

Detailed Schedule

July 24, 2008

PhD Session 1

Fields 230

09:30-11:00

Chair: *Mike Carter*

Tutorial

Schechter, Steven

Introduction to medical decision making

Detailed Schedule

July 24, 2008

PhD Session 2

Fields 230

11:30-13:00

Chair: *Dionne Aleman*

Operations Research in Cancer and Chronic Care

Kucukyazici, Beste

The role of operations research through the journey of chronic care

Lavieri, Mariel

Applying operations research in cancer care

Detailed Schedule

July 24, 2008

PhD Session 3

Fields 230

14:00-15:30

Chair: Ali Vahit Esensoy

High Level Health Care Applications

Patel, Brijesh

Taxonomy of modelling and simulation methods in health care and a toolkit for method selection for health care requirements

Chahal, Kirandeep

A symbiosis between systems dynamics and discrete event simulation in health care

Detailed Schedule

July 24, 2008

PhD Session 4

Fields 230

16:00-17:30

Chair: *Daphne Sniekers*

Hybrid Models

Viana, Joe

Hybrid models at the University of Southampton (Part I)

Desai, Shivam

Hybrid models at the University of Southampton (Part II)

Detailed Schedule

July 25, 2008

PhD Session 4

Fields 230

09:30-11:00

Chair: *Dionne Aleman*

Tutorial

Cote, Murray

A feasibility model for healthcare resource planning: applications and potential future research opportunities

Detailed Schedule

July 25, 2008

PhD Session 5

Fields 230

11:30-13:00

Chair: *Dionne Aleman*

Disease Planning

McCoy, Jessica

Planning for a response to a bio-terrorism attack: An example of an anthrax scenario planning model

Hutton, David

Cost effectiveness of Hepatitis-B catch-up vaccination among children and adolescents in China

Detailed Schedule

July 25, 2008

PhD Session 6

Fields 230

14:00-15:30

Chair: *Ali Vahit Esensoy*

Patient Management

Weaver, Sherry

Managing the waiting experience for patients

VanBerkel, Peter

Tutorial and case study in outpatient planning

Detailed Schedule

July 28, 2008

Plenary 1

BA 1130

10:00-11:00

Chair: *Mike Carter*

ORAHS Welcome

Detailed Schedule

July 28, 2008

Session 1

BA 1170

11:30-13:00

Chair: Keisei Tanahashi

Cost Effectiveness 1

- | | |
|--------------------|--|
| Kucukyazici, Beste | Designing antithrombotic therapy for stroke prevention in atrial fibrillation |
| Hoch, Jeffrey | What to do about a biased solution to a constrained optimization problem:
The case of cost-effectiveness analysis |
| Ivy, Julie | An integrated decision analysis for evaluating mode of delivery in childbirth |

BA 1190

11:30-13:00

Chair: John Blake

Appointment Scheduling and Simulation

- | | |
|-------------------|--|
| Isken, Mark | Occupancy and scheduling models for inpatient obstetrics |
| Creemers, Stefan | Queueing models for appointment-driven systems |
| Chahal, Kirandeep | A symbiosis between systems dynamics and discrete event simulation in
health care |

BA 1200

11:30-13:00

Chair: Christina Pagel

Benchmarking

- | | |
|------------------|--|
| O'Neill, Liam | Impact of specialty hospitals on hospital markets: Evidence from Texas |
| van Vliet, Ellen | Evaluation of the operational effectiveness of care pathways for cataracts:
An international comparison |
| Ketabi, Saeedeh | Efficiency measurement of cardiac care units of Isfahan Hospitals in Iran |

Detailed Schedule

July 28, 2008

Session 2

BA 1170

14:00-15:30

Chair: Steven Schechter

International Systems & Comparisons

- | | |
|-------------------|---|
| Rauner, Marion | Incentives of the Austrian performance-oriented reimbursement system on the treatment of patients with knee-joint problems |
| Reinhardt, Gilles | Do policy and strategy differences between Canadian and US healthcare systems affect the operational effectiveness of their respective EDs? |
| Buhaug, Harald | Allocating funds to hospitals in a health region |

BA 1190

14:00-15:30

Chair: John Blake

Strategic and Operational Planning

- | | |
|------------------|--|
| Denton, Brian | Managing uncertainty in the allocation of health care resources |
| Mullen, Penelope | Successful health and safety, successful business – an expert Delphi study |
| Rohleder, Thomas | Scheduling patients and health care resources in a high volume cast clinic |

BA 1200

14:00-15:30

Chair: David Stanford

Unit Modelling and Simulation

- | | |
|--------------------|---|
| Schmidt, Ursula | Process improvements in hospitals by means of discrete event simulation |
| Worthington, David | Modelling emergency admission units |
| van Dijk, Nico | On dimensioning intensive care units |

Detailed Schedule

July 28, 2008

Plenary 2

MP 103

16:00-15:30

Chair: John Blake

Bill Pierskalla

Pierskalla, Bill

Applications of operations research in health care

Detailed Schedule

July 29, 2008

Plenary 3

BA 1130

08:30-09:30

Chair: *Mike Carter*

Jeff Griffiths

Griffiths, Jeff

A miscellany of healthcare models

Detailed Schedule

July 29, 2008

Session 3

BA 1170

09:30-11:00

Chair: Greg Zaric

AIDS 1

Lasry, Arielle	Modelling resource allocation for HIV prevention in the US
Schechter, Steven	Simulation versus markov decision processes approaches to HIV therapy planning
Malvankar, Monali	Incentives for optimal multi-level allocation of HIV prevention resources

BA 1200

09:30-11:00

Chair: Marten Lagergren

Home Care 1

Gascon, Viviane	Home care districting
Yarmohammadian, Mohammad	Assessing organizational needs of medical record departments' staff via People Capacity Maturity Model (PCMM)
Hare, Warren	Mathematical and societal challenges to modelling home and community care

BA 1220

09:30-11:00

Chair: Korina Katsaliaki

Clinical Modelling 1

Stanford, David	Recent trends in liver transplantation in the Province of Ontario, Canada
Denton, Brian	Optimization of medical treatment decisions for type 2 diabetes
Roberts, Steve	Simulation modelling of colorectal cancer

Detailed Schedule

July 29, 2008

Session 4

BA 1170

11:30-13:00

Chair: John Blake

Care Modelling

Leers, Ellen The analysis and design of an integrated service delivery system in intellectual disability care

Bowen, Tom Alternatives to hospital: models of integrated care

Baars, Irma Care delivery system of mental health: From concept to model

BA 1200

11:30-13:00

Chair: Vedat Verter

Women's Health

Asaduzzaman, Md Analysis of a Loss Network Model for Performance Evaluation and

Hans, Erwin Individualized breast cancer follow-up: Cost-effectiveness of various follow-up scenarios

VanBerkel, Peter Using queuing theory to analyse the participation of chemotherapy in a focused factory for breast cancer patients

BA 1220

11:30-13:00

Chair: Marion Rauner

Staff Scheduling

Reisi, Mohen Nurse scheduling with column generation

Soriano, Patrick Scheduling physicians in emergency rooms: A hybrid approach

Werker, Greg An IP approach to strategic scheduling of radiation therapists at the BC Cancer Agency

Detailed Schedule

July 29, 2008

Session 5

BA 1170

14:00-15:30

Chair: Paul Harper

Cancer Treatment

Belien, Jeroen	Brachytherapy treatment planning with focus on dose-volume constraints
Aleman, Dionne	Total body irradiation treatment planning using IMRT optimization
Lavieri, Mariel	Radiation therapy treatment decision making for prostate cancer patients based on PSA dynamics

BA 1180

14:00-15:30

Chair: Sally Brailsford

Lean Thinking

Bacoiu, George	Reengineering of the emergency room process based on lean analysis and simulation
Brandao de Souza, Luciano	The use of lean thinking to reduce LOS in elderly care
Brandao de Souza, Luciano	Lean healthcare and computer simulation: a soft-hard approach

BA 1220

14:00-15:30

Chair: Ken Klassen

EMS 1

Ruiz, Angel	Ambulance fleet deployment and re-deployment under dynamic demand
Crowe, Julien	Scheduling paramedics and ambulances with a flexible hybrid tabu search and MIP resolution method
Aringhieri, Roberto	Composing medical crews with equity and efficiency

Detailed Schedule

July 31, 2008

Plenary 4

BA 1130

08:30-09:00

Chair: *Mike Carter*

Michael Rachlis

Rachlis, Michael

Cue the queue Management: Operations research and re-design of services eliminate healthcare wait lists

Detailed Schedule

July 31, 2008

Session 6

BA 1170

09:30-11:00

Chair: Adele Marshall

Cost Effectiveness 2

Zhang, Hui	Pharmaceutical promotion and leakage under a price-volume agreement
Zaric, Greg	Cost-effectiveness of the Vancouver safe injection facility
Bayoumi, Ahmed	Equity considerations in cost-effectiveness analysis

BA 1180

09:30-11:00

Chair: Dan Haight

EMS 2

Badri, Hossein	Extension of single allocation hub location problem for locating emergency wards and finding the optimum number of required medical specialists
Deo, Sarang	Ambulance diversion in emergency departments: The role of hospital capacity
Ruiz, Angel	Ambulance dispatch rules

BA 1200

09:30-11:00

Chair: Joe Viana

Long Term Care

Lagergren, Marten	The dynamics of aged care - disability development, transfer and mortality
Desai, Shivam	Modelling demand for LTC

BA 1220

09:30-11:00

Chair: David Cooke

Clinical Modelling 2

Alvarez, Rene	Operating room scheduling: A methodology to schedule elective surgeries using the Fenton-Wilkinson approximation to sum multiple log-normal times
Vasilakis, Christos	Monitoring surgical wound infection rates: Adjusting for specialty average vs. individual patient risk
Shlakhter, Oleksandr	Modelling variable placental shapes using DLA simulation

Detailed Schedule

July 31, 2008

Session 7

BA 1170

11:30-13:00

Chair: Erwin Hans

Simulation 1

Pidd, Michael	Hospital performance simulation: The DGHPSim project
Voake, Cheryl	Investigation of transmission models for MRSA
Katsaliaki, Korina	Profiling simulation research within the health care context

BA 1200

11:30-13:00

Chair: Thierry Chausalet

Medical Decision Making

Michalowski, Wojtek	Clinical guidelines as constraint satisfaction problems
Khare, Rahul	A decision model for patients presenting to the emergency department with low-risk chest pain
Zhao, Lei	Optimal control of dosage decisions in controlled ovarian hyperstimulation

BA 1220

11:30-13:00

Chair: David Worthington

Capacity and Network Planning 1

Wang, Yanchao	Acute care capacity simulation and optimal bed allocation
Verter, Vedat	A bilevel model for preventive healthcare facility network design with congestion
Li, Lefei	Resource allocation and cooperation policy research for healthcare systems using agent-based modelling and simulation

Detailed Schedule

July 31, 2008

Session 8

BA 1170

14:00-15:30

Chair: Sandy Rutherford

Access and Wait Lists 1

- | | |
|-------------------|--|
| Joustra, Paul | Reduce access times for an endoscopy department through an iterative combination of computer simulation and linear programming |
| Elkhuizen, Sylvia | The application of operations research and management in the Academic Medical Center, Amsterdam |
| Rutherford, Sandy | Modelling of regional surgical wait lists |

BA 1180

14:00-15:30

Chair: John Blake

Outpatient Scheduling 1

- | | |
|---------------------|---|
| Zonderland, Maartje | Re-design of an outpatient clinic using queuing theory |
| ElMekkaway, Tarek | A tabu search for scheduling an outpatient clinic |
| Yergens, Dean | Experiences with rapid analysis tools and operating room scheduling systems |

BA 1220

14:00-15:30

Chair: Penelope Mullen

Surgical Scheduling

- | | |
|---------------------|---|
| van Oostrum, Jeroen | Beatrix Hospital uses a master surgical scheduling approach to improve hospital logistics |
| Vissers, Jan | Patient mix optimisation and stochastic resource requirements: A case study in tactical cardiothoracic surgery planning |
| Raeiszadeh, Pouya | An integer programming approach for scheduling ED physicians in teaching hospitals |

BA 1240

14:00-15:30

Chair: Dionne Aleman

Simulation 2

- | | |
|------------------|--|
| Harper, Paul | Modelling for hospital bed capacities and nurse workforce planning |
| Sniekers, Daphne | A perioperative simulation-based decision support tool for the orthopaedic service |
| Williams, Janet | Modelling bed-occupancy in a critical care unit |

Detailed Schedule

July 31, 2008

Session 9

BA 1170

16:00-17:30

Chair: Beste Kucukyazici

Outpatient Scheduling 2

- | | |
|------------------|---|
| Begen, Mehmet | Appointment scheduling with discrete random durations |
| Kolisch, Rainer | Capacity allocation for magnetic resonance imaging scanners |
| Klassen, Kenneth | Doctor interruptions and unpunctuality in outpatient scheduling |

BA 1180

16:00-17:30

Chair: Harald Bauhag

Access and Wait Lists 2

- | | |
|-------------------|---|
| Santibanez, Pablo | Reducing wait times & improving utilization at the BC Cancer Agency's ambulatory care unit |
| Chow, Vincent | Reducing surgical ward congestion at Vancouver Island Health Authority through improved surgical scheduling |
| Cardoen, Brecht | Sequencing surgeries at UZ Leuven: a visualization and optimization tool |

BA 1190

16:00-17:30

Chair: Ursula Schmidt

Simulation 3

- | | |
|-----------------|---|
| Patel, Brijesh | Taxonomy of modelling and simulation methods in health care and a toolkit for method selection for health care requirements |
| Burnell, Steven | Why has the UK Department of Health decreed simulation modelling within the competencies of 'World Class Commissioning'? |
| Pitt, Martin | Towards a science of usability in healthcare modelling and simulation |

BA 1230

16:00-17:30

Chair: Dionne Aleman

Statistical Modelling

- | | |
|--------------------|---|
| Churilov, Leonid | Combining clustering, classification, and regression techniques to better understand resource utilization patterns in stroke patients |
| Chausalet, Thierry | Profiling hospitals based on patient readmissions |
| Marshall, Adele | Modelling time in Northern Ireland hospitals |

Detailed Schedule

August 1, 2008

Session 10

BA 1170

09:00-10:30

Chair: Gilles Reinhardt

ED Simulation

Klein, Michael	Using spreadsheets to model simulated patient flows in ED
Xu, Samuel	A discrete event simulation model for physician capacity management in the emergency department
Powell, Emilie	Which is better: Adding more beds to the ED or reducing admitted patient boarding times?

BA 1200

09:00-10:30

Chair: Tom Bowen

EMS 3

Ingolfsson, Armann	Scheduling ambulance crews for maximum coverage
Haight, Dan	Policy implications of operations research in emergency medical services delivery
Kergosien, Yannick	A dynamic transportation problem of patients between care units

BA 1210

09:00-10:30

Chair: Dionne Aleman

Capacity and Network Planning 2

Gallivan, Steve	Simple sums and useful products
Page, Christina	Working above capacity - modelling a generic mental health process
Cooke, David	Systems dynamics for health care capacity planning

BA 1220

09:00-10:30

Chair: Erwin Hans

OR in Education Roundtable

Hans, Erwin	OR/OM in health care
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Detailed Schedule

August 1, 2008

Session 11

BA 1170

11:00-13:00

Chair: Sonia Vanderby

Cost Effectiveness 3

Viana, Joe	Sexually transmitted infections management toolkit
Mohiuddin, Syed	Enabling health, independence and wellbeing for psychiatric patients through Personalised Ambient Monitoring (PAM)
Brailsford, Sally	Estimating the costs of surgical site infections following coronary artery bypass graft surgery

BA 1200

11:00-13:00

Chair: Peter VanBerkel

Simulation 4

Blake, John	Is the time to third available appointment (TTTA) a good measure of waits?
de Silva, Dileep	Modelling for oral health human resources: A Sri Lankan experience

BA 1220

11:00-13:00

Chair: Vedat Verter

NCE RoundTable

Verter, Vedat	Towards a Canadian network of centers of excellence in health care
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