Leading the Lean Healthcare Journey

Driving Culture Change to Increase Value "In this book, *Leading the Lean Healthcare Journey: Driving Culture Change To Increase Value*, Pat Hagan and his colleagues tell a compelling story of change at an enormously prestigious institution in its market whose leadership listened carefully to their patients, families and staff and set out to raise quality, safety, and service to new heights.

I have known Seattle Children's for over 30 years and have watched their leaders take Children's from a good pediatric hospital to an emerging international powerhouse in the care, teaching and research related to the most complex pediatric illnesses. My wife, Gail, served as a PICU nurse there for 10 years and would come home daily to tell stories of heroic medicine, compassion beyond comprehension and opportunities to improve systems to deliver excellence reliably.

The story is really about the evolution of thinking by the leadership about the management system necessary to truly create a world class healthcare system. It is a story about leadership deciding that a true commitment to customers (patients) meant going and seeing what was really happening to them at the front line. It is a story about the culture change led by management to publicly acknowledge their defects, thereby giving their people the permission and freedom to fix things right away. It is a story about leadership taking the long view and systematically improving. It is a story of humility and the courage to go outside of healthcare to learn.

I remember when Children's started this journey. I remember Pat finding the Toyota Management System, called CPI by Children's, as intriguing. While there was clearly interest by all, there was a fair amount of palpable skepticism about the applicability of lean to healthcare and another "management fad of the month". The reader gets to enjoy the 10 year story of transformation from the perspective of the staff and clinician leaders that made CPI take root, grow, sustain, and enable all of its staff to soar daily. The reader will also see that while 10 years ago, lean in healthcare was "interesting", today it is essential."

—J. Michael Rona, Principal, Rona Consulting Group (J. Michael Rona is the former president of Virginia Mason Medical Center in Seattle, Washington and introduced the Toyota Management System to Virginia Mason in 2000. He founded the Rona Consulting Group in 2007 to teach healthcare systems how to transform themselves using the Toyota Management System)

Buy this book and gain the confidence to act!

"Joan Wellman and her colleagues provide examples of dramatic performance improvements. Using their practical examples you can be on your way to becoming a leader who transforms your organizations, empowers your team, adds value, and saves lives."

-Ken Graham, CEO of El Camino Hospital in Mountain View, CA

"Joan Wellman and co-authors Pat Hagan and Howard Jeffries are true pioneers in the lean healthcare world. Their book, *Leading the Lean Healthcare Journey*, puts lean into the right context for healthcare leaders and change agents. This book presents all of the aspects of a management system that will create alignment and improvement from top-to-bottom, from arrival-to-discharge, each and every day. Engaging and well-written, I recommend it highly."

-Mark Graban, author of Lean Hospitals: Improving Quality, Patient Safety, and Employee Satisfaction

"The ability for health care delivery organizations to increase their ability to deliver value is not just of national importance, but might be the critical factor for our country to continue its economic leadership position in the world. In *Leading the Lean Healthcare Journey*, Joan, Pat and Howard have made an important contribution to the growing body of literature that lean techniques, but more importantly, the lean management philosophy, can be brought to health care delivery organizations successfully. The result is higher quality, more affordable, and safer care, and a more satisfying care experience for our patients. They have addressed through several case studies the fundamental point that lean is not a set of tools, but a way of leading and engaging an organization's work that can result in real transformation of care delivery."

-James Hereford, Executive Vice President, Group Practice Division, Group Health Cooperative

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Joan Wellman Patrick Hagan Howard Jeffries, MD



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Preface

Joan Wellman had invited Pat Hagan and Jerry Zimmerman to help her teach her weeklong Lean Leader Training to a group of physician and executive leaders at Children's Hospitals and Clinics of Minnesota. It was July 2008. During the course of the week, we talked a great deal with our "students" about the utility of applying continuous improvement principles to healthcare. After class each day, we took advantage of the long and warm Minnesota evenings to discuss the importance of an organization's leadership to a successful lean transformation, and the different paths taken by different hospitals (and manufacturing companies) on their lean journeys.

Joan noted her early 1990s involvement in the introduction of lean principles to healthcare in the Northwest, citing Bellevue's Overlake Hospital as an example of an early adopter of lean methodology due to the influence of their board chair from the Boeing Company. Later Peace Health, Virginia Mason Medical Center, Group Health, and Seattle Children's also began adapting continuous improvement to their organizations. Leaders at all of these organizations were taking the risk of applying "manufacturing methods" to healthcare practices. Each, however, took different approaches to implementation, some preferring a top-down approach and others a less philosophical "tools-only" path.

As we talked we discussed the Seattle Children's approach, what we called "continuous performance improvement" (CPI), and compared and contrasted it with those of others. At Seattle Children's, CPI was marked by guidance and direction from the top but grounded in the engagement and participation of clinical leadership, middle management, and staff, and we had embraced the philosophy of continuous improvement as well as the tools and methods. Not that we felt this approach was superior to others, but our results were pretty darn good and our people—faculty, management, and staff—were highly engaged in CPI.

As we talked we agreed we had a story to tell and, coincidentally, with the Lean Leader Training modules we were using that week, a structure with which to tell it. The training modules are based on the principles of continuous improvement, and we decided that our story should take the form of a series of chapters based on those principles. To highlight the leadership and involvement of clinicians, management, and staff, the chapters would be written by people who had applied lean principles to improve their own processes, from 5S to load leveling to standard work....

So, two and a half years later, we're published. Most of the chapters that follow describe work at Seattle Children's, but to avoid an exclusive focus on any one organization and the possible concern that it is a "special" case several other healthcare organizations with whom Joan has worked have also provided chapters.

We hope that readers both beginning and well on their way on their lean journeys will find the stories within helpful as they seek to apply the philosophy and principles of continuous improvement to their work.

> Joan Wellman Pat Hagan Howard Jeffries

Acknowledgments

We would like to thank Tony Payauys, this book's tireless project manager, for his hard work keeping us organized, reminding us of deadlines, and helping us negotiate the world of book publishing. We couldn't have finished this book without him. We would also like to thank Jerry Zimmerman and Cara Bailey for their encouragement from the beginning of this endeavor and for helping us identify where to focus our efforts, and many thanks to Sue Cowan for her invaluable support throughout the project.

We acknowledge that this book represents not only our individual work, but also the hard work of many authors, writing about how dedicated, smart people with great ideas are changing how healthcare is delivered. We are privileged to present their stories in this book.

Finally, we thank Productivity Press for their willingness to publish our work.

About the Authors

Joan Wellman, founder and president of Joan Wellman & Associates (JWA), pioneered the application of Toyota principles to healthcare in 1995. Joan and her associates have provided lean consultation to Seattle Children's since 1997, and to other organizations featured in this book, including MemorialCare Health System, Children's Hospitals and Clinics of Minnesota, The Everett Clinic, and Jefferson Healthcare. Today, JWA supports healthcare organizations as they implement the methods, management systems, and mind-set required for sustained lean transformation. Before working in healthcare, Joan



spent twenty years consulting to lean initiatives in the aerospace, telecommunications, computer, and energy industries.

Patrick Hagan joined Seattle Children's Hospital in 1996 and currently serves as its president and chief operating officer. Over the past twenty-five years, he has held executive positions at children's hospitals in Ohio, Arizona, and Seattle. Pat helped develop and lead Seattle Children's continuous performance improvement (CPI) strategy. This multidimensional approach has contributed to the hospital's success in improving its performance in service quality, clinical access, patient safety, staff engagement, and financial results. Pat has spoken at numerous national conferences about Seattle Children's successful application of its transformative CPI strategy.



Howard E. Jeffries, MD, MBA, is a cardiac intensive care physician and medical director of continuous performance improvement at Seattle Children's Hospital. He is a clinical associate professor of pediatrics at the University of Washington School of Medicine. He completed a residency in pediatrics at Children's Memorial Hospital and a fellowship in critical care at Childrens Hospital Los Angeles. He has published peer-reviewed articles and book chapters, with an emphasis on cardiac intensive care, informatics, and quality improvement. He sits on the advisory board for the Virtual PICU



Performance System database and on the Washington State Healthcare Associated Infections Advisory Committee.