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Sommario/riassunto	New computerized approaches to various problems have become critically important in healthcare. Computer assisted diagnosis has been extended towards a support of the clinical treatment. Mathematical information analysis, computer applications together with medical equipment and instruments have become standard tools underpinning the current rapid progress with developing Computational Intelligence. We are witnessing a radical change as technologies have been integrated into systems that address the core of medicine, including patient care in ambulatory and in-patient setting, disease prevention, health promotion, rehabilitation and home care. Computer aided diagnosis and treatment systems increase the objectivity of the analysis and speed up the response to pathological changes. This book presents a variety of state-of-the-art information technology and its applications to the networked environment to allow robust computerized approaches to be introduced throughout the

healthcare enterprise. Patients safety and shortening of the rehabilitation time requires a more rapid development of minimally invasive surgery supported by image navigation techniques. Home care, remote rehabilitation assistance, safety of the elderly require new areas to be explored in telemedicine and telegeriatrics. This book is a great reference tool for scientists who deal with problems of designing and implementing processing tools employed in systems that assist clinicians in patient diagnosis and treatment. .