are difficult to read, the editing is inconsistent, and the content that was omitted indicates that "efforts to bring this work from conception to fruition in less than one year" (as stated in the book's acknowledgments section) prevented this book from being a "gold standard" text.

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Intensive Care Medicine in 10 Years. Mitchell P Fink, Peter M Suter, William J Sibbald, editors. *Update in Intensive Care and Emergency Medicine* series, volume 43, Jean-Louis Vincent, series editor. Berlin: Springer-Verlag. 2006. Hard cover, illustrated, 435 pages, \$179.

The responsibilities of a capable criticalcare leader extend beyond clinical knowledge at the bedside. Critical care is distinguished by the absolute need for its clinical leaders to understand and practice interdisciplinary teamwork, and to be knowledgeable about systems of care delivery, workflow dynamics, budget and resource management, workforce issues, and performance and quality measurement. In addition, because of an aging population, an increasing number of debilitated people with "long-term" end-organ-failures, and increasing numbers of immunocompromised patients, we are witnessing the emergence of critical illness as a chronic disease(s). What does this mean to the future practice of critical care? Clearly there are more questions than answers to this not-so-rhetorical query. Where does one start? How does one begin planning for this uncertain future?

Springer-Verlag, under the editorial guidance of Jean-Louis Vincent, publishes a series called *Updates in Intensive Care and Emergency Medicine*, and Fink, Suter, and Sibbald have guest-edited **Intensive Care in 10 Years** as volume 43 of this series. Their intent was to use the development of intensive care over the last thirty years, as well as the current, evolving demands, as data points to plot a plausible future trajec-

tory for critical care medicine. The book is divided into sections entitled "Setting the Stage," "Diagnostic, Therapeutic, and Information Technologies 10 Years From Now," "How Might Critical Care Medicine Be Organized and Regulated?" "Training," and "The Critical Care Agenda." Each section consists of a series of essays/chapters that discuss various aspects of the topic, and all the sections have solid scientific support and bibliographies. The individual topics span the entire range of critical-care clinical practice, administration, quality and safety, and so forth. The contributors are acknowledged senior clinical and scientific leaders in critical care medicine from around the world.

The "Setting the Stage" section includes "Managing and Leading in Critical Care," "Critical Care From 50,000 Feet," "Expectations Around Critical Care: 10 Years On," "The Quality and Safety Agenda in Critical Care Medicine," "The Challenge of Emerging Infections and Progressive Antibiotic Resistance," "Technology Assessment," and "Trends in Pediatric and Neonatal Critical Care in the Next 10 Years." Each of the sections displays similar depth, quality of authorship, and provocative subject matter. Most essays/chapters are excellently written, although a few are only average—where the sizzle of the title and substance of the chapter are perhaps about equal. On balance, excellent chapters outnumber average chapters by about 4 to one (there are 31 chapters). In particular, I found the section on critical care organization and regulation most useful. It addresses hospital and medical school organization of critical care services, intensive-care-unit physician staffing, research, conducting outcomes investigations (really, it's population health research for critical care), funding and accounting structures, and other topics.

Here at Mayo Clinic, like many (perhaps most) other critical care enterprises, we are at a crossroads, a nexus point. We are actively planning our future critical care delivery models based on the immutable realities of chronic critical illness, cost, patient volumes, the need for data visibility, safety, medical simulation, etc. I have shared this book with some of my fellow colleagues and leaders in critical care, because it is provocative, offers a number of fresh ideas, and conceptually lays out several pertinent/ useful concepts in charts, diagrams, and tables. This is not a clinical book, per se, but rather a book that may facilitate or help

initiate a planning process for leaders who recognize the imperative for change and adaptation in critical care. Accordingly, I recommend this book to individuals and groups engaged in all aspects of critical care management, now and in the future.

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Mechanical Ventilation: Physiological and Clinical Applications, 4th edition. Susan P Pilbeam MSc RRT FAARC and James M Cairo PhD RRT FAARC. St Louis: Mosby/Elsevier. 2006. Soft cover, illustrated, 651 pages, \$58.95.

As respiratory therapists and many other health care professionals know, some of the most complex patient care involves mechanical ventilation, both invasive and noninvasive. This is true throughout intensive care units, rehabilitation centers, skilled nursing facilities, within patient's homes, and during patient transport. Mechanical ventilation is an essential, life-sustaining measure for many patients, but it can also harm the patient. Mechanical Ventilation: Physiological and Clinical Applications, now in its 4th edition, is a well-recognized textbook that has served the respiratory care profession for the past 20 years. The authors do an excellent job of taking the reader on a detailed, evidence-based journey through the complexities of mechanically ventilating and caring for critically ill patients.

In general, the sequence of the chapters mirrors the general course that many patients follow: initiating ventilation, managing the course of treatments, addressing complications, weaning, and liberation from the ventilator. The authors thus create a "familiar flow" that is easy to follow, as well as making the book a reference in which to find specific content on many aspects of mechanical ventilation.

The text has 8 parts and 23 content-heavy and extensively referenced chapters. The chapters are highly organized, and each includes an outline, key terms, and learning objectives, thus creating a clear, consistent road map for the reader. The typeface is clear and easy to read. The single-color (green) and black-and-white illustrations are clear and relevant to the topics discussed.