 2,024 @ \$.83		
Travel		\$ 1,647
To attend and present at four annual public health meetings Kansas		
(KUSM-W travel \$855, K- State Travel \$792)		
Direct Costs:	KUSM-W \$19,379, K-State \$ 8,409	\$27,788
Indirect Costs:	KUSM-W \$ 9,302 (48%), K-State \$2,859 (34%)	\$12,161
TOTAL		\$39,949

## **B. Budget Narrative**

### **1. Personnel**

In terms of personnel, 15% of principle investigator Teresa R. Coady's salary is being requested for the eighteen-month term of this project. Ms. Coady's fringe benefits for this project are \$1,922. Ms. Coady, MLS, Manager of George J. Farha Medical Library at the University of Kansas School of Medicine – Wichita, will be responsible for the overall management and coordination of the project. MS. Coady will manage the development of a Web site and the design, production and distribution of a CD. Ms. Coady will continue to partner with the Kansas Public Health Association, the Kansas State Nurses Association, the Kansas Association of Local Health Departments, the Kansas Veterinary Medical Association, and the Kansas Association of Sanitarians. Electronic health information will be presented at their annual meetings and at the Annual Immunization Conference. Ms. Coady will distribute the CDs to 99 county health departments in Kansas. Ms. Coady will write all necessary reports and documents for the grant.

Gayle K. Willard, MLS, AHIP, Director of the Veterinary Medical Library at Kansas State University, Manhattan, Kansas will serve as co-investigator. Ms. Willard is budgeted at 6% effort on the project and charges are \$3,870. Ms. Willard's fringe benefits are \$824. Ms. Willard will review the Web Site and CD for content and organization, and advise on presentation format. Ms. Willard will also travel to the annual meetings and be a co-presenter with Ms. Coady.

To be named student worker at the University of Kansas School of Medicine – Wichita will provide clerical support and tabulate evaluation data, at 5% of salary.

### **2. Equipment**

Two lap tops and two PDAs will be purchased to use for demonstrating Internet searches and to show how PDAs can enhance access to electronic health information. The demonstrations of electronic resources will take place at each of the four annual meetings: the Kansas Public Health Association/Kansas Association of Sanitarians, the Kansas State Nurses Association, Annual Immunization Conference, and the Kansas Veterinary Medical Association. The Kansas Association of Local Health Departments will be reached through a mass mailing of 99 CDs, one to each department in the state of Kansas. Total charges for two lap tops will be \$5,046. Total cost for two PDAs will be \$800. The charge for each lap top is \$2,523. The charge for each PDA is \$400. The University of Kansas School of Medicine Library and the Veterinary Medical Library will each receive one lap top and one PDA.

### **3. Communications**

The target audience of 2,024 persons will be reached, by presenting at key annual meetings, where public health workers are a guaranteed audience and by direct mailing CDs to each of the 99 county health departments in Kansas.

Line charges for presentations at four annual meetings will cost \$400. Postage for 99 CDs at \$1.34 will total \$133. Return postage paid postcards (evaluation forms) for 1500 at a cost of \$.315 each is estimated at \$472.

#### **4. Reproduction**

The University of Kansas School of Medicine – Wichita will do the printing. 2,024 letters explaining the grant will be printed at \$.25 each, to total \$51. Post-test postcard evaluations, which will be inserted in the 2,024 promotion packets, will cost \$250. Printing 1,925 pre-test evaluation forms to distribute at the annual meetings, directly following our presentation will cost \$.025 each and will total \$48.

Additional supplies needed for the CDs are 2,024 inserts at \$.21 each to total \$425. 2,024 CD labels at \$.18 each totaling \$364, and 2,024 recloseable poly bags costing \$117. Additionally 99 padded mailing envelopes and mailing labels are needed to mail the CDs to each county health department. This cost will be \$63.

#### **5. Other Costs**

The professional design for the CD, insert and label will be accomplished by Melody Brownell, Ph.D., Manager of Educational Technology at the University of Kansas School of Medicine – Wichita. The design fee is \$2000. The Web site design, maintenance and updates will be the responsibility of Dr. Brownell and will cost \$500. The University of Kansas School of Medicine – Wichita's graphic designer will design the postcard evaluation for \$250. The postcard evaluation will be enclosed in the CD packet.

High Fidelity Recording, a professional studio distributor company in Wichita, Kansas will duplicate 2,024 CDs at \$.83 each, for a charge of \$1680.

Travel to attend the four annual meetings of the Kansas Public Health Association/ The Kansas Association of Sanitarians, the Kansas State Nurses Association, the Kansas Veterinary Medical Association, and the Annual Immunization Conference will cost at total of \$1647. The Kansas Public Health Association and the Kansas Association of Sanitarians will hold a joint meeting September 23-25, 2003 in Overland Park Kansas. Mileage, hotel and meals will be \$300 for Travel for Ms. Coady. Mileage, hotel and meals will be \$272 for Ms. Willard.

The Kansas State Nurses association will meet in Topeka, Kansas on October 19 and 20, 2002. Mileage, hotel and meals will cost \$279 for Ms. Coady and \$244 for Ms. Willard. The Annual Immunization Conference will be held November 12 and 13, 2003 in Wichita, Kansas and Ms. Willard's cost will be \$276. The Kansas Veterinary Medical Association meeting will be held in June 6-9, 2004 in Manhattan, Kansas and Ms. Coady's travel costs will be \$276.

Indirect costs included by the University of Kansas School of Medicine – Wichita are 48%. Direct Costs for the University of Kansas School of Medicine are \$19,379 and 48% of the direct cost is \$9,302.

Indirect costs included by Kansas State University, College of Veterinary Medicine, Medical Library are 34%. Direct Costs for the Veterinary Medical Library are \$8,410 and 34% of the direct cost is \$2,859.

The grand total of this grant project is \$39,949.