

Health Policy

MARCH 2009 Vol. 22, No. 4

FROM THE EDITOR =

Jefferson School of Population Health— Part II: Making a World of Difference

December 1, 2008 was a Red Letter Day for Jefferson's new School of Population Health: The University Board of Trustees ratified the School's bylaws, appointed David B. Nash, MD, MBA as the Founding Dean, and approved two new Master of Science degree programs in Health Policy and Healthcare Quality and Safety. These new programs and the current Master of Public Health (MPH) constitute the School's inaugural academic offerings. With students slated to begin classes this September, these programs could not have come at a more crucial time: the cost of health care continues to rise, access is absent for many Americans, and troubling issues around quality and safety populate the daily headlines. Never has the preparation of leaders to guide health care and public health been more urgent.

The mission of Jefferson School of Population Health is to find solutions to the nation's healthcare ills and to produce the leaders and the research that will make this happen. In keeping with this challenge, the School has designed unique and pioneering educational programs to prepare leaders who will make a difference—*a world of difference*—in the future of American health and healthcare.

The School's **Master of Science in Health Policy** (**MS-HP**) prepares leaders to critically analyze the organization, financing, and delivery of health care; to rigorously apply analytic skills to plan, implement, and evaluate health policy; and to

produce research evidence to support policy development and change. Graduates are ready to assume policy analysis and advocacy roles in healthcare provider organizations, integrated health care delivery systems, government offices, academic institutions, health services research firms and community-based or advocacy organizations. What differentiates this program from others of its kind is its emphasis on problem identification, modeling and policy solutions; its system approach; its treatment of health care as a business; and its access to a broad, nationwide network of health policy experts and practitioners who can work with students on a vast array of meaningful policy projects.

The MS-HP degree program and its Certificate option are open to practicing medical and healthcare professionals of all stripes; to healthcare administrators working in healthcare plans, management companies, and government agencies; to academics and HIT professionals and analysts; to recent college graduates with degrees in public policy, economics, political science or a healthcare field; and to students currently enrolled in a medical, nursing, law or pharmacy program who wish to earn an additional degree in health policy.

JSPH's **Master of Science in Healthcare Quality and Safety (MS-HQS)** represents a groundbreaking contribution to healthcare education. As the second program of its kind in the nation, the degree prepares healthcare professionals—

Jefferson School of Population Health— Part II: Making a World of Difference1
1st Annual IHI Open School Chapter Congress2
Tracking the Future of Healthcare Leadership: The MD/MBA Student3
Stay Connected3
Training Future Physicians as Public Health Leaders: Jefferson's MD/MPH Graduate Education Program4
The University Clinical Skills and Simulation Center: A Jefferson Gem5
The 7 Principles in Simulation Teaching and Simulation Centers6
The West Oak Lane NORC Initiative: An Innovative Aging-Support Program8
6th Annual Interclerkship Day: Improving Patient Safety9
Upcoming Pubic Health Events9
Health Policy Forums10
The Evolving Pharmaceutical Industry 11
Increasing Organ Donation Consent Rates in an Inner City Hospital13
Defining the Active Ingredients of Rehabilitation14
Best and Brightest Forum on Medical Innovation14
Upcoming Health Policy Forums
School of Population Health Presentations 15
School of Population Health Publications 15
College for Value Based Purchasing of

providers, payers, purchasers, and policymakers —to be leaders and advocates in the design, implementation and dissemination of programs and policies that measurably improve healthcare quality and patient safety. The strength of the MS-HQS is its focus on organizational behavior and change and the advanced use of quality and safety tools and methods. Graduates serve as chief quality or safety officers, quality analysts, and program leaders for quality improvement in all venues of healthcare delivery.

The MS-HQS and the Certificate in Healthcare Quality and Safety are intended for physicians, nurses, pharmacists, and other healthcare professionals working in the full range of healthcare settings; for individuals working in payer settings, including managed care and other insurer positions, who have background or interest in quality and utilization, disease or case management; for risk managers, healthcare program administrators, and HIT specialists; and for individuals working in public health, government or regulatory positions at the local, state or federal level. The programs are also well suited to students currently enrolled in a medical, nursing, law or pharmacy program who wish to earn an additional degree in healthcare quality and safety.

JSPH's **Master of Public Health (MPH)** is a strong generalist program that stresses competencies in five public health areas—behavioral and social sciences, biostatistics, environmental health sciences, epidemiology, and public health policy and management. It prepares professionals to work in multiple venues within public health— state and local public health departments and health centers, non-governmental health organizations (NGOs), schools and universities, professional health agencies, health insurance companies, and businesses such as the pharmaceutical industry.

Graduates track disease outbreaks, conduct community health assessments, plan public health education programs, and develop public health policies. They also engage in public health research and work internationally in global health environments.

The MPH program is designed for both recent college graduates and working professionals. The Certificate in Public Health is an excellent option for practicing health professionals working in government, community health organizations, health insurance companies, the pharmaceutical industry, and academic institutions who wish to deepen their experience with public health practice. To encourage participation of medical, law and nursing students, JSPH also offers joint degree programs—MD/MPH, JD/MPH, MJ/MPH and MSN/MPH— in which all coursework can be completed in 12 months.

Caroline Golab, PhD

Associate Dean for Student and Academic Affairs Jefferson School of Population Health

David B. Nash, MD, MBA

Dean, Jefferson School of Population Health

For more information about the School's programs or to apply to one of them, contact JSPH at 215-503-5305 or visit us at www.jefferson.edu/ population_health/. Together, we can make a world of difference in U.S. healthcare—and Jefferson can lead the way.

1st Annual IHI Open School Chapter Congress

Doctors, nurses, pharmacists, health administrators, and public health professionals enter the healing professions to make a difference in the lives of their patients and populations. The Institute for Healthcare Improvement (IHI) established the IHI Open School for Health Professions in September 2008 to create an outlet for students in these disciplines to engage in conversations about the quality and safety of our healthcare systems.

IHI established the Open School because quality and safety are not typically offered as part of the curriculum, even as electives. Built on the "aims for improvement" set forth in *Crossing the Quality Chasm, A New Health System for the 21st Century*,¹ the IHI seeks to engage students in quality and safety while they are in training. Despite the notable and highly publicized efforts of the IHI to improve the quality of healthcare^{2,3}, that work will only be sustainable if the healthcare leaders of tomorrow are sufficiently prepared and ready to take appropriate action.

On January 10, 2009 representatives from the IHI Open School Chapters converged on Cambridge, MA for the first Chapter Congress. For many, this was the first opportunity to meet face to face and build a network of contacts. Donald Berwick, MD, MPP, FRCP, President and CEO of the Institute for Healthcare Improvement, and Lucian Leape, MD, Adjunct Professor of Health Policy at Harvard School of Public Health, were in attendance and commented on the importance of student involvement in quality and patient safety. Presentations and exercises demonstrated the importance of teamwork and communication among an interdisciplinary group of healthcare professionals. Brainstorming sessions were held throughout the day. The IHI Open School is growing rapidly, reflecting the organization's and the students' commitment to building their chapters.

Valerie P. Pracilio

Project Manager for Quality Improvement Jefferson School of Population Health

For more information about the IHI Open School and the Thomas Jefferson University Chapter, contact the author at: Valerie.Pracilio@jefferson.edu.

- 1. Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academies Press; 2001.
- 2. Protecting 5 million lives from Harm. Institute for Health Care Improvement Web site. http://www.ihi.org/IHI/Programs/Campaign/. Accessed January 30, 2009.
- 3. IHI Improvement map. Institute for Health Care Improvement Web site. http://www.ihi.org/IHI/Programs/ImprovementMap/. Accessed January 20, 2009.

Tracking the Future of Healthcare Leadership: The MD/MBA Student

In the tradition of Asclepius, Greek god of medicine, it is difficult to envision a time where physician healers would turn to management science to hone their skills. Yet that is exactly where we stand today. With increasing scrutiny of the medical profession—targeting cost, access and quality of care—a growing number of physicians are seeking formal business training to adapt to the evolving healthcare industry.¹ Recognizing the value of a complementary business education, especially for training physician leaders, medical and business schools across the country have been forging partnerships to address this knowledge gap through the concurrent pursuit of the MD and MBA degrees.

First established in 1970 at the University of Pennsylvania, MD/MBA dual-degree programs have seen rapid growth in recent years. Climbing in number from 6 established programs in 1993 to the 50 that are currently recognized by the Association of American Medical Colleges, educational leaders are recognizing the demand for a modified educational structure.² At the time of a 2003 study, nationwide enrollment for MD/MBA programs reached 329, and will likely continue to rise as awareness increases and more programs are established.³ Yet with such a new phenomenon, questions inevitably arise as to the career paths these students will pursue, the motives inspiring their unorthodox education, and the impact that it will have on medicine and the delivery of healthcare.

Of specific concern is the identity these students will develop as they are schooled in seemingly dichotomous theoretical foundations. While studies have shown that the majority of MD/ MBA students intend to continue along the traditional path of medical education into residency, complementing their clinical practice with administrative duties, opportunities in the healthcare industry are luring some students to postpone or forego residency training to pursue career paths such as management consulting.4 This small but important trend creates two different endpoints of the dual-degree product: the clinician with a basic education in business management as opposed to the executive with formal medical knowledge and credentials. Though the market has shown the value and need for both career pathways, how these students will ultimately utilize their training may have great implications for both the future of medical education and the healthcare industry as a whole.

Noting that much could be learned by establishing a means to track these cohorts into the future, Jefferson Medical College has been working with leaders at institutions offering the dual-degree to establish a national registry of MD/MBA programs and their matriculants. Although in its infancy, this database is similar to the Jefferson Longitudinal Study of Medical Education, which has systematically followed the careers of all Jefferson Medical College graduates since 1968. The national registry of MD/MBA graduates will have the potential to serve as the basis for studies of these young physicians to describe their personal characteristics, track their professional development and study the programs from which they obtained their education.

Unlike the practicing physician who returns to obtain an MBA after years of service, these dual-degree students are initiating their careers with an additional skill set. Novel in its theoretical implications, this growing trend deserves systematic observation to elucidate the impact of these individuals on the state of healthcare. Although they may be limited in number, these students are positioning themselves to assume active roles in defining the future of the delivery and financing of healthcare, and thus the future of medical practice.

Marc B. Royo

MD/MBA Candidate 2011 Jefferson Medical College/ Widener University

J. Jon Veloski, MS

Director, Medical Education Research Center for Research in Medical Education and Health Care Jefferson Medical College

For more information contact the authors at Marc.Royo@jefferson.edu and Jon.Veloski@jefferson.edu.

REFERENCES

- 1. Lazarus A (ed). MD/MBA: Physicians on the New Frontier of Medical Management. Tampa, FL: American College of Physician Executives, 1998.
- 2. Combined MDMBA Programs. Curriculum Directory. AAMC Web site. http://services.aamc.org/currdir/section3/degree2.cfm?data=yes&program=mdmba. Accessed September 8, 2008.
- 3. Larson DB, Chandler, M, and Forman, HP. MD/MBA programs in the United States: evidence of a change in health care leadership. *Acad Med*. 2003;78:335-41.
- 4. Sherrill WW. Dual-degree MD-MBA students: a look at the future of medical leadership. *Acad Med*. 2000;75:S37-S39.

Stay Connected

Nash on Health Policy Blog

Share your thoughts and comments by visiting: http:nashhealthpolicy.blogspot.com/

Jefferson School of Population Health Website

See what's new with JSPH by visiting: www.jefferson.edu/population_health/

Training Future Physicians as Public Health Leaders: Jefferson's MD/MPH Graduate Education Program

The Obama Administration and leaders of the 111th Congress have made health care reform a priority—specifically emphasizing prevention and population health as a way to improve Americans' health and reduce costs over the long term. A key component is to address the growing need for appropriately trained health care providers working in our public health system.

There are a number of health care challenges that require physicians who are trained to treat individual patients within a larger context of family, community and society.^{1,2} These include infectious diseases; the significant increase in chronic disease due to the aging of our population; the potential detrimental health impact of climate change; and the continued racial, ethnic, and cultural disparities in health care access in our increasingly diverse society. A recent report by the Bureau of Labor Statistics estimated that the U.S. needs 20,000 physicians in public health, with an annual replacement need of 1,350.3

The appeal to improve public health education for physicians is not new, but instead has grown steadily over the years. Since 2000, several reports have been issued by national organizations such as the Institute of Medicine on the need and strategies to improve population health education in medical curricula.^{4,5} The Association of American Medical Colleges (AAMC) has expressed continued interest in public health education for physicians and dedicated a recent issue of its journal, Academic Medicine, entirely to Population Health Education.⁶ Together, these reports have called for medical students' education to include epidemiology, biostatistics, disease prevention/health promotion, health care organization and management, environmental health, community-based participatory

research and several other educational topics that are common to a masters degree in public health (MPH).

In fall 2008 the AAMC, in cooperation with the Centers for Disease Control and Prevention (CDC), developed cooperative agreements with medical schools to develop Regional Medicine-Public Health Education Centers (RMPHECs) with the goal of improving the integration of population health into medical education curricula. The development of an initial draft set of population health competencies for medical students is currently under review.7 The competencies will be directly linked to long-standing public health competencies.

Thomas Jefferson University (TJU) recognizes the need to incorporate population health principles and education within its medical educational program to help meet the growing workforce development needs. Medical students receive basic education on population and public health, and many conduct clerkships and/or volunteer their time in community-based health settings as part of their educational experience.

TJU has provided a master's level public health program since 2002 and in the current academic year, initiated a joint five-year MD/MPH degree. The joint MD/MPH program augments medical education focused on quality and effective clinical practice with evidenced-based public health and prevention principles, theories, skills, and practice.

Medical students participating in this joint degree program will take a full year off from their medical education, typically after year two or year three, for an intensive year in Jefferson's nationally-accredited MPH program. During that year they complete coursework and a

community-based clerkship experience, returning to medical school the following year. The MPH capstone research project is usually completed during the subsequent year of medical school. Medical students can receive up to 9 transfer credits for the 45-credit MPH program based on their Introduction to Clinical Medicine two-year course, which includes much population health-related instruction, and their selection of population health elective experiences.

The academic goal of the Jefferson School of Population Health is to prepare leaders to develop, implement, and evaluate health policies and systems that improve the health of populations. Graduates of the program will be well-prepared to serve as leaders in a variety of settings including government, insurance, professional organizations, academic institutions, community-based organizations, as well as clinical practice both in the U.S. and globally.

Rob Simmons, DrPH, MPH, CHES Director, Master of Public Health Program Associate Professor Jefferson School of Population Health

For more information on Jefferson's public health program, contact the author at Rob.Simmons@jefferson.edu.

- 1. Institute of Medicine. Unequal Treatment: Confronting Racial and Disparities in Health Care. Washington, DC: National Academies Press; 2002.
- 2. Shortell, SM, Swartzberg, J. The Physician as public health professional in the 21st century. JAMA 2008; 300(24)2916-2918.
- 3. Bureau of Labor Statistics, Physician Workforce Estimates, Washington, DC: 2006
- Institute of Medicine. Who Will Keep the Public Health? Educating Public Health Professionals for the 21st Century. Washington, DC: National Academies Press; 2003.
 Institute of Medicine. Training Physicians for Public Health Careers. Washington, DC: National Academies Press; 2007.
- 6. Population Health Education. Acad Med. 2008; 83(4).
- 7. Association of American Medical Colleges. Regional Medicine-Public Health Education Centers draft population health competencies for medical students circulated for comment. http://www.aamc.org/members/cdc/rmphec/rmphec_detail.htm. Accessed February 20, 2009.

The University Clinical Skills and Simulation Center: A Jefferson Gem

Part I Interview with Dale Berg, MD and Katherine Berg, MD Co-Directors of the University Clinical Skills and Simulation Center (UCSSC)

What is the primary mission of the Clinical Skills Center?

DB: The Center's goal is to produce enthusiastic, empathetic, caring, scientific-minded physicians who work with others to the benefit of their patients, colleagues and students. Using the 7 Principles of Simulation (Table 1) that we have developed, we've created what we believe is an optimal learning environment that will allow learners to efficiently and effectively learn the skills necessary to practice and teach medicine. We want them to think critically about the skill sets that we teach them, to ask questions on the evidence behind the physical examination skills that are taught. We think that teaching and evaluating in the Simulation Center will help to translate these skills to the bedside. Finally, we want to inspire our students to become teachers themselves and to serve as role models for future generations. We hope that, through its combination of curriculum and faculty, the Center can help our graduates model the ideal Oslerian physician: "Equal parts doctor, teacher and priest."

How did you first start to become interested in this field?

DB: We started in 1990 because we, and many of our teaching and academic colleagues, felt that the student and resident physicians had significant deficits in physical diagnosis and examination skills which are so important to the provision of high quality (and cost effective) health care. With several mentors at the Milwaukee VA and the Medical College of Wisconsin, we developed a unique elective course for senior medical students that allowed them to learn an advanced version of physical examination during their clinical years. This course served as a paradigm for all of our future teaching endeavors. The evidence-based curriculum used checklists to make certain that everyone received the same teaching. Patients with real findings were examined by the students in a reproducible standardized method. And, we developed an evaluation and assessment

tool that was a primitive Objective Structured Clinical Exam (OSCE). Finally, we conducted research on this curriculum and, most importantly, translated it to the bedside.

Over 1000 students have participated in this course, which continues to be our paradigm for all clinical skills teaching and is the backdrop to our development of the *7 Principles of Simulation* in teaching and evaluation. The Standardized Patient (SP) program that began with that course evolved and expanded to be used in many other venues: in Boston, at Harvard Medical School; in Minneapolis, at the University of Minnesota; and then we brought it to Jefferson when we were recruited here in 2001.

KB: The Step 2 Clinical Skills of the Boards, an examination that graduate medical students need to pass in order to receive a license to practice medicine, affirmed the need for simulation teaching and assessment in a standardized way. This led to using simulation to teach skills in physical examination, history-taking, and communication skills. There has been a kind of renaissance in physical examination skills and, as it evolved, we began incorporating other types of simulation (i.e. manikins) into the curriculum. Today's manikins are much more sophisticated and durable, and the sound quality has markedly improved in the last few years.

When you were students did you have exposure to this?

- **KB:** No, none. The reason I got involved in physical exam was because I felt the training I had did not give me enough to be able to do what I need to as a physician. It was a deficiency in education that motivated us to do this.
- **DB:** The things we teach in the Simulation Center— the cases we present and the checklists we have written—are items that we wish that we had seen, learned and experienced in our medical training. We never had a chance to practice with standardized patients, we never had a

chance to hear classic murmurs in a minimal-stress environment.

We practiced medicine for a while in rural Nepal, where there was no electricity, no imaging, no lab tests. There you must depend on the fundamentals of clinical skills-history and physical examination to diagnose and follow patients. We had to put in practice what we had been teaching. To practice medicine with no modern ancillary tools was a challenge, but a delicious challenge.

If, God forbid, you are somewhere without electricity and thus without radiographs, you can still assess the patient in a professional and scientific fashion with the skills of exam and history. That is being a physician using your senses and your knowledge to determine a clinical diagnosis.

- **KB:** Health care delivery has changed. Hospitals stays are shorter, and more is done in outpatient visits. When I was a student, I could observe the natural history of the acute or sub-acute disorder of a patient over the course of their entire stay of 1, 2, or even 3 weeks. In a relatively nonstructured fashion, I could examine these patients and learn and practice clinical skills there. By simulating the hospital environment in a standardized fashion, we allow the student to learn clinical skills and provide opportunity for structured practice. The SP allows the students to learn and practice the skills in safe, structured environment. The Center does not, however, supplant bedside teaching. We allow the students to practice invasive procedures on plastic models first, instead of working on a live patient.
- **DB:** We can state that the students know how to perform the steps in the skills and even how to effectively interpret and document these skills. Because it is a simulated environment, we cannot state that they are clinically competent; that will always require observation and assessment at the bedside. We need to be able to translate what we do to the bedside. Clearly, simulation centers allow for the effective introduction to the teaching

of skill sets, as well as the experience of structured practice. Their power is to more effectively prepare the student with the tools to learn better, under the tutelage of faculty, at the bedside. Simulation cannot replace bedside teaching or assessment. It makes it more efficient, more standardized, and more reproducible across learner groups.

- **KB:** We have been in other institutions with manikins and other sophisticated equipment that sits unused in the corner. Without faculty who are trained to use it, it is really not valuable. One of the challenges we face nationally is that everyone gets money to put up the centers, but the operational costs of faculty are not factored in. At Jefferson we have a very dedicated faculty to support the learning environment.
- **DB:** Jefferson is the first place that we have worked as teachers where the mission of education is not the weak sibling relative to other center missions. The model here has been to build the classrooms and teaching venues and to fill them with quality and innovative teachers and faculty leaders in simulation. Jefferson has built a sustainable model for the present and the future, and we are proud to be a part of it.
- **KB:** We have incorporated simulation into all levels of the curriculum throughout medical school. During the first and second years we have simulation sessions on a regular basis to teach them the skills of history taking and recording and physical examination.

The history and physical examination is embedded into and in parallel with their classroom work. When they learn cardiovascular diseases in classroom, they do skills sessions using Harvey[®], the cardiopulmonary patient simulator, and SPs who are trained for cardiac physical exam and history. What they learn in class is translated into actions in the skills that are learned at the Center.

For more information on the University Skills and Simulation Center contact the authors at dale.berg@jefferson.edu and katherine.berg@ jefferson.edu.

Part II of this intervew will appear in the June 2009 issue of the Health Policy Newsletter.

The 7 Principles in Simulation Teaching and Simulation Centers

- Simulation programs must be developed in a context that is useful to the learner. The programs should be based upon real cases that are contextually appropriate to the level of training. The leaders of a simulation center must know the overall medical school curriculum in order to create reproducible simulation teaching modules. Simulation teaching and evaluation is built into the curriculum in a longitudinal basis, starting from week one and going on through each year of undergraduate education. Graduate education and faculty development are increasingly becoming involved.
- 2 Simulation programs need to have a robust Standardized Actor/Patient (SP) program. One of the pivotal components of a Center is a robust and active SP program. Standardized patients are actors paid to provide a history, feign certain physical examination findings, provide feedback, and evaluate using a checklist—the skills of students. They are of great use in evaluation and skills assessment, but perhaps are best used in structured practice and skills attainment. They are also used as standardized residents, attending, and family members so that teaching and evaluation programs can be diverse.
- **3** The experiences must be standardized. All students at a certain level of training need to have a reproducible, standardized paradigm to learn the same skill set. This allows for a fairer and more competency-driven assessment of the learner's skill set. The faculty leaders of a center must be able to develop checklists that are appropriate and credible to the skills set.
- **4** The simulation experience must be credible. The learner must be able to suspend disbelief during the encounter so that the educational and assessment value is optimized. This requires context, as described above, but also requires some "magic" and "stagecraft" and innovation. The SP must be trained and directed

in acting the case in a specific and appropriate manner. In addition, appropriate tubes, furniture, smells and even simulated fluids should be in the room as needed to optimize credibility. The plastic and electromechanical simulators need to be vetted and used by teachers who perform the procedures on real patients. Finally, the faculty leaders need to be able to combine the standardized patient simulation with the plastic models. This hybrid or chimera approach is the next level of simulation.

- 5 There must be a method for effective debriefing after the encounter. Debriefing is one of the most powerful tools we have to teach in the simulation environment. A faculty may watch the encounter in one of 3 ways: direct observation from behind a one-way mirror, or watch a live video-feed watch the encounter on a previously recorded video disc. The faculty can work with the learner/s to learn from and build upon what was performed correctly and remediate what was performed incorrectly.
- 6 The simulation curricula must itself be critically evaluated and researched. A fundamental aspect of simulation in medical education is that it must be studied in a prospective and scientific manner. Simulation is an expensive innovation and in order for it to positively evolve, we must be able to study it and ascertain what does and does not work.
 - **Simulation must be translated to the bedside.** This is the overarching and most fundamental of principles. Simulation may make teaching more efficient, but it will never supplant the need to learn from the patient under the direct mentoring of an accomplished teacher. Faculty from the center must be able go from simulation to the bedside. Bedside rounds must be a component of any simulation curriculum.

Developed by Dale Berg, MD and Katherine Berg, MD.

Change Your Life. Change Health Care.

Jefferson School of Population Health

- Master of Public Health (MPH)
- Master of Science in Health Policy (MS-HP)
- Master of Science in Healthcare Quality and Safety (MS-HQS)

Full-time options Part-time options for working professionals Easily accessible Center City location

Make a world of difference – the Jefferson way



Redefining Healthcare Education Thomas Jefferson University



The West Oak Lane NORC Initiative: An Innovative **Aging-Support Program**

While some adults enjoy a seamless transition through the age continuum, others experience increased isolation and physical and cognitive impairment as they age.¹ This isolation is typically the result of physical limitations that inhibit socialization, a lack of access to social networks due to retirement and relocation, or death of friends and family. Often, these factors hamper the ability of older adults to maintain their homes, despite their overwhelming desire to remain in them.² At the same time, adults are living longer in the U.S.,³ making supportive, affordable housing for older Americans an increasingly pressing societal issue.

Naturally Occurring Retirement Community (NORC) programs, which first emerged in the mid-1980s,¹ represent a growing, grassroots trend in community-based supportive housing services for older adults. NORC is a demographic term that encompasses zip codes, neighborhoods, or regions that contain a large number of older adults who have "aged in place," meaning they have continued to live in their own homes as they have aged. Nationally, more than 80 NORC supportive-service programs receive public funding, and a host of others are sustained privately.4 The goal of NORC programs is to allow residents to remain in their homes by providing a "safety net" consisting of a range of psychosocial, health care, and other support services.

In 2001, the Administration on Aging contributed to the expansion of this trend by appropriating over \$3 million in grants for five NORC demonstration projects around the country.¹ These projects aided in the development of effective NORC models of service, and also confirmed the efficacy of neighborhood-based supportive services, which tend to be proactive rather than reactive.1,5

This article highlights Philadelphia's West Oak Lane (lower Northwest Philadelphia) NORC Initiative. Founded in 2007, this is a program of the Albert Einstein Healthcare Network (AEHN) and the Strategic Alliance for the Elderly (SAFE). SAFE, founded in 2004, is a coalition of local organizations that strives to strengthen the community's capacity to meet the needs of older adults by sharing knowledge, pooling resources, and pursuing collaborative opportunities.

AEHN provides medical care, while SAFE assists in collaborative problem-solving and resource-sharing. Staffing for NORC includes a full-time project director, part-time outreach worker, and part-time Master's-level social work student. Program services are provided via phone, at the NORC office, or in clients' homes. The program also benefits from an active Consumer Advisory Board, comprised primarily of area residents over 60, many of whom care for their own aging parents.

Residents are encouraged to access the program's services primarily through referrals, whether from government and aging programs, SAFE member agencies, spiritual organizations, or word-ofmouth from other NORC clients. The program distributes a quarterly newsletter and has its own website (www.einstein.edu/norc). It also has an active community outreach agenda and a dynamic volunteer corps.

While the West Oak Lane NORC is thriving, there are a number of hurdles that impede its full efficacy. The program is still in its trust-building stage, which can make it difficult to engage neighborhood residents around their medical or mental health needs. The staff members work to overcome this challenge through regular outreach efforts and extensive community involvement. Budget constraints also affect the program's impact, though it is actively pursuing funding opportunities to facilitate expansion and ensure its longevity. Finally, the program is not able to address all of residents' needs; when possible, referrals are made to other agencies. For example, West Oak Lane residents often fall just above

income limits for certain assistance programs (including Medicaid, Medicare prescription assistance, etc.). This means that needed services that require out-of-pocket payment, such as home maintenance and repair and property taxes, often go unmet.

The range of services continues to evolve. The initiative has implemented both a friendlyvisitor program (for socialization and errands) and a general home-visiting program (for more acute, targeted needs). Home-repair and computer-access programs are in development; the latter is aimed at increasing the availability of information and socialization opportunities for homebound older adults.

The pending launch of a computerized database will facilitate more expansive assessments to help evaluate the program's efficacy. Included will be an assessment of the NORC's success in linking residents to community resources that enable them to remain at home, and its ability to bridge gaps in existing service.

Ideally, the development of similar programs in other communities will facilitate the creation of a supportive aging network for older adults. Helping elders age in place makes sense in important ways. Allowing longtime homeowners to remain in their communities helps to keep housing values) stable. NORCs also afford elders an alternative to long-term care options, which are not only financially prohibitive for the average senior, but often provide "overcare" or "undercare."⁴

Sara R. Popkin, MSW, LSW Project Director, West Oak Lane NORC

Albert Einstein Healthcare Network

For more information contact the author at: popkins@einstein.edu.

- 1. US Department of Health and Human Services. Urban Health Institute. Supportive services programs in naturally occurring retirement communities. http://aspe.hhs.gov/daltcp/reports/ NORCssp.pdf. Published November 2004. Accessed March 11, 2009.
- Lawler, K. Aging in place: coordinating housing and health care provision for America's growing elderly population. Joint Center for Housing Studies of Harvard University Neighborhood Reinvestment Corporation. http://www.jchs.harvard.edu/publications/seniors/lawler_w01-13.pdf. Published October 2001. Accessed March 11, 2009.
- 3. National Center for Health Statistics. Health, United States, 2007 with chartbook on trends in the Health of Americans. http://www.cdc.gov/nchs/data/hus/hus07.pdf. Accessed March 11, 2009. 4. NORC Action Blueprint Project. United Hospital Fund Web site. http://www.uhfnyc.org/pubs-stories3220/pubs-stories_show.htm?doc_id=294235. Accessed April 26, 2008. 5. NORC Blueprint. A guide to community action. Understanding the community. http://www.norcblueprint.org/community. Accessed March 11, 20009.

6th Annual Interclerkship Day: Improving Patient Safety January 5, 2009

The 6th Annual Interclerskhip Day on Improving Patient Safety was a unique opportunity for Jefferson Medical College's (JMC) 3rd year students to explore their own attitudes and beliefs about medical error, disclosure, and patient safety, while benefiting from lessons learned from the aviation model of crew resource management and its application to medicine. Sponsored by Office of the Dean of JMC and the Jefferson School of Population Health (JSPH), the program was moderated by David B. Nash, MD, MBA, the founding Dean of JSHP. The day opened with a welcome from Michael J. Vergare, MD, Senior Vice President of Academic Affairs for Thomas Jefferson University.

The keynote speaker was internationally known aviation safety expert, John J. Nance, JD. Nance is the founding board member of the National Patient Safety Foundation; a former airline pilot; and a broadcast analyst on aviation for ABC News. He presented compelling evidence illustrating how medicine can use techniques from the airline industry to improve patient safety and increase professionalism. He emphasized the importance of communication and the creation of an environment and culture that allows a junior team member to actively participate and speak up if something is amiss. This type of environment fosters teamwork while ultimately improving patient safety.

Improving patient safety must include an understanding of one's errors. David W. Andrews, MD, FACS, Director of Neuro-Oncologic Neurosurgery and Stereotactic Radiology shared, with great honesty and humility, his own story of a medical error. This helped the audience to process the reality of what might actually lead to a medical error and how everyone is affected by it. Daniel F. Ryan, Esq. then discussed the legal implications of medical error, including disclosure and apology.

Following the morning presentations, students had the opportunity to meet Mark L. Tykocinski, MD, the new Dean of Jefferson Medical College, as he discussed his background and role during a luncheon presentation. Dr. Tykocinski was formerly the Simon Flexner Professor and Chair of the Department of Pathology and Laboratory Medicine at the University of Pennsylvania. As Dean of JMC he is responsible for the educational, research, and clinical missions of the college.

The afternoon program began with an award presentation to Jay Scott, Executive Director of Alex's Lemonade Stand Foundation. The inaugural Patient Advocacy Recognition Award honored the Foundation for their outstanding regional and national work advocating for the rights of patients and their families. Following the ceremony, Mr. Scott shared a poignant story about the initial time period when his daughter Alex first developed symptoms of her disease and the frustrations he encountered early on when trying to get a diagnosis, appropriate care, and effective treatment. It was a moving and emotional story which revealed the shortcomings of the medical system and highlighted opportunities for improvement. Mr. Scott's take-home message for the students was to *listen*.

The next presentation focused on recognizing barriers to physician disclosure. Joseph Spiegel, MD, Associate Director of Otolaryngology at Jefferson, explained how fears—particularly fears of lawsuits—can serve to hinder disclosure and trust. Guilt and shame, patientprovider perceptions and expectations also impede disclosure. Dr. Spiegel suggests that increasing confidence in the law and reforms to policies are some of the steps that will help to encourage disclosure.

It can be very difficult to communicate a bad outcome to patients and families. Jason Baxter, MD, MSCP, Assistant Professor in the Division of Maternal-Fetal Medicine, offered a very interactive presentation and dynamic exchange with the audience that helped to characterize the elements of a successful encounter with patients and families. Through the use of case scenarios and student involvement in role-plays, the audience observed important skills, actions, language, and non-verbal cues which enhance the providerpatient encounter and lead to patient satisfaction.

This particular clerkship program provides an important venue for integrating patient safety issues into educational programming for JMC students and it will continue to thrive in future years to come.

Upcoming Public Health Events

The Impact of Water on Public Health Symposium

Thursday, March 26, 2009 5:00 pm – 6:00 pm *Hamilton Building, Room 505*

National Public Health Week

April 6 – 12, 2009 www.nphrw.org

Making a World of Difference: Jefferson's Public Health Initiatives Symposium and Luncheon

Wednesday, April 8, 2009 11:30 am – 1:00 pm Jefferson Alumni Hall Atrium

For more information about upcoming Public Health events contact: Lisa Chosed, MPH, Program Coordinator at 215.503.0174 or lisa.chosed@jefferson.edu.

Health Policy Forums

BeWell.com - The Value of Social Media in Health Communication

Cheryl Heiks,

Director of Communications and Events LLuminari Inc.

January 14, 2009

Social media has become pervasive in today's society. Blogs, forums, social networks, and virtual worlds are easily accessed and attract many users. Consumer health information has become increasingly prevalent in a variety of media formats, and has become especially significant in social media. How health information delivered through social media affects prevention, behavior change, decision-making, knowledge, and health perceptions is the fundamental question in the quest to reach consumers.

Cheryl Heiks is Director of Communications and Events of LLuminari Inc, an innovative health communications company located in Wilmington, Delaware. LLuminari is the parent company for BeWell.com, the first expert-guided social network on health. LLuminari Inc. was founded by the internationally renowned experts, Dr. Nancy Snyderman, Dr. Susan Love, and Elizabeth Browning. This dream team of over thirty of America's leading health and wellness experts was launched in *O, The Oprah Magazine* with a 12-month editorial series. Their vision is to give consumers easier access to health experts with reliable information. The company focuses on women's health issues, but also includes pediatrics, family health, and recently, men's health. From the beginning, the company was grounded in its commitment to multicultural health. LLuminari focuses on consulting work; live and on-line events; content; products for consumers; and landmark research studies.

LLuminari launched BeWell.com in December 2008. The site is designed to offer networks of communities focused on specific health care topics, with access to a panel of medical experts. It also offers resources, such as articles, blogs, online tools and videos. What makes BeWell special is its ability to offer current cutting-edge, transparent information through postings, and conversations with leading experts. BeWell users appear to be very interested in the topics such as infertility, breast cancer, care giving, smoking cessation and heart disease. BeWell. com is a fascinating hybrid example of how social networking can blend with consumer health information (factual and evidence-based) guided by medical experts. Though conversations between users can be fluid, users cannot get lost in a maze of inaccurate information.

Cheryl Heiks discussed the future of social media which she feels will emphasize the mobile device as the primary connection tool to the internet. She also described the continuum of blurred lines between business and social media which can be both complex and beneficial at the same time.

Public Policy and Cardiovascular Disease: Making the Connection

Timothy Gardner, MD

President, American Heart Association Medical Director, The Center for Heart and Vascular Health, Christiana Care Health System

February 11, 2009

Cardiovascular disease is the major cause of death, for both men and women, in the United States. The societal impact and burden of this disease is a major concern to clinicians, advocates, and policy experts. Timothy Gardner, President of the American Heart Association (AHA), provided an excellent overview of this issue at a recent Health Policy Forum.

Dr. Gardner first described the role and history of the American Heart Association. From the grass roots level to the federal level, AHA is primarily an advocacy organization. Its mission is focused on building healthier lives, free of cardiovascular disease and stroke. More specifically, AHA's impact goal is to reduce coronary heart disease, stroke, and risk by 25% by 2010. Its primary activities include support for research, public education, advocacy, and professional services.

The American Heart Association conducts multiple programs and campaigns which often

focus on increasing public awareness and encouraging behavior change. For example, *Go Red for Women* is a campaign aimed at supporting AHA's goals by educating the public regarding the misperceptions of coronary disease while raising money for research. *The Heart of Diabetes* is a program that assists and supports those affected by Type II Diabetes in making healthy lifestyle behavior changes. The American Stroke Association (a division of AHA) uses another educational campaign, *The Power to End Stroke*, to provide outreach and education to African Americans on ways to reduce their risk of stroke.

Dr. Gardner discussed the national crisis of childhood obesity and its implications on their risk for future cardiovascular disease and Type II Diabetes. The societal response to this crisis is critical in order to improve the overall health of the population. Dr. Gardner refers to this as "primordial" prevention, or keeping those who are healthiest and not yet at risk from acquiring those risk factors that can make them vulnerable to disease.

Policies at the governmental level can play a particularly important role in prevention. For example, it was Surgeon General Koop, a champion of anti-smoking campaigns, who laid the foundation for influencing awareness and behavior change nationally. This, in turn, had an effect on decreasing the rate of cardiovascular disease in the US. The AHA has an Office of Federal Advocacy and it continues to work closely with the National Institutes of Health, the Centers for Disease Control and Prevention, and the Agency for Healthcare Research and Quality.

For more information on the American Heart Association, visits its Web site at: www.americanheart.org.

The Evolving Pharmaceutical Industry

For decades, the pharmaceutical industry was lauded for its role in improving the health of the world's population. However, the industry has faced significant challenges in recent years. Its pipeline of new products has weakened, and costs for research and development, sales, and marketing have increased. Other issues—such as increased scrutiny of pharmaceutical practices, concern over the high cost of pharmaceuticals, and litigation related to several high-profile drug safety recalls—have served to tarnish the industry's reputation. This combination of factors has forced the industry to reassess how it conducts business. This article will explore a few of the ways pharmaceutical companies are attempting to operate more efficiently and work to repair their image and regain public trust.

There has been considerable progress on the front to increase transparency regarding business practices. In March 2008, AstraZeneca announced that it would begin posting online a list of all contributions to state and federal political candidates, complete with recipients' names and the total amount contributed.1 Two months later, Eli Lilly issued a statement in support of the Physicians Payments Sunshine Act, legislation sponsored by Senators Charles Grassley (R-Iowa) and Herbert Kohl (D-Wisconsin) to create a national registry of all payments over \$500 made to physicians by pharmaceutical companies, medical device, and medical supply companies. Lilly announced it would begin voluntarily reporting this information online in 2009.² Merck, in September 2008, pledged to disclose physician payments for speaking engagements beginning in 2009.³

Pfizer also made significant strides to reduce potential conflicts of interest. In July 2008 it

announced that the company would no longer directly support Continuing Medical Education (CME) courses offered by for-profit medical education and communication companies.⁴ This action attempts to ensure that CME courses remain focused on improving clinical care and patient outcomes, and are not mistaken for promotional programs.

Given the current difficult economic environment, many firms are turning to mergers and layoffs to improve efficiency and lower operating costs. High-profile mergers, such as the Eli Lilly and ImClone merger completed in November 2008,5 can serve to expand a company's pipeline of future medications and help to re-focus their efforts on innovative therapies instead of relying on "me-too" and patent-extending reformulations of existing medications. Wyeth, Merck and several other companies have, in recent months, announced workforce reductions of greater than ten percent.⁶ This reduction in the workforce poses many questions for the future, and it is too early to tell if it will also impact the progress of research and development.

A recent survey of industry stakeholders found that an astounding 94% of respondents believe that pharmaceutical companies spend too much on advertising.⁷ Reversing this belief is imperative to improving the current public perception of the industry. The industry is attempting to shed this image by regulating itself through guidelines set forth by the Pharmaceutical Research and Manufacturers of America (PhRMA). The most recent voluntary guidelines on direct-to-consumer (DTC) advertising, issued in December 2008, call for an end to off-label promotion in DTC advertising, and ask manufacturers to define risks as clearly as they define benefits in commercials and print ads.⁸ While these guidelines do nothing to address the sheer volume of advertising aimed at consumers, and are merely voluntary, they do address some key concerns that have been voiced by critics.

The changes occurring in the pharmaceutical industry certainly show an attempt to repair an image that has been tarnished in recent years by safety recalls, criminal fines, and compliance failures. The industry will need to continue to transform itself and focus on its core mission; to develop novel, innovative products that improve the lives of patients around the world

Joe Couto, PharmD, MBA

Pharmacoeconomics and Outcomes Research Fellow Jefferson School of Population Health

For more information contact the author at: joseph.couto@jefferson.edu.

- 1. AstraZeneca to provide more information about key areas of its US business. AstraZeneca. http://www.astrazeneca-us.com/about-astrazeneca-us/newsroom/ all/2418382?itemId=2418382. Accessed December 28, 2008.
- 2. Support for Grassley-Kohl Bill newest addition to Lilly's 'Transparency Agenda'. Eli Lilly & Co. http://newsroom.lilly.com/releaseDetail.cfm?ReleaseID=310110. Accessed December 28, 2008.
- 3. Merck takes important steps to enhance transparency. Merck & Co. http://www.merck.com/newsroom/press_releases/corporate/2008_0925a.html. Accessed December 28, 2008.
- 4. Pfizer CME restrictions: no support for education firms, caps everywhere else. FDC Reports. http://www.fdalegislativewatch.com/2008/07/pfizer-cme-rest.html. Accessed December 28, 2008.
- 5. Lilly completes acquisition of ImClone Systems. Eli Lilly & Co. http://newsroom.lilly.com/releasedetail.cfm?releaseid=350339. Accessed December 28, 2008.
- 6. Top 5 layoffs of 2008. FierceMarkets, Inc. http://www.fiercepharma.com/special-reports/wyeth-top-5-layoffs-2008. Accessed December 28, 2008.
- 7. Restoring trust in the pharmaceutical industry by translating expectations into action. PricewaterhouseCoopers Health Research Institute. http://www.pwc.com/extweb/ pwcpublications.nsf/docid/e8a194168c19de678525767852572b91. Accessed November 12, 2008.
- 8. America's pharmaceutical research companies enhance voluntary guidelines on direct-to-consumer advertising. Pharmaceutical Research and Manufacturers of America (PhRMA). http://www.phrma.org/news_room/press_releases/americas_pharmaceutical_researes_companies_enhance_voluntary_guidelines_on_dtc_advertising/. Accessed December 29, 2008.

Increasing Organ Donation Consent Rates in an Inner City Hospital

According to the United Network for Organ Sharing (UNOS), over 100,000 people in the US are waiting for an organ transplant.¹ Eighteen people die each day, waiting. In April 2003, the Department of Health Resource and Service Administration (HRSA), set forth a national objective to abolish the waiting list for organ recipients: No person shall die waiting for an organ transplantation. HRSA established the Organ Donation Breakthrough Collaborative,² partnering hospitals that are leaders in organ donation with those that have a large donation potential and low donor yield. The goal: 100% referral rate (all eligible referrals are made) and a 75% conversion rate (the number of actual donations from eligible referrals).

Albert Einstein Medical Center (AEMC) was identified by the Collaborative as one of the 200 largest hospitals nationwide with the greatest potential for improvement. In March 2004, the conversion rate was a dismal 17% (1 donation of 6 eligible referrals). While referrals of potential donors were made 78% of the time, only 30% were done in a timely manner. This meant we were not contacting our organ procurement organization (OPO) in time for a proper on-site evaluation. Our process was broken.

In an effort to achieve the new national benchmark, AEMC partnered with Gift of Life (GOL), our local organ procurement organization. A core group from AEMC participated in the Second National Breakthrough Collaborative in San Diego, CA along with GOL staff. Likewise, a larger committee was created at AEMC to implement these shared best practices throughout our institution.³

The Collaborative recommended we first identify barriers to AEMC's donation process. Education, religious conviction, cultural sensitivity, racial relations, socio-economic status and community trust of the healthcare system were identified as

key barriers impeding our objective.⁴ To improve our process and break through these barriers, we used the PDSA model—plan, do, study, act—a rapid-cycle quality improvement tool we learned at the Collaborative.

Our first PDSA intervention resulted in the creation of the "trigger card" for all ICU staff. A 5x7 laminated card detailed how to identify all potential donors using clinical criteria, with emphasis on early identification. Our next intervention has become one of our most successful. Initially, GOL teamed with physician leaders, nurses, residents, clergy, interpreters and administrators exclusively from AEMC to educate and create "champions" for organ donation.5 In one 8-hour off-site training session, these champions were instructed in an abridged format using practices learned at HRSA's collaborative. Due to the success of this intervention at AEMC, GOL has expanded the champion training to over 15 regional hospitals.

Our most successful intervention to date is AEMC's "trust bridge," a mechanism involving the individual or individuals who have worked with the family of a patient who is moving toward becoming a potential donor, and has established a relationship of mutual trust and understanding. The team works closely with the family to safely and consciously transfer or share this trust with the organ donation coordinator.6

According to Yuen, Burton, Chiraseveenuprapund, et al., there is an overall distrust of the medical profession.⁷ Specifically at AEMC, our clients are skeptical of medical practices involving donation and transplantation, believing that their organs will be used to save the lives of the wealthy and privileged. Consequently, we had to find a way to establish trust with patients and their families. Through an intense internal assessment, it was determined that our population feels best supported by the bedside nurse and AEMC's

pastoral support staff. For that reason, we chose to partner clergy and the primary nurse to support the donor family throughout the decision process. Also, due to our diverse population, we decided to involve interpreter services into the donation discussion when warranted. As a result families, through the support and trust of clergy, nurses, physicians and OPO coordinators, are consenting to donate more often.

In conclusion, AEMC's referral rate has increased to 100%, which has been sustained for over 4 years. Our conversion rate, while not meeting our goal of 75%, has risen to 57% (an increase of over 235%). The number of annual referrals has risen from 44 in 2003, to 116 in 2008. We continue to work diligently in our community to gain trust in our institution by dispelling myths and educating our patients through outreach. We will continue new interventions designed to increase the yield of organs per donation so that, someday, the waiting list will exist no more.

George Alburger, MSN, RN

Nurse Manager SICU/Coordinator Organ Donation Collaborative Albert Einstein Medical Center

Patrick Molloy, BSN, RN

Staff Nurse SICU/Organ Donation Nurse Champion Albert Einstein Medical Center

For more information contact the authors at: alburgerg@einstein.edu and mollyp@einstein.edu.

- United Network for Organ Sharing Scientific Registry (database), Richmond, VA. http://www.unos.org/. Accessed October 9, 2008.
 Shafer TJ, Wagner D, Chessare J, Zampiello FA et al. Organ donation breakthrough collaborative: Increasing organ donation through system redesign. *Critical Care Nurse*. 2006; 26(2):33-49. 3. Ehrle R, Shafer T, Nelson K. Determination and referral of potential organ donors and consent for organ donation: Best practice—A Blueprint for Success. Critical Care Nurses. 1999; 19(2):21-30.
 - Evers K, Lewis D, Schaeffer M. Cultural diversity: Sociological and cultural factors affecting consent for organ donation. Critical Care Nurse. 1999; 19(4):57-61.
 - 5. Youll J. The bridge beyond: strengthening nursing practice in attitudes towards death, dving, and the terminally ill, and helping the spouses of critically ill patients. Intensive Care Nursing 1989;5:88-94.
 - 6. Puchalski C. Spirituality in health: the role of spirituality in critical care. Critical Care Clinics. 2004; 20:487-504.
 - 7. Yuen C, Burton W, Chiraseveenuprapund P, et al. Attitudes and beliefs about organ donation among different racial groups. JAMA. 1998; 90(1):13-18.

Defining the Active Ingredients of Rehabilitation

Rehabilitation treatments and services are an important part of the healthcare system, and the need for such services is increasing. A larger proportion of the population is aging or elderly and, thanks to advances in medical technology, a number of individuals with disability who might previously have died are enjoying improved survival rates.¹ Rehabilitation treatments are important both economically and in terms of quality of life, and can be expected to become more critical in the future.¹

Despite their importance, evidence supporting the efficacy and effectiveness of most rehabilitation treatments is sparse. There are many reasons for this, including inadequate funding of rehabilitation research, insufficient numbers of rigorously trained investigators, and the inherent complexity of the biopsychosocial (as compared to the biomedical) model that underlies the practice of rehabilitation.² However, an increasingly recognized obstacle to research is the difficulty in defining many rehabilitation treatments with respect to their "active ingredients" in such a way that their impact can be studied. Similar to psychotherapy—whose efficacy has also been challenging to study-most rehabilitation treatments are delivered through some form of interpersonal interaction between rehabilitation therapist and patient/client, may be tailored to the goals, strengths, and weaknesses of the individual, and may incorporate multiple active ingredients.³ For example, consider several patients with difficulty walking after a stroke. All may be receiving "gait training", but in one case the emphasis may be more on correcting impaired balance; in another on clearing the toe with each step; and another on being more attentive to obstacles in the environment while walking. Are these all the same treatment or is each patient receiving a different treatment? Because of these complexities, many attempts at clinical rehabilitation research have resorted to defining the treatments merely as numbers of hours of physical, occupational, speech, and other therapies; length of stay in a particular type of institution; or the goal of the treatment (e.g., "attention training"), as though the actual services delivered by clinicians and institutions during the treatment time are unimportant. Although numbers of sessions or hours may certainly be relevant, just as the dose of a medication is important, the dose does nothing to define the active ingredients of the treatment.

Recently the National Institute on Disability and Rehabilitation Research (NIDRR), a major funding source for rehabilitation research, awarded a 5-year grant to Marcel Dijkers, PhD at Mount Sinai School of Medicine for a project entitled, "Classification and Measurement of Medical Rehabilitation Interventions." This project is intended to begin a process of building a taxonomy of rehabilitation treatments that is suitable for research purposes and may also facilitate interdisciplinary communication, clinical education, documentation, and billing. The grant includes a subcontract to Moss Rehabilitation Research Institute (MRRI) at the Albert Einstein Healthcare Network, an affiliate of Thomas Jefferson University, with John Whyte, MD, PhD and Tessa Hart, PhD as lead investigators at MRRI.

A taxonomy is a way of dividing a set of entitiesin this case rehabilitation treatments-into a set of ordered groups or categories. Building a taxonomy of rehabilitation treatments that is applicable across disabilities, treatment settings, and patient populations is an enormous task that cannot be completed in a single grant cycle. The current project contains several key activities that are expected to support ongoing taxonomy development beyond the duration of the project. First is the construction of a "blueprint" for the taxonomy—an effort that will be led by the author. The blueprint will specify the principles by which treatments are grouped in the final taxonomy. In principle, one could sort rehabilitation treatments into categories according to whether the treatment was provided by a woman, a man, or a robot; whether the treatment was conducted in the morning or the afternoon; or an infinite number of other dimensions. The development of the blueprint will be shaped by reviewing published literature on a wide range of rehabilitation treatments and services, paying

particular attention to overt or covert "treatment theory," since treatment theory proposes the mechanism by which a treatment works. Thus, to the extent possible, the boundaries between treatment taxonomy categories should reflect the active ingredients of the treatments as opposed to dimensions that don't bear on how the treatment will be used or how effective it will be. Upon completion of the blueprint, a multidisciplinary stakeholder conference will be held to review and critique the blueprint.

After the investigators obtain feedback from rehabilitation professionals and consumer advocacy groups, the blueprint will be tested by using it to construct treatment taxonomies in two focused areas: treatments to improve gait and mobility for individuals with neurologic impairments; and treatments to ameliorate executive function deficits in individuals with brain injury. The choice of exemplars is relatively arbitrary and reflects a desire to assess the blueprint's capacity to guide organization of a more cognitive vs. more motor domain, and to use domains with which the research team is particularly knowledgeable. Taxonomy development in these two treatment areas may suggest further refinements of the blueprint itself, with the goal that, by the end of the five-year project, a relatively enduring blueprint will be published that can support further taxonomic development in many additional treatment areas. In the final stages of the project, the two taxonomies discussed above and the revised blueprint will be reviewed and critiqued by external stakeholders, and plans made to continue further development of a useful treatment taxonomy for rehabilitation.

John Whyte, MD, PhD Director Moss Rehabilitation Research Institute

For more information contact the author at: JWhyte@einstein.edu.

- 1. Institute of Medicine. The future of disability in America. 2007. Washington, DC: The National Academies Press.
- Whyte J. Distinctive methodologic challenges. In: Fuhrer MJ, ed. Assessing Medical Rehabilitation Practices: The Promise of Outcomes Research. Baltimore, MD: Paul H. Brookes; 1997; 43.
 Whyte J, Hart T. It's more than a black box, it's a Russian doll: defining rehabilitation treatments. Am J Phys Med Rehabil. 2003;82(8):639-652.

Best and Brightest Forum on Medical Innovation

Franklin Institute, Philadelphia, Pennsylvania

December 15, 2008

On December 15, 2008, former Congressman Dick Gephardt facilitated a program that featured keynote speaker Governor Edward G. Rendell to discuss the future of medical innovation in the United States. The discussion focused, in particular, on the greater Philadelphia area in the context of the current economic downturn. In addition to the keynote, two expert panels highlighted obstacles to innovation as well as potential solutions. Panelists included:

- Dennis M. "Mickey" Flynn, President of Pennsylvania BIO
- Glen N. Gaulton, PhD, Executive Vice Dean, Chief Scientific Officer at The University of Pennsylvania School of Medicine
- Brenda Gavin, DVM, MBA, Founding Partner of Quaker BioVentures
- **Paul Howard, PhD**, Senior Fellow and Director of the Center for Medical Progress at the Manhattan Institute for Policy Research
- Russel Kaufman, MD, President and CEO of the Wistar Institute
- Alan Leshner, PhD, CEO of the American Association for the Advancement of Science

- Joseph M. Mahady, President of Wyeth Pharmaceuticals and Senior Vice President at Wyeth
- Thomas Morr, President and CEO of Select Greater Philadelphia
- David B. Nash, MD, MBA, Dean of the Jefferson School of Population Health at Thomas Jefferson University
- Barbara S. Schilberg, Managing Director and Chief Executive Officer of BioAdvance
- The Honorable Joe Sestak (D-PA), U.S. House of Representatives
- **George Wohlreich, MD**, Director and CEO of the College of Physicians of Philadelphia

The Greater Philadelphia area is a hub for medical innovation activities, with a strong biotechnology sector and numerous academic institutions with nationally recognized programs in the life sciences. According to a 2005 Milken Institute study¹, the medical innovation industry in Greater Philadelphia encompasses 11.4 percent of all employment in the region, 12.8 percent of total earnings, and 7.1 percent of gross metro product.

Progress in Patient Safety

Wednesday, May 13, 2009

Executive Director, Patient Safety

Panelists drew attention to several key issues the region faces in capitalizing on these resources, with a focus on research and development, financing, and education. With respect to research and development, effective technology transfer and translational research will allow medical innovation to evolve along the continuum from basic science research to clinical care at the bedside. In order for this to occur, partnerships between academia and industry are essential. Funding challenges include aligning incentives for research and development, incentives for investigators to pursue basic science research, and defining the roles of public and private funding sources. Finally, panelists indicated that high quality education in the sciences must begin in elementary school and continue throughout higher education. Graduate programs in the sciences must be able to recruit young investigators and retain them following graduation.

The event was co-hosted by America's biopharmaceutical companies, Pennsylvania BIO, BioAdvance and Select Greater Philadelphia.

REFERENCES

1. Ross D, Koepp R, Wallace L, et al. Milken Institute Research Report. The greater Philadelphia life science cluster: an economic and comparative assessment. http://www.selectgreaterphiladelphia.com/uploads/files/philadelphia_sciences_0605%5B1%5D.pdf. Published June 2005. Accessed February 18, 2009.

Initiatives

Mike Doering

Authority of PA

Upcoming Health Policy Forums

The Impact of Serious Medication Errors for Healthcare Providers

Wednesday, April 8, 2009

Zane Robinson Wolf, PhD, RN, FAAN Dean and Professor School of Nursing, La Salle University

PLEASE NOTE: NEW LOCATION

All Forums will take place at:

Room 101 • Bluemle Life Science Building • 233 South 10th Street, Philadelphia, PA 19107 8:30 a.m. – 9:30 a.m.

Patient Friendly Billing -Increasing Transparency

Wednesday, June 10, 2009

Michael Brennan Chief Financial Officer, Geisinger Health System

For more information contact: (215) 955-6969 www.jefferson.edu/population_health/

School of Population Health Presentations

Goldfarb NI, Cole J, and **Whitesell E.** Key strategies for effective educational grant writing. Presented at: The 33rd Annual Alliance for CME Conference. San Francisco, CA, January 30, 2009.

Gottlieb D, Friedman DA, Evans RA, **Yuen E,** Abdur-Razzaq Miller, IM. Religious perspectives on aging. Panel presentation at: Coming of Age presents *Boomervision!*[®] Philadelphia, PA, February 19, 2009.

Reifsnyder J, Richardson D. Continuity of care for persons diagnosed with Alzheimer's disease. Paper presentation at: The 61st Annual Meeting of the Gerontological Society of America. National Harbor, MD, November 22, 2008.

Reville B, **Reifsnyder J, Toner R,** and Parks S. Hospital-based palliative care consultation: An opportunity to improve care for dementia. Paper presentation at: The 61st Annual Scientific Meeting of the Gerontological Society of America. National Harbor, MD, November 22, 2008. **Reifsnyder J.** Putting ethics in your toolbox: Managing dilemmas in end of life care. Podium presentation at: The New Jersey Hospice and Palliative Care Organization Annual Meeting, Eatontown, NJ, November 13, 2008.

Safarty M. Tools for improving breast cancer screening rates. Presented at: Saving Lives in Brooklyn, Symposium on Breast Cancer. SUNY Downstate, Wellpoint, and the American Cancer Society. Brooklyn, NY, November 11, 2008.

Safarty M. Multiple chronic conditions: Health care delivery and public health. Presented at: Office of Population Health and Science, Department of Health & Human Services, Washington, DC, November 21, 2008.

Simmons R. Designing a cultural humility and competence online and in-person course for public health and health education practitioners. Presented at: The Society for Public Health Education (SOPHE) Annual Meeting, San Diego, CA, October 24, 2008. Simmons R. Introducing public health informatics into a new MPH program. Presented at: The American Public Health Association (APHA) Annual Meeting, San Diego, CA, October 28, 2008,

Simmons R. Developing a leadership mindset (and skills) for health education.Presented at: The National Capital Chapter of the Society for Public Health Education (SOPHE), Rockville, MD, November 15, 2008.

Yaskin JC. Summit: The evidence base for effectiveness of obesity management progams— A comprehensive overview. Panelist at: 3rd Annual Obesity Congress: Implementing Wellness Initiatives and Promoting Health Behavior, Washington, DC, November 20, 2008.

School of Population Health Publications

Nash DB. Birthday boomer. *Biotechnol Healthcare*. 2008;5(4):4.

Nash DB. Whiter CME. P&T. 2009;34(1):9.

Nash DB, Kash KM. Mental health parity becomes a reality. *Medpage Today*. November 13, 2008. http://www.medpagetoday.com/ Columns/11774. Accessed February 4, 2009. Nash DB, Berman BB. Quality reporting what to expect for 2009. *Medpage Today*. December 9, 2008. http://www.medpagetoday. com/Columns/12084. Accessed February 4, 2009.

Nash DB, Kimberly LL. A look at the ethics of facial transplantation. *Medpage Today*. January 12, 2009. http://www.medpagetoday. com/Columns/12412. Accessed February 4, 2009. Nash DB, Yaskin JC. Population health battles the bulge. *Medpage Today*. February 9, 2009. http://www.medpagetoday.com/Columns/12821. Accessed February 10, 2009.

College for Value Based Purchasing of Health Benefits

June 1-4, 2009 *Columbus, OH* September 14-17, 2009 *Memphis, TN*

For more information visit: www.cvbp.org

Health Policy NEWSLETTER

Jefferson School of Population Health Thomas Jefferson University 1015 Walnut Street, Suite 115 Philadelphia, PA 19107 Non Profit Org US Postage PAID Bensalem, PA Permit #182

EDITORIAL BOARD

Editor

David B. Nash, MD, MBA Dean Jefferson School of Population Health

Managing Editor

Emily J. Frelick, MS Project Director Jefferson School of Population Health

Editorial Board

Timothy P. Brigham, PhD

Sr. Vice President Department of Education Accreditation Council for Graduate Medical Education

James J. Diamond, PhD Director, Greenfield Research Center Department of Family Medicine Jefferson Medical College

Max Koppel, MD, MBA, MPH Clinical Associate Professor of Urology Department of Urology Thomas Jefferson University

Daniel Z. Louis, MS Managing Director Center for Research in Medical Education and Healthcare Jefferson Medical College Kevin Lyons, PhD Associate Dean Director, Center for Collaborative Research Jefferson College of Health Professions

John Melvin, MD

Professor and Chairman Department of Rehabilitation Medicine Thomas Jefferson University

Ronald E. Myers, PhD, DSW Professor Director of the Division of Population Science Department of Medical Oncology Jefferson Medical College

Etienne Phipps, PhD Director Einstein Center for Urban Health Policy and Research Albert Einstein Healthcare Network

Joel Port, MHSA, CHE, CMPE Vice President Planning and Business Development Main Line Health

Mary G. Schaal, RN, EdD Dean School of Nursing Jefferson College of Health Professions

Jay Sial Chief Operating Officer JeffCare, Inc. Jefferson Health System

Rob Simmons, DrPH, MPH, CHES

Associate Professor Program Director, Public Health Jefferson School of Population Health

Alexis Skoufalos, EdD Assistant Professor Assistant Dean, Continuing Professional Education Jefferson School of Population Health

Rachel Sorokin, MD Chief Patient Safety and Quality Officer Thomas Jefferson University Hospital

Richard G. Stefanacci, DO, MGH, AGSF, CMD Director, Center for Medicare Medication Management Geriatric Health Program University of the Sciences in Philadelphia

Paula Stillman, MD, MBA President of Health Initiatives Senior Vice President, Special Projects Christiana Care Health System

Michael Vergare, MD Senior Vice President, Academic Affairs Thomas Jefferson University

Health Policy Newsletter is a quarterly publication of the Jefferson School of Population Health.

1015 Walnut Street Suite 115 Philadelphia PA, 19107 Tel: (215) 955-6969 Fax: (215) 923-7583

www.jefferson.edu/population_health/