

Health Policy NEWSLETTER

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FROM THE EDITOR

The Scholarship of Quality

Enter a hospital today, and you will see physicians entering orders into computers, nurses scanning patient barcodes, and custodians keeping floors clean and dry. Each of these tasks is an example of the increased emphasis on quality improvement (QI) that pervades today's healthcare system.

A major catalyst for this activity was the 2000 publication of the IOM report, "To Err is Human,"¹ which exposed flaws in the U.S. healthcare system and galvanized an international effort to improve quality. At the heart of QI initiatives is the "the scholarship of quality," a field dedicated to defining, expanding, and distributing the knowledge base of quality.

The scholarship of quality is divided into roughly three dimensions: 1) journals, textbooks, and research reports that contain the growing knowledge base; 2) academic departments, professional organizations and think-tanks, focused on creating knowledge; and 3) professional schools, fellowships, and educational seminars that transfer knowledge and train the next generation of leaders. Collectively, these resources create the framework on which stakeholders design and implement interventions.

Peer-reviewed journals play a key role within the scholarship of quality, by providing a vehicle to disseminate information and serve as a forum for discussion. Clinically focused publications with wide-based circulations, such as the *New England Journal of Medicine*, the *Journal of the American Medical Association*, and *Annals of Internal Medicine*, appeal to practicing physicians. Journals targeted at health quality research include: *The Milbank Quarterly*, *Health Services Research*, *Inquiry*, *Frontiers of Health Services Management*, and *Quality Management in Health Care*. Professionals engaged in the practice and daily implementation of QI, eg, practice management, employer-based initiatives, and patient safety, might subscribe to: *Health Affairs*, *Joint Commission Journal on Quality and Safety*, *American Journal of Medical Quality*, *Journal of Ambulatory Care Management*, and *Journal of Patient Safety*. Journals with an international quality scope include *Clinician in Management*, *Quality and Safety in Healthcare*, *The Journal of Health Services Research and Policy*, and *International Journal for Quality in Healthcare*.

Examples of several textbooks that synthesize the growing knowledge base are: *The Healthcare Quality Book: Vision, Strategy, and Tools*,² designed to provide a robust foundation of knowledge for all stakeholders involved in QI; *The Quality Solution: A Stakeholder's Guide to Improving Health Care*,³ featured in courses on healthcare quality taught at professional schools of public health, medicine, law, and management; and *The Core Curriculum for Medical Quality Management*,⁴ published by the American College of Medical Quality (ACMQ) and which serves as the basis for its educational programs.

Professional organizations, through fostering the development and exchange of knowledge, are another foundation of the scholarship of quality. For example, The American College of Medical Quality (ACMQ) was founded to "provide leadership and education in healthcare quality management."⁵ While practicing physicians account for the majority of ACMQ's membership, approximately 15% of its members are nurses, lawyers, educators and healthcare administrators. ACMQ publishes a bimonthly peer-reviewed journal, the *American Journal of Medical Quality*; and a bimonthly newsletter, *Focus*, which offers case studies, policies, legal discussions and original articles on health quality topics. Through educational seminars and audio forums, members can become eligible for designation as Fellow of the American College of Medical Quality or earn a Certification in Medical Quality.

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The Institute for Healthcare Improvement (IHI), headquartered in Cambridge, MA, was founded by Donald Berwick in 1991 to “help lead the improvement of health care throughout the world.” IHI offers myriad programs, resources, and products, as well as a fellowship program in collaboration with the Summer Program in Clinical Effectiveness at the Harvard School of Public Health.

At the international level, the International Society for Quality in Health Care (ISQUA), founded in 1985, has a membership representing over 70 countries. It publishes a bulletin; a peer-reviewed journal – the *International Journal for Quality in Health Care*; and it organizes an annual conference. The British Association of Medical Managers (BAMM) sponsors several key initiatives aimed at training physician leaders, eg, the Faculty of Medical Management and Leadership, in collaboration with the Royal College of Physicians, (in development). BAMM publishes a quarterly peer-reviewed journal, *Clinician in Management*.

Training programs for the next generation of leaders are an essential part of the scholarship of quality. A majority of medical schools today, including Jefferson Medical College, offer dual-degree pathways, where students can earn an MPH or MBA along with their medical degree. According to the Liaison Committee on Medical Education (LCME) Annual Medical School Survey, during the 2004-2005 academic year, 64 of the 125 (51%) LCME-accredited medical schools in the US offered MD/MPH programs, while 42 (34%) offered MD/MBA programs. A decade earlier (1994-1995), only 35 schools (28%) offered MD/MPH programs, and 13 (10%) offered MD/MBA programs.⁶ Some medical schools have developed “areas of concentration” that allow students to seek enrichment in areas outside of the core medical school curriculum.

To address health care quality in graduate medical education, The Accreditation Council for Graduate Medical Education (ACGME) holds residency programs accountable for six core competencies for physicians in training, which have previously been described in this space.⁷ Among these is knowledge of “systems-based practice,” which includes advocating for quality patient care and optimal patient care systems.⁸

Among the national fellowship programs that provide training in health care quality are the Robert Wood Johnson Clinical Scholars Program, The Physician Post-Residency Fellowship

Program at Stanford University, and the Harvard Pediatric Health Services Research Fellowship program.

The scholarship of quality serves as an engine for innovation within healthcare. To improve healthcare quality, one must combine evidence-based medicine with evidence-based management.⁹ The scholarship of quality feeds into this framework by developing the evidence-based management core; it lays the foundation for interventions that will ultimately bridge the quality chasm.

As always, we are interested in your thoughts.

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REFERENCES

1. Institute of Medicine. *To Err is Human*. Washington, DC: National Academies Press; 2000.
2. Ransom SB, Joshi MS, Nash DB. *The Healthcare Quality Book: Vision, Strategy, and Tools*. Chicago, IL: Health Administration Press; 2005.
3. Nash DB, Goldfarb NI. *The Quality Solution: The Stakeholder's Guide to Improving Health Care*. Sudbury, MA: Jones & Bartlett; 2005.
4. American College of Medical Quality. *Core Curriculum for Medical Quality Management*. Sudbury, MA: Jones & Bartlett; 2005.
5. American College of Medical Quality. Available at: <http://www.acmq.org>. Accessed August 27, 2007.
6. Barzansky B, Etzel SI. Educational programs in US medical schools, 2004-2005. *JAMA*. 2005; 294: 1068-74.
7. ACGME Competencies: The Curricular Challenge. *Health Policy Newsletter*. 2002; 15: 1-2.
8. Program Director Guide to the Common Program Requirements. Accreditation Council for Graduate Medical Education. Web site. Available at: http://www.acgme.org/acWebsite/navPages/nav_commonpr.asp. Accessed August 27, 2007.
9. Shortell SM, Rundall TG, Hsu J. Improving patient care by linking evidence-based medicine and evidence-based management. *JAMA*. 2007; 298: 673-676.

RESOURCES

The Milbank Quarterly

<http://www.milbank.org/quarterly.html>

Health Services Research

<http://www.blackwellpublishing.com/journals>

Inquiry

<http://www.inquiryjournal.org>

Frontiers of Health Services Management

<http://www.ache.org/pubs/frontiers.cfm>

Quality Management in Healthcare

<http://www.qmhcjournal.com>

Health Affairs

<http://www.healthaffairs.org>

Joint Commission Journal on Quality and Safety

<http://www.jcrinc.com>

American Journal of Medical Quality

<http://ajmq.sagepub.com>

Journal of Ambulatory Care Management

<http://www.ambulatorycaremanagement.com>

Journal of Patient Safety

<http://www.journalpatientsafety.com>

Clinician in Management

http://www.radcliffe-oxford.com/journals/J08_Clinician_in_Management

Quality and Safety in Health Care

<http://qshc.bmj.com>

Journal of Health Services Research & Policy

<http://www.rsmppress.co.uk/jhsrp.htm>

International Journal for Quality in Healthcare

<http://intqhc.oxfordjournals.org>

American College of Medical Quality

<http://www.acmq.org>

International Society for Quality in Health Care

<http://www.isqua.org.au>

British Association of Medical Managers

<http://www.bamm.co.uk>

Institute for Healthcare Improvement

<http://www.ihl.org>

Rapid Response Teams

Each year, The Joint Commission, which evaluates and accredits nearly 15,000 healthcare organizations and programs in the U.S., releases its National Patient Safety Goals. The implementation of these goals is

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As of March 2008, over 700 RRT calls have occurred at TJUH. This suggests that ill patients, for whom early intervention is imperative, are receiving care prior to further clinical decline.

required by all accredited organizations in order to improve the quality and safety of patient care.¹ One of the 2008 National Patient Safety Goals requires hospitals to develop medical response teams by December 2008.² Physicians at the University of Pittsburgh Medical Center (UPMC) were the first in the U.S. to develop these teams, often referred to as Rapid Response Teams (RRT) or Medical Emergency Teams (MET), in 1989.³

As part of this trend, the Rapid Response System Collaborative was established in 2006. The Collaborative, whose goal is to implement RRT programs in teaching and community hospitals, was organized by the Association of American Medical Colleges and the Delmarva Foundation, and sponsored by The Robert Wood Johnson Foundation. In 2006, Thomas Jefferson University Hospital (TJUH) joined the Collaborative. The RRT program was launched as a trial in May 2006 on a medical floor. It expanded to four medical/surgical floors, and was expanded again to the entire inpatient population (625 beds) at TJUH in October 2006.

The TJUH RRT consists of highly trained personnel that function as a pre-code team: an ICU nurse, respiratory therapist, medicine resident, anesthesiologist, and, unique to TJUH, a surgical resident. Bedside clinicians (nurse, resident, attending) call the RRT by activating a page when the patient meets criteria (Table 1). After being called, the team arrives within three

TABLE 1.

Criteria to Call an RRT at TJUH:

- Blood Pressure: below 90 or above 180
- Heart Rate: below 45 or above 125
- Respiratory Rate: below 8 or above 24
- Oxygen Saturation: below 90% or increasing oxygen requirements
- Acute change in mental status
- New onset of chest pain
- Staff member concerned about patient
- Patient has not responded to treatment already underway for recent change in status

minutes to the bedside, at which time they analyze the clinical situation, begin interventions to stabilize the patient, and communicate with the patient's attending physician and house staff. The team then helps the caregiver initiate a plan, and turns care back to the normal caregivers. Patients are often transferred to an ICU or step-down setting. On average, the team completes its work and disperses in under 60 minutes. The objective is to provide advanced care for unstable patients early enough to prevent cardiac or respiratory arrest in non-ICU settings.⁴

TJUH's RRT program entails intensive education and communication efforts throughout the hospital and among all staff. A multidisciplinary committee was established to review individual cases, address opportunities for improvement, and update a report card, which was developed to track key measures indicating utilization and outcomes of the RRT. This committee continues to meet bi-weekly and closely reviews the report card.

Based on internal performance measures, preliminary results from the scorecard and staff input are positive. Tracking metrics from the outset has yielded the following results from calendar year 2007:

- Average response time - 2.33 minutes
- Survival to discharge rate - 73%
- Patient intubation rate - 25%
- Transfer to higher level of care rate - 77%

An important positive outcome of the RRT is the empowerment of nurses who call for help when they are unsure of a patient's condition. For example, bringing a critical care nurse to the bedside with the RRT call has led to an early diagnosis of a post-operative stroke. Although staff nurses are the most frequent initiators of RRT calls, residents and attending physicians have also called the RRT when a patient requires many caregivers rapidly at the bedside to treat their worsening symptoms. Initially, some physicians worried that the team would usurp the functions of the medical and house staffs, however, these concerns have dissipated with the RRT team working closely with the bedside nurse and house staff. Furthermore, attending physicians are to be notified via telephone by a team member within 15 minutes of arriving at the patient room. Plans are underway to adapt the RRT structure to the Jefferson Hospital for Neuroscience and the Methodist Hospital Division.

TJUH has also developed two unique RRT structures for both pediatric and obstetric patients. Jefferson's Pediatric RRT was developed to bring pediatric expertise to the patient's bedside. The Pediatric RRT responds to inpatients 13 years and younger with pediatric-specific supplies and equipment. Currently the Obstetric Critical Response Team (OBCRT) responds to obstetric emergencies on the ante- and post-partum patient floors, and is working to expand to the Emergency Department and other inpatient areas that treat pregnant patients. Both of these RRT structures have unique criteria for calling the team, separate monitoring, and defined oversight meetings to review calls.

Overall costs and financial ramifications of the RRT program are difficult to measure. TJUH shows virtually no staffing costs to support the RRT as the system for RRT response mimics the current hospital system for responding to cardiac and respiratory arrests (code) calls. However, the opportunity cost of clinicians leaving their area or current work to respond to the RRT call is difficult to quantify. Of course, quantifying the costs of these preemptive interventions versus eventual cardiac or respiratory arrest events is not possible.

Whether RRTs reduce mortality in hospitalized patients has been the subject of debate, mostly due to mixed research results. At least one retrospective six-year study of a tertiary hospital showed that as RRT calls increased, cardiac arrests decreased.⁵ Although the focus of most clinical practice is evidence-based, the RRT has become a permanent trend due to The Joint Commission's regulations. Quantifying RRT outcomes will continue to evolve as increased experience with this intervention grows.

REFERENCES

1. Institute for Healthcare Improvement. Patient Safety: General. <http://www.ihl.org/IHI/Topics/PatientSafety/SafetyGeneral>. Accessed March 21, 2008.
2. The Joint Commission. National Patient Safety Goals. 21 Mar. 2008 http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/08_hap_npsgs.htm. Accessed March 21, 2008.
3. Larson L. Have you M.E.T. the future of better patient safety? *Hospital & Health Networks*. Oct. 2005:59-66.
4. Winters BD, Pham J, Pronovost, PJ. Rapid response teams-walk, don't run. *JAMA*. 2006;296:1645-1647.
5. Devita MA, Braithwaite RS, Mahidhara R, et al. Use of medical emergency team responses to reduce hospital cardiopulmonary arrests. *Quality and Safety in Health Care*. 2004;13: 251-254.

Web 2.0: A New Vocabulary for Health Policy

Effective health policy requires information to be transparent and accessible. Given the World Wide Web thrives on transparency and accessibility, it makes sense for us to pay attention to Web innovations as they arise.

This article provides an overview of how the Web has evolved from a simple “read-only” Web (also known as Web 1.0), to a fully interactive Web composed of new, powerful tools (Web 2.0).^{1,12} The intent is to facilitate a basic understanding of this new Web vocabulary (eg, blogs, wikis, RSS Feed), how it applies to specific areas of health policy, and to provide a foundation for future analysis on the impact of the Web on healthcare.

The Web Today

A recent survey by the Pew Internet & American Life Project found that 73% of adults in the U.S. are Internet users, up from only nine percent of adults in 1995.³ Over 40 million businesses have a registered dot.com website today.⁴ Few businesses exist without some level of online identity, and some companies operate exclusively online, foregoing a physical, “brick-and-mortar” location. The home page of a website is the face of the organization to anyone searching online. Since the website has become fundamental to most business models, the need for a greater selection of digital media has emerged.

Moving from Web 1.0 to Web 2.0 means that websites no longer just contain “static content,” but instead allow users to collaborate, share information, and develop new services online.⁴ Individuals and organizations alike are now using new tools to compete for visibility, starting with increasingly sophisticated search engines.

Search Engines: The Power of Linkage

Familiar companies such as Google™ and Yahoo! (now household names) offer search engines to sift through the limitless contents of the Web (Google™ indexed eight billion web pages in 2005).⁴ The power exercised by these companies is enormous, given they have become the de facto gateways to the Web and, in effect, control what is made visible to everyday users.

For the most part, the algorithms these companies use for ranking the returns for a search query work as follows: the more websites that link to your website, the more likely your website shows up in the first page of returns for a Google™ search. Eighty percent of Internet traffic goes to those websites in the first half of the first page of search results.⁵ Verbally referring a customer to your company is now synonymous with a company embedding a link to your website on their home page.

“The new reality: Your CV is no longer what you send to your employer – it’s the first 10 things that show up on Google,™” according to Michael Fertik, whose company, Reputation Defender, manages Internet reputations.⁶ For healthcare academics and others whose life work—countless publications, quotations, presentations, and other miscellaneous information—is stored in digital space, this reality can be a mixed blessing. Furthermore, the segregation of one’s personal

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and professional life in the physical world does not carry over to the Web; a search shows no discretion. Half of Internet users have searched for themselves online and 38% took steps to restrict and remove

some of the information they found.⁷

Blogs: A New Platform for Dialogue

The word *blog* is simply the words “web” and “log” merged, ie, a blog is simply a web page created by an individual or group for the purpose of logging their own reflections, ideas, news and opinions.⁸ Most blogs act as discussion platforms, allowing the blog host to converse with other Internet users. With names like “The Angry Pharmacist,” “White Coat Rants,” and “PharmaGossip,” it’s not difficult to see the roles these blogs play in health policy. Even the Secretary of the Department of Health and Human Services maintains a blog. The transparency and open conversation created by blogs affords everyone a seat at the table, regardless of age, title, or achievement.

Internet-Video & Podcasts: Convenience and Accessibility

Video via the Internet has become increasingly popular, especially with its widespread use in enhancing political campaigns during this presidential election cycle. Well over half of Internet users have watched videos online and almost 20% do so every day.⁹ In the healthcare arena, Internet-video has very practical uses. Websites like YouTube can be used to broadcast and view panel discussions between some of healthcare’s foremost leaders. Conferences often post video clips of popular presentations and speeches. These media services are available free of charge, as websites are more interested in attracting Internet traffic to sell advertising space, as opposed to charging a fee to post a video.

In a similar fashion, podcasts—audio files that can be downloaded to a computer or portable audio player—offer yet another media outlet for Internet users. While perhaps not as entertaining as real-time video or webcasts, audio files are generally smaller and easier to share with others. Recording and posting an audio clip online is also generally less labor-intensive compared to capturing and displaying the same content via video.

Wikis and Social Networks: Power in Numbers

Rarely is a manuscript published in a medical journal before it has undergone extensive peer-review and editing. This is done to ensure accuracy and improve the quality of the content. Building on these concepts of peer-review and peer-editing, a *wiki* is a collection of web pages specifically designed to be interactive, enabling anyone who accesses its content to make improvements to it in real-time (the word “wiki” comes from the Hawaiian word for “quick”).^{4,10} Given that health research and technology are constantly evolving and improving, wikis could facilitate the translation of research into practice. However, the upside and downside of wikis are one and the same... the ability of anyone to edit content.

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Until recently, policy makers and industry stakeholders were the primary authority behind health policy initiatives. Today, online social networks, eg, MySpace and Facebook, have become conduits for individuals to organize and mobilize behind a shared interest or cause (cancer survivorship, universal insurance coverage, etc). Philanthropists and advocates for specific causes are increasingly using these sites to garner attention and recruit members to support their efforts.

Really Simply Syndication (RSS): Streamlining the Web Experience

Second only to search engines, Really Simple Syndication (RSS) feed has been most useful in streamlining the Internet experience. Most Internet users have their favorite websites. By subscribing to a website or blog's RSS feed, the Internet user establishes a digital connection with that site that allows the user to receive notices of updates and information of interest as soon as it is posted to the site. One could argue that relying on email alerts for news might be somewhat outdated with the advent of RSS. A good way to measure the success of a website is to monitor how many Internet users have subscribed to the RSS feed.

The application of these web-based tools to health policy is already happening and could potentially influence policy-making at the highest levels. However, the application and impact of Web 2.0 on the actual healthcare seeking patterns of individuals and populations is a more widely appealing and significantly more important subject. New websites are popping up every day that offer some solution to a different healthcare problem. Google™ and Microsoft have created online personal health records to address the lack of continuity of care; websites like *DoubleCheckMD* allow individuals to enter drug information and check for potential drug interactions and side effects. Further attention should be focused on how the Web is impacting the actual health and care of individuals.

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REFERENCES

1. Murray RB. Web 2.0 and podcasting: Implications for health care. *Health Policy Newsletter*. 2006;19(4).
2. Versel N. Health 2.0. Will its promise be realized? Advocates say it will transform health care; detractors warn against overestimating its potential. *Managed Care*. March 2008:49-52.
3. Fox S. Internet Usage Trends: Through the Demographic Lens. Pew Internet Project, Presentation to the FTC, Nov. 6, 2006. http://www.pewinternet.org/ppt/Fox_FTC_Nov_6_%202006.pdf. Accessed March 15, 2008.
4. Laudon K, Laudon J. Management Information Systems, 10th Edition. Upper Saddle River, NJ: Pearson Education, Inc., 2006.
5. Expansion + Internet Marketing. Search engine visibility: What good search results will do for your traffic. www.expansionplus.com. Accessed May 1, 2008.
6. Coutu D. We Googled you. *Harvard Business Review*. June 2007;85(6):47. Interactive Case Study available at: <http://www.hbsp.harvard.edu/flatmm/ics/>
7. Madden M, Fox S, Smith A, Vitak J. Online identity management and search in the age of transparency. Pew Internet & American Life Project, December 2007. http://www.pewinternet.org/pdfs/PIP_Digital_Footprints.pdf. Accessed May 22, 2008.
8. Thielst CB. Weblogs: A communication tool. *Journal of Healthcare Management*. 2007;52(5):287-88.
9. Madden M. Online video: 57% of internet users have watched videos online and most of them share what they find with others. Pew Internet & American Life Project, July 25, 2007. http://www.pewinternet.org/pdfs/PIP_Online_Video_2007.pdf. Accessed May 22, 2008.
10. Wikipedia, the free encyclopedia. <http://en.wikipedia.org/wiki/wiki>. Accessed June 8, 2008.

DHP Presentations at the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 13th Annual Meeting, May 3-7, 2008, Toronto, Canada.

Podium Presentations

Bain KT, **Richardson D**, **Liao D**, Diamond J, Novielli KD, **Goldfarb NI**. *Prescription Drug Utilization Among a National Representative Sample of Medicare Beneficiaries with Heart Failure*.

Gagne JJ, **Maio V**, Berghella V, Louis DZ, Gonnella JS. *Exposure to Contraindicated and Other Potentially Dangerous Medications During Pregnancy: A Population-Based Study in Italy*.

Poster Presentations

Chaudhari P, **Pizzi L**, **Richardson D**, **Singh V**. *Impact of Nighttime Pain on Sleep Quality in Patients with Chronic Painful Conditions*.

Liao D, **Pizzi L**. *Complementary and Alternative Medicine and Health Care Utilization in Patients with Non-Cancer Chronic Pain*.

Yuen E, **Toner R**, **Cobb N**, Kata P, **Goldfarb NI**. *Disparities in Medication Utilization and Compliance for Gastro-esophageal Reflux Disease: A Population-Based Study*.

Yuen E, **Toner R**, **Cobb N**, Kata P, **Goldfarb NI**. *Racial, Social, and Economic Disparities in Knowledge and Care Seeking Behaviors for Gastro-Esophageal Reflux*.

Pennsylvania's Investment in Quality: Electronic Medication Management Systems

The Centers for Medicare and Medicaid Services (CMS) and other payors are aggressively moving toward pay-for-performance in the hope that investing in quality improvement systems will produce better outcomes for patients as well as financial benefits for providers. This article reviews cogent issues in medication management today and touches on several initiatives being undertaken by the Commonwealth of Pennsylvania.

Medication errors are among the most common medical errors, harming at least 1.5 million people every year, according to a report from the Institute of Medicine (IOM).¹ Studies indicate that 400,000 preventable drug-related injuries occur each year in hospitals; the extra costs of treating these injuries have been estimated at \$3.5 billion a year. (This estimate does not take into account lost wages and productivity or additional health care costs.) Another 800,000 preventable drug-related injuries occur in long-term care settings, and roughly 530,000 occur among Medicare recipients in outpatient clinics. While these numbers may seem shocking, they likely underestimate the extent of the problem.

Problems regarding medication management typically fall into one of the following categories:² untreated indications; improper drug selection; sub-therapeutic dose; failure to receive drugs; overdose; adverse drug reactions; drug interactions; and drug administration without an indication.

Electronic prescribing (e-prescribing) is one innovation that promises to reduce medication error and is the most heavily promoted segment of electronic medication management. Studies have consistently found that paper-based prescribing is associated with high error rates, due to pharmacists' challenges with prescription legibility. When combined with decision-support tools, e-prescribing can automatically alert prescribers to possible interactions, allergies, dosage, and other potential problems. It should be noted that a comprehensive e-prescribing system is one that includes prescribing, dispensing and administering medications through use of an electronic platform.

While the problem of medication errors is well-known, and has an identified solution (electronic medication management), there are significant barriers that hinder widespread implementation of these systems. Some of these barriers include provider reluctance, unfamiliarity with new technology, lack of capital resources, and misaligned financial incentives.

According to a report from the IOM,¹ by 2008 all health care providers should have plans in place to write prescriptions electronically. However, the IOM has acknowledged that significant regulatory issues and problems with automated alerts still need to be resolved. In a 2007 report, IOM recommends that by 2010, all providers should be using e-prescribing systems and all pharmacies should be able to receive prescriptions electronically. The Department of Health and Human Services appears ready, through its information technology (IT) initiatives, to push the implementation of electronic systems used in ordering, administering, and monitoring drugs. This is being accomplished through the American Health Information Community (AHIC), a federal advisory body that was chartered in 2005 to make recommendations to the Secretary of the U.S. Department of

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Health and Human Services on how to accelerate the development and adoption of health information technology.³ The Commonwealth of Pennsylvania has also taken positive steps to encourage the successful implementation of electronic medication management systems through the following notable initiatives:

The Hospital Quality Care Investment Grant Program

The Hospital Quality Care Investment Grant Program and the Hospital Quality Incentive Pilot Program, its companion incentive pilot, were created as part of a legislative initiative [36 Pa.B. 2235]. The purpose of the program is to provide an incentive for acute care general hospitals to initiate quality improvement projects by offsetting some of the costs related to implementing these initiatives.

Jefferson Medical College and the Pennsylvania e-Health Technology Consortium

Jefferson Medical College has been an active participant in a consortium of 28 health care organizations with a goal of building a Pennsylvania electronic patient data network. Established in 2005, the Pennsylvania e-Health Technology Consortium aims to build and standardize a secure national electronic medical record network, toward improving patient safety, save on health care spending, and help doctors treat patients faster. This network is linked to a national system so that patients and their doctors can securely access medical records from any part of the country. Similar, smaller-scale initiatives have also been started within the Commonwealth, including a \$750,000 grant from Blue Cross of Northeastern Pennsylvania in Wilkes-Barre to enable a local hospital to develop a computerized physician order-entry system.

Institute for Safe Medication Practices

Finally, no article regarding medication safety would be complete without mention of Pennsylvania's Institute for Safe Medication Practices (ISMP). The ISMP, based in suburban Philadelphia, is the nation's only 501(c)(3) nonprofit organization devoted entirely to medication error prevention and safe medication use. ISMP represents several decades of experience in aiding healthcare practitioners to keep patients safe, and it continues to lead efforts to improve the medication use process. The organization is known and respected worldwide as the premier resource for impartial, timely, and accurate medication safety information.

While much work remains in order to meet the IOM's projected timetable for universal adoption of electronic medication management systems, much progress has been made. Pennsylvania is doing its part to actively meet the challenge.

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REFERENCES

1. Institute of Medicine. Preventing Medication Errors: Quality Chasm Series. Washington, DC: National Academies Press; 2007. Free executive summary available online at http://www.nap.edu/catalog.php?record_id=11623.
2. Strand LM, Morley PC, Cipolle RJ et al. Drug-related problems: their structure and function. *Drug Intel Clin Pharm* 1990;24:1093-7.
3. American Health Information Technology. <http://www.hhs.gov/healthit/community/background/>. Accessed May 24, 2008.

Reducing Obesity in Adolescent Girls and the Power of Positive Education: A Collaboration of the PAL (Police Athletic League) Positive Images Program and Thomas Jefferson University, Jefferson School of Nursing

The World Health Organization has declared obesity a global epidemic.¹ The Centers for Disease Control and Prevention link the obesity epidemic to poor nutrition, an over-consumption of food, and sedentary behaviors.²

In children this epidemic is particularly daunting; more than 17% of children are considered obese.³ The number of young adults regularly engaging in moderate to vigorous exercise has dramatically decreased, while weekly television and video viewing has increased.⁴ Studies now link childhood obesity to the early onset of chronic illnesses that were once associated with middle to late adulthood.^{2,3} The incidence of type 2 diabetes in children and adolescents is estimated to have increased twenty-fold in the past two decades.⁵

The burden of obesity-related illness on the youth of our country, and in turn, on our healthcare system, is sobering and can no longer be ignored.⁶

Adolescence is a time when many future health behaviors begin to develop.² Given that a sedentary lifestyle and poor dietary habits that begin in childhood generally continue into adulthood, this developmental period is an opportunity to create community interventions that encourage positive health behaviors and offer a broader range of increased physical activity. Diet and lifestyle strategies taught at an early age appear to have a profound impact on reducing morbidity and mortality rates related to obesity later in life.⁷ Interventional studies have demonstrated the beneficial impact of dietary modifications and increased physical activity on markers of cardiovascular risk, including regression of pre-clinical measures of arterial disease.⁸

In response to this community health need, and at the request of the Police Athletic League (PAL), in 2007 Jefferson School of Nursing (JSN) RN-BSN students designed a comprehensive health education curriculum for PAL's Positive Images program, instituted at all 19 PAL centers throughout Philadelphia.⁶ The program, which is 12 weeks long, aims to build self-esteem and ambition among girls ages 11-17. To date, hundreds of girls are enrolled in this unique program.⁹ The focus is on nutrition and exercise, taught in a highly interactive environment via "teacher-guide modules."

Jefferson RN-BSN students began the process of creating a curriculum by first visiting various PAL sites and meeting with the teachers and girls. These meetings helped the students learn the challenges of healthy living for adolescent and teenage girls who reside in Philadelphia. After understanding the concept and mission of the Positive Images program, the students created modules that examined principles of healthy living based on good nutritional choices that are consistent with the realities of living in an urban environment.

Girls in the program explored issues that promoted their personal growth and well-being, including obesity and body image, adequate sleep, coping with stress, and building a positive self-image. Since weight management is related to diet and exercise, each learning module suggests exercise regimes

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that are not only cost-effective and interesting to young adults, but also that can be done without the need of expensive formalized exercise programs.

This collaboration between JSN and PAL was truly a "win-win." The education curriculum supported PAL's mission to cultivate and encourage self-esteem

among teenage girls in Philadelphia. The JSN RN-BSN students gained valuable experience in collaborating with a Philadelphia community agency toward effecting positive change in the health status of young people. They also gained experience as nurse-leaders in the community.

The program is ongoing, and JSN RN-BSN students continue to serve as teacher-guides in the educational component. Research results are pending. PAL, enthused about participation in and response to the healthy living curriculum of the Positive Images program, has asked us to create mirror educational modules for "Boys2Men," an established program aimed at young males, with similar goals and objectives.

Governments, international partners, civil society, nongovernmental organizations and the private sector all have vital roles to play in shaping healthy environments and making healthier diet options more affordable and more easily accessible. This is especially important for the most vulnerable in society: the poor and their children—those among us who have limited choices about the food they eat and the environments in which they live.¹⁰

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REFERENCES

1. Obesity and Overweight Facts. World Health Organization. <http://www.who.int/dietphysicalactivity/publications/facts/obesity/en/index.html>. Accessed June 12, 2008.
2. Clemmens D, Hayman LL. Clinical Issues. Increasing activity to reduce obesity in adolescent girls: A research review. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*. 2004;33(6):801-08.
3. Falkner B. What exactly do the trends mean? *Circulation*. 2007;116:1437-39.
4. Thomas H. Obesity prevention programs for children and youth: Why are their results so modest? *Health Education Research*. 2006;21(6):783-95.
5. Cruz ML, Shaibi MJ, Weigensberg D, Spruijt-Metz D et al. Pediatric obesity and insulin resistance: Chronic diseases risk and implications for treatment and prevention beyond body weight management. *Annual Review of Nutrition*. 2005;25:435-68.
6. Alvarez K, Sciamanna C. The childhood obesity epidemic: Rebalancing the scales. *Health Policy Newsletter*. 2006;19(4).
7. Burrowes JD. *Nutrition Today*. Nutrition for a lifetime: childhood nutrition. 2007; 42(4):160-67.
8. Charakida M, Deanfield JE, Halcox J. Childhood origins of arterial disease. *Current Opinion in Pediatrics*. 2007;19(5):538-45.
9. Positive Images Program. Police Athletic League of Philadelphia. http://www.phillypal.com/programs/pal_positiveimages.php. Accessed June 12, 2008.
10. Obesity and Overweight Facts. World Health Organization. <http://www.who.int/mediacentre/factsheets/fs311/en/index.html>. Accessed April 5, 2008.

Department of Health Policy Presentations

Berman B. *Physician Quality Reporting Initiative (PQRI) Implementation: A Report from a University Faculty Practice Plan.* Presented at: Reaching the Pinnacle of Performance, University HealthSystem Consortium 2008 Performance Excellence Forum, Grapevine, Texas, February 24-26, 2008.

Cole JG, **Skoufalos A**, **Berman B**, **Nash DB.** *Accelerating Best Care in Pennsylvania: An Innovative CME Collaboration to Improve Care in Pennsylvania Community Hospitals.* Poster presented at: CME Congress 2008, Vancouver, British Columbia, Canada, May 29-31, 2008.

Jacoby R. *The Potential of GetWellNetwork to Improve Hospital Safety.* Presented at: Get Connected 2008-GetWellNetwork User's Conference, Washington, April 6-8, 2008.

Yuen EJ, Louis DZ, Cisbani L, Rabinowitz C, **Maio V**, Marangolo M. *Breast Cancer Quality Indicators in Emilia-Romagna, Italy: Using Administrative Data to Assess Large Populations.* Paper presented at: Academy Health 2008 Research Meeting, Washington DC, June 8-10, 2008.

Yuen EJ, Toner R, Cobb N, Katz P, Goldfarb NI. *Gastro-Esophageal Reflux Disease (GERD) is More Common in Hispanic than African American, Asian, and Caucasian Populations in the United States.* Presented at: Digestive Disease Week, San Diego, CA, May 17-22, 2008.

Yuen EJ. *Compassion, Being Present, and the Clinical Encounter.* Hospital Universitario Dr. José E. Gonzáles, Monterrey, México, April 24-26, 2008.

Department of Health Policy Publications

Berman, B. The Centers for Medicare and Medicaid Services' approach to value-based purchasing. *Value-Based Purchasing.* March 2008; 2 (2). Available at: <http://jdc.jefferson.edu/vbp/>.

Hess G, Hill J, **Clough J**, Hulnick S, Nordyke RJ. Utilization of darbepoetin alfa in relation to cancer patients' hemoglobin levels. *Current Medical Research and Opinion.* 2008; (3):815-819.

Gagne JJ, **Maio V**, Rabinowitz C. Prevalence and predictors of potential drug-drug interactions in regione Emilia-Romagna, Italy. *Journal of Clinical Pharmacy and Therapeutics.* 2007;33: 141-151.

Nash DB. Open public hearing No. 4. My fight for nonprescription Mevacor. *P&T.* 2008;33(5):5.

Nash DB, Skoufalos A. EHRs: building blocks for quality healthcare [MedPage Today online column]. April 21, 2008. Available at: <http://medpagetoday.com/Columns/9188>.

Nash DB, Quigley GD. Looking forward: the end of autonomy. *Headache.* 2008;48(5):719-24.

Sarfaty M, Myers R. The effects of HEDIS measurement of colorectal cancer screening on insurance plans in Pennsylvania. *Am Journal of Managed Care.* 2008;14(5).

Skoufalos A. Prescription reading: practicing medicine in the 21st century. *M.D. News.* 2008;2(5):22.

Their SL, Yu-Isenberg KS, **Leas BF**, Cantrell CR, De Bussey S, **Goldfarb NI**, **Nash DB.** In chronic disease, nationwide data show poor adherence by patients to medication and by physicians to guidelines. *Managed Care.* February 2008; 48-57.

HEALTH POLICY FORUMS: FALL 2008

The Forum meets on the second Wednesday of each month (September-June) from 8:30 a.m. to 9:30 a.m. in Conference Room 218, Curtis Building, 1015 Walnut Street, Philadelphia, PA. A light breakfast will be served.

September 10, 2008

What Language Are You Speaking? Why Communication is a Patient Safety Issue

Mario Moussa, PhD, MBA

Principal
Center For Applied
Research, Inc.

ACPE No:

079-000-08-009-L05-P

October 8, 2008

Assessing Physician Performance: Challenges and Opportunities

Louis Diamond, MD,

ChB, FACP

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079-000-08-010-L04-P

November 5, 2008

The Women's Wellness Guide

Leslie Stiles

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Department of Health Policy Forums

Leadership Training— What Can Medicine Learn from the Military?

Reed R. Bonadonna, PhD

Commander, US Maritime Service

Director, Ethics and Character Development

US Merchant Marine Academy

March 12, 2008

Commander Bonadonna, a military historian and ethicist with the U.S. Merchant Marine Academy, discussed the ways in which the lessons of military experience might be applied to medicine, in the context of the military profession's "whole person" approach to leadership.

The goals of the military and medicine are at odds—taking life, when necessary, versus preserving life. Yet, the two professions are not so disparate. People are often drawn to medicine and the military for similar reasons—the immediacy of the challenge, the nobility of the cause. Like military officers, physicians could be termed "pragmatic scientists" who rely on technical knowledge (best practices; technology) combined with subjective judgment.

Physician and military leaders likewise share similar charges. For example, both must be effective administrators and motivators. As part of its leadership training, the military strives to develop the right skill set as well as the "right stuff"—a combination of integrity, dedication, and team ethic. Given that medicine has increasingly become a team endeavor, the comparisons between the two professions, especially concerning esprit de corps, are apt.

The World of Healthcare/Pharma Blogging

Ed Silverman

Editor, Founder

Pharmalot.com

April 9, 2008

Ed Silverman, a business journalist, is editor and founder of Pharmalot (www.pharmalot.com), a healthcare blog owned by the *Star-Ledger* that focuses on the pharmaceutical industry and policy-related issues. Silverman leveraged his reputation as a journalist and his industry contacts to help found Pharmalot in response to a general lack of coverage of this area in the blogosphere.

Pharmalot's purpose is to "provide a more insightful view of healthcare," specifically, the pharmaceutical aspect, and to disseminate current information. As blogging has become an increasingly viable medium for the exchange of information, it is critical that the content is reliable and credible, particularly concerning topics related to healthcare. Silverman employs traditional journalistic standards, befitting his relationship with the *Star-Ledger*. One Forum audience member posed to Silverman that professionals and consumers, seeking assurance of a blog's integrity, would liken such affiliations (ie, with newspapers) to a "seal of approval."

As Pharmalot's sole writer and editor, Silverman chooses the blog's content, and noted that keeping current in the field and updating the blog in real time is a non-stop challenge.

Pharmalot is not yet a viable business model, says Silverman; it is supported in minor part by advertising, mostly by conference companies.

The Barker Hypothesis

Steven Snyder, PhD

Assistant Professor of Economics

Lehigh University

May 14, 2008

Dr. Snyder reported on The Barker Hypothesis, which posited in 1986 that a baby's nourishment before birth and during infancy is a determinant of health status in later life. Based on British county-level data from the early part of the 20th century, Barker and colleagues associated poverty with an increase in heart attacks by a rate of more than 40%.

The Hypothesis, also called the DOHaD (Developmental Origins of Health and Disease) Hypothesis, suggests that maternal "shocks" received to the fetus *in utero* put one at later-life (eg, 70s) health risk, via the following means: 1) adverse maternal conditions in utero affect the fetus' physiology, which cannot be fully compensated for after a given developmental stage has passed; or 2) adverse health events to the fetus or young child alter the baby's physiology and are difficult to offset after childhood.

The hypothesis proposes an association between infant development and chronic disease, but not a causal relationship. The confounding variable is poverty, Barker and colleagues were aware, but the nuances were not studied.

Health Policy Forum podcasts are available at:
<http://jdc.jefferson.edu/hpforum/>

DHP Highlights

Dr. Nash was honored as one of the 50 Most Powerful Physician Executives in Healthcare in the April 14, 2008 issue of *Modern Healthcare*.

Valerie Pracilio has been selected to participate in the Health Research and Educational Trust 2008-2009 Patient Safety Leadership Fellowship program.

Congratulations to Dr. Nash and Valerie Pracilio!

College for Advanced Management of Employee Benefits

September 15-18, 2008 Washington, DC

This 4-day training program is designed to help employee benefit managers meet the growing challenge of providing high quality health benefits while managing rising benefit costs. For more information contact: Jeannine Kinney at (215) 955-0194 or jeannine.kinney@jefferson.edu.

A complete description may be located at: <http://www.jefferson.edu/dhp/CAMHB.cfm>.

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For donations and additional information contact: Nicole M. Cobb, Program Coordinator, Greater Philadelphia Schweitzer Fellowship Program at (215) 955-9995 or nicole.cobb@jefferson.edu.

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