

Biomedical and Health Informatics Lecture Series

Course Website: [Link](#)

**Tuesday, October 23, 2012
12:00 - 12:50 p.m., Room T-747**

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“Failures of Hospital Computer System Components and Their Implications for Patient Care”

Many papers have examined the causes and frequency of errors due to EMR applications and user interface, the unintended consequences of computerized practitioner order entry, and inadequate consideration of workflow. However, little attention has been devoted to be problems and failures of the increasingly complex infrastructure that underlies clinical computing systems. As electronic medical record systems become more common in hospitals and more actions are automated using them, dependency on this infrastructure rises. There is less understanding of the problems that failures of this infrastructure--even temporary ones--can cause for clinical care. We will review the architecture of clinical computing systems, the variety and approximate frequency of component failures, and estimate the implications for clinical care that these failures may cause.

Dr. Payne has 23 years' experience with EMRs and clinical computing systems in private, federal and academic medical centers. He attended Stanford University, University of Washington School of Medicine, was a medical resident at the University of Colorado and an NLM fellow at Massachusetts General Hospital. For 12 years he has served as Medical Director of Information Technology Services at the University of Washington in Seattle and attending physician in Medicine at UW Medical Center and Harborview Medical Center. He is on the Board of AMIA, Editorial Board of JAMIA, a fellow of the American College of Medical Informatics, the American College of Physicians and the Royal College of Physicians (Edinburgh).