The “convenient care” movement continues to make national headlines, from CVS’s acquisition of MinuteClinic to Walgreen’s recent acquisition of Take Care Health Systems. Developed in response to the need for accessible, affordable, quality healthcare, convenient care clinics (CCCs) based in retail stores and pharmacies seek to meet the basic health needs of patients with and without insurance. The nurse practitioners (NPs) that primarily staff these clinics can treat common health problems (eg, strep throat and ear infections), triage patients to the appropriate level of care, advocate for a medical home for all patients, and reduce unnecessary visits to emergency rooms and urgent care clinics.

Because physicians view themselves as the gatekeepers of healthcare, the convenient care movement has engendered controversy and led to a heterogeneous response from organized medicine. The American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American Medical Association (AMA) have all called for increased regulation of CCCs. AMA Board of Trustees member William A. Hazel Jr., MD, has stated that while “store-based health clinics can never replace the patient-physician relationship, with guidance from the AMA and AAFP they can offer patients a viable option for routine health care services.” However, in its policy statement concerning retail-based clinics, the AAP formally opposes CCCs as an appropriate source of medical care and discourages their use because of its commitment to the medical home model and because of concerns regarding fragmentation and quality of care. Nonetheless, the AAP recognizes that the economics of our current health care system will support the continued existence of CCCs and has therefore published principles to guide operations and the quality of care delivered. On the other hand, with 400 CCCs in existence today and an estimated 1,500 operating by the end of next year, some physicians have been trying to introduce legislation to hinder the industry’s ability to grow. An Illinois State Medical Society-backed Illinois House bill would require CCCs to pay $2,500 for permits from the state health department, and the ability to obtain these permits includes stipulations such as having one physician supervisor for every two NPs.

Unfortunately, these legislative efforts fail to acknowledge the excellent status of NPs in primary care. Numerous studies, as far back as the 1986 case study released by the Office of Technology Assessment, have found the quality of care provided by NPs and physicians to be equivalent. Most recently, a descriptive evaluation was conducted at primary care nurse-managed health centers, where NPs practice independently within a nursing model of primary care, and population-based measures of quality and healthcare resource utilization were compared to those of like providers including community health clinics. With patients experiencing significantly fewer emergency room visits, hospital inpatient days, specialist visits, and having a lower risk of giving birth to low birth weight infants compared to patients in conventional healthcare, the results indicate that nurse-managed health centers reduce healthcare costs through preventive care.

Given the impending crisis in primary care, we therefore believe it is entirely appropriate to determine where CCCs fit into the future design of primary care delivery. Currently, the supply of physicians and nurses is diminishing while the demand for healthcare increases as baby boomers grow older and develop chronic conditions. The CCC service model may efficiently provide services to a small portion of the population, giving primary care practitioners and emergency rooms more time for complex cases for which they are appropriately configured. Such a model could even improve access to care and create spare capacity for primary care practices and emergency departments.
In light of the CCC service model’s ability to influence the design of future delivery systems, the Department of Health Policy has taken a keen interest in the growth of the convenient care industry. One of us (DBN) serves as chairman of the National Medical Advisory board of Philadelphia-based Take Care Health Systems, one of the largest retail clinic companies, and the Department of Health Policy has chaired two meetings of the advisory board to-date. We also recently produced a white paper appearing in the April 2007 issue of Disease Management whose purpose was to describe the entire history of the convenient care industry, explain the role of NPs in CCCs, describe the role of the new consumer-driven model of care, and to identify future directions for the convenient care industry. This review of the field was co-authored by Tine Hansen-Turton, executive director of the newly-formed Convenient Care Association, a Philadelphia-based national organization representing CCCs that was founded by healthcare leaders in October 2006. To further understand this burgeoning industry, one of us (EJM) also attended the national Retail Health Clinic Summit in Philadelphia and the national Retail Based Health Clinic Summit in Chicago earlier this year.

As the industry grows and validates its business model for the delivery of healthcare, we are particularly interested in its future research and education agenda. With regard to future directions for research, a key issue to consider involves the collection of data on adherence to applicable measures from the Ambulatory Quality Alliance, the National Committee for Quality Assurance, or the Centers for Medicare and Medicaid Services’ Physician Quality Reporting Initiative. These outcomes may further certify CCCs’ high quality of care due in part to their standardized protocols and guidelines grounded in evidence-based medicine. For example, emerging evidence suggests that usage of these protocols by NPs in CCCs to enhance the decision-making process has led to appropriate testing of, and antibiotic prescribing to, patients at risk for strep throat. Meanwhile, recent findings indicate that the major problem of primary care physicians in the testing and treatment of adults with sore throats is not which guideline to follow, but that they usually fail to follow any guideline.

Moreover, formal collection of data on adherence to national quality measures leads to the question of whether CCCs should require an outside quality stamp in order to distinguish the various chains. Until this happens, CCC chains can differentiate themselves in the marketplace by publishing quality of care research in the peer-reviewed literature. Ideally, the entire industry would follow suit, leading to a commitment to transparency.

In addition to its future research agenda, the convenient care industry needs to consider its impact on the medical education system. CCCs will have to ensure continuity of care by building effective relationships with local primary care physicians. It is therefore necessary to consider how this model of care delivery could become a component of the educational process. Questions then arise, including: should medical school curricula begin to include medical student training with NPs at these clinics?

While today’s clinics focus primarily on providing episodic care, speculation about the future concerns whether they will become a “disruptive innovation,” a service lacking features of incumbents that ultimately improves and captures the whole market. CCCs have clearly entered the market at the low end of medical complexity, and their current service model will almost certainly not interrupt the core business of primary care practitioners. However, as the industry develops over time, CCCs may in fact be poised to transmogrify into providers of chronic care management, with competency in areas such as core medical and pharmacy management and wellness management programs. The Department of Health Policy will continue to pay very close attention to these important issues.

As always, we are interested in your views. You can reach me at David.Nash@jefferson.edu.

Eric J. Moskowitz
MD/MBA Candidate, 2009
Jefferson Medical College/Widener University

David B. Nash, MD, MBA
Editor

REFERENCES
Our department was fortunate to receive an educational grant from InterComponentWare, AG (ICW), a leading international e-health company headquartered in Germany. For the past two years, we have been working with the corporate leadership of ICW as they begin to enter the US domestic marketplace. ICW “develops and markets software and hardware components for healthcare IT infrastructure for electronic health cards, personal health record known as LifeSensor® and network solutions for clinics and physicians in private practice.” ICW and its LifeSensor® PHR is the leading product in Germany, Austria, Switzerland and Bulgaria. With the help of a nationally prominent advisory board convened by our department, including such domestic luminaries as Janet Marchibroda from e-Health Initiative and Blackford Middleton from Partners Health Care System, Inc., the goal of our work is not only to help ICW to break into the domestic US market, but rather to expand their world view, suggest a research agenda, and network internationally.

As we were sailing down the Spree River in the beautiful reunified city of Berlin this past summer, it struck me that there were some key take-home lessons that I learned during our three-day advisory board summit meeting there. I think there are at least seven important take-home messages, and I will articulate each in turn.

**Cultural barriers abound!** Cultural barriers exist from both a consumer and physician perspective regarding the use, connectivity, and penetration of a PHR. For example, in centrally controlled healthcare systems like Switzerland (with a total of 9 million inhabitants), ICW has readily made a great breakthrough in that isolated homogeneous nation. Comparable breakthroughs in the US market will be rare. German physicians were skeptical about the power of a PHR and the additional time it might add to a typical office visit; sound familiar? ICW was smart and worked hand-in-hand with the German Association of Family Practitioners (Deutscher Hausaerzteverband) to overcome their reluctance. Dr. Ludwig Richter helped the domestic advisory board members to grasp nuances of the physician cultural barriers, especially in Germany.

**Connectivity is king.** ICW, like every other healthcare provider, is struggling to make sure that their product can connect back to any legacy electronic medical record (EMR) and hospital-based computerized physician order entry (CPOE) system. It is a real struggle, but because LifeSensor® is entirely web-based, everyone believes it can be done. The Germans know there is a movement in the US toward standardization. Our work overseas has convinced me beyond a doubt that a primary care internist, I relish the day when patients bring an easy-to-use, web-enabled, password-protected, no legacy wires necessary system to their primary care visit. We could spend quality time doctoring and get down to what really matters — enhanced doctor-patient communication.

**Cashing in on ROI.** Whether it is measured in euros, pounds, or dollars, the language of return on investment is the same. The advisory board struggled with the question of how to measure the return on a PHR. Who will gain? Who will lose? How do we measure patient activation? Will empowered patients cost the US system more? All the evidence from Germany points to improved workflow, improved communication all around, and probably some early gains in quality. We know if we are successful? What are the major outcome measures? Can we link a PHR to the Physician Quality Reporting Initiative from CMS? Do we really want patients reviewing key laboratory data at home at night while they are online? What if one doctor uses the LifeSensor® web-enabled secure password but a referral specialist refuses? How will this skew the data and impact the research agenda? The advisory board grudgingly admitted that we know so little about what really goes on in the black box of an ambulatory primary care visit in the United States. Yet, they were heartened to learn that the same is probably true in Western Europe!

**Who is the purchaser?** The enthusiasm of the advisory board was tempered by a wide-ranging and heartfelt discussion regarding who will actually buy LifeSensor®. In the US, will it be large employers who essentially give away LifeSensor® as a competitive recruiting advantage? Will it be managed care plans seeking market leverage who fund LifeSensor® and deliver it to a certain strata of paying customers? Finally, outside of a federal government centrally-controlled system it is open to interpretation as to who the final purchaser might really be. Switzerland, with 9 million people is a nice, neat demonstration project!

**Primacy of partners.** ICW has done an exemplary job of reaching out to all kinds of partners beyond the German Association of Family Practitioners mentioned earlier. They are no doubt going to need corporate partners like Intel, Microsoft, or others yet un-named. Maybe they should join with Revolution Health or WebMD to push out LifeSensor® to a broader domestic market. Experienced IT professionals in the US know that partnerships come and go just as frequently as corporate mergers and divestitures. Today’s partner is tomorrow’s adversary. A legacy system that worked yesterday may not connect tomorrow. It will be important to establish these kinds of partnerships early on and to work aggressively to nurture them moving forward.

**Finally, all politics are global!** That’s right, not local, global. Our work overseas has convinced me beyond a doubt that a PHR and an empowered healthcare consumer is where we need to go. We could quibble over whether it is LifeSensor® or another outstanding product. But I know in my own practice as a primary care internist, I relish the day when patients bring an easy-to-use, web-enabled, password-protected, no legacy wires necessary system to their primary care visit. We could spend quality time doctoring and get down to what really matters — enhanced doctor-patient communication.

Who knows, during my next trip to Germany sometime in the future, maybe there really will be a global PHR readily connected, as easily as the internet enables us to do email. Imagine falling ill in Europe and enabling your German primary care doctor to view all of your domestic records, labs and the like. I hope I will get to see this in my practice lifetime.

If you would like to learn more about ICW, certainly go to www.icw-global.com or www.LifeSensor.com.
Survival rates for patients with many different types of cancers have improved dramatically over the past few decades. In order to achieve such excellent outcomes many patients receive aggressive treatment including surgery, chemotherapy and radiation therapy. Nonetheless their underlying disease processes as well as the therapeutic interventions they undergo often create functional deficits that limit quality of life, financial stability and the ability to meet social and family obligations. These impairments have been shown to persist even in patients whose cancers have been controlled and who are said to be disease-free.\(^1\) Although the relative overall 5-year survival rate for all cancers now exceeds 65% the “cure” rate remains much lower.\(^2\) This means that large numbers of patients require not just surveillance but repeated oncologic interventions over time, interventions that may further impact functional performance.

The transformation of cancer from death sentence to chronic disease has made health care practitioners and patients more aware of the need to attend to functional and quality-of-life issues. Rehabilitation medicine specialists have responded by developing new models of cancer rehabilitation that preserve and promote function during all phases of disease and treatment.\(^3\) Many nationally recognized cancer centers including M. D. Anderson and Memorial Sloan Kettering, house robust departments of Physical Medicine and Rehabilitation that provide clinical services as well as research initiatives. Cancer rehabilitation services can be effectively introduced in a variety of institutional settings. They can be initiated through consultation requests for patients in acute care hospitals, they can be provided during inpatient rehabilitation stays, and they can be obtained in outpatient rehabilitation medicine clinics or by including physiatrists in interdisciplinary clinics organized around specific diagnoses. Several studies have shown improved functional outcomes and high levels of patient satisfaction following rehabilitation interventions in each of these milieus.\(^4,5,6\) For example, patients with primary as well as metastatic brain tumors who participated in an inpatient rehabilitation program made and maintained gains in Functional Independence Measure (FIM) scores that matched those made by traditional rehabilitation candidates.\(^7\) Patients with significant disability from oncologic spinal cord compression have also been shown to benefit from inpatient rehabilitation.\(^8\) Considerable data from bone marrow transplant units has proven the safety and benefit of aerobic exercise for this population so convincingly that exercise protocols are now an expected component of treatment plans. Specific interventions for lymphedema that develops after node dissection or speech therapy after laryngectomy are other examples of the broad range of services that help restore and maintain function following cancer treatment. Algorithms for addressing cancer related fatigue (CRF) have been developed by the National Comprehensive Cancer Network.

A significant challenge to any model for delivering cancer rehabilitation services results from an ongoing dialectic between a symptom-based approach and a disease-based approach. Certain problems including pain; cachexia; fatigue; reduced range of motion; deficits in activities of daily living; impaired mobility; or complications from chemotherapy or radiation occur with many different cancer diagnoses and a standardized approach to assessment and intervention may be efficacious. Implementation, however, may be determined by the specific diagnosis and treatment such as the selection of transdermal administration of pain medication for a head and neck cancer patient with severe dysphagia. Specific tumors are also associated with more rapid or indolent progression, which needs to be taken into account when selecting interventions or rehabilitation goals. Specificity of oncologic diagnosis and staging also determines treatment protocols and the resulting side effects and anticipated impairments. Familiarity with the oncologic continuum of care for specific diagnoses is essential for physiatrists committed to designing optimal rehabilitation programs for cancer patients and speaks to the importance of having medically trained leadership for cancer rehabilitation programs. Pertinent medical information needs to be disseminated to the entire interdisciplinary treatment team, ensuring patient safety and appropriate and realistic support for patients transitioning through different phases of the disease continuum.

The Department of Rehabilitation Medicine of Thomas Jefferson University is currently expanding its cancer rehabilitation initiative by establishing a dedicated consultation service for hospitalized patients, developing a specialized program for inpatient rehabilitation for patients with cancer diagnoses, pursuing specialized training for physical, occupational, and speech therapists and offering outpatient evaluations for patients during and after their treatment for cancer. These services will help patients maximize the benefits conferred by the state of the art oncologic treatment they are receiving. In doing so they will allow us to meet the challenge described by John F. Kennedy in 1963 when he said that “having added new years to life, our objective must also be to add new life to those years.”

### REFERENCES

Rx for Pennsylvania: Healing the Health Care System, the twelfth annual Department of Health Policy Summer Seminar, was held on the Jefferson campus on July 17, 2007. The keynote and plenary presentations focused on impending and proposed changes to Pennsylvania’s health care system, with an emphasis on the needs of the aging and elderly populations. Following the presentations, a reactor panel offered impromptu reactions to the issues raised and the real-world challenges of addressing them.

Secretary Nora Dowd Eisenhower, JD, from the Pennsylvania Department of Aging, provided context for the morning’s discussions in the form of demographic trends. Global and national population projections reveal an impending sea change in the age 65+ cohort, with its attendant impact on health care and other services and costs. Because the cost of health care for this cohort is 3-5 times greater than the cost for those under age 65, the nation’s healthcare spending is projected to increase by 25% by 2030. This upturn in health care needs—such as the demographic issues as multiple chronic conditions, falls, and depression—will make the shortage of health care providers an even more acute problem. The key to addressing these challenges is to proactively determine how best to modify systems to adapt to the changing demographics.

Rosemary Greco, director of the Governor’s Office on Health Care Reform, provided an update on the status of the state’s health care initiatives. Governor Rendell’s goal is to improve the accessibility, affordability, quality, and cost of health care. The Rx for Pennsylvania plan addresses these, plus chronic care and other issues.

Ms Greco briefly outlined the eight health care bills proposed for this legislative session that were approved late on July 16. Six of these bills recognize the expansion of scope of practice, which aligns with the concepts of the Chronic Care Model. Every clinician now must practice to the fullest extent possible. One bill concerns Health-Acquired Infection (HAI; formerly Hospital-Acquired Infection). It is now mandatory that all HAI be reported, including those occurring in nursing homes and ambulatory surgery centers. The focus is on transparency and surveillance (ie, reporting, monitoring, and comparative analysis). Pennsylvania is the first state to address surveillance. One bill concerns Assisted Living. This bill defines Assisted Living and establishes regulations and standards for these organizations; previously there were none.

Susan Reinhard, PhD, MSN, from the AARP Institute for Health, Healthcare Policy and Aging, spoke about the changes to policy and professional norms that must occur in order to meet the challenges of an aging society. She highlighted state policies that promote new models of caring for older adults, emphasizing scope of practice and changes across settings, and stressed the need to become more creative in the organization and regulation of health and long-term care.

Robert N. Butler, MD, President and CEO of the International Longevity Center-USA, delivered the keynote presentation, “The Longevity Revolution.” Dr Butler discussed the findings of longevity science, key among which is the need to rethink diseases in lifespan terms. The foundations of many diseases considered specific to the elderly were laid much earlier in life. We must study the biology of aging itself.

Dr Butler also touched on ageism in America, and on the economic impact of longevity. Health and longevity are associated with increased wealth. He cited William Nordhaus’ assertion that the value of increased longevity over the 20th century could be as large as the value of growth in all other goods and services over the same period.

Dr Butler stressed the need to redesign health care for an older America. Health care providers, social workers, and caregivers must be trained in the best techniques for caring for the elderly. Concurrently, there must be an emphasis on health promotion and disease prevention, improved chronic disease management, and enhanced end of life and palliative care. We must work toward transforming the culture and experience of aging.

A reactor panel of Jefferson colleagues and health care stakeholders, representing consumers, payors, and practitioners, offered unscripted responses to queries posed by moderator David B. Nash, MD, MBA. Among the issues addressed were the need for: transparency (monetary and care provision), education (for medical students and consumers), community-based care, realignment of provider and consumer incentives, development of advanced career trajectories for health care workers, and involvement of all stakeholders in solutions. The thought-provoking comments of the reactor panel and ensuing dialog with audience members made for stimulating discussion at the luncheon that followed.

A complete summary of the Summer Seminar presentations is forthcoming in the December issue of Disease Management. A podcast of the event is available through a link on the DHP website at http://www.jefferson.edu/dhp/education_ls.cfm.

New Publications from the Department of Health Policy


Jefferson’s Department of Health Policy is developing a major article, “Chronic Care at the Crossroads: Preparing to meet the challenge of an aging population,” highlighting the key messages from this important and timely summit. Look for it in November, 2007 when it will be published as a special supplement to the December issue of Disease Management. The webcast may be viewed on-line at http://www.visualwebcaster.com/event.asp?id=40457.

On July 17, 2007 in Washington, DC, a group of the nation’s most respected health leaders gathered to discuss and explore solutions to a highly complex and increasingly urgent challenge for the US healthcare system – namely, the looming burden of chronic care for an aging population. This high-level summit, hosted by Intel Corporation and its Chairman Craig Barrett, was attended either in person or via webcast by presidents, chairmen and executive directors of influential organizations including the National Business Coalition on Health, the National Medical Association, and Centers for Medicare and Medicaid Services.

Susan Dentzer, PBS’ on-air health correspondent for The NewsHour with Jim Lehrer, moderated the event which was modeled on Meet the Press. The summit was organized around 3 expert panels with representation from health care associations, payors, policy-makers, advocates, providers and provider organizations, and health technologies.

The first panel discussed the potential impact of the age wave and chronic disease in the next generation from various perspectives.

Janice Kiecolt-Glaser, PhD (Chair of Medicine, Ohio State University College of Medicine) shared surprising and disturbing statistics on the adverse effects of chronic illness on caregivers.

“Caregivers are the second victims.”

Mark B. McClellan, MPA, MD, PhD (Sr. Fellow, AEI - Brookings Joint Center for Regulatory Studies, The Brookings Institution) emphasized the need for a fundamental shift from “sick care” to “well care,” and for re-alignment of the reimbursement system. He noted that patients and employers may be the strongest forces for change.

Suzanne Mintz (President/Co-Founder, National Family Caregivers Association) sounded a wake-up call, “Not a single family in America will be untouched by chronic illness.”

Michael L. O’Dell, MD, MSHA, FAAFP (Chair & Director, Family Medicine Department and Residency Program, North Mississippi Medical Center) communicated the frustrations of providers, in particular a funding system that does not support an essential component of chronic care – coordination.

Craig Barrett (Chairman, Intel Corporation; Board Member, American Health Information Community) expressed disappointment in employers who have not taken advantage of the large amount of readily available health information technology (eg, personal health records, electronic medical records) that would improve care and reduce costs.

The second panel shared insights and experiences regarding current trends (“What is working?”) and challenges (“What could we be doing better?”) posed by chronic care and the aging population.

Steve Agritelley (Director, Product Incubation & Prototyping, Intel Health Research & Innovation Group) described almost a decade of Intel social science and ethnographic research, the insights gained, and the technologies being developed to affect behavior change.

Tracey Moorhead (President & Chief Executive, Disease Management Association of America) observed that a transition is occurring from “sick care” to “wellness” and predicted that “disease management” will expand to “population management.” The challenge lies in proving value.

David Lansky, PhD (Senior Director, Health Program & Executive Director, Personal Health Technology Initiative, Markle Foundation) noted some successful applications of the Chronic Care Model and the promise of personal health records (PHR) as key trends. Challenges include integration of “silos” and improved outcome measures.

Carmella A. Bocchino, MBA (Executive Vice President, Clinical Affairs & Strategic Planning, America’s Health Insurance Plans [AHIP]) discussed the positive impact of current information technologies on the effectiveness of disease management programs and the importance of standardized data, common templates and portability standards for PHR’s.

The third and final panel infused “hope” into the discussion as they spoke about innovations and possibilities for the future in meeting the challenges posed by chronic care and aging.

Thomas Lee, MD, MSc (Network President for Partners Health System & CEO for Partners Community HealthCare, Boston, MA) predicted a safer, more efficient, better integrated health care delivery system in five years. New strategies will address variability at the individual physician level, increased efficiency through lean management technology, and comprehensive care designs for complex patients and end-of-life. These initiatives will require care coordination teams and payment reform.

Larry Minnix (President & CEO, American Association of Homes and Service for the Aging) described a nation-wide movement toward “green houses,” a transition that sees care of the chronically ill and aging taking place in homes or home-like settings. De-institutionalization of large nursing homes into smaller, cottage-like settings increases satisfaction among patients and caregivers.

Carol Raphael, MPA (President & CEO, Visiting Nurse Service of New York) introduced several high-tech/high-touch initiatives – eg, a VNSNY program that provides tele-monitors (programmed in 8 different languages) for 400 heart failure/hypertension patients. Initial outcomes show a 14% decrease in hospitalizations and a 12% decrease in emergency room visits.

Mariah Scott, MBA (General Manager, Intel Personal Health Platforms) introduced the concept of using technology for decision support (for providers, patients and their caregivers) and for sustaining behavior change.

Allen Woolf, MD (Sr. Vice President & National Medical Officer, Health Advocacy, CIGNA Healthcare) described new inroads being forged by health coaches who equip people with information, technology and skills to modify behavior and to help sustain healthy behavior.
Improving health care in Pennsylvania is a priority for governmental officials and health care providers. This was demonstrated through the collaborative efforts of Thomas Jefferson University’s Department of Health Policy and Baylor Health Care System in Dallas, Texas who set out to “Accelerate Best Care in Pennsylvania” (ABC in PA) in January of 2007. The organizations were given support via a state grant through the efforts of Representative Todd A. Eachus, Democratic Majority Policy Chair, 116th Legislative District. The goal of ABC in PA was to collaboratively identify health care needs, set targets and demonstrate quality improvement for rural hospitals in Pennsylvania. Two community hospitals were chosen to participate: Hazleton General Hospital, a 127 bed not-for-profit institution in Hazleton, Pennsylvania and Meadville Medical Center, a 248 bed not-for-profit institution in Meadville, Pennsylvania.

A team of individuals from different disciplines within the hospital were identified and met in Hershey, PA in January of 2007 for the first of three sessions to learn about continuous quality improvement. In January, the participants learned about the structure, process and outcomes of improving quality. Each of the teams received coaching from the Jefferson and Baylor teams and was advised on how to effectively implement change in their own institution. The February session laid the groundwork for the projects that the teams were to complete by the end of the program.

The team from Hazleton General Hospital chose to focus their efforts on the administration of heart failure discharge instructions; surgical antibiotic prophylaxis; pneumococcal vaccinations; stroke care; and pneumonia care. The Meadville Medical Center team focused on pneumococcal vaccination administration and DVT prophylaxis. After months of rigorous training and diligent work, team members presented the results of their efforts June 7, 2007 in Harrisburg, in front of Representative Eachus and stakeholders from across the state. Hazleton reached their goal of increased compliance for each of the initiatives they implemented and moved one step closer to earning the designation of Stroke Center of Excellence. Meadville also demonstrated marked improvements by achieving 100% compliance on administration of pneumococcal vaccinations and DVT prophylaxis, and enjoyed significant financial gains. The team’s efforts helped to set the standard for “Accelerating Best Care” in rural hospitals throughout Pennsylvania. For more information about Accelerating Best Care in Pennsylvania, please contact me at valerie.pracilio@jefferson.edu.
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Annual Fellows Day: A Welcoming Reunion  
June 11, 2007

The Department of Health Policy has mentored Outcomes Research Fellows for more than 10 years. It has become a tradition for the Department to host an annual reunion of the group each spring. Fellows Day offers current first year Fellows the opportunity to showcase their work, and graduating Fellows a chance to celebrate their completion of the program. This half-day event welcomes both current and alumni Fellows, Senior Scholars, and invited guests from the pharmaceutical companies that sponsor our fellowship programs.

At this year’s event, first year fellow Seina P. Lee, PharmD, MS and MD/MBA students, Jeffrey Clough (2008) and Eric Moskowitz (2009) each presented a research project.

**Seina P. Lee, PharmD, MS**  
*Ortho-McNeil Janssen Outcomes Research Fellow (2006-2008)*

Seina P. Lee presented results from a research project on the impact of appropriate pharmaceutical care on heart failure outcomes in the Medicare population. This retrospective study used a large observational survey, the Medicare Current Beneficiary Survey (MCBS) Cost and Use file, to evaluate the relationship between utilization and recommended medications and disease-related outcomes, such as hospitalization, costs and mortality. The preliminary findings of the study suggest that only 50 percent of patients with heart failure (HF) receive recommended therapy for HF management. Patients who are not on appropriate medication appear to have worse clinical and non-clinical outcomes, including higher hospitalization rate, increased mortality rate and higher costs.

**Jeffrey Clough**  
*MD/MBA Candidate 2008*

Jeff Clough reviewed results from a study examining the impact of appropriate medication therapy for several chronic diseases on medical and productivity costs from the employer perspective. The study found that for several conditions, savings in terms of reduced future medical expenditures and increased productivity more than compensated for the initial cost of treatment. However, there is still a paucity of validated measures for determining the costs of chronic diseases to accurately quantify these savings. This is particularly true with presenteeism, or reduced productivity at work, which represents the bulk of costs related to some conditions.

**Eric Moskowitz**  
*MD/MBA Candidate 2009*

Eric Moskowitz discussed key themes from a qualitative study of medical and pharmacy benefit design for specialty pharmaceuticals. Eleven telephone interviews with health care purchasers and policy experts revealed that benefit design for specialty pharmaceuticals is a challenge for payors and insurers, and no clear trends in how payors and insurers manage these drugs are evident. Practices and policies vary according to the organization and the nature of the drug and its alternatives; and there is fragmentation between drugs reimbursed through the medical benefit versus the pharmacy benefit. Furthermore, insurers need more data to demonstrate the value of these products in terms of improved outcomes. Overall, the ability to provide better care for patients taking these specialty products requires better integration between the medical and pharmacy benefit.

Following the presentations, a panel of five alumni Fellows were invited to share insight into their past Fellowship experiences, current role and responsibilities, career development and, most importantly, offer ideas and advice regarding professional career opportunities. The live interactive panel discussion allowed former Fellows to present their views on the future trends and what they believe will influence the future of outcomes research. Panelists included:

**Vijay Nadipelli, PharmD, MS (1995-1997)**
*Associate Director*
*Health Economics, Outcomes and Reimbursement*
*Bayer Healthcare Pharmaceuticals*

**Joseph Doyle, RPh, MBA**
*Director*
*Health Economics and Outcomes*
*Research-Employer Group*

**Mike Schaffer, PharmD, MBA (1997-1999)**
*President/CEO*
*Medicents*

*Value Demonstrator Leader*
*Health Economics and Outcomes Research*
*AstraZeneca Pharmaceuticals*

**Chureen Carter, PharmD, MS (2001-2003)**
*Regional Outcomes Research Manager*
*Ortho Biotech Clinical Affairs, LLC*

The Department presented recognition certificates to alumni who completed the Fellowship training more than 10 years ago. Fellowship Director Vittorio Maio, PharmD, MSPH, MS, presented graduation certificates to the three graduating Fellows (Joshua Gagne, PharmD, Madhu Singh, MD, and Amy Talati, PharmD) in recognition of their completion of two years of rigorous training.
Nowhere is the movement of consumerism in health care more obvious than the myriad of medical websites offering a broad range of information and services. Revolution Health Group is a relatively new consumer-centric health company whose primary service is a free online medical resource center designed to help consumers manage their health needs. Grounded in evidence-based medicine, Revolution Health emphasizes consumer empowerment, informed decision-making and personalized care. The board and staff of Revolution Health represent an impressive cross-disciplinary team whose expertise includes consumer marketing, healthcare, and information technology.

Jeff Gruen, MD, MBA, Chief Medical Officer of Revolution Health Group, explained how the notion of consumerism was the driving force behind the development of this innovative company. Consumerism, in general, fits within the trend of the current world economy and the changing nature of work. Healthcare mimics other industries, and change can occur if tools and strategies are changed, and consumers are galvanized. Gruen described how consumers are not engaged and may even be actively disengaged in their care. Often, consumers feel what Gruen identifies as “superficial attention.” Gruen asks that we think about the connectedness that an individual needs to feel this need, which is essential in any healthcare encounter. Related to this, providers have the opportunity to look at consumer dissatisfaction and create opportunities to become re-enfranchised.

Revolution Health identifies women between the ages of 30-55 as the critical consumer audience to reach in accessing services and implementing change. Recently, Revolution Health teamed with Columbia University Medical Center to launch a new internet destination for maternal fetal health. Faculty of the Columbia OB/GYN department function as an expert resource in providing content and identifying ongoing information related to maternal health. Additionally, the faculty will participate in weekly blogs to assist women in understanding information and new choices affected by the advances in maternal fetal health technology.

To learn more about the Revolution Health Group visit: http://www.revolutionhealth.com/.

To access a podcast of the Revolution Health Group meeting visit: http://www.jefferson.edu/dhp/education_pp.cfm.

HEALTH POLICY FORUM: FALL 2007

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 12, 2007
Household Survey and Consumer Driven Health Care
Cindy Fillman
Director, Office of Consumer Liaison
Commonwealth of Pennsylvania

October 10, 2007
Pharmaceutical Management Program & Business Strategy with Science and Technology
Kevin Caviston
Director, Drexel MBA Pharmaceutical Management
Drexel University

November 7, 2007
Medication Therapy
Management and Pharmacy Quality Measurement
Dave Domann, MS, RPh
Senior Director, Healthcare Quality Management
Ortho-McNeil Janssen Scientific Affairs, LLC

December 12, 2007
PA Budget and Healthcare
Lawrence M. Clark, Esq
Director of Legislative Affairs
Governor's Office of Healthcare Reform
Commonwealth of PA

Department of Health Policy Presentations


