

Preface

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Published online: 27 March 2015

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Health Care provides both medical treatments to patients and prevention counseling to people, thereby enhancing health security in human lifetime. With the development of society and economy, along with growing concern about health, *Health Care* has become an important subject drawing great attention from researchers in different fields in the last decade. Historically biotechnology and medical research have been the dominant areas of *Health Care* research. In recent years there has been a worldwide surge in the study of the systems of operation and management of *Health Care*. This research has achieved remarkable results. The application and development of management science, computer science and other related disciplines to solve healthcare management problems demonstrated an unprecedented positive impact on the *Health Care* sector.

The early research works in *Health Care* operations management were mainly undertaken by the administration staff who focused more on the clinical results of daily care of patients. Although they were familiar with the specific operations of *Health Care* and understood the need to improve *Health Care*, their lack of scientific management theory and optimization methods has hindered the progress in the study of *Health Care*. The growing application of management theories and computer science to *Health Care* operations has encouraged more interdisciplinary researches.

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With increasing attention being paid to *Health Care*, more experts in management science, computer science, mathematics and optimization have become engaged in *Health Care* research. These experts collaborate with the *Health Care* providers and collectively produce many outstanding achievements with strong opportunities for applications. There are still great potentials for further researches. Predictably, the science of operations management will make significant contributions to the provision of *Health Care*.

This “Special Issue on Combinatorial Optimization in Health Care” records 13 original articles by a number of Chinese experts and scholars in the fields of operations research and medical research. It includes the leading-edge researches in emergency and acute services, surgery scheduling, appointment dispatching, disease classification, pharmacy supply chain management, complicated diseases and cellular networks. We have prepared this collection of research papers to inspire more researchers to be involved in *Health Care*.

We would like to acknowledge the scholars, colleagues and friends for their support of this publication. Their support has facilitated the organizing and selection of these high-quality academic papers in a short period of time.

In summary, we believe that this “Special Issue on Combinatorial Optimization in Health Care” will encourage more researchers to focus on *Health Care*. Their accomplishments will eventually guarantee more affordable *Health Care* services with better outcomes and higher quality to people all over the world. We will also consult with the experts in management science, computer science, mathematics and optimization to edit special issues of other topics. This will promote theoretical research, the joining of theory and practice, and interdisciplinary development.

Guest Editors:
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March, 2015