

The Essentials of Respiratory Care is often the first book out of the book bag. I am sure this will hold true for the fourth edition as well.

Students, instructors, and practitioners have a variety of choices when it comes to respiratory care theory books. How does this book measure up to other texts in the same class? Because of its unique format, the authors are free to include large amounts of information in a compact and easily accessed package. As a reference manual I found this book superior to others on my shelf because of its detail and ease of use. Its extensive table of contents and comprehensive index contribute to the ease of use.

I agree with the authors' position that this book is best suited as a reference manual and not as a primary text. However, this is a quintessential piece of respiratory care literature. I believe it has a place in any student's book bag, as well being as a great complement to any respiratory care department's library. I found this book extremely useful in my daily preparations for teaching, and it pulls double-duty as a clinical reference.

Fred Goglia RRT

Respiratory Care Program
Seattle Central Community College
Seattle, Washington

Respiratory Care Made Incredibly Easy!

W Chad Barefoot RN MSN CRNP and contributors. Philadelphia: Lippincott Williams & Wilkins. 2005. Soft cover, illustrated, 344 pages, \$35.95.

Respiratory Care Made Incredibly Easy! is presented as a new respiratory care reference for all acute-care nurses who have respiratory care patients. The foreword's author suggests this text is for nurses who work in medical-surgical, critical care, emergency, or pediatric nursing units, and is a supplement for hospice and home-care nurses. The foreword also recommends this text for nurses who require respiratory knowledge to be able to pass certification examinations in medical-surgical, critical care, or pediatric nursing.

The book includes 11 chapters, a glossary, a quick reference guide to laboratory tests, references and Internet resources, and an index. Each chapter is organized with a list of objectives, titled "Just the Facts." The text is highlighted and the type bolded to differentiate key concepts. The material is presented in a casual yet straightforward

manner and includes a "snapshot summary" in bullet format. I found the material clear and concise, and it held my attention. The illustrations and diagrams are ample and easy to understand, and many are nicely colored. There are cartoon-style figures scattered throughout, on the margins, which apparently are meant to be humorous, though I found them somewhat distracting in a reference book. Each chapter contains text boxes that highlight or reinforce important points. The "Advice From the Experts" section offers special tips from respiratory professionals. The "Now I Get It!" section notes particularly important aspects of respiratory disorders, procedures, tests, and treatments. The "Kids' Korner" section addresses concerns specific to children. The "No Place Like Home" section provides information on adapting care when the patient goes home. Each chapter ends with a quiz of multiple-choice questions and a scoring guide. The references and Internet resources seem to be current, as of my reading. I noted no typographical or grammatical errors.

Chapter 1 provides a succinct review of anatomy and physiology of the respiratory system, though the section on acid-base balance was over-simplified.

Chapter 2 was my favorite part of the text. It provides a thorough review on obtaining a health history, using a systematic approach for physical examination, which includes inspection, palpation, percussion, and auscultation, and a nice review of abnormal chest, respiratory patterns, and breath sounds. In other words, it's the "good old-fashioned way."

Chapter 3 covers common diagnostic tests, factors that interfere with those tests, pertinent nursing care, and what the tests may indicate. My main criticism relates to the section on arterial blood gas analysis and obtaining a blood sample. The explanation is far too brief for such an important diagnostic tool, and the description of obtaining a sample omits choosing an appropriate site and an explanation of how and where to perform an Allen's test. I liked the information on pulmonary function tests, though a diagram of lung volumes and capacities would have been helpful. The section on pulse oximetry could benefit from an illustration of an appropriate waveform, which is useful in determining the accuracy of the reading.

Chapter 4 includes classes of drugs used to improve respiratory function, surgical treatments, how to administer inhalation

therapy, and how to perform chest physiotherapy. The section on drug therapy completely omits anticholinergics. The discussion of nursing considerations with endotracheally intubated patients should include hyperoxygenation and hyperinflation before and after suctioning. I liked the sections on securing an endotracheal tube and end-tidal carbon dioxide monitoring. The section on handheld oropharyngeal inhalers has nice illustrations of types of inhalers, but incorrectly lists the administration of mucolytics. The section on nursing considerations of incentive spirometry provides a very nice patient instruction set. The discussion on mechanical ventilation is too brief; it provides only the bare minimum of information. There is no illustration of waveforms associated with mechanical ventilation. Discussion of continuous positive airway pressure should be included in the section on ventilator modes. I liked the inclusion of criteria for weaning. The depiction of the large-volume nebulizer is antiquated. The section on oxygen therapy did not include any discussion of humidification of dry gas. I liked the illustration of oxygen-delivery systems, but care of transtracheal oxygen needed more elaboration. The section on nursing considerations for transtracheal oxygen should also elaborate the requirements of tracheostomy care in the tracheostomy section. The discussion of miscellaneous treatments omitted mentioning the administration of chest physiotherapy via pneumatic, electric, or special bed. Other mucus-clearance devices include the Vest and positive-expiratory-pressure devices.

Chapter 5 discusses common acute and chronic respiratory infections and inflammation disorders, including their causes, pathophysiology, signs and symptoms, diagnostic test results for acute respiratory infections, and treatment options. There is a nice presentation on pneumonia. There is no mention of the need to nasotracheally suction children with respiratory syncytial virus in the "What to Do" portion.

Chapter 6 discusses common obstructive disorders, including the potential causes, recognition, and treatment of these conditions. There was no mention regarding the Standards for Asthma Management.

Chapter 7 discusses common restrictive disorders, including potential causes, recognition, diagnostic tests, and treatment.

Chapter 8 discusses several vascular lung disorders, including causes, pathophysiology, recognition, diagnosis, and treatment. I particularly liked the illustrations in this chapter.

Chapter 9 covers the characteristics of several traumatic respiratory injuries, their potential causes, recognition, diagnosis, and treatment. There should have been some emphasis on the inaccuracy of pulse oximetry with inhalation injuries.

Chapter 10 covers characteristics of laryngeal and lung cancers, their potential causes, diagnosis, treatment, and staging.

Chapter 11 reviews the potential causes of respiratory emergencies, and their diagnosis, recognition, and treatment. The illustrations were clear.

There were several notable omissions in this text. There was virtually no recognition of how respiratory therapists can assist the nurse. There is no discussion of clinical practice guidelines in the administration of respiratory therapy. There were no references cited in the body of the text; including references could have made it more convenient for the reader to find evidence for or against the views this book puts forth. The discussions on treatment of pediatric/neonatal patients is so limited, I doubt it would adequately prepare a nurse for routine care, let alone any specialty certification examination. Though there is material directly related to critical care, it is limited and offers no discussion of hemodynamic monitoring. There is also no discussion of organ donation or the ethics of end-of-life care.

In summary, **Respiratory Care Made Incredibly Easy!** is a reasonably complete and concise reference guide on the fundamentals of respiratory care. I think this text would be most appropriate for a medical-surgical nurse. A critical care, emergency department, or pediatric nurse preparing for a specialty certification would find this text useful, but it falls short of the details necessary to provide expertise in the care of a complex respiratory patient. Overall, I did enjoy reviewing this text from a nursing perspective.

Leslie C Patzwahl RRT-NPS
Respiratory Therapy Section
Pulmonary, Allergy, and
Critical Care Medicine
The Cleveland Clinic Foundation
Cleveland, Ohio

Capnography: Clinical Aspects. Carbon Dioxide Over Time and Volume. JS Gravenstein MD DrhC, Michael B Jaffe PhD, and David A Paulus MD, editors. Cambridge, United Kingdom: Cambridge University Press. 2004. Hard cover, illustrated, 441 pages, \$120.

With contributions by 59 authors, **Capnography: Clinical Aspects. Carbon Dioxide Over Time and Volume** is an excellent addition to a reference library. Written mostly by physicians (with contributions by 2 respiratory therapists), this book would be useful for anyone interested in the traditional and emerging applications of capnography. The editors point out in the preface that this book is written as a series of essays rather than as a textbook. Each author incorporates conclusions from published studies and examples of first-hand clinical experience in each of the chapters.

I found the format in the first part of the book easy to read, in that each chapter provided a different viewpoint on the same capnography sub-topic, and the examples presented made this truly a Clinical Aspects book. The book is laid out in 4 parts: "Clinical Perspectives," "Physiological Perspectives," "Historical Perspectives," and "Technological Perspectives." Each section has a distinct style, and the information in each section is true to its heading. Twenty-six of the 42 chapters are in the "Clinical Perspectives" section, which is divided into 5 subsections on capnography applications for ventilation: adequacy of breathing, airway management, monitoring of ventilation, and weaning.

The remainder of the "Clinical Perspectives" section covers "Special Situations," which is a large section on circulation, transport of carbon dioxide, pulmonary flow, and carbon dioxide production.

The opening chapter, written by Gravenstein and Paulus, who are two of the editors, gives a good overview of capnography applications and normal and abnormal capnograms. This chapter establishes the reader's interest and provides essentials of capnography, which are developed throughout the book.

The following chapters cover various applications of capnography in all types of settings. Included are uses during anesthesia, in intensive care, and during pre-hospital admission. The contributing authors cite specific studies that illustrate capnography applications, and they include many anecdotal clinical scenarios that have been reported in the literature.

Basic key concepts are introduced, including verification of artificial airway placement and American Society of Anesthesiologists (ASA) standards. An interesting clinical application described is the use of capnography to determine correct placement of a nasogastric tube; Chapter 4, by Betadpur and Truweit, gives a detailed description of the technique.

The book's largest section is "Clinical Perspectives," which is on the use of capnography during mechanical ventilation. While these chapters are sometimes repetitious in describing basic aspects and application, each author provides his or her own insight into capnography as a clinical tool. The authors describe many unusual clinical scenarios where capnography was used, including during cardiopulmonary resuscitation, for determining airway placement and the adequacy of chest compressions, and as a tool for predicting survival. The ventilation section also includes chapters on capnography in noninvasive ventilation, sleep studies, and during procedural sedation. The sedation chapter provides a good review of the ASA definitions of the levels of sedation and the standards and recommendations from the ASA and the American Academy of Pediatrics for monitoring during sedation.

Several chapters introduce the emerging volumetric capnography techniques and show applications with neonates and in optimizing mechanical ventilation. There is a good explanation of the differences between time-based and volume-based capnography, and the subtle aspects of the angles and slopes of portions of the capnogram. Included in the section on optimizing mechanical ventilation is the evaluation of the phases of the capnogram to adjust ventilator settings, such as positive end-expiratory pressure to reduce dead space, and to see changes in pulmonary perfusion.

Chapters 20–24 explore the use of capnography to make determinations regarding circulation. Here, again, some of the material is repetitious from previous chapters, but each chapter stands alone on its merits. Chapter 21 extensively covers the use of capnography for detecting embolism and reviews capnography for dead-space determination. There is further information on the use of volume-based capnography for dead-space calculation, and there is an entire chapter on volumetric capnography that provides additional explanations of dead-space-ver-