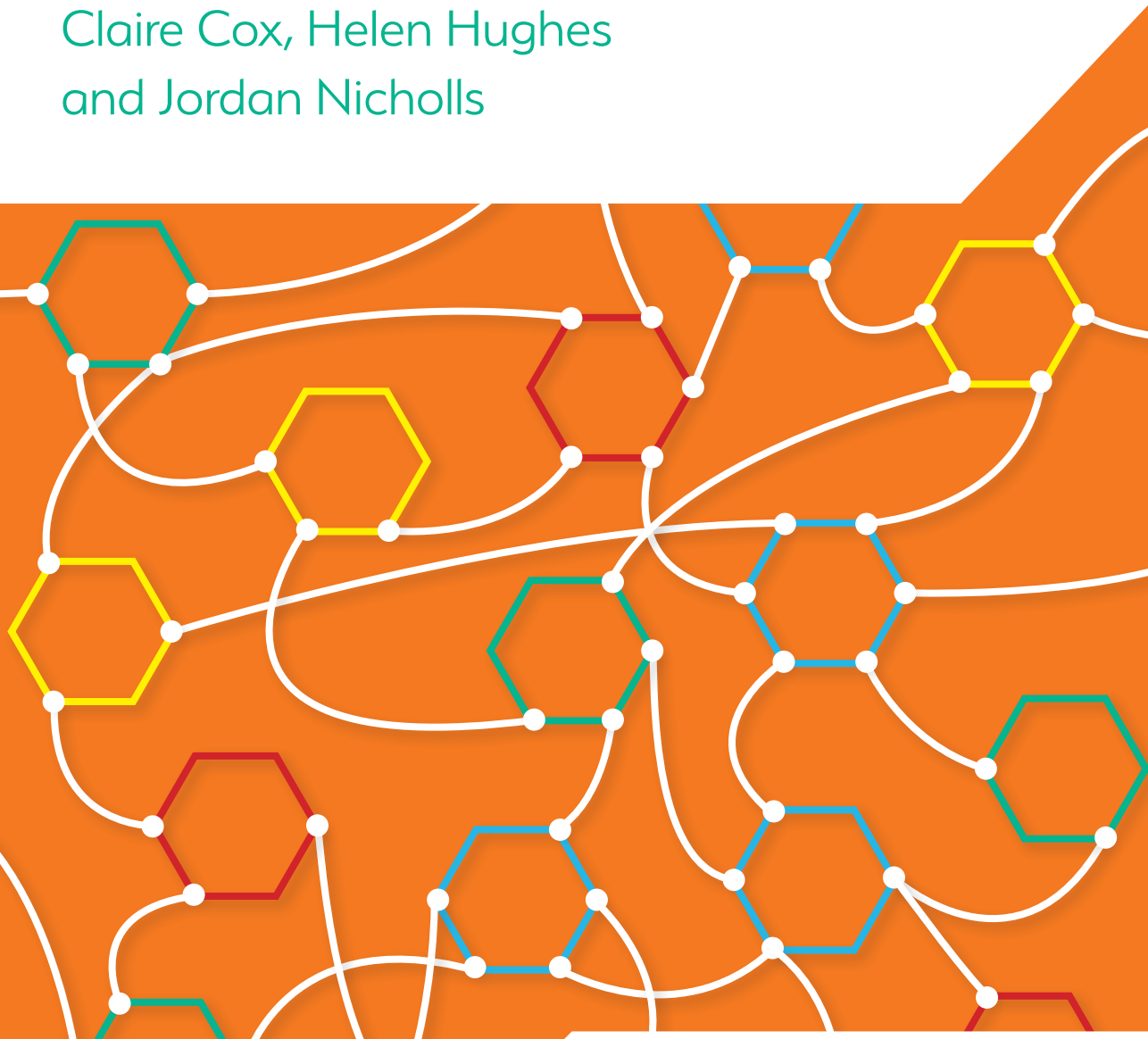
Patient Safety

Emerging Applications of Safety Science

Claire Cox, Helen Hughes
and Jordan Nicholls



patient safety management network

10% of your purchase price will be donated to Patient Safety Learning

Patient Safety

Emerging Applications of Safety Science

Claire Cox
Helen Hughes
Jordan Nicholls

CLASS
PROFESSIONAL
PUBLISHING

Foreword

Ted Baker

We are living in an extraordinary time for the advancement of medical science. There have been incredible achievements in the effectiveness of the prevention and treatment of disease. Conditions once thought to be unassailable can now be treated with a high chance of a successful outcome. The United Nations estimates that average life expectancy globally in 1950 was 46.5 years; by 2019 it had risen to 72.8 years. This improvement is not only driven by economic and social factors, but also the outstanding success of modern healthcare. The developments in medical science and technology behind much of this success have been substantial and the systems to deliver healthcare have, of necessity, become increasingly complex. This complexity brings with it an increasing fragility and a risk of unintentional harm. Our understanding of this system risk and its impact on the safety of patients in our health services has undergone a transformation in recent years, but this understanding has not fully translated into practical ways that we can manage patient safety more effectively.

Traditionally, at its core, healthcare has been an interaction between an individual patient and a healthcare practitioner. For much of its history, the quality of the care was dependent on that relationship and the safety of the care relied on the diligence of the practitioner. In modern healthcare, the one-to-one patient–practitioner relationship is still central, but it no longer encompasses the totality of care. Care is provided by a system, often complex, or, in some cases, a series of interacting systems that might or might not be well coordinated around the patient's needs. Our thinking about patient safety is often still built upon the traditional view of healthcare. This conceptual barrier has stood in the way of improvements in patient safety that, in many ways, have not kept up with the advances in medical science. Indeed, the focus on safety without this understanding can and has led to a misplaced emphasis of the role of human error. Blame and recrimination when things go wrong drives a wary and defensive culture that oppresses healthcare staff and alienates their patients.

Other industries have long understood this and have transformed their approach. They have nurtured open safety cultures in which risks are reported freely without fear of retribution. They have learnt to investigate without a fixation on human fallibility, instead focusing on the system factors that create safety risks. They have embraced the best safety science to understand how systems can improve and so reduce risk. In these industries this approach has, over time, achieved spectacular improvements in safety. It is time for healthcare to catch up.

Change of this magnitude will not be easy or rapid, but we are not starting from scratch. Indeed, much work is already underway; an example being the NHS's recent far-reaching changes in reporting and investigating patient safety events and the new approaches outlined in the chapters of this book. A critical mass of expertise, crystallised in this book, has been built up over the last few years and there is an urgent desire for progress. In this book you will find guidance from those at the forefront of the patient safety movement. There are explanations of the current thinking in safety science together with practical case studies from putting it into

practice. Among the topics covered is the essential work of involving patients in understanding why things go wrong and in setting priorities for safety. There have been numerous major reports on safety problems in health services over recent years and they have all had a recurrent theme; we have not listened to patients and those close to them nearly well enough. Patients' voices are vital, not just because they may have been harmed but because they have experienced safety from a different perspective. They have seen how healthcare is actually provided, not how we often imagine it is provided. If we are to improve safety, we must understand how it is experienced by patients. We must draw on their expertise and understanding. We must listen to the diversity of their views.

If we succeed, and succeed we must, improvements in patient safety will be incremental, built on consistent implementation of the best safety practice as laid out in this book. They will be cumulative, each building on those before, until eventually it is evident to all that safety has transformed and healthcare has at last come to terms with the risks inherent in its ever-increasing complexity.

CHAPTER 1

Introduction

Claire Cox, Jordan Nicholls and Helen Hughes

Modern healthcare is complex. There are a range of different ways in which unintended avoidable harm can occur, with millions of patients harmed or dying each year across the world because of this. In the United Kingdom (UK), the National Health Service (NHS) pre-Covid-19 estimate was that there were around 11,000 avoidable deaths annually due to safety concerns, with thousands more seriously harmed (NHS England and NHS Improvement, 2019).

Patient safety as a discipline has emerged in response to this and the evolving intricacy of healthcare. It can be defined as:

> 'A framework of organized activities that creates cultures, processes, procedures, behaviours, technologies and environments in health care that consistently and sustainably lower risks, reduce the occurrence of avoidable harm, make errors less likely and reduce the impact of harm when it does occur.' (WHO, 2021)

A key feature of this is collecting data on patient safety events and using these insights and experiences to improve our understanding of why such incidents occur and to help inform solutions to prevent their recurrence.

Patient Safety in the NHS

During the 1980s and 1990s there was an increasing awareness of the impact of avoidable harm in healthcare, marked by the publication in 1999 of the seminal Institute of Medicine report, *To Err is Human*. This set out that the level of hospital deaths as a result of avoidable harm in the United States of America (US) could be as high as 98,000 per year (Institute of Medicine, 1999). At around the same time in the UK, the Chief Medical Officer published *An Organisation with a Memory*, a report focused on learning from adverse events in the NHS. This highlighted the need for significant improvements to the health system's approach to patient safety, noting that 'the NHS is failing to learn from the things that go wrong and has no system to put this right' (Department of Health, 2000).

Following the publication of *An Organisation with a Memory*, patient safety as a concept has increasingly been in the mainstream of healthcare in the UK. There has been a growing consciousness of the need to better understand the causes of unsafe care and the action needed to reduce harm, coupled with a range of new roles, programmes and initiatives created to this end. However, despite the hard work of many people involved in the industry, avoidable harm has continued to persist at high levels.

There have been a wide range of discussions about the reasons for the persistence of harm. Some have focused on the way we think about and approach improving safety in healthcare

and the need to balance between Safety-I and Safety-II approaches (Hollnagel and Wears, 2015), which we consider in greater detail in Chapter 5. Others have looked at what is needed to tackle the implementation gap between what we know improves patient safety and what is done in practice (Woodward, 2016) and the need to address the complex systemic causes that underpin avoidable harm (Patient Safety Learning, 2019).

In the NHS itself, the heart of the current approach to improving patient safety is the *NHS Patient Safety Strategy*. Published in July 2019, this strategy sets out how the NHS should work towards its safety vision 'to continuously improve patient safety' (NHS England and NHS Improvement, 2019). It sets out three strategic aims to help build a patient safety culture and patient safety system to achieve this: insight, involvement and improvement.

The 'insight' strategy focuses on how best the health system can draw intelligence from multiple sources of patient safety information. It identifies a key element of this as a new Patient Safety Incident Response Framework (PSIRF), which:

> '... sets out the NHS's approach to developing and maintaining effective systems and processes for responding to patient safety incidents for the purpose of learning and improving patient safety' (NHS England, 2022a).

NHS England states that the four key aims of PSIRF are:

1. Compassionate engagement and involvement of those affected by patient safety incidents.
2. Application of a range of system-based approaches to learning from patient safety incidents.
3. Considered and proportionate responses to patient safety incidents.
4. Supportive oversight focused on strengthening response system functioning and improvement. (NHS England, 2022a)

This new framework has given rise to new-found opportunities and freedom of investigation and incident management. However, its proposals also represent a significant shift in approach to incident investigation, with these new approaches to learning, action and improvement requiring significant training and, in some cases, a radical change in mindset. To ensure that NHS organisations apply these new approaches and tools, guidance has been issued (NHS England, 2022b), including advice on the culture change needed with a focus on learning and improvement together with PSIRF training for all staff.

Practical Tools for Patient Safety

Patient Safety: Emerging Applications of Safety Science, is written *by* people working in patient safety management *for* patient safety management people. It explores the theory of safety and translates this into practice using a case study approach. Although the trigger for this book is the implementation of PSIRF, the reasons behind this book and the challenges faced across the healthcare system are inherently worldwide.

The impetus for this book comes from discussions and growth of the Patient Safety Management Network (PSMN). The PSMN is an informal voluntary network of patient safety professionals, created by and for patient safety managers and hosted on the charity Patient Safety Learning's online platform, *the hub*. Established in 2021, the PSMN has become a key forum for discussion about the implementation of PSIRF. It is a safe space for regular discussions about the new system-based approaches to investigations outlined in PSIRF and provides a valuable resource and place to share experiences and good practice (Cox, 2021). Many of the case studies in this book come from members of the PSMN. The Network has grown rapidly and the membership is expanding (Cox, 2023), demonstrating that there is a clear appetite and interest from patient safety professionals to share learning about new approaches to patient safety. The PSMN model of collaboration, engagement and knowledge