

Practical Operating Theater Management: Measuring and Improving Performance and Patient Experience

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Because most anesthesiologists work in the operating room setting, anesthesiologists are involved with the management of the operating room suite (or “theater”). Even if they are not responsible for the management, anesthesiologists still want to understand the decision-making process and metrics that affect their daily schedule and duties. In the United States, anesthesiologists can attend in-person conferences and seminars on leadership, practice management, and operating room management offered by national associations, online webinars and resources, and textbooks. Although these offerings will give anesthesiologists groundwork for calculations of metrics, *e.g.*, productivity and efficiency, an in-depth discussion is not done.

In contrast, *Practical Operating Theater Management: Measuring and Improving Performance and Patient Experience* provides the reader in-depth materials on data-driven metrics, including operating room efficiency, productivity, utilization, and scheduling. The book purposely is designed not to cover leadership or management styles but focuses on collecting and employing operating room data in a manner that is practical and applicable.

The book has two functional sections. The first includes an introduction and eight chapters that cover the terms and principal content, as well as efficiency, productivity, scheduling, planning, staffing and contracts, operating room finances, and preoperative patient preparation. The second section contains five chapters examining operating room management in different countries, including Japan, The Netherlands, Switzerland, Australia, and the United States. Chapter 14 then covers operating room safety, and chapter 15 (the last) provides an overview of the book by a contributor.

Some of the topics discussed include the different formats used to manage surgical block times, as well the importance of normalizing terms and definitions so the collected data can be reported, analyzed, and acted upon effectively. Among the data that proves useful to collect is operating room capacity, demand by surgeons, utilization rate, overruns, cancellation rate, start times, and turnover times, with some of these bundled into key performance indicators. Of these, efficiency (as defined in chapter 2), on-time start, and turnover times are considered fundamental.

Chapter 2 is central to the book, and in it the author cautions that the much-used and maligned measurement of on-time starts or cancellation rates *by themselves* are a poor measure of overall operating room efficiency. Efficiency as a

measurement is clearly defined in a mathematical formula, and the manner in which operating room management decisions affect it is discussed in detail. Subsequent chapters cover measures of productivity (chapter 3) and strategies for scheduling (chapter 4), with an emphasis on maintaining and utilizing a real-time database of facility-specific surgical times, capacity planning of schedules, and add-on operating room capacity (chapter 5). Operating room staff contracts and the prominent role of staffing in providing the capacity is covered in chapter 6. Chapters 7 and 8 cover operating room finances and preoperative patient preparation, respectively.

Although the book’s editor and major contributors are from the United Kingdom, the concepts are applicable to operating room management in the United States as well as other countries. In fact, the latter half of the book explores the similarities and differences in operating room management in different countries, including New Zealand, Japan, The Netherlands, Switzerland, and the United States. It is amazing that anesthesiologists from many different countries face similar challenges.

For data-driven metrics, it is not surprising that the book relies on a mathematical approach to data. This math-heavy approach would be more appealing to business-trained operating room managers rather than physicians, although the author did attempt to make it more accessible by incorporating these formulas into Excel spreadsheets. We believe anyone interested in implementing data-driven decision-making processes will be able to follow the mathematical progression that occurs in the first half of the book.

Overall, this book is a useful resource to anesthesiologists, operating room managers, and financial analysts on the topics of data-driven metrics. It provides a unique educational resource for those who are new to the topic of operating room efficiency, utilization, and productivity. For those who have been working with these concepts, the book provides a resource to reexamine our formulas with an international perspective.

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