### **Editorial**

# Guest Editors: Eliezer Geisler, Koos Krabbendam and Roel Schuring

As we enter the 21st century, major transformations are occurring in the delivery of healthcare worldwide. Medical and healthcare technologies are increasingly impacting on the clinical and the administrative dimensions of healthcare delivery. Innovations introduced in the 1990s have already created accumulated effects that will be compounded by the continuous technological progress in medical care. Areas such as telemedicine, telehealth, computerised medical records, and uses of the internet are some of the milestones in the almost total revamping of the healthcare landscape.

A key ingredient in this age of challenges and transformations is the redesign of the hospital as a provider of medical care. Medical technology is already changing the operations, mission, and the processes of today's hospitals. In this regard, the challenges for the future represent an exciting opportunity for study, reflection, planning, and intervention.

This special issue is a compilation of selected papers presented at the *First International Conference on the Hospital of the Future*. The Conference was held at the University of Twente, in the Netherlands, in April 2001. Over 100 academics and practitioners from 14 countries presented exciting papers that described recent developments in the technological transformations of the sector of healthcare delivery.

The papers are the outcome of the four main themes or tracks of the Conference. These themes were:

#### 1 Changes and transformations in society

What will be the changes that occur in societal attitudes toward healthcare and medical care? How will these changes impact on the hospital of the future? What will be the changes in behavioural patterns concerning the role that technology plays in healthcare delivery? What will be the changes in the needs and expressed desires of customers, regulators, and providers in the new era of medical technology and the ubiquity of the Internet?

#### 2 Applications of information technologies

What are the uses of telemedicine, telehealth, electronic applications of data and information, and electronic medical records? What are the organisational and economic issues and challenges? How can we resolve them? How will they impact on and shape the hospital of the future?

## 3 Emerging technologies

How will new developments in technology contribute to medical care, the hospital of the future, and healthcare delivery? What are the uses and challenges of gene therapies and genetic technologies, imaging technologies, and the combined effects of joint applications of diverse technologies in healthcare delivery?

## 4 Applications of modern management

How will applications of modern management techniques such as TQM, ERP, continuous improvements, and organisational restructuring contribute to the efficiency of the hospital of the future and improved healthcare delivery?