

Final Report
Enhancement of the FPIN Librarian Community
2003 Access to Electronic Health Information Subcontract

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Introduction

The Family Physicians Inquiries Network (FPIN) is a not-for-profit academic consortium of family medicine residency programs dedicated to promoting evidence-based practice in primary care. Librarians and computer specialists are included in the effort, and the Librarian Community is an organizational entity now comprised of about 80 librarians, mostly academic health sciences librarians, who work in the libraries of the organizations where the family medicine department members are located. There is a small number of librarians whose departments are not consortium members. The primary activity of the librarian community is to co-author evidence-based summaries of the literature that address a specific clinical question asked by family physicians. There are now over 200 of these summaries, called "Clinical Inquiries," which are published monthly in the *Journal of Family Practice* and *American Family Physician*. However, the activities of the Librarian Community are not limited to CI co-authorship. They also are involved in teaching evidence based medicine searching to physicians, and they contribute to the professional development of medical librarian colleagues.

Summary of accomplishments

The FPIN Librarian Community was developed through the activities described in the quarterly reports. These activities included:

- Create the Librarian Team, whose members are one representative from each Founding Member institution's library, the Librarian Team Leader, and the FPIN Vice President for Information Resources. By the end of the funding period, there were eleven members of the Librarian Team meeting monthly by teleconference to discuss their work. A list of Team members can be viewed on the FPIN web site at <http://www.fpin.org/leadership/librarian/thelibrarianteam.aspx>
- Develop a standardized list of databases to be searched for each Clinical Inquiry. This list is on the FPIN web site at <http://www.fpin.org/ci/librarian/SearchProtocol.aspx>
- Develop search filters to be applied as standard practice for each literature review. There are three filters: treatment, diagnosis, and prognosis now on the FPIN web site. They can be accessed by clicking on the six choices on the librarians page at <http://www.fpin.org/ci/librarian/default.aspx>.
- Create and refine a search summary report form that guides the librarian to filter the search results and report them based on relevance. The report form can be viewed at <http://www.fpin.org/ci/librarian/SearchSummaryForm.aspx>.
- Create and refine a step-by-step process for librarians, which can be viewed at the FPIN web site at <http://resources.fpin.org/documents/Librarian/LibrarianCIinstructions.pdf>
- Facilitate development of the Librarian Community through an annual meeting at the Annual Meeting of the Medical Library Association. There have been three annual meetings to date, and another is planned for MLA 2006. Information about the upcoming 2006 Annual Meeting and last year's 2005 Annual Meeting can be viewed on the FPIN web site at <http://www.fpin.org/ci/librarian/mla.aspx>.
- Create a training package for librarians to help them learn how to search for "Clinical Inquiries," and make it available from the FPIN web site. The training

- package has two versions, for both PubMed and Ovid searchers, and is available for viewing by clicking on the links from the FPIN Librarian page at <http://www.fpin.org/ci/librarian/default.aspx>. An electronic file attachment of the PowerPoint training package is included with this report. This training package is required for anyone who wants to be a “Clinical Inquiries” co-author. After completing the online version of the training, the librarian submits searches for review by the FPIN Librarian, so that quality can be monitored.
- Face-to-face training was done at six sites, where we received feedback and answered questions that might not have been asked in an on-line situation. Insights gained lead to improvements in the online version of the program. The PowerPoint presentation for the PubMed format is attached to this report.
 - Create a CE Course through the Medical Library Association to build librarian skills in expert searching for evidence-based literature and build communication skills with physicians. This course, “Evidence-Based Information Service Delivery: Oh Librarian, Where Art Thou?” was co-taught at MLA by Susan Meadows and Deb Ward in May 2004, and at two chapter meetings in fall 2005. This course will be converted to an electronic version now that Susan Meadows has attended the MLA training program for CE presenters, held in March 2006. A brief description of the course can be found on the MLA web site at <http://www.mlanet.org/am/am2004/ce/400.html>
 - Create a model format for Clinical Inquiries information to be translated into brief articles that physicians could give to their patients. It was anticipated that these articles could establish a basis for an informed discussion for treatment decisions involving the patient. Team members to accomplish this were a small group of two physicians, two nurses with specialty in patient information, and two librarians. The final model was approved at the fall 2005 meeting of the FPIN Board. The first one was published in January 2006 issue of FPIN’s *Evidence Based Practice Newsletter*.
 - Develop an implementation plan for the patient information articles to be published regularly in a tear-sheet format easily used in practice. We decided to publish the articles in the *Evidence Based Practice Newsletter*, which is published by FPIN. There are now four articles that have been written, and the first one was published in January 2006. A paper copy of the article was submitted with the last quarterly grant report.
 - In addition, FPIN caught the attention of the Medical Library Association, and a number of unanticipated activities resulted. We wrote an invited article for *MLA News* that was published in October 2004. A full article about the FPIN librarian community was published in the *Journal of the Medical Library Association* in January 2005. FPIN was invited to present a segment of the satellite CE program on expert searching in March 2004 and to present at the poster/panel session “Morning of Innovation” at the 2004 MLA Annual Meeting. The Librarian Team will present a poster at the 2006 MLA Annual Meeting on the FPIN search filters.

Geographic Region

FPIN members are scattered throughout the United States. There were originally eight, and there are now ten Founding Members, one of which is in Canada. There are also

organizational members and individual members. 2005 was a big year of growth for the FPIN community. We welcomed in eleven new programs to the network bringing our total membership to nearly 3000 clinicians contributing to FPIN in 86 residency programs across the U.S. and Canada. A roster of FPIN member institutions is on the FPIN web site at <http://www.fpin.org/membership/default.aspx> . A roster of the FPIN Librarian Community during the time of the grant project is on the FPIN web site at <http://resources.fpin.org/documents/Cortni/FPIN%20Librarian%20Nov%20%20rosterJN.pdf> . The eleven-member Librarian Team and their host institutions is listed at <http://www.fpin.org/leadership/librarian/thelibrarianteam.aspx> .

FPIN members engage in various types of content production, which includes the “Clinical Inquiries” articles as well as the Evidence Based Practice Newsletter and PEPID PC. The individuals who help with content production, those who deal with creating content from research, and those who work with translating practice into FPIN research topics are all touched by FPIN. However, it is worth noting that anyone who reads the journals in which the “Clinical Inquiries” series appear, and those who use the content in the EBP Newsletter and PEPID PC are impacted by FPIN’s work as well. The librarians primarily work with the Clinical Inquiries, so when we try to define “reach,” it depends on whether we refer to FPIN as a consortium or only to the librarian activity.

Collaborations/Partnerships

The Medical Library Association provided various kinds of linkages for the grant activities. The publications included working with the editors of the *MLA News* and the *Journal of the Medical Library Association*. The continuing education course was developed with coordination from the MLA staff, and the investigation of the feasibility of the certification program involved collaboration with the MLA Continuing Education Committee. In addition, the program planning each year at the MLA Annual Meeting involves an interface with contractors of MLA who work with meeting arrangements.

The FPIN Librarian Coordinator, Joan Nashelsky, worked with indexing staff at NLM to help resolve inconsistencies of indexing the Clinical Inquiries series. This effort resulted in a decision made by the Indexing Section to place the standard title, “Clinical Inquiry:” before each topic title. This way, a title search on “Clinical Inquiry” will retrieve all of the articles published in the *Journal of Family Practice*. The current FPIN Librarian, Kristin Hitchcock, is now working with the NLM Indexing Section on standardizing their approach to the articles published in *American Family Physician*. We hope the result will be the same for those articles, so that all can be retrieved using the same strategy.

The most difficult challenge to meet all of the goals of this project relates to the goal for establishing a certification program in evidence-based expert searching. The Medical Library Association was not ready during this time frame to explore that with us. The Continuing Education Committee wanted more time to evaluate their experience with the certification in consumer health information. The door is still open to explore this at a later time, and the FPIN Librarian Team is still interested in this. It is an open issue for all of us that we all hope to take up in the future.

Training

Training sessions for professional medical librarians were held at the following six sites during the funded period: Michigan State University (5), State University of New York – Upstate (7), University of Wisconsin (2), University of Washington (8), University of North Carolina (6), and University of Cincinnati (5). We reached a total of 33 librarians through these training sessions. The sessions were valuable, because the librarians almost unanimously stated that they learned so much about the consortium and the FPIN search techniques that they had not realized before. They also asked very good questions, some of which were incorporated into the training package, for its improvement.

Training Sites

The sites used for the training were small conference rooms near the libraries where there was computer and projection equipment. At the University of Cincinnati, the training was held in a computer lab in the library.

Exhibits

The poster session at the Medical Library Association Annual Meeting 2004 was held on May 26, 2004, in Washington, DC. It was part of a general session called “Morning of Innovation,” and sponsored by the MLA Board. Susan Meadows provided the FPIN presentation; Joan Nashelsky and Deb Ward staffed the poster. A guess of the attendance of the persons who heard the presentation at the session is about 300. About 50 people came by the poster and talked with us one-on-one. Our sense was that people were very interested in what we were doing, and some expressed interest in working with FPIN.

Resource Materials and Web Site

Because of the distributed nature of the consortium, all of the significant products exist on the FPIN web site. There were packets distributed at the Annual Meetings that contained additional materials, and these were previously mailed to NN/LM as attachments to the quarterly reports. The materials from the 2005 meeting are at <http://resources.fpin.org/documents/Librarian/MLA%20Packet%20complete.pdf>

Background material on FPIN can be found on the FPIN web site, which was not supported by grant, but supplies useful information: <http://fpin.org/> In addition, the FPIN Clinical Inquiries is a section that will provide the landscape for the librarians’ work. See <http://fpin.org/CI/>.

The FPIN Librarian Community page is at <http://fpin.org/ci/librarian/default.aspx> It is a robust page with many links. There is a link to the description of the search process and protocol. Please click on the Training Package links to see the training package, developed in two versions, one for PubMed searchers, and one for Ovid searchers. It is available for viewing by clicking on the links from the FPIN Librarian page at <http://www.fpin.org/ci/librarian/default.aspx> . An electronic file attachment of the PubMed version of the training package is included with this report. In addition, the URL for the page where the link appears was sent to the National Training Center and Clearinghouse (NTCC) for inclusion in the Educational Clearinghouse. It was submitted

by clicking on the “Suggest a Resource” section that appears on that page on March 22, 2006.

Also from this page are links to the database list, the steps of the process, search filters, and the search reporting form. Links to specific products, such as the list of databases searched, the search reporting form, the CI production process, were previously provided in the “Summary of Accomplishments” section of this report.

Document Delivery and Reference Services

Most of the Clinical Inquiries authors are clinicians who work in academic settings where they have access to a library. There have been two cases in which the authors needed resources from a library, and the J. Otto Lottes Health Sciences Library supplied them. The number is estimated at about 20 articles total. One of the requestors was stationed at the time in Iraq, and he sent a photograph of the view outside his window in appreciation. Seeing the barb wire and tanks really brought home to us that FPIN was providing an important linkage to someone who was experiencing professional isolation.

Since FPIN searching can be defined as expert reference services, it is appropriate to quote some statistics. There have been more than 300 “Clinical Inquiries” published, and most of those were supported by a professional librarian’s search. We publish at the rate of six per month, and at any one time, there can be as many as 75 topics assigned that are in various stages of research and writing. The process is managed by a managing editor who uses an editorial management system developed for FPIN. The librarians do more than just search. They also review the content of the completed text to make sure that the literature is represented, and they review the reference lists for accuracy.

Approaches and Interventions

Personal contact has been a very important aspect of building the FPIN Community, whether it is physicians, librarians, or computer specialists. Flexibility, commitment, and willingness to work long hours of overtime have been required of the leadership. I think the impact on the librarian members has been very positive. They generally complete their FPIN work as a professional development activity and they receive co-authorship, which can be important to their professional portfolios.

We have employed a professional software developer for the web site and editorial management system that underpin all of our Clinical Inquiries writing activities. There is a full-time staff of four people in Columbia, MO that support FPIN activities, and the Librarian Community is only one aspect of FPIN. The FPIN staff have been invaluable in putting together our meeting packets, web site assistance, technical assistance for the training package and poster, and have helped with mailings. They help us coordinate our teleconferenced meetings, and they are our link to the software company. The FPIN Librarian has the technical permissions to edit the web site, and she has done a very nice job with presenting the librarians’ work through the web site.

Keeping full-time personnel is critical to our work. A very competent librarian coordinator, Joan Nashelsky resigned in July 2005, and we turned to a new position at the

University of Chicago to provide support and eventual leadership for the team. Kristin Hitchcock was hired and began her work in September 2005. The Team Leader, Susan Meadows, was feeling overburdened, and was relieved to be able to turn many of her duties over to the new librarian at Chicago. After spending much of the fall in training, Kristin Hitchcock assumed the Team Leader role in January 2006. We still face the situation in which there is far more to do than hours in which to complete tasks so it is important to prioritize. It is important to note that Susan Meadows and Deb Ward have contributed many uncompensated hours in order to cover the work, which has been in addition to their full-time positions. In spite of careful planning, we were taken by surprise by the workload created by this project. Our current challenge is to manage the workload for the FPIN Librarian Team Leader, Kristin Hitchcock, and still cover the work that must be done.

Evaluation

Evaluation of the training package has already been described. Verbal feedback through the community annual meetings and the monthly Librarian Team teleconferences has been the method used to keep us moving forward. This past January, the Librarian Team Leader conducted a survey of the librarians, and we are using that as a basis for future planning.

The development of the patient information model was done with feedback from the members of the FPIN Board. We will conduct a formal evaluation of the patient information articles once four have been published, which will be in summer 2006.

Problems or Barriers

As an interdisciplinary community, FPIN members work with other professionals who assume a host of different cultural norms and expectations. I am pleased with the way in which we can resolve these, but there are lingering aspects of culture that still sometimes cloud relationships between the librarians and the physicians. Communication issues are something we run into with the writing of the Clinical Inquiries, since it is a labor-intensive, and communications-dependent process.

Money is an issue for web site development, since everything we do on either the Editorial Management System or the web site is fee-based. Commitment of the membership is strong, but we are still a new and growing organization. Managing growth has been a key issue for us, and we still deal with that. That is the context in which the FPIN Librarian Community resides, and there are always issues of capacity, training, and meeting deadlines that keep us on our toes. The strong support from the physicians for having a vibrant librarian community is what keeps us going.

Continuation Plans

The FPIN Consortium is an established legal entity, and it continues to produce content to support evidence-based practice through the Clinical Inquiries series and other products. The Founding Member institutions continue to speak about the importance of FPIN to helping their departments meet their goals for teaching their faculty and residents how to engage in clinical research.

The librarian at the University of Chicago will continue to function as FPIN Librarian Team Leader. We stay in communication with one another through regularly scheduled phone calls, her travel to Missouri, and the monthly Librarian Team Meetings. The ten members of the Librarian Team have indicated their willingness to continue their roles, and we will continue the discussion with the community at MLA in May 2006. Our intention is for this to be an annual activity. At the 2006 meeting, for the first time, the librarians will have the opportunity to invite colleagues who may want to learn more about FPIN and the Librarian Community.

New goals for the FPIN Librarian Community have been identified, we are using the survey as librarian community input for planning, and already underway is a joint project for a writers' curriculum. The lead person on the project is a physician from Oregon, and we have identified three modules for the librarians to develop and teach. The Librarian Team Leader, Kristin Hitchcock, will lead the course development, coordinate librarians to teach at locations where it is offered, and will serve as the person responsible for updating the course content as needed.

We will evaluate the patient information articles in *Evidence Based Practice Newsletter* in summer 2006, and will make whatever adjustments we can make to improve them. The publication and evaluation were originally scheduled for 2005, but postponed in order for the *EBP Newsletter* to be revamped. The newsletter appeared in its new format in January 2006, and it made sense to hold the introduction of the new type of article for the revised version of *EBPN*.

The discussions of the information delivery system continue, which also involve librarians at the leadership level. At some point we may decide to expand this to include more librarians as needed.

Impact

FPIN has received attention from both the physicians and the medical librarians professional associations for its work in evidence-based information synthesis and its training for clinical scholarship for family physicians. We believe that our work is integral to progress of both family medicine and librarianship, and the attention focused on the organization is evidence of that. I also think we have gained respect on our respective campuses for this work. For example, a veterinary medicine faculty member has contacted me who is interested in the FPIN Consortium model for identifying and developing evidence-based content and for teaching clinical scholarship.

One of the most gratifying things has been seeing the local activities that have spun off in some of the FPIN member institutions. What we see happening is increased involvement of the FPIN librarians in working on clinical scholarship training classes and partnering with faculty to teach evidence-based medicine training classes in their own institutions. The FPIN Librarians involved in these efforts report that they feel that they are functioning as partners with their faculty with whom they are co-teaching. At the University of North Carolina, for example, the librarians have participated for two years

now in an annual planning retreat for the Family Medicine Faculty involved in statewide clinical and research activities. It is important to the librarians, and when I hear from their institutional board representative at the board meetings, I hear him say that it is important to the physicians as well. A description of more of these activities can be found in the FPIN Librarian Community Annual Meeting materials for 2005.

Recommendations for Improvement

It would have been helpful for us to have formally evaluated the training sessions by asking the participants to fill out an evaluation form that would have given us written feedback about the training package strengths and weaknesses. We originally planned to construct the course using instructional software like Blackboard, but in the end went with PowerPoint, which was easier to construct and mount on the web site. We are now wrestling with whether or not we need to go back to the original plan, even though it is more labor-intensive. I believe that we chose the more practical course that, given the time constraints, served us well. Susan Meadows has just returned from the MLA course on web-based instruction, and we anticipate that at least a four-hour piece of the MLA CE course will be done by October 2006. We are also discussing whether or not we should convert the training package to this format.

Responses to Questions

Were original goals met? Three of the four goals were met, and we also met goals we did not even pose. I actually believe that we exceeded the stated goals, given the unanticipated activities and the positive feedback for the consortium's activities. The one goal we did not meet, the certification program, was ill-timed, and with more complete information ahead of time, would not have been included in the proposal.

What significant lessons were learned which could be of interest or use to others conducting outreach projects?

Keeping the scope of the project smaller and more focused and to have had more personnel would have been more practical. We took on more than we should have, given the resources at hand. We needed a paid full-time team leader for the project all along the way, but funds were short, and we made do with what we had.

Which strategies were the most effective in implementing the project?

Personal recruitment of librarians was effective, particularly in the beginning when FPIN was totally unknown. Collaborative strategies that worked well were our many teleconferences for task groups. We learned that there was no substitute for face-to-face interaction, and there were times when only personal interaction was effective in thoroughly resolving issues. Face-to-face contact is also needed for planning and community building.

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

I would have insisted on a full-time staff person, funded to carry out FPIN Librarian activities, to be devoted only to FPIN Librarian Community work. We should have applied for a larger grant that could have provided more of the funding we needed.

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

I would advise that an effort of this magnitude requires tremendous effort and commitment from the key personnel. Get buy-in and commitments from consortium members to take on pieces of the project as early in the process as possible. We were blessed with a leader devoted to the consortium and whose results have been remarkable. Seek a realistic financial base to cover costs adequately. Communication and coordination are critical. I used the word standardization frequently during the early of development. I had to convince others that there is no other way to do something like this without standard procedures, processes, and teamwork. You have to be willing to put in the time to come to understandings with others so that the product produced is of standard quality. For a multidisciplinary collaboration, partners need a fair amount of discussion in order to truly achieve mutual understanding and respect, but it is critical to success. All of the principle players, physicians and librarians alike, were committed to giving FPIN a tremendous amount of personal time. Had it not been for this, FPIN would not be what it is today.