

# Learning from practice

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## Introduction

Critical incident reporting is an important part of monitoring safety and learning from events. There are multiple tools available for reviewing adverse events and analysing causation before taking action.

## Purpose

To provide resources that support active reflection on events, by complaint and adverse event analysis, mortality and morbidity meetings, case note review and prospective hazard analysis.

To provide templates and resources to allow a structured approach to safety.

Objective 1	Action	Evidence and Resources
<p><b>To understand incident reporting and analysis.</b></p>	<p>It is important to understand the barriers and incentives to incident reporting as well as appreciate the strategies that can be used to increase the number of reports submitted.</p>	<p><b>Barriers and overcoming them:</b></p> <p><b>Creating an Infrastructure for Safety Event Reporting and Analysis in a Multicenter Pediatric Emergency Department Network</b> J Chamberlain <i>Pediatr Emerg Care</i>. 2013 Feb;29(2):125-30.  <a href="http://www.ncbi.nlm.nih.gov/pubmed/23364372">http://www.ncbi.nlm.nih.gov/pubmed/23364372</a></p> <p><b>Can incident reporting improve safety? Healthcare practitioners' views of the effectiveness of incident reporting.</b> J Anderson <i>Int J Qual Health Care</i>. 2013 Apr;25(2):141-50.  <a href="http://intqhc.oxfordjournals.org/content/early/2013/01/17/intqhc.mzs081.abstract">http://intqhc.oxfordjournals.org/content/early/2013/01/17/intqhc.mzs081.abstract</a></p> <p><b>Interventions to increase clinical incident reporting in health care.</b> E Parmelli. <i>Cochrane Database Syst Rev</i>. 2012 Aug 15;8:CD005609.  <a href="http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005609/abstract">http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005609/abstract</a></p> <p><b>Critical incident reporting and learning.</b> Mahajan RP. <i>Br J Anaesth</i>. 2010 Jul;105(1):69-75.  <a href="http://bja.oxfordjournals.org/content/105/5/698.1.full">http://bja.oxfordjournals.org/content/105/5/698.1.full</a></p> <p><b>Improving patient safety incident reporting systems by focusing upon feedback - lessons from English and Welsh Trusts.</b> L Wallace <i>Health Serv Manage Res</i>. 2009 Aug;22(3):129-35  <a href="http://www.ncbi.nlm.nih.gov/pubmed/19633181">http://www.ncbi.nlm.nih.gov/pubmed/19633181</a></p>

Objective 1	Action	Evidence and Resources
<b>continued</b>		<p><b>Feedback from incident reporting: information and action to improve patient safety.</b> J Benn et al. Qual Saf Health Care. 2009 Feb;18(1):11-21  <a href="http://qualitysafety.bmj.com/content/18/1/11.abstract">http://qualitysafety.bmj.com/content/18/1/11.abstract</a></p> <p><b>Trends in healthcare incident reporting and relationship to safety and quality data in acute hospitals: results from the National Reporting and Learning System.</b> A Hutchinson. Qual Saf Health Care. 2009 Feb;18(1):5-10  <a href="http://www.ncbi.nlm.nih.gov/pubmed/19204125">http://www.ncbi.nlm.nih.gov/pubmed/19204125</a></p> <p><b>Development of an evidence-based framework of factors contributing to patient safety incidents in hospital settings: a systematic review.</b> Rebecca Lawton et al. BMJ Qual Saf 2012 21:369-380  <a href="http://qualitysafety.bmj.com/content/early/2012/03/14/bmjqs-2011-000443.full">http://qualitysafety.bmj.com/content/early/2012/03/14/bmjqs-2011-000443.full</a></p> <p><i>A scoping study which identifies how the effective use of design could help to reduce medical accidents.</i>  <b>Engineering Design Centre, Design for Patient Safety</b>  <a href="http://www-edc.eng.cam.ac.uk">http://www-edc.eng.cam.ac.uk</a></p>
Objective 2	Action	Evidence and Resources
<p><b>To understand the selection of processes for investigation and analysis of an event.</b></p>	<p>Incident analysis is more than just collecting information – appropriate reflection, analysis of events and team discussion of what the department was like at the time is crucial to understand why and what happened and therefore how the risk of recurrence can be reduced.</p>	<p><b>NHS Patient Safety Resources, Root cause analysis information and evaluation</b>  <a href="http://www.nrls.npsa.nhs.uk/resources/?entryid45=75602&amp;q=0%c2%acroot+cause+analysis%c2%ac">http://www.nrls.npsa.nhs.uk/resources/?entryid45=75602&amp;q=0%c2%acroot+cause+analysis%c2%ac</a></p> <p><b>Training health care professionals in root cause analysis: a cross-sectional study of post-training experiences, benefits and attitudes.</b> P Bowie et al BMC Health Serv Res. 2013 Feb 7;13:50  <a href="http://www.biomedcentral.com/1472-6963/13/50">http://www.biomedcentral.com/1472-6963/13/50</a></p> <p><b>Experiences of health professionals who conducted root cause analyses after undergoing a safety improvement programme.</b> J Braithwaite Qual Saf Health Care. 2006 Dec;15(6):393-9.  <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2464895/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2464895/</a></p> <p><b>Survey evaluation of the National Patient Safety Agency's Root Cause Analysis training programme in England and Wales: knowledge, beliefs and reported practices.</b> L Wallace Et al. Qual Saf Health Care. 2009 Aug;18(4):288-91  <a href="http://qualitysafety.bmj.com/content/18/4/288.abstract">http://qualitysafety.bmj.com/content/18/4/288.abstract</a></p>

Objective 2	Action	Evidence and Resources
<b>continued</b>		<p data-bbox="788 150 2132 242"><b>Imperial College London, The London Protocol</b>  <a href="http://www1.imperial.ac.uk/medicine/about/institutes/patientsafetyservicequality/cpsq_publications/resources_tools/the_london_protocol/">http://www1.imperial.ac.uk/medicine/about/institutes/patientsafetyservicequality/cpsq_publications/resources_tools/the_london_protocol/</a></p> <p data-bbox="788 280 1962 373"><b>Framework for analysing risk and safety in clinical medicine.</b> C Vincent et al. BMJ. 1998 Apr 11;316(7138):1154-7  <a href="http://www.bmj.com/content/316/7138/1154">http://www.bmj.com/content/316/7138/1154</a></p> <p data-bbox="788 411 2101 504"><b>How to investigate and analyse clinical incidents: clinical risk unit and association of litigation and risk management protocol.</b> C Vincent et al. BMJ. 2000 Mar 18;320(7237):777-81.  <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1117773/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1117773/</a></p> <p data-bbox="788 542 2136 635"><b>Analysis of clinical incidents: a window on the system not a search for root causes.</b> Vincent CA. Qual Saf Health Care. 2004 Aug;13(4):242-3.  <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1743862/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1743862/</a></p> <p data-bbox="788 673 2105 766"><b>Beyond FMEA: The structured what-if technique (SWIFT)</b> AJ Card et al. American Society for Healthcare Risk Management 2012 vol 31, number 4, pp 23-29  <a href="http://onlinelibrary.wiley.com/doi/10.1002/jhrm.20101/pdf">http://onlinelibrary.wiley.com/doi/10.1002/jhrm.20101/pdf</a></p>
Objective 3	Action	Evidence and Resources
<b>To appreciate the utilisation of routine audit or M&amp;M meetings to identify risk and reduce hazards.</b>	These can be a useful way of monitoring the care of critically ill patients or sentinel conditions.	<p data-bbox="788 852 2042 944"><b>Mortality and morbidity meetings: an untapped resource for improving the governance of patient safety?</b> Higginson J, Walters R, Fulop N. BMJ Qual Saf (2012).  <a href="http://qualitysafety.bmj.com/content/21/7/576.full">http://qualitysafety.bmj.com/content/21/7/576.full</a></p> <p data-bbox="788 983 1966 1040"><b>The normalization of deviance in healthcare delivery.</b> John Banja Bus Horiz. 2010; 53(2): 139.  <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2821100/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2821100/</a></p> <p data-bbox="788 1078 2136 1171"><b>Medication safety: using incident data analysis and clinical focus groups to inform educational needs.</b> H Hesselgreaves. J Eval Clin Pract. 2013 Feb;19(1):30-8  <a href="http://www.ncbi.nlm.nih.gov/pubmed/22070161">http://www.ncbi.nlm.nih.gov/pubmed/22070161</a></p> <p data-bbox="788 1209 2101 1302"><b>One model of healthcare provision lessons learnt through clinical governance.</b> V Webb J Forensic Leg Med. 2010 Oct;17(7):368-73  <a href="http://www.ncbi.nlm.nih.gov/pubmed/20851355">http://www.ncbi.nlm.nih.gov/pubmed/20851355</a></p>

Objective 3	Action	Evidence and Resources
<b>continued</b>		<p><b>Prevention of medication errors: detection and audit.</b> Montesi G, Lechi A. Br J Clin Pharmacol. 2009 Jun;67(6):651-5  <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2723204/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2723204/</a></p> <p><b>Morbidity and mortality conferences:</b> Their educational role and why we should be there. Epstein NE. Surg Neurol Int. 2012;3(Suppl 5):S377-88  <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3520073/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3520073/</a></p>
Objective 4	Action	Evidence and Resources
<b>To understand how case note review can be used to identify errors or harm.</b>	Routine small scale review of notes can demonstrate recurrent, and often hidden, errors or risks to safety.	<p><b>Evidence that errors are detectable by routine review</b></p> <p><b>Preventable deaths due to problems in care in English acute hospitals: a retrospective case record review study.</b> H Hogan et al BMJ Qual Saf. 2012 Sep;21(9):737-45.  <a href="http://qualitysafety.bmj.com/content/early/2012/07/06/bmjqs-2012-001159.full">http://qualitysafety.bmj.com/content/early/2012/07/06/bmjqs-2012-001159.full</a></p> <p><b>To what extent are adverse events found in patient records reported by patients and healthcare professionals via complaints, claims and incident reports?</b> I Christiaaans-Dingelhoff et al. BMC Health Serv Res. 2011 Feb 28;11:49  <a href="http://www.biomedcentral.com/1472-6963/11/49">http://www.biomedcentral.com/1472-6963/11/49</a></p>
Objective 5	Action	Evidence and Resources
<b>To understand the purpose of prospective hazard analysis in reducing risk.</b>	Analysing and depicting complex systems highlighting weaknesses and vulnerable areas. A variety of techniques are available to predict failure before it happens.	<p><b>What happens when one part of a pathway fails</b></p> <p><i>The Institute for Healthcare improvement has a tool for failure modes and effects. A tour of this tool can be found below:</i></p> <p><b>Institute for Healthcare improvement, Failure Modes and Effects Analysis (FMEA) Tool</b>  <a href="http://www.ihl.org/knowledge/Pages/Tools/FailureModesandEffectsAnalysisTool.aspx">http://www.ihl.org/knowledge/Pages/Tools/FailureModesandEffectsAnalysisTool.aspx</a>  <a href="http://app.ihl.org/Workspace/tools/fmea/">http://app.ihl.org/Workspace/tools/fmea/</a></p> <p><b>Using Health Care Failure Mode and Effect Analysis - The VA National Center for Patient Safety's Prospective Risk Analysis System,</b> J Derosier et al.  <a href="http://www.generalpurposehosting.com/updates/HFMEA_JQI.pdf">http://www.generalpurposehosting.com/updates/HFMEA_JQI.pdf</a></p> <p><b>Using prospective hazard analysis to assess an active shooter emergency operations plan,</b> Alan J. Card, Heidi Harrison, James Ward and John Clarkson, Journal of Healthcare Risk Management (31,3) 2012  <a href="http://onlinelibrary.wiley.com/doi/10.1002/jhrm.20095/pdf">http://onlinelibrary.wiley.com/doi/10.1002/jhrm.20095/pdf</a></p>

Objective 5	Action	Evidence and Resources
continued		<p><b>Use of FMEA in a pathway analysis</b></p> <p>Using a multi-method, user centred, prospective hazard analysis to assess care quality and patient safety in a care pathway J Dean et al  <a href="http://www.biomedcentral.com/1472-6963/7/89">http://www.biomedcentral.com/1472-6963/7/89</a></p> <p><b>Example of best practice</b></p> <p><i>This PhD is an example of best practice into a specific clinical question</i></p> <p><b>The evaluation of methods for the prospective patient safety hazard analysis of ward-based oxygen therapy.</b> M Durand  <a href="http://dspace.lib.cranfield.ac.uk/handle/1826/4480">http://dspace.lib.cranfield.ac.uk/handle/1826/4480</a></p>
Objective 6	Action	Evidence and Resource
<p><b>To utilise data from complaints to analyse risk to patient safety.</b></p>	<p>Complaints may give a different view of the department and the work therein – identifying situations where normal practice is not followed.</p>	<p><b>Clinical complaints: a means of improving quality of care.</b> P Bark et al Qual Health Care. 1994 Sep;3(3):123-32.  <a href="http://www.ncbi.nlm.nih.gov/pubmed/10139408">http://www.ncbi.nlm.nih.gov/pubmed/10139408</a></p> <p><b>A comprehensive overview of medical error in hospitals using incident-reporting systems, patient complaints and chart review of inpatient deaths.</b> J de Feijter PLoS One. 2012;7(2):e31125  <a href="http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0031125">http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0031125</a></p> <p><b>Using Patient Complaints to Promote Patient Safety,</b> James W. Pichert, PhD, Gerald Hickson, MD, and Ilene Moore, Advances in Patient Safety Vol 2.  <a href="http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/advances-in-patient-safety-2/vol2/Advances-Pichert_51.pdf">http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/advances-in-patient-safety-2/vol2/Advances-Pichert_51.pdf</a></p> <p><b>This website provides guidance on how to improve complaints handling in the NHS.</b>  Parliamentary and Health Service Ombudsman, <i>Getting it right: our work in the new NHS</i>  <a href="http://www.ombudsman.org.uk/listening-and-learning-2012/getting-it-right/getting-it-right-our-work-in-the-new-nhs">http://www.ombudsman.org.uk/listening-and-learning-2012/getting-it-right/getting-it-right-our-work-in-the-new-nhs</a></p> <p><b>Learning from complaints about general practitioners - Clinical governance means handling complaints better - for both parties,</b> Richard Baker, BMJ. 1999 June 12; 318(7198): 1567–1568.  <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1115948/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1115948/</a></p> <p><b>The role of the patient in clinical safety.</b> R Lawton and G Armitage. The Health Foundation 2012  <a href="http://www.health.org.uk/publications/the-role-of-the-patient-in-clinical-safety/">http://www.health.org.uk/publications/the-role-of-the-patient-in-clinical-safety/</a></p>