



CALL FOR PAPERS

SIMULATION (ISI ranked journal) - Special Issue on
“Modeling and Simulation in Healthcare”

Important Dates (extended):

Paper Submission:	July 1, 2009
Authors Notification:	August 15, 2009 (extended)
Final Submission:	September 15, 2009
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Journal Website: <http://sim.sagepub.com/>

Special Issue Scope:

Modeling and simulation have benefited many of the traditional areas in learning about system behavior, providing training, becoming a standard practice for analyzing and developing complex systems/processes, and helping to mitigate design flaws.

The healthcare domain, with all its potential, is making only first steps in this horizon. Applying modeling and simulation as two complementary methods in healthcare could facilitate a significant understanding of the healthcare operational aspects, medical practices, treatment delivery, and help to identify where potential human errors are most likely.

Due to its importance, sensitivity, complexity, security, informality, and specific nature, healthcare requires unified modeling and simulation approach, which creates an enormous potential for challenging research and innovative applications.

With global transition to electronic medical records (EMR), simulation could be used to study the IT impact on healthcare processes, redesigning current healthcare processes to implement innovations in the delivery of healthcare.

One of the main challenges and quality factors in healthcare delivery is waiting time and traveling to medical centers. Medical resources (physicians, advanced diagnostic equipments, operation facilities) are constantly in high demand, which require innovative approaches to increase their availability. Current trends in designing new medical facilities require co-design of medical centers and healthcare processes - known as process-centric spatial design. Simulating healthcare practices where space and processes are jointly taken into account may significantly increase resource utilization and healthcare productivity. Streamlining procedures for traveling patients may result in high satisfaction as well as reducing number of visits. Furthermore, simulation is immersing as an asset in training, communication, and sharing among analysts, practitioners, and professionals in the healthcare domain.

This special issue is aimed to solicit research results on the following topics of interest, but not limited:

Suggested Topics

- Potential of simulation in healthcare
- Challenges of simulation in healthcare
- Pitfalls with applying simulation in healthcare
- Simulation methods and methodologies for healthcare
- Modeling and simulation of patient examination processes
- Modeling and simulation of hospitalization processes
- Modeling and simulation of primary care (general practitioner/family doctor) offices
- Modeling and simulation of inter-organizational processes in healthcare
- Modeling and summation of EMR systems
- Requirements modeling and simulation for designing EMR system
- Modeling and summation of ICT impacts in healthcare
- Modeling and Simulation of IT-healthcare alignment
- Simulation of healthcare information systems
- Simulation and gaming for training healthcare personnel
- Process-centric spatial design and simulation of healthcare centers
- Case studies in healthcare simulation
- Survey of simulation tools/suites for healthcare

Submission Instructions

For manuscript formatting and other guidelines, please visit the **SIMULATION Submission Guidelines** webpage: <http://www.scs.org/pubs/simulation/submissionGuidelines.html>

Manuscripts should be prepared and submitted online at <http://mc.manuscriptcentral.com/simulation>. Please note in your online cover letter that your manuscript is submitted for the special issue "Modeling and Simulation in Healthcare".

Important Note:

Manuscripts must not have been previously published or be submitted for publication elsewhere. Each submitted manuscript must include title, names, authors' affiliations, postal and e-mail addresses, an extended paper, and a list of keywords. For multiple author submission, please identify the corresponding author.