Health care reform.
New measures of effectiveness.
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Dear Alumni and Friends of SHRS,

It is almost superfluous to note that nearly all segments of the health care industry will be confronted with challenges in the year ahead and perhaps well beyond. These challenges will also be shared by academic institutions – and particularly by those of us who are engaged in education and training for the health and rehabilitation professions.

At the time of this writing, the U.S. House and Senate have passed markedly different versions for a continuing resolution (CR) to fund the government for an additional period, and whatever emerges through reconciliation may still differ appreciably from the President’s budget with the possibility of veto. Although no one likely knows at this point what the eventual CR will provide in the way of appropriations, it seems certain that there will be significant budget reductions with still more and deeper cuts to follow for the 2012 budget. Yet, as you will see in our cover story, it is apparent that we also have been visited with opportunities. Despite budgetary actions with both adverse and unknown consequences, I believe that SHRS is appropriately positioned to perform effectively in our areas of responsibility. Still, the future is notoriously difficult to predict, and we must rely on agility, resourcefulness and resolve to sustain our academic, scholarly and professional performance as a school and community.

I would point to the fortuitous emergence of CER (Comparative Effectiveness Research) as a priority reflected in the Patient Protection and Affordable Care Act enacted in 2010 and to the diversity of SHRS funding sources. I would also note that we have enjoyed success in the recruitment of exceptionally talented students in all of our programs, including our newly established programs in Prosthetics and Orthotics and Physician Assistant Studies.

The next few weeks and months will be interesting. It seems unlikely that anyone can predict the full nature and extent of the impending changes. They will be considerable, but with resolve and initiative I am confident that we will survive and emerge stronger with a “healthier” and more efficient national health care system.

With kind regards,

Clifford E. Brubaker, Professor and Dean
cliffb@pitt.edu
In this issue of FACETS magazine, on pages 19 and 33, we highlight three very accomplished alumni of SHRS who have elected to establish endowed funds to support future students of the school. Each gave for very different and personal reasons, but the overarching theme that rang loud and clear was how each felt a desire – or perhaps a responsibility – to give back. The students at SHRS are quite fortunate to be the beneficiaries of such kindness and generosity!

Endowed funds establish a legacy for the donor within the University and SHRS. Endowed funds exist into perpetuity by retaining the investment and releasing the interest earned on the principal each year. Endowed funds require a minimum gift of $10,000, and this gift may be pledged and satisfied over a period of five years.

Donors may also choose to contribute “current use” gifts, gifts of any amount that are wholly available immediately to support a certain purpose or at the dean’s or department chair’s discretion. Current use gifts also include those made through the annual giving program or the university’s “telefund” drives.

Endowments and current use gifts can provide funds for tuition, books, lab fees, travel and other related expenses that today’s students face. Such funds can also be established to support faculty, research and general development of the school’s mission, to name a few options.

Denise Dunyak, David Perrin and Cindy Zak aren’t the only alumni who have established funds at SHRS over the years. A number of our alumni have named funds that produce scholarship awards each year. Countless other alumni choose to contribute generous amounts to already-existing funds or to the annual giving fund for specific academic programs or to be disbursed at the dean’s discretion. Still others have made arrangements to name the school in their wills or estate plans. However our alumni and donors choose to support SHRS, the University, school and our students are most appreciative of these efforts.

I’d welcome the opportunity to talk with you about any ideas you may have regarding philanthropy to support SHRS or your academic program. Or if you’d like more specific information about particular kinds of giving options – endowments, bequests, planned gifts, etc. – I’d be happy to provide that as well.

Sincerely,

Patty Kummick
Director of Development

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Health care policy is contentious. Experts disagree about almost everything, especially strategies to curtail the explosive costs of health care. Therefore, rehabilitation clinicians, providers and consumers – and their counterparts in other areas of health practice – are uncertain about future coverage and reimbursement policies. Can research make a contribution to the resolution of issues around health costs? Can it help to determine the best value treatment solutions? To explore these questions, we turned to Everette James, who was named associate vice chancellor for Health Policy and Planning at the University of Pittsburgh in the fall of 2010. James, a lawyer and former Pennsylvania Secretary of Health from 2008-2010, is responsible for advising the University and UPMC on health reform implementation, and leads the collaborative Comparative Effectiveness Research (CER) program which compares the clinical effectiveness of treatments and services with a goal of determining “what works best” to efficiently improve health outcomes.

When I served as Pennsylvania’s Secretary of Health, I was on the receiving end of the new health care law, the Patient Protection and Affordable Care Act. The states were given responsibility for implementing its early provisions, like setting up the high-risk pool and rewriting the insurance claims and appeals regulations. You get an appreciation of how tough it is to change a system that’s been in place for a long time and has so many entrenched interests.

The Act calls for research on new payment models and ways to make the health delivery system more efficient. At the state level, we examined the medical home, which utilized a team-based model of care that coordinates preventative and treatment services to keep patients as healthy as possible. We administered a medical home project for children with special needs that involved the rehab professions, and found this model to both improve outcomes and reduce hospitalizations. In the future, electronic medical records will greatly enhance the communication among health professions needed to make these models work.

The Act also established an ongoing national program in Comparative Effectiveness Research (CER). Here at the University of Pittsburgh, I’m working with all the health sciences schools and UPMC to participate in CER research. The “CER star” really began rising in 2009 when Congress allocated $1.1 billion to its implementation. The National Institutes of Health and the Agency for Healthcare Research and Quality are both involved in issuing calls for proposals and supporting research proposals to develop CER infrastructure and to conduct CER studies. The Institute of Medicine issued a report recommending a list of priority topics to be the initial focus of a new national investment in comparative effectiveness research. The report identified many areas of priority for CER of interest to rehabilitation researchers, from comparing treatments for hearing loss to low back pain to preventing fractures in older women.

One of my responsibilities is to make sure our researchers have the resources they need. Central to the conduct of CER is data. We are developing a data architecture that will allow researchers to access large data sets to make their research findings meaningful. There are hundreds of CER-like projects underway across the health sciences. These projects, which will generate evidence for cost-effective interventions, will benefit the rehabilitation consumer and clinician.

The Affordable Care Act clearly recognizes the role of rehab professionals and should include these services in the essential benefit package. Some of the innovations that will be tested by CER should support direct access to outpatient services and greater utilization of physical therapy and other rehab services. In turn, professionals will have greater independence to practice. Innovative rehab services within the CER model should also lead to cost-effective treatment and greater demand for rehab services. For clients, incentives for better care coordination and chronic disease management should keep them healthier.

The Act does intend to slow the growth of Medicare spending, so reimbursement will be a challenge. The value proposition offered by rehab and therapy should make up for those costs. For any health profession, representation through trade associations and staying abreast of policy is key. As the essential benefits are established by the Department of Health and Human Services, the agencies and lawmakers must be informed and understand the evidence base that supports the cost-effectiveness of rehab services.

Ultimately, CER should help us determine the most effective role for each profession in the health system. At the state level, we have found that practice acts are often behind what is actually happening in the field and that, at a minimum, they should reflect the current delivery system. Scope of practice changes must account for the modern team-based approach to care, training, workforce supply, reimbursement and patient safety. The issue is not who should be the gatekeeper, but what’s in the best interest of the patient. CER, scope of practice, electronic medical health records and models such as the medical home — each holds great promise to make the health system more patient-centered and cost-efficient.
Faculty News

Health Information Management

Dr. Mervat Abdelhak, chair and associate professor, recognized internationally as a leader in HIM education, presented “Computational Thinking and Genomics: Emerging Topics in Health Information Management Education” at the International Federation of Health Records Organizations (IFHRO), Milan, Italy, November 15-19, 2010. She presented “The Health Information Management (HIM) Workforce: A Case for Health Information Management Education” at the e-HIM Conference, King Fahad Medical Center (KFMC), Riyadh, Saudi Arabia, November 27-28, 2010; and “Preparing Health Information Management Professionals: Innovative Strategies for Workforce Development” and “Graduate Studies in Health Information Management: University of Pittsburgh” December 5-7, 2010, at the World Health Care Congress Middle East (WHCC ME), Abu Dhabi, United Arab Emirates.

Abdelhak also serves as a consultant to the College of Public Health & Health Informatics, King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia.

Dr. Leming Zhou, assistant professor, Mervat Abdelhak, chair and associate professor, and Qi Mi, assistant professor, PI and Co-PIs on the C-PATH Project, were selected to receive funding to attend the Computing Education for the 21st Century (CE21) Community Meeting in collaboration with the National Center for Women and Information Technology (NCWIT).

Dr. Zhou will also be presenting two posters entitled “Mechanisms of Spliceosomal Intron Gain and Loss: An Investigation and Review using 12 Drosophila Species” and “Exploring Genome Organization and Chromatin Structure in Drosophila, a Distributed Undergraduate Research Project” at the 52nd Annual Drosophila Research Conference (The Genetics Society of America), San Diego, CA, March 30-April 3, 2011.

Dr. Sajeesh Kumar, assistant professor, received the Asia-ARVO/NEI U.S. travel grant to support his attendance and presentation “Smartphone in Ophthalmology Practice: Teleophthalmology Assessment of Diabetic Retinopathy Fundus Images – Smartphone Handset vs. a Standard Office Computer Workstation” at the 2011 Asia-ARVO meeting in Singapore, January 20-22, 2011.

Rebecca Harmon, assistant professor, presented on the “Health IT Workforce Programs” at WPHIMA’s CDI Symposium, Sayre, PA on March 25, 2011.

Occupational Therapy

Dr. Mary Lou Leibold, assistant professor, received the 2010 Academic Educator Award of the Pennsylvania Occupational Therapy Association.

This honor recognizes her excellence in transitioning students from classroom to clinic.

Dr. Denise Chisholm, associate professor, received the 2010 President’s Award of the Pennsylvania Occupational Therapy Association (POTA). This honor recognizes her exceptional commitment and faithful service to the POTA.

Dr. Elizabeth Skidmore, assistant professor, received the UPMC Clinical Connections Clinical Excellence Award in grateful appreciation and distinguished recognition of her hard work, devotion and commitment to excellence.

Skidmore also received the Best Poster Award (2nd place) at the Neuropsychological Rehabilitation Special Interest Group of the World Federation of NeuroRehabilitation.

Dr. Ketki Raina, assistant professor, was selected to serve on the Roster of Accreditation Evaluators for the Accreditation Council for Occupational Therapy Education (ACOTE).

Dr. Nancy Baker, associate professor, was an invited panelist at the Experts in Arthritis panel “Clinical and Research Updates on Rheumatoid Arthritis” sponsored by the United States Bone and Joint Decade and the American College of Rheumatology.

Baker also presented research papers at the following conferences: the Seventh International Scientific Conference on Prevention of Work-Related Musculoskeletal Disorders PREMUS 2010, the Human Factors and Ergonomics Society 54th Annual Meeting, and the American College of Rheumatology/Association of Rheumatology Health Professionals Annual Scientific Conference.
Physical Therapy

Dr. G. Kelley Fitzgerald, associate professor, received as principal investigator a four-year $1.41 million grant from the Agency for Healthcare Research and Quality for a multi-clinical trial titled “Enhancing Effectiveness of Physical Therapy for People with Knee Osteoarthritis.” The project will examine the clinical- and cost-effectiveness of utilizing booster sessions in the delivery of exercise therapy, and supplementing exercise therapy with manual therapy techniques in people with knee OA. The funding was received on a first submission, noteworthy for RO1 funding.

Rehabilitation Science and Technology

Dr. Ashli Molinero, assistant professor, was elected to the board of directors of the SBAWP (Spina Bifida Association of Western Pennsylvania) Housing, Inc.

Dr. Katherine Seelman, associate dean of Disability Programs and professor, was the recipient of ACHIEVA’s 2010 Professional Service Award. She was also invited to serve on the Advisory Board for the Center for the Study of Chronic Illness and Disability, George Mason University.

Seelman also served on panels addressing Innovation and Robotics: The Future of Assistive Technology, and R&D in Accessible ICT/Adaptive Technology in Washington, DC, this past November. She also served as faculty at the 2011 NIH-sponsored ERRIS Intensive Workshop on Grant Writing, Preparation and Submission in Rehabilitation Research in January at the University of Va.

Sports Medicine and Nutrition

Judy Dodd, assistant professor, received the National Friend of Extension Award during the National Epsilon Sigma Phi Annual Meeting in Jackson Hole, WY. The award is the highest honor presented by ESP to an individual and is designed to recognize outstanding support and personal involvement in Cooperative Extension efforts.
Messages from Amman

Dr. Margo Holm, professor and director of Post-Professional Education, Department of Occupational Therapy, enjoyed the distinct honor of serving as a Fulbright Scholar at the University of Jordan in Amman, Jordan, during the Fall 2010 semester. Part of her responsibilities included developing a rehabilitation science educational and research program, and consulting with faculty on curriculum development. She found the experience to be personally gratifying, culturally enriching and professionally rewarding. Excerpts from her missives home are recapped here.

Personal Reflections

Jordanian and Muslim societies are based on relationships, and all those I met extended friendship and hospitality to me.

My colleagues have been taking good care of me. Razan took me shopping for housewares and groceries; Somaya helped me look for printers, cables and a larger monitor; and Sana took me through the administrative maze at the University and helped me buy a phone.

I have been invited to meet the families, some of whom I met in the States when they came to visit.

Cultural Reflections

I immersed myself in Islamic customs, music, food, family gatherings, as well as Biblical and Islamic sites and antiquities.

After religion, family and personal relationships are the most important aspect of life in Jordan. It permeates all aspects of daily life here, as well as business and society. All of my colleagues and their families have been very inclusive... I have celebrated engagements, marriages, the births of children, religious holidays and my own birthday with people I now consider dear friends.

The past two weeks have been a real paradigm shift: from the church bells in Pittsburgh to the Calls to Prayer (five times a day) in Amman.

Because it is Ramadan (time of fasting, reflection and repentance), most of the Arabic-speaking channels feature Imans lecturing from the Qu’ran, or scenes from Mecca. As a Fulbright Scholar, I am required to respect the practices of my host country, and during Ramadan, I am not allowed to eat or drink in public from sunrise to sundown.

I will also enjoy Eid, which is the four days of feasting after Ramadan.
Most of last week was spent setting up the infrastructure for the faculty research projects. Because there are few standardized OT assessments in Arabic, that will be the initial thrust, along with the validity and reliability studies.

I gave a lecture at the Jordan University of Science and Technology (JUST) in Irbid, Jordan, to the Department of Occupational Therapy faculty, teaching assistants and students on “Generating Evidence Collaboratively.” I described the research collaboration projects that the University of Pittsburgh Department of Occupational Therapy has with 18 departments, programs and centers, providing examples that they might wish to consider as future practitioners and as faculty researchers. I then consulted with the faculty on their research agendas, as well as issues related to the teaching of clinical reasoning.

My colleagues and I are in the process of translating the Activity Card Sort (ACS) for adults and for preschool children. We are also working on nominating Middle Eastern relevant items for the PASS tool, and working with two practitioners on translating the Pittsburgh Rehabilitation Participation Scale (Lenze, Rogers et al.).

The 24 manuscripts on the OT faculty research agenda have now increased to 26! Sixteen are in translation or pilot data collection phases, and we are making good progress.

Razan and her husband took me on a tour of Amman through several of the seven hills to the Roman amphitheatre ruins in the center of the city, and to the Anman Citadel, with artifacts and ruins that pre-date AD times.

Professional Reflections
All rehabilitation professions are young in Jordan and the Middle East, so the research undertaken by my Jordanian colleagues was seminal in nature – consistent with being future leaders of occupational therapy in Jordan and the Middle East.
Alumni News

A group of 200 alumni, faculty, staff and friends of SHRS gathered for an afternoon reception and Pitt men’s basketball game at CONSOL Energy Center on December 2, 2010. As hard as the SHRS crowd cheered with the other Pitt fans, we could not bring about a victory for the home team. But it was good to see so many of “our family” gathered for a fun-filled day. Amy Aggelou (AT ’94) and her husband Sotiris were joined by their two daughters, Anastasia and Iliana, who hammed it up with the Pitt cheerleaders!

Emergency Medicine

Dr. Walt Stoy, program director and professor, gathered with alumni while in Saudi Arabia recently.

Health Information Management

Laura Rizzo (HIM ’82) served as president of the Central Pennsylvania Health Information Management Association and president-elect of the Pennsylvania Health Information Management Association for 2010-2011. She also completed her Master’s in Health Administration at Penn State University in 2003. She serves as the director of HIM for Lancaster General Health, Lancaster, Pa.

Occupational Therapy

While at the University of Jordan in Amman on a Fulbright Scholarship to their Department of Occupational Therapy, Dr. Margo Holm, professor, interacted with SHRS alumni who are now members of the Faculty of Rehabilitation Sciences at the university.

From left are Somaya Malkawi (OT ’06), Nihad Alnasri (PT ’06), Dr. Sana Abu Dahab (OT ’05, PhD ’08), Dr. Razan Hamed (OT ’05, PhD ’08), Dr. Holm and Ahmad Fannoon (OT ’08).

Nancy Dubuar (OT ’07) was accepted into The American Occupational Therapy Association’s Emerging Leaders Development Program.

Rehabilitation Science and Technology

Dr. Kate Seelman, associate dean of Disabilities Programs, professor, Department of Rehabilitation Science and Technology, and keynote speaker, joined SHRS alumni Dr. Jong Bae Kim (REHSCI ’05) and Dr. Jue Wang (REHSCI ’00), research presenters, at the International Symposium on Rehabilitation, Seoul, Korea. Kim and Wang are among a number of SHRS alumni who are emerging as leaders with prestigious positions in research and education in their own countries (Korea and China, respectively).
Richard W. Bowling
September 10, 1943 – December 8, 2010

The SHRS family extends condolences to the family of Richard Bowling, 67, upon his passing this past December. Mr. Bowling received his Bachelor of Science degrees in biological sciences from Kent State University, where he was also a varsity football letterman. He went on to earn a certificate in physical therapy at the D.T. Watson School of Physiatrics, and then earned a Master’s degree in Science with an emphasis in orthopaedic physical therapy education from the School of Health Related Professions. His career included serving as chief executive officer of and partner in Centers for Rehab Services, formerly CORE Network, and president of Rehab Management Associates of Pittsburgh, Inc. and Forest Hills Orthopaedic and Sports Physical Therapy Associates, Inc., and vice president of Keystone Rehabilitation Systems in Indiana, PA.

From 1981 to 1993, Mr. Bowling was an assistant professor at SHRS. Along with Dr. Rosemary Scully and Paul Rockar, he developed and expanded the orthopaedic physical therapy track at SHRS. His honors and awards include an honorary fellowship to the American Academy of Orthopaedic Manual Physical Therapists in 2002, the Rose Excellence in Research Award in 1994, the SHRS Distinguished Alumni Award in 2005, and the Bowling-Erhard Orthopedic Clinical Practice Award in 2007. He was a member of the American Physical Therapy Association Sections on Orthopaedics and Sports Medicine, and was past chairman of the Pittsburgh Regional Orthopaedic Physical Therapy Study Group. He was published in journals and textbooks, and had numerous scientific and professional presentations to his credit.

Along with the late Dr. Richard E. Erhard, Bowling was widely recognized for his groundbreaking research in low back pain, and he was instrumental in developing a highly accurate classification system for low back pain patients.

The SHRS family extends heartfelt sympathy to Mr. Bowling’s wife Joyce, daughter Lisa (husband James Prince) and son Bryan.

Ping Ren (HIM ’09, HIS ’10) was a recipient of the 2010 AHIMA Foundation Graduate Merit Scholarship, presented to graduate students who demonstrate academic achievement and commitment to the field of health information management.

Rachael Simon, MOT student, was selected for a Jonas Salk Fellowship sponsored by the Jewish Healthcare Foundation, Health Careers Futures, and the University of Pittsburgh Center for Bioethics and Health Law.

Young Joo (Kevin) Kim, doctoral candidate, received an SHRS Research Development Fund grant for his dissertation study titled “Functional Outcomes II.” This study will examine the effectiveness of the Maximizing Energy intervention on reducing fatigue in post–cardiac arrest adults.

Ashleigh Altmeyer, MOT student, received a Scholarship for Disadvantaged Students award. This award is funded by the Department of Health and Human Services Health Resources and Services Administration and is awarded through SHRS.


The department received a four-year $1.18 million grant award for “REACH for Children: Research and Education to Aid Communication Health in Children” from the U.S. Department of Education Office of Special Education and Rehabilitative Services. Among other things, the award will provide one full year of funding to outstanding students recruited into the AuD, MA-SLP and CScD programs with a desire to dedicate themselves professionally to providing IDEA 2004-related services to children in high-need local education agencies or otherwise at risk due to poverty, homelessness or incarceration. Dr. Debbie Moncrieff, assistant professor, is the project director.
Dave Jedlicka, AuD (’10), considers it an honor to serve the men and women who once served our country, but who are now patients at the VA Pittsburgh Healthcare System.
As a staff audiologist, Jedlicka is deeply immersed in the hearing problems of returning veterans. While he routinely performs hearing and balance tests and conducts fittings for hearing devices, he also utilizes many new technologies that improve the quality of life for his patients.

Helping patients achieve the goals they set makes his work richly rewarding.

“New technologies built into hearing aids provide a wider range of sounds for the users,” comments Jedlicka. “And now, there are assistive technologies like FM system devices that can be worn around the neck. The device reduces background noise and allows patients who might not otherwise be able to distinguish sounds to hear much better.”

Today, hearing problems are no longer associated only with older veterans.

“Five years ago, most of the vets with hearing problems were 65 years of age or older,” Jedlicka observes. “Today, we see more and more young veterans returning from Iraq and Afghanistan – men and women under the age of 40 – who experienced hearing loss due to IED explosions and other ground combat hazards.”

In many cases, their hearing problems present differently than those of the older population. Jedlicka says, “A lot of the younger veterans are experiencing Auditory Processing Disorders (APD). They have different levels of brain function. Some have trouble with patterning and they can’t differentiate pitches. These issues cause feelings of isolation, and lead to difficulty in communicating.”

According to Jedlicka, APD is a controversial subject. “Many people diagnosed with APD also suffer from attention disorders and conditions that result from being in so many stressful situations. Many audiologists believe they should be treated for the other disorders first.”

The VA Pittsburgh is one of the few centers in the country focusing on adult-related APD. Jedlicka and his team have started a pilot study with veterans who are failing the APD testing battery to determine what may be the cause and what treatments may be beneficial for the veterans.

He also utilizes computer-based tools, such as LACE® listening software, that provide auditory therapy – much like PT for auditory problems.

As an undergraduate student in 2001, (Dave) was one of the founders of the “Oakland Zoo.”

Jedlicka likes the fact that returning veterans are now treated by a wide range of health care specialists. Many physicians and other clinicians work at both UPMC and the VA. As a team of psychologists, auditory specialists, occupational and physical therapists, they share knowledge and find better ways to treat patients.

“We’re not just thinking audiology 24/7, but we consider other problems and aspects of patient care. We try to better assess patient goals, and determine how we can collaborate to meet them,” explains Jedlicka.

The audiologist stays involved with the University of Pittsburgh on many levels. As an undergraduate student in 2001, he was one of the founders of the “Oakland Zoo,” and continues to advise student leaders in their efforts to spread pride in Panther basketball and create a better organization.

On a professional level, he serves as a supervisor of AuD graduate students during their clinical experiences at the VA. He also attends conferences and other educational programs that allow him to touch base with former professors and classmates.

“Dave Jedlicka’s enthusiasm for the field of audiology and his commitment to use the current evidence base to ensure the best possible care for his patients were motivating for his classmates, and are now motivating for his colleagues,” says Dr. Catherine Palmer, associate professor, Department of Communication Science and Disorders. “We are very proud to call Dave one of our own. I enjoy being his colleague just as much as I enjoyed having him in our program.”

In his spare time, Jedlicka is pursuing a degree in history from Pitt. “It’s been a long-time passion of mine,” smiles Jedlicka. “I often joke with my patients that I’m able to have free history lessons every day at work because all of my patients provide their own perspective on world events.”
COUNSELING
FUTURE REHABILITATION COUNSELORS

“Never be afraid to ask questions.”
That’s solid advice from any instructor to her students.

In this case, the instructor is Ashley McFall, transition coordinator for the Start on Success program at Pittsburgh Public Schools (PPS), and the students are highly trained rehabilitation counselors who are completing a required internship during the final semester of their graduate program.
Sara Beth Probst (HRS ‘10) completed her internship with McFall on the Start on Success program, a three-year transition program for students with disabilities that integrates both classroom and community-based work experiences.

Now transition coordinator at Pittsburgh Oliver High School, Probst touts the value of that experience. “It taught me so much about myself as a counselor and my counseling skills,” admits Probst. “It helped me grow more confident, and gave me the opportunity to assess the manner in which I approached different topics with my client. I was always able to discuss the situations with my supervisors and gain valuable insight from them.”

Michelle L. Sporner, instructor in the Department of Rehabilitation Science and Technology, gives high praise to both McFall and Evans for their personal involvement with SHRS interns. “They take the time to get to know each student and to identify their interests and their abilities,” acknowledges Sporner. “They allow the students to develop activities and programming that complement their backgrounds. In the past I’ve seen them let our students take ownership of many of the projects that have, in turn, expanded the programs offered at Pittsburgh Public Schools.”

Crystal Evans, transition facilitator for the district, oversees all rehabilitation counselors and transition programs in the Pittsburgh Public Schools. She believes the internship provides a well-rounded experience for SHRS students.”

“During their 600 hours of time with us, interns gain a better understanding of the full range of disabilities, from learning disabilities to autism to intellectual disabilities and mental health disorders,” observes Evans. “They also learn a great deal about the laws and regulations that govern this field, and the many services that are available through the school system.”

Under the mentorship of McFall and Evans, interns are exposed to the many services available for students at PPS, both in the classroom and through various district programs. Interns complete student assessments, advise on personal and school-related issues, participate in IEP meetings, help students search for jobs, and prepare them for life after high school.
Effectiveness and health care reform: How do you get there from here?

Since the Patient Protection and Affordable Care Act was signed into law in March 2010, the controversy has not ended. But in spite of a year of divisiveness in Congress, at least one word in the hefty, 2,000-page document has been championed by the vast majority of stakeholders. It’s a word that presents a challenge. And a promise. Effectiveness.

In an effort to make health care more effective, the new law provides for changes in health care delivery methods, new definitions of scopes of practice, and an increase in comparative effectiveness research (CER).

At SHRS, we are taking an in-depth look at what current legislation means to us, and how it will impact our research and the training of future health care clinicians.

What is CER?

Everette James, University of Pittsburgh associate vice chancellor for Health Policy and Planning, defines CER as “research that compares the benefits and harms of alternative methods to prevent, diagnose or treat a clinical condition.”
According to the Agency for Healthcare Research and Quality (AHRQ), an arm of the U.S. Department of Health and Human Services, CER researchers may conduct research reviews of existing evidence, or they may generate new evidence of effectiveness based on tests, treatments, procedures or other health care services.

James further explains, “In the purest form, CER asks one or both of the following questions with respect to the effectiveness of a treatment: When comparing interventions, is there a clear ‘best practice,’ and Does the more effective intervention significantly improve outcomes and lower the cost of care?”

The Institute of Medicine describes six characteristics of classic CER:

1. Directly informs a specific clinical decision from the patient perspective or health policy decision from the population perspective.
2. Compares at least two alternative interventions, each with potential to be “best practices.”
3. Describes results at the population and subgroup levels.
4. Measures outcomes – both benefit and harm – important to patients.
5. Utilizes methods and data sources appropriate for the decision.
6. Conducted in settings similar to those in which intervention will be used in practice.

Dr. Clifford E. Brubaker, professor and dean of the School of Health and Rehabilitation Sciences, notes, “CER offers an opportunity for SHRS to compare alternative methods for health care practices in areas that many of our faculty already have particular expertise.”

**But will the research be funded?**

As of February 7, Brubaker reported the net research funding awarded to SHRS faculty investigators for fiscal year 2011 stood at $18.8 million. This is a net increase in research funding of $4.3 million over the total for fiscal year 2010. At the current pace, with five months remaining in fiscal year 2011 and with several large grant applications in review, he predicts the total funding for SHRS research awarded for the year will reach or exceed $20 million.
“2012 is by all estimates and projections expected to be much more difficult in nearly all respects,” claims Brubaker. “Stimulus funding is over, and the current legislation poses obvious reasons for concern. The budget deficit and the changes subsequent to the mid-term elections would appear to pose additional pressure on federal appropriations for research.

“The National Institutes of Health (NIH) have historically been the primary source of funding for health science research, and success in NIH funding has been the recognized metric for institutional research excellence. While this is unlikely to change, diversity in sources of funding is clearly desirable in the current climate.”

In January 2011, in an effort to identify potential funders, James inventoried all the University Health Sciences schools and tallied 132 projects that met at least three of the six characteristics for CER.

“The goal of this inventory was to come up with a short list of CER that establishes our expertise and interest to be presented to federal agencies, the Patient-Centered Outcomes Research Institute and other potential funders of this important work,” says James.

Although funding varies among sources from year to year, Brubaker sees potential for increased funding from certain organizations, including the Department of Defense (DoD).

Case in point: Funding from the DoD, primarily for research on “Injury Prevention and Performance Optimization” for Special Operations Commands – Army Special Operations and Naval Special Warfare (SEALs), totaled 12.2 percent of total grant funding at SHRS in 2010, but grew to 30.7 percent during 2011.

**CER and SHRS.**

Recently, the DoD funded a new CER project that is being conducted by Dr. Ketki D. Raina, assistant professor, Department of Occupational Therapy. The study compares a novel intervention for maximizing energy after traumatic brain injury (TBI) to traditional clinical interventions.

The new intervention, known as the Maximizing Energy (MAX) intervention, is unique because no study to date has examined the effectiveness of non-pharmacological interventions for the treatment of post-TBI fatigue. During the two-year clinical trial, MAX will be compared to the traditional intervention of health education for increasing participation in everyday life, reducing work disability and decreasing the impact and severity of post-TBI fatigue.

Professor Anthony Delitto, associate dean of research at SHRS and chair of the Department of Physical Therapy, believes that CER is a necessary and important component of health care reform.

“No matter whether the Affordable Care Act is amended or not, comparative effectiveness research is something we absolutely need as we move forward,” proclaims Delitto. “It gives us the ability to manage issues that are currently very costly.

“Right now, there are many therapies out there for any given condition. It’s in the best interests of the health care industry to compare and create documentation that validates which are the most effective.”

Dr. Nancy A. Baker, associate professor, Department of Occupational Therapy, explains a current CER study that examines workplace behavior. The research, being conducted over a three-year period, will determine the effect of alternative keyboards on musculoskeletal symptoms.

“Conventional wisdom is that the alternative keyboard reduces musculoskeletal symptoms during typing more than the conventional keyboard by changing risky postures of the wrists and hands so that there is less stress on the joints,” explains Baker.

“What makes this study of additional interest is that we will complete subgroup analyses to determine several factors. We will weigh: 1) if the risky postures during typing are in fact reduced by the alternative keyboard; 2) if those reductions are associated with reduced musculoskeletal symptoms; and 3) for those people for whom the alternative keyboard does not work – and anecdotal evidence suggests this is so, although we have not fully analyzed the data – what subject characteristics seem to be associated with the failure of the alternative keyboard to reduce the symptoms.”
“The thrust today is centered around the patient,” claims Professor Joan C. Rogers, chair, Department of Occupational Therapy. “So the MAX fatigue study, for example, uses self-reporting measures. In the end, it’s important that the patient feels better after the intervention – that he or she is able to participate in everyday activities without pain.”

Delitto agrees that patient-centered care is at the heart of CER. “Patients need to know their options for health care in much the same way they know their options when it comes to buying any other product or service in the marketplace,” says he.

“Unfortunately, patients are not always totally informed about different treatments or therapies. CER will help by providing more opportunities for patient education. As patients learn more about the pros and cons of certain therapies, they can make informed decisions and ultimately feel like they have received the most effective treatment.”

adding value.

Delitto asserts that the new Affordable Care Act demands not only effectiveness, but also “value.”

“Value in this context means the highest-quality health care, delivered in the most affordable way,” explains Delitto. “For many years, health care providers were rewarded for doing more – more visits and more tests. Under the health care reform bill, it is clear that incentives will come from doing the right thing for the patient.”

Reimbursement methods will change. So will delivery of care.

Delitto predicts that health care providers will adopt a case management philosophy that will lead to more efficient – and effective – care.

measuring outcomes.

“As a result of the new health care legislation, we’re changing how we measure patient outcomes,” observes Rogers. “Here’s an example. At one time, treatment would be considered successful if a patient had a five-degree increase in range of arm motion. But today we realize that if the patient still can’t reach her kitchen cupboard, then the treatment was not successful at all.”

Dr. Deborah A. Opacic, assistant professor and director of the Physician Assistant Studies program, believes that outcomes can also be measured by access – and this will lead to cost efficiencies.

“Physician assistants play a major role in increasing patient access to care,” Opacic declares. “If the current legislation remains in place, there will be additional funding to put more PAs in clinics, private practices and nursing facilities.”

The scope of practice for physician assistants has expanded over the past decade, allowing them to take on more responsibilities of patient care.

“With health care reform, more institutions will want to support PA practices because we can assist with preventive health care,” she continues. “Naturally, better preventive care will eventually lead to lower health care costs.”

In the end, will health care reform actually result in lower health care costs?

Delitto admits that it may, if health care providers themselves seek out affordable solutions. “We need to assess the status quo. For example, in physical therapy, do MRIs, CAT scans and other diagnostics guide patient treatment that well? Comparative effectiveness research can help us make that determination, and perhaps point us to more effective, less costly protocols.”

Brubaker concurs. “I believe that there is indeed great potential for CER to have an impact on cost-effectiveness. However, realization of cost savings will depend heavily upon the willingness to utilize these research findings, and the willingness of health care professionals – meaning caregivers, providers and payers alike – to accept a reduced compensation and ‘profit’.”

As health care reform continues to evolve, the discussion surrounding CER and the need for evidence-based, cost-effective care is bound to continue, among us at SHRS and other health care stakeholders.
Sports Medicine and Nutrition

Tara Farley, Deanna Wolfe and Joe Stanek, all first-year students in the coordinated Master’s degree program in Dietetics, wholeheartedly agree. Right now, as part of their Supervised Practice in the Community class, they’re working with six women who are training to walk in the Pittsburgh Half-Marathon on May 15, 2011.

Ranging in age from the late 40s to early 70s, the women are members of OASIS, a national education and service organization that seeks to inspire mature adults to engage in vibrant, healthy and productive lives.

SHRS students found the group to be highly motivated and open to suggestions about how nutrition can lead to lifestyle changes.

“It’s never too late to start paying attention to nutrition,” claims Farley. “We stress the fact that changes to your diet don’t have to be huge. Even something as simple as drinking more water can impact your energy levels.”

Wolfe adds that teaching the women how to fuel their bodies for exercise was first on their agenda. “We touched on adequate fluid intake, supplementation, pre-and post-exercise meals, along with examples of great recovery foods,” she explains. “We also talked about common problems, such as fatigue and muscle cramping, and how to combat those with proper nutrition.”

What drives an individual to lace up her shoes, get out the door and not come back till she’s logged more than 13 miles?

The variety of answers is as diverse as the athletes themselves. But whether they’re competing for the challenge, the exercise or the sheer joy of it, two things are clear.

When it comes to long-distance running and walking, age is not a factor. And proper nutrition is a must.
Registered Dietitian Judy Dodd, adjunct assistant professor, Department of Sports Medicine and Nutrition, notes that as her students share the concepts of health and nutrition with members of OASIS, they are experiencing firsthand the expanding role that dietitians can play in the community.

“The word of the day is ‘wellness,’ followed by ‘prevention’,” observes Dodd. “The registered dietitian has the background and training to move people on a wellness track. They can assess needs, personalize lifestyle perceptions and guide food choices, which is exactly what these students are doing with the women from OASIS.”

As part of their class requirements, students rotate through various community sites to experience the role of the dietitian at various life stages, from lactation through old age. At each rotation, they update Dodd and their classmates on the objectives they set for the group and the progress they make.

“They’re not only learning the current role of the registered dietitian,” stresses Dodd, “but also what the role of the registered dietitian could be. This is the emphasis of the coursework and the topic of their final project.”

Stanek adds that in working with the OASIS group, they’re starting slow and progressing toward larger changes and more difficult goals. “We set SMART (specific, measurable, attainable, realistic, timely) goals with the participants and coach and motivate them to achieve these goals.”

According to Farley, participants’ goals may range from walking a certain amount every day to eating more servings of vegetables daily to taking time out during hectic days to eat a healthy lunch. “We will help the participants break their goals down and find ways to achieve them,” she states.

“The best thing about this OASIS group is the desire to learn,” Stanek continues. “When Tara, Deanna and I are talking to them, it’s like watching a young child hooked to the television screen. They are just so interested in the information and in making changes.”

Dodd says the value of connecting students to community groups is a win-win. “The students bring enthusiasm along with their knowledge. The groups and sites come to us because they’re looking for education, but the energy that transfers from enthusiastic presenters is such a bonus.

“It’s a joy for me to be part of this process since I believe the community is where our practice needs to be.”

Farley interjects a personal note about her experience with OASIS. “I am so grateful for the opportunity to work with such an enthusiastic group. I am learning more from working with them than they probably know!”

Dr. David Perrin Creates Student Endowment

When asked what motivated him to create the David H. Perrin Student Award, the provost and executive vice chancellor at The University of North Carolina at Greensboro and professor in the Department of Kinesiology in the School of Health & Human Performance at UNCG, said it was simple.

“Alumni support is essential to help attract and retain the best students, and really makes the difference between good and great academic programs.”

“I have a special affection for the Pitt program,” continues Perrin, who served as director of undergraduate athletic training education at Pitt from 1979-1986. “And I am thrilled with the evolution of the program in the years since I left, with it moving to the School of Health and Rehabilitation Sciences, and developing its renowned graduate and research programs.”

When he left Pitt, Perrin embarked on an illustrious career at the University of Virginia (UVA), where he met Cliff Brubaker, current SHRS professor and dean.

“Dave was a ‘star’ from the moment he arrived at UVA,” recalls Brubaker. “His stellar performance resulted in multiple opportunities for him that eventually led to his acceptance of a decanal position at the University of North Carolina, where he subsequently advanced to his current position as provost.”

“I shall further note that Dave was advisor and mentor to Scott Lephart, chair of our Department of Sports Medicine and Nutrition, when Scott was a doctoral candidate at UVA.”

Perrin’s connection to Pittsburgh continues to this day. He serves as a valuable member on the school’s Board of Visitors, and his new endowment fund solidifies his legacy. It will help to educate graduate or undergraduate students who are enrolled in the Athletic Training or Sports Medicine programs in the Department of Sports Medicine and Nutrition.

“When the escalating costs of higher education, students can really use the financial help,” admits Perrin. “Hopefully, it will inspire these students to help others as well.”

“It would be most difficult to exaggerate the scope and relevance of Dave’s contributions to our School,” adds Brubaker.

“Pitt provided me the opportunity to earn a PhD in Exercise Physiology on a part-time basis over six years while serving as the athletic training curriculum director and a clinical athletic trainer,” observes Perrin. “The PhD prepared me to direct master’s and doctoral programs in athletic training and sports medicine, and to launch a research laboratory at the University of Virginia, where I served on the faculty for 15 years after leaving Pitt.”
In the highly acclaimed film, *The King’s Speech*, Golden Globe- and Academy Award-winning best actor Colin Firth makes the world painfully aware of the burdens and challenges faced by people who stutter.

As the stammering Bertie is transformed into his new role as King George VI, he not only finds his voice, he uses it to inspire and unite his British subjects at the onset of World War II.

Dr. J. Scott Yaruss, associate professor, Department of Communication Science and Disorders, touts the power of this movie. “*The King’s Speech* is not only a great story based on historical fact. It’s a great tribute to the relationships between people who stutter and their speech therapists.”

In the film, we learn that Bertie’s therapist, Lionel Logue (played by Geoffrey Rush), had no formal training. But through his work with men returning from war, he learned how to interact with people – to listen, to offer techniques that helped reduce their stammering somewhat, and to find their voice.

Graduate student Megan Pellek says this is exactly what Yaruss encourages his students to do.

According to Pellek, “The relationship between the two is important because the person who stutters needs to trust the therapist who is pushing them, even if the exercises are challenging or embarrassing.”

“There are two important issues that face all speech clinicians,” adds Yaruss. “They must have some sense of the immediate embarrassment and frustration felt by those who stutter, and they need to understand how to help their clients overcome their fears.
and shame. When people get to the point where they can tolerate their own speaking difficulties, they can find the tools to manage it.”

Yaruss illustrates his point by telling the story of his own grandfather who struggled with the burden of stuttering his entire life.

“At the age of 42, my grandfather was asked to deliver a eulogy for his best friend. Because he stuttered, people didn’t know if he could do it. But this speech was so important to him that he got through it, in much the same way the King did in the movie when he delivered the radio address to the British people. From that day on, although my grandfather continued to stutter, he did not let it interfere with his quality of life.”

This kind of breakthrough is the goal of every speech therapist.

“The issue is helping people say what they want to say when they want to say it – just like in The King’s Speech.”

Stuttering crosses all cultures, all ages and all times. It is even recorded in ancient Egyptian hieroglyphics, although only one percent of the population stutters. It is a highly variable, neurologic disorder with a strong genetic component. It also carries many social and psychological ramifications.

To help students further understand the implications of stuttering, Yaruss invites his students to meet regularly with members of the National Stuttering Association (NSA), the largest stuttering self-help group in the world.

Sara MacIntyre, a post-baccalaureate student and person who stutters, appreciates this connection. “Hands down, the NSA has helped me not only with my speech, but also in building self-confidence and in improving my public speaking abilities. It has also given me the tools to effectively express what it’s like to be a person who stutters to the people around me.”

“It is great to hear other people’s stories and how they overcame their demons. It is very inspiring,” adds graduate student Chris Constantinou. “It is also interesting how unique everyone’s experiences are. People who stutter deal with their disfluencies in their own way.”

To date, OASES has been translated into 15 languages and is being used around the world as a means of documenting treatment outcomes for people who stutter. New versions have recently been released for school-age children and teens.

Says Yaruss, “Stuttering is more than just stuttering.” Especially for the speaker. It’s the quality of life that’s important.”

For more information about stuttering, contact Dr. Yaruss at jsyaruss@pitt.edu, or the National Stuttering Association at www.WeStutter.org or 800-WeStutter (937-8888).
When you get Joe McLaughlin talking, it doesn’t take long to discover he’s deeply invested in what he calls his “encore career.”

In 2009, McLaughlin was named the first ambassador for the Quality of Life Technology Center Engineering Research Center (QoLT ERC), a unique partnership between the University of Pittsburgh’s Human Engineering Research Laboratory (HERL) and Carnegie Mellon University’s Robotics Institute.

Today, this retired physics teacher and four other ambassadors enthusiastically bring revolutionary technologies out of the research lab and into the community. Their primary goal is to engage students in grades K-12, and encourage them to consider careers that will improve the quality of life for people of all ages.

Case in point: McLaughlin recently introduced a pushrim-activated power-assist wheelchair (PAPAW) to high school students who were attending a National Engineering Week event at the Carnegie Science Center.

“It was a marvelous thing,” claims McLaughlin. “We showed a brief PowerPoint presentation, then invited the students to take a ride in the chair. They not only had fun, they were really impressed. It was a logical introduction to a conversation about careers in research and engineering. It was a very successful event.”

In addition to the PAPAW, students were able to see firsthand how a variety of assistive technologies help make life easier for people with disabilities.

Mary Goldberg, an education and outreach coordinator for QoLT, says ambassadors like McLaughlin are vital members of the QoLT team, showcasing technology efforts in a way that can be easily understood and appreciated.

“Joe is absolutely fascinated by the world of technology and, as a former science educator, really has a knack for translating the technical jargon and philosophies into layman’s terms,” adds Shelly Brown, also a QoLT education and outreach coordinator.

Goldberg notes that the ambassadors are out in the community nearly every month, hosting events such as a Job Shadowing Day for high school students and a Tech Night for Girls for middle school students. “They do a wonderful job, getting students excited about science and technology.”
While ambassadors themselves are never involved with research or the development of technology, there is a steep learning curve necessary before they go out to the public.

Each ambassador receives formal training that includes an overview of QoLT research projects, hands-on activities that illustrate the need for products that enhance quality of life, and tours of research facilities. After the training, ambassadors are equipped with a kit that includes handouts and activities that are appropriate for community events. McLaughlin says it’s still a thrill for him to meet with the researchers and gain insight into their work.

“Being an ambassador allows me to do so many of the things that I wanted to do but never had time for while I was teaching,” explains McLaughlin.

“When we talk about robotics, there is so much visualization involved and so many algorithms, it’s enormously difficult to comprehend. But for me to be able to take the mission of QoLT out into the community – to let young people know how science and technology can impact the quality of life for the elderly and people with disabilities – this is extremely satisfying to me.”

“‘There’s nothing quite like the QoLT Ambassadors Program anywhere in the country right now.’”

Goldberg says that ambassadors are also active in QoLT ERC’s collaboration with area Boy Scouts. “They’ve assisted with Engineering, Innovation and Disability Awareness merit badges, and have helped with disability awareness training for Scout leaders,” she notes.

Dr. Rory Cooper, chair and distinguished professor of the Department of Rehabilitation Science and Technology and co-director of QoLT ERC, says, “The QoLT Ambassador Program is an important development. Having volunteers committed to our programs to carry the message greatly extends our reach, and their message about our work is much more powerful than we could convey ourselves.”

“There’s nothing quite like the QoLT Ambassadors Program anywhere in the country right now,” admits McLaughlin. “It really is a premier model of education and outreach. I believe this is a mustard seed. It’s going to grow.”

If you are interested in becoming involved with the QoLT Ambassadors Program, please contact Mary Goldberg at mrh35@pitt.edu.

The power of the tweet.

The 140-character phrases of Twitter, coupled with messages on Facebook and YouTube, have gone a long way in helping the Rehabilitation Engineering Research Center on Wheelchair Transportation Safety (RERC WTS) share rich information with a broad but targeted audience.

Over the past 18 months, the center’s researchers have connected with colleagues in the rehabilitation sciences as well as manufacturers, suppliers, advocacy groups and end users.

“We found this is a highly effective way to disseminate information to all of our stakeholders,” attests Dr. Ashli Molinero, assistant professor, Department of Rehabilitation Science and Technology. “One little piece of information leads people to our website, and then hopefully the website becomes a resource for them.”

Information shared on social media sites includes wheelchair crash test videos, interviews with researchers, articles prepared for trade journals, the RERC WTS’s work in standards development, and listings of standards-compliant products.

As of the end of January 2011, 684 professional organizations follow RERC WTS on Twitter, including Disability.gov and the American Association of People with Disabilities (AADP).

According to Molinero, directly connecting to other disability organizations and end users via social media has the potential to be one of the best strategies for reaching large numbers of people with the RERC WTS information.

“We’ve established a schedule for releasing our information on Twitter and Facebook every Tuesday,” adds Molinero. “That’s because Disability.gov tweets about transportation issues for people with disabilities on that day of the week. By releasing our information the same day they do, we increase the chances of being retweeted to that organization’s 1,000+ followers.”

Social media will continue to be a strong component of the RERC WTS’s knowledge translation activities. Follow them on Twitter @RERCWTS, join them on Facebook at RERC on Wheelchair Transportation Safety, subscribe to their YouTube channel, RERCWTS, on www.YouTube.com or visit them at www.ercwts.org.
Dr. G. Kelley Fitzgerald, associate professor, Department of Physical Therapy, has a keen interest in arthritis. “If we live long enough, all of us will probably end up with some sort of arthritis,” admits Fitzgerald.
Over the past 12 years, Fitzgerald has conducted many studies that investigate ways to help relieve some of the discomfort from this pervasive disease. His work has been funded by organizations such as the Arthritis Foundation and the National Institute of Arthritis and Musculoskeletal and Skin Disorders, and the Foundation for Physical Therapy, Orthopaedic Section.

“Every time we conduct a study, we’re hoping the intervention will improve the patient’s condition,” claims Fitzgerald. “That’s the whole purpose of research.”

“But these days, we’re conducting comparative effectiveness research, which includes other considerations. We’re challenged to look at interventions that we know already work, and try to determine which of those are most effective from both a cost and clinical perspective.”

In his latest study, Fitzgerald and his team are comparing ways to enhance the effectiveness of physical therapy in people with knee osteoarthritis (OA). With funding from the Agency for Healthcare Research and Quality (AHRQ), the study will compare two interventions as well as two delivery methods.

The trials, which began in March, are being conducted in Pittsburgh, Salt Lake City, Utah, and San Antonio, Texas. Participants include individuals 40 years of age and older who suffer from knee OA, but have not had surgery and are not surgical candidates.

Participants were randomized into two groups. One group receives an exercise therapy program that builds strength and flexibility. The second group receives the same exercise therapy with the addition of manual therapy. As part of the manual therapy, the therapist uses hands-on techniques such as joint mobilization, soft tissue manipulations, manual traction and passive stretching.

“If the combination of exercise therapy and manual therapy is shown to improve the overall effectiveness of rehabilitation for reducing pain and disability, it may significantly delay or reduce the need for total knee arthroplastic surgery,” observes Fitzgerald. “It might also reduce the medication intake for the individual with knee OA.”

According to Fitzgerald, a unique aspect of this study is the delivery method.

Half of the patients in the study receive all of their therapy in the traditional time frame with 12 sessions delivered over nine weeks. The other half, known as the “booster” group, receive eight sessions in nine weeks, then follow-up sessions every three months for the next nine months.

“We know that the effects of physical therapy tend to diminish over time,” explains Fitzgerald. “So we thought it was important to look at the delivery model, and make changes to see if we could extend the positive effects of therapy over a longer period of time.”

Because cost-effectiveness is a key component of comparative effectiveness research, Fitzgerald will perform cost analyses of the two interventions and two delivery methods at one- and two-year intervals.

To determine the primary cost outcome, Fitzgerald will measure the health system costs for implementing each intervention, medical/surgical costs during that time period, and personal costs to participants in terms of travel, non-funded medications, time off work and quality-of-life burdens.

“It’s our hope that we will find an approach that provides the biggest effect for the longest period of time,” says Fitzgerald.

How will students benefit from the new research? Fitzgerald says they will immediately be in the information loop.

“Every week we present clinical rounds to our student body, so they are constantly aware of what type of research is being conducted here, and what types of interventions they may be using in the future,” Fitzgerald notes.

“Of course, as we gain more information, we continually change what we teach.

“In a program where there is a large amount of research being done, I believe we tend to turn out a higher caliber of student.”

With leading-edge research, dedicated professors and exceptional students, it’s easy to understand why the Physical Therapy Department at SHRS ranks second in the nation.
The American Stroke Association reports about 795,000 Americans sustain a new or recurrent stroke every year. While stroke is the third leading cause of death in the United States, claiming more than 137,000 lives annually, there are other casualties. Every year, hundreds of thousands of individuals who have a stroke must adjust to an entirely new way of living after this debilitating event. These individuals may sustain motor impairments, cognitive impairments or changes in mood.

Dr. Elizabeth Skidmore, associate professor in the Department of Occupational Therapy, recognizes the challenges stroke patients face as they attempt to recover from their stroke, particularly those for individuals with cognitive impairments. During her study, “Examining Neurobehavior and Disabilities After Stroke,” Skidmore noted that individuals with cognitive impairments and mood changes after stroke sustained more disability in terms of activities of daily living than individuals with motor impairments alone.

“There’s a lot of research addressing motor function and stroke,” claims Skidmore. “Because individuals with cognitive and mood impairments are not as responsive to traditional therapy, I wanted to develop an intervention that would close the gap and help lessen disability for these individuals.”

At a professional conference, Skidmore was introduced to an intervention originally developed by Canadian occupational therapy scientist Helene Polatajko for children with neurological problems, and adapted by another Canadian occupational therapy scientist, Deirdre R. Dawson, for adults with traumatic brain injury. Skidmore believed the Cognitive Orientation to daily Occupational Performance (CO-OP) intervention could be further adapted for use with adult stroke patients with cognitive deficits.
For the comparative study, stroke patients are divided into the CO-OP group and an attention control group. Individuals in both groups meet individually with occupational therapy personnel in addition to their usual inpatient therapy. Sessions are videotaped and reviewed regularly by Skidmore, Dawson and their students.

“In the attention control group, we discuss the rehabilitation process and provide support,” explains Skidmore. “In the CO-OP group, we focus on identifying and solving problems using strategies that will help our participants do the activities they want to do.”

Participants who use the CO-OP strategy increase their awareness of both their deficits and skills post stroke,” notes occupational therapist and doctoral student Emily Grattan. “They become deeply invested in the sessions because they have the opportunity to develop and work toward personal goals.”

Although the study is still in its first year, early results are promising. Skidmore notes that so far the individuals who received CO-OP have higher activities of daily living scores (indicating less disability) at discharge from inpatient rehabilitation as well as 12 weeks after stroke, compared to patients in the control group.

“We are gaining critical information that can be used to change the way we treat individuals with cognitive impairments after stroke,” explains Skidmore.

Grattan continues, “Another interesting thing we have seen is that participants not only carry over the CO-OP strategy and incorporate it into their daily routines, but they also take on a more vocal and active role in directing their rehabilitation.”

According to Skidmore, “The ability to do those activities that are personally meaningful should be the focus of rehabilitation for every individual.”

When new interventions are tested side by side with conventional therapies, there are victories for both patients and researchers.

“The collaboration between Dr. Skidmore and myself means better, more rigorous research as we share our personal expertise and the expertise at our respective centres,” adds Dawson. “As we investigate ways to improve every-day life for survivors of stroke and other forms of acquired brain injury, this also means our collaboration ultimately results in improved quality of life for these people – the ultimate goal of our shared collaboration.”
A VOICE in Washington: It’s one of our own

On January 1, 2011, Dr. Gregg Margolis accepted the position of director of the Division of Health Systems and Health Care Policy in the Office of the Assistant Secretary for Preparedness and Response in the U.S. Department of Health and Human Services. This appointment came on the heels of a prestigious one-year fellowship with the Robert Wood Johnson Health Policy Fellowships Program in Washington, DC, that set the stage for his current position. In his new role, Margolis will be formulating, analyzing and implementing various policy initiatives related to disaster and public health emergency preparedness, response and recovery, as well as for daily emergency care.
Margolis spoke to FACETS about his recent fellowship, his new position and the role of emergency medicine under the new Affordable Care Act. Dr. Walt Stoy, director of SHRS’s Emergency Medicine program, and Dr. Kelly B. Close, director of Emed Health, Center for Emergency Medicine of Western Pennsylvania, joined in the conversation.

FACETS: Dr. Margolis, as the first person with an emergency medical services background to become the Robert Wood Johnson Health Policy Fellow, you were “in the trenches” of health care reform during a significant period in history. Were there any moments that were particularly rewarding?

DR. MARGOLIS: It was a rollercoaster ride of emotions, from the highest highs to the lowest lows. There were times that it looked like the whole thing would fall apart and months and months of work would go down the drain. Of course, the culmination was President Obama signing the bill into law on March 23.

One of the most significant moments that I will always remember was the bipartisan meeting on health reform at the Blair House on February 25. The President hosted a seven-hour meeting on health care with congressional leaders. I was simply amazed at the depth of understanding about complex and nuanced health policy issues by everybody at the table. They really understood the issues in a way that transcended staff briefings and talking points. It was at that point that I fully appreciated how smart and dedicated most of our elected officials are. I often disagree with them, but I now realize how seriously they take their oaths of office.

FACETS: How do you see emergency medicine changing under the new Affordable Care Act?

DR. MARGOLIS: The Affordable Care Act will create a lot of opportunity for emergency care practitioners. There are a few direct references to emergency care in the law, especially in terms of regionalization, research, support for trauma systems, workforce issues and more. The larger impact will probably come indirectly. In particular, the decrease in the number of uninsured people should make it easier for patients to receive care before it becomes a full-blown emergency. For this reason, there is a big need for emergency care and primary care systems to be more integrated and coordinated.

DR. CLOSE: A few of the most promising aspects of the law potentially reduce avoidable emergency department visits, enhance social service support for 911 and emergency department patients, and/or provide greater tools for the ED physicians to discharge patients to their homes with additional community support.

DR. STOY: An example of community support is the Community Care Transitions Program, which goes into effect this year. It will help high-risk Medicare patients who are hospitalized avoid unnecessary readmissions by coordinating care and connecting patients to services in the community.

FACETS: Why do you think it’s vital to have an EMS person involved in national policy?

DR. MARGOLIS: Emergency care tends to be overlooked in many policy discussions because it is a relatively small part of a gigantic health care system. Despite its small size, quality emergency care is essential. It is a safety net that everybody assumes will exist in their moment of need. The quality, safety, readiness and resiliency of emergency care is a direct result of the local, state and federal policies that support that system. We have to get the policy right to make sure the system is strong every day in every community.

DR. STOY: With a person like Dr. Margolis working on policy issues in Washington, we hope that EMS and emergency medicine will receive the policy attention it deserves.

FACETS: How will health care reform impact SHRS’s current and future students?

DR. MARGOLIS: A broad-based education is the best way to prepare for success in a changing environment. I encourage students to look for mega trends and learn as much as they can in those areas. A few big areas of opportunity are in health information technology and the electronic health record, how to measure quality, improving patient safety, improving access to care, eliminating disparities of care and increasing care coordination.

DR. CLOSE: There are several avenues for enhanced EMS and ED research funding within the next five years through NIH, NCQA, AHRQ and CDC, as well as the workforce advisory committee, the trauma center state grant program and the state grants to regionalize systems of emergency care.

Margolis is a three-time alumnus of the University of Pittsburgh. He completed a Master’s of Science in Health Care Supervision and Management in 1994 through SHRS. In the late 1990s, he collaborated with Dr. Walt Stoy to develop the Emergency Medicine program at SHRS, and became a full-time faculty member in that program. He left the University in 2000, but continues to serve as an adjunct faculty member for the Emergency Medicine program.
behind the scenes before any NCAA Division I sporting event, the excitement is palpable. Dozens of coaches, athletic trainers, physicians and managers collaborate to bring out the best in their student athletes.

But there’s an additional surge in adrenaline every day for five athletic training students (ATSs) when they converge on the Petersen Events Center for their clinical rotation with the Pitt men’s and women’s basketball teams.

Michael Lawther, Dianna Kroft, Roxanne DeWalt, Heather Kisiel and Kristylyn Turkowski take great pride – and pleasure – in being part of two of the most dynamic teams in the Big East.

All five students admit that even though there’s a routine to every day, it’s far from boring.

Their typical day starts with morning classes. Around noon, the students head to the “Pete,” where they prepare the court with water, Gatorade, a first-aid kit/AED and a portable table that can be used for acute injury evaluation along with splints and crutches.

The next hour is dedicated to pre-practice treatments such as moist heat, ultrasound, electrical stimulation, laser therapy and stretching. They also assist in taping ankles or other various joints to assist in prevention of injuries.
While the players are on the court, the ATSs keep a constant eye out for injuries or complaints. After practice, rehab and post-practice treatments such as wrapping ice bags occur. The day ends with clean-up duty, then prepping for the following day and any upcoming games.

“Game days sometimes go as late as 11:30 at night,” notes Kroft, a junior ATS assigned to the men’s team. “But it’s great because every day we interact with the coaching staff, the team, the physicians and various employees at the Pete, including the business, compliance and media relations departments.”

“We learn what a fast-paced environment is like, and the high expectations of this particular sport,” chimes in Kisiel, senior ATS for the Lady Panthers.

Tony Salesi, athletic trainer for Pitt men’s basketball, says he and Ann Marie Porada, athletic trainer for the women’s team, try to make the student experience as rich and meaningful as possible.

“Our goal is to build on their classroom knowledge, and help them learn how to apply their skills in the training room setting,” claims Porada.

DeWalt, a junior ATS working with the men’s team, appreciates the hands-on approach. “There have been times when I’ve had to react immediately, which is something that can never be taught in the classroom. Those experiences are the ones that make a person stronger in their field.”

“At the end of the day, the athletes will respect you more if they know you have their best interests in mind.”

Opportunities to accompany student athletes to doctor’s appointments, or even observe surgery, add to the overall experience.

“It’s all about education,” remarks Salesi. “The more the students know about the athletes’ medical problems, the better they will be able to rehab them back to their optimum playing condition.”

According to Salesi, athletes come to rely on AT students for their competency and skill.

Lawther, senior ATS on the men’s team, says that confidence plays a big role.

“I make sure that I appear confident to my athletes. They need to trust my judgment and respect me as well as my capabilities to perform duties as an ATS. I keep a professional relationship with all my athletes, but maintain a welcome environment so that they feel comfortable coming to me with any issue.”

Kisiel agrees. “I feel that it is a very safe and trusting atmosphere for the team, and they continuously open up to us more and more as the season progresses.”

“At the end of the day, the athletes will respect you more if they know you have their best interests in mind,” adds Turkowski, a junior working with the women’s team. “Asking questions and keeping up with your athletes shows them you care.”

There’s a culture of collaboration and respect among the ATSs themselves, and between them and their mentors. “I keep the students involved by having them report to each other,” Porada notes.

Lawther explains further. “As the senior ATS on the men’s team, I serve as a leader and try to guide the juniors so that they can better themselves in the clinical setting. I must say, though, I can learn as much from them as they learn from me.”

The students call Salesi and Porada “great clinical instructors” who are “strong role models” and “a wealth of information.” After so many “assists” from these mentors, this class of ATSs can move forward into other clinical rotations or on to graduate programs, knowing they gained their training by working on a true Dream Team.
“I always tell my students, information is our middle name,” claims Dr. Mervat Abdelhak, associate professor and chair, Department of Health Information Management. “Today, the focus is not so much on technology, but rather on data – the rich information that technology allows us to collect – and how we use it.”

On February 23, 2011, Dr. David Blumenthal, the National Coordinator for Health Information Technology, delivered an online message to health care information professionals, citing this year as the “age of meaningful use of health information.”

Operating within the Office of the Secretary for the U.S. Department of Health and Human Services, the Office of the National Coordinator for Health Information Technology (ONC) serves as a nationwide resource to support the adoption of health information technology to improve health care.

According to Blumenthal, meaningful use should be viewed as a vision “for defining, encouraging and supporting the optimal use of information for patient care.”

Meghan Kelley (HIM ’07) sees firsthand how data can be utilized to improve the patient and family experience. Kelley is senior project coordinator at UPMC’s Innovation Center (IC), a unique applied research facility that works in close collaboration with several departments across the UPMC organization.

The IC utilizes a Patient and Family Centered Care (PFCC) Methodology and Practice that allows clinical caregivers to use data to make changes to their processes in order to create ideal patient and family care experiences, in turn improving quality, safety and patient satisfaction.

Kelley explains that some multi-disciplinary working groups utilize patient-completed Hospital Consumer Assessment of Healthcare Providers and Systems survey scores as a basis for initiating change.

“It’s all about improving the patient’s and family’s care experience by engaging them and viewing everything from their perspective,” she continues. “All the data we collect, whether it relates to the facility itself or the communication between the staff and the patient or even the clarity of the discharge instructions, drives us to make changes that impact the patient and family.”

Orthopaedic surgeon, Dr. Anthony DiGioia III, founder and medical director of the Orthopaedic Program and the IC at UPMC, explains the reason for the development of the PFCC Methodology and Practice.
“Artificial silos exist in the current health care delivery system that prevent us from delivering exceptional care experiences to everyone, all the time. This methodology cuts across departmental silos by changing how care is viewed and delivered. It’s a transformational approach. The key to making it work is requiring caregivers to view all care experiences through the eyes of the patients and families.”

In addition to improving patient satisfaction, data is being used to help assess and coordinate quality care, and to reduce costs.

Abdelhak says that many new tools are already available, and are being added to Electronic Health Records (EHRs) to help improve the quality of care while it is being delivered.

“Clinical decision support tools, for example, provide practitioners with computerized alerts and reminders about patient-specific information,” she points out. “There are other tools that improve care coordination and communication between various practitioners and patients, and others still that facilitate more accurate documentation and data collection.”

There is no doubt that the health care industry is committed to meaningful use.

In 2010, the ONC identified 17 communities across the United States as “Beacon Communities” to demonstrate how the meaningful use of EHRs and health information exchange can lead to improvements in health care quality, cost-effectiveness and care.

And in January 2011, as part of the Health Information Technology Economic and Clinical Health Act (HITECH), Medicare and Medicaid-eligible providers and hospitals registered for financial incentives for the adoption and implementation of certified EHR technology.

But in his address, Blumenthal notes, “the real significance of this moment might be easily overlooked. The age of meaningful use is only partly about the use of EHRs and the major financial incentives now available to support this. Even more, this new era creates opportunities to revolutionize the work of health professionals and health care institutions, and to make them and the health care system hugely more effective and efficient.”

Abdelhak concurs. “Meaningful use opens the door to include other stakeholders in the process of improving quality and reducing costs. It’s not just up to the physicians or the government agencies anymore. Employers and patients themselves must become more engaged.”

She foresees a time when a patient with a chronic illness such as heart disease or diabetes will log in to a secure system, record their day-to-day symptoms, and allow their clinicians access to these health journals. “Good data will help patients manage their diseases better, and help reduce costs.”

As health care systems move forward with the implementation of meaningful data, they will rely even more heavily on well-trained health information professionals.

“That is why we focus on giving students intelligent tools that can be used to improve clinical, financial and operational performance,” affirms Abdelhak.

“The Health Information Management program at SHRS prepared me extremely well for my work at the IC,” says Kelley. “The project management skills I learned and the IT knowledge that I gained there have really given me an edge in my career.”

HIM Students Benefit from Alumnae Gifts

Two graduates from the Department of Health Information Management seek to inspire current HIM students and help them complete their education through their generous financial support.

Denise Dunyak (’81), product marketing manager, HIM Solutions at Siemens Healthcare in Malvern, Pa., recently established the Denise A. Dunyak Student Award. She credits one of her former professors, Dr. Mark Dietz, RHIA, with encouraging her to give back. “I think that’s where my spirit of volunteerism began,” reflects Dunyak.

“Year after year, I have presented to the undergraduate and graduate (HIM) programs at Pitt. It is rewarding to work with students – to possibly shape their future. Establishing a scholarship was a natural extension of that for me.”

Cindy Zak (’82), director, Health Information Management at Milford Hospital, Milford, Conn., earmarked a new endowed fund for registered health information professionals who left employment to pursue a post-graduate degree. The Cindy Zak Endowed Student Resource Fund provides funding for books, lab fees, travel or other educational expenses for graduate students.

According to Zak, “Obtaining my Master’s Degree was a ‘game changer.’ It opened up doors to career opportunities in health care consulting and hospital administration. An endowed student resource fund is my way of ‘giving back’ to the HIM program that ‘gifted’ me with incredible professional advantages and opportunities.”

Both gifts recognize the value of the Pitt program and its reputation for preparing the next generation of HIM professionals. And the donors exemplify, in very real terms, ways alumni can continue to be involved in their Alma Mater.

“Because they chose to endow their gifts, both Denise’s and Cindy’s funds will remain in perpetuity to benefit our current and future HIM students,” notes Dr. Mervat Abdelhak, chair and associate professor, Department of Health Information Management. “We are most grateful for their generosity and philanthropic spirit.”
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...to make a difference. You don’t have to be wealthy to make a difference with your charitable giving. Whether it’s an annual gift, a pledge to be paid over time, or a planned gift to be completed at some point in the future, your donation to the School of Health and Rehabilitation Sciences will ensure that our proud tradition of educating talented and caring therapists, clinicians, and researchers continues. And the good feeling you’ll get from giving a gift to SHRS is the icing on the cake.

For more information, contact Patty Kummick, director of development, at 412-383-6548 or pkummick@shrs.pitt.edu.

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