Safety I And Safety Ii The Past And Future Of Saf

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Patient Safety and Quality Improvement in Healthcare vdf Hochschulverlag AG
This book is the 3rd volume in the Resilient Health Care series. Resilient health care is a product of both the policy and managerial efforts to organize, fund and improve services, and the clinical care which is delivered directly to patients. This volume continues the lines of thought in the first two books. Where the first volume provided the rationale and basic concepts of RHC and the second teased out the everyday clinical activities which adjust and vary to create safe care, this book will look more closely at the connections between the sharp and blunt ends. Doing so will break new ground, since the systematic study in patient safety to date with few exceptions has been limited.

Safety with Machinery John Wiley & Sons
The vast majority of healthcare is provided safely and effectively. However, just like any high-risk industry, things can and do go wrong. There is a world of advice about how to keep people safe but this delivers little in terms of changed practice. Written by a leading expert in the field with over two decades of experience, Rethinking Patient Safety provides readers with a critical reflection upon what it might take to narrow the implementation gap between the evidence base about patient safety and actual practice. This book provides important examples for the many professionals who work in patient safety but are struggling to narrow the gap and make a difference in their current situation. It provides insights on practical actions that can be immediately implemented to improve the safety of patient care in healthcare and provides readers with a different way of thinking in terms of changing behavior and practices as well as processes and systems. Suzette Woodward shares lessons from the science of implementation, campaigning and social movement methods and offers the reader the story of a discovery. Her team has explored an approach which could profoundly affect the safety culture in healthcare; a methodology to help people talk to each other and their patients and to listen through facilitated safety conversations. This is their story.

Resilience Engineering John Wiley & Sons
The second edition of a bestseller, Safety Differently: Human Factors for a New Era is a complete update of Ten Questions About Human Error: A New View of Human Factors and System Safety. Today, the unrelenting pace of technology change and growth of complexity calls for a different kind of safety thinking. Automation and new technologies have resu

Concise Encyclopedia of System Safety John Wiley & Sons
For Resilience Engineering, 'failure' is the result of the adaptations necessary to cope with the complexity of the real world, rather than a breakdown or malfunction. The performance of individuals and organizations must continually adjust to current conditions and, because resources and time are finite, such adjustments are always approximate. This definitive new book explores this groundbreaking new development in safety and risk

management, where 'success' is based on the ability of organizations, groups and individuals to anticipate the changing shape of risk before failures and harm occur. Featuring contributions from many of the worlds leading figures in the fields of human factors and safety, Resilience Engineering provides thought-provoking insights into system safety as an aggregate of its various components, subsystems, software, organizations, human behaviours, and the way in which they interact. The book provides an introduction to Resilience Engineering of systems, covering both the theoretical and practical aspects. It is written for those responsible for system safety on managerial or operational levels alike, including safety managers and engineers (line and maintenance), security experts, risk and safety consultants, human factors professionals and accident investigators.

Synesis CRC Press
Environmental tragedies such as Chernobyl and the Exxon Valdez remind us that catastrophic accidents are always possible in a world full of hazardous technologies. Yet, the apparently excellent safety record with nuclear weapons has led scholars, policy-makers, and the public alike to believe that nuclear arsenals can serve as a secure deterrent for the foreseeable future. In this provocative book, Scott Sagan challenges such optimism. Sagan's research into formerly classified archives penetrates the veil of safety that has surrounded U.S. nuclear weapons and reveals a hidden history of frightening "close calls" to disaster.

Crossing to Safety Createspace Independent Pub
Accidents are preventable, but only if they are correctly described and understood. Since the mid-1980s accidents have come to be seen as the consequence of complex interactions rather than simple threads of causes and effects. Yet progress in accident models has not been matched by advances in methods. The author's work in several fields (aviation, power production, traffic safety, healthcare) made it clear that there is a practical need for constructive methods and this book presents the experiences and the state-of-the-art. The focus of the book is on accident prevention rather than accident analysis and unlike other books, has a proactive rather than reactive approach. The emphasis on design rather than analysis is a trend also found in other fields. Features of the book include: -A classification of barrier functions and barrier systems that will enable the reader to appreciate the diversity of barriers and to make informed decisions for system changes. -A perspective on how the understanding of accidents (the accident model) largely determines how the analysis is done and what can be achieved. The book critically assesses three types of accident models (sequential, epidemiological, systemic) and compares their strengths and weaknesses. -A specific accident model that captures the full complexity of systemic accidents. One consequence is that accidents can be prevented through a combination of performance monitoring and barrier functions, rather than through the elimination or encapsulation of causes. -A clearly described methodology for barrier analysis and accident prevention. Written in an accessible style, Barriers and Accident Prevention is designed to provide a stimulating and practical guide for industry professionals familiar with the general ideas of accidents and human error. The book is directed at those involved with accident analysis and system safety, such as managers of safety departments, risk and safety consultants, human factors professionals, and accident investigators. It is applicable to all major application areas such as aviation, ground transportation, maritime, process industries, healthcare and hospitals, communication systems, and service providers.

Making Healthcare Safe Ashgate Publishing, Ltd.
John Ridley and Dick Pearce, both recognized specialists in machinery safety, guide the reader through the various standards, regulations and best practices relating to the safe design and use of machinery and show which standard is relevant for which type of machine. Safety with Machinery provides a basic grounding in machinery safety and covers safeguarding philosophy and strategy, typical hazards, risk assessment and reduction, guarding techniques, ergonomic considerations, safe use of equipment and plant layout. All types of safeguards are discussed – mechanical, interlocking, electrical / electronic / programmable, hydraulic, pneumatic. The new edition has been updated throughout in line with changes in regulations and standards. The section on electric, electronic and programmable safety systems has been expanded to reflect their increasing importance. The book now focuses on the harmonised standards (e.g. EN ISO 13849, IEC/EN 61131-2) which can be used by manufacturers to self-certify their machines for the European market without the need for third party examination, but also covers other relevant standards (e.g. IEC 62061). Many practical examples set the regulations in context and assist in the interpretation of the various standards. Safety with Machinery is essential reading for all engineers involved in machinery design and maintenance all over the world as every machine sold within or into the EU needs to conform to the harmonised standards. It also provides health and safety professionals, students and employee representatives, as well as certification bodies, health and safety inspectors and safety regulators with a comprehensive overview of machinery safety.

Barriers and Accident Prevention Taylor & Francis
This unique and engaging open access title provides a compelling and ground-breaking account of the patient safety movement in the United States, told from the perspective of one of its most prominent leaders, and arguably the movement's founder, Lucian L. Leape, MD. Covering the growth of the field from the late 1980s to 2015, Dr. Leape details the developments, actors, organizations, research, and policy-making activities that marked the evolution and major advances of patient safety in this time span. In addition, and perhaps most importantly, this book not only comprehensively details how and why human and systems errors too often occur in the process of providing health care, it also promotes an in-depth understanding of the principles and practices of patient safety, including how they were influenced by today's modern safety sciences and systems theory and design. Indeed, the book emphasizes how the growing awareness of systems-design thinking and the self-education and commitment to improving patient safety, by not only Dr. Leape but a wide range of other clinicians and health executives from both the private and public sectors, all converged to drive forward the patient safety movement in the US. Making Healthcare Safe is divided into four parts: I. In the Beginning describes the research and theory that defined patient safety and the early initiatives to enhance it. II. Institutional Responses tells the stories of the efforts of the major organizations that began to apply the new concepts and make patient safety a reality. Most of these stories have not been previously told, so this account becomes their histories as well. III. Getting to Work provides in-depth analyses of four key issues that cut across disciplinary lines impacting patient safety which required special attention. IV. Creating a Culture of Safety looks to the future, marshalling the best thinking about what it will take to achieve the safe care we all deserve. Captivatingly written with an "insider's" tone and a major contribution to the clinical literature, this title will be of immense value to health care professionals, to students in a range of academic disciplines, to medical trainees, to health administrators, to policymakers and even to lay readers with an interest in patient safety and in the critical quest to create safe care.

Keeping Patients Safe MIT Press
Current safety and risk management guidelines necessitate that organizations develop and formally manage their understanding and knowledge of the standards and protocols of risk management. The impact of communication and human performance on the identification and control of hazards and associated risk must be addressed in a structured manner. This core reference provides a complete guide to creating a comprehensive and effective safety culture. Safety Culture is a reference for safety and risk professionals and a training text for corporate-based learners and students at university level. The book will keep safety and risk management professionals up-to-date and will provide the tools needed to develop consistent and effective organizational safety protocols. How to develop a foundation to improve the perception of safety, analyze the organizational culture and its impact on the safety management system, and review the importance of developing a influential network Provides a format for establishing goals and objectives, discusses the impact of leadership on the safety management system and the roles and responsibilities needed as well as methods to gain employee participation Tools to enhance the safety management system, the education and training of employees, how to assess the current safety management system, and the process of curation is introduced

Safety Differently Princeton University Press
The authors of this book set out a system of safety strategies and interventions for managing patient safety on a day-to-day basis and improving safety over the long term. These strategies are applicable at all levels of the healthcare system from the frontline to the regulation and governance of the system. There have been many advances in patient safety, but we now need a new and broader vision that encompasses care throughout the patient's journey. The authors argue that we need to see safety through the patient's eyes, to consider how safety is managed in different contexts and to develop a wider strategic and practical vision in which patient safety is recast as the management of risk over time. Most safety improvement strategies aim to improve reliability and move closer toward optimal care. However, healthcare will always be under pressure and we also require ways of managing safety when conditions are difficult. We need to make more use of strategies concerned with detecting, controlling, managing and responding to risk. Strategies for managing safety in highly standardised and controlled environments are necessarily different from those in which clinicians constantly have to adapt and respond to changing circumstances. This work is supported by the Health Foundation. The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK. The charity's aim is a healthier population in the UK, supported by high quality health care that can be equitably accessed. The Foundation carries out policy analysis and makes grants to front-line teams to try ideas in practice and supports research into what works to make people's lives healthier and improve the health care system, with a particular emphasis on how to make successful change happen. A key part of the work is to make links between the knowledge of those working to deliver health and health care with research evidence and analysis. The aspiration is to create a virtuous circle, using what works on the ground to inform effective policymaking and vice versa. Good health and health care are vital for a flourishing society. Through sharing what is known, collaboration and building people's skills and knowledge, the Foundation aims to make a difference and contribute to a healthier population.

Proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018) Modern Library
This book analyses and explains the principles behind Safety-I and Safety-II approaches and considers the past and future of safety management practices. The analysis makes use of common examples and cases from domains such as aviation, nuclear power production, process management and health care. The final chapters explain the theoretical and practical consequences of the new, Safety-II perspective on day-to-day operations as well as on strategic management (safety culture).

Safety Management National Academies Press
While worker safety is often touted as a companys first priority, more often than not, safety activity is driven by compliance to legislation rather than any safety improvement initiative. Lean takes a proactive approach it is not contingent on legislation. A serious Lean effort will tear apart an old inefficient entitlement-riddled culture and

The Measurement and Monitoring of Safety CRC Press
We all aim for safe processes. However, providing safety is a complex endeavour. What is it that makes a process safe? And what is the contribution of humans? It is very common to consider humans a risk factor prone to errors. Therefore, we implement sophisticated safety management systems (SMS) in order to prevent potential "human failure". These SMS provide an impressive increase of safety. In safety science this approach is labelled "Safety-I", and it starts to be questioned because humans do not show failures only. On the contrary, they often actively contribute to safety, sometimes even by deviating from a procedure. This "Safety-II" perspective considers humans to be a "safety factor" as well because of their ability to adjust behaviour to the given situation. However, adaptability requires scope of action and this is where Safety-I and Safety-II contradict each other. While the former restricts freedom of action, the latter requires room for manoeuvring. Thus, the task of integrating the Safety-II perspective into SMS, which are traditionally Safety-I based, is difficult. This challenge was the main objective of our project. We discovered two methods that contribute to the quality of SMS by integrating Safety-II into SMS without jeopardizing the Safety-I approach.

To Err Is Human CRC Press
This volume, developed by the Observatory together with OECD, provides an overall conceptual framework for understanding and applying strategies aimed at improving quality of care. Crucially, it summarizes available evidence on different quality strategies and provides recommendations for their implementation. This book is intended to help policy-makers to understand concepts of quality and to support them to evaluate single strategies and combinations of strategies.

Safety Leadership Butterworth-Heinemann
This book presents the proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018), held on August 26-30, 2018, in Florence, Italy. By highlighting the latest theories and models, as well as cutting-edge technologies and applications, and by combining findings from a range of disciplines including engineering, design, robotics, healthcare, management, computer science, human biology and behavioral science, it provides researchers and practitioners alike with a comprehensive, timely guide on human factors and ergonomics. It also offers an excellent source of innovative ideas to stimulate future discussions and developments aimed at applying knowledge and techniques to optimize system performance,

while at the same time promoting the health, safety and wellbeing of individuals. The proceedings include papers from researchers and practitioners, scientists and physicians, institutional leaders, managers and policy makers that contribute to constructing the Human Factors and Ergonomics approach across a variety of methodologies, domains and productive sectors. This volume includes papers addressing Organizational Design and Management.

Lean Safety Routledge

The book is designed as an accessible and readable introduction to a rapidly expanding area that is in demand worldwide. A variety of professionals from different backgrounds are being tasked with managing health and safety risks in a wide variety of settings. Many lack current and up-to-date knowledge of the key developments that have taken place in Safety Science in recent decades, as well as a sense of how these developments fit in with previous approaches. This book takes readers on a 'journey' across three broad developments in safety science. It covers topics that focus on the individual including human error, risk and the role of cognition in human performance. It then shifts to research in safety science that uses organizations as the basic unit of analysis, questions about organizational decision making and the characteristics that dispose towards or against organizational failure and it introduces perspectives based on systems science that address issues that arise out of complexity and interdependence. Those who will purchase this book are students taking courses in human factors, ergonomics, applied psychology, occupational health and safety management. Professionals working in safety management in any field from agriculture, construction, shipping, aviation, power generation, oil exploration, manufacturing to healthcare will find this book useful, as well as general readers interested in why systems fail.

Safety-I and Safety-II Springer

With annual cost in excess of $150 billion from workplace related illnesses and injuries, any knowledge that can reduce this burden contributes to the overall welfare of the work force and business performance. Yet, there are many key areas of opportunities that have not yet been discussed in the literature, such as approaches to improving contractor safety management and innovative approaches to shared learning in health and safety. Until now. Built upon practical principles and knowledge derived from the authors' field experience, Safety Management: A Comprehensive Approach to Developing a Sustainable System provides recommendations and practical solutions for improving health and safety in the workplace. The authors recognize and promote workplace health and safety as essential for sustained long-term profitability of all organizations, regardless of the industry. The book emphasizes the potential for sustained improvements in workplace health and safety from understanding: How business environment trends can guide approaches to managing health and safety in the workplace The importance of safety management systems (SMS) The benefits of integrating process safety management (PSM) into your business practices How leadership commitment and shared learning in health and safety can improve the workplace and that leveraging shared learning in safety helps you avoid repeat and similar incidents The importance of leveraging contractor safety management to generate real improvements in workplace safety Proactively identifying gaps in organizational SMS and addressing them by using audits as a collaborative process The authors explore different leadership styles and detail their pros and cons in the workplace. Compiling this wealth of knowledge into a single book provides a holistic approach to upgrading the way health and safety is managed in the workplace. It shows you how to take your organization from ordinary to world-class safety performance.

The Limits of Safety Department of Health and Human Services

This text uses a case-based approach to share knowledge and techniques on how to operationalize much of the theoretical underpinnings of hospital quality and safety. Written and edited by leaders in healthcare, education, and engineering, these 22 chapters provide insights as to where the field of improvement and safety science is with regards to the views and aspirations of healthcare advocates and patients. Each chapter also includes vignettes to further solidify the theoretical underpinnings and drive home learning. End of chapter commentary by the editors highlight important concepts and connections between various chapters in the text. Patient Safety and Quality Improvement in Healthcare: A Case-Based Approach presents a novel approach towards hospital safety and quality with the goal to help healthcare providers reach zero harm within their organizations.

Safety-II in Practice Springer

System safety is an engineering discipline that is applied during the design and development of a product or system to identify and eliminate/mitigate hazards, thereby preventing potential mishaps and accidents. System safety is ultimately about savings lives. It is a proven technique that is currently applied on a diversity of systems, such as commercial aircraft, military aircraft, ships, trains, automobiles, nuclear power plants, weapon systems, chemical processing plants, mining, software, and medical devices. The lack of system safety costs millions of dollars in damages and loss of lives every year due to preventable mishaps. The purpose of this book is to provide an introduction to the system safety process; it presents the tools, techniques and processes involved in the system safety discipline. This book is intended for persons from various industries who are interested in making safe products and systems. It should be very useful to those individuals new to the system safety discipline with a desire to understand the basic methodology. It is also intended as a refresher for system safety practitioners that already apply the system safety process in their daily job. This book is for engineers, analysts and managers who are confronted with the responsibility of developing safe systems and products.

Integrating Safety-II into Safety Management OECD Publishing

Aimed at those who are responsible for the overall performance of organisations, divisions or departments in diverse industries such as healthcare, aviation, construction, oil and gas, nuclear, railways and defence, this book introduces a new safety paradigm in comprehensible and practical terms. It aims at improving safety and overall organisational performance through a doable, different and directed approach using multiple small steps. This book will help readers in understanding how to integrate the natural variability of human performance – and our ability to compensate for unpredictability elsewhere – into organisational systems, thereby ensuring successful outcomes. It covers important topics, including complexity, effective workplace innovations, micro-experiments, maintaining alignment between rules and reality, maximising learning and restoring relations. It includes practical examples and supporting material referenced in the expansive notes section. This book: Presents multiple small steps that collectively facilitate the improvement of safety Discusses improving safety in routine work;, not triggered by accidents Covers a chapter on what to do when things go wrong Discusses these methods with the help of numerous vignettes Has a separate section on each industry Safety professionals, academicians, researchers and students (undergraduate and graduate) in health and safety, human factors, ergonomics, occupational health and safety will also appreciate the brevity and clarity of this work in conveying the latest scientific insights on safety.