Pivoting: leveraging opportunities in a turbulent health care environment*

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**Purpose:** The purpose of this lecture is to challenge librarians in clinical settings to leverage the opportunities presented by the current health care environment and to develop collaborative relationships with health care practitioners to provide relevant services.

**Discussion:** Health care organizations are under financial and regulatory pressures, and many hospital librarians have been downsized or have had their positions eliminated. The lecture briefly reviews hospital librarians’ roles in the past but focuses primarily on our current challenges. This environment requires librarians to be opportunity focused and pivot to a new vision that directs their actions. Many librarians are already doing this, and colleagues are encouraging us to embrace these opportunities. Evidence from publications, websites, discussion lists, personal communications, and the author’s experience is explored.

**Conclusion:** Developing interdisciplinary and collaborative relationships in our institutions and providing relevant services will mark our progress as vital, contributing members of our health care organizations.

INTRODUCTION

Like all Janet Doe lecturers, I thank those who selected me and confess to a sense of anxiety because of the responsibility to honor Janet Doe and offer something worthwhile to my colleagues. I briefly considered trying to start a new tradition called the “Janet Doe TED Talk,” since TED talks can be no longer than eighteen minutes. But I realized I really did have quite a bit I wanted to say about medical librarianship in the current environment, and I am grateful for this opportunity.

The theme of my lecture is “Pivoting: Leveraging Opportunities in a Turbulent Health Care Environment,” and I will be exploring this idea throughout the lecture. The picture on the title slide is an artist’s rendering of the new Saint Joseph Hospital that will open in December of 2014. It has been built with the energy and vision of Saint Joseph Hospital staff who had to stay focused on taking care of patients and the demands of the health care system, while at the same time working to bring the vision of the new hospital to life.

Many in this audience may not know very much about Janet Doe or why she continues to be honored through this endowed lectureship. In looking at previous lectures, I was particularly moved by the words of Virginia H. Holtz, AHIP, FMLA, in her 1986 lecture, because they were not so much about Janet Doe’s many accomplishments as they were about her attitude regarding the Medical Library Association (MLA) and her colleagues. Holtz said:

Janet Doe was among the first of those who have set for me a “gold standard” for what MLA and MLA members should be, through the example of her enthusiasm for the fellowship and ideas of colleagues, young and old, a joy in the task to be done, and pleasure in accomplishment, no matter whose. Among her enduring gifts to this association, renewed at each annual meeting, is this open, generous, and joyful sharing of each other’s company, insights, and accomplishments. [1]

Janet Doe lecturers are asked to provide their perspectives on the history or philosophy of medical librarianship. Most lectures are a mixture of both, since the work of our predecessors has contributed to our values of purpose, service, and excellence. Many lectures are also quite personal. Nina W. Matheson, AHIP, FMLA, noted that “All [lecturers] have written about what they hold nearest and dearest to their professional hearts, seeking to inform, to provide insight, to inspire, and even to entertain” [2]. In his 2004 lecture, Rick B. Forsman, FMLA, said that “To a significant degree [the lecture] is a self-disclosure, an intimate exposure of how one thinks, what one believes is important, and what are the innermost musings that may have been shared with a small circle of colleagues and friends, but that rarely are presented so publicly” [3].

As I reflected on the content of my lecture, I thought about the words of Mother Xavier Ross, the founder of the Sisters of Charity of Leavenworth and Saint Joseph Hospital. She said, “It is wisdom to pause, to look back and see by what straight or twisting ways we have arrived at the place we find ourselves” [4]. In his 1976 lecture, David Bishop cited the maxim “never talk of yourself,” but he allowed an “occasional personal note” [5], so I hope he would humor my wish to share a little about my medical librarianship journey and how I arrived at where I am today.

* The Janet Doe Lecture on the history or philosophy of medical librarianship, presented at MLA ’14, the 114th Annual Meeting of the Medical Library Association; Chicago, IL; May 19, 2014; Joanne Gard Marshall, PhD, AHIP, FMLA, the 2013 Janet Doe Lecturer, gave the introduction.

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MY BACKGROUND

Unlike many previous lecturers, I never knew Janet Doe. When Gertrude Annan gave the first lecture in 1967, “The Medical Library Association in Retrospect, 1937–1967” [6], I was an English major finishing up my sophomore year in college. When I was not worrying about the war in Vietnam or anticipating the latest Beatles album (which turned out to be Sgt. Pepper’s Lonely Hearts Club Band), I was planning to enjoy the life of academic scholarship, teaching, and perhaps membership in Garrison Keillor’s yet to be formed “Professional Organization of English Majors.”

After graduation from college, I was accepted into the master’s program at Loyola University in Chicago as a teaching assistant. Although I eventually received my master’s degree in English, I was at first stymied by the prerequisite of a passing grade on a Princeton foreign language exam; foreign languages were never my strong suit. I was chagrined in reading Janet Doe’s oral history when she said, “I don’t believe you could get anywhere in medical librarianship without some knowledge of French and German, and a little smattering of Spanish [and] Italian” [7]. Fortunately, I did not know that.

Realizing I might need to find a different career and encouraged by my parents and friends, I enrolled in the School of Library and Information Science at Rosary College, now Dominican University, in River Forest, Illinois. In one similarity with Janet Doe, at that time, I never knew there was such a thing as a special library. I thought I might partly achieve my academic aspirations as a college librarian.

It was there that I pivoted, inspired by Katherine (Kay) Haas, a medical librarian who had been recruited by Sister Lauretta McCusker, dean of the library school, to return to Rosary to teach medical librarianship. Haas impressed upon us that a good librarian could succeed in any environment; even liberal arts majors could become excellent medical librarians. Haas encouraged me and my classmate Joan M. Stoddart, AHIP, to become certified. In those days, one could achieve Level I certification by completing a course approved by MLA. Haas also recommended me to John A. Timour, FMLA, for my first position in 1972 as Connecticut Regional Medical Program librarian, located at the Yale Medical Library. I owe Haas—and Timour—a great deal.

As an extension librarian at the University of Connecticut Health Center, I visited hospitals around the state giving MEDLINE demonstrations with my trusty Texas Instruments Model 725. This portable beauty with the built-in acoustic coupler printed thirty characters per second, weighed about thirty pounds, and had its own carrying case. Later, I worked in the public library in Grand Forks, North Dakota, in the mid-1970s. Then, after moving to Denver, Colorado, in 1978, I applied and was hired for the medical librarian position at Saint Joseph Hospital.

It was here that my life changed again. I found not just a job, but a vocation. Many hospital librarians have that sense of a calling, perhaps because of our daily contact with clinicians and often with patients and families. Every day, you are reminded of why you are doing this work. In reviewing previous lectures, I found one other, that by Jacqueline D. Doyle, AHIP, FMLA, for many years a hospital librarian, who referred to this work as a vocation. She said, “The passion that many librarians bring to their jobs makes librarianship a vocation as much as a profession” [8].

In an article on Florence Nightingale, Victoria Sweet, author of God’s Hotel, wrote:

What would she (Nightingale) have thought of the Affordable Care Act? She would have liked its emphasis on public health, on data and on adequate care for everyone. There’s just one thing she would have missed—her belief that caring for the sick is not a business but a calling. She didn’t mean “calling” in a religious sense. She meant having a kind of feeling for one’s work—an inner sense of what is right, which she termed “enthusiasm,” from the Greek entheos, having a god within. [9]

Medical librarians often have this inner sense of what is right; they demonstrate it in the enthusiasm they bring to their work, often in spite of the barriers and frustrations they encounter. I would like to share with you how that happened for me.

HOSPITAL LIBRARIANSHIP AS A VOCATION

One morning in the early 1980s, a young woman opened the door to a small medical library on the eleventh floor of the hospital, directly under a helicopter landing pad. I was surprised to see someone who was not a staff member. Visitors were rare because of the remote location, and patients never came. But this visitor was a patient, recently diagnosed with Meniere’s disease and terrified by unexpected dizzy spells. While she was relieved to have a diagnosis, she was worried about what the future held. Her doctor suggested that she visit the hospital library to find something to read about the disorder; he thought it might help her cope.

I told her I would find some information, but it might be quite technical. The patient was anxious for any information, and I found a few items in textbooks and journals. Shortly before she left the hospital, the patient stopped by to thank me and to give me a gift, a bookmark with a verse by Grace Haines that ends with these lines:

So here’s to all the little things,
The “done and then forgotten” things,
Those “Oh, it’s simply nothing” things,
That make life worth the fight.

I still have the bookmark, and I have never forgotten this incident. I realized then that the knowledge I had about the medical literature might help not only the professionals, but also patients. If this patient needed information, probably others did too. This was the beginning of what I would come to
understand as my philosophy of medical librarianship and clarified for me more than any other experience why I was doing this work. Whether I was providing information to doctors, to nurses, or to patients, the purpose for my work was the patient, and I felt that I had found a vocation or that it had found me.

CONSUMER HEALTH INFORMATION

Fortunately, the timing was right. Denver colleagues Marla Graber, Sandi Parker, and Rosalind F. Dudden, AHIP, FMLA, shared my interest. MLA’s Consumer and Patient Health Information Section, which had achieved provisional status in 1984, put me in contact with some of the pioneers in the field. Although the consumer movement in the health care sector was still fairly young, there were helpful publications, including Alan Rees’s 1982 book, Developing Consumer Health Information Services [10], that provided insights and practical advice from health care professionals and librarians, including Joanne Gard Marshall, AHIP, FMLA. In Hospital Library Management [11], edited by Jana Bradley, FMLA, Ruth Holst, AHIP, FMLA, and Judith Messerle, AHIP, FMLA, and published in 1983 by MLA, Rebecca Martin and Ellen Gartenfeld contributed chapters about services for patients and community health information. Rees’s 1991 book, Managing Consumer Health Information Services [12], included descriptions of programs in hospitals and other settings.

I also found a partner in my own institution, our patient education coordinator, Nancy Griffith. She had attended a conference where she heard the talk by Kathleen A. Moeller, AHIP, FMLA, about the Overlook Hospital consumer health library and asked me if we could do something similar. This experience showed me the power of leveraging opportunities and the energy of collaboration, as Griffith and I worked together to plan and open a consumer health library in 1985. It also taught me the link between being opportunity focused and pivoting to a new vision that directs action. This happened for me thirty years ago, and it is even more important today as hospital librarians must leverage opportunities in this turbulent health care environment.

LEVERAGING OF OPPORTUNITIES

One of the items on Peter Drucker’s list of eight practices for effective leaders is “focus on opportunities,” rather than on problems. Drucker states, “problem solving, however necessary, does not produce results. It prevents damage. Exploiting opportunities produces results” [13]. It is not easy to do this. We all tend to focus on problems because we are under so much pressure to remain relevant in this environment. This can make us fear-based in our actions—or nonaction. We are constantly hearing that we need to reinvent, transform, evolve, move out of the library, embed ourselves, redefine, take on new roles, and so forth. Many hospital librarians, including me, are using the concept of knowledge services to reframe current services and expand into new ones.

Today, I am adding another concept, by suggesting that we need to “pivot.” The idea is from the pivoting meditation in 365 Tao by Deng Ming-Dao, who begins:

Some days, you and I go mad.
Our bellies get stuffed full.
Hearts break, minds snap.
We can’t go on the old way so we change.
Our lives pivot, forming a mysterious geometry

He goes on to say that “Life revolves. You cannot go back one minute or one day. In light of this, there is no use marking time in any one position. Life will continue without you, will pass you by, leaving you hopelessly out of step with events. That’s why you must engage life and maintain your pace” [14].

Many hospital librarians have been pivoting to meet the needs of their organizations that are under tremendous pressures, both financial and regulatory. Many of our colleagues have not survived these pressures. Those who have survived do not possess some secret sauce and we only need to get their recipe. And no outside agency—including the Joint Commission, the Centers for Medicare and Medicaid Services (referred to as CMS), or the Accreditation Council for Graduate Medical Education (ACGME)—is going to mandate that every hospital should have a librarian. It is highly unlikely, and we should not waste time and energy hoping that day will return.

When I asked Hospital Libraries Section (HLS) colleagues for their ideas about leveraging opportunities, I received many responses. Sheila Hayes, AHIP, from Hartford Hospital recommended that I read Changing Roles and Contexts for Health Library and Information Professionals, edited by Alison Brettle and Christine Urquhart [15]. In her enthusiastic review, Hayes noted that “Since 2009 there has been a plethora of literature on the roles of librarians, how to change them and how to engage in more definitive activity in [our] respective institutions.” She added, “All this information has been enough to cause an emotional breakdown on some level in all librarians; at last a book has arrived to put sanity back in our heads and in our practices” [16].

Diane G. Schwartz, AHIP, reminded me of the list her Vital Pathways team compiled to show the diversity of services that hospital librarians provide [17]. Claire Joseph, AHIP, sent me the excellent article that she and Helen-Ann Brown Epstein, AHIP, published in the March 2014 issue of the Journal of Hospital Librarianship, called “Proving Your Worth/Adding to Your Value” [18]. The article highlighted a number of ideas that hospital librarians can implement in their own institutions.

HOSPITAL LIBRARIANS: EVOLVING ROLES

Previous Janet Doe lecturers have looked at the evolving roles of hospital librarians, although Doyle’s 2002 lecture was the second of only two that were
presented by hospital librarians. The first hospital librarian to give the lecture was Holst. Her excellent 1990 lecture, “Hospital Libraries in Perspective,” provided a history of American hospitals and the various roles that the hospital library has played within its parent institution during the twentieth century [19]. Perhaps some of these roles resembled a 1940s vocational guidance film [20].

Although there have been only a few hospital librarians who have had the privilege of presenting the lecture, hospital librarians have been mentioned in many presentations. In his 1977 lecture, “Foundations of Medical Librarianship,” Erich Meyerhoff, AHIP, FMLA, noted that the emergence of hospital librarians as a creative and productive group of practitioners with professional strivings and close relationships with their clientele represents a pool of talent which has already begun to make its mark” [21]. Betsy L. Humphreys, AHIP, FMLA, in 2001, noted the sometimes contentious relationship between the National Library of Medicine (NLM) and hospital librarians [22]. I have to confess that I was one of the hospital librarians who protested in 1989 when NLM announced Grateful Med to hospital administrators without mentioning hospital library services. I guess you can take the woman out of the Mid-Med, but you can’t take the ‘60s out of the woman.

Ana D. Cleveland, AHIP, FMLA, in her 2010 lecture recalled telling Estelle Brodman about her enthusiasm for educating her students to be clinical librarians. She said, “Dr. Brodman...proceeded to tell me that hospital librarians have been providing information to doctors, residents, patients, and others in the hospital wards for a long time. She was...determined that I would get the point that this was a new name for a service provided by hospital librarians for years” [23]. Meyerhoff also spoke of clinical librarianship, saying, “It is a mode of service which promises to establish once again a close and systematic relationship between physicians and librarian” [21]. It is interesting to consider that Janet Doe was happy that she retired before the advent of automation. In her 1977 oral history interview, she said, “The automation has changed, to some extent, the relationship between the physician and the librarian, because it has made available to the physician directly much more information that had to be gathered for him by the librarian” [7]. Thus, Meyerhoff hoped that clinical librarianship would restore this relationship.

When I was thinking about how I wanted to talk about hospital librarianship, colleagues suggested that possibly I could point out the contributions of hospital librarians through the years. Clinical librarianship, the benchmarking network, and library standards came to mind. Instead of exploring these important activities, I decided to focus on some of the radical changes in the health care environment impacting hospitals, and therefore both hospital librarians and academic librarians who work with affiliated hospitals. My goal was to offer an optimistic message and, at the same time, deliver one that would recognize the realities that we are facing in the current health care environment.

According to research from the American Hospital Association, “Hospitals have faced repeated cuts to Medicare and Medicaid payment since 2010 due to both legislative and regulatory changes” [24]. These changes and others are putting financial pressures on hospitals and hospital librarians that some will not survive. In 2006, a status notification form was posted on MLANET at the request of the Vital Pathways Task Force. The form is meant to rapidly collect information on major changes in individual hospital libraries in the United States. From 2006 to September 2013, MLA headquarters received 189 unique, usable responses; a report on the responses is posted on the MLANET Vital Pathways page [25]. Most, although not all, of the changes were negative.

In addition to discussing recent trends, I also wanted to highlight several individuals who have inspired us by words and actions, as they have pivoted to address these challenges. Although pivoting has become a buzzword in politics and in business, especially in Silicon Valley, the concept can also apply to us. For example, in his work related to startup companies, Eric Reis wrote:

I want to introduce the concept of the pivot, the idea that successful startups change directions but stay grounded in what they’ve learned. They keep one foot in the past and place one foot in a new possible future. Over time, this pivoting may lead them far afield from their original vision, but if you look carefully, you’ll be able to detect common threads that link each iteration. [26]

In an email to me, Marshall shared an idea from tai chi. She said that “In tai chi, we pivot on our heel when we want to turn in a different direction. It is a key action for facilitating movement in a safe, stable way” [27].

In the pivoting meditation, Deng says, “Each time you make a decision, move forward. If your last step gained you a certain amount of territory, then make sure that your next step will capitalize on it...But how do we develop timing for the process? It has to be intuitive” [14]. When Deng talks about intuition, he is referring to what we might call tacit knowledge. Amrit Tiwana, author of The Knowledge Management Toolkit, states that “Tacit knowledge includes judgment, experience, insight, rules of thumb, intuition.” He says, “Experts and professionals generally practice primarily with tacit knowledge” [28]. It is our tacit knowledge that can help us pivot in this environment, while staying well grounded in our fundamental values.

In her introduction to the October 2013 Journal of the Medical Library Association (JMLA) issue on new roles for health sciences librarians, Lucretia W. McClure, AHIP, FMLA, reminded us that “A constant in librarianship is the ability to move and adapt with the changes in medicine, science, and the environment” [29]. One could replace “move and adapt” with the word “pivot.” In her editorial in the January 2014 JMLA, Jane Blumenthal, AHIP, had compelling advice:
What do you do when you find out seemingly overnight that the roles you have been playing in your institution are no longer needed or valued? Adapt. Find new roles. Move away from activities that are not valued and embrace value-added activities that demonstrate return on investment. Move quickly and change direction on a moment’s notice. [30]

In her 2010 lecture, Cleveland noted that:

It is essential that educational programs do not abandon the basic tenets of library and information sciences—what we often call the core principles. On the other hand, we cannot lose sight of the fact that our programs require interdisciplinary and collaborative curricula that integrate the total domain of the health care enterprise, library and information sciences, and other information-centered fields. [23]

Hospital librarians must live the interdisciplinary and collaborative essentials that Cleveland emphasized as they pivot to new endeavors in this current environment.

Commenting on a recent MEDLIB-L discussion on hospital library closures, Elaine Russo Martin said, “We will need to challenge everything we have held dear in the past and perhaps no longer do these things. But do new things, in new ways, under new conditions...most importantly I think we will need the Will and the Perseverance to do so.” She added, “I don’t think we have been ready for the radical changes I would see necessary for us to move to ensure the future of medical librarianship. Are we now?” [31]. In other words, “pivot.”

HEALTH CARE ENVIRONMENT CHALLENGES

Cleveland’s 2010 lecture included what she called a model of the health care environment [23]. The major elements are clinical practice, information, technology, consumers, and research. As shown in Figure 1, she then expanded each element to include the paradigm shifts and trends that health information professionals need to know about to provide relevant services. I will focus on just a few of the elements in the model: technology, the link between legislative mandates/regulatory requirements and patient safety, and consumer health information/health literacy.

Of course, our colleagues have always demonstrated awareness of changes in the health care environ-
ment. For example, when the Joint Commission standards changed, Connie Sbardt, AHIP, FMLA, and the Hospital Library Standards Committee revised the “Standards for Hospital Libraries” to be complementary [32]. When “Total Quality Management” was being adopted in hospitals in the early 1990s, hospital librarian leaders including Chris Jones and others were educating HLS members about it through the National Network and other venues [33].

In the January 2002 JMLA, a symposium on “patient-centered librarianship” focused on the clinical environment, including the then new informationist concept. While some of these articles were then and still are inspiring, twelve years later, the scene has changed dramatically. The symposium article “Hospital Librarianship in the United States: At the Crossroads” by Diane G. Wolf and others quoted Edwin A. Holtum, who said, “Regardless of the vast leaps made in digitizing information...there is no magic black box containing the world of medical knowledge [from] which busy clinicians will be able to...receive precisely targeted feedback during the clinical encounter” [34]. Wolf added, “Focused, high-quality patient-care information will be most cost effective and reliable when obtained by using the skills of specialists, and hospital librarians are the specialists in this arena” [35].

While this was accurate then, before long it may no longer be true, as my short fantasy video of a clinical librarian robot suggests. My purpose in showing this video is not to alarm you or to talk about the implications of robotics and big data in health care. However, the video is intended to be another reminder about the technological changes in the health care environment that will continue to have an impact on us and other professionals. While some of our current activities may continue well into the future, we cannot be complacent, thinking and telling each other that only we can provide these services. For example, Chris Patrick and Karena Man commented, in Information Week, on the changes brought about by cloud computing that are impacting chief information officers (CIOs) in all sectors. They wrote, “The fundamental choice facing every company, CIO, and aspiring CIO is the same: Embrace the possibilities of a world without walls, or cling to what feels familiar and secure and risk becoming irrelevant more quickly than you ever imagined possible” [36]. We could change this quote from “CIO” to “hospital librarian,” many of whom are already providing services without walls.

For the past few years, our hospitals have been dealing with the technological challenges of electronic health records (EHRs), including the requirements of “meaningful use.” Meaningful use is a set of criteria for the use of certified EHR systems to improve patient care that provides incentive payments for Medicare providers. The concept of meaningful use rests on the “5 pillars” of policy priorities for health outcomes:

1. Improving quality, safety, efficiency, and reducing health disparities
2. Engage patients and families in their health
3. Improve care coordination
4. Improve population and public health
5. Ensure adequate privacy and security protection for personal health information [37]

Participation in the program is now voluntary, but if entities that are called “Eligible Hospitals” or “Eligible Professionals” fail to join by 2015, there will be negative adjustments to their Medicare/Medicaid payments, starting at 1% reduction and escalating to 3% reduction by 2017 and beyond. The Advisory Board Company created a poster to help organizations compare the latest objectives and measures of meaningful use stages 1 and 2, as outlined by CMS for 2014. The poster demonstrates the complexity inherent in the meaningful use program [38].

Many librarians are leveraging opportunities as they are working with their hospitals’ chief medical information officers to provide point-of-care resources that will enhance the usefulness of the clinicians’ EHRs and the patients’ personal health records. Librarians are also supporting the development of evidence-based order sets to improve clinical care [39].

Other pressures that our hospitals are facing are the changes in reimbursements created by health care reform and the regulatory requirements that address patient satisfaction, clinical quality, and high reliability in patient safety. Of course, patient safety in hospitals is not a new concern. Florence Nightingale wrote about it in 1863 in the preface to Notes on Hospitals. She said, “It may seem a strange principle to enunciate as the very first requirement in a hospital that it should do the sick no harm. It is quite necessary, nevertheless, to lay down such a principle” [40]. In our modern era, Donald Berwick was one of the earliest and most influential proponents of bringing quality improvement techniques to health care. Former head of CMS and a 2014 candidate for governor of Massachusetts, Berwick founded the Institute for Healthcare Improvement (IHI) in the late 1980s to focus on specific quality and safety issues. Following the Institute of Medicine (IOM) publications To Err Is Human: Building a Safer Health System in 1999 [41] and Crossing the Quality Chasm: A New Health System for the 21st Century in 2001 [42], IHI developed 2 significant patient safety efforts; the “100,000 Lives Campaign” [43] in 2004 and the “5 Million Lives Campaign” [44] in 2006.

Today, there is a multitude of entities that hospitals may voluntarily work with to address quality and patient-safety requirements that are often tied to Medicare reimbursement. Cybrarian Lorri Zipperer has often written about the role of librarians in patient safety. Her latest publication, Patient Safety: Perspectives on Evidence, Information and Knowledge Transfer, includes contributions from many MLA members. It highlights the essential role of librarians in improving patient safety throughout the continuum of care [45].

Unfortunately, there has been a discouraging lack of progress in preventing harm to patients since To Err Is Human. A study in the 2013 Journal of Patient
Safety by John T. James is titled “A New, Evidence-based Estimate of Patient Harms Associated with Hospital Care.” James based the estimate on the findings of four recent studies that identified preventable harm suffered by patients. He concludes that “the epidemic of patient harms in hospitals must be taken seriously if is to be curtailed” [46]. Patient safety pioneer Lucian Leape, who was on the IOM committee that wrote To Err Is Human, was quoted as saying that they knew at the time that their estimate of medical errors was low and that he has confidence in the four studies and the estimate by James [47].

Diagnostic error is also receiving a new focus in patient safety. Co-funded by the Agency for Healthcare Research and Quality (AHRQ), a study in BMJ Quality & Safety by Hardeep Singh, Ashley N. D. Meyer, and Eric J. Thomas found that diagnostic errors occur for about 5% of US adults and that about half of those errors could severely harm patients [48]. The 2014 Becker’s Hospital Review has included “Diagnosis” on their list of top 10 patient safety concerns [49].

Hospital librarians likely will be receiving more requests dealing with diagnostic error and research to improve diagnostic accuracy. Barbara B. Jones, Library Advocacy/Missouri coordinator at the National Network of Libraries of Medicine, MidContinental Region, is coordinating a collaborative program, called “Expert HealthSearch,” that was initiated and is being sponsored by the Society to Improve Diagnosis in Medicine. A pilot project for the program was launched in April of 2014: “As designed,...a team of five librarians from across the country who are passionate about helping people and are working on their own time at nominal rates does the actual searches for patients” [50].

GOVERNMENT INCENTIVES

What has changed since Berwick and others first urged improvement in quality and patient safety is that government incentives are now tied to these requirements. Hospitals receive bonuses or penalties from CMS based on how they score on process measures, patient experience, and mortality rates. These incentives may force improvements that the shock from the original IOM report has not been able to achieve.

One of the new Medicare payment programs is the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), which is part of the Hospital Value-Based Purchasing Program created in the Affordable Care Act [51]. Value-based purchasing rewards high-quality providers and penalizes weak performance. HCAHPS is just one of the federal reporting programs designed to provide incentives for hospital performance across a range of quality metrics. The HCAHPS survey was developed for CMS by AHRQ to provide a standardized survey instrument and data collection methodology for measuring patients’ perspectives on hospital care. Hospitals authorize companies such as Press Ganey and Gallup to administer the survey. Using the HCAHPS questions, the companies ask recently discharged patients about their hospital stays, and the companies report the survey results to CMS.

The survey asks patients to rate the frequency of events during their care. The choices are never, sometimes, usually, or always; some questions only require a yes or no answer. Hospitals that perform well in comparison to peers will receive a quality bonus; those that perform poorly will incur a penalty. Questions about communication include: During your hospital stay:
- how often did nurses explain things in a way you could understand;
- how often did doctors explain things in a way you could understand;
- before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand;
- did you get information in writing about what symptoms or health problems to look out for after you left the hospital? [52]

For the incentive payments and penalties, Medicare counts only the percent of patients who answer “always” or “yes.” The results for satisfaction are posted on the Hospital Compare website, along with the quality metrics reported by hospitals. Consumers can select multiple hospitals and compare performance measure information [53].

HOSPITAL LIBRARIANS AND HEALTH LITERACY

When I looked at the HCAHPS survey, the questions reminded me of Rees’s 1992 Janet Doe lecture, “Communication in the Physician-Patient Relationship.” Rees challenged librarians to take a “leadership role in opening newer channels of communication between physicians and patients” [54]. Many did, by encouraging patients to discuss the information that they received from the librarians with their physicians.

Today, direct access to tools like MedlinePlus can produce better-informed patients and consumers. We have come a long way since my 1980s story of the patient with Menière’s disease. But while consumer health information services are still vital and serve a need, hospital librarians are pivoting to a new level of involvement in improving communication with patients. Despite all of the information available to patients and consumers, numerous government and private agencies, the health professionals in our hospitals, and librarians have recognized that low health literacy is an increasing problem.

Funded by NLM and with the leadership of coprincipal investigators Jean P. Shipman, AHIP, FMLA, and Carla J. Funk, CAE, and Project Coordinator Sabrina Kurtz-Rossi, MLA developed a health information literacy program in 2008 that has been used in a variety of settings, including my own. The program is available on MLANET, and additional resources continue to be added to the Health
Information Literacy page [55]. Many hospital librarians are forming collaborative endeavors with practitioners that can address the specific HCAHPS questions that are associated with the communication domains mentioned above. In 2013, the librarians and nurse champions in my hospital organized an interdisciplinary community of practice to help embed health literacy best practices in our hospital and clinics. Our hospital uses “Lean Six Sigma” methodologies, and “going to Gemba” is recommended as a first step in continuous process improvement. Gemba is a Japanese term meaning “the actual place.” It involves going to the place where the work is being done, the front line, to observe and learn [56].

Members of the committee conducted twenty-five observations of activities including preoperative teaching, discharge instructions, medication teaching, and the admissions process. The results were compiled and categorized on a fishbone cause-and-effect diagram, and through multi-voting, the team selected its first specific aim, which was to improve the teaching environment by reducing the distractions, interruptions, and noise that they had observed in nearly every setting.

A checklist was developed and is currently being piloted on several hospital units. It suggests ways for the teacher to improve the environment by turning off phones and other devices, assessing who needs to be in the room, and sitting down and being present to the learners. Another suggestion is for the teacher to close the door and post a “Teaching Time Out” stop sign to reduce interruptions. Results to date have been positive from both teachers and learners. In the future, other practices will be addressed, including the use of teach-back and improvement in tools such as the after-visit summary that patients receive before they leave the hospital.

As hospital librarians help embed health literacy best practices in their hospitals, practitioners may achieve the Health Literate Care Model that Howard Koh and others proposed in a February 2013 Health Affairs article. They wrote that everybody is at risk for

Andrea Harrow, AHIP, from Good Samaritan Hospital Medical Library in Los Angeles, publicizes her services as a librarian who can help to find patient information in other languages, and she schedules continuing medical education (CME) topics promoting health literacy and translation services [59]. Helen Houpt, AHIP, from Pinnacle Health System in Harrisburg, Pennsylvania, has collaborated with nurses to present a variety of health literacy classes to both internal and external audiences [60].

Other activities include a New England Region webinar, “Creative Health Literacy Projects,” in which Margo H. Coletti, AHIP, from Beth Israel Deaconess Medical Center in Boston, collaborated with other experts to develop a workshop on how to compose clearly written informed consent forms. In the same forum, Nancy Goodwin, AHIP, director of library and knowledge services at Middlesex Hospital in Middletown, Connecticut, described how she led the effort of a multidisciplinary committee to rewrite the hospital’s admission booklet to make it health literate [61]. She leveraged an opportunity by taking on a job no one else wanted but that her hospital needed.

Can librarian involvement in health literacy activities improve a hospital’s HCAHPS scores? It can be a contributing factor. More importantly, through these activities, librarians are discovering new ways to use their skills to help patients, their hospitals, and their communities.

PIVOTING TO THE NEW WORLD OF HOSPITAL LIBRARIANSHIP

So how do we find the time to leverage the opportunities presented to us by the current environment and pivot to this new world of hospital librarianship? Elaine Martin said, “We will need to challenge everything we have held dear in the past and perhaps no longer do these things” [31].

Do hospital librarians still bind print journals? I have recently been in the process of removing our library’s bound journals because we will not be taking them with us when we move to the new hospital in December. Instead, we will be providing collaborative spaces, as many hospital libraries now do. The volumes are beautiful and bound in appropriate colors, such as red for the journal Blood. There was a time when having bound journals made me feel as though I had a real library. I am embarrassed to notice how pristine many of these volumes still are, a sign that they have not been opened much since they were shelved fresh from the bindery. Michelle Kraft, AHIP, suggested that perhaps hospital librarians should no longer check in print journals or maybe even stop getting print journals, and simplify our cataloging [62].

And we certainly cannot leverage opportunities by complaining about the failure of our MLA headquarters staff to advocate for us. As Kraft noted in the recent MEDLIB-L thread about library closings, “We need to stop asking the 16 overworked people to start advocating for us, they are doing as good of a job as they can.” She added, “The 3,543 members need to
work with the rest of the medical librarians on this listserv who aren’t MLA members to come up with ideas” [63]. Kraft might have been channeling Janet Doe who said, “when we say ‘the Association’ we mean the individuals who have composed its membership and have done its work” [64]. In fact, our elected leaders, headquarters staff, and MLA members have made many efforts over the years to provide hospital librarians with tools and resources, including National Medical Librarians Month, the Vital Pathways project, the Myths and Truths materials, and the Advocacy Toolbox.

The Joint Commission’s “Speak Up” brochure, “Understanding Your Doctors and Other Caregivers,” is a recent successful advocacy example. Based on recommendations from MLA headquarters, the Joint Commission incorporated information about libraries, MedlinePlus, and MLA into the brochure [65]. These kinds of efforts will continue. But we also realize that these national organizations have their own agendas that may not align with ours.

T. Scott Plutchak, AHIP, FMLA, in an editorial in the July 2004 JMLA, suggested that the reinvention of librarianship “requires rethinking everything we do, and we can only do that when we put our services and priorities in the context of the larger organization that we serve.” He said, “We have talents, resources, and skills that are essential for the success of our institutions. All of our efforts should be focused on doing whatever we have to do to make the most of those opportunities. That means getting out of the library and talking with the people we serve about what they are doing and what their goals are. It means thinking about what the institution needs and not what the library needs” [66]. Our colleagues have shown us that hospital librarians help their organizations by participating in interdisciplinary communities of practice in order to learn more about what clinicians and administrators do and how our skills can help them.

Opportunities have walked into my library from time to time, as in my first story, but that was thirty years ago. It is less likely to happen now in this current environment unless we have already been visible contributors to the organization’s important goals. If necessary, hospital librarians should invite themselves to safety committees and nursing councils, and if that seems difficult, they should enlist a champion from that committee to invite them. As we participate, we gain insights into the challenges that these practitioners face through the tacit knowledge that is being shared. This is the best way to really know and not simply assume what our constituents need. And it is how we can focus our efforts, leverage opportunities, and pivot in this environment.

When I posted a question to the HLS email discussion list asking how hospital librarians can leverage opportunities in the current environment, I received an email from Louise McLaughlin, information specialist at Women’s Hospital Health Science Library in Baton Rouge. I am quoting a portion of it with her permission:

I credit Elaine Martin’s summation with providing me with clarity and direction. In short, I had better get a move on before it’s too late. I also realized that I need human connection. I have reawakened the vision, I have joined with some HLS colleagues, and I am carrying the word to librarians in Louisiana that we must do all that we can to face reality, reinvent ourselves, get uncomfortable, move in new ways. Maybe by doing this, we can avert the dreaded pink slip. And if it comes anyway, we will know that we did all we could to avoid the “coulda, woulda, shoulda, moment.” [67]

At this annual meeting, we will learn about the new Values2 initiative for hospital libraries, created by the MLA Board and implemented by HLS [68]. It builds on the Vital Pathways Project that was initiated by M. J. Toodey, AHIP, FMLA [69], and the values research study by Marshall and others that was published in the JMLA in 2013 [70]. There will be contributed papers and posters and what promises to be a stimulating program, called “Professional Identity Reshaped.” Our colleagues will challenge and inspire us with their research and new programs that we can adapt to our situations. These activities exemplify Janet Doe’s enduring gift to MLA that Holtz eloquently described.

CLOSING THOUGHTS

At the conclusion of the pivoting meditation, Deng says:

On certain days, we come to our limits, and our tolerance for a situation ends. When that happens, change without interference of concepts, guilt, timidity or hesitancy. Those are the points when our entire lives pivot and turn toward new phases, and it is right that we take advantage of them. We mark our progress not by the distance covered but by the lines and angles that are formed. [14]

As we pivot to leverage opportunities in this turbulent health care environment, it will be the interdisciplinary and collaborative lines and angles that we form that will mark our progress as vital, contributing members of our health care organizations. Whether as an individual or as an association, when we pivot, we will change the trajectory of our profession.

Many previous Doe lecturers have quoted poetry to sum up their messages. As I thought about my conclusion, I knew I wanted to end with an inspiring verse, worthy of my colleagues and, also perhaps, a way to indulge my English major avatar. Tennyson’s lines from “Ulysses” came to mind.

Come, my friends,
’Tis not too late to seek a newer world.
Push off, and sitting well in order smite
The sounding furrows; for my purpose holds
To sail beyond the sunset, and the baths
Of all the western stars, until I die.

It may be that the gulfs will wash us down:
It may be that the gulf will wash us down:

And see the great Achilles, whom we knew.

It may be we shall touch the Happy Isles,
And see the great Achilles, whom we knew.

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Tho’ much is taken, much abides; and tho’
We are not now that strength which in old days
Moved earth and heaven, that which we are, we are;
One equal temper of heroic hearts,  
Made weak by time and fate, but strong in will  
To strive, to seek, to find, and not to yield. [70]

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REFERENCES

1. Holtz VH. Measures of excellence: the search for the gold standard. Bull Med Lib Assoc. 1986 Oct;74(4):305–14.
2. Matheson NW. The idea of the library in the twenty-first century. Bull Med Lib Assoc. 1995 Jan;83(1):1–7.
3. Forsman RB. Life and death on the coral reef: an ecocological perspective on scholarly publishing in the health sciences. J Med Lib Assoc. 2005 Jan;93(1):7–15.
4. Gilmore J. Come north! the life-story of Mother Xavier Ross, foundress of the Sisters of Charity of Leavenworth. New York, NY: McMillen Books; 1951.
5. Bishop D. On the uses of diversity. Bull Med Lib Assoc. 1976 Oct;64(4):349–55.
6. Annan GL. The Medical Library Association in retrospect, 1937–1967. Bull Med Lib Assoc. 1967 Oct;55(4):379–89.
7. Doe J, Brodman E. MLA oral history committee interview with Janet Doe. Chicago, IL: Medical Library Association; 1984.
8. Doyle JD. A job with a view: perspectives from the corporate side of the hospital. J Med Lib Assoc. 2003 Jan;91(1):12–7.
9. Sweet V. Far more than a lady with a lamp. NY Times. 2014 Mar 3:D3.
10. Rees AM. Developing consumer health information services. New York, NY: Bowker; 1982.
11. Bradley J, Holst R, Messerle J. Hospital library management. Chicago, IL: Medical Library Association; 1983.
12. Rees AM. Managing consumer health information services. Phoenix, AZ: Oryx Press; 1991.
13. Drucker PF. What makes an effective executive. Harv Bus Rev. 2004 Jun;82(6):58–63.
14. Deng MD. 365 Tao: daily meditations. 1st ed. San Francisco, CA: Harper; 1992.
15. Brettle A, Urquhart C. Changing roles and contexts for health library and information professionals. London, UK: Facet; 2012.
16. Hayes S. Changing roles and contexts for health library and information professionals, edited by Alison Brettle and Christine Urquhart [review]. J Hosp Lib. 2013(4):403–4. DOI: http://dx.doi.org/10.1080/15323269.2013.834410.
17. Schwartz DG, Gibbou FM, Shipman JP, Markwell LG, Marshall JG. The health sciences librarian in medical education: a vital pathways project task force. J Med Lib Assoc. 2009 Oct;97(4):280–4. DOI: http://dx.doi.org/10.3163/1536-5050.97.4.012.
18. Joseph CB, Epstein HAB. Proving your worth / adding to your value. J Hosp Lib. 2014 Jan;14(1):69–79. DOI: http://dx.doi.org/10.1080/15323269.2014.860842.
19. Holst R. Hospital libraries in perspective. Bull Med Lib Assoc. 1991 Jan;79(1):1–9.
20. Twogood AP. Do you want to be a librarian. Your life works series. Des Moines, IA: Vocational Guidance Films; 1947. (Available from: <https://www.youtube.com/watch?v=4RGccQFix3U>. [cited 25 Jul 2014].)
21. Meyerhof E. Foundations of medical librarianship. Bull Med Lib Assoc. 1977 Oct;65(4):409–18.
22. Humphreys BL. Adjusting to progress: interactions between the National Library of Medicine and health sciences librarians, 1961–2001. J Med Lib Assoc. 2002 Jan;90(1):4–20.
23. Cleveland AD. Miles to go before we sleep: education, technology, and the changing paradigms in health information. J Med Lib Assoc. 2011 Jan;99(1):61–9. DOI: http://dx.doi.org/10.3163/1536-5050.99.1.011.
24. American Hospital Association. Financial fact sheets [Internet]. Chicago, IL: The Association; 2014 [cited 21 Jul 2014]. <http://www.aha.org/research/policy/finfofactsheets.shtml>.
25. Funk C. Summary of hospital library status forms [Internet]. Chicago, IL: Medical Library Association; Sep 2013 [cited 21 Jul 2014]. <https://www.mlanet.org/sites/default/files/resources/pdf/bh_status_summ_201309.pdf>.
26. Reis E. Pivot, don’t jump to a new vision [Internet]. 22 Jun 2009 [cited 21 Jul 2014]. <http://www.startuplessonslearned.com/2009/06/pivot-dont-jump-to-new-vision.html>.
27. Marshall JG. Personal communication. 13 Feb 2014.
28. Tiwana A. The knowledge management toolkit: orchestrating IT, strategy, and knowledge platforms. 2nd ed. Upper Saddle River, NJ: Prentice Hall; 2002.
29. McClure LW. When the librarian was the search engine: introduction to the special issue on new roles for health sciences librarians. J Med Lib Assoc. 2013 Oct;101(4):257–60. DOI: http://dx.doi.org/10.3163/1536-5050.101.4.006.
30. Blumenthal J. Creating the future [editorial]. J Med Lib Assoc. 2014 Jan;102(1):2–4. DOI: http://dx.doi.org/10.3163/1536-5050.102.1.002.
31. Martin E. Library closures. In: MEDLIB-L email discussion list [Internet]. Chicago, IL: Medical Library Association; 29 Jan 2014 [cited 21 Jul 2014].
32. Medical Library Association, Hospital Libraries Section, Standards Committee. Standards for hospital libraries. Chicago, IL: The Association; 1994.
33. Jones CJ. The health sciences librarian’s contribution to quality improvement. Natl Netw. 1991 11;16(2):11.
34. Holtum EA. Librarians, clinicians, evidence-based medicine, and the division of labor. Bull Med Lib Assoc. 1999 Oct;87(4):404–7.
35. Wolf DG, Chastain-Warheit CC, Easterby-Gannett S, Chayes MC, Long BA. Hospital librarianship in the United States: at the crossroads. J Med Lib Assoc. 2002 Jan;90(1):38–48.
36. Patrick C, Mann K. Business walls tumble, CIOs face agility test. Information Week. 4 Mar 2014 (Available from: <http://www.informationweek.com/strategic-cio/executive-insights-and-innovation/business-walls-tumble-cios-face-agility-test/d/d-id/1114097/#msg>., [cited 25 Jul 2014].)
37. Centers for Disease Control and Prevention. Meaningful use: introduction [Internet]. The Centers; 11 Oct 2012 [cited 25 Jul 2014]. <http://www.cdc.gov/ehrmeaningfuluse/introduction.html>.
38. Raiford R. Meaningful use: the whiteboard story [Internet]. The Advisory Board Company; 11 Feb 2014 [cited 25 Jul 2014]. <http://www.advisory.com/research/health-care-it-advisor/resources/posters/2012/meaningful-use-the-whiteboard-story>.
39. Brandes S, Wells K, Bandy M. Invite yourself to the table: librarian contributions to the electronic medical record. Med Ref Serv Q. 2013;32(3):358–64. DOI: http://dx.doi.org/10.1080/02763869.2013.807087.
40. Nightingale F. Notes on hospitals. London, UK: Longman, Green, Longman, Roberts, and Green; 1863.
41. Kohn LT, Corrigan J, Donaldson MS. To err is human: building a safer health system. Washington, DC: National Academies Press; 2000.
42. Institute of Medicine (US), Committee on Quality of Health Care in America. Crossing the quality chasm: a new health system for the 21st century. Washington, DC: National Academies Press; 2001.
43. Berwick DM, Calkins DR, McCannon CJ, Hackbeth AD. The 100,000 lives campaign: setting a goal and a deadline for improving health care quality. JAMA. 2006 Jan 18;295(3):324–7. DOI: http://dx.doi.org/10.1001/jama.295.3.324.
44. McCannon CJ, Hackbeth AD, Griffin FA. Miles to go: an introduction to the 5 million lives campaign. Jt Comm J Qual Patient Saf. 2007 Aug;33(8):477–84.
45. Zipperer LA. Patient safety: perspectives on evidence, information and knowledge transfer. Farnham, Surrey, UK: Gower Publishing; 2014.
46. James JT. A new, evidence-based estimate of patient harms associated with hospital care. J Patient Saf. 2013 Sep;9(3):122–8. DOI: http://dx.doi.org/10.1097/PTS.0b013e3182948a69.
47. Allen M. How many die from medical mistakes in U.S. hospitals? ProPublica [Internet]. 13 Sep 2013 [cited 25 Jul 2014]. http://www.propublica.org/article/how-many-die-from-medical-mistakes-in-us-hospitals.>
48. Singh H, Meyer AND, Thomas EJ. The frequency of diagnostic errors in outpatient care: estimations from three large observational studies involving US adult populations. BMJ Qual Saf. 2014;23:727–31. DOI: http://dx.doi.org/10.1136/bmjqs-2013-002627. [Epub ahead of print]
49. Rizzo E. Top 10 patient safety issues for 2014. Becker’s Infect Control Clin Qual [Internet]. 3 Dec 2013 [cited 25 Jul 2014]. <http://www.beckershospitalreview.com/quality/top-10-patient-safety-issues-for-2014.html>.
50. National Library of Medicine. Regional medical libraries making a difference: focus on MidContinental Region [Internet]. The Library; 21 May 2014 [cited 25 Jul 2014]. <http://infolocus.nlm.nih.gov/2014/05/regional-medical-libraries-mak-3.html>.>
51. Centers for Medicare and Medicaid Services. HCAHPS: hospital consumer assessment of healthcare providers and systems [Internet]. Baltimore, MD: The Centers; 25 Feb 2014 [cited 25 Jul 2014]. <http://www.hcahpsonline.org>.>
52. Centers for Medicare and Medicaid Services. Survey instruments [Internet]. Baltimore, MD: The Centers [cited 25 Jul 2014]. <http://www.hcahpsonline.org/surveyinstrument.aspx>.
53. Centers for Medicare and Medicaid Services. Medicare hospital compare [Internet]. Baltimore, MD: The Centers; 17 Jul 2014 [cited 25 Jul 2014]. <http://www.medicare.gov/hospitalcompare/>.>
54. Rees AM. Communication in the physician-patient relationship. Bull Med Lib Assoc. 1993 Jan;81(1):1–10.
55. Medical Library Association. Health information literacy [Internet]. The Association [cited 25 Jul 2014]. <https://www.mlanet.org/resources/healthlit/index.html>.
56. Liker JK. The Toyota way: 14 management principles from the world’s greatest manufacturer. New York, NY: McGraw-Hill; 2004.
57. Koh HK, Brach C, Harris LM, Parchman ML. A proposed ‘health literate care model’ would constitute a systems approach to improving patients’ engagement in care. Health Aff (Millwood). 2013 Feb;32(2):357–67. DOI: http://dx.doi.org/10.1377/hlthaff.2012.1205.
58. Pfannenstiel B. Personal communication. 4 Dec 2014.
59. Harrow A. Personal communication. 22 Mar 2014.
60. Houpt H. Personal communication. 28 Mar 2014.
61. Coletti M, Goodwin N. Creative health literacy projects webinar [Internet]. New England Regional Medical Library; 11 Feb 2014 [cited 26 Jul 2014]. <http://nnlm.gov/ner/blog/2014/02/07/creative-health-literacy-projects-webinar-2/>.>
62. Kraft M. Sacred cows and heretical librarians. Krafty Librarian [Internet]. 9 Oct 2013 [cited 25 Jul 2014]. <http://kraftylibrarian.com/?p=2480>.>