



Decision and Information Technologies

Center for Health Information and Decision Systems

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NEWSLETTER

Fall 2006

Welcome to the inaugural issue of the *CHIDS Newsletter*. These newsletters will be published on a bi-annual basis and will provide updates on various Center activities in the prior quarters and highlight upcoming events.

CHIDS was founded in January 2005 in order to create thought leadership around the implementation of information and decision technologies in the healthcare domain. This thought leadership is generated primarily from our rigorous research efforts. We are an academia-led effort with collaboration from industry and government affiliates. Our mission is to advance the science of technology implementation and decision analysis in the health care sector, and to better understand its impacts at all levels, including organizational, provider, and individual outcomes. The long-term goal of CHIDS is to improve the delivery of health care by offering research-driven solutions that impact safety, quality, access, efficiency, and return on investment.

Drawing on the expertise of the Decision and Information Technologies department at the Smith School, the University of Maryland Medical Center, and other assets in the University of Maryland network, CHIDS offers the benefit of a world-class research staff with skills in technology implementation, adoption, assimilation, workflow design, data modeling, statistical analysis, operations management, decision sciences, and value of IT.

As an unbiased third-party, CHIDS brings vendors, government agencies, insurers, health systems, and other HIT stakeholders together so that a common goal of improving the delivery of health care can be achieved.

STUDENT FELLOWS

CHIDS' involvement in the Smith Research Fellowship program is training graduate and undergraduate students from a variety of majors to conduct research projects on a broad range of topics related to HIT. The students work individually and in teams under the supervision of faculty researchers. For the 2006-2007 academic school year, six students were chosen as CHIDS Research Fellows.

Arjun Kathuria is a junior Accounting and Information Systems major, graduating in May 2008 with a Bachelor's degree. His primary project involves researching HIT initiatives undertaken by US states over the last four years and how these programs and legislations will affect industry stakeholders and consumers. He is also responsible for updating the CHIDS/HIMSS HITDashboard™.



Eugene Hwang is a junior Finance and Information Systems major, graduating in May 2008 with a Bachelor's degree. He is investigating the transmission of electronic health information to cellular phones, specifically issues regarding patient privacy, targeted audiences, technical requirements, and pricing.



Suramya Fonseka is a junior Accounting major, graduating in May 2008 with a Bachelor's degree. She is currently working on a project related to the adoption and diffusion of Electronic Medical Records in different countries. Suramya's research will explore single versus multiple payer models as well as other barriers and enablers on an international level.



Irina Komarova is a junior Accounting and Information Systems major, graduating in December 2008 with a Bachelor's degree. Irina is also working on a project related to the global adoption and diffusion of EMRs. Irina's research will specifically examine legacy system difficulties in the United States compared to other countries.



Jibanananda Khuntia is working towards an MS in Engineering and Policy and graduating in 2008. He earned a Bachelor's degree in Mechanical Engineering in 1995 in India. Jiban's primary directive is to generate mutually-beneficial, collaborative projects between HIT stakeholders and the Indian Health Information Network Development (I-HIND) in coordination with the National Knowledge Commission of India. Jiban is working closely with CTIS and Internet2, two local HIT stakeholders, to create a collaborative effort which will support future endeavors.



P. Kenyon Crowley is earning a Joint MBA/MS in the Information Systems program and graduating in 2008. Kenyon completed his BS in International Business Management from the University of NC at Wilmington. Kenyon is working with CHIDS on a contract to provide an overview of the approaches and corresponding metrics currently used to measure adoption and implementation of HIT. This contract was awarded by the Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, with WESTAT as the lead contractor.



PROFILES IN RESEARCH

In each issue, we will profile a couple of recent research projects that were conducted by CHIDS faculty and affiliated faculty.

Professors **Jason Kuruzovich** and **Samer Faraj** led a team of researchers in an ethnographic study at St. Agnes Hospital in Baltimore, MD investigating the use of wireless VoIP communication technology for patient service. After more than 120 observation hours, researchers concluded that the integrated communication system reduced overall mean time for completing a patient request by 51%.

Professor **Gordon Gao** led a project involving two PhD students investigating initial and ongoing-participation in an online health portal. This study found statistical evidence that specific consumer characteristics and traits, such as age, gender, and psychological well-being lead to initial participation and subsequent use.

PROFILES IN TEACHING

Starting Fall 2007, the Smith School will offer a Masters of Science in Health Information and Decision Systems. CHIDS is taking the lead in designing this one-of-a-kind degree program that will prepare students for leadership positions in HIT.

A new course offered by the D&IT Department is crafted specifically for healthcare stakeholders. The course, BMGT808: Quantitative Modeling for Hospital Operations and Management, taught by Professor **Bruce Golden**, is being offered in the fall 2006 semester. It is structured as part Ph.D. seminar and part consulting project, and it explores hospital operations, management, and information technology and works in collaboration with the University of Maryland Medical Center to collect data and improve hospital efficiency.

AWARDS AND CONTRACTS

In early September, CHIDS was awarded a planning grant from the National Science Foundation (NSF) under a program designated the Industry/University Cooperative Research Center (I/UCRC). The I/UCRC program develops long-term partnerships among industry, academe, and government. I/UCRCs stimulate highly leveraged industry/university cooperation by focusing on fundamental research recommended by Industrial Advisory Boards.

In late September, CHIDS was awarded a subcontract from DHHS-ASPE, with the well-known research firm, WESTAT, as the prime contractor. This project will investigate metrics and methodologies used in the past to study HIT adoption and success. One of the long-term goals of the project is to create a publicly searchable database of HIT resources to aid in the development and analysis of future initiatives.

UPCOMING EVENTS**September**

Sept 18 – Ritu Agarwal to speak at Telemedicine Symposium, "Patient-Centric Care: But Does it Add Value?" Boston, MA

October

Oct 6 – Ritu Agarwal to speak at Boston College Workshop - Using IT to Improve Outcomes in Healthcare Delivery, "PHRs, EHRs, EMRs: Research Opportunities and Challenges," Boston, MA.

Oct 25 – Corey Angst to speak at National Health Council Meeting, "PHRs and Value," Washington, DC

November

Nov 3 – CIO Forum at UMD, "Strategic Use of IT," College Park, MD

December

Dec 7 – Corey Angst to speak at Markle Foundation Conference, "Connecting Americans to Their Health Care," Washington, DC.

Dec 12 – Corey Angst to speak at International Conference on Information Systems, Milwaukee, WI

Recent CHIDS' Activities

- Expert Testimony and Panels
 - NCVHS, Personal Health Records (PHR)
 - AHIC, Consumer Empowerment Workgroup
 - Connected Health Initiative, Partners
 - HIMSS Advocacy Day
 - Connecting Americans, Markle Foundation
- Special project with Commission for Systemic Interoperability, NLM
- Industry first - HITDashboard® in collaboration with HIMSS
- **Completed research**
 - Digital health records and privacy concerns
 - Distribution of PHRs for maximum utility
 - Perceived value of using a PHR
 - Defining the PHR for research and practice
 - Spatial influence in EMR diffusion
 - Predicting the likelihood of EMR adoption by hospitals
- **On-going research**
 - Adoption and uptake of PHRs
 - Sustained usage of PHRs
 - Business value of EMRs
 - Adoption metrics for EMRs
 - Modeling beliefs of PHR users/non-users
 - Online intervention programs for employees

CHIDS CONTACT INFORMATION

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