Preface

The definition of “health” as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” as adopted by the World Health Organization in New York, in June 1946, at its inceptional meeting has proved an elusive global goal. While many countries have enjoyed the benefits of health care systems and social and economic policies that have improved life expectancy and reduced mortality and the WHO has had single significant victories in eradication of disease (e.g. smallpox and polio), many countries still have high maternal and infant/child mortality, struggle with infectious diseases such as HIV/AIDS, malaria, tuberculosis, and face critical health human resources shortages. The UN’s ambitious eight Millennium Development Goals target poverty and hunger, maternal and child health, gender equality, primary education, environmental sustainability, infectious diseases, and global initiatives for development – perhaps the first global effort to achieve “health” in the original definition of the term. Unfortunately many of the current issues still plaguing health care and health services delivery at a global level – the shortage of healthcare professionals, brain drain and migration of health workers, brain waste, lack of proper health technology and adequate information and communication technology – threaten the achievement of these goals by the target of 2015. The price of failure is potential disaster with literally life or death consequences. In this time of present and expected pandemics, health disparities across urban and rural residents or developed and developing countries, an aging global demographic, increased prevalence of chronic illness, economic crises, every country is struggling to try to find customized solutions that fit their healthcare systems, while also trying to work with other countries, under the World Health Organization’s guidance, to find a global solution to many of these problems.

The Toronto Call to Action declared the decade from 2006 to 2015 “A Decade for Health Human Resources” for the Americas. The attendees at the regional meeting of the Observatories of Human Resources in Health (Toronto, October, 2005) recognized that both national and international actors in the health sector and other relevant sectors had to be mobilized to “collectively strengthen the human resources in health through both policies and interventions, in order to achieve the Millennium Development Goals and according to the national health priorities to provide access to quality health services for all the peoples of the Americas by the year 2015” (PAHO, 2005). Relevant and timely, this book tackles two problems – health human resources and the introduction of computer technologies in health care - by having some of the most respected scholars and practitioners from around the World describe their experiences, some successes, many fresh starts, and propose possible solutions both at a theoretical and practical level.

The 16 chapters in the book have been divided into four sections. The first section addresses the foundations of human resources in the field of health care and provides us with an overview in Chapter
Chapter 1 of the issues facing health human resources and outlines the need for strategic health human resources planning at the organizational and institutional level that includes consideration of social, economic, and cultural lenses and realities. Chapter 2 provides a historical overview of the social origins and theories of human resources management that have shaped the current practice and stresses the need to leave theoretical models behind and look at the day-to-day realities of health workers. The current hierarchical and traditional structure of physicians and nurses is also challenged as we need to look for solutions to human resources problems in new ways of working together and new organizations. The example of “magnet” hospitals is given – so-called because the working conditions drew nurses to these organizations that emphasized an organizational culture of collaborative models of working, excellence in nursing services, competency, strong leadership, and continued education. Finally in Chapter 3 the business model of learning organizations as expounded by Peter Senge in the 1990s is described and applied to the “learning healthcare organization.” All chapters emphasize the need for a new way of building our health organizations and the need for dynamic and responsive planning of human resources.

Section 2 focuses on the challenge of recruiting and keeping healthcare professionals. From the point of view of motivation, management, and demographics the authors do a great job at explaining the difficulties not only for hiring, but also in managing and keeping a motivated healthcare workforce. Health systems across the world are experiencing critical shortages of health workers that limit the ability to provide timely and effective care. Lack of resources in low income countries is worsened by the lure and “pull” of trained staff to better paying positions in the developing world, as well as the “push” from those countries due to poor working conditions, hazardous conditions, and lack of continuing education (“brain drain”). In these chapters Bidwell et al outlines some general factors that address how to motivate and maintain staff, and describes incentives, both financial and non-financial, that are most effective, while two specific examples are given in very different countries. In Chapter 5, McAuliffe et al describe the conditions in two sub-Saharan African countries, Lesotho and Malawi, and illustrate from focus group discussions and surveys of workers the reasons for dissatisfaction and attrition, while Chapter 6 by Kabene et al. indicates this is not only a problem in the developing world but also in a country such as Canada with a fairly good health and educational system. The recruitment and retention of health workers particularly in underserviced rural communities is also a problem that affects accessibility and provision of care. The authors provide recommendations on increased medical school enrolment, more effective use of foreign-trained/international medical graduates (to eliminate “brain waste”), and a call for more effective HR management and health HR planning.

Section three, with six chapters based on case studies and practice from different areas of the world, deals with the crucial problem of eHealth, health informatics, and the introduction of information technologies into individual organizations, regions, or nations. We start with the ‘big’ picture in Chapter 7 in presenting an overview of the Spanish health system and its efforts at introducing IT and eHealth at a regional and national level and in Chapter 8 an example of a public-private partnership in India that has resulted in the implementation of IT and a unique service delivery model for primary care in the state of Andhra Pradesh. Using an example on a smaller scale (in a hospital neonatal care unit), Antunes et al in Chapter 9 introduce a model for the study of the impact of technology and risk assessment that looks at the interplay of the software, hardware, “liveware” (i.e. humans) and the environment (SHELL).

The introduction and use of information and communication technologies has been touted as a tool that can help to solve some of the problems of poor working conditions in rural and remote areas (by provision of connections to colleagues and specialists, continuing education) and delivery of service via telehealth applications to patients in remote communities. Chapter 10 describes an innovative distance
education program in Thailand delivered through the Chulalongkorn University that is specifically designed to keep front-line health workers in their local communities by providing online learning and provision of material and courses that are directly relevant to local problems - a “tailor-made learning in the workplace” program. Chapter 11 by Edirrippulige provides a discussion of the benefits of telehealth and some of the advantages it can provide in provision of medical and nursing services with the caveat that technology should only be introduced to solve an existing problem and not simply for the sake of the technology itself. A message that I think resonates in all of our examples of health informatics in providing improved care for a nation, primary care to rural residents who are kilometers away from health centers, a tailor-made solution to local health needs, and the foreseen and unforeseen benefits that result when IT is introduced in a health unit and alters interactions and collaborations among physicians, nurses, nurses assistants, parents, and small patients.

The final chapter in Section three describes the reflections and personal journey of one researcher who has worked on several projects in South Africa in a participatory, collaborative research model. In many instances this model presents the best way for communities and researchers to collaborate on the introduction of services that will improve health care locally, but El Ansari warns of the unique attributes of this form of research and the delicate balance that is needed to develop and maintain a true collaborative partnership – the key, assigning the patient as the top priority.

All authors have done a formidable job in describing, analyzing, and presenting these real-life examples and in helping the reader have a better view of challenges met and often faced successfully by colleagues across the globe.

Finally, in the logical continuation and an exciting conclusion to the book, Section Four: New Types of Human Resources - New Ways of Working; The Future! - peeks into the future. The authors have imagined the future of health care both in terms of human resources and technology. The move to more extensive use of computer technologies in health systems and a fully integrated electronic health record also calls for a new type of health professional who is technically proficient and can span both knowledge and skills in ICT and health/biomedical sciences. The field of health informatics, or more broadly the term eHealth, is used to describe this brave new world and a mix of eHealth professionals (technology specialists, health informaticians, health information management professionals) or health informatics professionals is needed. These new types of workers are described in the chapters (13 and 14, respectively) by Gibson and Covey, Demystifying eHealth human resources and by Lui, the Health Informatics Professional. In the following Chapter 15, Johnson and Takashiro consider how best to design and develop curricula that provide evidence-based interprofessional education, a new way of collaborative working, for all health care workers with some examples drawn from their work in health information management.

Finally Davis looks provocatively into the future and the newest type of “worker” and way of work that blends humans and technology – a consideration of “hu” resources – the ultimate challenge and final evolution of our advanced technology and integration of “human” and “technological” resources. This is not as far off as some may believe, the term ‘humanotics’ is already being used to describe this brave new world of co-evolved humans and robotic machinery!

These authors have shown incredible prescience and skills in having us time-travel to imagine what the future of healthcare could be like. In the cross roads of human behavior and the newest technology and their troubled waters, they are helping us to navigate and reach the shores.

We invite you to join us in reading this very exciting volume to travel both in space and time in the crucial field of health care, its challenges, successes, and failure. This book can be used both as a refer-
ence and as a text book to use in your classes to initiate passionate discussions with colleagues and/or students. This book will also help you feed your own ideas with examples and visions from colleagues having the same passion in solving the most important problem of all: The health of the human race! And to make that original WHO definition of health a reality. This can only be accomplished by making sure that we have the right number of healthcare professionals, highly motivated, properly trained, and having at their disposal the right technology.

We were truly happy to see the number of scholars interested in contributing to this book. Our reviewers and the advisory board had the hard task of choosing the best ones to make this book an important contribution to the field of health care and its human capital and to the billions of patients across the world hoping for the best treatment, and for all of us looking for good health. We are truly indebted to you. We also want to thank the publisher, IGI Global, for accepting this publication and for the support and patience they showed throughout the process and for all the authors and reviewers who helped to make it a reality.

REFERENCE