Title: Compendium of Tools & Resources on Patient Safety- Strategic Objective 6
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6. Information, research and risk management	Name	Link	Type of resource	Source	Description	Language	Cost	Interlinking areas
6.1 Patient safety incident reporting and learning systems	Investigating Human Error	https://www.routledge.com/Investigating-Huma	Book	Barry Strauch	In this book the author applies contemporary error theory to the needs of investigators and of anyone attempting to understand why someone made a critical error, how that error led to an incident or accident, and how to prevent such errors in the future.	English	35-80 pounds	
6.1 Patient safety incident reporting and learning systems	Concise Incident Analysis Tool	https://www.patientsafetyinstitute.ca/en/toolsR	Guidance	Canadian Patient Safety Institute, John Hopkins Medicine, WHO	Root cause analysis (RCA) investigations of patient safety incidents (an event or circumstance that could have resulted, or did result, in unnecessary harm to a patient)1 have played an important role in improving care. This rigorous methodology is designed to understand all relevant aspects of an incident and to take effective actions that reduce the risk of a recurrence.	English	Free	
6.1 Patient safety incident reporting and learning systems	Raising and acting on concerns about patient safety	https://www.gmc-uk.org/-/media/documents/ra	Guidance	General Medical Council	This guidance sets out our expectation that all doctors will, whatever their role, take appropriate action to raise and act on concerns about patient care, dignity and safety. It is separated into two parts. Part 1: Raising a concern gives advice on raising a concern that patients might be at risk of serious harm, and on the help and support available to you. Part 2: Acting on a concern explains your responsibilities when colleagues or others raise concerns with you and how those concerns should be handled	English	Free	
6.1 Patient safety incident reporting and learning systems	A guide for health professionals on how to report a doctor to the GMC	https://www.gmc-uk.org/-/media/documents/Do	Guidance	General Medical Council	This booklet gives doctors, medical directors, clinical governance managers and other health professionals advice on what action they should take if they have concerns about a doctor.	English	Free	
6.1 Patient safety incident reporting and learning systems	When Things Go Wrong: Responding to Adverse Events	http://www.macoalition.org/documents/respons	Guidance	Harvard Hospitals	This consensus statement examines the potential benefits and risks of an institutional response quite different from what most hospitals choose today. It focuses on rapid and open disclosure and emotional support to patients and families who experience serious incidents. It also addresses ways to support and educate clinicians involved in such incidents and outlines the administrative components of a comprehensive institutional policy. The purpose of the document is to codify agreement on principles that individual hospitals will use to develop specific institutional policies to implement them.	English	Free	4.2, 4.4, 4.5
6.1 Patient safety incident reporting and learning systems	RCA2: Improving Root Cause Analyses and Actions to Prevent Harm	http://www.ihi.org/resources/Pages/Tools/RCA2	Guidance	IHI	The purpose of this document is to ensure that efforts undertaken in performing RCA2 will result in the identification and implementation of sustainable systems-based improvements that make patient care safer in settings across the continuum of care. The approach is two-pronged: Identify methodologies and techniques that will lead to more effective and efficient RCA2 Provide tools to evaluate individual RCA2 reviews so that significant flaws can be identified and remediated to achieve the ultimate objective of improving patient safety	English	Free	
6.1 Patient safety incident reporting and learning systems	Minimal Information Model for Patient Safety Incident Reporting and Learning Systems	https://apps.who.int/iris/handle/10665/255642	Guidance	WHO	The purpose of the MIM PS is to provide a list of information categories that should be collected as a minimum, when reporting an adverse event. The reason for this is that adverse event reporting is nowadays increasingly seen, in the patient safety community, as a tool not only for assessing the patient safety situation at any one point in time, but also to contribute to sharing anonymous safety incident information with others, in a mutually understandable format, as part of a continuous learning process, in order to encourage to policy change.	English, Portuguese	Free	
6.1 Patient safety incident reporting and learning systems	WHO Draft Guidelines for Adverse Event Reporting and Learning Systems	https://apps.who.int/iris/bitstream/handle/1066	Guidelines	WHO	The objective of these draft guidelines is to facilitate the improvement or develop- ment of reporting systems that receive information that can be used to improve patient safety. The target audience is countries, which may select, adapt or otherwise modify the recommendations to enhance reporting in their specific environments and for their specific purposes.	English	Free	
6.1 Patient safety incident reporting and learning systems	WHO Inter-regional Consultation on Patient Safety Incident Reporting and Learning Systems in Africa and the Asia Pacific Regions	http://apps.who.int/iris/bitstream/handle/1066	Meeting Report	WHO	The Inter-regional Consultation on Patient Safety Incident Reporting and Learning Systems in Africa and the Asia-Pacific Regions, was held on 22-24 March 2016 in Colombo, Sri Lanka. The lessons derived from this exercise were formulated into strategic recommendations to develop, implement, support and strengthen patient safety RLSs, as quality and safety surveillance tools and a source of shared knowledge for better care, which is foundational to patient safety strategies.	English	Free	7.4
6.1 Patient safety incident reporting and learning systems	Patient Safety: Rapid Assessment Methods for Estimating Hazards	https://www.who.int/patientsafety/activities/ra	Meeting Summary	WHO	The purpose of the meeting was to provide guidance and input towards the development of rapid assessment methodologies for estimating harm caused by the health care system. Particular attention was to be given to the development of tools for use in data-poor environments. A balance was to be sought between robustness of scientific method and the need for urgent assessment and action on vital patient safety issues. This report and the recommendations of the Working Group meeting were to be targeted at policy and decision-makers, at national and international level, who are not necessarily experts in the field of patient safety.	English	Free	6.5
6.1 Patient safety incident reporting and learning systems	Improving the Value of Patient Safety Reporting Systems	https://www.ahrq.gov/downloads/pub/advances	Paper	Agency for Health Research and Quality	We developed and implemented a Web-based PSRS and discuss in this paper the benefits, limitations, and challenges we encountered. First, we discuss the benefits of PSRS as part of a patient safety learning community. The remainder of the paper focuses on the challenges we faced that still need to be resolved to improve the value of reporting systems.	English	Free	
6.1 Patient safety incident reporting and learning systems	Sentinal Event Policy and Procedures	https://www.jointcommission.org/resources/pat	Policy	The Joint Commission	The Joint Commission adopted a formal Sentinal Event Policy in 1996 to help health care organizations that experience serious adverse events improve safety and learn from those sentinal events.	English	Free	
6.1 Patient safety incident reporting and learning systems	Reporting and Learning Systems	https://www.patientsafetyinstitute.ca/en/toolsR	Recommendation	Canadian Patient Safety Institute	Reporting systems (frequently referred to as reporting and learning systems) capture patient safety concerns, hazards and/or incidents and are meant to trigger action, facilitate communication, response, learning and improvement. Establishing a reporting system and processes to support it, including identifying and spreading learning, is foundational to patient safety and incident management and essential to advancing a patient safety culture.	English	Free	
6.1 Patient safety incident reporting and learning systems	Never Events for Hospital Care in Canada	https://www.patientsafetyinstitute.ca/en/toolsR	Report	Canadian Patient Safety Institute	This report represents the collective work of the National Patient Safety Consortium to identify, for the first time, a list of 15 never events for hospital care in Canada. Never events are patient safety incidents that result in serious patient harm or death and that are preventable using organizational checks and balances. Never events are not intended to reflect judgment, blame or provide a guarantee; rather, they represent a call-to-action to prevent their occurrence.	English	Free	
6.1 Patient safety incident reporting and learning systems	GP mythbuster 24: Reporting patient safety incidents to the National Reporting and Learning System (NRLS) for GP practices	https://www.cqc.org.uk/guidance-providers/gps/	Report	CQC	This mythbuster is about reporting patient safety incidents to the National Reporting and Learning System (NRLS). NRLS has introduced a referral eform. This allows the learning to be used in the practice's significant event analysis programme.	English	Free	3.5
6.1 Patient safety incident reporting and learning systems	NRLS Research and Development	https://www.imperial.ac.uk/media/imperial-colle	Report	NIHR Patient Safety Translational Research Centre at Imperial College London and Imperial College Healthcare NHS Trust	This report presents the findings of the NRLS Research and Development Programme conducted by the Patient Safety Translational Research Centre (PSTRC) and the Centre for Health Policy (CHP) at Imperial College London. It sets out the current state of affairs regarding patient safety incident reporting in the NHS, and specifies where the most pressing areas of concerns are, including thorough descriptions of the various incident reporting systems used in the NHS today. Furthermore it identifies areas for improvement in the overall landscape of incident reporting, and suggests how systems like the NRLS can capitalise on developments in technology.	English	Free	
6.1 Patient safety incident reporting and learning systems	The measurement and monitoring of safety	https://www.health.org.uk/sites/default/files/TI	Report	The Health Foundation	The aim of this report is to provide a framework and approach to measuring and monitoring safety in all relevant dimensions and facets. The report is based on review of safety literature, enquiries into safety practice in other industries, case studies of organisations, and discussions and interviews with a wide variety of people.	English	Free	6.3
6.1 Patient safety incident reporting and learning systems	Developing a reporting culture: Learning from close calls and hazardous conditions	https://www.jointcommission.org/-/media/tjc/d	Report	The Joint Commission	The Joint Commission recommends that organizational leaders take the following actions to increase trust, reporting and responsibility/ accountability of all staff in support of a safety culture with the ultimate goal to protect patients from harm.	English	Free	2.1
6.1 Patient safety incident reporting and learning systems	Reporting and learning systems for patient safety incidents across Europe	http://bunnegratsche.agenas.it/documents/Mon	Report	European Commission	This report presents the findings and recommendations of the reporting and learning systems (RLS) subgroup on reporting and learning systems for incidents in the Member States of the European Union.1 The remit of the subgroup was to provide a set of key findings and give recommendations to support the implementation of Council Recommendation 2009/C 151/02 regarding reporting and learning systems.	English	Free	
6.1 Patient safety incident reporting and learning systems	Patient safety incident reporting and learning systems: technical report and guidance	https://www.who.int/publications/i/item/97892	Report / Guidance	WHO	This document is to urge the readers to understand the purpose, strengths and limitations of patient safety incident reporting. Data derived from incident reports can be very valuable in understanding the scale and nature of harm arising from health care, provided that the properties of the data are reviewed carefully and conclusions are drawn with caution. This technical guidance will help the journey to a position where we can show patients and their families how we used this learning to give them care that is safe and dependable, every time they need it.	English, Portuguese	Free	
6.1 Patient safety incident reporting and learning systems	Patients' Safety: 2nd Round table on Reporting systems in health care	https://www.euro.who.int/__data/assets/pdf_fil	Round table Summary	WHO	The Second round table on reporting systems in health care, which was held in Bratislava, Slovakia, on the 28 and 29 November 2011, was an opportunity for representatives of the Czech Republic, Slovakia and Slovenia to monitor the progress made in the area of patient safety since the first round table a year earlier. Current issues and achievements were explored among others with regards to adverse events reporting systems and research in health related harm. The importance of patient engagement and education of healthcare workers on patient safety has been stressed again. The opportunities to tackle patient safety through integrated approaches were explored, while the importance of networking of all stakeholders nationally and internationally was recognized. A set of further recommendations was developed, including continuing to meet at patient safety round tables.	English	Free	
6.1 Patient safety incident reporting and learning systems	The Salzburg Statement on moving measurement into action: global principles for measuring patient safety.	https://www.salzburgglobal.org/fileadmin/user_	Statement	Salzburg Global	The conversations in Salzburg have helped establish eight global principles for the measurement of patient safety. They feature in a new Salzburg Statement on Moving Measurement into Action: Global Principles for Measuring Patient Safety, which Salzburg Global is launching alongside the IHI and the Lucian Leape Institute.	English	Free	
6.1 Patient safety incident reporting and learning systems	Reporting and Learning System	https://www.patientsafetyinstitute.ca/en/toolsR	Strategy	Canadian Patient Safety Institute	Strategies for reporting systems that capture patient safety concerns, hazards and/or incidents and are meant to trigger action, facilitate communication, response, learning and improvement. Establishing a reporting system and processes to support it, including identifying and spreading learning, is foundational to patient safety and incident management and essential to advancing a patient safety culture.	English	Free	
6.1 Patient safety incident reporting and learning systems	Before the Incident	https://www.patientsafetyinstitute.ca/en/toolsR	Strategy	Canadian Patient Safety Institute	Strategies for patient safety and incident management plans and processes proactively developed and in place, together with active monitoring, analyzing, prioritizing and implementing actions to mitigate risks and improve quality and safety, contribute to effective response to both expected and unexpected safety issues.	English	Free	
6.1 Patient safety incident reporting and learning systems	The Incident Decision Tree: Guidelines for Action Following Patient Safety Incidents	https://www.ahrq.gov/downloads/pub/advances	Tool	Agency for Health Research and Quality	The National Patient Safety Agency has developed the Incident Decision Tree to help National Health Service (NHS) managers in the United Kingdom determine a fair and consistent course of action toward staff involved in patient safety incidents. The Incident Decision Tree supports the aim of creating an open culture, where employees feel able to report patient safety incidents without undue fear of the consequences. The tool comprises an algorithm with accompanying guidelines and poses a series of structured questions to help managers decide whether suspension is essential or whether alternatives might be feasible.	English	Free	2.1
6.1 Patient safety incident reporting and learning systems	Self-Assessment Tool: A National Action Plan to Advance Patient Safety	https://ff.hubpoolcontent30.net/hubfs/2410	Tool	IHI	This self-assessment is complementary to the recommendations and tactics presented in Safer Together: A National Action Plan to Advance Patient Safety (National Action Plan) and the accompanying Implementation Resource Guide.1,2 The assessment is organized by the four interrelated foundational areas, described in the National Action Plan, for developing a total systems approach to advance patient safety: Culture, Leadership, and Governance; Patient and Family Engagement; Workforce Safety; and Learning System. The self-assessment questions represent a selection and synthesis of elements detailed in the complete National Action Plan and may, therefore, provide a partial representation of the current state of an organization's patient safety efforts.	English	Free	
6.1 Patient safety incident reporting and learning systems	Patient Reported Outcome Measures (PROMs)	https://digital.nhs.uk/data-and-information/data	Webpage	NHS	Patient Reported Outcome Measures (PROMs) measure health gain in patients undergoing hip replacement, knee replacement and up to September 2017, varicose vein and groin hernia surgery in England, based on responses to questionnaires before and after surgery. This provides an indication of the outcomes or quality of care delivered to NHS patients and has been collected by all providers of NHS-funded care since April 2009.	English	Free	4.1, 4.2, 6.5
6.1 Patient safety incident reporting and learning systems	Patient Safety Authority	http://patientsafety.pa.gov/pst/Pages/Good_Cat	Webpage Guidance	Pennsylvania Patient Safety Authority	Following aggregate event analysis and facility interviews, the Pennsylvania Patient Safety Authority concluded that good catch programs can help hospitals more effectively analyze reported data and implement risk reduction strategies. Additionally, using a Good Catch Comparison report available through the Authority's Patient Safety Liaisons can identify facility-specific event types or care areas that are reporting above or below aggregate peer rates, potentially highlighting successful practices or targets for improvement efforts.	English	Free	5.3
6.1 Patient safety incident reporting and learning systems	Pennsylvania Patient Safety Reporting System (PA-PSRS)	http://patientsafety.pa.gov/PA-PSRS/Pages/PAPS	Webpage Report	Pennsylvania Patient Safety Authority	The Pennsylvania Patient Safety Authority developed the Pennsylvania Patient Safety Reporting System, a secure, web-based system that permits healthcare facilities to submit reports of what Act 13 of 2002, Act 30 of 2006 and Act 52 of 2007 defines as "Serious Events" and "Incidents."	English	Free	
6.1 Patient safety incident reporting and learning systems	From Safety-I to Safety-II: A White Paper	https://www.england.nhs.uk/signuptosafety/wp-	White paper	NHS	Most people think of safety as the absence of accidents and incidents (or as an acceptable level of risk). In this perspective, which we term Safety-I, safety is defined as a state where as few things as possible go wrong. Safety management should move from ensuring that 'as few things as possible go wrong' to ensuring that 'as many things as possible go right'. We call this perspective Safety-II; it relates to the system's ability to succeed under varying conditions. A Safety-II approach assumes that everyday performance variability provides the adaptations that are needed to respond to varying conditions, and hence is the reason why things go right. The way forward relies on combining safety-I and safety-II.	English	Free	
6.2 Patient safety information systems	Conceptual framework for the international classification for patient safety	https:// www.who.int/patientsafety/taxonomy/i	Framework	WHO	The purpose of the International Classification for Patient Safety is to enable categorization of patient safety information using standardized sets of concepts with agreed definitions, preferred terms and the relationships between them being based on an explicit domain ontology (e.g., patient safety). The ICPS is designed to be a genuine convergence of international perceptions of the main issues related to patient safety and to facilitate the description, comparison, measurement, monitoring, analysis and interpretation of information to improve patient care.1	English	Free	
6.2 Patient safety information systems	Annual Report 2019-20	https://www.safetyandquality.gov.au/sites/defa	Report	Australian Commission on Safety and Quality in Healthcare	Our purpose is to contribute to better health outcomes and experiences for all patients and consumers, and improved value and sustainability in the health system by leading and coordinating national improvements in the safety and quality of health care. Within this overarching purpose, the Commission aims to ensure that people are kept safe when they receive health care and that they receive the care they should.	English	Free	
6.2 Patient safety information systems	Canadian Patient Safety Institute 2019-2020 Annual Report	https://annualreport.patientsafetyinstitute.ca/e	Report	Canadian Patient Safety Institute	We are pleased to report on the progress we have made to inspire and advance a culture committed to sustained improvement for safer healthcare. In this Annual Report, you will learn more about our public engagement strategy that builds urgency and calls to action to improve safety in healthcare, while providing the public with tools and resources to keep them safe. We report on the progress of our four Safety Improvement Projects, and we provide a snapshot of the many significant activities undertaken over the past year that have impacted policy and strengthened alliances and networks.	English	Free	
6.2 Patient safety information systems	Annual Patient Safety Report 2018 - Leicester's Hospitals	https://www.google.com/url?sa=t&rct=j&q=&esr	Report	Leicster Hospital	Annual report of patient safety incidents in Leicster hospitals	English	Free	
6.2 Patient safety information systems	National Patient Safety Agency - Annual Report and Accounts 2008/09	https://assets.publishing.service.gov.uk/governm	Report	National Patient Safety Agency	The National Patient Safety Agency (NPSA) has worked with the wider NHS to understand and support its ever-changing needs and become a more responsive and agile organisation. This is the annual report of is work, covering the national reportings nd learnign service, national clinical assessment service and national research ethics service.	English	Free	
6.2 Patient safety information systems	Annual progress report for the NHS Patient Safety Strateev: vear one	https://www.england.nhs.uk/wp-content/uploa	Report	NHS	An annual report of 2019/20 on patient safety, categorised as safety system and safety culture, inginhgt, involvement and improvement.	English	Free	
6.2 Patient safety information systems	Data and Analysis of Data on Patient Safety within the OECD Health Care Quality Indicators Project (OECD-PS)	https://ec.europa.eu/chafea/health/documents/	Report	OECD	The OECD established a set of international patient safety indicators and has regularly collected data from member states over the past decade. Over this period the OECD has undertaken ongoing research and methodological development of these indicators to improve the robustness of the indicators for international comparison. This Action is taken within the context of the OECD's ongoing R&D program of work on patient safety. The general objective of the Action is to improve the 'actionability' of the international patient safety indicators of the OECD across EU and OECD member states, including a focus on expanding the scope, uptake and use of these indicators.	English	Free	
6.2 Patient safety information systems	Patient Safety Reporting Program 2018 Annual Report	https://oregonpatientsafety.org/docs/psrp/PSRP	Report	Oregon Patient Safety Commission	In 2018, Oregon healthcare organizations—ambulatory surgery centers (ASCs), hospitals, nursing facilities, and community pharmacies—voluntarily contributed 339 adverse event reports to PSRP for learning. Through the information that healthcare organizations submitted to PSRP and through their evaluation of research in the field of patient safety, they have identified key lessons ina adverse event reporting.	English	Free	
6.2 Patient safety information systems	Patient Safety Annual Report 2017	http://www.oxfordahsn.org/wp-content/upload	Report	Oxford Academic Health Science Network	The Oxford AHSN has highlighted and embedded safety across many of its region-wide projects; more than 30 programmes address safety issues across multiple clinical contexts. Safety needs to be addressed differently in different clinical contexts, and our approach needs to evolve as our healthcare systems address new challenges. In the following pages, we describe a range of physical and mental health patient safety improvement programmes spanning hospitals, the community and care in the home.	English	Free	
6.2 Patient safety information systems	Introduction to the Toolkit for Using the AHRQ Quality Indicators: How To Improve Hospital Quality and Safety	https://www.ahrq.gov/sites/default/files/wysiwy	Toolkit	Agency for Health Research and Quality	The Toolkit for Using the AHRQ Quality Indicators (QI Toolkit) is a set of tools available free of charge. The QI Toolkit is designed to support hospitals in assessing and improving the quality and safety of care they provide. Because hospitals vary in the extent to which they have existing quality improvement processes in place, the QI Toolkit is designed as a flexible, modifiable set of tools that can be selected according to your hospital's needs	English	Free	
6.3 Patient safety surveillance systems	Serious Incident Framework	https://www.england.nhs.uk/wp-content/uploa	Framework	NHS	The Framework seeks to support the NHS to ensure that robust systems are in place for reporting, investigating and responding to serious incidents so that lessons are learned and appropriate action taken to prevent future harm. The Framework describes the process for undertaking systems-based investigations that explore the problem (what?), the contributing factors to such problems (how?) and the root cause(s)/fundamental issues (why?).	English	Free	2.4, 4.1
6.3 Patient safety surveillance systems	Module 7. Measuring and Benchmarking Clinical Performance	https://www.ahrq.gov/hcqrsr/tools/ql-handbook	Module	Agency for Health Research and Quality	Performance measurement involves collecting and reporting data on practices' clinical processes and outcomes. Measuring clinical performance can create buy-in for improvement work in the practice and enables the practice to track their improvements over time. This information should also be used to identify and prioritize improvement goals and to track progress toward those goals. In addition, these data should be used to monitor maintenance of changes already made.	English	Free	
6.3 Patient safety surveillance systems	A Process-centered Tool for Evaluating Patient Safety Performance and Guiding Strategic Improvement	https://www.ahrq.gov/downloads/pub/advances	Report	Association for Health Research and Quality	This paper presents a patient safety applicator tool for implementing and assessing patient safety systems in health care institutions. The applicator tool consists of critical processes and performance measures identified in the context of the 2003 Malcolm Baldrige National Quality Award (MBNQA) Health Care Criteria for Performance Excellence.	English	Free	

6.3 Patient safety surveillance systems	International review of patient safety surveillance systems January2016Safer Better Care	https://www.gov.ie/pdf/?file=https://assets.gov	Report	Health Information and Quality Authority	In summary, this international review highlights the considerable variation in place across countries in relation to patient safety reporting. It is clear however,that the coordination and triangulation of patient safety intelligence for risk profiling is extremely important. Incidents need to be combined with other quality and patient safety sources of information. In Ireland, as highlighted by the CMO, there is currently no single agency or body with overall line of sight at a national level in relation to the coordination of patient safety intelligence.	English	Free	
6.3 Patient safety surveillance systems	Root Cause Analysis: Responding to a Sentinel Event	https://www.nursingcenter.com/ce_articleprint?	Report	Lipincott Nursing Center	Adverse events, including sentinel events, require comprehensive review to improve patient safety and reduce healthcare errors. Root cause analysis (RCA) provides an evidence-based structure for methodical investigation and comprehensive review of an event enabling appropriate identification of opportunities for improvement. Use of RCA is described in the home care setting.	English	Free	
6.3 Patient safety surveillance systems	Understanding benchmarking: RCN guidance for nursing staff working with children and young people	https://www.rcn.org.uk/professional-developme	Report	Royal College of Nursing	This Royal College of Nursing (RCN) document explains how benchmarking can support the development of best practice, and how you can develop benchmarks for your area of clinical practice. This guidance is aimed at nursing staff working with children and young people.	English	Free	
6.3 Patient safety surveillance systems	Safety Culture Assessment: Improving the Survey Process	https://www.jointcommission.org/-/media/tjc/d	Tool	The Joint Commission	The Joint Commission urges organizations to establish a safety culture that fosters trust in reporting unsafe conditions to ensure high-quality patient care. A project recently completed by The Joint Commission addressed how to improve the assessment of safety culture during survey.	English	Free	6.1
6.4 Patient safety research programmes	Patient safety research: a guide for developing training programmes	https://apps.who.int/iris/bitstream/handle/1066	Guidance	WHO	This guide is a comprehensive document that provides guidance to educators for the development of training programmes in this important, but less well-known, field of research. This guide addresses research for change or research for improvement – a form of translational and applied research that seeks to improve patient safety based on sound methodology.	English	Free	
6.4 Patient safety research programmes	Global Priorities for Patient Safety Research: Better Knowledge for Safer Care	https://apps.who.int/iris/bitstream/handle/1066	Guidance	WHO	WHO Patient Safety brought together a working group of research experts from around the world to focus on identifying research priorities in developing, transitional and developed countries. This work, published in May 2009, provides a crucial focus and starting point for global research into patient safety. The identification of these priorities enables a more collaborative global approach, finding solutions that can be applied in different countries and thus avoiding duplication of research. Although priorities differ in different parts of the world, there is considerable overlap in priorities between developing countries and countries in transition.	English	Free	
6.4 Patient safety research programmes	Patient safety assessment manual, second edition	https://apps.who.int/iris/handle/10665/249568	Manual	WHO	The Patient safety assessment manual is a component of the WHO Patient Safety Friendly Hospital Initiative. The manual integrates different standards that are directly related to the recommended WHO patient safety interventions and challenges. These standards cover five patient safety domains: leadership and management, patient and public involvement, safe evidence-based clinical practices, safe environment and lifelong learning. The manual is intended to provide health care professionals with practical guidance on how to identify patient safety gaps at the hospital level.	English	Free	
6.4 Patient safety research programmes	Summary of the Evidence on Patient Safety: Implications for Research	https://apps.who.int/iris/bitstream/handle/1066	Report	WHO	The aim of the report was to summarize existing research on patient safety and to set priorities on that basis. The group identified specific clinical outcomes (such as health care-associated infections), underlying structural problems (such as lack of a trained workforce) and procedural mechanisms (such as poor communication between clinicians) that contribute to unsafe care. On the basis of the epidemiology of patient safety and expert opinion, the group identified 23 topics that have a substantial impact on the safety of medical care and asked experts to describe how each issue affects patient safety.	English	Free	
6.4 Patient safety research programmes	Centre for Quality Improvement & Patient Safety	https://cquips.ca	Webpage	Centre for Quality Improvement & Patient Safety	The webpage of the centre for quality improvement and patient safety	English	Free	
6.4 Patient safety research programmes	Center for Patient Safety Research (Columbia)	https://www.aprmed.columbia.edu/research/re	Webpage	Columbia University	Webpage of the Center for Patient Safety Research at Columbia University	English	Free	
6.4 Patient safety research programmes	High Quality and Safe Care - Wolfson Centre for Applied Health Research	https://wolfsoncahr.uk/research/safety/	Webpage	High Quality and Safe Care - Wolfson Centre for Applied Health Research	The webpagef the high quality and safe care research group within the Wolfson Centre for Applied Health Research	English	Free	
6.4 Patient safety research programmes	Armstrong Institute for Patient Safety and Quality	https://www.hopkinsmedicine.org/armstrong_in	Webpage	Hopkins Medicine	Webpage of the Armstrong Institute at Johns Hopkins	English	Free	
6.4 Patient safety research programmes	NIHR Patient Safety Translational Research Centre	https://www.imperial.ac.uk/patient-safety-trans	Webpage	Imperial College London	The webpge of the NIHR Patient Safety Translational Research Centre at Imperial College	English	Free	
6.4 Patient safety research programmes	NIHR King's Patient Safety and Service Quality Research Centre	https://www.kcl.ac.uk/lsm/research/divisions/wi	Webpage	King's College London	The webpage of the NIHR King's Patient Safety and Service Quality Research Centre at King's College London	English	Free	
6.4 Patient safety research programmes	NIHR Greater Manchester Patient Safety Translational Research Centre (Greater Manchester PSTRC)	http://www.patientsafety.manchester.ac.uk	Webpage	The University of Manchester	The webpage of the NIHR Patient Safety Translational Research Centre at the university of Manchester.	English	Free	5.1
6.5 Digital technology for patient safety	Plan of Action for Strengthening Information Systems for Health 2019-2023	https://iris.paho.org/handle/10665.2/51617	Action plan	WHO	This document presents the Plan of Action for Strengthening Information Systems for Health 2019-2023, which contains strategic lines of action and tools to support implementation of the 2030 Agenda for Sustainable Development. Its purpose, moreover, is to help health institutions in the Member States to advance toward meeting the targets of the Sustainable Health Agenda for the Americas 2018-2030 , especially targets 6.1 and 6.2, in alignment with other government initiatives such as open government and e-government	English, Portuguese, Spanish, French	Free	
6.5 Digital technology for patient safety	Health IT and Patient Safety: Building Safer Systems for Better Care	https://www.nap.edu/catalog/11269/health-it-a	Book	Institute of Medicine	IOM's 1999 landmark study To Err is Human estimated that between 44,000 and 98,000 lives are lost every year due to medical errors. This call to action has led to a number of efforts to reduce errors and provide safe and effective health care. Information technology (IT) has been identified as a way to enhance the safety and effectiveness of care. In an effort to catalyze its implementation, the U.S. government has invested billions of dollars toward the development and meaningful use of effective health IT.	English	38.99 - 48 dollars	
6.5 Digital technology for patient safety	A Framework for Selecting Digital Health Technology	http://www.ihi.org/resources/Pages/Publications	Framework	Institute of Healthcare Improvement	The intent of this 30-day IHI Innovation Project, conducted in the summer of 2013, was to scan for health technology innovations that will provide the greatest value to health systems working to achieve the IHI Triple Aim. The Triple Aim is a framework developed by the Institute for Healthcare Improvement (IHI) that describes an approach to optimizing health system performance to improve the health of populations. IHI advocates for delivery innovation to be aligned with the three dimensions of the Triple Aim: 1) improving the patient experience of care; 2) improving the health of populations; and 3) reducing the per capita cost of health care.	English	Free	
6.5 Digital technology for patient safety	Improvement Leaders' Guide Technology to improve service	https://www.england.nhs.uk/improvement-hub/	Guidance	NHS	This guide is a practical approach to enabling technology to be used to benefit your patients, your colleagues and you. This guide is for anyone in the NHS or social care who would like toimprove services and care for users and patients.	English	Free	
6.5 Digital technology for patient safety	Safely implementing health information and converging technologies	https://www.jointcommission.org/-/media/tjc/d	Guidance	The Joint Commission	The overall safety and effectiveness of technology in health care ultimately depend on its human users, ideally working in close concert with properly designed and installed electronic systems. Any form of technology may adversely affect the quality and safety of care if it is designed or implemented improperly or is misinterpreted. Not only must the technology or device be designed to be safe, it must also be operated safely within a safe workflow process. This provides guidance on how to address this.	English	Free	
6.5 Digital technology for patient safety	Safe use of health information technology	https://www.jointcommission.org/-/media/tjc/d	Guidance	The Joint Commission	This alert builds upon Sentinel Event Alert #42 on safely implementing health information and converging technologies (published in 2008) to take a broader look at health IT, particularly the socio-technical factors having an impact on its safe use. This alert's suggested actions center on safety culture, process improvement and leadership.	English	Free	
6.5 Digital technology for patient safety	Ethics and governance of artificial intelligence for health	https://www.who.int/publications/i/item/97892	Guidance	WHO	The report identifies the ethical challenges and risks with the use of artificial intelligence of health, six consensus principles to ensure AI works to the public benefit of all countries. It also contains a set of recommendations that can ensure the governance of artificial intelligence for health maximizes the promise of the technology and holds all stakeholders – in the public and private sector – accountable and responsive to the healthcare workers who will rely on these technologies and the communities and individuals whose health will be affected by its use.	English	Free	
6.5 Digital technology for patient safety	SAFER Guides	https://www.healthit.gov/topics/safety/safer-gui	Guide	The Office of the National Coordinator for Health Information Technology	The SAFER Guides consist of nine guides organized into three broad groups. These guides enable healthcare organizations to address EHR safety in a variety of areas.The guides identify recommended practices to optimize the safety and safe use of EHRs. The content of the guides can be explored here, at the links below, or interactive PDF versions of the guides can be downloaded and completed locally for self-assessment of an organization's degree of conformance to the Recommended Practices. T	English	Free	
6.5 Digital technology for patient safety	Electronic Health Records: Manual for Developing Countries	http://apps.who.int/iris/bitstream/handle/1066	Manual	WHO	This manual has been designed as a basic reference for use when exploring the development and implementation of Electronic Health Record (EHR) systems. It provides a general overview, some basic definitions and examples of EHR practices. Also covered are points for consideration when moving towards the introduction of an EHR, some issues and challenges which may need to be addressed and some possible strategies, along with steps and activities to implementation. There is a particular focus on setting goals, revising policies, developing an action plan and outlining implementation procedures.	English	Free	
6.5 Digital technology for patient safety	Electronic Health Record Systems: Definitions, Evidence, and Practical Recommendations for Latin America and the Caribbean	https://publications.iadb.org/en/electronic-heal	Recommendations	Inter-American Development Bank	This document uses the available evidence to provide policy makers and other stakeholders with general insights about EHR systems. The first section summarizes the potential and promise of EHR systems for LAC, the second section reviews definitions of EHR systems and their key functionalities, the third section provides an overview of the impacts of EHR systems based on the existing evidence, the fourth section describes the key challenges related to implementing EHR systems, and the fifth section proposes practical recommendations to support successful implementations of EHR systems at scale in LAC.	English, Spanish	Free	
6.5 Digital technology for patient safety	Technology in the NHS: Transforming the patient's experience of care	https://www.kingsfund.org.uk/sites/default/files	Report	The King's Fund	This review builds on current work in this area and aims to improve the uptake of useful consumer-facing technology in health care by analysing the main barriers to adoption and suggesting measures to overcome them. We begin by describing an 'ideal scenario' for the use of health care technology and reviewing the conditions likely to be most favourable for the adoption of technology. Chapter 3 of the report analyses the factors that influence the adoption of technology, and Chapter 4 goes on to identify the most important barriers to adoption. Chapter 5 sets out our recommendations for overcoming these barriers and improving the adoption of technology.	English	Free	4.1
6.5 Digital technology for patient safety	Management of Patient Information: Trends and Challenges in Member States	https://apps.who.int/iris/bitstream/handle/1066	Report	WHO	This, the final report in the Global Observatory for eHealth Series, assesses the results of the survey module that dealt with the patient information. It examines the adoption and use of patient information systems in Member States and reviews data standards and legal protection for patient data. The survey results – provided by WHO region, World Bank income group, and globally – showed that electronic information systems are being increasingly adopted within health settings. The report concludes with an overview of steps Member States can take to facilitate the implementation of patient information systems.	English	Free	
6.5 Digital technology for patient safety	Global strategy on digital health 2020-2025	https://www.who.int/docs/default-source/docu	Strategy	WHO	The global strategy on digital health builds on resolutions adopted by the United Nations General Assembly and the World Health Assembly,3 related WHO global and regional reports, regional strategies, the two-part report of the ISO Technical Committee on Health Informatics on eHealth architecture, the resolution on ICD-11 and the WHO Family of international classifications and terminologies, the three-part National eHealth strategy toolkit, Member States' current digital health situation and status, actions, strategies, policies and investments, and recommendations of various United Nations panels on digital and innovation topics.	English	Free	
6.5 Digital technology for patient safety	Future of digital health systems: report on the WHO symposium on the future of digital health systems in the European Region (Copenhagen, Denmark, 6–8	https://www.euro.who.int/en/health-topics/Hea	Symposium Report	WHO	The aim of this Symposium was to develop priorities for public health action to accelerate the adoption of digital health in countries and to help to develop a European roadmap for the digitalization of national health systems by sharing country experiences and exploring how digital health and emerging innovations are used to strengthen national health systems.	English, Polish	Free	
6.5 Digital technology for patient safety	National e-health Strategy Toolkit	http://apps.who.int/iris/bitstream/handle/1066	Toolkit	WHO	The Toolkit provides a framework and method for the development of a national eHealth vision, action plan and monitoring framework. It is a resource that can be applied by all governments that are developing or revitalizing a national eHealth strategy, whatever their current level of eHealth advancement. It is a practical, comprehensive, step-by-step guide, directed chiefly towards the most relevant government departments and agencies, particularly ministries of health and ministries of information technology and communication.	English, Arabic	Free	
6.5 Digital technology for patient safety	Video: Safe use of Health Information Technology	https://www.jointcommission.org/resources/pa	Webinar	The Joint Commission	This is a webinar, held by the Joint Commission, which builds upon Sentinel Event Alert 56: Safe Use of Health Information Technology	English	Free	
6.5 Digital technology for patient safety	Harnessing technology and innovation	https://www.england.nhs.uk/five-year-forward-v	Webpage	NHS	The major work programmes mapped out in this Plan are underpinned by an agreed, costed and phased NHS technology plan, building on the recommendations of the Wachter review. It will simplify patient access to care, in the most appropriate location, while supporting people in managing their own health.	English	Free	
6.5 Digital technology for patient safety	Health IT Feedback and Inquiry Portal	https://inquiry.healthit.gov/support/plugins/serv	Website	The Office of the National Coordinator for Health Information Technology	This website compiles evidence, tools, and case examples to help prepare organizations for problems associated with implementation and use of electronic health records.	English	Free	