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Section I. Fundamental Concepts and Theories

This section serves as the groundwork for this comprehensive reference book by addressing central theories essential to the understanding of clinical technologies. Chapters found within these pages provide a tremendous framework in which to position clinical technologies within the field of information science and technology. Insight regarding the critical integration of global measures into clinical technologies is addressed, while crucial stumbling blocks of this field are explored. In the chapters comprising this introductory section, the reader can learn and choose from a compendium of expert research on the elemental theories underscoring the clinical technologies discipline.

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This section discusses a variety of applications and opportunities available that can be considered by practitioners in developing viable and effective clinical technologies programs and processes. This section includes over 20 chapters reviewing certain utilizations and applications of clinical technologies, such as artificial intelligence and social network analysis in healthcare. Further chapters show case studies from around the world, and the applications and utilities of clinical technologies. The wide ranging nature of subject matter in this section manages to be both intriguing and highly educational.

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Section VI. Managerial Impact

This section presents contemporary coverage of the social implications of clinical technologies, more specifically related to the corporate and managerial utilization of information sharing technologies and applications, and how these technologies can be facilitated within organizations. Section 6 is especially helpful as an addition to the organizational and behavioral studies of section 5, with diverse and novel developments in the managerial and human resources areas of clinical technologies. Typically, though the fields of industry and education are not always considered co-dependent, section 6 provides looks into how clinical technologies and the business workplace help each other. The interrelationship of such issues as operationalizing, supervision, and diagnosis management are discussed. In all, the chapters in this section offer specific perspectives on how managerial perspectives and developments in clinical technologies inform each other to create more meaningful user experiences.

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Section VII. Critical Issues

Section 7 details some of the most crucial developments in the critical issues surrounding clinical technologies. Importantly, this refers to critical thinking or critical theory surrounding the topic, rather than vital affairs or new trends that may be found in section 8. Instead, the section discusses some of the latest developments in ethics, law, and social implications in clinical technology development. Within the chapters, the reader is presented with an in-depth analysis of the most current and relevant issues within this growing field of study.

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Section VIII. Emerging Trends

The final section explores the latest trends and developments, and suggests future research potential within the field of clinical technologies while exploring uncharted areas of study for the advancement of the discipline. The section advances through medical imaging techniques, diagnostics, virtual reality, and more new technologies by means of describing some of the latest trends in clinical research and development. These and several other emerging trends and suggestions for future research can be found within the final section of this exhaustive multi-volume set.

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