Introduction to the Minitrack on
Decision Support in the Delivery of Healthcare

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Motivation: Well-designed decision support systems (DSS) have the potential to support managers and professionals in dealing with changes in the health care industry. A number of complex facilitators and barriers in the design and use of effective DSS in health care, however, suggest that specific research studies are required. These facilitators and barriers include complex work patterns, professional autonomy and skills, stakeholder needs to be addressed in strategic planning, production systems, cost and revenue structures, decision making, and medical language and applied knowledge. Studies in this field contribute not only to both design and “tailored” applications of DSS in health care, but also to mid-range and broader level theories of social-technological interaction. This mini-track was created to address these needs, and the papers presented in this mini-track reflect these goals.

Riley, in her paper “Applied Simulation as a Decision Support System Tool: The Design of a New Internal Medicine Facility”, examines one of the most important resources to manage in a clinic’s production: physician time. She illustrates how the development and use of a DSS to assist the redesign of a clinic’s scheduling of walk-in versus scheduled patients can have dramatic effects on the production, service quality, and capacity of an internal medicine clinic.

Ribièrè, LaSalle & Khorramshahgol, in their paper “Hospital Information Systems Quality: A Customer Satisfaction Assessment Tool”, focus on the “customers” of health care – which include both health professionals and patients. The researchers highlight the lack of specific quality assessment tools for health information systems for these important stakeholder groups. They use and build upon the theoretical work of information systems satisfaction, system quality, and the “loss function”, to illustrate additional variables and measures needed to be considered to measure the quality of health information systems.

A UK perspective of decision support in health care is provided by Hackney, Dhillon, McBride & Kesar in their paper “Interpreting IS/IT Decision Support in the UK Primary Health Care System.” The paper presents an overview of the UK National Health Service (NHS) Reforms and discusses the subsequent impact of IS/IT as a facilitator for changing the structure of primary care within the NHS. The authors argue that primary care physicians not only need to adopt more appropriate decision support techniques for the management of IS/IT but should also be more proactive in its application.

User acceptance of DSS is another important issue in health care. In the paper “Theory of User Acceptance of New Technologies: An Examination of Professionals”, Succi and Walter argue that the Technology Acceptance Model (TAM), which has been developed based on surveys of managers, may not apply to professionals, such as physicians. Given professionals’ concern about the
loss of professional *dominance*, they may base their decisions about the use of IT according to the impact such technologies may have on their professional position. A new dimension for TAM is proposed to capture the degree to which IT is perceived by professionals to affect their overall professional dominance.

**Conclusions:** All of these papers present important perspectives on DSS design and implementation in health care. Each paper contributes to both the application of DSS in the health care, and to the theoretical development of the DSS and IS literature.