RISK MANAGEMENT and the EMERGENCY DEPARTMENT

EXECUTIVE LEADERSHIP for PROTECTING PATIENTS and HOSPITALS
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ACHE Management Series
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Nationwide 66 percent of all inpatients passed through the emergency department first (Owens and Elixhauser 2006). In 2008 there were 134 million ED visits, and despite plans for healthcare reform, there does not seem to be a decreased need for unscheduled healthcare on the horizon.

Yet the ED is the place for unsatisfactory patient experiences; there are waits, delays, and inefficiencies. The ED is also inherently unsafe. The Joint Commission (2002) has proclaimed the emergency department as the place in healthcare with the most sentinel events caused by waits and delays. Research has shown that medication errors in the ED are common (Hays 2007). Finally, the emergency department is also one of the healthcare settings with the greatest likelihood of violence.

Part I of this book is a deep dive on the emergency department and all of the elements that contribute to waits, delays, errors, and adverse events. These chapters will help you understand the problems faced daily in the ED and arm you with tools that will be part of the solutions. This 360-degree view will enable you to better understand how the ED microcosm differs from other settings and to recognize the constraints to that delivery. From
human cognition and human factors engineering to mistake proofing and teamwork, there are real-world cases to illustrate the concepts presented in each chapter and strategies for healthcare leaders to address the myriad problems inherent in ED healthcare.

This section of the book provides a road map for developing both a robust quality improvement program and a comprehensive risk management program for your ED. We make the case that the two disciplines are part of a continuum of safety and should be integrated with data sharing, aligned annual goals, cooperative projects, and a unified report for the board.

Two relatively new concepts in healthcare management are included in Part I: apologies and the role of the board in risk management strategies. All of the topics covered are applied specifically to the ED. Part I is an effort to fully inform healthcare leadership about the problems and the solutions from 30,000 feet up.
CHAPTER 1

The Nature of Emergency Medicine

In This Chapter

• The ED Laboratory
• The Patient
• The Illness
• The Unique Clinical Work
• Sense Making Versus Diagnosing
• The ED Environment
• The Role of Executive Leadership
• Case Study
• Strategies for Healthcare Executives

THE ED LABORATORY

The emergency department (ED) is a unique clinical environment affected by a number of elements that make the safe and efficient delivery of healthcare seem an impossible proposition. It has been called a “laboratory for error,” where time-pressured work is performed in an atmosphere of uncertainty. Devising strategies to improve safety and minimize risk in the emergency department requires a thorough understanding of its unique features and elements:

\[
\text{Time-pressured work} + \text{Environment of uncertainty} \quad \rightarrow \quad \text{Laboratory for error}
\]
THE PATIENT

The patient seen in the ED has characteristics not usually found in patients in other settings. The patient arrives for unscheduled healthcare, and there is little or no information about him. The patient is under stress, is often in pain, and may have conditions that alter his mental status. Language barriers are common in the ED. Many ED patients lack identification, and some are intoxicated and uncooperative. Additionally, patients with mental health problems are a growing burden to the ED. In many communities this accounts for up to 6 percent of all ED volume, which is comparable to the frequency of chest pain presentations (Welch 2006). Mental health patients are among the most difficult patients to manage. But all ED patients share one thing in common: They need urgent if not emergent care. This immediate need requires that all these obstacles be overcome. The challenges of the ED and the constant pressure to deal with them mean the ED is loaded with risk and the possibility of errors.

The Patient

_Givens_

- Appears randomly, not on a schedule
- Is stressed and in pain
- Requires urgent or emergent care

_Possibilities_

- Is inebriated, intoxicated, or uncooperative
- Carries no identification
- Does not speak English
- Has mental health issues
- Brings along minimal health information

THE ILLNESS

The patient presenting for emergent or urgent care may have any number of illnesses or injuries. The presentations of these maladies may be atypical and unpredictable, but they generally require some rapid diagnostic and therapeutic intervention. Many critical illnesses can present innocently (e.g., serious infectious diseases
that appear minor at first), and minor illnesses can mimic serious illnesses (e.g., acid reflux appearing as an acute myocardial infarction). Serious illnesses and the treatments they require are inherently risky.

**THE UNIQUE CLINICAL WORK**

Unlike other clinical specialties, the practice of emergency medicine involves unbounded clinical entities, and there are no limits on the number of patients who can present for care at a given time. The multitasking and interruptions are unique to this setting, and several studies have shown that the intensity of the clinical work is greater in the ED than in other medical office or clinic environments. As Exhibit 1.1 shows, the ED physician has more than three times the number of interruptions in an hour. She also has seven “breaks in task” an hour. The ED doc is almost always caring for three or more patients at once while the office physician spends roughly one minute per hour tending to three patients at once.

There is no context for either the provider or the patient in an ED encounter. Two strangers attempt to find explanations for the patient’s subjective complaints in an information vacuum. There is little opportunity to establish a significant relationship in a three-hour ED encounter. These factors make it easy for expectations to be unmet and for patients to be upset and hold the ED accountable for perceived lapses in care. Finally, providers must toggle between the “horizontal patient,” who may have serious illnesses that need minute-to-minute management, and the so-called “vertical patient” with high service quality expectations. Compare this to any other specialty: The office physician manages all vertical patients and the hospital-based physician, especially the ICU intensivist, manages all horizontal patients. This variation in the ED is unique and is quite different from other clinical settings.

**Exhibit 1.1: Comparison of Interruptions by Practice Location**

<table>
<thead>
<tr>
<th>Interruptions and Multitasking</th>
<th>Office Physician</th>
<th>Emergency Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interruptions per hour</td>
<td>9.7</td>
<td>23.9</td>
</tr>
<tr>
<td>Caring for 3 or more patients</td>
<td>&lt; 0.9 minutes per hour</td>
<td>37.9 minutes</td>
</tr>
</tbody>
</table>

SOURCE: Data from Chisholm (2001).
SENSE MAKING VERSUS DIAGNOSING

Physicians are trained in medical school and residency at diagnosing, but the skill that may be even more critical to the practice of emergency medicine is sense making. At its most basic, sense making means “how people make sense of events,” but it is more complicated than that. Sense making theory looks at how individuals or groups notice and interpret what is happening around them and how they translate this into action. Sense making means asking these two questions: (1) What is going on here? and (2) What do I do next? A key element in sense making is the practice of stopping and incorporating new information again and again to make sense of a situation.

While diagnosing involves choosing among diagnostic possibilities, sense making involves deciding which information even gets considered. In the emergency department, where patients present out of any context and symptoms may evolve over time, the physician must constantly be engaged in sense making and his care plan must be an iterative process. Effective sense making requires that the team engaged in the care of the patient constantly share their assessments and revise their approaches. Communication must be effective and frequent among team members. The physician must articulate his expectations for test results and the patient’s responses to treatment. If those expectations are not met, the team—led by the physician—should consider that the earlier sense making was incorrect.

THE ED ENVIRONMENT

The factors coming to bear on the ED and medicine at large appear to be building into a perfect storm.

The Perfect Storm

The following elements contribute to the perfect storm looming over the ED:

- The changing demographic: EDs are seeing older, sicker, more medically complex patients.
- The fluctuating nursing shortage is threatening staffing levels.
- Many EDs are staffed with younger, less experienced workers who do not stay in one job for long.
• A physician shortage, particularly in primary care, is growing; this may cause patients to wait longer to seek care, resulting in sicker people in the ED.
• The on-call crisis affects nearly every medical subspecialty now, which has led to an inability to get timely consultations for patients in the ED.
• There is growing pressure to keep patients out of the hospital.
• More diagnostics can be done in the ED, creating longer ED stays.

Exhibit 1.2 shows a graph from Peter Sprivulis at the Institute for Healthcare Improvement showing the complexity of acute healthcare needs in patients as they age. As the baby boomers become senior citizens—the number of citizens over age 65 will double by 2030 (He et al. 2005)—their healthcare needs will increase: Emergency department personnel will do more to them, for them, and with them.

Though much has been made of the nursing shortage, the physician shortage that is just beginning also will have a significant impact on EDs in the United States. Since the 1980s, when the Association of American Medical Colleges predicted an oversupply of physicians, medical school graduation rates have been flat (Alberti 2011). The curves representing supply and demand suggest a crisis that will know no boundaries: The shortage will cross political and geographic borders and medical specialty boundaries. A 2010 article in the Journal of the American Medical Association noted that physicians had decreased their hours worked by 7.2 percent,
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