



Introduction

Why Another Book about Patient Safety?

Sally E. Rampersad

Why another patient safety book? In the following chapters, you will be guided through not only the theory but also the practical application of tools that can be used to enhance quality and safety in medicine. Many, but by no means all, of the examples are drawn from the perioperative environment. Several of the lessons were initially used in other “high-reliability” industries such as aviation, nuclear power, and petroleum industries. We will include principles taken from these industries’ safety cultures. These principles include:

1. Preoccupation with failure
2. Reluctance to simplify
3. Sensitivity to operations
4. Commitment to resilience
5. Deference to expertise

“Preoccupation with failure” refers to the idea that any lapse, no matter how small, could be a symptom of a system problem and should be followed up and resolved. Several small lapses could add up to a potentially severe consequence and must be addressed. “Reluctance to simplify” means that an organization takes time to understand the complete situation with all of the details considered and with varied opinions being valued and weighed rather than relying upon a “we’ve always done it this way” mentality. “Sensitivity to operations” is attending to the details of how frontline workers do their jobs and really knowing and understanding in order to have situational awareness. “Commitment to resilience” refers to the ability of an organization to be dynamic, to cope with errors that arise, to mitigate them and to be able to move on and to keep functioning. Finally, “deference to expertise” occurs when people are relied upon to do the jobs that they do best, without regard for hierarchy. Decisions are made by frontline people who have the most knowledge of the particular situation.^[1]

In Section 1, we look at planning and preparation through the use of simulation and through the deliberate design of the work environment. The reader will see that through design, the right thing to do can become the easy thing to do. Through simulation, practicing the desired responses to emergency situations can prepare healthcare providers to better navigate emergencies when they arise, with no risk to patients.

Section 2 describes several Quality Improvement (QI) tools such as daily management systems, Lean, the Model for Improvement, and cause analysis. These tools can be used both to plan for QI projects and to analyze an adverse event after it has occurred.

Next, in Section 3, we look at ways that adverse events are reported and what can be learned from this reporting, including a look at national databases and pooled data sources.

Putting the tools into practice, Section 4 examines some projects undertaken at the authors' institutions.

In Section 5, we acknowledge that people are what make or break any QI efforts. There is examination of some of the “softer” patient safety skills such as effective communication. Stylized forms of communication such as handoff tools are described in detail, as are specific tools used to communicate and escalate a concern. Finally, we look at behavior and what it takes to change behavior to create a safer environment for our patients, families, and staff.

Since the authors started writing their chapters, the world has been gripped by COVID-19, a public health crisis unlike anything we have seen in our lifetimes. There have been many instances when hospitals have turned to some of the very tools described in this book to face this challenge. Simulations have been done to practice for the intubation of a patient with unknown COVID-19 status or known positive COVID-19 status.^[2] Teams have considered the effects that COVID-19 will have on patients presenting for other conditions, such as labor and delivery. In addition, they have had to consider how to continue with proficiency training while maintaining social distancing and adequate protection for trainers and learners.^[3] Lean methodology has been used to address the supply chain for vital testing kits and personal protective equipment^[4] because worldwide shortages have threatened to undermine our ability to deliver care safely. In a very fast-changing world, I hope that you will find tools and ideas within these pages that will help you and your hospital to stay one step ahead and stay safe.

References

1. Weick KE and Sutcliffe KM. *Managing the Unexpected*. 2nd ed., Hoboken, NJ, Jossey-Bass, 2007.
2. Daly Guris RJ, Doshi A, Boyer DL, et al. Just-in-time simulation to guide workflow design for coronavirus disease 2019 difficult airway management. *Pediatric Critical Care Medicine*. 2020;21(8):e485–e490. doi:10.1097/PCC.0000000000002435, 10.1097/PCC.0000000000002435.
3. Kiely DJ, Posner GD, and Sansregret A. Health care team training and simulation-based education in obstetrics during the COVID-19 pandemic. *Journal of Obstetrics and Gynaecology Canada*. 2020;42(8):1017–1020. doi:10.1016/j.jogc.2020.05.007, 10.1016/j.jogc.2020.05.007.
4. Sheehan JR, Lyons B, and Holt F. The use of Lean methodology to reduce personal protective equipment wastage in children undergoing congenital cardiac surgery, during the COVID-19 pandemic. *Paediatric Anaesthesia*. 2021;31(2):213–220. doi:10.1111/pan.14102. Epub 2020 Dec 20. PMID: 33345391.