Health Informatics

Pamela Hussey
Margaret Ann Kennedy *Editors*

Introduction to Nursing Informatics

Fifth Edition

Springer

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We dedicate this new edition to frontline healthcare workers around the world. For those who are managing care delivery in the midst of the COVID-19 pandemic. We thank them for their dedication, commitment, and unwavering efforts. By focusing our minds not on fear but on creating knowledge in the design of digital health services we can expand thought and targeted action for positive societal impact.

Preface

The publication of this fifth edition of an *Introduction to Nursing Informatics* is timely. Its core purpose is to act as primer for nurses searching for basic information on the topic of nursing informatics and to act as a resource for nursing education in informatics. Interest in health informatics and its relevance to digital health is expanding. The World Health Organization recently published State of the Worlds Nursing Report which calls for a massive acceleration in nurse education which needs to respond to changing technologies and advancing models of integrated health and social care.

As a profession, nursing is accountable for a significant contribution to healthcare service provision. Contemporary nursing practice is changing, and at the same time, facing a number of critical challenges. For example, two global issues that the profession is striving to address include a high staff turnover and nursing skill mix shortages. Articulating the nursing contribution to self-management support and design of systems for new models of care delivery is a key priority. Nursing informatics continues to be an essential aspect in which to inform not only the profession but also nurse leaders in their quest for the expansion of nursing knowledge and theory development.

Twenty-first century medicine offers exciting opportunities for the nursing profession to engage with and develop within. One example includes the increasing diffusion of artificial intelligence and machine learning within health and society. Additionally, concepts relating to health ecosystems which can be used to transform and enhance health and social care delivery in context are seeking nurse's expertise and imagination. There is a need to ensure that resources such as the Electronic Health Records and Telehealth applications are pragmatic and fit for purpose. Nurses often described as context experts, understand the care flow of healthcare processes, and are key agents for design, requirements identification, and benefit realization of systems deployment to progress integrated care.

In this fifth edition of *An Introduction to Nursing Informatics*, the editors have collected the best available evidence to inspire and support nurses to think critically about both current and future practice. This book is presented in such a manner as to encourage the reader to pause and reflect upon key concepts presented from the

perspective of their existing practice domain. Starting with the fundamental concepts of nursing practice, and exploring the nursing contribution on digital health and integrated care, the chapters illustrate their relationship to informatics. This edition includes a number of contributions from leading experts, who have practiced in the field of informatics over a number of years. Preparing nurses for engagement with initiatives relating to eHealth transformational programs locally, regionally, or nationally is supported with additional files for downloading from extras.springer.com. There is a strong emphasis on both education and continuous professional development, and the pedagogical framework used to devise the core learning activities is explained in Chap. 1. This book builds on previous editions and provides readers with a basic primer for searching information on the topic of nursing informatics and accelerating nursing education on informatics. It includes online resources and tools to support the acquisition of informatics skills for future professional development. We hope you enjoy this fifth edition.

Dublin, Ireland — Pamela Hussey
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About the Editors

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Chapter 1
Introduction to Nursing Informatics

Pamela Hussey

Abstract This chapter introduces the reader to the structure and content of this new edition. As with the fourth edition, this next edition is designed as an ebook. This fifth edition describes how the acronym CARE originally introduced in early editions by Hannah and Ball and used in the previous editions has evolved and presents content in four discrete sections. Educational tools devised to support the reader are also presented in this chapter, and 3 distinct learning approaches; assimilative, productive and interactive/adaptive styles are explained. Each chapter has an associated learning template that can be downloaded at the end of the resource. In this chapter the structure and presentation of the learning templates is also presented.

Keywords Introduction to 5th edition structure · Supporting educational resource tools · Learning approaches explained · The revised CARE acronym

Learning Objectives for the Chapter

1. Introduce the reader to the 5th Edition of An Introduction to Nursing Informatics
2. Explain the acronym of CARE
3. Describe the Educational approach devised by the editors to support the reader of this 5th edition

The 5th edition of An introduction to Nursing Informatics, is designed for use with practicing nurses and students in undergraduate and post graduate programmes of study. It presents the fundamental concepts of nursing informatics and considers

Electronic Supplementary Material The online version of this chapter (https://doi.org/10.1007/978-3-030-58740-6_1) contains supplementary material, which is available to authorized users.

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