CTSC 5961
Health Information Technology Evaluation: Clinical Informatics Methods

Faculty: Vitaly Herasevich, M.D., Ph.D. & Brian Pickering, M.D.
Credits: 1
Quarters: Fall
Prerequisites: CTSC 5010, 5300 & 5600 (all prior or concurrently)

Overview
Governments and clinical providers are investing in health information technologies with little evidence as to their ultimate value. For years, health information technology (HIT) has been implemented with the goals of improving clinical care processes, health care quality, and patient safety. A systematic approach to the evaluation and testing allows for comparison of different HIT interventions with the goal of promoting those which improve clinical care and outcomes. In addition, structured evaluations of a projects impact are an essential element of the justification for investment in HIT. The question of the day is no longer “why perform evaluations,” but “how to perform evaluations.”

This course will present basic concepts, theory, and methods associated with HIT evaluation. Specific topics include: structure of studies, measurement fundamentals, design of demonstration studies, analyzing results of evaluation, proposing and communication results of evaluation studies, guidelines and reference standards.

Objectives
- To understand the value of technology evaluation
- To understand basic terminologies and concepts and limitations in health information technology evaluation
- To recognize the methods and approaches in health information technology evaluation
- To design and develop a protocol for health information technology evaluation studies

Evaluation
Final grades will be based upon student participation, a final exam covering the topics from the course and a project. The final project will be the primary basis for evaluation and will consist of a protocol for a health information evaluation study.

Students will be expected to spend approximately two to four hours per week on content from this 1-credit course.

For specific dates and times this course is provide, please see the quarterly detailed course schedule.