bhi biomedical and health informatics

UNIVERSITY OF WASHINGTON

Biomedical and Health Informatics Lecture Series

Tuesday, February 15, 2011
12:00 - 12:50 p.m., Room E-216

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"Evidence-based HIT and User-centered Design: UW's Research for SHARP-C"

There is critical, nationwide need to reduce costs and improve access to health care services, while preserving or even improving their quality. Electronic medical records (EMR) and applications of health information technology (HIT) have great potential, but there is strong resistance to adoption by private clinics. A recent survey in NEJM pointed to large initial cost with uncertain impact as major obstacles. Physicians, clinic executives, and other health care leaders have the responsibility to select and direct HIT projects, but in conventional software engineering (SWE) they do not have information to answer such fundamental questions as: How will a new HIT system impact our workflows of clinical care?

The answers are beyond the scope of conventional software engineering, and need a new, multidisciplinary approach. SHARP is the HHS research program for the technology needed for nation-wide adoption and meaningful use of EMR. Our UW team is part of SHARP-C, the National Center for Cognitive Informatics and Decision Making in Healthcare (NCCD). Our two-year goal is software technology to make HIT serve as a reliable, understandable means for health care leaders to plan and direct strategic, evidence-based improvements in care services. The specific objective is to make measurable improvements to clinical workflows integral to the way HIT software is created. This lecture will describe our technical approach and conclude with software demos and initial discussion of collaboration potential across schools.

Keith Butler is a former Director of Future Products and Architecture at Microsoft, a former Technical Fellow at Boeing, and currently Co-PI for SHARP-C, and Principal Research Scientist and Affiliate Professor in the Department of Human Centered Design & Engineering.