

## Scientific Schedule Monday July 16th

10:00	Conference Opening		Room: Waaier 2
	<b>Ed Brinksm</b> , Rector Magnificus of the University of Twente <b>Erwin Hans and Ingrid Vliegen</b> on behalf of the Organizing Committee of ORAHS 2012 <b>Sally Brailsford</b> , Chair of ORAHS		
10:30	Keynote Talks 1 & 2		Room: Waaier 2
	<b>Pieter Vos</b> The Dutch healthcare system in 2020: High Tech Human Touch? <b>Hanneke Kloppe</b> Mind the gap		
13:00	Poster Pitches		Room: Waaier 2
	<b>Nor Aliza Abd Rahmin</b> Simple heuristics for on-line scheduling of operating theatres <b>Matthew Adaji</b> Mathematical model for cost optimization option with priority queuing <b>Friday Adejoh</b> Application of queuing model to waiting time of out-patients in public hospitals in Benue state, Nigeria <b>Nardo Borgman</b> Organizing acute care: Logistics optimization of an integrated emergency post using discrete event simulation <b>Martine Breteler</b> Scenario analysis and real options modeling of home brain monitoring in epilepsy patients <b>Pornpimol Chaiwuttisak</b> Location-allocation problem for blood service facility in Thailand <b>Sarah Dalton</b> How to predict high dependency cot demand in upcoming days <b>Angelico Fetta</b> Modelling adolescent smoking behaviours with social network analysis <b>Mushota Kabaso</b> A simulation model of long-term survival estimates and economic costs of antiretroviral therapy (ART) in Zambia <b>Sarah Kok</b> Modeling the impact of serosorting on the spread of HIV in men who have sex with men <b>Joep Kraeima</b> Optimisation of breast cancer follow-up: Individualising trajectories based on risk stratification <b>Arturo Pérez Rivera</b> Radiotherapy capacity planning <b>Pieter Smet</b> A comparison of fairness objectives for nurse rostering <b>Nizar Triki</b> Planning home health care service <b>Gerard van der Linde</b> Simulating the effect of an integrated emergency post: A quantitative comparison of an integrated and a non integrated emergency post by using discrete event simulation <b>Wim Vancroonenburg</b> Patient-to-room assignment planning in a dynamic context <b>Renske Visser</b> A decision framework for selecting healthcare modeling approaches <b>Peter Williams</b> Unpunctuality in outpatient arrivals: Some fresh data <b>Peter Williams</b> Capacity modelling of a multi-Level system: Gatekeeper model revisited for chronic illness		
14:00	Poster Display		Room: Foyer Waaier
15:30	Session 1		
	<b>1A Epidemiology and Disease Modeling</b> Room: Carré 1A	<b>1B Organization of Healthcare Facilities</b> Room: Carré 1B	<b>1C Interaction between OR and Ward</b> Room: Carré 1C
	<b>Alexander Rutherford</b> A system dynamics model of the continuum of care for HIV/AIDS <b>Fredrik Dahl</b> Modelling population effects on HIV of prophylactic ART medication in Malawi <b>Joe Viana</b> Simulation modeling of age related macular degeneration in the UK <b>Muhammad Islam</b> Nonparametric smoothing of the impact of climate change for some selected diseases: a case study for Greater London	<b>Timo Hartmann</b> Save planning of hospital renovations <b>Ines Verena Arnolds</b> Multi-period ward layout planning for hospitals <b>Lene Berge Holm</b> Reorganising the central surgery unit: More focus on teamwork <b>Sally Brailsford</b> Simulation modelling for bipolar disorder	<b>Lerzan Ormeci</b> Optimal mix of surgical procedures under stochastic patient length of stay <b>Theresia van Essen</b> Improve OR-schedule to reduce number of required beds in the HagaZiekenhuis <b>Aleida Braaksma</b> Hourly bed census predictions for inpatient care services <b>Nikky Kortbeek</b> Flexible nurse staffing based upon hourly bed census predictions

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09:30 Session 2			
<b>2A Empirical Modeling in Healthcare</b> <i>Room: Carré 1A</i>	<b>2B Patient Flow (1)</b> <i>Room: Carré 1B</i>	<b>2C Operating Room Planning and Scheduling (1)</b> <i>Room: Carré 1D</i>	<b>2D Practical Challenges in Healthcare</b> <i>Room: Carré 1C</i>
<b>Steffen Bayer</b> Length of stay for stroke patients: Statistical and simulation analysis	<b>Nelly Litvak</b> Patient flow analysis	<b>Andreas Fügner</b> Behavioral aspects of operating room planning	<b>Daniëlle Ekkel</b> Simulation based optimization of the operating theatre program
<b>Evin Uzun Jacobson</b> Causes of delays in hyper-acute stroke care	<b>Izabela Komenda</b> A model of CCU activities through queueing theory	<b>Inês Marques</b> Planning elective surgeries in a Portuguese hospital using a genetic heuristic	<b>Brecht Cardoen</b> Grouping of medical disposable items into custom packs: A mathematical programming approach
<b>Jeroen Beliën</b> Factors causing non-surgical time in a parallel surgery and anaesthesiology setting	<b>Jonathan Helm</b> Discharge planning to mitigate hospital congestion and bed block	<b>Sebastian Rachuba</b> A robust approach for scheduling in healthcare considering multiple objectives	<b>Michel Kats</b> Tactical planning in ZGT Almelo/Hengelo
<b>Hassan Baalbaki</b> Fitting multiple distributions in multiple risks situations: Impact on health economic evaluations	<b>Kiok Liang Teow</b> Systems dynamics modelling for specialist outpatient flow	<b>Fabrcio Sperandio</b> Optimization via simulation: An approach to the operating room scheduling problem	<b>Maartje Zonderland</b> Variations in the patient care process at the emergency department: Development and implications of an observational instrument
11:30 Session 3			
<b>3A Healthcare Policy Modeling (1)</b> <i>Room: Carré 1A</i>	<b>3B Patient Flow (2)</b> <i>Room: Carré 1B</i>	<b>3C Home Care</b> <i>Room: Carré 1D</i>	<b>3D Interaction between OR and Ward: From Theory to Practice - Sponsored by Information Builders</b> <i>Room: Carré 1C</i>
<b>Penelope Mullen</b> Are numbers still killing people: And what is being done about it?	<b>Paolo Tubertini</b> Health planning via discrete event simulation: A breast screening case study	<b>Thierry Garaix</b> Consistent home health care service	<b>Peter Vanberkel</b> Implementing algorithms to reduce ward occupancy fluctuation through advanced planning
<b>Leonid Churilov</b> Can minutes really save years? Simulation modelling for understanding the effect of fast and appropriate access to stroke thrombolysis on functional outcomes and long-term stroke burden	<b>Sylvia Elkhuizen</b> An operational model for comparison of health services for diabetes II between six countries	<b>Ettore Lanzarone</b> A robust programming model for the assignment problem in home care services	<b>Edgar de Groot</b> Linking the OR block plan with bed utilization: From model to implementation
<b>Abdur Rais</b> New insights on integer programming models for the kidney exchange problem	<b>Yasar Ozcan</b> Assessing the impact of organizational changes in clinical pathways	<b>Bushra Bashir</b> The nurse-patient assignment problem in home care	<b>Renske Visser</b> A model to reduce ward occupancy fluctuation through advanced planning: From theory to practice
<b>Msugh Moses Kembe</b> Combining high tech with human touch by doctors at Federal Medical Centre Makurdi	<b>Bernadetta Addis</b> Clinical pathways: Insights from a multidisciplinary literature survey	<b>Hanane Allaoua</b> Combining routing and rostering for the home health care problem	<b>Bernd van den Akker</b> Using operation research in real life hospital capacity management
14:00 Keynote Talk 3 <b>Wim van Harten</b> Translating operations research methods into hospital practice; evidence base and factors influencing optimal use			<i>Room: Waaier 2</i>
14:30 Discussion Session <b>A panel consisting of both academics and practitioners</b> Applying OR models in healthcare practice: Is there need for more advanced models?			<i>Room: Waaier 2</i>

<b>4A Healthcare Policy Modeling (2)</b>	<b>4B Stochastic Modeling (1)</b>	<b>4C Operating Room Planning and Scheduling (2)</b>	<b>4D Implementing Scheduling Budgets: From Theory to Practice - Sponsored by ORTEC</b>
<i>Room: Carré 1A</i>	<i>Room: Carré 1B</i>	<i>Room: Carré 1D</i>	<i>Room: Carré 1C</i>

<b>Marion Rauner</b> Prevention programs for occupational injuries: Cost analysis and targeted resource allocation	<b>Adele Marshall</b> Discrete conditional phase-type models for representing patient activity in accident and emergency	<b>Sara Ceschia</b> Patient admission scheduling with operating room constraints	<b>Egbert van der Veen</b> Optimal staffing under annualized hours
<b>Tracey England</b> Demonstrating the benefit of OR in maximising the use of existing health related data for the Welsh Government	<b>Dawid Kozłowski</b> Use of queue modelling in the analysis of elective patient treatment governed by a maximum waiting time policy	<b>Guoxuan Ma</b> Case mix and capacity planning: An application in a Belgian hospital	<b>Martin Woudstra</b> Controlling workforce scheduling budgets using decision support
<b>Michael Carter</b> Crossing the OR-policy gap: System dynamics of cross-sector patient flows	<b>Greggory Schell</b> Optimal treatment policies for risk-averse patients with limited resources	<b>Manisha Rathi</b> Predicting hospital resource utilization: A fuzzy regression approach	<b>Paul Trossèl</b> Implementing workforce scheduling budgets: A case study
<b>Teresa Cipriano Rodrigues</b> Cognitive maps in healthcare: An analysis of reported applications	<b>Shirin Geranmayeh</b> Bed allocation using a generic Markov model	<b>Luiz Guilherme Nadal Nunes</b> Analyzing the use of hospital resources: Applying mathematical programming	

## Scientific Schedule Thursday July 19th

09:00	Session 5		
	<b>5A Location Problems</b> <i>Room: Carré 1A</i>	<b>5B Stochastic Modeling (2)</b> <i>Room: Carré 1B</i>	<b>5C Personnel Planning and Scheduling</b> <i>Room: Carré 1C</i>
	<b>Honora Smith</b> A fast spatial query algorithm for nationwide location of laboratories for HIV/AIDS blood testing in South Africa	<b>Jivan Deglise-Favre-Hawkinson</b> Stochastic modeling and optimization for integration of clinical research into clinical care	<b>Elizabeth Rowse</b> Workforce planning for a district nursing service
	<b>John Blake</b> OR case study: Evaluating a blood distribution network in Atlantic Canada	<b>Paulien Koeleman</b> Using Markov decision theory to optimise waiting time targets	<b>Roberto Aringhieri</b> Models for multi-skilled rostering in health care
	<b>Ana Maria Mestre</b> Hospital network planning under uncertainty	<b>Martin Utlej</b> Evaluating a stochastic model of short-term bed demand	<b>Mieke Defraeye</b> A shift scheduling approach to control excessive waiting times under time-varying demand
	<b>Kenneth Korve</b> Accreditation of health care facilities under the national health insurance scheme in Nigeria: The role of the geographical information system tool	<b>Xiaolan Xie</b> Promise surgery start times and implementation strategies	<b>Bernardo Almada-Lobo</b> Medical doctor staffing and scheduling
11:00	Keynote Talk 4		<i>Room: Waaijer 2</i>
	<b>Vinod Subramaniam</b> MIRA - Top technology for patients		
13:00	Session 6		
	<b>6A Forecasting</b> <i>Room: Carré 1B</i>	<b>6B Appointment Scheduling</b> <i>Room: Carré 1C</i>	<b>Lab Tour</b> <i>Start from Registration Desk</i>
	<b>Paul Harper</b> MetSim: A simulation support tool using meteorological information to improve the planning and management of hospital services	<b>Marjan van der Velde</b> Organizing multidisciplinary care for children with neuromuscular diseases	
	<b>Philip Worrall</b> Development of a hybrid grey-fuzzy methodology to forecast future demand for long-term care	<b>Joost Veldwijk</b> Designing appointment schedules in health care: Dealing with walk-in patients	
	<b>Valérie Dorval</b> Forecasting post-surgical length of stay using phase-type distribution and regression tree theory	<b>Evrin Didem Gunes</b> Appointment scheduling in presence of seasonal demand	
	<b>Dhia Jomaa</b> Improvement of the inventory management module implemented in a pharmaceutical warehouse management system	<b>William Millhiser</b> Assessing appointment systems' operational performance with policy targets	
15:00	Session 7		
	<b>7A Emergency Care Services (1)</b> <i>Room: Carré 1B</i>	<b>7B Operating Room Planning and Scheduling (3)</b> <i>Room: Carré 1C</i>	<b>Lab Tour</b> <i>Start from Registration Desk</i>
	<b>Martijn Mes</b> A simulation study of an integrated emergency post	<b>Stefan Creemers</b> The optimal allocation of server time slots over different classes of patients	
	<b>Melanie Reuter</b> Planning the patient transport as part of the German EMS system	<b>Marco Pranzo</b> An efficient decomposition approach for surgical planning	
	<b>Thierry Chausalet</b> Using data mining and simulation for health system understanding and capacity planning: an application to urgent care	<b>Malek Masmoudi</b> Robust master surgical scheduling	
	<b>Serhat Tüzün</b> A multi-criteria decision model for the evaluation of emergency department performance	<b>Marzieh Soltanolkottabi</b> Capacity planning in operating rooms by means of centralized data envelopment analysis: Case study of Alzahra hospital in Isfahan-Iran	

## Scientific Schedule Friday July 20th

09:30

Session 8

### 8A Process Optimization

Room: Carré 1A

#### Mehmet Begen

Reducing wait times and improving treatment planning process for radiation therapy

#### Marek Lubicz

Towards supporting clinical, hospital, and regional management-lessons from thoracic surgery

#### Claude Olivier

Analysis of emergency departments in a regional hospital: A lean approach

#### Mohammad Yarmohammadian

Improvement of hospital processes through Business Process Management (BPM) in Qaem teaching hospital: A work in progress

### 8B Emergency Care Services (2)

Room: Carré 1B

#### Vincent Knight

A game theoretical approach to the Emergency Medical Vehicle - Emergency Department interface

#### Geert Jan Kommer

Optimal ambulance capacities under uncertain demand and response times

#### Leanne Smith

Allocating EMS vehicles to maximise survival of heterogeneous patients

#### Rob van der Mei

TIFAR: A simulation tool evaluating dispatching strategies for ambulance services

### 8C Planning Health Services

Room: Carré 1C

#### Teresa Cardoso

Searching for equity improvements: A multi-objective mathematical programming model for planning the delivery of long-term care

#### Mario Jorge Ferreira de Oliveira

An operations and control center for rescue and treatment of emergency patients in large scale events

#### Christos Vasilakis

The Surgical Wound Infection Monitoring (SWIM) tool

#### David Stanford

Addressing waiting time inconsistencies in transplantation