USING SCIENTIFIC

The Research Policy Statement of

EVIDENCE TO IMPROVE

the Medical Library Association

INFORMATION PRACTICE



This policy statement expresses the vision of the Medical Library Association (MLA) of research as a foundation for excellence in health information practice, for new and expanded roles for health sciences librarians, and for attracting excellent people to the profession. It also affirms the association's commitment to collaborate with other organizations to increase

support for health sciences librarians' research activities.

MLA's research policy is guided by the association's strategic plan, which identifies research in health information science as a key part of the association's mission. The research policy statement builds upon and complements MLA's educational policy statement, Platform for Change, which identifies research, analysis, and interpretation as one of the seven broad categories of knowledge and skills needed by health sciences librarians. Like the strategic plan and Platform for Change, MLA's research policy statement is addressed to a wide audience, including MLA members, library and information science (LIS) educators, administrators, health care professionals, researchers, and policy makers.

Through much discussion and document revision, MLA's Research Task Force, charged with developing this statement, arrived at a vision of health information management practice whose core consists of verified scientific evidence, with LIS professionals as creators, managers, and active users of such evidence. The policy expresses MLA's vision of research as a foundation for excellence in the profession, for new and expanded roles for health sciences librarians, and for attracting top people to the field. It also emphasizes MLA's commitment to collaborating with other groups to increase support for the research activities of those in the field.

The research policy does not include a "laundry list" of research topics. Instead, it provides an intellectual basis and rationale for the role of research in support of professional practice. Knowledge gained from research can provide a relevant, useful base for improved information practice. The policy statement

articulates a dual role for health sciences librarians in relation to research. On the one hand, health sciences librarians must be familiar with health care research methods and sources in order to provide information services based on scientific knowledge to their users. On the other hand, they must pay particular attention to the development and application of their own research knowledge base.

The policy statement begins by acknowledging the many changes that are occurring in the provision of information, health care, and the role of health sciences librarians. In order to take advantage of the significant opportunities to develop research in the new environment, the goals of the document suggest that health sciences librarians must do the following:

- understand that the knowledge base of their profession applies to health information problems that go beyond bibliographic data and library collections;
- increase their ability to analyze and appraise research results in their own discipline as well as those of their users;
- use the health information science knowledge base to design, develop, and market new health information systems and services, including those that integrate scientific literature with other types of healthrelated information;
- apply the health information science knowledge base by carrying out research that is broadly relevant to the organization, delivery, use, and impact of information on health care, biomedical research, and health professionals' education.

The document goes on to describe the role that individual health sciences librarians and MLA must play to meet these goals. The proposed action plan outlines future directions for MLA under the heading of education, research support, funding, recognition, and measurement.

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task of developing clinical practice guidelines. As information professionals, librarians must develop their own evidence-based information practice, identifying the methods and technologies that will provide the most cost-effective and high-quality service in different health care, education, and research contexts.

As part of the health care enterprise, librarians should apply their research knowledge base to a broad range of information management and policy problems facing the health care community. There is a vital need to apply information technology, theory, and practice not only to organizing, filtering, and delivering scientific knowledge but also to organizing, managing, and safeguarding patient-specific data; to linking patient data to scientific knowledge; and to aggregating and analyzing patient data within and across institutions.

Information issues have moved to a prominent position on the health care research agenda, and health sciences librarians are well placed to investigate many of them. To take advantage of this strategic position, health sciences librarians must increase their ability

- to serve as research quality filters for their users;
- to apply health information research to information service practice, information policy, and other information issues confronting their institutions; and
- to conduct research relevant to health information problems.

Research is systematic inquiry into a problem, with the goal of gathering evidence to produce new knowledge. Research relevant to health information covers a spectrum that includes development of clinical indicators; curriculum analysis; program evaluation; abstracting and indexing; information storage and retrieval; thesaurus construction; technological innovation; assessment of information needs and information-seeking behavior; and study of the use and impact of information on patients, caregivers, researchers, and students.

RESEARCH AND
HEALTH
SCIENCES
LIBRARIANS

In the inherently complex and multidisciplinary world of health information, many important research questions demand collaborative study—involving practitioners and academicians; data from multiple sites; and experts from several disciplines, including information science.

Scientific evidence gained from research supports better decision making—in information service as well as in health care. The key to evidence-based information practice is the ongoing development and application of health information science research. Not all health sciences librarians will produce research, but all must effectively use the knowledge base generated by research. By using and adding to the research knowledge base of health information science, health sciences librarians can increase their real and perceived value to the health sciences community.

RESEARCH
GOALS FOR
HEALTH
SCIENCES
LIBRARIANS

Health sciences librarians have an unmatched opportunity to make positive contributions to health care and to information policy. To take advantage of this opportunity, librarians must

- understand that the knowledge base of their profession applies to health information problems that go beyond bibliographic data and library collections;
- increase their ability to analyze and appraise research results in their own discipline as well as their users' disciplines;
- use the health information science knowledge base to design, develop, and market new health information systems and services, including those that integrate scientific literature with other types of health-related information;
- apply the health information science knowledge base to other clinical, educational, and research information problems confronting their institutions; and



Society is concerned about access to high-quality health care at reasonable cost. Increasing numbers of health care leaders recognize the importance of information to excellent, affordable care. Clinical decisions should be based on the scientific evidence traditionally recorded in the health sciences

literature. The development and use of evidence-based practice guidelines demand a sophisticated analysis of the literature, creative ways of delivering information to practitioners at the point of care, and an understanding of the effect of information on practice patterns and costs. There is a growing need for computer-based patient record systems that can generate new scientific knowledge as a by-product of current care.

While health care institutions look for better ways to conduct local health services research and to apply the results of research to practice, the amount of evidence-based information continues to expand, and the options for organizing and disseminating it multiply. In the electronic era, the number of potential "publishers" is unbounded, and the very concepts of publication and database are changing. New electronic formats have not replaced traditional printed forms of recorded knowledge but have simply increased the range of information products available. The application of the emerging National Information Infrastructure to health care, education, and library services opens up new opportunities for enhanced information delivery but also raises serious policy questions related to security, privacy, and intellectual property rights.

As managers of scientific knowledge, health sciences librarians play a key role in helping health care professionals find scientific evidence that is applicable to individual practice decisions or to the complex add to the health information science knowledge base by carrying out research that is broadly relevant to the organization, delivery, use, and impact of information on health care, biomedical research, and health professionals' education.

The analysis and application of the research knowledge base of information science must become part of the culture of health sciences librarianship. In addition to basing decisions about information services on scientific evidence, health sciences librarians must be alert to opportunities to apply their knowledge base to any information issue that is important to health care, research, and education.

The percentage of health sciences librarians with full- or part-time research as a job responsibility should be comparable to the percentage of researchers in other health professions. The number of practicing health sciences librarians who are directing or participating in research and disseminating research results must increase.

The primary responsibility for increasing the profession's research contribution rests with individual health sciences librarians.

Individuals must

- design a personal lifelong learning program that includes improvement of research skills, including critical appraisal or quality filtering of published research;
- take advantage of available training, funding, and other research support services;
- apply the results of research routinely—to library and information service practice, to the development of information policy, and to other information issues important to health care institutions;

ROLE OF
INDIVIDUAL
HEALTH
SCIENCES
LIBRARIANS

- seek out potential research collaborators within their institutions, in other libraries, in schools of library and information science, and in other organizations;
- devote professional time to directing research activity, to facilitating health information research by others, or to participating in institutional quality or research initiatives;
- disseminate results of critical analyses of research evidence,
 reports of applications of research to practice, information about
 research in progress, and new research findings; and
- recognize and encourage the research activity of colleagues.

ROLE OF THE
MEDICAL
LIBRARY
ASSOCIATION

To facilitate research by its members, the Medical Library Association (MLA) collaborates with other groups—including educators, administrators, health care professionals, researchers, policy makers, and funders—to establish an environment that is conducive to increased production and use of research. This positive environment includes

- access to a broad range of relevant education and training,
- advice and assistance for librarians embarking on research,
- adequate research funding,
- incentives for collaborative research,
- flexible and supportive employment situations, and recognition for research work.

As part of a broader program of data collection and analysis aimed at understanding the activities and needs of health sciences librarians, MLA develops and applies measurements of the research activity of its members.

ACTION PLAN FOR THE MEDICAL LIBRARY ASSOCIATION

research focus;

To improve the research environment for its members, MLA will undertake new or expanded initiatives in the following key areas, relying on the use of electronic communications where feasible and appropriate.

Health sciences librarians need a continuum of research-related training throughout their careers, beginning with a firm foundation in their master's-degree program. To ensure that suitable training opportunities exist, MLA will

1. work with academic programs in library and information studies to ensure that opportunities to develop quantitative and qualitative research knowledge and skills appear throughout the curriculum for both master's and Ph.D. programs and seek funding for pilot implementations of programs with an increased

- 2. review, revise, and expand MLA's continuing education (CE) program to provide a complete range of basic and advanced courses in quantitative and qualitative research methodology and in the critical analysis of research and incorporate the assessment of related research into every MLA CE course;
- identify the kinds of training fellowships or grants that are likely to attract beginning and midcareer librarians, including internships at "Centers of Excellence" in health information science research, and encourage funders and employers to support these arrangements;

EDUCATION

4. increase amount of funding available in MLA's Doctoral Fellowships.

RESEARCH SUPPORT

Organizations in which health sciences librarians study, teach, and work should foster a culture that facilitates research. To promote this culture, MLA will

- 1. define model health sciences librarian positions that combine research with practice or with teaching and develop a strategy to establish and obtain funding for a small number of such positions in academic departments and in health sciences institutions;
- 2. develop guidelines for research support services that health sciences institutions should provide to their librarian employees;
- 3. organize a research methodology consulting service for MLA members;
- 4. establish a brokering service that matches practicing librarians who have research questions and suitable research populations with academic librarians and information scientists who have research expertise and time to conduct research;
- 5. expand and publicize the research mentoring programs established by the MLA Research Section;
- 6. involve MLA sections and other units in the critical appraisal of research results relevant to their interests, in the identification of important researchable topics, and in the design of collaborative research projects that provide research experience to a range of MLA members.

Money can buy the time needed for health sciences librarians to conduct high-impact research. To promote adequate funding for its members' research, MLA will

- identify the kinds of funding mechanisms, such as "Centers of Excellence" in health information science or substantial awards targeted toward collaborative research, that are likely to be attractive to health sciences librarians and their collaborators and encourage the development of funding programs to support these arrangements;
- develop an MLA program of small research planning grants that will enable members to do the background work necessary to develop solid research proposals;
- 3. publicize research funding mechanisms applicable to health sciences librarians.

Research results must be broadly disseminated through formal and informal channels if they are to have a positive effect on practice. To facilitate the transmission of scientific evidence gained from research, MLA will

- 1. structure MLA publications, including the Bulletin, to give greater prominence to new research findings, critical analysis of research, and the implications of research for practice;
- 2. feature reports of research results at all MLA meetings;
- 3. use MLANET or other mechanisms to highlight research in progress and recent research findings with important ramifications for health sciences librarians;
- develop a program of joint meetings and publications with other professional associations whose members are natural research collaborators for health sciences librarians.

FUNDING

DISSEMINATION

RECOGNITION

Recognition encourages the researcher to sustain the research endeavor. To encourage the research achievements of its members, MLA will

- 1. publicize the research accomplishments of health sciences librarians to employers and to other health professions;
- 2. review and, if necessary, restructure MLA's credentialing program to provide enhanced recognition for the production and use of research;
- ensure that production and use of research is given increased recognition in MLA's awards program by establishing a new award for best research project of the year and by other appropriate means.

MEASUREMENT

Better information is needed about the research activity of health sciences librarians and about the infrastructure that supports this activity, including educational and funding opportunities. To monitor the effect of the implementation of its research action plan, MLA will

- 1. identify appropriate indicators of the levels of research activity and support for research;
- 2. collect baseline data on these indicators, and monitor any changes over time to assess the impact of actions designed to encourage increased research activity by MLA members.

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