Foreword

While computer systems to document nursing care have been in existence since at least the early 1960’s, it was only in the early 1980’s that we began to formally define and describe the emerging discipline of nursing informatics. Since those early days, nurses in many parts of the world have taken leading roles in exploring, implementing, researching and promoting the use of a range of increasingly computerised, and increasingly networked, technologies to support the delivery of nursing and all other aspects of healthcare. Nurses and nurse informaticians have long recognised that simple technical and technological solutions will not address the problems of the world’s health services, and that socio-technical approaches, that take account of the inter-relationship between the social and the technical factors, are vital for successful system implementation and organisational change.

Even today, though, as we move towards the second decade of the twenty first century, and with the ready availability of countless examples, case studies, and a wealth of supporting theory, governments and organisations, sadly, still try, with predictably disastrous results, to implement purely technical and technological solutions to health and healthcare problems. Which makes the need for a book such as this, that foregrounds the importance of socio-technical approaches, all the more important, and its appearance very timely.

In many countries of the world, similar challenges are being faced, and increasingly, the role of nurses and nurse informaticians in helping to inform the decision-making processes is being recognised. Those nurses themselves need to have a good understanding of the complexity of the socio-technical interactions that affect the design, implementation and evaluation of health information systems. They also need to recognise that, just as nursing itself draws on, and interacts with, a wide range of disciplines for its theory and practice base, so socio-technical approaches similarly require awareness and understanding drawn from many disciplines. The wide range of disciplines addressed in this book can help them in that understanding.

As a nurse with a background in critical care, with its high dependence of technology, I became aware early in my career that simple reliance on technology could never fully address the needs of the patients and their families; nor could technologies introduced without the involvement of the nurses and other health professionals expected to use them ever result in real improvements to care. However, we need to recognise the reality that many technologies exist and are continually being developed that offer potential for improving care in whatever setting the nurse or other health professional may interact with the patient or their family, or may contribute to the promotion of health and prevention of disease at the population level. The application of socio-technical approaches, and consideration of the lessons illustrated in many of the chapters of this book, can help us to come to the right decisions on whether the technologies can provide real benefit.

The various chapters, whose authors come from many different parts of the worlds, recognise the increasingly diverse and often, non-traditional, care settings in which nursing informatics has a role and cover a range of methodological approaches. The increasing importance of interaction at a geographic
distance, mediated by technology, to provide care is addressed in the chapters that deal with aspects of telehealth and that explore the delivery of telehealth applications in home and other settings, through a range of technologies, and the impact this might have on nursing roles in different contexts.

Mobile technologies, in particularly phones, handheld digital assistants, and the newer ‘smartphones’ that combine many technologies and applications in one device, offer significant potential to support improvements in healthcare delivery, especially in low-income and developing countries. The chapter addressing these issues will be of particular interest to anyone interested in exploring leading edge developments.

Education is one area where nursing and technology have long had strong interaction, whether in terms of using technologies to deliver and support education, or in exploration of the technologies as the educational content. It is appropriate, therefore, that several chapters explore a range of perspectives including pedagogical strategies, virtual learning communities and use of technologies such as handheld devices.

The definition of nursing informatics adopted in 1998 by the International Medical Informatics Association’s Special Interest Group in Nursing Informatics, states that nursing informatics is “the integration of nursing, its information, and information management with information processing and communication technology, to support the health of people world wide.” In late 2007, the Yahoo! Education website identified nursing informatics as number one in its “10 hottest emerging careers that you might not know about, but probably should”. This book is a valuable resource for both the established nurse informatician and the new recruit that we need to attract to the discipline, with lessons for both in the need for appropriate application of socio-technical approaches to using technology to support the health of people world wide. Hopefully, as a result, we can avoid further repetition of the mistakes of the past, and of the present era.

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