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Collana	Health Informatics, , 1431-1917
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Soggetti	Artificial intelligence - Medical applications Medical informatics Neural networks (Computer science)
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword -- Preface -- Introduction -- Paradigm Shift in Conceptualizing Error -- Analysis of Error based on Laboratory Studies -- Team Decision Making and the Analysis of Error -- Influence of Training on Error Detection in Simulated Clinical Rounds -- Opportunistic Decision Making and Workflow Patterns -- Decision Making and Deviations from Protocol in Trauma -- Effect of Information Seeking Activities on Clinical Decision Making -- Investigating Communication Complexity and Errors: A Continuity of Care based Approach -- Bridging Gaps in Transitions of Care: Design and Evaluation of Handoff Intervention Tool -- Driven to Distraction: Classifying Interruptions in Intensive Care -- Shared Mental Models in Team Handoff -- Enhancing Communication and Improving Coordination in ICU -- The interplay of organizational structure and communication practices -- Activity Prediction and Automated Workflow Modeling using RFID Sensors -- Sensor-based Tracking of Team Interactions and Clinical Workflow -- Work Domains, Complexity and Situation Awareness in the ED -- A framework for understanding error and complexity in critical care -- Communication and

Complexity: Negotiating transitions in shift work and the coordination of patient care -- Learning and Competency: Role of Cognition and Error in the Complex Workplace -- A Framework for Complexity and Cognition in Technology-Rich Clinical Settings -- Clinical Practice -- Education and Training -- Biomedical Informatics -- Epilogue.

Sommario/riassunto

This book is the first to address cognitive informatics (CI), a burgeoning discipline that cuts across several academic and professional disciplines. It contains examples drawn from the application of methods and theories from CI to challenges pertaining to the practice of critical care medicine and the management of life-threatening conditions. Cognitive Informatics in Health and Biomedicine: Case Studies on Critical Care, Complexity and Errors focuses on the unifying themes of cognition, complexity, and the management of error in critical care practice and has been written by distinguished scholars who are leaders in their respective fields. The results reflect the interdisciplinary strengths of cognitive science, and offer a fresh insight into ways to investigate and mitigate errors and the role of health information technology in complex, dynamic environments such as the emergency room and the intensive care unit. The book will be of interest to students and a broad range of researchers in cognitive science, human factors, biomedical informatics, psychology, critical care specialists, computer science, linguists and anthropology.
