Value Stream Mapping For Healthcare Made Easy

#Value Stream Mapping Healthcare #VSM for Healthcare #Healthcare Process Optimization #Lean Healthcare Tools #Medical Efficiency

Discover how to simplify complex processes in healthcare with our easy-to-understand guide. This resource makes Value Stream Mapping for Healthcare Made Easy, providing practical steps to identify waste and optimize patient care pathways. Learn to implement effective Lean Healthcare Tools for significant process improvement and enhanced healthcare efficiency.

Value Stream Mapping for Healthcare Made Easy

In no industry is the concept of quality more essential than it is in healthcare, which is why the lean quality principles learned through the example of the Toyota Production System are so applicable. Two fundamental principles of Toyota‘s push for excellence are especially relevant to healthcare: ensuring quality at every step and keeping improve

Mapping Clinical Value Streams

Tens of thousands of patients die unnecessarily every year as a result of errors and defects in our healthcare processes. Those that survive often pay too much for the privilege. The value stream mapping methods described in Mapping Clinical Value Streams will help you achieve more efficient health care processes and will pave the way to an improved medical system with significantly reduced medical errors and other costly waste. Part of the Lean Tools in Healthcare series, this user-friendly book will help you understand how to use value stream mapping to provide quality, patient-centered care. Value stream mapping is a powerful tool for observing and depicting processes as they truly are—and for envisioning and reconfiguring the same processes to eliminate errors and other waste. With this book, you'll learn how to: Map current-state processes Create a future-state map with processes streamlined through "flow" and "pull" Manage the rollout of your future state with "A3" project plans Presented in a highly organized and easy-to-assimilate format, the book includes examples from actual healthcare processes, plus numerous illustrations and margin assists that call your attention to key points. Value stream mapping icons make it easy to see and understand the ebb and flow of healthcare processes. Each chapter also includes a summary for quick review. Throughout the book you will be asked to reflect on questions that will help you apply these concepts and techniques to your own workplace. To be competitive in today's marketplace, you cannot afford to leave processes unexamined, or let them become haphazard. You must apply conscious, quality attention to continuously see and fix your healthcare processes. In Mapping Clinical Value Streams, Shingo Prize-winning author Thomas L. Jackson shows you how.

A Guide to Lean Healthcare Workflows

Is Lean a fit for your healthcare organization? Various methodologies can be used to help organizations achieve their objectives depending on their criteria: lowest risk of failure, fast to resolution, or lowest cost for deployment. But what every organization should consider is which methodology will have the greatest impact. Lean, a systematic approach to understanding and optimizing processes, may be the fit for your organization. Learn more in this new IBM® RedpaperTM publication, A Guide to Lean Healthcare Workflows, by Jerry Green and Amy Valentini of Phytel (An IBM Company). The paper delves into the five steps of Lean: Define value from the patient's perspective Map the value stream, and identify issues and constraints Remove waste, and make the value flow without interruption Implement the solution, and allow patients to pull value Maintain the gain, and pursue perfection It describes each step in-depth and includes techniques, example worksheets, and materials that can be used during the overall analysis and implementation process. And it provides insights that are derived from the real-world experience of the authors. This paper is intended to serve as a guide for readers during a process-improvement project and is not necessarily intended to be read end-to-end in one sitting. It is written primarily for clinical practitioners to use as a step-by-step guide to lean out clinical workflows without having to rely on complex statistical hypothesis-testing tools. This guide can also be used by clinical or nonclinical practitioners in non-patient-centered workflows. The steps are based on a universal Lean language that uses industry-standard terms and techniques and, therefore, can be applied to almost any process.

Lean Hospitals

Healthcare leaders around the world are facing tough challenges, including the need to deliver better value for patients and payers, which means improving quality while reducing cost. It might seem impossible to do both, but organizations around the world are proving it's possible, through Lean. Health systems are able to enhance all dimensions of patient care, including both safety and service, while creating more engaging and less frustrating workplaces for healthcare professionals and staff... all leading to improved long-term financial performance. Building on the success of the first two editions of this Shingo Prize-Winning book, Lean Hospitals: Improving Quality, Patient Safety, and Employee Engagement, Third Edition explains how to use the Lean philosophy and management system to improve safety, quality, access, and morale while reducing costs. Lean healthcare expert Mark Graban examines the challenges facing today's health systems, including rising costs, falling reimbursement rates or budget constraints, employee retention, and harm to patients. The new edition of this international bestseller (translated into eight languages) begins with an overview of Lean methods and mindsets. It explains how engaging staff and leaders in Lean practices such as value stream mapping and process observation can help reduce wasted motion for caregivers, prevent delays for patients, and improve the long-term health of your organization. In addition to a new introduction

from John Toussaint, this updated edition includes: New and updated material on identifying waste, A3 problem solving, employee idea management, kanban for materials management, and strategy deployment New case studies and examples—including a new 5S case study (Franciscan St. Francis Health) and other case examples highlighting the challenges and successes of an academic medical center and a small urgent access hospital, featuring quotes and stories from executives New examples and updated data throughout, including revised chapters on patient safety and patient flow challenges and the improvements driven by Lean Detailing the mindsets and methods needed for a successful transition to a Lean culture, the book provides the understanding of Lean practices—including value stream mapping, standardized work, error proofing, root cause problem solving, and daily improvement processes—needed to reduce common hospital errors and improve performance in other dimensions. The balanced approach outlined in this book will guide you through the process of improving the quality of care and service while reducing costs in your hospital. *The Lean Certification and Oversight Appeals committee has approved Lean Hospitals as recommended reading for those in pursuit of Lean Bronze Certification from SME, AME, Shingo Prize, and ASQ

Mapping the Total Value Stream

Mapping the Total Value Stream defines and elaborates on the concepts of value stream mapping (VSM) for both production and transactional processes. This book reshapes and extends the lessons originally put forward in a number of pioneering works including the popular ,Value Stream Management for the Lean Office. It reinforces fundamental concepts and theoretical models with real-world applications and complete examples of the value stream mapping technique. To educate VSM mappers on the specific mechanics of the technique, the text provides in-depth explanations for commonly encountered situations. The authors also provide a more complete perspective on the concept of availability. While they discuss availability of equipment in transactional processes, they extend the concept by elaborating on availability as it applies to employees. The calculation of process lead time for work queues is taken to an advanced level – not only is the calculation of this lead time explained, but the text also covers the very real possibility of having more work in the queue than available time. While previous books have focused on only production process VSM or transactional process VSM, this work meets the real needs of both manufacturers and service sector organizations by dealing with both types. It goes beyond explaining each scenario, to teach readers what techniques are commonly applicable to both, and also explains areas of difference so that mappers will be able to readily adapt to whatever unique situations present themselves.

Planning and Designing of Specialty Healthcare Facilities

A thorough treatment of product and systems development interms of value to all stakeholders Product and Systems Development compiles more than twentyyears of research and practice from a value perspective, fromvision and marketing to design, manufacturing, delivery,operations, and maintenance. It defines stakeholder value andidentifies specific stakeholders in the product and systemdevelopment process; covers best practices in development; andexamines systems engineering, current industry views, and the lifecycle of a value stream. Featuring appendices written by professionals in the field ontopics such as Design Structure Matrices, Lean Enablers for systemsengineering, and MDAO and simulations, this indispensableguide: Explains why stakeholders' values can hold the key tofulfillment or defeat of the developer's vision Emphasizes the succession of value-contributing practices andtools that form a framework for development success Integrates the technical, productivity, and customer/end-userelements in product and system development Uses more than 100 tables and figures to illustrate the aboveprocesses, as well as corollary elements of risk, failure analysis,and fault-tolerant design Includes numerous case studies and links to onlinematerial Product and Systems Development is an excellentcoursebook for senior and graduate students in aerospace,mechanical, civil, electrical, and material engineering, as well asmanagement science and engineering. It is also a useful referencefor practicing engineers in a variety of technology-basedindustries.

Product and Systems Development

In this book you will find the following: A structured approach to executing lean improvements Relevant real-world case studies Examples of tools and templates along with downloadable files Hints, tips, and lessons learned Chapter challenges aimed at giving the reader assignments to apply key concepts and tools in the work setting The primary audience for this book is individuals responsible for improvement in healthcare settings, such as lean practitioners, Six Sigma belts, quality improvement specialists,

and project managers. Additional health professionals will benefit from the practical application and guidance. Positions include frontline managers and supervisors, improvement teams, professors teaching quality improvement and/or operations management, healthcare professionals responsible for performance improvement, and students in all related health professions (clinical and administrative). The book promotes practical application. Readers are equipped with the skills to implement lean concepts and tools within their work setting. Additionally, the book provides insight and strategies for avoiding failure and developing buy-in.

Executing Lean Improvements

Healthcare Kaizen focuses on the principles and methods of daily continuous improvement, or Kaizen, for healthcare professionals and organizations. Kaizen is a Japanese word that means "change for the better," as popularized by Masaaki Imai in his 1986 book Kaizen: The Key to Japan‘s Competitive Success and through the books of Norman Bodek, both o

Healthcare Kaizen

A growing, aging population; the rise to epidemic proportions of various chronic diseases; competing, often overlapping medical technologies; and of course, skyrocketing costs compounded by waste and inefficiency - these are just a few of the multifarious challenges currently facing healthcare delivery. An unexpected source of solutions is being imported from the manufacturing sector: lean thinking. Lean Principles for Healthcare presents a conceptual framework, management principles, and practical tools for professionals tasked with designing and implementing modern, streamlined healthcare systems or overhauling faulty ones. Focusing on core components such as knowledge management, e-health, patient-centeredness, and collaborative care, chapters illustrate lean concepts in action across specialties (as diverse as nursing, urology, and emergency care) and around the globe. Extended case examples show health systems responding to consumer needs and provider realities with equal efficiency and effectiveness, and improved quality and patient outcomes. Further, contributors tackle the gamut of technological, medical, cultural, and business issues, among them: Initiatives of service-oriented architecture towards performance improvement Adapted lean thinking for emergency departments Lean thinking in dementia care through smart assistive technology Supporting preventive healthcare with persuasive services Value stream mapping for lean healthcare A technology mediated solution to reduce healthcare disparities Geared toward both how lean ideas can be carried out and how they are being used successfully in the real world, Lean Principles for Healthcare not only brings expert knowledge to healthcare managers and health services researchers but to all who have an interest in superior healthcare delivery.

Lean Thinking for Healthcare

The A3 process is a way to look with "new eyes" at a specific problem identified by direct observation or experience. It offers a structure that begins by always defining the issue through the eyes of the customer. In A3 Problem Solving for Healthcare Cindy Jimmerson explains an essential tool borrowed from the Toyota Production System, which is an extension of work identified with the well-known Value Stream Map. She offers an easy-to-learn problem-solving method that can be used in every aspect of healthcare to identify, understand, and improve processes that don't support workers in doing their good work. In this compelling book you get: The expertise of a recognized industry expert in Lean principles A practical, easy-to-use workbook Concepts illustrated with numerous A3s in various stages of development Explanation of how to extend the VSM philosophy to a more focused perspective An extensive exploration of the A3 problem-solving tool in healthcare—the first book to do so Through case studies and actual A3s, this book illustrates the simplicity and completeness of the A3 tool and its applications to regulatory documentation as well as activities of daily work.

A3 Problem Solving for Healthcare

This books provides content that arms clinicians with the core knowledge and competencies necessary to be effective informatics leaders in health care organizations. The content is drawn from the areas recognized by the American Council on Graduate Medical Education (ACGME) as necessary to prepare physicians to become Board Certified in Clinical Informatics. Clinical informaticians transform health care by analyzing, designing, selecting, implementing, managing, and evaluating information and communication technologies (ICT) that enhance individual and population health outcomes, improve patient care processes, and strengthen the clinician-patient relationship. As the specialty grows, the

content in this book covers areas useful to nurses, pharmacists, and information science graduate students in clinical/health informatics programs. These core competencies for clinical informatics are needed by all those who lead and manage ICT in health organizations, and there are likely to be future professional certifications that require the content in this text.

Clinical Informatics Study Guide

By minimizing waste and waiting times, the lean operational concepts and techniques serve to maximize value for patients. It places a strong emphasis on staff involvement, ongoing improvement, and consideration of the demands of the consumer.. All employees of the firm, from clinicians to operations and administrative personnel, continuously work to identify areas of waste and eliminate anything that does not create value for patients using lean concepts in healthcare. To make sure that the production team members on the assembly line always have the parts and tools they need to complete their tasks, Toyota has put all the systems and support personnel in place. If you visit one of their assembly factories, you can see this for yourself. Although patients are more essential, it can be argued that Toyota invests significantly more in its front-line staff than many hospitals do. Toyota enables team members to concentrate on their tasks and the truck in front of them, resulting in greater outcomes and overall happiness.

Lean Healthcare: Enhancing the Patient Care Process while Eliminating Waste and Lowering Costs

Lean production is the gold standard in production systems, but has proven famously difficult to implement in North America. Mass production relies on large inventories, uses "push" processes and struggles with long lead times. Moving towards a system that eliminates muda ("waste") caused by overproduction, while challenging, proves necessary for improved efficiency. Often overlooked, value stream mapping is the essential planning stage for any Lean transformation. In Mike Rother and John Shook's essential guide, you follow the value stream mapping undertaken for Acme Stamping, for its current and future state. Fully illustrated and well-organized, Learning to See is a must-see for the value stream manager.

Learning to See

This book provides a set of detailed instructions to help you construct your departmental, divisional, or organizational functional tree structure (FTS) and work towards world-class service. Preparing for Continuous Quality Improvement for Healthcare: Sustainability through Functional Tree Structures outlines a method that will enable your organization to set a stable base for future improvements that are sustainable and create breakthrough improvements in service, quality, and costs. More importantly, the FTS method outlined in the book will provide you with the tools to build processes tailored to your customers’ specifications and standards. It will enable you to improve your department, division, and entire organization and edge ahead of your competition. The book explains why organizations steeped in process improvement need to re-evaluate and re-establish their procedures—especially if initial outcomes have not met expectations. Illustrating key concepts with examples, case studies, and flow charts, it provides you with a clear understanding of organizational functional structure and how to document current organizational and departmental functional tree structures. Describing how to identify a department's functional deficits, shortcomings, and waste, it explains how to select the best course of action for your organization. After reading this book, you will be able to create a pictorial representation of your organization's current functional structure and select the best course of action for achieving sustainable advancements in service, quality, and costs. The book will help to convert your managers from a people-management mentality to one of process management—transforming leaders to educators and not guards.

Preparing for Continuous Quality Improvement for Healthcare

Lean techniques are tools that reduce waste in the process and create value for the end-customer. Initially, the concept of lean thinking started in manufacturing, but with the tremendous advantages it offers in terms of value creation for the customer, defect reduction, increase of profits for corporations, it has been recognized as an important tool across a wide spectrum of industries. Although Healthcare industry has started applying these techniques, there is very little work published on how to apply these techniques to this particular industry. In this study, a framework for applying lean thinking to healthcare industries is presented. The framework depicts a systematic methodology for identifying value streams. The framework was developed specifically for the healthcare industry, but it can be applied to service

industry in general. A case study is presented on how to apply this framework. Value stream mapping has been conducted at a clinic to identify areas of improvement. The components of the developed framework have been used to define a future state of process based on input from process owners, nurses, physicians, and patient surveys. The study has identified factors that influence the success of implementation of lean techniques in healthcare. Also the potential for future work has been identified.

Framework for Lean Thinking Approach to Healthcare Organizations

Bring Lean Improvements to the Administrative Areas of Your Organization! Extending their eight-step process to the realization of a lean office, Tapping and Shuker use a customer service case studyto illustrate the effectiveness of the value stream storyboard.This popular volume provides organizations with a proven system for implementing lean principles in the office. In addition to providing a thorough overview of basic lean concepts, this book details methods for identifying the administrative activities in need of attention. To address these, it applies the eight-step process for removing waste and reorganizing workflow. Accompanying the book is a CD containing a lean assessment tool, a storyboard template, charts, a team charter, and worksheets. BONUS CD! Along with this book you receive a CD containing a lean assessment tool, a storyboard template, useful charts, a team charter, forms, reports, and worksheets!

Value Stream Management for the Lean Office

With 14 new definitions touching on management, healthcare, startups, manufacturing, and service, the 5th edition of the Lean Lexicon, is the most comprehensive edition yet of the handy and practical glossary for lean thinkers. The latest Lexicon, updated in 2014, contains 60+ graphics and 207 terms from A3 Report to Yokoten. The Lexicon covers such key lean terms as andon, jidoka, kaizen, lean consumption, lean logistics, pull, plan-for- every-part, standardized work, takt time, value-stream mapping, and many more. The new terms are: • Basic Stability • Coaching • Gemba Walk • Huddle • Kamishibai Board • Kata • Leader Standard Work • Lean Management • Lean Management Accounting • Lean Startup • Problem Solving • Service Level Agreement • Training Within Industry (TWI) • Value-stream Improvement Unlike most other business glossaries in print or online, the Lexicon, introduced in January 2003, is focused exclusively on lean thinking and practice. Like the past four, the fifth edition of the Lean Lexicon incorporates terms and improvement ideas from our customers. We continue to welcome suggestions from the growing lean community in its traditional industries and beyond.

Lean Lexicon

"Perfecting Patient Journeys is a guide for leaders of healthcare organizations who want to implement lean thinking. Readers will learn how to identify and select a problem, define a project scope, and create a shared understanding of what's occurring in the value stream. Readers will also learn to develop a shared vision of an improved future, and how to work together to make that vision a reality"--Provided by publisher.

Value Stream Management for Lean Healthcare

Three Wins is a true story of how a small team of healthcare professionals re-invented the way they worked to deliver a higher quality, lower cost service and improved their working environment. The outcome of their transformation has been awarded two national innovation awards; the first for the improved service to patients; the second for the way that they used information technology to achieve their vision.

Perfecting Patient Journeys

The five-volume set IFIP AICT 630, 631, 632, 633, and 634 constitutes the refereed proceedings of the International IFIP WG 5.7 Conference on Advances in Production Management Systems, APMS 2021, held in Nantes, France, in September 2021.* The 378 papers presented were carefully reviewed and selected from 529 submissions. They discuss artificial intelligence techniques, decision aid and new and renewed paradigms for sustainable and resilient production systems at four-wall factory and value chain levels. The papers are organized in the following topical sections: Part I: artificial intelligence based optimization techniques for demand-driven manufacturing; hybrid approaches for production planning and scheduling; intelligent systems for manufacturing planning and control in the industry 4.0; learning and robust decision support systems for agile manufacturing environments; low-code

and model-driven engineering for production system; meta-heuristics and optimization techniques for energy-oriented manufacturing systems; metaheuristics for production systems; modern analytics and new AI-based smart techniques for replenishment and production planning under uncertainty; system identification for manufacturing control applications; and the future of lean thinking and practice Part II: digital transformation of SME manufacturers: the crucial role of standard; digital transformations towards supply chain resiliency; engineering of smart-product-service-systems of the future; lean and Six Sigma in services healthcare; new trends and challenges in reconfigurable, flexible or agile production system; production management in food supply chains; and sustainability in production planning and lot-sizing Part III: autonomous robots in delivery logistics; digital transformation approaches in production management; finance-driven supply chain; gastronomic service system design; modern scheduling and applications in industry 4.0; recent advances in sustainable manufacturing; regular session: green production and circularity concepts; regular session: improvement models and methods for green and innovative systems; regular session: supply chain and routing management; regular session: robotics and human aspects; regular session: classification and data management methods; smart supply chain and production in society 5.0 era; and supply chain risk management under coronavirus Part IV: AI for resilience in global supply chain networks in the context of pandemic disruptions; blockchain in the operations and supply chain management; data-based services as key enablers for smart products, manufacturing and assembly; data-driven methods for supply chain optimization; digital twins based on systems engineering and semantic modeling; digital twins in companies first developments and future challenges; human-centered artificial intelligence in smart manufacturing for the operator 4.0; operations management in engineer-to-order manufacturing; product and asset life cycle management for smart and sustainable manufacturing systems; robotics technologies for control, smart manufacturing and logistics; serious games analytics: improving games and learning support; smart and sustainable production and supply chains; smart methods and techniques for sustainable supply chain management; the new digital lean manufacturing paradigm; and the role of emerging technologies in disaster relief operations: lessons from COVID-19 Part V: data-driven platforms and applications in production and logistics: digital twins and AI for sustainability; regular session: new approaches for routing problem solving; regular session: improvement of design and operation of manufacturing systems; regular session: crossdock and transportation issues; regular session: maintenance improvement and lifecycle management; regular session: additive manufacturing and mass customization; regular session: frameworks and conceptual modelling for systems and services efficiency; regular session: optimization of production and transportation systems; regular session: optimization of supply chain agility and reconfigurability; regular session: advanced modelling approaches; regular session: simulation and optimization of systems performances; regular session: AI-based approaches for quality and performance improvement of production systems; and regular session: risk and performance management of supply chains *The conference was held online.

Three Wins

Highly Commended in the BMA Medical Book Awards 2018! Here’s what the judges said: "This is one of the few textbooks I would suggest every clinician reads.” Healthcare Economics Made Easy 2e is a clear and concise text written for healthcare professionals and students who need to understand the basics of the subject but who do not want to wade through a specialist health economics text. This new edition builds on the success of the first edition by adding new chapters which provide a comparison across several western economies, as well as a consideration of the US healthcare system. Healthcare Economics Made Easy 2e will equip the reader with the necessary skills to make valid decisions based on the economic data and with the background knowledge to understand the health economics literature. This book provides insight into the economic methods that are used to promote public health policies, the techniques used for grading and valuing evidence and the statistics relied upon, without trying to re-train the reader as a health economist. If you are left bemused by terms such as QALY, health utility analysis and cost minimisation analysis, then this is the book for you! From reviews of the first edition: “This is a clearly written and accessible introduction to health economics... This book should prove useful to all those responsible for planning and delivering health service. It is a quick read but also a useful reference for the desk.... I would commend this book as a means by which people .... can better understand both the impact of their own practice on our health economy and also appreciate the methods that are being adopted to determine clinical practice at a regional and super-regional level.” Ulster Medical Journal, 2014

Advances in Production Management Systems. Artificial Intelligence for Sustainable and Resilient Production Systems

Healthcare Economics Made Easy, third edition is a clear and concise text written for those working in healthcare who need to understand the basics of the subject but who do not want to wade through a specialist health economics text. It will equip the reader with the necessary skills to make valid decisions based on the economic data and with the background knowledge to understand the health economics literature. This new edition builds on the success of the second edition by updating the material on the NICE appraisal process and including new sections on health technology assessment in the USA and the key role of the Institute for Clinical and Economic Review. This book provides insight into the economic methods that are used to promote public health policies, the techniques used for grading and valuing evidence and the statistics relied upon, without trying to re-train the reader as a health economist. If you are left bemused by terms such as QALY, health utility analysis and cost-minimization analysis, then this is the book for you! Second edition Highly Commended in the BMA Medical Book Awards! Here’s what the judges said: “This is one of the few textbooks I would suggest every clinician reads.”

Healthcare Economics Made Easy, second edition

The book shows readers exactly how to use Lean tools to design healthcare work that is smooth, efficient, error free and focused on patients and patient outcomes. It includes in-depth discussions of every important Lean tool, including value stream maps, takt time, spaghetti diagrams, workcell design, 5S, SMED, A3, Kanban, Kaizen and many more, all presented in the context of healthcare. For example, the book explains the importance of quick operating room or exam room changeovers and shows the reader specific methods for drastically reducing changeover time. Readers will learn to create healthcare value streams where workflows are based on the pull of customer/patient demand. The book also presents a variety of ways to continue improving after initial Lean successes. Methods for finding the root causes of problems and implementing effective solutions are described and demonstrated. The approach taught here is based on the Toyota Production System, which has been adopted worldwide by healthcare organizations for use in clinical, non-clinical and administrative areas.

Healthcare Economics Made Easy, third edition

When Mike Rother and John Shook first realized the power of value stream mapping in the mid-1990s they began to offer workshops on this invaluable technique.

Ergonomic Value Stream Mapping

In today's hyper-competitive world, organizations need to make high performance and continuous improvement their highest priority. From a variety of process improvement philosophies and methods, one has emerged as the clear winner: Lean. Based on work by pioneers like Frederick Winslow Taylor, and Frank and Lillian Gilbreth, matured by global organizations like the Toyota Motor Company, and adapted world-wide since the 1980's, companies that have embraced Lean have consistently risen to the top of their industries. This is true for both manufacturing and non-manufacturing organization, like hospitals. The heart of the Lean method for manufacturing is flow, the ability to do work as a continuous, uninterrupted process, without waste, mistakes, or delays. The more that work can flow, the closer the company gets to high profitability, fast response time, zero waste, happy customers, and a host of other benefits. All of the extensive tools of Lean are focused on this objective: to be able to flow work. More specifically, organizations need to flow work of different types, the concept of Mixed Model production. The Complete Guide to Mixed Model Line Design is a practical guidebook that explains the Lean line design method, step-by-step and in plain English. This data-driven approach has been implemented successfully thousands of times, and has been proved in every industry. The Complete Guide to Mixed Model Line Design, and the methodology it explains, should be a part of every organization's improvement strategy, and be a part of the training for everyone involved in continuous improvement.

The Lean Healthcare Handbook

The first of its kind—a Value Stream Mapping book written for those in service and office environments who need to streamline operations Value Stream Mapping is a practical, how-to guide that helps decision-makers improve value stream efficiency in virtually any setting, including construction, energy,

financial service, government, healthcare, R&D, retail, and technology. It gives you the tools to address a wider range of important VSM issues than any other such book, including the psychology of change, leadership, creating teams, building consensus, and charter development. Karen Martin is principal consultant for Karen Martin & Associates, LLC, instructor for the University of California, San Diego's Lean Enterprise program, and industry advisor to the University of San Diego's Industrial and Systems Engineering program. Mike Osterling provides support and leadership to manufacturing and non-manufacturing organizations on their Lean Transformation Journey. In a continuous improvement leadership role for six years, Mike played a key role in Square D Company's lean transformation in the 1990s.

Value Stream Mapping Workshop

Every lean practitioner occasionally wishes for a simple, fun, and quick-read introduction to lean thinking to give acquaintances, associates, and family members -- even to our kids. If lean thinking often entails unlearning a plethora of bad habits, wouldn't it better if we learned better thinking -- and habits -- from the beginning? Everything I Know About Lean I Learned in First Grade is just that sort of book. It brings lean back to its original simplicity by showing how lean is alive in a first grade classroom. The book connects common lean tools to the broader lean journey, shows how to identify and eliminate waste, and aids the reader in seeing lean for what it truly is: a way to create a learning and problem-solving culture. Written to educate the entire organization on the fundamentals of lean thinking, this is the perfect source to engage all team members at all levels of an organization. Originally self-published in 2008, LEI is proud to re-issue this book and make it available to the broader lean community.

The Complete Guide to Mixed Model Line Design

As tech giants and startups disrupt every market, those who master large-scale software delivery will define the economic landscape of the 21st century, just as the masters of mass production defined the landscape in the 20th. Unfortunately, business and technology leaders are woefully ill-equipped to solve the problems posed by digital transformation. At the current rate of disruption, half of S&P 500 companies will be replaced in the next ten years. A new approach is needed. In Project to Product, Value Stream Network pioneer and technology business leader Dr. Mik Kersten introduces the Flow Framework—a new way of seeing, measuring, and managing software delivery. The Flow Framework will enable your company’s evolution from project-oriented dinosaur to product-centric innovator that thrives in the Age of Software. If you’re driving your organization’s transformation at any level, this is the book for you.

Value Stream Mapping: How to Visualize Work and Align Leadership for Organizational Transformation

Metrics-Based Process Mapping (MBPM) is a tactical-level, visual mapping approach that enables improvement teams to make effective, data-based decisions regarding waste elimination and measure ongoing process performance. The mapping technique, often used to drill down from a value stream map, integrates the functional orientation of traditional swim-lane process maps with time and quality metrics that are essential for designing improved processes. Building on the success of its popular predecessor, Metrics-Based Process Mapping: An Excel-Based Solution, this book takes readers to the next level in understanding processes and process improvement. Included with the book is an interactive macro-driven Excel tool, which allows users to electronically capture their current and future state maps. The tool also audits the maps for completeness, summarizes the metrics, and auto-calculates the improvements. Improvements to this version include: Foundational content about processes—what they are and how they vary A description of the difference between value-stream and process-level maps New content about how to bridge the gap between your current state and your desired future state Tips for effective team formation and mapping facilitation An implementation plan for those using the mapping methodology as a standalone tool and not part of a Kaizen Event The Excel-based tool included on the accompanying CD provides readers with a user-friendly way to electronically archive manually created maps in team settings for easier storage and distribution across your entire organization. While current and future state MBPMs are initially created during team-based activities using butcher paper and post-its, the electronic maps serve as standard work documentation for the improved process, enabling training, communication, and process monitoring activities. This flexible, user-friendly tool includes: A custom toolbar that simplifies map creation and editing Automated calculation of key metrics An audit feature to prevent mapping errors The ability

to simulate how improvements will impact staffing requirements System Requirements: The tool is intended for use on PCs using Excel 2003 or later—it will NOT function with earlier versions of Excel, or on Macintosh computers. View a demo of the Excel tool at: www.mbpmapping.com

Everything I Know About Lean I Learned in First Grade

The Creating Level Pull workbook shows you how to advance a lean transformation from a focus on isolated improvements to improving the entire plantwide production system by implementing a lean production control system. "The workbook is unique because it is a step-by-step case study on how to implement a level, pull-based production control system," said author Art Smalley. This is a new step towards 'system kaizen that is not yet well understood outside of Toyota.The lean efforts at most companies focus on "point kaizen" (e.g., reducing set up times, implementing 5S, etc.) that improves a small portion of the value stream running from raw materials to finished products. Or they focus on "flow kaizen" that improves the entire value stream for one product family. Creating Level Pull shows how companies can make the leap to "system kaizen" by introducing a lean production control system that ties together the flows of information and materials supporting every product family in a facility. With this system in place, each production activity requests precisely the materials it needs from the previous activity and demand from the customer is levelled to smooth production activities throughout the plant.[Source : 4e de couv.].

Project to Product

Organizations around the world are using Lean to redesign care and improve processes in a way that achieves and sustains meaningful results for patients, staff, physicians, and health systems. Lean Hospitals, Third Edition explains how to use the Lean methodology and mindsets to improve safety, quality, access, and morale while reducing costs, increasing capacity, and strengthening the long-term bottom line. This updated edition of a Shingo Research Award recipient begins with an overview of Lean methods. It explains how Lean practices can help reduce various frustrations for caregivers, prevent delays and harm for patients, and improve the long-term health of your organization. The second edition of this book presented new material on identifying waste, A3 problem solving, engaging employees in continuous improvement, and strategy deployment. This third edition adds new sections on structured Lean problem solving methods (including Toyota Kata), Lean Design, and other topics. Additional examples, case studies, and explanations are also included throughout the book. Mark Graban is also the co-author, with Joe Swartz, of the book Healthcare Kaizen: Engaging Frontline Staff in Sustainable Continuous Improvements, which is also a Shingo Research Award recipient. Mark and Joe also wrote The Executive’s Guide to Healthcare Kaizen.

Metrics-Based Process Mapping

Healthcare Quality Management: A Case Study Approach is the first comprehensive case-based text combining essential quality management knowledge with real-world scenarios. With in-depth healthcare quality management case studies, tools, activities, and discussion questions, the text helps build the competencies needed to succeed in quality management. Written in an easy-to-read style, Part One of the textbook introduces students to the fundamentals of quality management, including history, culture, and different quality management philosophies, such as Lean and Six Sigma. Part One additionally explains the A3 problem-solving template used to follow the Plan-Do-Study-Act (PDSA) or Define, Measure, Analyze, Improve, and Control (DMAIC) cycles, that guides your completion of the problem-solving exercises found in Part Two. The bulk of the textbook includes realistic and engaging case studies featuring common quality management problems encountered in a variety of healthcare settings. The case studies feature engaging scenarios, descriptions, opinions, charts, and data, covering such contemporary topics as provider burnout, artificial intelligence, the opioid overdose epidemic, among many more. Serving as a powerful replacement to more theory-based quality management textbooks, Healthcare Quality Management provides context to challenging situations encountered by any healthcare manager, including the health administrator, nurse, physician, social worker, or allied health professional. KEY FEATURES: 25 Realistic Case Studies–Explore challenging Process Improvement, Patient Experience, Patient Safety, and Performance Improvement quality management scenarios set in various healthcare settings Diverse Author Team–Combines the expertise and knowledge of a health management educator, a Chief Nursing Officer at a large regional hospital, and a health system-based Certified Lean Expert Podcasts–Listen to quality management experts share stories and secrets on how to succeed, work in teams, and apply tools to solve problems Quality Management Tools–Grow

your quality management skill set with 25 separate quality management tools and approaches tied to the real-world case studies Competency-Based Education Support–Match case studies to professional competencies, such as analytical skills, community collaboration, and interpersonal relations, using case-to-competency crosswalks for health administration, nursing, medicine, and the interprofessional team Comprehensive Instructor's Packet–Includes PPTs, extensive Excel data files, an Instructor's Manual with completed A3 problem-solving solutions for each Case Application Exercise, and more! Student ancillaries–Includes data files and A3 template

Creating Level Pull

According to the health data released by the Organization for Economic Cooperation and Development (OECD), the United States spends more per capita on healthcare than any other OECD country. Currently, U.S. healthcare spending constitutes $2.5 trillion, or 17.3 percent of GDP, with healthcare costs increasing 9 percent annually. To reverse this alarming trend, the Obama administration recently led the effort to dramatically reform healthcare policy, laws, and regulations. This book provides you (whether a healthcare policy maker, hospital administrator, pharmaceutical company manager, or other healthcare professional) with practical guidance for leveraging supply chain principles to better manage healthcare resources and control healthcare costs. It introduces basic supply chain management concepts, terminologies, and tenets. Other included topics are strategicalliances among healthcare partners, value analysis of healthcare services and products, the impact of healthcare reforms on healthcare supply chains, and the development of performance metrics for the healthcare supply chain and benchmarking.

Lean Hospitals

Recipient of the 2019 IISE Institute of Industrial and Systems Engineers Joint Publishers Book-of-the-Year Award This is a comprehensive textbook on service systems engineering and management. It emphasizes the use of engineering principles to the design and operation of service enterprises. Service systems engineering relies on mathematical models and methods to solve problems in the service industries. This textbook covers state-of-the-art concepts, models and solution methods important in the design, control, operations and management of service enterprises. Service Systems Engineering and Management begins with a basic overview of service industries and their importance in today's economy. Special challenges in managing services, namely, perishability, intangibility, proximity and simultaneity are discussed. Quality of service metrics and methods for measuring them are then discussed. Evaluating the design and operation of service systems frequently involves the conflicting criteria of cost and customer service. This textbook presents two approaches to evaluate the performance of service systems – Multiple Criteria Decision Making and Data Envelopment Analysis. The textbook then discusses several topics in service systems engineering and management – supply chain optimization, warehousing and distribution, modern portfolio theory, revenue management, retail engineering, health systems engineering and financial services. Features: Stresses quantitative models and methods in service systems engineering and management Includes chapters on design and evaluation of service systems, supply chain engineering, warehousing and distribution, financial engineering, healthcare systems, retail engineering and revenue management Bridges theory and practice Contains end-of-chapter problems, case studies, illustrative examples, and real-world applications Service Systems Engineering and Management is primarily addressed to those who are interested in learning how to apply operations research models and methods for managing service enterprises. This textbook is well suited for industrial engineering students interested in service systems applications and MBA students in elective courses in operations management, logistics and supply chain management that emphasize quantitative analysis.

Healthcare Quality Management

Lean healthcare is not about being better, but rather becoming the best at getting better. Today's challenge in the healthcare environment is your ability to improve at a greater rate than surrounding competitors. This book focuses on the model, strategy, and lessons learned in implementing lean thinking in a practical way. Using real-world case studies, the book provides approaches and tools to facilitate rapid improvements, along with a bonus section on pandemic preparedness. By following this accessible, user-friendly guide, you can achieve meaningful results right away. Dr. Dennis R. Delisle currently serves as the Executive Director for The Ohio State University Wexner Medical Center's flagship University Hospital. Through the Thomas Jefferson University College of Population Health,

Dennis founded and oversees the Master of Science degree program in Operational Excellence, one of the first of its kind in the nation. He is the author of two books about streamlining and transforming healthcare.

Healthcare Supply Chain Management

“Net Zero” has been an effective rallying cry for the green building movement, signaling a goal of having every building generate at least as much energy as it uses. Enormous strides have been made in improving the performance of every type of new building, and even more importantly, renovating the vast and energy-inefficient collection of existing buildings in every country. If we can get every building to net-zero energy use in the next few decades, it will be a huge success, but it will not be enough. In Build Beyond Zero, carbon pioneers Bruce King and Chris Magwood re-envision buildings as one of our most practical and affordable climate solutions instead of leading drivers of climate change. They provide a snapshot of a beginning and map towards a carbon-smart built environment that acts as a CO2 filter. Professional engineers, designers, and developers are invited to imagine the very real potential for our built environment to be a site of net carbon storage, a massive drawdown pool that could help to heal our climate. The authors, with the help of other industry experts, show the importance of examining what components of an efficient building (from windows to solar photovoltaics) are made with, and how the supply chains deliver all those products and materials to a jobsite. Build Beyond Zero looks at the good and the bad of how we track carbon (Life Cycle Assessment), then takes a deep dive into materials (with a focus on steel and concrete) and biological architecture, and wraps up with education, policy and governance, circular economy, and where we go in the next three decades. In Build Beyond Zero, King and Magwood show how buildings are culprits but stand poised to act as climate healers. They offer an exciting vision of climate-friendly architecture, along with practical advice for professionals working to address the carbon footprint of our built environment.

Service Systems Engineering and Management

This open access book comprehensively covers the fundamentals of clinical data science, focusing on data collection, modelling and clinical applications. Topics covered in the first section on data collection include: data sources, data at scale (big data), data stewardship (FAIR data) and related privacy concerns. Aspects of predictive modelling using techniques such as classification, regression or clustering, and prediction model validation will be covered in the second section. The third section covers aspects of (mobile) clinical decision support systems, operational excellence and value-based healthcare. Fundamentals of Clinical Data Science is an essential resource for healthcare professionals and IT consultants intending to develop and refine their skills in personalized medicine, using solutions based on large datasets from electronic health records or telemonitoring programmes. The book’s promise is “no math, no code”and will explain the topics in a style that is optimized for a healthcare audience.

Lean Healthcare

Build Beyond Zero