

## C2 Clinical Computing Research

### Presenters:

"Advancing Healthcare Through Information Technology Innovation"

Dean F. Sittig, PhD, CHR

"Knowledge-based Information Retrieval System (KBIRS)"

Brian Hazlehurst, PhD, CHR

"Safety in Prescribing (SIP) Project"

Adrienne Feldstein, MD, KPNW

"Exam Room Computing Study"

Holly Jimison, PhD, CHR

The goal of this panel is to illustrate the types of clinical computing research projects that form the basis of Kaiser Permanente's newly formed Clinical Informatics Research Network (CIRN). CIRN is a virtual network of clinical informatics researchers who are also interested and involved in operational computing projects. The session will begin with a description of CIRN and the Advancing HealthCare through Information Technology Innovation Grant program that the Garfield Fund, Kaiser Permanente's internal funding agency, will soon be releasing. This RFP seeks clinical informatics-related research projects that are focused on clinical decision support systems, population care systems, systems that facilitate internet access to health care and examinations of the effect of information technology on the work flow process. We will also describe the new interactive website that CIRN has developed to facilitate communication amongst the disparate clinical informaticians involved in CIRN.

Following this introduction we will have three speakers who will describe their research projects. The first speaker, Brian Hazlehurst, will describe the Knowledge-based Information Retrieval System (KBIRS) that he is developing. Briefly, KBIRS is designed to explore the use of clinical knowledge models derived from patient data to facilitate the identification of personalized patient and problem-specific patient education materials.

Adrienne Feldstein will be our second speaker. She will describe the Safety in Prescribing (SIP) project that is being carried out in the Northwest Region of Kaiser as part of the HMO Research Network CERT prescribing safety project. SIP is examining the effectiveness of patient-specific, clinical alerts delivered to clinicians via the clinical information system. She will highlight the process to develop alerts that have been created for medications that should have their doses adjusted when patients are renally-impaired, for medications that generally should not be used in elderly patients and for selected drug-drug interactions.

Our third speaker will be Holly Jimison who will describe the exam room computing study that she recently carried out in the Northwest region of Kaiser. This study examined the impact of an extensive patient-provider communication training session on clinician use of the EpicCare workstations in the presence of patients in the examination room. The study used a sophisticated video monitoring system to record both the clinician/patient interaction as well as the computer screen.