

# ACHIEVING SAFE HEALTH CARE

Delivery of Safe Patient Care  
at Baylor Scott & White Health



Jan Compton, MS-HCAD, BSN, RN, CPHQ

Foreword by David C. Classen, MD, MS



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Baylor Scott & White Health's approach to achieving the Triple Aim is both innovative and proven. This book provides the practical information and real-life examples that individuals and organizations will find extraordinarily useful to improve and enhance care in their settings...it is a "must have" for anyone interested in maximizing patient safety.

**Beth Mancini, RN, PhD, NE-BC, FAHA, ANEF, FAAN**

*Professor, Associate Dean, and Chair Undergraduate Nursing Programs  
The University of Texas at Arlington College of Nursing and Health Innovation  
Baylor Professor for Healthcare Research  
Past President, The Society for Simulation in Healthcare*

Baylor Scott & White Health is way out in front of the pack in their approach to safety, using a true systems approach, embedding PhD-level human factors engineers in their safety program, and creating a robust training program for their safety teams in the science of safety. This is a system worth watching.

**Rollin J. (Terry) Fairbanks, MD, MS**

*Director, National Center for Human Factors in Healthcare  
Director, Simulation Training & Education Lab (MedStar SiTEL)  
MedStar Institute for Innovation, MedStar Health  
Associate Professor of Emergency Medicine, Georgetown University*

There is no better way to evaluate an approach than to introduce it. Baylor Scott & White Health has done this with STEEEP to great effect. There are lessons aplenty in this excellent publication from Baylor Scott & White Health.

**Peter Carter**

*Chief Executive Officer  
International Society for Quality in Health Care*

Jan Compton and her colleagues at Baylor Scott & White Health have produced a valuable compendium reflecting the intentional efforts to systematically improve care across their health system. This intentional work has resulted in a considerably safer care environment for both patients and the people providing care.

**Michael Leonard, MD**

*Managing Partner  
Safe & Reliable Healthcare LLC  
Adjunct Professor of Medicine  
Duke University School of Medicine*

Measuring and reducing patient harm are central to delivering safe and reliable healthcare and yet, based on the evidence, remains a challenge for most. STEEEP care created an even higher standard by pioneering preventable risk, one of many ways in which Baylor Scott & White Health (BSWH) has proven a trailblazer in high reliability. This book is a gift to the field and demonstrates how BSWH will remain a leader in this next generation of patient care.

**Drew Ladner, MBA, MA**

*Chairman & CEO*

*Pascal Metrics*

In this book, Baylor Scott & White Health has once again illustrated why it's a leader in the field of medicine. If every hospital in America was as direct in its goal to reduce patient harm, we could cut preventable deaths by a significant number. While no one has all of the answers to solving the patient safety problem in this country, Baylor Scott & White Health is leading the way to reach zero preventable deaths. We thank them for their commitment to patients.

**Laura Batz Townsend**

*Co-Founder & President*

*Louise H. Batz Patient Safety Foundation*

Baylor Scott & White Health provides practical examples and approaches to excellence in patient safety in *Achieving Safe Health Care*. Each page holds ideas that any system can implement. Further, Baylor Scott & White Health provides detailed measurement of its improvements utilizing the STEEEP program.

**Kristin M. Jenkins, JD, MBA, FACHE**

*President*

*Dallas-Fort Worth Hospital Council Foundation*

*Senior Vice President*

*Dallas-Fort Worth Hospital Council*

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With Kathleen M. Richter, MBA, MS, MFA

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# Foreword

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More than fifteen years after the Institute of Medicine report *To Err Is Human*, patient safety remains a significant problem for the U.S. health care system and, more emphatically, for American patients who still suffer high rates of harm. Recent studies have estimated that more than 400,000 lives are lost each year because of safety problems in American hospitals, making safety the third leading cause of death in the United States.<sup>1</sup> In addition, more than six million injuries may occur to patients undergoing inpatient care in the United States. Yes, there have been improvements in safety—hospital mortality rates have declined along with certain types of safety problems such as central line–associated blood stream infections and ventilator-associated pneumonia. However, the startling figures mentioned previously tell a bigger story, that many serious patient safety problems remain to be addressed. Many health care professionals well aware of these safety problems closely monitor and follow family members and loved ones who get hospitalized. The recent publication of surgeon-specific complication rates with huge variation has only fueled public interest and concern about the safety of care. The rapid rise of high-deductible health plans now means that patients are covering a larger financial burden from these injuries.

Given these many current challenges in improving patient safety, what are the greatest opportunities in moving forward in improving patient safety? As other high-risk industries have learned, it starts with leadership completely committing itself, not just to the talk but to the walk as well. It continues with creating a culture of safety throughout the organization that touches everyone, even those not directly involved in patient care. It requires a commitment to safety culture that overrides a focus on productivity—allowing health care workers to “stop the line” if a situation not only is unsafe but also even looks unsafe. It demands thinking ahead in safety using the principles of human factors to redesign the health care process. It cannot

work without the safe adoption and broad use of technology and it must also include a degree of collaboration and teamwork heretofore not seen in health care. And finally, it can never be successful without the deep involvement of patients and families. For a health care organization to truly achieve safe and highly reliable care, all these things must be working as a well-conducted symphony. Given the complexity of the adaptive organism that we call a hospital or a health system, this has not yet arrived in American health care. However, the blueprint for just this transformation is outlined in great detail in this book, *Achieving Safe Health Care: Delivery of Safe Patient Care at Baylor Scott & White Health*, which outlines what this symphony will look like.

Over the last two decades, Baylor Scott & White Health (BSWH) has been putting together this organizational blueprint for safer and higher reliable care. It is built on top of leadership commitment and structure and aligned incentives to carry it out. Beginning with an integrated plan for enhancing quality of care called STEEEP (safe, timely, effective, efficient, equitable, patient-centered care), BSWH began by reducing preventable deaths, then reducing preventable injuries, and finally reducing preventable risk. In essence, unlike so many other patient safety plans, this is a plan with a proven track record. It is also a plan that has benefited from more than a decade of education, training, innovation, and testing. Although BSWH heavily uses successful approaches from other organizations, in many cases, innovative approaches to safety had to be developed and innovated by BSWH. This book is replete with examples of these important safety innovations. From the novel and aggressive use of human factors expertise to redesigning health care processes or technology design or use, to the reinvention of surgical checklists with real-life pragmatic workflows, to the development of a unique BSWH safety culture assessment tool, to the use of Swaddle teams to support health care workers who disclose patient safety problems to patients, to the deep involvement of patients and families in all aspects of the BSWH safety programs including the creation of patient white boards and the safety huddle approach to instill principles of high reliability at the frontlines of care, to the development of a new model of root cause analysis called the Cardiac Surgery Phase of Care Mortality Analysis, to the development and use of an all-cause harm measure based on the Institute for Healthcare Improvement Global Trigger Tool, this book abounds with innovations beyond the ones mentioned here.

Other industries such as aviation and nuclear power have shown us that there is safety in numbers: Achieving safe and highly reliable performance

requires an organization that operates on a daily basis with the principles of high reliability, continually measures its safety performance, always looks for opportunities to improve, and is hypervigilant about safety events, risks, near-misses, and those safety problems that have not yet been recognized. This will require health care organizations to move from a focus on a series of specific safety initiatives such as reducing medication errors to an overall organizational approach and plan to achieve this world of highly reliable and safe care. This book is that plan and should be required reading for any health care leader who wants to transform his or her organizational approach and performance in patient safety. Indeed, this book may become the blueprint for how to deliver the safest care possible, something that remains a great challenge as well as a great opportunity for the US health care system.

**David C. Classen, MD, MS**

*Chief Medical Information Officer, Pascal Metrics  
Associate Professor of Medicine, University of Utah  
Salt Lake City, Utah*

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# Acknowledgments

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Each day, I am privileged to work with more than 35,000 employees of Baylor Scott & White Health (BSWH) who dedicate themselves to delivering the BSWH vision “to be the most trusted name in giving and receiving *safe*, quality, compassionate health care.” They do this by operationalizing the STEEEP quality framework—health care that is safe, timely, effective, efficient, equitable, and patient centered. Everything we do as a health care organization starts with the safe delivery of care.

I am both committed and excited to be on this mission to achieve safe care with an organization passionate about delivering exemplary care to the patients we serve. This book provides details on the strategies and tactics we as a health care system have implemented to achieve safe health care. More importantly, this book provides stories from the frontline about how engagement with and commitment to patient safety prevent errors from occurring. It is truly an honor to be able to share this journey on behalf of the BSWH team. The culture and dedication exhibited by each employee are what make BSWH the best place to give and receive care. Health care is very competitive, but when the topic is patient safety, hospitals and health care systems should work together and share how to achieve the best possible outcomes in the journey to safer care. It is my hope that this book provides insight into making health care safer.

I want to thank those leaders across BSWH who mentored me when I was a nurse beginning my journey and those who have provided wisdom and leadership to define the leader I have become.

In addition, I am appreciative of Dr. Paul Convery, Nanette Myers, Kathleen Richter, Hilda Williams, and Alyssa Zarro, who provided editorial support during the production of this book, and to Dr. Don Kennerly, for

building the foundation for the patient safety program in 2005 and allowing me to take that vision and continue to build a robust patient safety program. Thank you for those in the Office of Patient Safety who share my passion for this very important work. Last, thank you to Dr. David Ballard for giving me the opportunity to tell our story.



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# Author

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**Jan Compton, MS-HCAD, BSN, RN, CPHQ**, is vice president of patient safety and chief patient safety officer for Baylor Scott & White Health (BSWH), the largest not-for-profit health care system in Texas, which includes 46 hospitals, more than 800 patient care sites, 5800 affiliated physicians, more than 35,000 employees, and the Scott & White Health Plan. In this role, she is responsible for overseeing the health care system's efforts to develop and implement evidence-based patient safety practices intended to help the organization pursue its vision of "no preventable deaths, no preventable injuries, and no preventable risk." Jan's passion for patient safety is clearly demonstrated as she leads by influence the BSWH programs to reduce inpatient mortality, promotes an organizational culture conducive to the development of patient safety innovations, and guides employees in the adoption of patient safety values. Her plan is to operationalize patient safety goals and processes across all BSWH facilities.

Jan dreamed of becoming a nurse since early childhood. She lost her mother at an early age but has very vivid memories of her mother dressed in her white nursing uniform, smiling and always with a compassionate, caring heart no matter how tired she was. Jan's adoptive parents encouraged her to apply herself in school and pursue her dreams. The values instilled while she was growing up were honesty, integrity, and compassion for others. These are the values that she lives by in both her professional and personal life.

Jan earned her bachelor of science in nursing as well as her master of science in health care administration from the University of Texas at Arlington. She has more than 30 years of nursing experience at BSWH. Jan began her nursing career in critical care, where her passion for quality and patient safety first started. Jan's experience also includes previous roles as nursing supervisor; cardiovascular care coordinator; and director of health care improvement, care coordination, risk management, patient safety, and guest

relations for the Baylor Jack and Jane Hamilton Heart and Vascular Hospital. In her former role as director of patient safety for Baylor Health Care System (BHCS), she was responsible for the oversight, growth, and development of the BHCS Office of Patient Safety direct-report employees and facility-level direct-report employees, evaluations, and budget. Under Jan's leadership, the BSWH patient safety assessment program has spread and is now being implemented across the entire health care system to ensure a safe culture for our patients and staff.

Jan is a Certified Professional in Healthcare Quality. She is a member of the North Texas Association for Healthcare Quality, member and past chair for the Patient Safety and Quality Committee for the Dallas-Fort Worth Hospital Council, and a member of the North Texas Health Information and Quality Collaborative for the Dallas-Fort Worth Hospital Council.