A Pathway for a Safer Tomorrow in Healthcare:

Safe Enough!?

One goal of healthcare practitioners is to ensure the well-being of all. Every provider navigates their daily challenges of patient care. While we continue to do more to improve outcomes, our efforts are insufficient. It is time we approach safety differently. These authors present contemporary concepts from the safety profession concisely, making the ideas understandable and easy to implement for readers, enabling work to be done safely.
—Jeff Bennett, DMD oral surgeon

This is a magnificent resource, filled with the most up-to-date information on safety leadership philosophy, illustrating the work of thought leaders in our safety field. It is a wonderful single reference on leading tools and theories and a "must-read" for safety professionals. A common theme of "dialogue" throughout the book consistently highlights the importance of engaging workers (those most knowledgeable and familiar with how work is actually completed) for safety efforts to succeed. Although many elements of this book are geared toward healthcare, the concepts can be applied across all industries.
—Mark Jones, PhD, safety professional

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By

Daniel Sarasin and Sean Coughlin

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To the patients and healthcare providers who were harmed when their perception of being safe enough was insufficient.

To our parents, who taught us two critical concepts: with the power of curiosity, learning never ends, and more is both necessary and possible.

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FOREWORD

The authors, of whom I worked closely with one of them for many years, have done a masterful job of bringing the leading-edge safety thinking together in this book. I love how they have pulled in the key thoughts from Human and Organizational Performance, High Reliability Organizations, Safey II and Safety Differently to create a holistic philosophy which can be applied to any industry, including the medical world. They are not speaking from a purely academic mindset. Their wisdom and knowledge come from years of integrating these concepts in industry. Their focus on worker centric learning and improving has showed itself in general industry to be a cornerstone of all the above-mentioned methodologies and operational philosophies. We cannot just double down on what we have done in the past and expect better outcomes. The world and the processes and systems we work with are becoming increasingly complex. In order to better deal with complexity, we need those close to the work to help us understand how work actually gets done verses how we think it gets done. By understanding normal, regular, everyday work, even when an unwanted outcome occurs, will lead us to better understand the brittleness in our organizations. We find that the things that lead to a bad day are most often the very things that are out there when we have a "good" day. The adaptive nature and resilience of our workforce is the reason more bad things don't happen. When we better understand the brittleness, we know where we need to focus our resources for improvement. This book is a must read for anyone who wants to build a better path forward for safety and operational soundness. "Great Leaders – Make Great Decisions – If they have Great Information" (Baker, Conklin).

—Bob Edwards "The HOP Coach"

PREFACE

Welcome to a dialogic journey of shared ideas and practical applications that encourage readers to lean in and be inspired to apply them in their workplaces. Too often, people find themselves on a meandering trek of learning a myriad of concepts and facts, only to settle back down into their regular daily routines. Accumulating knowledge is wonderful, only if it can be put to good use (i.e., improvement and advancement).

Often, workers in organizations face the arduous task of "doing." The "doing" is expected and regularly monitored to optimally achieve. The best way to honor workers' efforts is to acknowledge the dedicated service by committing to utilize at least some of the information in this book in the quest to learn and improve. As readers explore their thoughts about workplace safety, try to consider using the information in actionable ways. Attempt to become masters of the work imagined by transforming it into the work as done. The imagined work "becomes" something new, refreshing, and energizing. It is part of the fabric of successful actions that workers make happen daily. As Aristotle reminds us all, "For the things we have to learn before we can do them, we learn by doing them." Learning these concepts is best accomplished by using these concepts; actions are necessary. In advance, thank you for what you are doing with them, for improving workplace safety.

Written procedures and verbal directions are everywhere these days. They help guide us through the myriad of tasks we must accomplish daily to reach our goals. In high-reliability organizations, such as healthcare, they are a necessity. Imagine the consequences if they did not exist. The conditions in providing care to patients dictate that we have robust processes to avoid the very real and impending danger the environments carry.

The healthcare world is fast-paced, characterized by high-risk, ever-looming, and serious consequences, as well as a high degree of complexity. These factors prompt organizations to consider the infinite potential eventualities and establish clear and meaningful procedures for mitigating them or, ideally, preventing them. The great irony that most organizations face today is that the complexity they operate within is constantly morphing in and out of the scope of those prescriptive ways of doing things. Complexity is growing, which brings uncertainty, variability, surprise, and so much more!

In healthcare trenches, system stability is maintained and brought back toward an equilibrium. An incredible system's secret weapon exists; it is known as the workers. Every organization has amazing people working hard daily to complete the mission under all kinds of competing conditions without any detriment to the final products of each organization (i.e., positive care outcomes).

Workers on the frontline deliver incredible results despite the many challenges they face that work against them. We owe healthcare providers adequate training, proper resources, unbridled appreciation, outstanding leadership, and transparent, fearless dialogue! With dialogue, learning occurs, and through learning comes improvement. Learning about your organization's work from your experts is a valuable investment that ensures you make informed and efficient decisions about improving organizational systems.

A highly reliable organization understands the value of ongoing systemic learning and the necessary adjustments that take place regularly. Written procedures are reasonable as long as they are effective and safe, until they are no longer so. Workers dance "complexity." They must frequently interpret and adapt to complete their work, meeting company goals and the needs of their patients. This worker's dance through complexity is a never-ending cycle of moving closer to the safety boundary and then further away as circumstances dictate.

Dialogue is an effective tool that helps leaders understand the work context by assessing how well procedures align with the real world and identifying any issues that may arise, challenging their efficacy and safety. If written directions are considered the lifeblood of a highly reliable organization, dialogue helps keep a healthy flow in the right amount and direction.

This book employs simple dialogue around critical ideas and principles designed to help organizations create and enhance safety for the workers and patients they serve. There are many concepts and principles that organizations can adopt and employ. The ideas in this book have emerged from various sources, including workers, leaders, safety professionals, and representatives from other industries. The resources contain concepts that can work successfully and can help fuel a journey of learning and improving workplace safety.

The authors are honored and humbled to help enable a growing and important dialogue about workplace safety in healthcare. The safety dialogue has trended on a line of contention for too long. What brings the safety dialogue into the same realm as the polarizing effects of politics or religion? Perhaps it is due to the dire consequences under which it is often

facilitated, and an inherent need to hold people accountable so blame and punishment can be utilized. An unlucky soul is frequently labelled as the cause of a disaster after the fact, with the typical recipient being a worker. With leaders and regulators, politicians and organizations, labor unions and companies, workers, and managers, there are many lines of contention when things go wrong. There is a better way, a more collaborative means that embraces safety dialogue. More desirable results often surface when sharing happens.

As you, the reader, engage with the intended dialogue, try to identify the tools, principles, and concepts that will help your organization learn and improve. Every organization must define for itself what it means to be safe enough. More importantly, they must deploy the instruments and fortitude to get there. May you find inspiration in these pages to help move your organization to your "safe enough" for a safer tomorrow.

ACKNOWLEDGMENTS

We are deeply indebted to many of our learning family members, who are incredibly deserving yet too humble to mention by name, for openly sharing their wisdom and experiences in their quest to improve the well-being of all. Their passion for advancing safety came from the industries in which they worked, many of which spanned decades. They provided practical insights into the good, the bad, and the ugly, as well as the barriers to implementing and adjusting things to work optimally for their organizations. They were willing to freely communicate their successes and failures, allowing others to learn and grow. As the silos of safety were dismantled with the building of bridges, relationships emerged and were strengthened as the people around us began to collaborate through dialogue.

Much thanks go out to the reviewers of this book, for they provided crucial feedback that shaped the final drafts and the book itself. The insights allowed us to appreciate different perspectives.

We are grateful to have had the opportunity to experience an outstanding Advanced Safety Engineering and Management Master's program at the University of Alabama at Birmingham. The faculty, students, guests, and extended alumni family opened doors to a world of insight and inspiration. The feedback was more than expected. Our ongoing quest to "become" has been strongly encouraged by so many.

A special thanks is due to Ashley McGuire, who played a pivotal role in helping to transfer the vision and ideas we wrote about on our personal computers into the hands and minds of our readers. Her editing and formatting skills transformed the book to meet the publisher's requirements. Ashley's professionalism and drive for excellence are symbolized in "Safe Enough!?" She was a valuable resource for finding information on the literary topics essential to this book, as they were broad, inclusive, and accurate. If she did not know where to find an answer, she helped connect us to the right people. With her presence, we were always confident that things were progressing smoothly.

We genuinely appreciate Cambridge Scholar Publishers' courage and willingness to partner with us to bring this book to life. Their active involvement helps to drive our goal of advancing safety in healthcare. Their action was not one of self-fulfilment but for the well-being of all.

Most importantly, we must step back and recognize our families and special friends. They provided us with unwavering support, patience, and love, the essential ingredients that made our dreams of writing this book and improving safety a reality. Their innate talent to critically listen and provide meaningful feedback continues to shape us and foster our pursuits. They are the wind beneath our wings. With much love and admiration, thank you!

Dan and Sean

CHAPTER 1

INTRODUCTION

> "It's not what you look at that matters; It's what you see. If you change the way you look at things, the things you look at change. Everything we hear is an opinion, not a fact. Everything we see is a perspective, not the truth."
> – Henry David Thoreau

The accomplishments that healthcare practitioners achieve through their endeavors are impressive when one stops to consider all that goes into caring for people. Thought to be impossible or improbable in the past, it is often achievable today. Additionally, some argue that the tasks of treating patients are relatively straightforward for highly trained professionals and perhaps even routine. These folks are likely not currently caring for patients in a dental or medical role.

Using tremendous passion, skills, and experience, care providers create success within an ever increasingly complex environment that must be made sense of. The complexity and confusion that must be dealt with continue to grow rapidly. Care teams enable the effective management of individuals' needs. Often, professionals feel their practices' actions mirror the Olympic

motto, "Citius, Altius, Fortius – Faster, Higher, Stronger?" Many people are familiar with the sensation and respond to internal and external pressures to take on more work over time, despite realizing they are functioning at maximum capacity. Franklin D. Roosevelt once said at a highly challenging moment in the United States, "Never before have we had so little time to do so much." When most care professionals reflect on their work responsibilities and the diminishing resources available, Roosevelt's words frequently reverberate in their minds. So much with so little.

Healthcare professionals have enormous responsibilities: they must build and maintain trust with the people in their communities and provide needed care and support. Patients walk, are carried, or wheeled into our facilities daily, expecting their problems to be accurately diagnosed and promptly managed. Caring for patients is complex because the patient population is diverse, with each individual having unique characteristics and challenges. Their management requires optimally adjusting to handle patients' conditions so they can regain or maintain a desirable level of health.

Today, treatment templates or algorithms are commonly used in an attempt to standardize patient management; however, they are inadequate for some individuals requiring care. One method or solution does not fit every situation. Individualizing treatment for many people by dedicated teams of workers involves adapting to the patients' uniqueness they encounter; it is more the rule than the exception. Dentists, doctors, nurses, and assistants strive to provide what is necessary and customary successfully. It is what caregivers and patients expect. It is also what society demands.

The delivery of services involves actions and behaviors that manifest from each member of the team's thoughts, training, and skills. Health professionals often assume they know what other workers and their patients think by assessing their behaviors and actions, but these assumptions are not always accurate without engaging in dialogue. It is essential to understand what others think. Collaboration is vital to unlock the potential within all of us. Comprehending what others, including our team of professionals and patients, think enables us to find shared meaning and purpose, thereby meeting individual and organizational goals.

Why do people think the way they do? Everyone has their views or perspectives, which are shaped by their experiences and cultural backgrounds. We all create memories and hold on to them as truths. They mold how each of us sees the world. One's goals, values, and principles critically influence one's thoughts. They affect our priorities, behaviors, and actions. Sharing and understanding one another's goals, values, principles,

and priorities when caring for patients benefits everyone. When we learn through dialogue, we layer many perspectives onto our own, creating a shared meaning that emerges and becomes a common reality. An exchange of perspectives on our work environment and how we perceive the risks we face together helps everyone better mitigate risks. We are in this together. We must be united. Otherwise, we stand to fail when we are divided in thoughts and actions.

Care providers have a huge sense of responsibility when managing patients. This is evident in the considerable time, effort, and dedication that healthcare practitioners invest in entering and remaining in the field. The innate quality of being driven to help others is prevalent throughout healthcare. As with any career one undertakes, maximizing our ability to earn a decent wage, gain expertise, and improve our capacity to help more people are common goals. It would be naive to think otherwise. One only has to examine the daily clinical schedule and the efforts to fill it to see the artifacts of many people's deep assumptions. Efficiency and effectiveness are critical elements for increasing production. Actions that elevate the focus on these driving forces often come with a cost. Usually, it is at the expense of thoroughness or safety to achieve the mandate of doing more in the name of production.

Caregivers often face constant struggles with goal conflicts. One can imagine it as an internal tug-of-war in their minds, which surfaces in their behaviors and actions. Usually, the stakes are high, and the pressure is immense with patients' well-being on the line. Care providers are not alone, for workers in most industries frequently face similar sacrificial judgments between production and safety; production always seems to prevail. This should not come as a surprise, as there are many benefits for both workers and organizations in maximizing production. The current designs of global economies, societies, and organizations prime them to think this way. Recognizing this omnipresent influence helps us to appreciate the importance of finding balance within our care systems and for those who work in them.

The balance of these decisions can shift when internal or external issues related to their world are perceived or realized, but they soon drift back to their original state; all complex systems seek equilibrium. The judgments are influenced by people's priorities and goals, which are tethered to our values of production and safety. In an environment where focus on people is so intrinsic, it is simple to become convinced that people are the problem when a bad outcome emerges. The system/place in which people work profoundly influences what they do and how they do it. We will examine these relationships throughout the book.

It would be so wonderful and easy if one only had to turn a dial to adjust organizational and people's values. Unfortunately, values emerge from our deep assumptions (Schein, 1984). Many institutions may have the deep assumption that 'we are safe enough.' If it could be changed to an ongoing inquiry that asks, “Are we safe enough?”, the subconscious sacrificial judgment balancing act that occurs throughout organizations would shift. Thinking, “We are safe enough,” begs acceptance of the current state. Asking, “Are we safe enough?” challenges our assumptions about it. The top priority would be transformed into trying to do things more safely to benefit both patients and the workers.

Changing an organization's deeply ingrained assumptions is challenging, as they are subconscious and rarely documented. They are the creations of what we perceive as true. Altering assumptions entails challenging the underlying truths held tightly within. Questioning one's beliefs is not simple and is infrequently done.

This book is intended for those involved in the well-being of patients to comfort, heal, and maintain. The subtitle, “Safe Enough!?” captures a common thought that frequently runs through many people’s minds. The book recognizes those on the sharp end of the work, close enough to be physically and emotionally touched by patients. All stages of caregivers are included, from seasoned veterans to those in training, spanning across the hierarchy of healing professionals. Additionally, it is intended for individuals involved in creating, monitoring, and refining healthcare structures (i.e., those on the blunt end of delivering care). This encompasses executives of organizations, supervisors, and managers who are at a discernible distance from patients. The publication is for all those striving for better in the complex world of collaborative patient care. The book is designed to stimulate thought and dialogue about enhancing systems (i.e., work environments) and making them safer, ensuring they are indeed “Safe Enough.”

Some in the healthcare field may wonder why they should bother to read a book about safety. Many think they have heard it all, including the ever-growing complexity and challenges they face, as well as what is needed to deal with these issues and achieve success. Most caregivers hold a viewpoint that aligns with their professional organization’s guiding principles. There are other views, many of which are unknown to them, that can improve safety in their work environments and the people they serve. It is time readers discover elements that are and need to be considered.

The writers of this book share a different perspective that may advance safety for the healthcare profession. For one author, a growing interest in safety for everyone emerged during his career as an oral surgeon and his

active involvement with the American Dental Society of Anesthesiology. It became clear to him that he did not know enough about safety. A sense of uneasiness arose in him that there must be more to learn about doing things safely. Through numerous conversations over the years, he found others shared the same feelings. Safety should be a primary consideration and is necessary in countless situations; it is far from esoteric for all healthcare providers. Doing things safely is critical for many, not just caregivers. Without it, everyone involved may be left with troubles that consume their daily existence. Most will be fortunate to get by, leaving it up to the notion that they are safe enough, but is it worth the risk?

The authors' intentions for this book are not to impose a mandate or a prescriptive set of marching orders. Readers' practices are frequently their creation, and they are in charge. By no means is our endeavor an attempt to be an all-encompassing "holy grail" scripture regarding safety. This book was not written to replace or undermine local, state, or federal rules and regulations that govern and guide healthcare practices. Also, it does not try to restate them differently.

The book is a compilation of ideas designed to enhance the reader's ability to examine their practice's systems, assess how the people work within them, and interact with each other. With this information, growth and improvement in safety can emerge. Following all the concepts in the pages presented in this publication can help advance safety, but it does not guarantee it. Nobody claims to have a secret formula for always being safe. The closest we can come to is an incomplete dynamic solution that has emerged from modern safety thinking. "Workers frequently, but not always, create safety through their actions and behaviors. Often, it comes from their critical insight gained from experiences working inside the system that fosters systemic improvements." However, being in the healthcare profession, most people are already aware that they are doing it daily. Is that enough?

The impetus behind creating this book, which is meant as a field guide rather than a library addition, was to provide readers with a catalyst or a catapult for themselves, the people around them, and their practices to advance safety. In other words, the intention is to foster safety possibilities and potential. The authors' perspective on safety may vastly differ from that of many healthcare providers. With one author completing a formal postgraduate master's program in Advanced Safety Engineering and Management (ASEM) at the University of Alabama, Birmingham, while working in private practice as an oral and maxillofacial surgeon, he discovered many concepts that could improve safety in healthcare settings. The other author is pursuing a PhD in interdisciplinary engineering, with a focus on Advanced Safety Engineering and Management. He has been

involved in teaching safety for numerous semesters at UAB while working as a safety professional in the heavy manufacturing industry. For decades, he has applied many modern safety concepts recognized by the profession to enhance safety in his work. In addition, he has been a collaborative member of committees for a national safety organization.

The theories the authors share in this book are not just restatements of professors' rhetoric, but an interwoven fabric of ideas that have crystallized these concepts, which are being practically applied in many ways by safety practitioners as the body of knowledge advances. The generative information emerged from our professors, teaching assistants, and fellow graduate students' experiences and viewpoints, as well as a multitude of program materials and speakers. This diverse group's input permeates the authors' understanding of these theories. The classmates and instructors come from a broad array of industries. We quickly learned that healthcare and other professions, including defense, energy, manufacturing, and transportation, share many more similarities than differences. Healthcare must not stand isolated with its ideas when it comes to safety. There is much that we can all learn from one another. The authors aim to provide the reader with a perspective honed by the influences of others working in seemingly disparate industries and professions, all of whom share a deep interest in integrating safety and production for the common good. In a sense, our obligation is to share information so that we all learn and improve together.

Many readers use the Hippocratic Oath to guide their daily caregiving practices. The oath was created around the 5th century BC and is attributed to the often-called "Father of Western Medicine," Greek physician Hippocrates. Although the oath has undergone many iterations over the years, the concept of "do no harm" has endured and remains a guiding principle for many. Whether healthcare providers have formally taken the oath or not, the philosophy is the foundation for many.

The engineering profession also has a guide that many utilize in their work. The oath, which is far newer but by no means less impactful than the Hippocratic Oath, is traditionally taken upon graduation from a formal engineering educational program. The order is a list of engineering obligations that should be followed to uphold professional standards and responsibilities (Harris et al., 2019). One charge is that engineers pledge to share their knowledge and skills without reservation for the public good when needed.

Integrating these oaths is easy, for they generally convey the same general message. Meant as directives, these oaths help form the ethical groundwork in two different worlds, where there are more similarities than differences. Ethical wording spread across workplaces is never enough

unless it can shape the behaviors and actions of those in a profession. Ethical phrases and sentences must become ingrained in people (i.e., internalized). Ethics, integrity, and morality are not things one gets from a class or a single mentor. Enrolling in a course alone is not enough to develop ethics and integrity. They are caught, not taught. Morality, ethics, and integrity are instilled in individuals by those of the past and present who surround them.

Readers may wonder why they should pick up this book and read it. Put simply, it differs from any other book that most have read. This book contains information seldom covered in other dental and medical safety books or lectures. The book's information comes from a place many in healthcare are unfamiliar with, the safety profession. Let's face it; much of the safety information discussed and written about in the dental and medical professions for years has been based on a general philosophy that emerged from their respective worlds. The philosophy has become a tacit thought. People's writing and lecturing transmit the ideas they are familiar with and utilize. The transmitters only know what they know. There are no ill intentions or ulterior motives. Things spoken and written upon are what is considered to be the truth that is perceived.

"You don't know what you don't know." – Socrates

Two things are certain: time goes on, and new facts emerge. Despite the increased focus on safety measures to reduce the number of adverse outcomes, issues persist and appear to be expanding. Healthcare safety concerns continue to grow, driven by unacceptable results, social media, public outcry, and governmental responses. The message has been loud and clear for years: "Deliver appropriate care without adding harm," but now it comes from many more avenues and reverberates more intensely.

As a result, new courses containing a few bits of fresh wisdom are constantly arising, and the number of rules/regulations continues to climb. Many measures are recommendations, while national organizations and government agencies mandate others. The hurdles caregivers must navigate in the name of safety propagate more rapidly than ever. Readers can attest that they have done all they are told to do to be safe and sometimes even more. The reader may say they are already safe, but are words enough? Are we Safe Enough?

The idea of a healthcare world that is perfectly safe, with the goal of zero harm, is a beautiful thought. Some organizations' mission includes the aim of zero events, injuries, or damages. It is difficult to imagine much of anything to be perfect (i.e., zero flaws or problems) for any significant length of time. Can perfection be consistently achieved when performing tasks safely in healthcare? Unfortunately, this dream of zero too often cannot be realized for more than "a magical instant" despite how hard one tries. Focusing solely on the goal of zero harm to workers and their organizations can have adverse effects (Thomas, 2020).

Many organizations see things differently. They know that zero is not possible. These institutions settle for less than zero, which seems logical and realistic for safety professionals. However, the question is more about how much less than zero and the associated severity of consequences they, their patients, and society are willing to compromise. It is a wicked question that people dance around to avoid answering thoroughly. The answers given are often unsettling and raise further wicked questions that no person can completely answer on their own.

Some national professional leaders have previously stated, "When charting the current levels of safety with the profession's efforts over the recent years, we have reached a plateau. For their profession to move the line closer to being safer is likely unattainable (i.e., an asymptote is present)." For some listeners, the message they hear is clear: they are doing enough, and more is unfathomable. To these folks, the profession's leaders have spoken and determined the level of safety that can be accomplished by striving for it each day. It is an imaginary place that has been constructed. There is no doubt they believe this ominous invisible space exists. In the propagation of the fixed-point safety philosophy, the notion that we have become safe enough has become cemented. There is an invisible cap on safety that cannot be lifted. Healthcare providers have it as good as it gets. Some health practitioners can find comfort in the words that come from the mouths of national leadership. They often feel endorsed by these words. They are doing enough.

For others, the thought of an asymptote is painful. Something more is felt to be necessary, yet the answers remain unclear due to the complexity, confusion, and varied narratives. They hear the public outcry and read the headlines of unfortunate and sometimes preventable outcomes. These people take the information to heart. The idea that further mitigation of patient suffering has reached an endpoint using the profession's known solutions is unimaginable to them.

As leaders try to balance the many competing priorities of their organizations, the bar set for each element may be inadvertently too low. The safety mindset of some individuals has a powerful influence on many and is inconsistent with the current safety profession's approach to doing things safely. Today, the safety profession is moving away from mechanistic thinking, simple root cause analysis, and a people-focused improvement strategy. The authors feel readers must embrace complexity and harness uncertainty as learning opportunities. A systems thinking style is beginning to permeate organizations, focusing on system improvements that benefit all workers and the people they serve. The employees are celebrated as problem solvers and improvisational creators of safety, despite the complex interactions of many system components. The individuals who perform daily tasks are taking their place at the forefront of providing operational intelligence that fuels success. Removing obstacles that block the path of enlightenment requires curiosity and a desire to improve and grow.

Rather than continuing to do “more” of the same thing on the journey to advance safety by working harder, perhaps adopting a different approach to safety is a more effective solution. The idea of “more” seems to be wearing many people out and is unlikely to be the best solution. The concept of “more” in safety has a significant shortcoming. It can be likened to the Greek mythology figure of Sisyphus, who is hopelessly condemned to pushing a giant boulder up a hill, only to have it roll back downhill every time. When will the madness come to an end, and what solutions can be more adequate and long-lasting?

"We cannot solve our problems with the same thinking we used when we created them." – Albert Einstein

We all have heard the saying, "The evil of good is better." Some sectors of society do not believe these words apply to doing things safely. This book aims to advance safety by sharing a "different "perspective. A "different" that has many possibilities. Gaining a new perspective can open up alternative ways of understanding and provide additional options for leaders and those working in organizations. Healthcare's safety potential can increase when care providers are willing to blend the current knowledge of two professional approaches: healthcare and modern safety, rather than keeping them mutually exclusive. Readers and their colleagues must find ways to move away from a fixed standpoint, which many perceive as the ultimate truth regarding safety. Use the book as a resource to explore an alternative direction. Let it be a stepping stone on your journey to a safer tomorrow, to being Safe Enough.

This book is broken down into seven sections. The authors in each part present traditional perspectives on the subjects, as well as current safety engineering concepts. The chapters are listed and include a summary of the topics:

Chapter 2 reviews the concepts of being safe and safety, including measuring and managing it.

Chapter 3 examines systems by defining them, describing their various types, outlining their distinct characteristics, evaluating their functions, and discussing methods for managing/navigating them. It also explores the concepts of sensemaking, systems thinking, and the importance of documentation.

Chapter 4 discusses hazards and risks, as well as the role of system safety in addressing these entities, including the barriers to implementing this philosophy. It will also examine Human Organizational Performance and

its principles. Finally, the reasons why workers take risks, the normalization of risk, and the concept of drift are explored.

Chapter 5 introduces the concept of resiliency by defining it, examining its role in systems, and illustrating an example of transforming a current brittle system into a resilient system to foster capacity. It also uncovers the concept of safety margins and potential ways to expand them.

Chapter 6 examines surprises, errors, near-misses, and accidents, with a focus on detection and reporting. Various accident philosophies are reviewed in the context of assessment. Two management pathways (blame and punishment versus understanding and learning) are possible, leading to different outcomes and potentially distinct cultures (i.e., retributive versus restorative just cultures).

Chapter 7 covers change and its management. It addresses adaptations to a dynamic environment and the handling of planned changes. The organizational effects and barriers to change will be reviewed with anticipated transitions. Assessing and managing these two elements and reducing adversity will be explored.

Chapter 8 provides a summary and some closing remarks on which to reflect. Striving to advance safety has no endpoint or level to reach.

The authors have provided practical perspectives and key takeaways for Chapters 2 through 8 to support readers' understanding and offer ideas for applying the information. They are intended to serve as practical thought starters, rather than comprehensive summaries of the information presented in the chapter.

The topics in each chapter are not meant to be contained in silos, where information in one space is insulated from its surroundings. The book should be viewed as a network of concepts, where each chapter's content interweaves with others. Although the categorized ideas can stand alone, they become dynamic and more meaningful when connected and interlaced with one another- the information from a chapter seeps into other segments of the book. Dividing or analyzing concepts contained in each chapter is an inadequate approach to comprehending and achieving a holistic view of safety. Safety must be considered with its many parts. Understanding and moving safety forward requires the key function of integration, or, more accurately, synthesis. Synthesis is critical when dealing with complex adaptive systems found in healthcare, as it seeks to understand the whole and the bigger whole that it is part of. Safety in a complex world is generally about understanding interactions and interrelationships. The same can be said of our healthcare workplaces. One must find the bridges and not dwell on the divisions. The divides that people construct block the quest for a safer

tomorrow. By understanding different perspectives, advancing safety can become a reality.

If you are reading this book, you are likely seeking new ways of thinking about old problems. We hope something nestled in these pages will spark a new pathway to a safer workplace on your journey to becoming Safe Enough!

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CHAPTER 2

SAFETY

"Measuring safety performance by the number of injuries you have is like measuring parenting by the number of smacks you give." – Robert Long

The words "safe" and "safety" are commonly spoken and written in our personal and professional lives. What do they mean to the reader? Everyone has connotative meanings that surface when they say, hear, write, and read these words, which invoke feelings within them and others due to past experiences. Individuals rarely use denotative meanings that provide clarity and are direct. Therefore, the transfer of information and understanding between individuals is more complicated and often incomplete. These communication issues negatively affect people's behaviors, relationships, and performance if they are not on the same page as their fellow workers. Feedback from others is a valuable tool that shapes our thinking and actions.

Without accurate feedback, people are limited in their ability to self-correct their behaviors/actions to changing conditions or situations around them.

Each worker has a different perspective on their increasingly complex healthcare environment. Localized context shapes what employees do and how they approach and handle tasks successfully. Being on the same page is crucial and requires people to come together in thought to achieve a shared understanding. Collaborative thinking requires finding a commonplace, in a sense, a shared meaning. To discover this place, the team of workers must adopt a deeper and more meaningful communication strategy among themselves to actually capture critical perspectives (i.e., the way people are seeing things). Uncovering the shared meaning of being safe and doing things safely bridges the gaps. It brings people together through communication.

Collaborative thought requires more than talking. We need to listen with curiosity to understand and truly learn. Being willing and able to ask the right questions is necessary (Conklin, 2018). Assuming we know what others think is not enough. Unspoken information and things we hear but do not understand remain useless and may be harmful.

Being safe

How often do people say to others or think to themselves, “This is safe?” For some, being safe means being free from harm and secure from threats of danger or loss. For others, it means being okay, stable, or successful. What does “safe” mean to you? Look at the picture of the chicken crossing the road. Is the bird safe? Given the information readers perceive, many

would quickly say, “Of course, it is safe,” even before it reaches the side of the road. Others may disagree because of their viewpoint, for they may be in the speeding car from where the photo was taken or next to a fox in the periphery, behind the fence. Also, even from the same spot, no two individuals perceive the same things, such as the hungry hawk above swooping in for its afternoon meal that is observed by only one person.

Thoughts of being safe are judgments we make using the available information we sift through in assessing situations. This applies whether crossing a road or performing tasks at work. We all desire certainty, knowing our actions will be appropriate regarding safety. Being uncertain is uncomfortable. Ultimately, the certainty of being safe only occurs when actions are completed. Sometimes, when attempting to reduce uncertainty, a rule or procedure is written by someone far removed from the actual work without considering other perspectives that are closely related to an area of concern. The desired effect of a distant overseer's action may exacerbate a problem rather than provide an effective solution. Having more perspectives allows us to determine more accurately whether actions are likely safe before they occur. Additional information improves our decision-making ability on what is safe to do and what is not. Actions can be halted or modified if new information emerges indicating that danger awaits if we continue doing certain things in specific ways. Fortunately, one does not have to wait until actions have begun. Vital information is held by others nearby, but it must be shared. Accessing other perspectives through the development of clear and open communication channels is crucial to being safe. Barriers to the flow of information are counterproductive to safety.

Safety

A typical dictionary or denotative meaning of “safety” is the state or condition of being protected from danger or harm. “Safety” is commonly used as a noun, but in most industries, it should be utilized as a verb that signifies an action. Verbs provide agency. When “safety” is defined as a state or condition, “safety” becomes a noun and no actions are necessary. Changing a verb to a noun is called nominalization (Vesel, 2021). Unfortunately, safety is a dynamic process, not a static position that remains unchanged. Safety requires adapting actions to the current conditions. These actions can be imagined as movements in a positive direction along an endless road where danger and risk continually require mitigation. Perhaps a better definition of *safety* for those working on the front-lines in organizations is not the reduction in failures leading to harm but the

presence of the capacity to handle both expected and unexpected conditions without severe injury or damage.

Safety professionals utilize consensus standards, such as ANSI/ASSP Z10.0 and ISO 45001, created by national and international standardization organizations for guidance (American National Standards Institute, 2019; International Organization for Standardization, 2018). Before 2020, when the latest ANSI standards revision was enacted, *safety* was defined as "the absence of injury or the freedom from unacceptable risks." In other words, safety meant avoiding what goes wrong, a concept of Safety I (Hollnagel, 2018). Newer standards promote the idea that health and safety are active and ongoing processes that unfold through the sharing of perspectives (i.e., receiving information accurately) rather than a specific outcome to be achieved. Safety is learning from things that go right, a Safety II concept (Hollnagel, 2018). These professional groups, utilizing the Safety II idea, have moved beyond nominalizing safety.

The ANSI/ASSP Z10's most current definition of safety is an "emergent property" of an organization that is achieved through the navigation of various dynamic processes. These guidelines serve as the foundation for creating effective management systems that can continually improve safety. However, attempts to follow guidelines alone have their limitations. More is necessary, including competency in systems thinking (ST), which will be discussed later in the book. ST is critical in determining the quality of management systems and a company's safety potential. The term "safety potential" is purposely utilized instead of reaching or attaining a point. The thought of reaching or achieving a level is nominalizing; these words are not enough. Organizations must continue to improve. Actions are ongoing, and ceilings do not exist except for those constructed by its leadership. Having covered what safety and being safe are, readers may ask, "Where do we go from here?"

Measuring Safety

In the healthcare world, we are frequently reminded of the importance of safety. It shapes what we do. A general caregiver's goal is to provide safe treatment for their patients. Safety is more than something we want to feel; it is what we want to deliver, and being safe is what we want to be.

Many compare their actions to those of others in their professional circles. All have heard, "We are safer than them." The authors assume that all healthcare providers read recent journal articles about the safety of procedures in their profession. The articles often review patients treated by the author(s) in their facilities. For many readers, the articles demonstrate