

## Letter from the Director

This is my last letter as Director after serving in this capacity for a decade. I am passing the baton to Dr. Kevin Fuji who will become the Director effective June 30th, 2014. My new role in our Center is as Senior Scientist, an exciting opportunity for me to further the Center's opportunities and direction. If Creighton is to realize the potential of this first decade, a reinvestment in the Center, supporting the future vision of the new Center Director, Dr. Kevin Fuji, is critical to this success. I commit to doing my part for the greater good and look forward to the coming decade. Thank you to my colleagues, students and staff members who have worked hard, and made our first decade so enjoyable.

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

## Research Methods Journal Club

The Research Methods Journal Club is an opportunity for University faculty to come together to gain knowledge and discuss diverse research topics with other University faculty from across disciplines.

The journal club is held monthly on the third Thursday of each month from 10:00 a.m. to 11:00 a.m. in the Thune Conference Room, Health Sciences Research Library and Bio Information Center.

If you would like to attend, please RSVP for the event through the CHRP web site <http://chrp.creighton.edu>

## Volume 5, Issue 2

April 2014

## "Passing the Baton" ... Reflecting on a Decade of Accomplishment

By Kimberly A. Galt, Pharm.D., Ph.D.

A brief story is offered here about 'firsts', of commitment, of accomplishment and of celebration about Creighton's future opportunities. A decade ago I proposed the formation of the Creighton Health Services Research Program (CHRP). Receipt of my first large independent investigator federal grant from the Agency for Healthcare Research and Quality (AHRQ) was the beginning. As it turns out, this was also the first one ever received by Creighton University. This meant it was a first for our Office of Sponsored Programs (formerly Grants Administration); a first for our Institutional Review Board (IRB); and a first for our university administration. This 'first' provided employment for more than 30 Creighton students every year for three years, and intensive education about standards of performance expected through professionalism, ethical behavior, quality and integrity. I expected the application of these standards by each one involved who participated in the research process with our community partners and voluntary participants in this research. We produced papers and presentations, I was appointed to federal grant review panels in both AHRQ and NIH, and Creighton became recognized at the federal level by AHRQ, a first.

One grant successfully launched and implemented led a group of us to propose CHRP. CHRP engages faculty from diverse backgrounds and disciplines, including medicine, pharmacy, nursing, and occupational therapy, physical therapy, social work, anthropology, sociology, dentistry, law and decision sciences. Establishing a health services research program brings researchers and scholars together for inter-professional collaboration to pursue innovation. We formed CHRP to create a scholarly home without boundaries. From the launch of CHRP, we identified needs and went after resources to support them. And we succeeded in gaining them. I earned a second and third grant from AHRQ to develop faculty researchers and contribute to new science in health services and safety. I had already developed an outcomes research fellowship and modified its focus to the context of patient safety and health services research (graduates Dr. Rule, Dr. Fuji). During the first two years of CHRP we offered an Interdisciplinary Training Day that focused on 70 students from 7 professions involved in case studies and panel discussions around the experiences of patients with health care safety.

The 2nd grant was a competitive program grant entitled, Building

Research Infrastructure Capacity (P20-HS015816-01) in which we created the framework for faculty scientist development and staff infrastructure support. We were one of five awards amongst 78 competitive applications. We developed a faculty "research tool kit", established regular research team meetings and worked on an interdisciplinary nationally competitive research project in health information technology and safety. This project expanded to other research contracts and grants supporting the study of important questions about patient safety and health information technologies. Training took faculty around the nation and I was asked to nominate additional faculty to federal study sections. Two more faculty members were appointed to AHRQ study sections (Fuji, Bramble). By this point, I had moved aggressively to partnership development and served an international reputation by engaging Nebraska Health and Human Services in on-going contract support for CHRP projects, chairing the governor's e-Health Council for 4 years and moving CHRP faculty appointees to state workgroups (Syracuse, Abbott, Bramble, Paschal and Fuji), and serving for three weeks as an international Visiting Scientist to Japan to educate universities and health systems on the subject of

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health care safety and quality. It was during this time period that we produced the first reports for the State of Nebraska on health information interoperability, health information security and privacy, and electronic health record adoption within the states of Nebraska and South Dakota as early indicators of how this transformation in health care would progress. We developed our interprofessional education course, IPE 410 Foundations in Patient Safety, a campus wide interdisciplinary offering. The faculty published a textbook and conducted educational research about the interdisciplinary and developmental experiences of students. This course was recognized as a first by the Institute of Medicine report on Medication Errors, and continues to be offered on-line.

The 3rd grant, entitled, Creighton Research Infrastructure Development Program to Achieve Sustainability (R24-HS18625-01), was one of two awarded in the country. This three year award provided monies to advance multiple teams of researchers expected to produce research products supporting the federal safety agenda and developing advanced skills amongst faculty researchers. This funding provided 29 faculty, 12 students and several staff with sponsor support to conduct the research, and the infrastructure support to create a Clinical Scientists Development Program (first candidate Dr. Kevin Fuji). CHRP became the Center for Health Services Research and Patient Safety. During this time period we launched our Meet the Researcher series, the Grants Boot Camp series, the Research Methodology series and the Journal Club series. A financial recharging system was established with 75% of the grant indirect dollars generated returned to the Center budget for operations. This same policy

was adopted for any new grants/contracts. Our interprofessional offerings advanced to two campus wide Patient Safety Day educational sessions, and invitation workshops for the School of Medicine for the Annual Department of Family Medicine faculty development program and the School of Medicine Institute of Leadership and Development Workshop. Additional courses were developed in health informatics and offered on-line. Communications about the CHRPs activities occur every other month in our newsletter to a general audience including legislators and sponsoring agencies, with a circulation of 500 nationally and excess of 2,200 website visits annually. All of our activities have been open to faculty, students and staff.

In sum, the first decade has realized more than 3.8 million dollars in grants and contracts associated with the mission of CHRP (see table at end of this article for highlights). Many individuals have been a part of this entity and many continue participation (see faculty listing in this article). Students, faculty and staff have learned, contributed, and served through the research and scholarship approach of a university.

I am stepping down after ten years as director of the CHRP. My new role in the center as Senior Scientist is an exciting direction. My contributions will continue by advancing the research methods and data management while educating others in this critical skill area, serving AHRQ, NIH, VA, HRSA and the state on grant review committees, and securing

sponsorship for the important research, scholarship and service work CHRP leads. CHRP can continue to demonstrate how Creighton University realizes value from our efforts by: (a) obtaining resources and leveraging them; (b) building faculty partnerships and relationships; (c) contributing to "brand name" recognition for programs in community and government relationships; (d) leveraging knowledge to advance initiatives; and (e) extending outreach of knowledge and service to advance mission. If Creighton is to realize the potential of this first decade, support for achieving financial stability is key. A reinvestment in the Center, supporting the future vision of the new Center Director, Dr. Kevin Fuji, is critical to this success. Will you join me?

#### Faculty who have been a part of CHRP in it's first decade:

Amy Abbott, Ph.D., R.N. (active), Associate Professor, Nursing  
James Ault, M.S. (retired), Chair, Sociology and Anthropology  
Shirley Blanchard, Ph.D., OTR/L (active), Assistant Professor, Occupational Therapy  
Jim Bothmer, M.A.L.S., A.H.I.P. (active), Director of the Health Sciences Library  
J. Chris Bradberry, Pharm.D. (active), Dean, School of Pharmacy and Health Professions  
James D. Bramble, Ph.D. (active), Associate Professor, Pharmacy Sciences  
Archana Chatterjee, M.D., Ph.D. (left Creighton), Associate Professor, Pediatrics  
Shih-Chuan Cheng, Ph.D. (active), Professor, Mathematics  
Bartholomew Clark, Ph.D. (active), Assistant Professor, Pharmacy Sciences  
Teresa Cochran, P.T., M.A., D.P.T., GCS (left Creighton), Assistant Professor, Physical Therapy  
Susan Crawford, Ph.D. (active), Associate Professor, Political Science  
Barbara J. Dilly, Ph.D. (active), Professor, Anthropology  
Andjela Drincic, M.D. (left Creighton), Assistant Professor, Endocrinology  
Kevin Fuji, Pharm.D., M.A. (active), Incoming Director and Past CHRP Fellow  
Kimberly Galt, Pharm.D., Ph.D. (active), Director, CHRP and Professor, Pharmacy Sciences  
Robert Garis, Ph.D. (deceased), Assistant Professor, Pharmacy Sciences  
Deborah Givens, P.T., Ph.D., D.P.T. (active), Professor and Chair, Physical Therapy  
Kelly A. Gould, M.A., R.D. (active), Assistant Professor, Dentistry  
Eleanor Howell, Ph.D. (active), Dean, College of Nursing  
Mark Latta, DMD, DDS (no longer active), Dean and Professor, School of Dentistry  
Robert McLean, Ph.D. (left Creighton), Director, Masters of Health Services Administration  
Robert McQuillan, M.D. (deceased), Associate Professor, Anesthesiology  
Michael Monaghan, Pharm.D. (active), Professor and Chair, Pharmacy Practice  
Keli Mu, Ph.D. (past participant), Associate Professor, Occupational Therapy  
Martha Nunn, DDS, Ph.D. (active), Associate Professor, Periodontics  
Linda Ohri, Pharm.D. (active), Associate Professor, Pharmacy Practice  
Rene' Padilla, Ph.D., OTR/L (past participant), Associate Professor, Occupational Therapy  
Karen Paschal, M.S., P.T. (active), Assistant Professor, Physical Therapy  
Bill Raynovich, MPH, NREMT (active), Assistant Professor, Director of EMS Education  
Ann Rule, Pharm.D. (left Creighton), CHRP Fellow and Assistant Professor, Pharmacy Practice  
Robert Sandstrom, D.P.T., Ph.D. (active), Professor, Physical Therapy  
Joann Schaefer, M.D. (left Creighton), Associate Professor in Family Medicine and State of Nebraska's Deputy Chief Medical Officer  
Linda Scheirton, Ph.D. (past participant), Associate Professor, Occupational Therapy  
Mark Siracuse, Pharm.D., Ph.D. (active), Assistant Professor, Pharmacy Sciences  
Joseph Threlkeld, Ph.D., PT (past participant), Associate Professor, Physical Therapy  
Phillip Vuchetich, M.S., Pharm.D. (left Creighton), Assistant Professor, Pharmacy Sciences

## Sponsored Projects Led by CHRP over the years:

Project Title	Dates of Project	Sponsor	Investigators	Amount Funded
Impact of personal digital assistant devices on medication errors in primary care.	2001-6	AHRQ <sup>a</sup>	Galt (PI), Houghton, Rich, Bramble, Young, Markert, Barr, Syracuse, Rule	\$901,000
Impact of personal digital assistant devices on medication errors in primary care: data analysis	2004-5	AHRQ <sup>a</sup>	Galt (PI), Houghton, Rich, Bramble, Young, Markert, Barr, Syracuse, Rule	\$27,000
Real Choice Quality Assurance: Program Development and Evaluation for the ENOA – Medicaid Waiver Adult Program	2004-7	NHHS <sup>b</sup>	Galt (PI), Ryan-Haddad, Syracuse, Kasha	\$32,400
HRSA Bioterrorism/Public Health Emergency Grant NE. Bioterrorism/Public Health Emergency Curricular Enhancement Project	2005-8	HRSA <sup>c</sup> /UNMC <sup>d</sup>	Galt (PI), Raynovich, Augustine, Dean, Rule, Kasha, Taylor	\$129,600
Improve Patient Safety: Learning Model to Reduce Errors in Occupational/ Physical Therapy Practice	2005-7	NPSF <sup>e</sup>	Mu (PI), Scheirton, Lohman	\$99,705
Creighton Health Services Research Development Project (BRIC)	2006-8	AHRQ <sup>a</sup>	Galt (PI), Bramble, Paschal, Riley, Drincic, Syracuse, Kasha, Taylor	\$499,979
Physician Office Readiness to Adopt the EMR for Patient Safety and Quality of Care	2006-8	NMF <sup>f</sup>	Galt (PI), Paschal, Drincic, Bramble, Syracuse, Abbott	\$60,000
ePrescribing & Electronic Record Interoperability	2006-8	NeSORH <sup>g</sup>	Galt (PI), Berens	\$11,000
Pharmacists for Patient Safety (Dyke Anderson Patient Safety Project)	2007-9	NSBP <sup>h</sup>	Galt (PI), Syracuse, Clark, Bramble	\$50,000
Nebraska Telehealth Network Use to Advance Pharmacists for Patient Safety	2007-9	NeSORH <sup>g</sup>	Galt, Berens	\$6,000
Exploring the Interactions of Consumers, Health Professionals, Community Infrastructures & Organizations about their health data	2007-9	NeSORH <sup>g</sup>	Galt, Paschal, Crawford	\$15,000
Electronic Health Record Adoption in Pharmacy Practice	2007-9	ACCP <sup>i</sup>	Fuji (PI), Galt	\$2,000
Winifred Ellenchild Pinch Research Grant (Sigma Theta Tau Chapter)	2008	IHSN <sup>k</sup>	Abbott	\$1,000
Pharmacists for Patient Safety	2008	NeHHS <sup>j</sup>	Galt (PI), Bramble, Clark, Syracuse	\$15,000
Study Analysis of Citizens Perceptions of the Implications of Personal Records (PHRs) and Electronic Health Records (EHRs)	2008	NeHHS <sup>j</sup>	Galt	\$14,000
Care Transitions Project of CIMRO of Nebraska	2008-10	NeHHS <sup>j</sup>	Galt	\$70,000
Interprofessional Patient Safety Education Course to Nursing Students: A Mixed Methods Study	2009	CU-OASA <sup>l</sup>	Abbott (PI), Fuji, Galt, Paschal	\$1,485
Partner Support for CHRP PSO	2009	NeSORH <sup>g</sup>	Galt	\$8,100
Nebraska HSS/e-Health Council Consumer and Professional Education Project	2009	NeHHS <sup>j</sup>	Galt (PI), McBride, Leighter	\$16,000
Pharmacists for Patient Safety	2009-11	CPF <sup>m</sup>	Galt (PI), Abbott, Bramble, Clark, Fuji, Paschal, Scheirton, Syracuse	\$69,660
Health Information Technology Adoption in Physical Therapy Practice	2009-11	HFF <sup>n</sup>	Paschal (PI), Galt, Syracuse, Drincic, Abbott, Bramble, Clark	\$20,000
Bridge Funding for Creighton Health Services Research Program	2009-10	HFF <sup>n</sup>	Galt, Syracuse, Paschal, Drincic, Bramble	\$75,000
Grants to States for Office of Rural Health	2010	NeSORH <sup>g</sup>	Galt	\$10,000
Creighton Research Infrastructure Program to Achieve Sustainability Project	2009-12	AHRQ <sup>a</sup>	Galt (PI), Abbott, Bauerly, Blanchard, Bramble, Cheng, Clark, Crawford, Drincic, Latta, Norris, Ohri, Paschal, Raynovich, Scheirton, Syracuse	\$1,500,000
Grants to States for Oral Health Workforce Activities	2010-12	NeHHS <sup>j</sup>	Galt (PI), Gould, Latta	\$155,000
Health Literacy and the Digital Divide	2013	Haddix Fund	Abbott (PI), Galt, Fuji, Howell, Lappe	\$15,000

a. AHRQ = Agency for Healthcare Research and Quality; b. NHHS = Nebraska Health and Human Services; c. HRSA = Health Resource and Services Administration; d. UNMC= University of Nebraska Medical Center; e. NPSF = National Patient Safety Foundation; f. NMF = Nebraska Medical Foundation; g. NeSORH = Nebraska State Office of Rural Health; h. Nebraska State Board of Pharmacy; i. ACCP = American College of Clinical Pharmacy; j. NeHHS = Nebraska Health and Human Services; k. IHSN = International Honor Society of Nursing; l. CU-OASA = Creighton University Office of Academic Excellence and Assessment; m. CPF = Community Pharmacy Foundation; n. HFF = Health Futures Foundation Internal Grant Program.

## Analysis of Government Survey Data from Public Use Data Files

By Robert Sandstrom PhD, PT

Public use data files from the United States (U.S.) government are a rich source of information for health services researchers. Sources of this data include surveys conducted by the U.S. Census, the Centers for Disease Control and Prevention (CDC) and the Agency for Healthcare Research and Quality (AHRQ). In many cases, the methodology of these surveys utilizes a complex survey design. Therefore, when interpreting survey data, the researcher cannot simply use classical statistics, as this may result in errors. Instead, the researcher is required to apply an appropriate statistical analysis based on the survey design.

The Household Component of the Medical Expenditure Panel Survey (MEPS-HC) is an example of a large government survey of the population's utilization of health care services, health care expenditures, and insurance coverage (<http://meps.ahrq.gov>). Each year, the MEPS-HC surveys a subsample of the population from the National Health Interview Survey. Family units in this survey are interviewed in five rounds over a two year period (i.e., a panel). Data from two overlapping panels are utilized to create datasets. The MEPS does not use a random sampling methodology to survey the population. Rather, it employs a two stage, stratified, clustered survey design. In this type of design, the survey administrator desires to identify and oversample certain populations (e.g. minority or

low income groups) in order to make more accurate estimates of the survey variables for these groups. To do so, the survey plan first divides the U.S. population into approximately 2000 primary sampling units (PSUs) which are counties or adjacent counties. The PSUs are then grouped into about 250 strata. In the second stage, clusters of housing units within PSUs are identified. Specific attention is given to oversampling of housing units within PSUs from the subpopulations of interest. Not all strata or PSUs are utilized in the sample for the MEPS-HC. In 2011, 35,313 persons participated in the MEPS-HC survey and provided data on 2052 variables.

The statistical analysis of these data requires the researcher to account for the survey design. Analysis of the MEPS-HC data are prone to bias (incorrect population estimates of the variable of interest and/or its standard error) due to the use of unweighted data in the analysis and small cell sizes. For example, a researcher may be interested in the number of persons in the U.S. population who had a visit to a physical or occupational therapist and the mean number of therapist visits the person experienced in that year. The use of classical statistics to infer these results from the MEPS-HC data violates the precepts of simple random sampling methods. Fortunately, statistical packages (e.g., STATA, SAS or SPSS) provide the researcher with procedures to analyze data

generated from complex survey designs. Estimates from the MEPS-HC need to be weighted to account for the oversampling of certain households. Since the MEPS-HC utilizes about 10% of the possible PSUs, the variability of the data at the PSU and strata level must be accounted for in order to obtain nationally representative samples. In the MEPS-HC data file, a person weight variable (PERWTxx), and two variance estimation variables (VARSTRxx, VARPSUxx) are included to facilitate the analysis. When interpreting the results, the researcher needs to be sensitive to the sample size and accuracy of the estimate. For example, a researcher interested in estimating the number of American Indian/Alaska Native females with a visit to a physical therapist may find a sample size less than 50 persons in the MEPS-HC. As a general rule, population estimates are acceptable if the sample size is at least 100 persons and the relative standard error of the population estimate (standard error of the estimate/population estimate) is less than 30%. It is also possible to pool MEPS-HC data across multiple years to generate larger cell sizes. A good strategy for the new researcher is to analyze variables in the public use data file that are reported in the summary data tables provided by AHRQ. Replication of the results in the summary data tables confirms the statistical analysis procedures utilized by the researcher.

Public use data files are an important resource for health services researchers. Analysis of the data from complex survey designs that accounts for the weighting of the variables, variance estimation between sampling units and adequate cell size can provide valuable information for researchers and the public.

### References:

1. Freburger JK, Konrad TR. The use of federal and state databases to conduct health services research related to physical and occupational therapy. *Arch Phys Med Rehabil.* 2002;83(6):837-845.
2. Riley GF. Administrative and claims records as sources of health care cost data. *Med Care.* 2009;47(7 Suppl 1):S51-5.
3. Cohen JW, Cohen SB, Bantlin JS. The medical expenditure panel survey: A national information resource to support healthcare cost research and inform policy and practice. *Med Care.* 2009;47(7 Suppl 1):S44-50.
4. Sakshaug JW, West BT. Important considerations when analyzing health survey data collected using a complex sample design. *Am J Public Health.* 2014;104(1):15-16.
5. Heeringa S, West BT, Berglund PA. *Applied survey data analysis.* Boca Raton, FL: Chapman & Hall/CRC; 2010:467.

## Perceptions on e-prescribing Safety and Quality

By Mark Siracuse, PharmD, PhD

Mark Siracuse, PharmD, PhD attended the 2014 Annual Meeting and Exposition of the American Pharmacists Association from March 28 – 31 in Orlando, Florida. The annual meeting presents opportunities for pharmacist and pharmacy students to hear from thought-provoking leaders on the most pressing issues currently confronting pharmacy professionals.

New to this year's meeting was a 'Day of Science' that allowed fellow scientists and researchers to connect with each other during a full day of science-related activities.

The 'Day of Science' included a keynote speaker, podium sessions, oral poster session,

and other networking opportunities.

Siracuse presented a poster entitled "Perceptions on e-prescribing Safety and Quality," which was completed of work from the Main Project on the SUSTAIN grant (R24HS018625, PI: Galt). Co-authors for the poster were Kimberly Galt, PharmD, PhD; Amy Abbott PhD, RN; Kevin Fuji, PharmD, MA; James Bramble, PhD; and Karen Paschal, DPT.

The objective of this study was to determine differences between healthcare professionals and organizational personnel regarding safety and quality of

e-prescribing in rural ambulatory care practices and pharmacies. Healthcare professionals and organizational personnel at five rural ambulatory care practices in Nebraska and Iowa were surveyed. A 90 item binary-response survey, of which 36 were related to e-prescribing, was distributed to 164 individuals at five locations. There were a total of 141 completed surveys for a response rate of 86.0%. Chi-squared tests were run to determine differences in responses between healthcare professionals and organizational personnel. Statistically significant differences were shown in 12 of 36 survey items.

Organizational personnel sometimes indicated e-prescribing as being safer compared to healthcare professionals. For example, 68% of healthcare professionals believed that e-prescriptions have been sent to the wrong pharmacy as compared to 33% of organizational personnel ( $p < 0.001$ ).

In conclusion, perceptions about the safety of e-prescribing may differ between healthcare professionals providing direct patient care and others in the organization who have administrative oversight or provide other support.

## Nurse Engagement with Electronic Health Records

By Amy Abbott, PhD, RN

Amy Abbott, PhD, RN attended the 2014 Annual Midwest Nursing Research Society Meeting in St. Louis, Missouri from March 27-30. The focus of the 37<sup>th</sup> Annual Meeting was on value-based partnerships through nursing science to improve nursing outcomes. This conference provides opportunities for nursing researchers, educators, and students to network and hear presentations from nursing's leaders, as well as, up-and-coming researchers on a variety of nursing aspects.

Abbott gave a podium presentation entitled "Adaptation vs. Adoption: A Qualitative Exploration of Nurse Engagement with

Electronic Health Records," which resulted from a sub-analysis of work completed on the Main Project of the SUSTAIN grant (R24HS018625, PI: Galt). Co-authors for the poster were Kevin Fuji, PharmD, MA and Kimberly Galt, PharmD, PhD.

The purpose of this single instrumental case study was to discern how the role of the nurse has changed with the adoption and implementation of an electronic health record (EHR) with e-prescribing (e-Rx) system in a Midwestern rural ambulatory care practice. Thirteen nurses and five providers (three physicians, one nurse practitioner, and one

physician's assistant) completed semi-structured interviews. Five themes emerged from the data analysis: 1) Nurses retain focus on caring for the patient; 2) Provider preferences drive nurses' use of EHR with e-Rx; 3) Nurses create workarounds for the EHR with e-Rx; 4) The EHR with e-Rx increases efficiency, quality, and safety for nurses; and 5) Nurses have increased responsibility with e-Rx.

Although nurses are not always involved in the adoption of the EHR with e-Rx, they have learned to adjust their roles to fit within the context of the documentation system. One of the biggest role changes

for nurses, centered on e-Rx. Nurses are now involved in entering prescriptions which interrupts the intention of the e-Rx being a tightly coupled process between the provider/prescriber and the pharmacist. Despite the potential for improved quality and safety with the EHR with e-Rx systems, this improvement is at the expense of an overall increased workload for nursing. Nurses are also placed in a position of being a provider's agent as it pertains to e-Rx, a function for which many nurses are inadequately educated.

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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.

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## Publications

- Raynovich W, Hums J, Stuhlmiller DF, Bramble JD, Kasha T, Galt KA. Critical Care Transportation by Paramedics: A Cross-sectional Survey. *Air Med J.* 2013 Sep-Oct;32(5):280-8.

## Presentations

- Siracuse MV, Galt KA, Abbott AA, Fuji KT, Bramble JD, Paschal KA. Perceptions on e-prescribing Safety and Quality. Poster presentation at the American Pharmacists Association Annual Meeting, March 28-31, Orlando, FL.
- Abbott AA, Fuji KT, Galt KA, Kasha T. Adaptation vs. Adoption: A Qualitative Exploration of Nurse Engagement with Electronic Health Records. Podium presentation at the Midwest Nursing Research Society Annual Research Conference, March 27-30, St. Louis, MO.
- Kraemer P, Friedman SK, Nystrom KK, Fuji KT. Incidence of Acute Kidney Injury with Piperacillin-Tazobactam: A Before-After Evaluation. Poster presentation at Creighton University St. Albert's Day/University Research Day, April 1, Omaha, NE.
- Mattli C, Nystrom KK, Schardt G, Fuji KT, Schmidt D, Friedman SK. Assessment of Blood Glucose Control in General Medicine Patients Treated with Subcutaneous Insulin in a Community Hospital. Poster presentation at Creighton University St. Albert's Day/University Research Day, April 1, Omaha, NE.
- Sandstrom R, Schmaltz A. Are Demographic, Functional Status or Medical Condition Variables Associated with Office-Based Therapy Utilization in the Outpatient Medicare Population? Poster presentation at Creighton University St. Albert's Day/University Research Day, April 1, Omaha, NE.

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