15 Human factors, patient safety and quality impro

- QUALITY MEASURES
- Resource-rich countries
- STRATEGIES FOR PATIENT SAFETY
- Shouldering the burden of adverse event
- Situation awareness identifying
- Situational awareness understanding the work envi
- Six Sigma
- Supporting a safety culture
- Surgical Safety Checklist
- Systems thinking and leadership
- THE PROCESS OF SURGICAL CARE
- THE QUALITY IMPROVEMENT PATHWAY
- Technical and operative errors
- The person approach
- The system approach
- UNDERSTANDING PATIENT SAFETY
- When things go wrong open disclosure
- teamwork errors

CLINICAL OUTCOMES, AUDIT AND IMPROVEMENT

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COMMUNICATION Professional behaviour and maintaining fitness to practice

Professionalism is an important component of patient safety . This embraces attitudes and behaviours that serve the patient’s best interests above and beyond other considerations. Organ isations responsible for maintaining ethical standards include professionalism as one of the standards by which healthcare workers are judged (see Chapter 14). Fitness to work or practice – competence – refers not just to knowledge and skills but also to the attitudes required to be able to carry out one’s duties. Monitoring their own fitness for work is the responsibility of each individual, their employer and professional organisations. Healthcare workers are required to have transparent systems in place to identify , monitor and assist them to maintain their competence. Credentialing is one way to ensure that clinicians are adequately prepared to safely treat patients with particular problems or to undertake defined procedures. COMMUNICATION Professional behaviour and maintaining fitness to practice

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Checklists

Checklists

Checklists in the operating theatre environment are now accepted as standard safety protocols since the Safe Surgery Saves Lives Study Group at WHO published its results. The use of a perioperative surgical safety checklist in eight hospitals around the world was associated with a reduction in perioperative mortality from 1.5% to 0.7% and major inpatient complications from 11.0% before to 7.0% after the introduction of the checklist. A more recent study from two hospitals in Norway (2015) showed a decrease in complica tions from 19.9% to 11.5%, a fall in mean length of stay of 2 /uni00A0 days and a significant fall in hospital mortality from 1.9% to 0.2% in one hospital. carried out at three obligatory time points (Figure 15.1). The checklist items are not intended to be comprehensive and addi - - tions and modifications are encouraged. For example, during the COVID-19 pandemic, the checklist lent itself to including COVID-19-specific checks within this pathway . The benefits of standardisation of sur gical processes need not be limited to the operating theatre. Several studies have shown that the majority of surgical errors (53–70%) occur out - side the opera ting theatre, either before or after surgery , and that a more substantial improvement in safety can be achieved by targeting the entire surgical pathway . Ther e is no question that checklists are tools that improve outcomes, provided they are correctly implemented. However, there are some important considera tions. Checklists are suited to solving specific kinds of problems, but not others. Even in comparison with aviation, managing patients involves an enor - mous amount of coordinated, time-pressured decision making and potential delays. Checklists are simple reminders of what to do; however, unless they are coupled with attitude c hange and e ff orts to remove barriers to actually using them, they will have limited impact. Simply put, if one begins to believe that safety is simple and that all it requires is a checklist, there is a danger of abandoning other important e ff orts to achieve safer, higher quality care. Experience has shown, however, that for successful imple - mentation of a checklist considerable attention is required to the following factors: - /uni25CF early engagement of sta ff ; /uni25CF active leadership and identification of local champions; /uni25CF extensive discussion, education and training; /uni25CF multidisciplinary involvement; /uni25CF coaching; /uni25CF ongoing feedback; /uni25CF local adaptation. Checklists

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Clinical microsystems

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A clinical microsystem is an interdependent quality improvement unit made up of a small group of people who work together, usually on a regular basis, to provide care. Such groups are typically multidisciplinary . The patients who receive that care can also be recognised as members of a discrete group, such as patients with cancer or people attending an emergency department. Clinical microsystems share clinical and business aims, have linked processes and share information. Each microsystem produces services or care that can be measured as performance outcomes. Microsystems evolve over time and normally form part of a larger macrosystem or organisation. They are considered ‘living adaptive systems’ as each microsystem must carry out work, meet sta ff needs and main tain its coherence as a clinical unit. Clinical microsystems can be assessed on their evidence base, leadership, patient and sta ff focus, and infor mation systems.
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Communicating openly with patients and their carer

Communicating openly with patients and their carers and obtaining consent

A patient-centred approach by medical sta ff , with involvement of patients and their carers as partners, is now recognised as being of fundamental importance. There are better treatment outcomes and fewer errors when there is good communication, while poor communication is a common reason for patients taking legal actions. Involving patients in and respecting their right to make decisions about their care and treatment is crucial. Explaining risk is a di ffi cult but important part of good communication. It requires skill to explain the potential for harm of a procedure so that it is fully understood because patients vary in their per ception and understanding and it is often di ffi cult to assess the trade-o ff s between harm and benefit. Obtaining consent for surgery requires that surgeons provide information to help patients to understand the posi tiv es and negatives of their various treatment options (15.2). Patients should be allowed to make these informed decisions without coercion or manipulation. Consent should be obtained by someone who is capable of performing the surgery , and this should be taken when the patient is fully aware, especially in the non-urgent situation, well before the surgical procedure (see Chapter 14). A failure to provide adequate time for discussion regarding consent and also to understand that consent is a process that frequently requires multiple interactions with a patient are frequent causes of an unsatisfactory consent process. Sir Robert Anthony Francis , b.1950, British barrister, chaired the Sta ff ord Hospital Inquiry . Peter Salovey , b.1958, social psychologist, President of Yale University , New Haven, CT , USA. John D Mayer , b. 1953, contemporary , psychologist, University of New Hampshire, NH, USA. /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF - /uni25CF

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HUMAN FACTORS

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The healthcare setting has become increasingly complex. Patient and societal demands for transparency in defining and justifying treatment decisions impact on all healthcare workers, who need to understand their professional responsibilities when working within complex social and work environments. Healthcare workers must understand that patients are increas ingly better informed and wish to be included more fully within the decision-making processes regarding treatment options. Likewise, when performance and clinical outcomes are less than expected, patients and their supporter s are entitled to timely and honest appraisal of ‘what went wrong’ and to be part of the discussion regarding ongoing care. Therefore, increasingly , surgeons will need to integrate knowledge, technical skills and mastery of complex equipment while participating in a multidisciplinary healthcare setting, in order to deliver safe and e ff ective care . The communica tion skills required to work in these complex environments and engage e ff ectively with audit, management and quality improvement systems are all dependent on human behaviour. These complex skill sets are set out in the study of human factors (HF), whic h examines the behavioural interrelation ships between humans, the tools the y work with and the environment in which they work. It is a complex area that incor porates knowledge derived from many disciplines. A bet ter understanding of the e ff ects of teamwork, tasks, equipment, workspace, culture and organisation on human behaviour will improve performance in clinical settings. A HF appr patient safety di ff ers from traditional safety training in that the focus is less with the technical knowledge and skills required to perform specific tasks, but rather with the cognitive and inter personal skills needed to e ff ectively manage team-based, high- risk activities. With time, HF training has evolved from models describing human interactions within complex environments to more nuanced programmes that modify wor kers’ behaviour and improve patient safety . HF was originally conceived in the 1940s in the aviation industry to better understand the relationship between a team’s behaviour, its technical surroundings and a c hanging environ ment. The ‘cognitive skills’ of the aircraft crew refers to the mental processes used for gaining and maintaining situational awareness, for solving problems and for making decisions, whereas ‘interper sonal skills’ are the communications and behavioural activities associated with teamwork. Crew resource management (CRM) training was developed to build e ff ective communication skills and a cohesive environ ment among team members and to build an atmosphere in which all personnel feel empo wered to speak up when the Richard H. Thaler , b.1945, economist, University Chicago, IL, USA, winner of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2017 for contributions to behavioural economics. Cass R Sunstein , b.1954, lawyer, Harvard Law School, Boston, MA, USA, co-authored in 2008. each other’s actions, o ff er assistance when needed and address errors in a non-judgemental fashion. Debriefing and providing feedback are key components of CRM training. It also empha - sises the roles of fatigue, perceptual errors (such as misreading monitors or mishearing instructions) and the impact of man - agement styles and organisational cultures. More recent developments in HF have looked more closely at designing systems better suited to minimising er ror. Stud - ies examining the hierarchy of intervention e ff ectiveness and concepts

based on nudge theory allow f or design of healthcare systems that increase safety and give a better understanding of - how people make decisions and behave. The n udge theory , introduced by Richard Thaler and Cass Sunstein, is based on shaping the environment to encourage choice selection along pathways deemed to be beneficial to the individual, an organisation or society . A key feature of nudge theory is to structure the selection of preferred options while allowing individuals to maintain freedom of choice within the decision-making process. One successful example is the adoption of generic medication brands on electronic medical records by the use of a simple opt-out checkbox if the pre - - scriber wishes to use a non-generic medication. It is now widely recognised that HF need to be consid - ered in every aspect of surgical care if the highest standards in patient safety are to be achieved. However, safety is just one aspect of a wider HF systems approach to equipment, task, - environment and or ganisational design. Better understanding of HF can also significantly contribute to the quality , accessibil - ity and cost of healthcare services and to the recruitment and - retention of healthcare sta ff . Summary box 15.1 oach to Acknowledging the gap between medical progress and delivery of quality patient care - /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF -

Health care is complex with many areas for improvement Understanding of the in /f_l uence of HF among care givers can highlight areas of risk but also potential solutions The different factors that impact human behaviour can be identi /f_i ed and in /f_l uenced in a way that improves health care Acknowledge the importance of ‘value’ for both healthcare provider and patient Training in human factors to enhance teamworking is a prerequisite of contemporary health care

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Hospital level

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Clinical governance Patient safety requires a team approach. Many national and international bodies, professional organisations and medical and academic health centres now realise the importance of leadership training. Motivated and well-prepared healthcare Before patient leaves operating room (with nurse, anaesthetist and surgeon) Nurse Verbally Confirms: The name of the procedure Completion of instrument, sponge and needle counts Specimen labelling (read specimen labels aloud, including patient name) Whether there are any equipment problems to be addressed To Surgeon, Anaesthetist and Nurse: What are the key concerns for recovery and management of this patient? Revised 1 / 2009 © WHO, 2009 workers trained to work together can reduce risks to patients, themselves and their colleagues, especially if incidents are managed positively and opportunities to learn from adverse events and near misses are used. High-performing institutions - consistently develop transpar ent governance structures to provide robust oversight of not only risk management but also all aspects of business planning and outcome reporting in addition to workforce education and training. - - Summary box 15.3 Strategies for patient safety /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF

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Human factors Inadequate patient assessment; delays or errors in diagnosis Failure to use or interpret appropriate tests Error in performance of an operation, treatment or test Inadequate monitoring or follow-up of treatment De /f_i ciencies in training or experience Fatigue, overwork, time pressures Personal or psychological factors (e.g. depression or drug abuse) Patient or working environment variation Lack of recognition of the dangers of medical errors System failures Poor communication between healthcare providers Inadequate staf /f_i ng levels Disconnected reporting systems or over-reliance on automated systems Lack of coordination at handovers Drug similarities Environment design, infrastructure Equipment failure owing to lack of parts or skilled operators Cost-cutting measures by hospitals Poor governance structures and inadequate systems to report and review patient safety incidents Medical complexity Advanced and new technologies Potent drugs, their side effects and interactions Working environments – intensive care, operating theatres

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Since 2009, WHO has embarked on a series of global and regional initiatives to improve surgical outcomes. Much of this work has stemmed from WHO’s Second Global Patient Safety Challenge, Safe Surgery Saves Lives . One specific strategy that has been shown to be e ff ective is the use of the surgical checklist, which, when properly implemented, has been shown to improve surgical outcomes in both low- and middle-income countries and in wealthier countries. International

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Introduction

INTRODUCTION

In recent years, increased emphasis has been placed on the study of healthcare systems to better understand the relation ship of how management and administrative systems best support clinical practice and promote quality improvement and patient safety . To some extent this has come about as a consequence of the increasing complexity of healthcare delivery , which, although credited with dramatically improving public health over the last 50 years, has led to the realisation that patient satisfaction and safety is frequently compromised. This issue is multifactorial but includes poor integration of care pathways, poor planning and utilisation of resources and errors in management and clinical care. A disa ff ected healthcare workforce challenged with excessive administrative and governance workloads compounds these issues and leads to ‘burnout’, which contributes to poor clinical outcomes and further compounds societal and patient dissatisfaction with patient care. Understanding healthcare systems, promoting ‘value’ for both healthcare providers and patients and supporting the healthcare workforce to deliver high-quality and safe care remains the biggest challenge for the healthcare industry in the current decade. This chapter addresses some of these import ant issues and provides a framework for surgeons to contribute to the design of safe and e ffi cient surgical pathways of care. Today’s healthcare systems face two big challenges: increas ing demand because of g reater volumes of patients who are older, who often have comorbidities and who often require multidisciplinary care; and an increasing volume of treatment options, often of greater complexity and cost. Despite the ability of medical science to manage and treat an increasing array of complex medical conditions, not all medical conditions are managed well. Implementing evidence-based care in complex health systems is challenging. Michael E Porter , b.1947, economist, Harvard Business School, Boston, MA, USA. Added to this, the financial cost of health care challenges both healthcare recipients and providers and questions how best to drive the ‘quality’ agenda in healthcare delivery . - According to the Institute of Medicine, patients do not always receive the most suitable care at the best time or in the best place. Its influential report, Crossing the Quality Chasm: A New Health System for the 21st Century, emphasises the need to redesign healthcare processes and systems in response to this quality gap. The concept of ‘value’ in health care has been developed to provide a focus for both healthcare recipient and provider . Professor Michael Porter, director of the Harvard Business School’s Institute for Strategy and Competitiveness, has advo - cated value-based health care as one of the most important topics in healthcare transformation. Porter proposed six prin - ciples that support a value-based approach to health care: 1 Organise care around medical conditions – care should be based upon the medical needs of a community . 2 Measure outcomes and costs for every patient. 3 Align reimbursement with value – to support better out - comes and more e ffi cient care. 4 Systems integration – organise treatment around matching patient, treatment and location. - 5 Geography of care – provide centres of excellence for complex care. 6 Information technology – provide integration of the - healthcare system. While value-based care has mainly gained traction within the USA and the private healthcare sector elsewhere, it is interest - ing to see its conceptual components being taken up by public health systems such as the National Health Service (NHS) in

the UK, with an understanding of the need for a universal healthcare number and integrated healthcare infor mation technology (IT) platforms and healthcare initiatives such as

and near misses The importance of patient safety, strategies and • application in clinical practice Quality improvement as an overarching activity • The need for system thinking and leadership •

Wisely UK’, all of which are based on designing healthcare systems that are truly patient-centric and o ff er quality outcomes that matter to patients.

Lean

Lean

Lean improvement methodologies originated in industrial settings among frontline workers and were pioneered in Japan, - giving rise to much of the terminology used. Kaizen is the Japa - nese word for improvement. A single ‘cycle’ of kaizen activity - is defined as requiring similar steps to a PDSA cycle. The same application can be used in health care, with many sequential cycles growing to ‘continuous improvement’. The essential philosophy behind lean methodologies is the elimination of waste through continuous improvement. Lean identifies seven forms of waste, each of which is relevant to health care (15.6). Identifying waste leads inevitably to the need to define value from the perspective of the patient, a factor that is central to the Choosing Wisely initiative (https://www .choosingwisely . org).

Overproduction Example: ordering unnecessary preoperative tests Solution: implementation of evidence-based preassessment pathways Inventory Example: storing excessive medication or supplies in ward storage with a risk of them going out of date Solution: alphabetically ordered medication cupboards with small amounts of commonly used drugs in conjunction with an ef /f_i cient replenishment system Waiting Example: patients waiting long periods to come to theatre Solution: staggered admission times aligned to operating theatre schedule Waste of transportation Example: using trolleys to bring ambulatory day patients to the operating theatre Solution: better design of the admissions process to enable patients to walk to theatre W aste of overprocessing Example: using computed tomography scans to assess children with possible appendicitis Solution: consider whether ultrasound could be used instead Defect Example: patients arriving for surgery with incomplete or inappr Solution: more robust checking systems before patients come to theatre Motion Example: frequent sear ching in theatres and the anaesthetic room to /f_i nd necessary drugs and equipment Solution: an ef /f_i cient theatre layout, common to all operating theatr minimal movement and always in the same place

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Learning objectives

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To learn: The importance of understanding human behaviour, • quality and value in healthcare delivery The importance of human factors and teamworking in • reducing and rectifying error Medical error and its de /f_i nitions, including adverse events • Learning objectives

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Low- and middle-income countries

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Resource-poor countries share many of the aspirations and challenges of resource-rich countries; however, they also face issues that require di ff erent strategies. The probability of a patient being harmed in hospital is greater with, for example, - a greater risk of healthcare-associated infection and di ffi culty maintaining medical equipment because of lack of parts or necessary skills. In some countries, the proportion of injections Low- and middle-income countries

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Model for improvement

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Based on the teachings of W . Edwards Deming (Table 15.4), the model for improvement is a system popularised by the Institute for Healthcare Improvement that asks three ques - tions: ‘What are we trying to accomplish?’, ‘How will we know that a change is an improvement?’ and ‘What changes can w e make that will result in improvement?’ The system employs plan–do–study–act (PDSA) cycles to perform and evaluate - small, rapid-cycle tests of change. Model for improvement

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Never events

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Many national health services and institutions now require that all incidents are managed, reported and investigated. Incidents can be defined as events that could have or did result in unintended and/or unnecessary serious harm. One subset of serious incidents is a never or serious reportable event . These events are considered to be wholly preventable; for example, a retained abdominal swab or instrument, where guidance providing strong systemic protective barriers should have been implemented, namely checklists. Each ‘never event’ type has the potential to cause serious harm to the patient or even death. However, serious harm or death is not required to have occurred for that inci dent to be categorised as a ‘never or serious reportable event’. As previously described clinical incidents of this nature, by definition, mandate an open disclosure process with pa and their carers. Never events

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PATIENT SAFETY AND RISK MANAGEMENT

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Patient safety can only be considered in a broader understand ing of risk management. Healthcare risk management has traditionally focused on the important role of patient safety and the reduction of medical error. However, with the increas ing complexity of the healthcare environment, which includes not only the increasing complexity of medical care but also the use of new and advanced technologies, IT and cybersecurity that health providers work in, a more comprehensive approach to risk management is required. As comprehensive risk management will increasingly become central to the design and deliv ery of all aspects of health care, surgeons need to be not only aware of the devel - opments in this area but also willing to contribute to the design, implementa tion and assessment of risk management systems. PATIENT SAFETY AND RISK MANAGEMENT

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PATIENT SAFETY AND THE SURGEON PROFESSIONAL RESPO

PATIENT SAFETY AND THE SURGEON: PROFESSIONAL RESPONSIBILITY

Among medical specialties, surgery is one of the most invasive healthcare interventions that a patient can experience. More than 100 million people worldwide undergo surgical treatment every year. Problems associated with surgical safety in resource- rich countries account for half of the avoidable adverse events that result in death or disability . The ‘more than one cause’ theory of accident causation can be aptly applied to many aspects of surgical patient care during the perioperative period. However, irrespective of the Sir Alfred Cuschieri , b.1938, Maltese surgeon and Emeritus Professor of Surgery , Dundee, UK. - Patient safety at the coal face /uni25CF /uni25CF /uni25CF /uni25CF - /uni25CF safety event or issue, the surgeon as the likely senior team leader will play a key role in reporting and communicating these events with patients and carers, other team members and hospital administration. This is particularly so for those coal-face ’ errors where patients identify the sur - so-called ‘ geon as being responsible for a defined episode of care. Cuschieri and others have described coal-face errors as those that can potentially be committed by surgeons during the care of their patients and include: /uni25CF diagnostic and management errors; /uni25CF resuscitation errors; /uni25CF prophylaxis errors; /uni25CF prescription/parenteral administration errors; /uni25CF situation awareness, identification and teamwork errors; /uni25CF technical and operative errors.

Communicating well with patients and their carers Understanding situational awareness and emotional intelligence Effective teamworking Professionalism, as another essential component of patient safety System approach to clinical risk management events and patients’ complaints

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PATIENT SAFETY

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Medicine will never be risk-free. From the beginning of train - ing, doctors are taught that errors are unacceptable and that the philosophy of primum non nocere (first, do no harm) should - permeate all aspects of treatment. Y et, worldwide, despite all the improvements in treatment and investment in technologies, y Nudge: Improving Decisions about Health, Wealth, and Happiness with Thaler with unsafe practices, incompetent healthcare professionals, poor governance of healthcare service delivery , errors in diagnosis and treatment and non-compliance with accepted standards. When errors occur, it is important that there are systems in place to ensure that all those a ff ected are informed and cared for, and that there is a process of analysis and learning to uncover the causes and prevent recurrence of such events. It is equally important to learn more about the characteristics and facilitators of safe, high-quality care. The study of patient safety is now a healthcare discipline in its own right, encompassing patient safety methodologies, health service design, investiga tion of incidents and related research. The development of risk management strategies within the healthcare setting attempts to address these failings. Comprehensive risk management is not just an exercise in ligation avoidance but aims to develop a cultural a wareness and support for all healthcare workers in defining and delivering high-quality clinical care. A milestone report by the US Institute of Medicine of the National Academy of Sciences (now the National Academy of Medicine), To E r r i s H u m a n : B u i l d i n g a S a f e r H e a l t h S y s t e m , drew widespread attention to the impact of medical error on healthcare outcomes. The World Health Organization (WHO) estimates that, even in advanced hospital settings, one in 10 patients receiving health care will su ff er preventable harm, although measurement of the incidence of suboptimal out comes remains challenging. In addition to the potential for needless su ff ering, the financial burden of unsafe care globally is compelling, resulting as it does in prolonged hospitalisation, loss of income, disability and litigation costing many billions of dol lar s every year. In 2017 the Organisation for Economic Co-op eration and Development (OECD) published The Economics of Patient Safety , which indicates that this is a problem faced in all healthcare systems, with iatrogenic patient harm being the 15th leading cause of the global disease burden and accounting for 15% of all OECD countries’ hospital expenditure. While the relationship between medical error and litiga tion is particularly complex, sophisticated healthcare systems understand that e ff ective strategies to promote patient safety and quality improvement must include a whole organisational culture change with both central senior management inv ment and active engagement by all those within the organ isation. Furthermore, clinical audit, data management and incident reporting must be carried out in a ‘blame-free’ culture with an emphasis on education and the avoidance of an adver sarial culture, which hinders activ e participation. PATIENT SAFETY

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Prescribing safely

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Patients are vulnerable to mistakes made in any one of the many steps involved in the ordering, dispensing and admin istration of medications. Medication errors are one of the most common errors across all medical specialties. Accuracy requires that all steps are correctly executed. Common medi cation er rors include: /uni25CF poor assessment or inadequate knowledge of patients and their clinical conditions; /uni25CF inadequate knowledge of the medications; /uni25CF dosage calculation errors; /uni25CF illegible handwriting; /uni25CF confusion regarding the name or the mixing up medica tions. Prescribing safely

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QUALITY MEASURES

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Measurement is a key principle of quality improvement. Although many changes take place in health care, without measurement it is impossible to determine whether those changes actually result in improved quality . Measurement of improvement requires di ff erent methods from those used in research, being concerned more with testing of how best to e ff ectively introduce and replicate best practice rather than determining for the first time what best practice should be. Quality measures are tools that help to quantify the char acteristics of high-quality health care and may measure the healthcare process, its outcomes, the patient's experience or the organisational structures or systems that support car e delivery . Quality may be measured in terms of structure, process and outcomes. Structural measures outline the characteristics of the health system that a ff ect the system's ability to meet the healthcare needs of individual patients or a population. Structural measures usually refer to the availability of mate rial, infrastructural or human resources, e.g. the number of surgeons per 100 /uni00A0 000 population or the number of sta ff ed operating theatre sessions in a hospital. Structural measures are especially useful in ev aluating and improving equity of access to health care. They may include measurement of the availability in a healthcare setting of policies or procedures needed to deliver high-quality care, such as standards for the frequency and nature of clinical observation of postoperative patients. Process measures assess what the healthcare provider did for the patient and how well it was done. The term pro cess is used to refer to the implementation of procedures and practices by sta ff when planning, prescribing, delivering and evaluating care . Each surgical patient's journey is a composite of multiple processes, such as preoperative assessment, hos pital admission and undergoing an operation, among oth ers. Measurement for improvement most commonly involves tracking processes at the same site over time in an attempt to reduce inappropriate variation. Process improvement mea sures should be associated with better outcomes of care and, ideally , should be important from a patient's perspective. An example of a clinical process measure might be the starting times of operating lists. Consistently starting the operating day on time r educes delays for patients awaiting surgery and has a number of associated possible benefits, such as shorter fasting times preoperatively and a greater ability to plan the theatre day . Sometimes process measures are used as a management olds. In this example, starting theatres on time might be part of a wider improvement plan that aims to reduce underutilisation of sta ff ed theatre time . Outcome measures describe the e ff ects of care on the health status of patients and populations – they are specific, observable and measurable changes that represent the achievement of an outcome of a quality improvement initiative. Clinical outcome measures refer specifically to outcomes of healthcare interventions, whether they are to do with diagnosis, treatment or care received by service users. Ideally , they should be outcomes that are important to patients rather than to the healthcare provider (PROM: patient- reported outcome measure), and there should be evidence that they reflect the quality of the interventions and their e ff ect. Outcome measures are what are commonly used in clinical audit when outcomes achieved are compared with evidence- based standards of clinical care. An important principle of healthcare

improvement is patient-centred co-design, a process by which healthcare pro - viders work in partnership with the people receiving care to identify and prioritise desirable outcomes. Suc h outcomes may include factors experienced by people accessing care, such as: - /uni25CF the speed of their access to reliable health advice; /uni25CF the e ff ectiveness of their treatment delivered by trusted professionals; /uni25CF the continuity of their care and its smooth transitions; /uni25CF the involvement of, and support for, their family and car - ers; /uni25CF the availability of clear, comprehensible information and support for self-care; - /uni25CF their involvement in decisions and the respect for their preferences; /uni25CF the emotional support, empathy and respect provided; /uni25CF the attention paid to their physical and environmental needs. The collection and interpretation of reliable data are of fundamental importance to any quality improvement exercise (Table 15.4). QUALITY MEASURES

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Resource-rich countries

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Many countries and professional bodies in resource-rich coun - tries have developed various strategies to improve outcomes in surgical practice. These include: /uni25CF regulatory systems for the licensing of physicians and healthcare institutions; /uni25CF national/statutory policies for patient safety; /uni25CF standard setting by surgical professional bodies; /uni25CF national clinical audits and quality improvement pro - grammes; /uni25CF statutory reporting of adverse events.
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STRATEGIES FOR PATIENT SAFETY

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As safety is everybody’s business, building and embedding a safety culture into surgical service delivery is the key to improving patient outcomes. At an institutional level, defining ‘best practice’ within a robust governance system and bench marking against national and international norms is required prior to implementation of strategies for improvement. Clearly these strategies will vary depending on local requirements and resources . STRATEGIES FOR PATIENT SAFETY

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Shouldering the burden of adverse event

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As primary care givers and clinical leaders, surgeons will not infrequently find themselves taking an active part in adverse event reporting. The professional responsibilities involved with managing adverse outcomes can be onerous, particularly understanding societal change and patients' expectations, in increasingly litigious societies. The admin istrative burden and responsibility associated with this need to be recognised. Issues relating to surgeons' well-being and burnout remain a cause for concern: supporting surgeons following adverse events has been incr easingly recognised as a responsibility of all within the surgical community . The concept of the 'second victim' has been advanced to acknowledge the e ff ects of adverse outcomes on surgeons' well-being. This is not to denigrate the undoubted harm caused to the 'first victim', or patient. Increasingly , however, comprehensive risk management systems will need not only to be patient-centric but also to acknowledge and support resilience of those working within our health services. In health care, quality improvement is defined as the continu - ous and combined e ff orts of people to make changes that will lead to better patient outcomes, enhanced healthcare system performance and better learning and professional development. Improv ements come about through the intentional actions of sta ff equipped with the skills and data needed to bring about changes in patient care, either directly or indirectly . Such changes require substantial and sustained commitments of time and resources. The field of improvement science provides frameworks and methodologies that help when designing or redesigning healthcare processes and systems, especially when the aim is to ensure more e ffi cient, safe, timely , e ff ective, patient-centred and equitable care. The concept of value is an important adjunct to healthcare improvement. Value takes into account the total cost of health care as compared with the outcomes delivered to patients and helps to place emphasis on health, well-being and preventative care as opposed to exclusively focusing on treatment of illness. There are large numbers of improvement activities that range from redesigning how teams deliver care in the multiple small clinical groupings (microsystems) that make up health - care organisations to more large-scale reconfigurations of spe - cialist services such as stroke care and cancer care. Other areas of healthcare improvement focus on areas as diverse as the redesign of training, budgeting processes and information sys - tems. Common to all healthcare improvement is the necessity for doctors and other healthcare sta ff to reflect on and improve the way they work and to build a culture that both understands and values continuous impr ovement. - Shouldering the burden of adverse event

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Situation awareness identifying

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- Situation awareness: identifying
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Situational awareness understanding the work envi

Situational awareness: understanding the work environment and working well within it

Nowhere is teamworking more important than in managing the flow of information within health care. Poor communica - tion can lead to misinformation to patients and sta ff and delays in diagnosis, treatment and discharge as well as in failures to - follow up on test results. On the other hand, good teamwork, good communication and continuity of care reduce errors and improve patient care and sta ff satisfaction within a team. The nuances of good communication extend beyond the - ability to converse with other members of the healthcare T able team and include specific competencies, namely situational awareness and emotional intelligence. Situational awareness describes an awareness of all individuals within the en viron - ment and an appreciation of the importance of change with time. Emotional intelligence, as defined by Peter Salovey and John Mayer, is ‘the ability to monitor one’s own and other peo - ple’s emotions, to discriminate betw een di ff erent emotions and label them appropriately , and to use emotional information to guide thinking and behavior’. Experienced clinicians and clinical leaders understand that e xcellent communication skills are based on both situational awareness and emotional intel - ligence. intelligence are important in identifying stress within oneself and other members of the healthcare team. Stress, tired ness and mental fatigue in the workplace are significant occupational health and safety risks in health care. There is good evidence linking tiredness with medical errors. Fatigue can also a ff ect well-being by causing depression, anxiety and confusion, all of which negatively impact on clinicians’ per formance. Increasingly ‘burnout’ has been identified as a major cause of poor performance in the medical workforce. Burnout is characterised by a state of emotional, mental and physical exhaustion caused by prolonged stress. Burnout in the medical workforce has increased in recent years and has been attributed to lack of autonomy within the profession and increased administrative workloads; the latter is compounded by electronic record-keeping and working in an increasingly regulated environment. Doctors su ff er from burnout to a greater extent than other professions. Organisations and those in leadership positions bear responsibility for managing the working environment and work practices to minimise fatigue and stress. While this is widely reflected in legal restriction of working hours, much needs to be done to determine whether reducing resident or trainee hours of work leads to greater patient safety because of the ‘trade-o ff ’ in requiring additional ‘handovers’ between clinical teams and subsequent loss of continuity of care. Situational awareness: understanding the work environment and working well within it

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Six Sigma

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Six Sigma refers to another business performance meth odology that has been adopted for use in health care. The fundamental objective of the Six Sigma methodology is the implementation of a measurement-based strategy that focuses on process impro vement and especially on reducing unnec - essary variation. One of its sub-methodologies is DMAIC Table (Define, Measure, Analyse, Improve, Control), which is an impro vement system for existing processes that fall below specification and require incremental improvement.

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Supporting a safety culture

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Adverse events and near misses go unreported for many reasons, including a fear of blame and the potential for litiga - - tion. Clinical risk management is an integrated process, based on risk identification, analysis and control of events, carried out within a ‘blame-free’ environment. Data collected from these episodes should be collated and learnt both institutionally and by uploading to a national database. Doctors should be familiar with the systems that operate within their own working environment. Complaints from a patient or carer often highlight a prob - lem that, when analysed, provides opportunities for reduc - ing adverse events. Knowing how to manage complaints is an important part of providing better health care. There is wide acceptance for the need for complaints to be made easily and e ff ectively , such that now more and more pa tient advo - cacy units provide a range of options for resolving complaints, - including the provision of information and mediation and the setting up of conciliation meetings between the parties. Such risk management is complex and involves multiple domains , including operational, legal and financial issues. For the pur - - pose of this chapter the focus is on clinical risk, benchmarking - and incident reporting. Most medical care entails some level of risk to the patient, either from the underlying condition or comorbidity or from the treatment itself, each of whic h may lead to recognised com - plications or side e ff ects. These episodes m ust be di ff erentiated from patient safety incidents, which have been described as - prev entable events or circumstances that did or could result in unnecessary harm to a patient. These include adverse events that result in actual harm, near-miss events that by chance or intervention cause no harm and no-harm events that reach olve - a patient but result in no harm because of chance or other - mitigating circumstance. The most frequent contributing factors that lead to patient safety incidents are listed in Table 15.1 . Of these, inadequate - communication between healthcare sta ff , or between medical sta ff and their patients or family members, ranks highest in frequency . Supporting a safety culture

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Surgical Safety Checklist

Surgical Safety Checklist

B efore induction of anaesthesia B efore skin incision (with nurse, anaesthetist and surgeon) (with at least nurse and anaesthetist) Has the patient confirmed his/her identity, Confirm all team members have site, procedure, and consent? introduced themselves by name and role. Y es Confirm the patient’s name, procedure, and where the incision will be made. Is the site marked? Y es Has antibiotic prophylaxis been given within the last 60 minutes? N ot applicable Y es Is the anaesthesia machine and medication N ot applicable check complete? Anticipated Critical Events Y es To Surgeon: Is the pulse oximeter on the patient and functioning? What are the critical or non-routine steps? Y es How long will the case take? D oes the patient have a: What is the anticipated blood loss? Known allergy? To Anaesthetist: No A re there any patient-specific concerns? Y es To Nursing Team: Difficult airway or aspiration risk? Has sterility (including indicator results) b een confirmed? No A re there equipment issues or any concerns? Yes, and equipment/assistance available Is essential imaging displayed? Risk of >500ml blood loss (7ml/kg in children)? Y es No N ot applicable Yes, and two IVs/central access and fluids planned This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. given with syringes or needles reused without sterilisation is as high as 70%. Each year, unsafe injections cause 1.3 million deaths, primarily as a result of transmission of hepatitis viruses and human immunodeficiency virus. Identifying and addressing patient safety risks in collabo ration with colleagues across the world allows progress to be made on a number of important areas of surgical safety as well as supporting improvements in surgical training. International collaborations, often based on personal pr ofessional relation ships, can be a catalyst to supporting surgical training and sur gical safety initiatives worldwide. The WHO surgical safety checklist (Figure 15.1) demonstrates that many patient safety initiatives are not resource intensive but require attention to the details of process and care pathways commensurate with the local conte xt.

Figure 15.1 World Health Organization’s surgical safety checklist research/safe-surgery/tool-and-resources) .

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Systems thinking and leadership

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In a system as complex as health care, ‘systems’ thinking allows the whole system and the relationships of the parts to be considered rather than just isolated functions. Health care is a shared resource with many interdependencies; for surgery these include anaesthesia, critical care, nursing and other specialties we work with to manage comorbid patients. If quality problems exist primarily because of systems prob - lems, solutions are more likely in systems where relationships and integration are considered important and where emphasis is placed on HF such as communication, team building, con - flict management, process management and education. Sys - tems work best w hen there is a non-punitive culture and when they have leaders who understand the complexity of systems and foster a culture of continuous quality improvement. Those - leaders should be visible at the front line and be champions of a supportive practice environment. Improvement in the quality of care does not occur by chance and a programme team, armed with just organisational and graphical tools, will not succeed in producing sustainable change. T rue change can only happen when supported and driven by front-line sta ff . The underlying, central and agreed - principles must include the creation of value for the patient, a constancy of purpose and systems thinking. These should be enabled by the intentional actions of trained sta ff supported by humble leadership and respect for individuals. Such a culture and a sustained commitment of time, patience and resources. Health care as a sector has been slow to recognise the important contribution that the theory and practice of qual ity improvement are able to make in delivering better value care. The experience of a relatively small number of care organisations that have successfully done so, such as the Virginia Mason Medical Centre in Seattle, WA, is a challenge to others to invest in acquiring the necessary skills and capa bilities. A recent report b y the Academy of the Medical Royal Col leges of UK and Ireland (2016) has argued that quality improve ment should be at the heart of medical training and that there is a pressing need to develop quality improvement learning across the continuum of medical education. Understanding how health systems can be improved and ho w evidence-based practice can be implemented in complex healthcare settings are important skills for surgeons to master. Summary box 15.5 Understanding quality improvement and its application in health care /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF Ham C, Berwick D, Dixon J. Improving quality in the English NHS – a strategy for action. The Kings Fund, 2016. Available from http:// - www .kingsfund.org.uk/publications/quality-improvement Hollnagel E, Wears RL, Braithwaite J. From Safety-I to Safety-II: A health - White Paper . The Resilient Health Care Net, 2015. Available from https://www .england.nhs.uk/signuptosafety/wp-content/uploads/ sites/16/2015/10/safety-1-safety-2-whte-papr.pdf Institute of Medicine. Crossing the quality chasm: a new health system for - the 21st century. Washington, DC: National Academies Press, 2001. Jones B, Vaux E, Olsson-Brown A. How to get started in quality im - - provement. BMJ 2019; 364 : k5408. - Kohn LT , Corrigan JM,

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THE PROCESS OF SURGICAL CARE

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- Patients attend surgeons in many di ff erent settings depending on whether they present electively (scheduled) or urgently (unscheduled). An elective patient’s journey is usually predict - - able and typically starts with referral from primary care for - outpatient (ambulatory) consultation and investigation. If a surgical procedure is required, the patient undergoes assess - ment from both a surgical and anaesthetic perspective prior - to admission. Ideally the patient is then admitted in a timely manner to the level of care that best meets their needs, whether as a day case, on the day of surgery , or for as short a time as possible before surgery as an inpatient. Preoperative checking is followed by the theatre journey , which includes reception, anaesthesia, the surgery itself and recovery – each, in their own way , a series of complex interventions. Returning to the ward and recovery demands another set of skills, procedures and processes followed by a final ‘discharge from hospital’ process and transition of care back to the community services if required. The urgent, emergency or unscheduled patient journey is di ff erent because it is unpredictable for each individual, although patterns of presentation do emerge when managing large numbers . The patient commonly presents at the emer gency department of a hospital either as a self-referral, as a primary care referral or by ambulance. The journey begins with triage by a team, who assess the severity of the illness and then stream the patient to the most appr opriate area for their needs, which might include, for example, a resuscitation unit, a rapid assessment and treatment unit, an acute surgi cal assessment unit, a minor injuries unit or an ambulatory care unit. The objective is that the patient is seen as soon as possible by a senior decision maker , so that the patient can be treated or discharged as expeditiously as possible or, if admission and surgery are required, this too can be expedited. Thereafter, the journey follows a similar course to that of an elective admission. This simple outline of surgical patients’ journeys serves to illustrate the many individual steps or processes in that journey , each with scope for errors, delays and ine ffi ciencies. Opportu nities f or improvement are almost limitless.

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THE QUALITY IMPROVEMENT PATHWAY

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Quality improvement can be applied to almost any step, process or activity . The science of improvement is an applied science that prioritises innovation, rapid-cycle testing and spread with the aim of identifying what changes, and in what contexts, will result in improvement. Healthcare Improvement Scotland identifies seven stages when undertaking improve ment: 1 discovering – is about defining the aims and vision; understanding what the problem is and what data are available; 2 exploring – is about defining the present state and visu alising the future state; 3 designing – is about defining how to move from the pres ent state to the future state and identifying the priorities; 4 refining – is about testing change, learning from the data and identifying the benefits; 5 introducing – is about managing communications and building the will and culture to change; 6 spreading – is about showing the improvements, telling the story and disseminating the message; 7 closing – is about capturing and sustaining the learning. - Each step is supported by the use of tools and methodol - ogies that are appropriate to the design and planning of each step, depending on the improvement exercise being under - taken (Table 15.5). - -

‘In God we trust, all others bring data.’ ‘What gets measured gets improved.’ Sequence of reactions that challenge data: “The data are wrong.” “The data are right but it’s not a problem.” “The data are right; it is a problem but not my problem.” “I accept the burden of improvement.” TABLE 15.5 Examples of tools used in quality improvement. Organisational Graphical Driver diagrams Root cause analysis Fishbone cause and effect Bene /f_i ts realisation planning diagrams Demand and capacity planning Spaghetti diagrams Process mapping Box, frequency and scatter Value stream mapping plots Kanban and 5 ‘S’ Pareto charts Run charts Statistical process control charts

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Technical and operative errors

Technical and operative errors

In surgery , the person rather than systems approach empha - sises the accountability of the surgeon, who, unlike colleagues in other medical disciplines, when operating carries specific responsibilities. During a surgical procedure, for example, there may be a specific action that, of itself, may be the error, such as inadvertent injury to the common bile duct during a cholecystectomy (Figure 15.3) . The practical value of this kind of interpretation is that, provided latent conditions are excluded, it gives a sense of responsibility to the surgeon and it may also help to point to the most e ff ectiv e pathway for reme diation, by counselling or retraining, as against reassessing the system and putting in place further safeguards. Central to operative performance is proficiency , an acquired state, honed by sound teaching, practice and repeti - tion, by which a sur geon consistently performs operations with good outcomes. In cognitive psychology , high surgical profi - ciency is a state of automatic unconscious processing, with the execution being e ff ortless , intuitive and untiring, as opposed to non-proficient execution, which is characterised by conscious control processing, requiring constant a ttention and resulting in slow , deliberate execution and inducing fatigue. The transi - tion from one state to the other is better known as the ‘learning curve’ and is reflected in the hierarchal pyramid of competence (Figure 15.4). This should not carry negative connotations f or trainee surgeons, who might be at the conscious processing stage but still perform a perfectly good operation, although it might take longer and be more tiring. Failures in operative technique include: /uni25CF cognitive errors of judgement, such as late conversion of a di ffi cult laparoscopic procedure into an open one; /uni25CF procedural , when the steps of an operation are not fol - lowed or are omitted; /uni25CF executional , when, for example, too much force is used, which may result in damage that may or may not have consequences; /uni25CF misinterpretation of anatomy/pathology , which is compounded by minimal access surgery with the limita - tions of a two-dimensional image; /uni25CF misuse of instrumentation, such as with energised dissec - - tion modalities (e.g. diathermy); /uni25CF missed iatrogenic injury either at the time of surgery or diagnosed late.

Figure 15.2 Axial (a) and coronal (b) magnetic resonance images demonstrating a well-de /f_i ned

abdominal mass with whorled stripes in a /f_l uid- /f_i lled central cavity (arrows). This 60-year-old woman had had an abdominal hysterectomy 10 years previously and presented with pyrexia and /f_l ank pain. The cause was due to the late presentation of a retained surgical swab. Figure 15.3 Endoscopic retrograde cholangiopancreatography radio graph showing an iatrogenic bile duct injury.

Unconscious Right intuition competence Conscious competence Right analysis Conscious incompetence Wrong analysis Unconscious incompetence Wrong intuition Figure 15.4 Hierarchy of competence.

Technical and operative errors

In surgery , the person rather than systems approach empha - sises the accountability of the surgeon, who, unlike colleagues in other medical disciplines, when operating carries specific

responsibilities. During a surgical procedure, for example, there may be a specific action that, of itself, may be the error, such as inadvertent injury to the common bile duct during a cholecystectomy (Figure 15.3) . The practical value of this kind of interpretation is that, provided latent conditions are excluded, it gives a sense of responsibility to the surgeon and it may also help to point to the most e ff ectiv e pathway for reme diation, by counselling or retraining, as against reassessing the system and putting in place further safeguards. Central to operative performance is proficiency , an acquired state, honed by sound teaching, practice and repeti - tion, by which a sur geon consistently performs operations with good outcomes. In cognitive psychology , high surgical profi - ciency is a state of automatic unconscious processing, with the execution being e ff ortless , intuitive and untiring, as opposed to non-proficient execution, which is characterised by conscious control processing, requiring constant a ttention and resulting in slow , deliberate execution and inducing fatigue. The transi - tion from one state to the other is better known as the ‘learning curve’ and is reflected in the hierarchal pyramid of competence (Figure 15.4). This should not carry negative connotations f or trainee surgeons, who might be at the conscious processing stage but still perform a perfectly good operation, although it might take longer and be more tiring. Failures in operative technique include: /uni25CF cognitive errors of judgement, such as late conversion of a di ffi cult laparoscopic procedure into an open one; /uni25CF procedural , when the steps of an operation are not fol - lowed or are omitted; /uni25CF executional , when, for example, too much force is used, which may result in damage that may or may not have consequences; /uni25CF misinterpretation of anatomy/pathology , which is compounded by minimal access surgery with the limita - tions of a two-dimensional image; /uni25CF misuse of instrumentation, such as with energised dissec - - tion modalities (e.g. diathermy); /uni25CF missed iatrogenic injury either at the time of surgery or diagnosed late.

Figure 15.2 Axial (a) and coronal (b) magnetic resonance images demonstrating a well-de /f_i ned abdominal mass with whorled stripes in a /f_l uid- /f_i lled central cavity (arrows). This 60-year-old woman had had an abdominal

hysterectomy 10 years previously and presented with pyrexia and /f_l ank pain. The cause was due to the late presentation of a retained surgical swab. Figure 15.3 Endoscopic retrograde cholangiopancreatography radio graph showing an iatrogenic bile duct injury.

Unconscious Right intuition competence Conscious competence Right analysis Conscious incompetence Wrong analysis Unconscious incompetence Wrong intuition Figure 15.4 Hierarchy of competence.

The person approach

The person approach

Human performance principles tell us that humans are fallible and that errors can occur through doing the wrong thing – errors of commission; failure to act – errors of omission; or errors of execution – doing the right thing incorrectly . These principles also tell us that, by understanding the reasons why adverse events and near misses occur and by applying the lessons learnt from past events, future errors can be prevented. However, for most errors the person approach on its own tends to blame the individual and restricts learning. For this reason, individual performance may be best assessed by professional appraisal processes and clinical audit, which ensures that performance outcomes are benchmarked across institutional, national and international norms. The person approach

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The system approach

The system approach

Health systems add complex organisational structures to human fallibility , thus substantially increasing the potential for errors. A systems approach to error recognises that adverse events rarely have an isolated cause and that they are best addressed by examining why the system failed rather than who made the mistake. This is clearly outlined in the 2013 report by Professor Don Berwick called A Promise to Learn – A Commitment to Act , which looked into improving patient safety in the NHS, where the emphasis is on a system-wide approach to patient safety . However, greater analysis of organisational safety needs to go beyond understanding not only why unanticipated events occur, which has been referred to as safety 1; it also needs to understand the robustness and r esilience within systems due to human innovation and adaptability , which frequently pre Donald Berwick , b.1946, Professor of Pediatrics and Health Care Policy , Harvard Medical School, Boston, MA, USA. Herbert W Heinrich , 1886–1962, engineer, Hartford, CT , USA, a pioneer in industrial safety . James T Reason , b.1938, Professor Emeritus of Psychology , University of Manchester, Manchester, UK. vents untoward events and is referred to as safety 2. Safety 1 places the emphasis on identifying errors after the event and aims to prevent them from occurring or recurring in the futur e, whereas safety 2 acknowledges that healthcare work is resilient and that everyday performance succeeds much more often than it fails. This is because clinicians constantly adjust what they do to match the conditions. Working flexibly , and actively trying to increase clinicians' capacity to deliver more care more e ff ectively , is key to this new approach. At its heart, proactive safety management focuses on how everyday perfor - mance usually succeeds rather than why it occasionally fails, and it actively strives to improve the former rather than simply preventing the latter. The publication 'Fr om Safety-I to Safety-II: A White Paper' (2015) expands on this concept and stresses the importance of assimilation of these two ways of thinking. Sophisticated healthcare systems need not only to examine what w orks well but also to examine adverse events and understand and plan for adverse outcomes. Balancing these concepts should be con - sidered an investment not only in safety but also in improving productivity and patient and sta ff well-being. The underlying principles to these approaches to risk man - agement stem from theories such as Heinrich's safety pyramid, which proposes tha t each major injury within a system masks a multiple of minor injuries and near misses. This model stresses the importance of near-miss re porting in order to fully under - stand the spectrum of patient safety and allow adequate risk management planning. More recently James Reason proposed the 'Swiss cheese' model of causation to explain the consequences of multiple errors that result in harm, analogous to the holes in a Swiss cheese, which if aligned crea te a defect that has adverse - consequences. For organisational safety to be e ff ective each respective roles in order to avoid the summation of error and resultant harm. Consequently , the more layers of responsibil ity , the fewer the chances of adverse events occurring. Summary box 15.2 Understanding patient safety incidents /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF

Errors can be viewed from a person-centred or a system approach The majority of near misses or adverse events are due to system factors Understanding why these errors occur and applying the lessons learnt will prevent future injuries to patients It is important to report all near misses or adverse events so that we can constantly learn from mistakes Error models can help us understand the factors that cause near misses and adverse events Examining what works well may be an additional constructive approach to de /f_i ning safe patient pathways

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UNDERSTANDING PATIENT SAFETY

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-

When things go wrong open disclosure

When things go wrong: open disclosure

Communicating honestly with patients after an adverse event, or open disclosure , includes a full explanation of what happened, the potential consequences and what will be done to fix the problem. Safe care also involves taking care of the patient after the event, ensuring that the problem does not happen again and sincerely o ff ering regret or an apology , as appropri - ate. These issues are increasingly reflected in open disclosure policies for healthcare workers; in the UK they are explicitly outlined in the General Medical Council’s professional duty of candour and statements by many of the professional bodies. Since 2015, and as a consequence of the F rancis report, a duty of candour has been placed on a statutory basis in the UK for all healthcare providers. When things go wrong: open disclosure

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teamwork errors

teamwork errors

Operating theatres have been described as ‘among the most - complex political, social and cultural structures that exist, full of ritual, drama, hierarchy and too often conflict’. In such an environment, systems should seek to prevent error by improving workplace preparedness and by incorporating defences that reduce human error or minimise its consequence. Well - recognised and potential errors include: /uni25CF the wrong patient in the operating theatre; - /uni25CF surgery performed on the wrong side or site; /uni25CF the wrong procedure performed; /uni25CF failure to communicate changes in the patient’s condition; /uni25CF disagreements about proceeding; /uni25CF retained instruments or swabs (Figure 15.2) . All these events are catastrophic for the patient and almost invariably occur through a lack of communication (see Never events). This means that all thea tre sta ff should follow proto - cols and be familiar with the underlying principles supporting a uniform approach to caring for patients. teamwork errors

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