

## Letter from the Director

Translating research findings to improve practice is one way to serve our social mission. The focus of translation is to get useful ideas used faster. However, I would offer that cultivating a future community of adults who understand and apply translation principles is as important as translation itself.

This issue focuses on how we offer this approach to developing these skills in undergraduate students and carry this out as faculty in current work supported through the center.

Enjoy the impact and reach of our faculty and student work described in this issue!

Regards,

Kimberly Galt, Pharm.D., Ph.D.  
Director, CHRP

## Coming Soon

“Meet the Researcher” Series

### Speaker:

Ya-Chen Tina Shih, Ph.D.  
University of Texas M.D.  
Anderson Cancer Center

**Date:** Aug. 5, 2010

**Time:** 10 a.m.

**Location:** Boyne 131

## Volume I, Issue 4

June 2010

## Undergraduate Students Join in Research with the Creighton Center for Health Services Research and Patient Safety

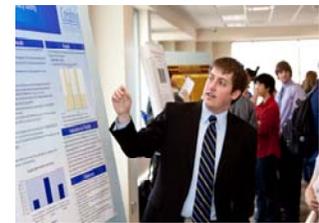
By Sue Crawford, Ph.D.

Interdisciplinary team research has consistently been a hallmark of the Center for Health Services Research and Patient Safety (CHRP). Research teams engage experts from various disciplines and professions across the campus. This year, team research at CHRP expanded to include four Health Administration and Policy students. Three of the students took lead roles on research projects that yielded research posters and presentations. In April, students presented their research findings at CHRP meetings and at two Creighton University poster sessions, including Honors Day and St. Albert's Day.

The inclusion of undergraduate students in research builds on one of the current goals of CHRP: to develop a strong campus wide infrastructure for research in health services and patient safety. On the College

of Arts and Sciences side, the partnership fits the goal of the college to engage as many students as possible in hands-on research experiences. Currently all College of Arts and Sciences honor students conduct original research. CHRP provides a setting for Health Administration and Policy honors students to participate in original research that allows them to build on their major course work. Tyson Hickle and Kersten Higgins, honors students and Health Administration and Policy majors, were the first students to participate in this new opportunity. However, even in this first year, the research partnership expanded beyond honors students. Lauren Ho and Courtney Bohn, Health Administration and Policy majors, also participated in research work.

Kimberly Galt, Pharm.D., Ph.D., provided summer research opportunities for the honors students, offering them a chance to gain research experience before developing their honors projects. The students worked with Dr. Galt, each other, and me to develop their research projects. Higgins developed a project analyzing the nature of patient safety risks in pharmacy settings. Hickle designed a project to analyze the consequences of



**Tyson Hickle, honor student and Health Administration and Policy major**

errors for consumers future interactions with health professionals. Bohn and Ho joined in the research in the fall. Dr. Galt and Kevin Fuji, Pharm.D., also participated in those meetings to shape the research. Dr. Fuji and I continued to meet with the honors students once a week over the course of the year. In the spring semester, Ho shifted to work with a research team examining the use of personal health records in diabetes management headed by Dr. Fuji and Andjela Drincic, M.D.

(Continued on page 2)



**Kersten Higgins, honor student and Health Administration and Policy major**



**Courtney Bohn, Health Administration and Policy major**

(Continued from page 1)  
while Bohn moved to an exploratory research project examining health information dynamics in dental practices. In discussions about the experience, students expressed their appreciation for the opportunity to participate in supported research and to learn more about patient safety. Hickle will be attending Creighton Medical School this fall. His research made him aware of the importance of working with patients to encourage

them to be attentive partners in reducing errors. Higgins will be attending programs in law and public health at St. Louis University. She now has a greater appreciation for the importance of consumer health literacy in preventing safety risks from becoming errors that cause harm. Bohn plans to attend dental school in the future. Her research provided her with a richer understanding of the challenges of translating health information into improved health outcomes. Ho hopes to

become a pharmacist and to continue participating in health services research.

One reason I became involved with CHRP was to provide an infrastructure for undergraduate students, particularly Health Administration and Policy students, to participate in research. It is an enriching experience seeing the students thrive in the team research environment at CHRP. While three of the students took the lead on

specific projects, all of the students collaborated on multiple projects and also had the opportunity to collaborate with CHRP researchers. The infrastructure allowed students to jump right into more sophisticated research. The strong team research culture at CHRP gave the students the opportunity to experience collaborative interdisciplinary research in a supportive environment.

## Current Issues in Practice: Electronic prescribing

By Mark Siracuse, Pharm.D., Ph.D.

Electronic-prescribing (e-prescribing) is an information technology based clinical application that is available for incorporation into the physician's office practice. E-prescribing applications are available as free-standing programs, or as a function often made available as part of an electronic health record (EHR). Use of EHRs has taken on increased importance with the Office of the National Coordinator for Health Information Technology expecting universal implementation by 2014. Incentives totaling \$19.2 billion are being spent to encourage adoption of EHRs by doctors and hospitals through the American Recovery and Reinvestment Act of 2009.

E-prescribing has great potential to enhance patient



safety and improve efficiency in pharmacies and physicians' offices. In a study conducted by CHRP researchers during 2007, actual levels of e-prescribing were relatively low. In 2009, the federal government implemented incentive payments created under the Medicare Improvements for Patients and Providers Act of 2008 to encourage physicians and other prescribers to adopt e-prescribing. Physicians who meet an e-prescription annual threshold for Medicare Part B patients can expect a 2 percent incentive payment from Medicare in 2009 and 2010. To meet this threshold, at least 50 percent of the prescriptions for that year must be e-prescribed for a pre-identified group of current procedural terminology (CPT) code conditions. The incentive payment will drop to 1 percent in 2011 and 2012 and to 0.5 percent in 2013. Those physicians who do not e-prescribe will see reimbursement rates decreased by 1 percent in 2012, 1.5 percent in 2013, and 2 percent in 2014 and beyond.

Will government incentives alone be enough to gain widespread adoption for something that faces so many barriers? Incentive payments will help, but there are several major interrelated barriers that must be overcome before e-prescribing becomes ubiquitous. These barriers include EHR status in the physician's office and related work flow issues, cost issues (for physicians and some pharmacies), regulatory issues and standards issues. The American Recovery and Reinvestment Act of 2009 should help overcome the first two barriers by providing resources to encourage physicians to adopt EHRs which would presumably be integrated with e-prescribing. Currently the Drug Enforcement Agency (DEA) does not allow controlled substances to be e-prescribed. In June 2008, the DEA proposed rules to allow e-prescribing of controlled drugs such as painkillers (e.g., morphine) and stimulants (e.g., methylphenidate).

Subsequently, on March 31, 2010, the DEA issued an interim final rule with request for comments on the issue of the e-prescribing of controlled substances. As of this publication, the final DEA rule is subject to congressional review. The current effective date is June 1, 2010. However, at the conclusion of Congressional review, the DEA will publish a document in the Federal Register to establish an actual effective date or to terminate the rule.

### References:

Siracuse MV, Galt, KA. "E-prescribing: What Pharmacists and Physicians Should Know," *Nebraska Mortar and Pestle* March/April 2010.

Siracuse MV, Galt, KA. "E-prescribing: What Physicians and Pharmacists Should Know," January 2010 by the *Nebraska Medical Association*, January 2010.

## Emergency Medical Services Research in Action

By Bill Raynovich, N.R.P., Ed.D., M.P.H.

Health care providers choose where they will work and communities attract health care providers with what they have to offer. Health care professionals often seem to choose to go “where the money is”; the major urban centers with tertiary specialty centers and an abundance of professional networks, resources and financial incomes.

In comparison, attractions for health care professionals to work in remote rural communities includes living close to home among family and lifelong friends, a lifestyle with a relaxed pace, a peaceful green environment, and an opportunity to serve where they are most needed. Given the imbalance of rewards and resources, most rural communities go underserved in a number of professional service areas. Some may have a physician but a shortage of nurses, pharmacists and allied health care professionals. Other communities have a nurse or a pharmacist, but no physician. This is true for emergency medical services (EMS) providers as well.

States have tried a number of different solutions to meet the needs of underserved areas. One successful solution over the past 40 years has been the emergence of the mid-level practitioner.

The expanded roles of nurses to nurse practitioners (NP) and the development of the physician assistant (PA) have filled many gaps in health care for underserved

areas, but many communities remain underserved, and most NPs and PAs today are working in metropolitan centers.

Over the past 20 years, expanding the roles and practices of paramedics has been attempted in several pilot projects. Last month, the Mayo Clinic and Hennepin Technical College in Minnesota completed a pilot training project on the Mdwanketan Sioux Tribal

**“Given the imbalance of rewards and resources, most remote rural communities go underserved in a number of professional service areas”**

Nation, where they set out to train 10 paramedics to provide expanded clinical care. A similar project to explore expanded practice roles for paramedics has been federally funded and is set to begin in Vail, Colo. Paramedics practicing in the new mid-level roles go beyond responding to emergencies; they do wellness physical examinations and long-term counseling for patients with chronic conditions including diabetes, hypertension and obesity. Their expanded clinical scope of practice includes suturing and other minor outpatient surgical procedures and an expanded drug administration

authority that includes antibiotics.

Dennis Berens, director of the Nebraska Office of Rural Health and newly elected president of the 18,000 member National Rural Health Association (NHRA), is serving on the advisory group for the Creighton University Center for Health Services Research and Patient Safety (CHRP). For over 15 years, Berens has been leading an initiative to

assess the needs of underserved remote rural communities in Nebraska and to find economically feasible ways to meet those needs. One of the possibilities currently being considered is expanding the role of paramedics in communities with health care gaps. That is where CHRP enters the picture.

Researchers at CHRP are currently studying how patients in remote rural communities access health information and how they maintain their personal health care records.

To determine if an expanded role for paramedics could



feasibly help fill gaps, the researchers at CHRP are assessing the attitudes that community residents have about the EMS responders in their communities and whether they would support an expanded role for paramedics. The researchers have conducted interviews with Nebraska Department of Health and Human Services officials to assess their attitudes toward implementing such a project and to identify any existing regulatory barriers that need to be addressed. Most importantly, the research team also is interviewing rural EMS providers to assess their attitudes about the services they are providing to their communities and whether they believe an expanded role for paramedics is feasible. Therefore, the question is: Can the roles of paramedics be expanded to help rural residents to improve their health outcomes in underserved areas in Nebraska? We intend to find out.

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The Creighton University Center for Health Services Research and Patient Safety was founded to coordinate and support research and training efforts among faculty within an interdisciplinary and collaborative research environment. Faculty and staff serve the research interests of governmental agencies, health care facilities, employers, health care industry companies and educators.

Mission Statement: The Center for Health Services Research and Patient Safety conducts health services research to improve quality, safety and efficiency of patient care through the discovery, translation and dissemination of new knowledge.

## Special Thanks

- The Center for Health Services Research and Patient Safety faculty and staff want to give a special thank you to Jamie Steemken and the Health Sciences Library/Learning Resources Center for their work displaying patient safety related materials during Patient Safety Week.
- We would like to extend a special thank you to Diane Martin, Ph.D. for her presentation on *The Future of Health Services Research Ph.D.* held on May 6, 2010, as part of the Meet the Researcher Series.
- We would like to extend a special thank you to John Allen, Ph.D. for his presentation on *Network Structure and Community Health: Who you know really matters* held on May 20, 2010, as part of the of the Meet the Researcher series.

## Recognition

- The Academic Development and Technology Center announced that CHRP members J.D. Bramble, Ph.D., M.P.H., and Robert Sandstrom, Ph.D., P.T. were appointed new eFellows for the coming 2010-11 academic year.
- On May 1, 2010, Mark Siracuse, Pharm.D., Ph.D., became the vice-chair in the Department of Pharmacy Sciences.
- Health Administration and Policy student, Kersten Higgins, received recognition for best poster in the Arts & Science/Humanities category at the 2010 St. Albert's Day Research Forum. Higgins worked with Sue Crawford, Ph.D., Kevin Fuji, Pharm.D., and Kimberly Galt, Pharm.D., Ph.D., along with CHRP staff.

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