Electronic Health Record Informatics: Workshop Human-Computer Interaction Lab Annual Symposium, University of Maryland Wednesday, May 23, 2012

www.cs.umd.edu/hcil/sharp/workshop2012

Organizers

Catherine Plaisant, Ben Shneiderman, Sureyya Tarkan, Megan Monroe





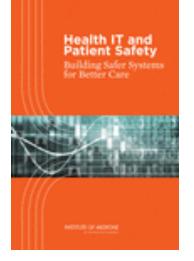
IOM Report: Health IT and Patient Safety

Problem

- Poorly designed health IT can create new hazards in the already complex delivery of care.
- Dosing errors, failure to detect life-threatening illnesses & delaying treatment due to poor HCI or loss of data have led to serious injury & death.

Recommendations:

- User-centered design & human factors applied to health IT





Strategic Health IT Advanced Research Projects (SHARP): Office of National Coordinator

- Security of Health Information Technology
- Patient-Centered Cognitive Support
- Healthcare Application and Network Platform Architectures
- Secondary Use of EHR Data





| 8.15am | Registration & Breakfast | |
|---------|--------------------------|---|
| 9am | Demos & Posters | |
| 10.30am | Welcome and Greeting | Catherine Plaisant, Associate Director of Research, HCIL, UMD |
| 10.45am | Introduction | Ben Shneiderman, Professor, Department of Computer Science, UMD |



| | Session 1: Visualization | |
|---------|---|--|
| 11am | Visualizing Patterns of Asthma Medication Prescribing in the Military Health System using EventFlow | Tamra Meyer, Megan Monroe, Jeff Millstein, Suji Xie, Trinka S Coster Pharmacovigilance Center, Office of the Surgeon General, Dept of the Army; Univ of Maryland, Computer Science & HCIL; Oracle Health Sciences |
| 11.20am | Visual Analytics for Tracking Disease Progression in Electronic Health Records | Adam Perer IBM |
| 11.40am | Integrating Cognitive Science and Information Visualization in Modality Management | Paul Nagy Johns Hopkins University |
| 12pm | Real-time Radiology Workflow Monitoring Tool for Overnight ED Residents | Michael Cohen Johns Hopkins University |
| 12.20pm | Lunch | |

| | Session 2: EHR Design and Evaluation | | |
|--------|---|--|--|
| 1.40pm | Electronic Health Records and the Clinical Narrative | Philip Resnik UMD | |
| 2pm | Development of a Model Electronic Health Record Format for Children | P. Kenyon Crowley, MBA, MS UMD Center of Excellence in HIT Research & CHIDS | |
| 1.20pm | NIST Advances in Measuring, Evaluating and Improving the Usability of Electronic Health Records | Matt Tyrone Quinn, Usability Scientist National Institute of Science and Technology (NIST) | |
| 2.20pm | Break | | |

| | | Session 3: Safety and Errors | |
|-------|---|---|--|
| 3pm | | Forget Statistical Significance: Visualization Tools Enhance Drug Safety Surveillance | Sheila Weiss UMD |
| 3.20p | m | Iechniques to Reduce Errors and Improve Efficiency in the Delivery of | Leon J. Osterweil Department of Computer Science, University of Massachusetts, Amherst |
| 3.40p | m | A Systematic Yet Flexible Systems Analysis of Medication Entry | Eliz Markowitz University of Texas |
| 4pm | | Discussion & Future Steps | |
| 4.40p | m | Closing | |

Take Away Messages

Healthcare is fertile area for HCI & InfoVis Patient Safety is a national priority We have tools for analysts

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