

**Call for Papers**  
**Special Issue of Decision Support Systems (DSS)**  
**Decision Support in Medicine**

Medicine is a rapidly changing field that embraces information technology at all levels. Different initiatives propel the development and use of information technology in medicine and health care leading to significant advances in the field. Several studies show the resulting impact and how information technology affects the lives of patients, practitioners, and researchers.

Patients who look for medical information or advice benefit from information technology and the Internet. A 2003 pew survey estimates that 80% of adult Internet users, about 93 million Americans, search online for information. They educate themselves and use this new knowledge to make health care decisions. A wide range of tools and technologies makes this possible. There are medical search engines and knowledge portals, interactive quizzes, support groups and diet groups, among others, which are available to everyone with an Internet connection.

Researchers also benefit from advances in information technology. Medical and biomedical informatics expedite the discovery of new knowledge and make existing knowledge more easily available. For example, several medical ontologies, libraries, and databases are available to researchers and for use in information systems. Information systems can help researchers with data mining, visualization, and simulation of data and experiments.

Practitioners use information technology for management, communication, education, and to aid medical decision taking. For example, the use of electronic patient records and prescriptions can reduce errors. Expert systems and machine learning algorithms can provide second opinions. And telemedicine and telehealth initiatives can cross-geographical boundaries.

This special issue encourages submissions of practical and novel information technology, techniques, methods, practices, and systems in medical informatics that contribute to and advance this active and burgeoning field. Compelling reviews of the field will also be considered. All submissions should be original work not published elsewhere.

Topics include but are not limited to:

- Knowledge management in medicine
- Epidemic detection and management systems
- Managing information security and privacy in health care
- Ethical and social challenges in medical informatics
- Information technology for mobile devices in medicine (PDAs, Tablets)
- Accessing, retrieving, and storing medical images (2D, 3D)
- The development, usage, and management of medical ontologies
- The Internet and consumer health informatics
- Data mining, text mining, and machine learning in medical research and clinical settings
- Information technology for medical education
- Telemedicine and telehealth
- Information technology for clinician-patient and patient-patient communication
- Electronic patient records
- Electronic prescription systems

Inquiries should be sent to the guest editors

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Manuscripts must be electronically submitted directly to [gondy.leroy@cgu.edu](mailto:gondy.leroy@cgu.edu) no later than October 15<sup>th</sup> 2004 (acknowledgement will be sent upon receipt). Submit two copies in pdf format: one copy with author names, affiliation and contact information and one copy without this information for review purposes. Accepted papers will need to comply with the required publication style and material for Decision Support Systems. Authors should consult the Instructions for Authors section at <http://www.elsevier.com/homepage/sae/orms/dss/menu.htm>.