Health care services spend and budget millions of dollars for clinical computing, with the goal of improving the effectiveness and efficiency of health care. Computerized Clinical Decision Support Systems (CCDSSs) match individual patient characteristics with a knowledge base and provide timely recommendations for care. How well do CCDSSs improve the process and outcomes of care?

A partnership of Hamilton Health Sciences senior managers, clinical leaders, and knowledge translation researchers spent 2 years in a CIHR-funded project to systematically review all randomized trials of computerized decision support for 6 key areas of clinical practice: primary preventive care, diagnostic test ordering, medication prescribing, therapeutic drug monitoring, acute medical care, and chronic disease management.

In this special rounds presentation, we will review the findings and invite the participants and audience to engage in a discussion of the implications for future research and investments in computerized decision support to support high quality health care.