DESAUTELS Faculty of Management
Faculté de gestion

CREATE
HEALTHCARE OPERATIONS & INFORMATION MANAGEMENT

MANAGEMENT SCIENCE RESEARCH CENTRE

Friday, January 11th, 2013
12:00 PM – 2:00 PM
Bronfman Bldg., Rm. 310

Can We Do Better than "One Size Fits All"?

Using Modeling to Personalize Breast Cancer Screening Policy

Julie Simmons Ivy, Ph.D.

Edward P. Fitts Department of Industrial and Systems Engineering
North Carolina State University

Abstract:
Breast cancer is the most common noncutaneous cancer in American women. It is associated with high mortality risk; however mortality is strongly correlated with stage at detection, where cancers detected at an early stage have improved survival. There have been recent controversies regarding breast cancer mammography screening policies. In 2009 when the United States Preventive Services Task Force (USPSTF) recommended changing the screening policy from annual screening beginning at age 40 to biennial screening for women 50 to 75, it generated significant commentary and initiated discussion on the topic of over-diagnosis. In fact, many agencies including the American Cancer Society (ACS), did not adopt the USPSTF screening policy. We propose a decision modeling framework that explores the issues of over-diagnosis and over-treatment. We discuss our research in the area of breast cancer screening and our use of the community-based Carolina Mammography Registry (CMR) data for model parameterization.
(Joint work with Shengfan Zhang, Department of Industrial Engineering, University of Arkansas)

All are cordially invited to attend- A light lunch will be served