The use of information systems in health care related services all over the world has been growing steadily in the past decades. As a result of this increase in implementation, many important problems have arisen. In this issue, we present five research papers which have been written by scholars in the U.S., Nigeria, Thailand and Taiwan. Thus, there is great international concern and increasing attention to Health Care Information Systems.

This attention is especially acute in the U.S. where spending on healthcare and healthcare information technology continues to rise at the fastest rate in our history. Total health care spending represents over 16 percent of the gross domestic product (GDP), and U.S. health care spending is expected to increase at similar levels for the next decade reaching $4 trillion in 2015, or 20 percent of GDP.

With the current U.S. discussions of reforming healthcare the goal is to slow the rate of cost increase while improving care. How can this be accomplished? We provide no answers and it fact argue that there is no singular answer. Instead, we believe the future lies in applying solutions from a broad array of disciplines and insights as well as looking to different countries that have grappled with these problems in different ways. These insights can be applied singularly and on a small scale (i.e., single practice or hospital environment) or on a large scale (hospital network and nationwide).

Thus this special issue casts a wide net to look at innovative ideas and approaches from across disciplines and countries.

The five papers in this issue represent empirical as well as theoretical work and they can be divided into the following four areas:

1. Records use
2. Expert systems use
3. Acceptance of various types of computerized service
4. Management of IS Facilities

In the first category, records use, we present the paper by Bourgeois and Yaylacecegi from the University of North Carolina, Wilmington, which discusses Electronic Health Records and whether they have improved patient safety and quality of care in Texas Acute Care. It presents empirical evidence in this area.

In the second area, expert systems, a group of researchers in Nigeria, Olufunke, Uwadia and Ayo, discuss the Sharp Boundary Problem in Rule Based Expert Systems in the Medical Domain. They use fuzzy logic to improve their expert system.

In the third area, there are two papers which study types of improvement in health
care using web based components, mobile health care, voice biometrics and acceptance of home telecare management. The first paper “Adaptive MultiServices System for Material and Child Health Care on Mobile Application (AM-Care)” is by Romsaiyud and Premchaiswadi from Siam University in Bankok. It describes a system that has been adapted in Thailand.

The second paper in this group is an empirical study entitled “Measuring Patient’s Perceptions and Social Influence on Home Telecare Management System Acceptance” based on an analysis of 221 patient’s questionnaires. The authors are Charles Chen and Shih-Wei Chou from National Kaohsiung First University of Taiwan.

Finally, a study of the management of information systems entitled “Virtualized Disaster Recovery Model for Large Scale Hospital and Healthcare Systems” outlines a plan for disaster recovery. This plan written by Lee and Guster, from St. Cloud State University in Minnesota, shows among other data, inter-packet arrival times and delay times for a virtual recovery model.

It is our hope that this combination of articles will allow the reader to see a wide breadth of IT implications and solutions pertaining to healthcare information technology. This can then lead to discussions of particular healthcare linkages and a systems-wide view of the problems facing healthcare researchers, healthcare workers, government officials and most importantly, the public.

Edmund L. Prater
Marion G. Sobol
Guest Editors
IJHISI