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EVIDENCE-BASED
STANDARDS OF PRACTICE

VALERIE
PAULA S. M.



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Textbook for the
**Adult-Gerontology
Acute Care Nurse
Practitioner**

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STANDARDS OF PRACTICE**



**VALERIE J. FULLER
PAULA S. McCAULEY**
EDITORS

TEXTBOOK FOR THE
ADULT-GERONTOLOGY ACUTE
CARE NURSE PRACTITIONER

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TEXTBOOK FOR THE ADULT-GERONTOLOGY ACUTE CARE NURSE PRACTITIONER

Evidence-Based Standards of Practice

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Editors

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First Springer Publishing edition 2023

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Springer Publishing Company, LLC
11 West 42nd Street, New York, NY 10036
www.springerpub.com
connect.springerpub.com/

Vice President and Publisher: Elizabeth Nieginski
Director, Content Development: Taylor Ball
Production Editor: Joseph Stubenrauch
Compositor: Amnet

ISBN: 978-0-8261-5232-9
ebook ISBN: 978-0-8261-5233-6
DOI: 10.1891/9780826152336

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23 24 25 26/ 5 4 3 2 1

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Library of Congress Cataloging-in-Publication Data

Names: Fuller, Valerie J., editor. | McCauley, Paula S., editor.

Title: Textbook for the adult-gerontology acute care nurse practitioner :
evidence-based standards of practice / [edited by] Valerie J. Fuller,
Paula S. McCauley.

Description: First Springer Publishing edition. | New York, NY : Springer
Publishing Company, 2022. | Includes bibliographical references and
index.

Identifiers: LCCN 2022020433 (print) | LCCN 2022020434 (ebook) | ISBN
9780826152329 (paperback) | ISBN 9780826152336 (ebook)

Subjects: MESH: Geriatric Nursing—methods | Acute Disease—nursing | Nurse
Practitioners | Evidence-Based Nursing

Classification: LCC RC954 (print) | LCC RC954 (ebook) | NLM WY 152 | DDC
618.97/0231—dc23/eng/20220801

LC record available at <https://lcn.loc.gov/2022020433>

LC ebook record available at <https://lcn.loc.gov/2022020434>

Contact sales@springerpub.com to receive discount rates on bulk purchases.

Publisher's Note: New and used products purchased from third-party sellers are not guaranteed for quality, authenticity, or access to any included digital components.

Eternal ISBN for reference work: 978-0-8261-6079-9

Printed in the United States of America.

This textbook is dedicated to all Acute Care Nurse Practitioner students and practitioners—may you find within these pages the information you need to improve the health and well-being of your patients and their families.

Valerie J. Fuller
Paula S. McCauley

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FOREWORD

Increasingly, nurse practitioners (NPs) are becoming the providers of choice for patients across the globe. The number of NPs continues to increase annually and although most NPs practice in primary care, more and more are educated, trained, and board certified to practice in acute care. These NPs provide care for patients who are in acute or critical condition in hospitals, specialty care settings, home-based settings, or via telehealth. In many hospitals, NPs staff the intensive care units (ICUs) around the clock, providing immediate provider response for patient care needs. Acute care NPs partner with other members of a multidisciplinary care team, often serving as first responders and principal coordinators for a patient's care. Working in adult, pediatric, and neonatal ICUs, as well as specialty care areas of practice, acute care NPs are caring for highly complex, critically ill patients with a variety of disease states.

Beyond the ICU, acute care NPs lead rapid response teams, transplant teams, cardiology teams, hospitalist teams, and many other medical and surgical specialty teams. The evolution of acute care NP practice has helped hospital systems achieve critical quality and safety goals. Acute care NPs drive quality indicators such as ideal hospital lengths of stay, reduction in adverse events, reduction in nosocomial infections, reduction in unexpected hospital readmissions, and reduction in unnecessary resource utilization and thereby costs of care. Studies continue to demonstrate the acute care NP's ability to optimize communication and coordination of care, improve handovers between services, and adhere to established standards of care. Their quality of education, experience, evidence-based practice, and multidisciplinary collaboration are paramount, and as thus, acute care NPs have become the mainstay of state-of-the-art acute care hospitals and critical care organizations.

Dr. Valerie J. Fuller and Dr. Paula S. McCauley have carefully compiled the first edition of the *Textbook for the Adult-Gerontology Acute Care Nurse Practitioner* as a comprehensive resource for both instruction and clinical practice. Written by NPs for NPs, the chapters provide an overview of assessment, diagnoses, treatments, and management of care. Succinct information is provided

on presenting signs and symptoms, history and physical exam findings, diagnostic considerations, treatment, and clinical pearls for the management of a variety of disorders, general clinical topics, and special considerations for AGACNP nursing practice. The editors have assembled nearly 100 expert authors who discuss the evidence-based gold standards for diagnostics and tests for optimal detection of multisystem disorders, patient management, and transitions of care. In these chapters, learners will gain greater understanding of the etiology and pathophysiology of acute and critical illnesses, and the latest in advanced pharmacologic and nonpharmacologic therapies.

Working in acute care for many years, we are thrilled for this first edition of *Textbook for the Adult-Gerontology Acute Care Nurse Practitioner*. We anticipate this book will be used often in classrooms, in workshops, as a reference for presentations and publications, and as a daily resource guide for acute care NPs practicing across acute and critical care settings. The authors of each chapter are indeed experts in their field and have thoroughly outlined important considerations for AGACNPs. We congratulate the editors and chapter authors for their efforts in developing a clearly outlined and accurate text for AGACNP use that will no doubt impact AGACNP care, to impact patient care outcomes, quality of life, and care delivery—truly the first of its kind.

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PREFACE

Since the inception of the nurse practitioner (NP) role by Dr. Loretta Ford and Dr. Henry Silver in 1965, NPs have provided high-quality, patient-centered health-care to individuals of all ages. Originally developed as a primary care role, the NP role expanded to address complex acute and critical patient conditions as well as healthcare workforce needs. The first acute care nurse practitioner (ACNP) education programs began in 1992 and ACNPs are now the fastest growing subset of NPs in the country (Kleinpell et al., 2018). ACNPs can be found in a wide variety of settings including critical care units, outpatient specialty practices, urgent care centers, and inpatient hospital services such as surgery, cardiology, pulmonology, and many others.

We have long recognized the need for a single comprehensive resource for ACNP practice that could be utilized by educational programs, students, and providers alike. Having both served as program directors in ACNP programs, we often had to pull together resources from our medical colleagues which often resulted in numerous textbooks and other information focused on a medical model. To that end, we are very pleased to bring you the first edition of the *Textbook for the Adult-Gerontology Acute Care Nurse Practitioner: Evidence-Based Standards of Practice*.

In an effort to create a resource both concise and comprehensive, we offer coverage of the conditions and challenges common in AGACNP practice and integrate evidence-based standards throughout. Clinical conditions are presented by body system, each organized by consistent headings to guide the practitioner or student

to pertinent information related to the evaluation, diagnosis, treatment, and transition of care. Brief and easy-to-find Clinical Pearls and Key Takeaways boxes are included throughout the text, making critical information easy to locate. Additionally, special topics on palliative and end-of-life care, pain, and pain management are discussed in the context of the AGACNP's professional role. Instructors who choose to rely upon *Textbook for the Adult-Gerontology Acute Care Nurse Practitioner* for teaching will have access to valuable supplements in the form of a Test Bank and PowerPoint slides to aid lectures or serve as study notes.

To sufficiently address the needs of those whom we hope will come to rely upon this text, we have included the expert perspectives of over 100 authors. These contributors have helped to ensure that this first-of-its-kind text adequately reflects the skills and competencies of the AGACNP specialty, and we are grateful for their work.

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Kleinpell, R., Cook, M., & Padden, D. (2018). American Association of Nurse Practitioners National Nurse Practitioner sample surgery: Update on acute care nurse practitioner practice. *Journal of the American Association of Nurse Practitioners*, 30(3), 140–149.

ACKNOWLEDGMENTS

Writing a textbook of this depth and breadth during one of the worst pandemics in history did not come without its challenges. We are deeply indebted to our esteemed authors who not only worked on the frontlines of this global healthcare crisis but also took the time to share their clinical wisdom and expertise for this text. You rose to the challenge both professionally and personally and we cannot thank you enough.

We also wish to thank our team at Springer Publishing, especially Elizabeth Nieginski, Taylor Ball, and Joseph Stubenrauch. The patience and kindness you exhibited during a time when it was immensely difficult for us to step away from our clinical roles will not soon be forgotten.

SPRINGER INSTRUCTOR RESOURCES

A robust set of instructor resources designed to supplement this text is available. Qualifying instructors may request access by emailing textbook@springerpub.com.

Instructor resources include:

- LMS Common Cartridge With All Instructor Resources for Use
- Instructor Test Bank
- Chapter-Based PowerPoint Presentations
- Mapping to AACN Essentials: Core Competencies for Professional Nursing Education

ROLE, SCOPE, AND STANDARDS OF THE ACUTE CARE NURSE PRACTITIONER

ROLE OF THE ACUTE CARE NURSE PRACTITIONER

Valerie J. Fuller and Paula S. McCauley

ROLE AND DEFINITION OF THE NURSE PRACTITIONER IN ACUTE CARE

ROLE

The acute care nurse practitioner (ACNP) role began in the early 1970s but saw notable expansion during the 1990s in response to the increasing acuity and complexity of hospitalized patients, hospital restructuring, and changes in the resident physician workforce (Kleinpell, 1997; Richmond & Keane, 1992; Shaw et al., 1997). These changes spurred the development of the first ACNP programs in 1992 at Case Western Reserve University, the University of Connecticut, the University of Pittsburgh, and the University of Pennsylvania to prepare nurse practitioners in the care of patients with acute, critical, and complex medical conditions. The first ACNP certification exam was jointly administered in December of 1995 by the American Nurses Credentialing Center (ANCC) and the American Association of Critical-Care Nurses (AACN). In 2020 there were more than 12,700 certified ACNPs in the United States (American Association of Nurse Practitioners [AANP], 2021).

DEFINITION

The AACN Scope and Standards for ACNP practice define the ACNP as,

“... a registered nurse who has completed an accredited graduate-level educational program that prepares him or her as a nurse practitioner with supervised clinical practice to acquire advanced knowledge, skills, and abilities. This education and training qualifies him or her to independently: (1) perform comprehensive health assessments; (2) order and interpret the full spectrum of diagnostic tests and procedures; (3) use a differential diagnosis to reach a medical diagnosis; and (4) order, provide, and evaluate the

outcomes of interventions. The purpose of the ACNP is to provide advanced nursing care across the continuum of health care services to meet the specialized physiologic and psychological needs of patients with acute, critical, and/or complex chronic health conditions. This care is continuous and comprehensive and may be provided in any setting where the patient may be found” (AACN, 2012, p. 6).

ADVANCED PRACTICE REGISTERED NURSE CONSENSUS MODEL

In response to a proliferation of nurse practitioner (NP) specialties along with a lack of standardization around advanced practice registered nurse (APRN) licensure, accreditation, certification, education, and regulation, the APRN Consensus Work Group and the National Council of State Boards of Nursing APRN Advisory Committee published the Consensus Model for APRN Regulation in 2008. The model was endorsed by over 48 professional nursing organizations to promote uniformity and standardization of the four APRN roles while ensuring patient safety and expanding access to care (APRN Consensus Work Group, 2008; Fuller, 2021). There are six population foci outlined in the model (Figure 1.1), with adult-gerontology and pediatrics being delineated as either acute care or primary care and based on competencies obtained through formal education (Doherty et al., 2018). The model also requires a graduate or postgraduate degree from an accredited institution, national certification, use of the APRN title, independent prescribing, independent practice, and both RN and APRN licensure. To date, 18 jurisdictions (16 states plus Guam and the Northern Mariana Islands) have fully adopted the seven key elements of the Consensus Model with the remaining states in varying stages of implementation (Figure 1.2; Buck, 2021).

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