Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2025-01-13	Kawamoto, Kensaku, Caitlin A. Houlihan, E. Andrew Balas, and David F. Lobach. 'Improving Clinical Practice Using Clinical Decision Support Systems: A Systematic Review of Trials to Identify Features Critical to Success'. Bmj 330, no. 7494 (2005): 765.	Link	Meta-analysis	Systems	Electronic Healh Record	Comparisons	Analysis of 70 randomised controlled trials of decision support systems showed that the significant features which most helped to improve clinical practice were when the support provided: a) was part of clinician workflow, (b) was delivered at the time and place of decision making, (c) included actionable recommendations, and (d) was computer based	3,274
2025-01-13	Lim, T. O., A. Soraya, L. M. Ding, and Z. Morad. 'Assessing Doctors' Competence: Application of CUSUM Technique in Monitoring Doctors' Performance'. International Journal for Quality in Health Care 14, no. 3 (2002): 251	Link	Empirical study	Groups	Doctors	Performance measurement	Describes a technique of assessing the peformance of medical staff in various procedures using a simple type of statistical process control analysis	158
2025-01-13	Rajkomar, Alvin, Eyal Oren, Kai Chen, Andrew M. Dai, Nissan Hajaj, Michaela Hardt, Peter J. Liu, et al. 'Scalable and Accurate Deep Learning with Electronic Health Records'. Npj Digital Medicine 1, no. 1 (8 May 2018): 1-10	Link	Empirical study	Systems	Electronic Healh Record	Artificial intelligence	A large and detailed study showing the power of artificial intelligence to accurately predict diagnosis, mortality, length of stay and readmission rates as shown by high AUC-ROC scores including an impressive figure of 0.90 for diagnosis	2,505
2024-04-29	Pendleton RC. We Won't Get Value-Based Health Care Until We Agree on What "Value" Means. Harvard Business Review. Published February 27, 2018.	Link	Essay /Article	Systems	Health economics	Value based healthcare	Refers to the results of an interesting survey by the University of Utah on perceptions of the key factors that are important to patients physicians and employers in that part of the USA. The main messages seem to be a) that physicians and patients rank the importance of various dimensions of value rather differently and that b) 45% of patients ranked "Out of pocket expenses" above "My Health Improves" (32%) This is obviously a sad reflection on the state of healthcare in the USA, but it also illustrates the multi-dimensional nature of perceptions of the meaning of "value". Unfortunately the link back to the actual survey results does not seem to provide any more details	32
2024-04-09	Thaker NG, Ali TN, Porter ME, Feeley TW, Kaplan RS, Frank SJ. Communicating Value in Health Care Using Radar Charts: A Case Study of Prostate Cancer. JOP. 2016;12(9):813-820	Link	Empirical study	Groups	Patients	Value based healthcare	A useful blueprint for anyone wondering how to implement value based healthcare (VBHC) for four reasons: 1) It is coauthored by clinicians and the architects of VBHC and time driven activity based costing (TDABC) 2) It clearly explains how the difficult and complex task of developing TDABC was achieved. 3) It demonstrates the use of a simple radar plot to display costs and outcomes, 4) It uses these methodologies to compare and display the key dimensions of value for three different methods of treating prostate cancer.	61

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2024-04-08	Steinmann G, van de Bovenkamp H, de Bont A, Delnoij D. Redefining value: a discourse analysis on value-based health care. BMC Health Serv Res. 2020;20(1):862.	Link	Empirical study	Groups	Staff - healthcare	Value based healthcare	An interesting and informative qualitative study of perceptions of the role of value based healthcare (VBHC) among health service executives and academics in Holland. Four different patterns were observed in the roles they envisaged for VBHC: 1. For patient empowerment via greater involvement in medical decision making. As a means of strengthening governance via the provision of more useful information for providers/managers. 3 As part of the professional responsibility of improving healthcare delivery. 4 Via critique - ie through noting criticisms of both the principles and practices of VBHC Common ground seemed to be that shared decision-making is / would be, a key component of VBHC.	57
2024-04-07	Carroll N, Lord JC. The Growing Importance of Cost Accounting for Hospitals. J Health Care Finance. 2016;43(2):172-185.	Link	Review /Overview	Systems	Organisations - hospitals	Cost accounting	One of the major difficulties in the implementation of value based healthcare is the lack of accounting systems that can attribute the costs related to relevant casemix and outcome categories, This paper provides a useful overview of the key issues and different methods that have been or could be used.	48
2024-04-07	Jarman PSB. Hospital standardised mortality ratios – their use and misuse. Med Leg J. 2015;83(2):72-92.	Link	Review /Overview	Groups	Patients	Mortality	A comprehensive review of the history, derivation, uses and criticisms of the hospital standardized mortality rates by its originator	2
2024-04-07	Porter ME, Teisberg EO. How physicians can change the future of health care. JAMA: the journal of the American Medical Association. 2007;297(10):1103.	Link	Review /Overview	Groups	Doctors	Value based healthcare	A short summary of the key messages from the book "Redefining Healthcare" (Entry no 119) by these authors and a plea to physicians to get actively involved in the design and implementation of value based healthcare	596
2024-04-02	Pringle M, Wilson T, Grol R. Measuring "goodness" in individuals and healthcare systems. BMJ: British Medical Journal. 2002;325(7366):704.	Link	Review /Overview	Groups	Staff - healthcare	Performance measurement	An interesting overview of the principles of performance measurement in health care with a list of 12 attributes to be taken into account. Gives an important warning about not holding staff accountable for indicators over which they have no control: Quote: "If the person or organisation is being measured feels (or is) powerless to influence the indicator, inappropriate measurement can also lead to de-motivation, dysfunction and crisis"	129
2024-03-08	Moriates C, Valencia V. Emerging principles for health system value improvement programmes. BMJ Qual Saf. 2019;28(6):434-437.	Link	Review /Overview	Groups	Organisations - hospitals	Value based healthcare	Worth a look if only for Table 1 which identifies 6 factors found to be important in the successful implementation of value based (hospital) health care in the USA - with examples	4
2024-03-08	Chatfield SC, Volpicelli FM, Adler NM, et al. Bending the cost curve: time series analysis of a value transformation programme at an academic medical centre. BMJ Qual Saf. 2019;28(6):449-458.	Link	Empirical study	Groups	Organisations - hospitals	Value based healthcare	An interesting hospital-wide multi-faceted intervention to increase value by decreasing costs in both medical and surgical patients. The only outcome measures used were readmission rates and mortality which did not change despite reduction in average monthly costs of 7.7% equating to a saving of approx, \$US59M. Also notable for using statistical process control to track chamges, and to have devleoped some creative ways of cost accounting suitable for the private sector	17

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2024-03-08	Zanotto BS, Etges APB da S, Marcolino MAZ, Polanczyk CA. Value-Based Healthcare Initiatives in Practice: A Systematic Review. J Healthc Manag. 2021;66(5):340-365.	Link	Meta-analysis	Groups	Organisations - hospitals	Value based healthcare	A useful meta-analysis illustrating the variety of ways in which value- based health care is being implemented - mainly in the USA; in specialist services; and largely in response to new models of funding that require some dimension of value to be taken into account. Groups sources using Porters 3 Tier classification	39
2024-03-08	Lee VS, Kawamoto K, Hess R, et al. Implementation of a Value-Driven Outcomes Program to Identify High Variability in Clinical Costs and Outcomes and Association With Reduced Cost and Improved Quality. JAMA. 2016;316(10):1061-1072	Link	Empirical study	Groups	Organisations - hospitals	Value based healthcare	An important paper from one of the leading organisations (University of Utah Health Sciences) that has been developing methods of measuring and maximizing the value of care in hospitals for several years. Notable for two concepts: the 'opportunity index' that identifies conditions with a combination of high and variable costs as targets for action, and the 'perfect score index' - a pre-study definition of what constitutes ideal practice against which actual events and outcomes can then be measured. This study was focused on joint replacements, sepsis and laboratory utilization and demonstrated significant savings and improved outcomes. Makes the important point of the need demonstrate to physicians the actual costs of care as opposed to charges, and in a survey shows high approval ratings of the system by them. A good starting point and model for anyone looking to implement value-based healthcare	291
2024-03-08	Glotzbach JP, Sharma V, Tonna JE, et al. Value-driven cardiac surgery: Achieving "perfect care" after coronary artery bypass grafting. The Journal of Thoracic and Cardiovascular Surgery. 2018;156(4)	Link	Empirical study	Groups	Organisations - hospitals	Value based healthcare	Another study from within the University of Utah Value Driven Outcomes program - this one was imited to coronary artery bypass graft procedures and included use of a predefined "perfect care" measusrement scale to compare the costs and outcomes of this group with those in which care fells short of this ideal, (adjusted for casemix severity) The paper was presented at a meeting of surgeons and the post-presentation discussions are appended and are of interest.	16
2024-03-08	Kawamoto K, Martin CJ, Williams K, et al. Value Driven Outcomes (VDO): a pragmatic, modular, and extensible software framework for understanding and improving health care costs and outcomes. Journal of the American Medical Informatics Association. 2015;22(1):223-235	Link	Empirical study	Groups	Organisations - hospitals	Value based healthcare	A detailed account of the systems and software developed by the University of Utah Health Sciences to support their Value Driven Outcomes program. Notable for the high levels of support from end users - mostly physicians	109
2024-03-04	Porter, M. Teisberg, E. Redefining Health Care: Creating Value-Based Competition on Results. Harvard Business School Press; 2006.	Link	Book	Groups	Organisations - hospitals	Value based healthcare	The book by economist and organizational scientists Michael Porter and Elisabeth Teisberg whose ideas have played a large part in the recent increased interest and activities in 'value-based healthcare', and more importantly in showing how this could and should be implemented. This and his subsequent publications have focused attention on the need to shift the healthcare funding model and metrics away from volume and fee for service and towards competition on the outcomes that matter to patients.	3,523

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2024-03-04	Porter ME. What Is Value in Health Care? New England Journal of Medicine. 2010;363(26):2477-2481	Link	Review /Overview	Groups	Organisations - hospitals	Value based healthcare	An interesting and useful development of Porter's ideas on the implementation of value based health care, emphasizing the need to take into account patient outcomes in three tiers: 1: Health status achieved or retained. 2: Process of recovery 3: Sustainability of Health -all nicely illustrated in Figure 1 as "The outcome measures hierarchy"	5,802
2024-03-04	Porter ME. A strategy for health care reform—toward a value-based system. New England Journal of Medicine. 2009;361(2):109-112.	Link	Review /Overview	Groups	Organisations - hospitals	Value based healthcare	A summary of the 6 socio- political principles / requirements for the implementation of value- based - mostly relevant to the USA because of the various distortions in the funding and insurance coverage models in that country	1,223
2024-02-11	Endless Forms Most Beautiful: Evolving Toward Higher-Value Care. NEJM Catalyst. Published online July 26 2018 Accessed Feb 11 2024	Link	Review /Overview	Groups	Organisations - hospitals	Value based healthcare	A short and instructive but seemingly, if citations are any guide, often overlooked, NEJM Catalyst article. This outlines an interesting analytical and management methodology for implementing and measuring value based healthcare. This involves providing physicians with the outcomes and costs of CABG procedures plotted on a phase map alongside those of their peers for comparison, and accompanied by time trends. A methodology worth replicating (The relevant figure is shown here)	4
2024-02-05	Spittal MJ, Bismark MM, Studdert DM. Identification of practitioners at high risk of complaints to health profession regulators. BMC Health Serv Res. 2019;19(1):380	Link	Empirical study	Groups	Doctors	Aberrant	A practicable method of predicting the risks of complaints against doctors healthcare professionals, especially doctors and dentists. A useful spin off of an earlier study. (Bismark et al Entry no 46 in this database) Fig 1 showing that a score of >35 predicts certainty of another complaint within the next 24 months should be noted by all medical administrators and regulators with responsibilities in this area.	19
2024-02-05	Anderson RA, McDaniel Jr RR. Managing health care organizations: where professionalism meets complexity science. Health Care Management Review. 2000;25(1):83.	Link	Review /Overview	Groups	Organisations - hospitals	Complex adaptive systems	An informative and detailed review of the nature of healthcare organisations as complex adaptive systems, and the consequences for those working at the interface between managers and healthcare professionals. Figure 1 provides a useful list of the leadership tasks needed in complex adaptive systems compared with those in a conventional bureaucracy	459
2024-02-05	Crow SM, Hartman SJ, Nolan TE, Zembo M. A Prescription for the Rogue Doctor: Part II Ready, Aim, Fire. Clinical Orthopaedics and Related Research ®. 2003;411:340.	Link	Review /Overview	Individuals	Doctors	Behaviour - aberrant	A more detailed and useful description of a well designed system for dealing with rogue doctors as outlined by the same authors in Part 1 of their paper.	16
2024-02-05	Crow SM, Hartman SJ, Nolan TE, Zembo M. A prescription for the rogue doctor: part I-begin with diagnosis. Clin Orthop Relat Res. 2003;(411):334-339.	Link	Review /Overview	Individuals	Doctors	Behaviour - aberrant	An instructive review of the small but very troublesome group of rogue sociopathic doctors, an exploration of the reasons why these individuals are often inadequately managed by organisations and their colleagues and an outline of a better performance management system	13
2024-02-05	Gawande A. Complications : A Surgeon's Notes on an Imperfect Science. Profile Books; 2002.	Link	Book	Groups	Clinicians	Complications	Another masterly exposition by surgeon-writer Atul Gawande about the causes consequences and learnings to be taken from accounts of complications - many from his own experiences	

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2024-02-05	Gawande A. Better: A Surgeon's Notes on Performance. Profile; 2007.	Link	Book	Groups	Clinicians	Practice improvement	A lucid and very readable account by an accomplished surgeon and writer about a variety of ways in a variety of environments in which clinical practice improvements have been needed and accomplished.	
2024-02-05	Simis MJ, Madden H, Cacciatore MA, Yeo SK. The lure of rationality: Why does the deficit model persist in science communication? Public understanding of science. 2016;25(4):400-414.	Link	Review /Overview	Groups	In general	Education	An account of the origins and limitations of the commonly used 'deficit model' of science communication and of how the public could be more effectively engaged informed	693
2024-02-05	Williams P. The life and times of the boundary spanner. Journal of Integrated Care. Published online 2011.	Link	Review /Overview	Individuals	Communication	Boundary spanner	A useful account of the characteristics and activities of a small but important group of people in any large multi-unit organisation who promote, often unknowingly intergroup communications and collaborations	117
2024-02-05	McKie J, Richardson J. The rule of rescue. Social science & medicine. 2003;56(12):2407-2419.	Link	Review /Overview	Groups	Patients	Rule of rescue	An overview of the natural and ethically admirable but often very costly desire of humans to extend efforts to rescue individuals in acute peril. This presents the difficult dilemma of balancing the competing demands of using a lot of limited resources on one individual versus the value of the same resources distributed more equitably tho' less dramatically over a larger population	392
2024-02-05	Harvey G, Jas P, Walshe K, Skelcher C. Absorptive capacity: How organisations assimilate and apply knowledge to improve performance. Connecting knowledge and performance in public services: From knowing to doing. Published online 2010:226-250.	Link	Book chapter	Groups	Organisations	Absorptive capacity	A review of various theories of organisational learning but mostly focused on the concept of absorptive capacity. It includes a summary of some empirical studies by the authors of how effectively or otherwise a variety of public organisations absorb and apply knowledge within the parameters of this model.	29
2024-01-30	Edmondson A. Strategies for Learning from Failure. Harvard Business Review.	Link	Review /Overview	Groups	Organisations	Learning	A useful conceptual map of the spectrum of how organisations should classify and respond to failure - ranging from blameworthy deviance to the negative results of exploratory and hypothesis testing	818
2024-01-29	Zahra SA, George G. Absorptive capacity: A review, reconceptualization, and extension. Academy of management review. 2002;27(2):185-203.	Link	Review /Overview	Groups	Organisations	Absorptive capacity	A lengthy but important review and re-thinking of the original concept by Cohen and Levinson (qv this database Entry no 55) of the ability of any organisation including those in the healthcare industry to discover and use new information. These authors make the key separation into two phases the potential vs the realized absorptive capacity for organizational learning innovation, and the factors that impair this transformation.	15,701

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2024-01-27	Tucker AL, Edmondson AC, Spear S. When problem solving prevents organizational learning. Journal of Organizational Change Management. 2002;15(2):122-137.	Link	Empirical study	Groups	Nurses	Learning - organisational	An instructive study of two very different types of reactions to problems (encountered by nurses at a rate of around one every one and a half hours or so.) The vast majority, 92 % - use first order problem solving methods that are quick and consistent with their professional ethos, but don't fix any underlying systemic issues, and therefore don't prevent recurrences. Only 8% are second order problem solvers that do try to fix the primary causes. The first order problem solvers are generally more popular with their colleagues and managers than the second, who are often viewed as "noisy disrupters" but who are the canaries in the healthcare coal mine.	410
2023-12-28	Ambady N, LaPlante D, Nguyen T, Rosenthal R, Chaumeton N, Levinson W. Surgeons' tone of voice: A clue to malpractice history. Surgery. 2002;132(1):5-9.	Link	Empirical study	Individuals	Doctors	Communication	Two 10 second extracts of first and last minute of consultation conversations between surgeons and patients significantly associated with litigation risk	587
2023-12-28	Amrhein V, Greenland S, McShane B. Scientists rise up against statistical significance. Nature. 2019;567(7748):305.	Link	Review /Overview	Systems	Data sciences	Statistical methods	Overview of growing concerns about inappropriate use of t-tests and wrong designations that results are or are not 'statistically significant' - based on consensus statement to this effect by over 800 scientists.	2,619
2023-12-28	Argyris C. Double loop learning in organizations. Harvard business review. 1977;55(5):115-125.	Link	Theory /Hypothesis	Groups	Organisations	Learning	A persuasive theory about why many organizational strategies and operational objectives fail. This is reckoned to be due to the mismatch between the assumptions and often oversimplified plans and objective of senior management and the more complicated realities of the workplace.	3,911
2023-12-28	Arrow KJ. Uncertainty and the Welfare Economics of Medical Care. The American Economic Review. 1963;53(5):941-973.	<u>Link</u>	Theory /Hypothesis	Systems	Economics	Health economics	A paper by one of the 'founding fathers' of health economics describing particular constraints of medical care as including the need to manage uncertainty in both disease processes and in the efficacy of treatments and the asymmetry of information between patients and doctors	12,066
2023-12-28	Badgery-Parker T, Pearson SA, Chalmers K, et al. Low-value care in Australian public hospitals: prevalence and trends over time. BMJ Qual Saf. Published online August 6, 2018:bmjqs-2018-008338. doi:10.1136/bmjqs-2018-008338	<u>Link</u>	Empirical study	Groups	Patients	Value based healthcare	A study in Australian hospitals that between 11 and 19% of episodes of care (using 2 definitions) were considered to be of low value and that these invoked between 7 an 14.7% of total costs	87
2023-12-28	Basch E, Deal AM, Kris MG, et al. Symptom monitoring with patient-reported outcomes during routine cancer treatment: a randomized controlled trial. Journal of Clinical Oncology. Published online 2015:JCO630830.	Link	Empirical study	Groups	Patients	Patient reported outcomes	A controlled trial showing that oncology patients given access to an online PROMS systems has better outcomes	2,050
2023-12-28	Bate P, Robert G, Bevan H. The next phase of healthcare improvement: what can we learn from social movements? Quality and Safety in Health Care. 2004;13(1):62-66.	Link	Review /Overview	Systems	Social factors	Practice improvement	An interesting speculation around the reality that many attempts to improve the safety and quality of healthcare fail and that (in the UK) only around 15% of NHS staff participate in centrally driven 'programmatic' initiatives. New approaches based on the successful elements of social movements are suggested.	167

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-12-28	Baumol WJ, Ferranti D de, Malach M, Pablos-Mendez A, Tabish H, Wu LG. The Cost Disease: Why Computers Get Cheaper and Health Care Doesn't. Yale University Press; 2013.	Link	Book	Systems	Organisations - hospitals	Health economics	A readable account in which Baumol points out that in common with education and the performing arts healthcare costs have risen much more steeply than CPi and the manufacturing industries, and argues that this 'cost disease' arises because of difficulty in reducing labour costs by increasing productivity. Despite his (correct) prediction that costs would continue to rise disproportionately as they have he seemed to be optimistic that gains in general productivity will be able to accommodate continued services	
2023-12-28	Berwick DM. The John Eisenberg Lecture: Health Services Research as a Citizen in Improvement. Health Services Research. 2005;40(2):317-336.	Link	Review /Overview	Groups	Organisations - hospitals	Practice improvement	An overview of the state of the art of health service improvement as it then was that is worthy of attention if only for a remarkable figure showing the complete absence of any correlation between the standardized mortality for a set of common conditions and the cost of care in a large number if USA hospitals with a 4 fold variation between the lowest and highest costs and mortalities	48
2023-12-28	Bismark MM, Spittal MJ, Gurrin LC, Ward M, Studdert DM. Identification of doctors at risk of recurrent complaints: a national study of healthcare complaints in Australia. BMJ quality & safety. 2013;22(7):532-540.	Link	Empirical study	Groups	Doctors	Behaviour - aberrant	A national study of complaints against doctors showing that a small proportion accounted for the majority of complaints and that the likelihood further complaints is predicable from past histories.	171
2023-12-28	Boyce MB, Browne JP, Greenhalgh J. Surgeon's experiences of receiving peer benchmarked feedback using patient-reported outcome measures: a qualitative study. Implementation Science. 2014;9:84.	Link	Empirical study	Groups	Doctors	Patient reported outcomes	Survey of attitudes of surgeons to receiving feedback from patient reported outcomes . Probably unsurprisingly this varied and could be classified into one of three groups - Advocates, Converts ans Sceptics	53
2023-12-28	Braithwaite J, Runciman WB, Merry AF. Towards safer, better healthcare: harnessing the natural properties of complex sociotechnical systems. Quality and Safety in Health Care. 2009;18(1):37-41. doi:10.1136/qshc.2007.023317	Link	Review /Overview	Systems	Organisations - hospitals	Complex adaptive systems	A shorter overview of the white paper by Braithwaite and colleagues of the mechanism and impact of the complex adaptive systems in healthcare organisations	230
2023-12-28	Braithwaite J, Churruca K, Ellis LA, et al. Complexity science in healthcare. Aspirations, approaches, applications and accomplishments A white paper Sydney, Aust: Australian Institute of Health Innovation, Macquarie University. Published online 2017.	Link	Report /White paper	Systems	Organisations - hospitals	Complex adaptive systems	A readable and comprehensive account of the mechanism and impact of the complex adaptive systems that are a large part of the difficulty in managing in healthcare organisations and that are often poorly understood	276
2023-12-28	Braithwaite J, Westbrook MT, Hindle D, Iedema RA, Black DA. Does restructuring hospitals result in greater efficiency-an empirical test using diachronic data. Health Services Management Research. 2006;19(1):1-12.	Link	Empirical study	Groups	Organisations - hospitals	Restructuring	A survey of 20 Australian hospitals to assess whether those that had undergone major organisational restructuring achieved the anticipated gains in efficiency. In short, they did not.	85
2023-12-28	Brown JS, Duguid P. Organizational learning and communities-of- practice: Toward a unified view of working, learning, and innovation. Organization science. 1991;2(1):40-57.	Link	Theory /Hypothesis	Groups	Communities of practice	Learning - organisational	A lengthy and detailed but important and much quoted review-hypothesis about the important differences between, to use Argyles nomenclature, espoused theories of how work should be done compared with the theories in action of how work actually gets done in practice. Uses work of photocopier technicians as an example but many of the circumstance and instances are reminiscent of the differences in work practices and mindsets between clinicians and healthcare managers	15,567

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-12-28	Buckingham M. First, Break All the Rules?: What the World's Greatest Managers Do Differently. Simon & Schuster; 2000.	Link	Book	Groups	Staff	Management	A detailed account of a large Gallup survey of many public and commercial organizations to work out how to attract and keep the best staff. In essence a 12 point check list is the keyalist that contains a few questions that might not be expected. A useful checklist for all managers.	
2023-12-28	Burns CM, Bennett CJ, Myers CT, Ward M. The use of cusum analysis in the early detection and management of hospital bed occupancy crises. Medical journal of Australia. 2005;183(6):291.	Link	Empirical study	Systems	Systems dynamics	Stock and flow	A study confirming the value of a form of statistical process control in monitoring and management the seasonal variations in the flow of patients through hospitals and consequent pressure on bed stocks and staff workloads	44
2023-12-28	Carrre S, Gottman JM. Predicting divorce among newlyweds from the first three minutes of a marital conflict discussion. Family Process. 1999;38(3):293-301.	Link	Empirical study	Individuals	In general	Communication	A study of conversations between couples, a few minutes of which predicted the future course of their marriages. This form of analysis has been used to a limited extent to assess communications between doctors and patients but deserves wider application.	412
2023-12-28	Cohen WM, Levinthal DA. Absorptive capacity: A new perspective on learning and innovation. Administrative science quarterly. 1990;35(1):128-152.	Link	Theory /Hypothesis	Groups	Organisations	Learning	The usually and much cited origin of the processes whereby individuals ans organizations do or don't succeed in importing and using new information	52,723
2023-12-28	Dekker S. Drift into Failure: From Hunting Broken Components to Understanding Complex Systems. Ashgate Pub.; 2011.	Link	Book	Systems	Complex adaptive systems	Failure	A comprehensive and instructive tour of the causes of failures in a wide range of industries including healthcare with a focus upon the multiplicity of interactive factors the contribute as part of the complex adaptive systems that need to be better understood and managed	
2023-12-28	Edmondson AC. Learning from failure in health care: frequent opportunities, pervasive barriers. Quality and Safety in Health Care. 2004;13(suppl 2):ii3.	Link	Empirical study	Groups	Nurses	Learning - organisational	An exploration through comparison of different organizational cultures and (nursing) management practices of which systemic issues promote or inhibit learning from mistakes. Quote "This article describes two powerful organisational factors that inhibit collective, shared, systematic learning from failure in health care. Organisational cultures lacking psychological safety for speaking up about ambiguous, small issues of potential concern (as opposed to large issues of obvious concern) and an overarching work design that emphasises production pressure and worker independence inhibit organisational learning from failure". An important paper for nursing management	664
2023-12-28	Edmondson AC. Learning from mistakes is easier said than done: Group and organizational influences on the detection and correction of human error. The Journal of Applied Behavioral Science. 2004;40(1):66-90.	Link	Empirical study	Groups	Nurses	Error	An important study of the reporting and management of drug administration errors by nurses. Contrary to the authors' expectations, more errors were found in hospitals with more supportive nursing management. This led the belief that this reflected a higher reporting rather than a higher occurrence rate reflecting a healthier low fear organizational culture and management practices	1,398
2023-12-28	Fisher ES, Wennberg DE, Stukel TA, Gottlieb DJ, Lucas FL, Pinder EL. The implications of regional variations in Medicare spending. Part 1: the content, quality, and accessibility of care. Annals of internal medicine. 2003;138(4):273-287.	Link	Empirical study	Systems	Patients	Value based healthcare	High spending (USA Medicare) regions had greater utilization of physician services but no better quality of care	2,043

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2023-12-28	Fisher ES, Wennberg DE, Stukel TA, Gottlieb DJ, Lucas FL, Pinder EL. The implications of regional variations in Medicare spending. Part 2: health outcomes and satisfaction with care. Annals of internal medicine. 2003;138(4):288-298.	Link	Empirical study	Groups	Patients	Value based healthcare	High spending (USA Medicare) regions had greater utilization of physician services but no better outcomes and no more patient satisfaction with the care provided.	1,697
2023-12-28	Fortin M, Dionne J, Pinho G, Gignac J, Almirall J, Lapointe L. Randomized controlled trials: do they have external validity for patients with multiple comorbidities? The Annals of Family Medicine. 2006;4(2):104.	Link	Theory /Hypothesis	Groups	Patients	Evidence based practice	Study showing that the results of carefully controlled randomized trials do not easily translate in implementation in general practice because of frequent comorbidities that would have caused them to be excluded from the relevant trials	380
2023-12-28	Fowler FJ, Gallagher PM, Anthony DL, Larsen K, Skinner JS. Relationship between regional per capita Medicare expenditures and patient perceptions of quality of care. Jama. 2008;299(20):2406-2412.	Link	Empirical study	Groups	Patients	Value based healthcare	No positive relationship was found between costs of care and patients perceptions of quality of care (USA Medicare) in fact for some variables there was an inverse relationship	94
2023-12-28	Gabbay J, Le May A. Practice-Based Evidence for Healthcare: Clinical Mindlines. Routledge; 2011.	Link	Book	Groups	Doctors	Practice-based evidence	Detailed account of an ethnographic study of how general practitioners make decisions - mostly through the 'mindlines' of practice based evidence more often the more rigorous but often inapplicable methods and requirements of evidence based practice	
2023-12-28	Gill CJ, Sabin L, Schmid CH. Why clinicians are natural bayesians. BMJ. 2005;330(7499):1080-1083. doi:10.1136/bmj.330.7499.1080	<u>Link</u>	Theory /Hypothesis	Groups	Clinicians	Statistical methods	A persuasive argument with examples of how Bayseian probabilistic conceptual models are used, often unconsciously in clinical decision making. This adds further to the case for greater use of analytical methods such as statistical process control in monitoring progress and comparing outcomes	306
2023-12-28	Granovetter MS. The strength of weak ties. The American journal of sociology. 1973;78(6):1360-1380.	Link	Empirical study	Groups	In general	Networks - social	A classic paper in sociology showing that in the spread of ideas and opportunities such as finding a job or looking for innovative solutions to problems, weak social connections are often more productive than strong ones. This is relevant to the development of cross - disciplinary scientific research and clinical service development.	72,033
2023-12-28	Hodgson CS, Teherani A, Gough HG, Bradley P, Papadakis MA. The relationship between measures of unprofessional behavior during medical school and indices on the California Psychological Inventory. Acad Med. 2007;82(10 Suppl):S4-7.	Link	Empirical study	Groups	Students	Behaviour - aberrant	A USA study showing that unprofessional behaviour as medical students correlated significantly with relevant variables in their prior California Psychological Inventories administered on admission to medical school	43
2023-12-28	Horn SD, Gassaway J. Practice-based evidence study design for comparative effectiveness research. Medical care. 2007;45(10):S50-S57.	Link	Review /Overview	Groups	Patients	Practice-based evidence	A persuasive argument in favour of developing and using structured practice based evidence to analyse and improve patient outcomes in operational healthcare service where formal randomized controlled trials are either not feasible or not relevant.	340
2023-12-28	Kaplan RS, Norton DP. The Balanced Scorecard : Translating Strategy into Action. Harvard Business School Press; 1996.	Link	Book	Groups	Organisations	Performance measurement	An early and simple but still relevant and valuable 4 quadrant schema for measuring key dimensions of performance in an organisation including healthcare services	
2023-12-28	Kern T. Darker Shades of Blue: The Rogue Pilot. McGraw-Hill; 1999.	Link	Book	Individuals	Pilots	Behaviour - aberrant	An account from the US air force of how to diagnose and manage the dangers of sociopathic rogue pilots - a small but dangerous group. Much of the experience and advice is very relevant to the management of the small but dangerous group of rogue doctors with similar personalities and failings, but who can still attract and impress influential peers and superiors in organisational hierarchies	

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-12-28	Lilford R, Mohammed MA, Spiegelhalter D, Thomson R. Use and misuse of process and outcome data in managing performance of acute medical care: avoiding institutional stigma. The Lancet. 2004;363(9415):1147-1154.	Link	Review /Overview	Systems	Process vs outcomes	Statistical methods	A review of the risks of using crude outcome data to measure institutional performance made more convincing by the fact that the same authors have very effectively used such data in other publications	619
2023-12-28	Lillrank P, Liukko M. Standard, routine and non-routine processes in health care. International Journal of Health Care Quality Assurance. 2004;17(1):39-46. doi:10.1108/09526860410515927	Link	Review /Overview	Systems	Management	Process vs outcomes	Makes important but often overlooked distinctions between variation and variety and between standard, routine and nonroutine processes of care. Useful reading for anyone trying to manage healthcare quality management / improvement programs	139
2023-12-28	March JG. Exploration and exploitation in organizational learning. Organization science. 1991;2(1):71-87.	Link	Review /Overview	Systems	Organisations	Learning - organisational	An important and detailed account of the origins and the management of the conflicts in any organisation in choosing whether to stay in the safety zone of what is familiar and acceptable or to explore new options which may or may not represent an improvement. Quote: "Exploration includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation. Exploitation includes such things as refinement, choice, production, efficiency, selection, implementation, execution. Adaptive systems that engage in exploration to the exclusion of exploitation are likely to find themselves the fits to many undeveloped new ideas and too little distinctive competence. Conversely, systems that engage in exploitation to the exclusion of exploration are likely to find themselves trapped in suboptimal stable equilibria. As a result, maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity".	35,027
2023-12-28	May RM. Simple mathematical models with very complicated dynamics. Nature. 1976;261(5560):459-467.	Link	Empirical study	Systems	Mathematics	Non-linear	A clear description of the complex chaotic reactions can arise from apparently simple time series equations. Probably not for the mathematically faint hearted but this classic paper provides important foundation knowledge for anyone interested in understanding the often seemingly unpredictable peculiarities of non-linear complex adaptive systems such as healthcare.	9,387
2023-12-28	McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. N Engl J Med. 2003;348(26):2635-2645.	Link	Empirical study	Groups	Patients	Evidence based practice	A random sample of over 7000 patients in the USA with several acute and chronic medical conditions that showed that on average only about 55% were receiving the correct evidence based medical care	6,595
2023-12-28	Meyer GS, Demehin AA, Liu X, Neuhauser D. Two Hundred Years of Hospital Costs and Mortality MGH and Four Eras of Value in Medicine. New England Journal of Medicine. 2012;366(23):2147-2149.	Link	Empirical study	Groups	Patients	Value based healthcare	Analysis of a remarkable and probably unique set of records of mortality and costs from the Mass. General Hospital over two centuries. This shows that although there has been steady decline in mortality, costs have recently and disproportionately increased. Of interest to those working to find ways to measure and monitor value as reflected by cost per unit outcome	24

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-12-28	Neuhauser D, Provost L, Bergman B. The meaning of variation to healthcare managers, clinical and health-services researchers, and individual patients. BMJ Quality & Safety. 2011;20(Suppl 1):i36-i40.	Link	Review /Overview	Groups	Staff	Variation	Given that the reduction of unjustified variation in clinical outcomes and costs between the best and the worst performances among healthcare services is the 'low hanging fruit' of improvement programs, it is important to note the differing interpretations of such measurements among different staff groups demonstrated in this study.	82
2023-12-28	Nolte E, McKee M. Variations in amenable mortality Trends in 16 high- income nations. Health Policy. 2011;103(1):47-52.	Link	Empirical study	Groups	Patients	Mortality	International comparisons of fatal conditions for which interventions most productively focus on attention on, and direct actions towards, those that are most amenable to known methods of prevention or treatment	225
2023-12-28	Papadakis MA, Teherani A, Banach MA, et al. Disciplinary action by medical boards and prior behavior in medical school. New England Journal of Medicine. 2005;353(25):2673-2682.	Link	Empirical study	Groups	Students	Behaviour	A case control study showing that bad behavior as medical students is predictive of bad behaviour as doctors	955
2023-12-28	Perla RJ, Parry GJ. The epistemology of quality improvement: it's all Greek. BMJ Quality & Safety. 2011;20(Suppl 1):i24-i27.	Link	Review /Overview	Groups	Teams	Knowledge management	An interesting overview of quality improvement activities in a pediatric intensive care unit using a philosophical model that views knowledge as straddling the intersection between evidence and beliefs	40
2023-12-28	Pisano GP, Bohmer RM, Edmondson AC. Organizational differences in rates of learning: Evidence from the adoption of minimally invasive cardiac surgery. Management Science. 2001;47(6):752-768.	Link	Empirical study	Groups	Staff	Team development	A 16 hospital comparison in the efficiency and effectiveness of surgical teams in the introduction of a new technique of minimally invasive cardiac surgery. Some services did much better than others and this, probably unsurprisingly, was achieved in those with more active surgical leadership, careful team selection and more rigorous team training.	724
2023-12-28	Priesmeyer HR, Sharp LF. Phase plane analysis: Applying chaos theory in health care. Quality Management in Healthcare. 1995;4(1):62.	Link	Empirical study	Groups	Patients	Statistical methods	One small and practicable step in the direction of measuring some of the many non-linear interactions in medicine and other complex adaptive systems	17
2023-12-28	Rogers EM. Diffusion of Innovations. Simon and Schuster; 2010.	Link	Book	Groups	In general	Communication	A, perhaps the, classic and comprehensive study of how new ideas spread, including medical developments and drugs. Memorable quotations include "84% of population is unlikely to change its behaviour based solely on arguments of merit, scientific proof, great training or jazzy media campaigns. The majority of those who try new behaviours do so because of the influence of respected peers", and: " opinion leaders (have been described) as "people on the edge": opinion leaders have a certain degree of cosmopoliteness in that they bring new ideas from outside their social group to its members. They "carry information across the boundaries between groups. They are not people at the top of things so much as brokers between groups"" Opinion leaders gain part of their perceived expertise regarding innovations by their greater contact across their system's boundaries" Resonates Williams description of 'boundary spanners'	

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-12-28	Roland M, Rao SR, Sibbald B, et al. Professional values and reported behaviours of doctors in the USA and UK: quantitative survey. BMJ Quality & Safety	Link	Empirical study	Groups	Doctors	Aberrant	A comparison between the attitudes of USA and UK doctors to a range of ethical and professional issues including their interactions with colleagues they knew to be impaired or incompetent (16-18%) Sheds some light on why doctors don't deal very well with such colleagues including the interesting and (for the UK) odd and disconcerting statistic that while 72.4% of USA doctors report that they would cease referring patients to such colleagues only 17.2 % would be inhibited in the UK	64
2023-12-28	Ross L. The intuitive psychologist and his shortcomings: Distortions in the attribution process. In: Advances in Experimental Social Psychology. Vol 10. Elsevier; 1977:173-220.	Link	Empirical study	Individuals	In general	Fundamental attribution error	A comprehensive account and summary of the evidence for, and definition of, the common human tendency to wrongly attribute problems to the 'dispositional' attributes of others rather than to the prevailing and often more important' situational 'or environmental causes/	8,512
2023-12-28	Rotenstein LS, Huckman RS, Wagle NW. Making Patients and Doctors Happier ? The Potential of Patient-Reported Outcomes. New England Journal of Medicine. 2017;377(14):1309-1312.	Link	Review /Overview	Groups	Staff	Patient reported outcomes	Although patient reported outcome measurements have been rightly developed to measure this important and sometimes neglected measure of clinical effectiveness, this review describes the increasing realisation among doctors that access to this information makes their work both easier and more satisfying.	242
2023-12-28	Rothwell PM. External validity of randomised controlled trials: to whom do the results of this trial apply? The Lancet. 2005;365(9453):82-93.	Link	Empirical study	Groups	Patients	Statistical methods	A comprehensive account of the problems of deciding whether the results of randomised controlled trials have external validity - ie whether they are applicable in routine clinical practice - which often they do not.	2,863
2023-12-28	Rushmer R, Davies HTO. Unlearning in health care. Quality and safety in Health Care. 2004;13(suppl 2):ii10.	Link	Review /Overview	Groups	Organisations - hospitals	Unlearning	Much energy is rightly expended on developing effective individual and organisational learning resources and processes. Much less thought is given about the frequent need for unlearning of ineffective or harmful practices. This paper provides a good overview of both why this is needed and how it can be implemented. It also makes the important distinction between the nature of, and the very different approaches needed for, 'routine' vs 'deep' unlearning	213
2023-12-28	Santomauro CM, Kalkman CJ, Dekker S. Second victims, organizational resilience and the role of hospital administration. Journal of Hospital Administration. 2014;3(5):p95.	Link	Review /Overview	Individuals	Clinicians	Adverse events	In the considerable and entirely appropriate efforts that are made dealing with and minimising the harm to patients afflicted by adverse events, the need for effective support and management for the clinicians involved is often overlooked. This paper outlines how this harm can be both exacerbated by inappropriate and ameliorated by appropriate organisational responses.	35
2023-12-28	Tali Sharot: Intelligent People Have Greater Difficulty Changing Their Beliefs.; 2018.	Link	Video	Individuals	In general	Beliefs / attitudes	A clear account research showing why facts and figures often fail to persuade intelligent and well educated people to change their minds in the expected direction. The size and direction of the change is highly dependent on preexisting beliefs	

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2023-12-28	Spiegelhalter D, Grigg O, Kinsman R, Treasure T. Risk-adjusted sequential probability ratio tests: applications to Bristol, Shipman and adult cardiac surgery. International Journal for Quality in Health Care. 2003;15(1):7.	Link	Empirical study	Groups	Organisations - hospitals	Stat. process control	A powerfully persuasive argument for the use of statistical process control analytics in healthcare. This technique was used to clearly demonstrate significantly deficient pediatric cardiac surgery outcomes in a service compared with peer groups many years before this became impossible to ignore. So too in the case of patient deaths at the hand of GP mass murderer. The power of these simple statistical techniques so clearly demonstrated in this important paper is still less well recognised than it deserves.	262
2023-12-28	Tainter JA. The Collapse of Complex Societies. Cambridge Univ Pr; 1990.	Link	Book	Systems	Complexity	Collapse	It may be difficult to persuade clinicians and health service managers, or anyone else for that matter, that reading a book by an archaeologist about the causes of collapse of ancient civilizations is worth their while but a good case can be made. This is because of the ever increasing resource costs of increasing complexity as a problem solving mechanism eventually reaches the point of diminishing returns on investments whether in whole civilizations or social enterprises such as healthcare. The graph the author shows (fig 11 p103) of the sharply declining productivity of healthcare in the last century is striking.	4,562
2023-12-28	Volpp KG, Grande D. Residents suggestions for reducing errors in teaching hospitals. N Engl J Med. 2003;348(9):851-855.	Link	Empirical study	Individuals	Doctors	Error	A short and instructive list of the simple and seemingly obvious but often overlooked ways in which errors could have been avoided and residents lives made a lot easier	389
2023-12-28	Walshe K, Shortell SM. When things go wrong: how health care organizations deal with major failures. Health Affairs. 2004;23(3):103.	Link	Review /Overview	Groups	Organisations - hospitals	Cultures - organisational	Key commonalities: 1 Longstanding, 2 Well known but not well handled, 3 Cause immense harm, 4 Lack of management systems, 5) Repeated incidents 6.Not discovered by 'quality assurance' systems, Exacerbated by 'club culture'; fragmented knowledge and responsibility and a high capacity for self deception	240
2023-12-28	Ward M. Appendix 6.1 on Clinical Networks in Queensland Heath Systems Review Forster Report pp 391-399. Published online 2005.	Link	Report /White paper	Groups	Organisations - hospitals	Networks - occupational	A commentary on two types of clinician leadership and a proposal that led to the formation of clinical networks in Queensland	
2023-12-28	Wennberg J, Gittelsohn A. Small Area Variations in Health Care Delivery A population-based health information system can guide planning and regulatory decision-making. Science. 1973;182(4117):1102-1108.	Link	Empirical study	Groups	Organisations - hospitals	Variation	A seminal paper from one of the pioneers in the study of the wide and often unjustified variations in clinical practices from place to place. It is worth noting and rather depressing that this important paper was rejected by several leading medical journals. In some services the importance of looking for and correcting unjustified variations in the evidence based processes, outcomes and costs of clinical practice are still overlooked.	2,604

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-12-28	Wu AW, Folkman S, McPhee SJ, Lo B. Do house officers learn from their mistakes? JAMA. 1991;265(16):2089-2094.	Link	Review /Overview	Individuals	Doctors	Learning	In short the answer in the authors' words was that: "Mistakes included errors in diagnosis (33%), prescribing (29%), evaluation (21%), and communication (5%) and procedural complications (11%). Patients had serious adverse outcomes in 90% of the cases, including death in 31% of cases. Only 54% of house officers discussed the mistake with their attending physicians, and only 24% told the patients or families"	1,090
2023-09-01	Thomas EJ, Sexton JB, Helmreich RL. Discrepant attitudes about teamwork among critical care nurses and physicians. Critical care medicine. 2003;31(3):956-959.	Link	Empirical study	Groups	Teams	Social identity	A study of f the quality of teamwork and communications in 8 intensive care units showing that in several areas doctors and nurses have very different perceptions. 73% of physicians for instance considered the quality of their collaboration and communications with nurses to be high or very high whereas the only 33% of nurses were of the same opinion.	1,072
2023-09-01	Bartunek JM. Intergroup relationships and quality improvement in healthcare. BMJ Quality & Safety. 2011;20(Suppl 1):i62-i66	Link	Review /Overview	Groups	Teams	Social factors	A proposal that relationships among healthcare professionals that influence the quality of care delivered depends on the interplay of three types of dynamics: social identity, communities of practice and socialisation into particular professional identities	130
2023-08-19	Edmondson AC, Bohmer RM, Pisano GP. Disrupted routines: Team learning and new technology implementation in hospitals. Administrative Science Quarterly. 2001;46(4):685-716.	Link	Empirical study	Groups	Teams	Learning	A comprehensive analysis of the factors that determined the effectiveness of the uptake of a new technique of minimally invasive cardiac surgery in 16 USA hospitals. Focused on the key determinants of success in the introduction of such innovations by designated teams, but also relevant to the sociology of communities of practice.	2,501
2023-08-19	Wenger EC. Introduction to communities of practice - wenger-trayner. Published January 12, 2022. https://www.wenger-trayner.com/introduction-to-communities-of-practice/	Link	Web site	Groups	Communties /networks	Communities of practice	An insightful but not widely recognised concept developed by Etienne Wenger which he defines as : "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly." Equally applicable wherever humans gather together for some shared activity whether social, occupational, or recreational.	
2023-07-28	Gawande A. The Coach in the Operating Room The New Yorker. September 26 2011	Link	Essay /Article	Individuals	Doctors	Coaching	Atul Gawande is an accomplished surgeon, public health researcher and writer. This is one of several eloquent and thoughtful essays published in the New Yorker on medical topics. In this one he raises the question of why it should be that eminent musicians and elite sports stars accept the need for ongoing coaching, but not as rule surgeons and other medical specialists. He points out the good evidence that coaching works well in improving the performance of other professionals such as teachers, and recounts his own experiences in using a surgical colleague as a coach	

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2023-07-28	Stanovich KE, Toplak ME. The Rationality Quotient: Toward a Test of Rational Thinking. MIT Press; 2016.	Link	Book	Individuals	Cognition	Rationality	An overview of the work of the authors in investigating the important differences between intelligence and rationality or between algorithmic and reflective thinking. They include details of the test that they use to measure rationality and they also define and explain the important differences between 'epistemic' and 'instrumental' rationality: "Epistemic rationality is about what is true and instrumental rationality is about what is true and instrumental rationality is about what to do. For our beliefs to be rational they must correspond to the way the world is—they must be true. For our actions to be rational, they must be the best means toward our goals—they must be the best things to do. Nothing could be more practical or useful for a person's life than the thinking processes that help them find out what is true and what is best to do."	
2023-07-27	Robson D. The Intelligence Trap: Why Smart People Make Stupid Mistakes - and How to Make Wiser Decisions.; 2019	Link	Book	Individuals	In general	Error	A comprehensive account with examples of the types of error that interfere with the abilities of intelligent people to make optimal decisions, together with some advice about how these problems can be avoided	
2023-07-25	Degeling P, Maxwell S, Kennedy J, Coyle B. Medicine, management, and modernisation: a "danse macabre"? Bmj. 2003;326(7390):649.	Link	Empirical study	Groups	Staff - healthcare	Cultures - organisational	The tension that often inhibits the relationships and potential cooperation between health service managers and healthcare professionals especially doctors is well known and often the source of much lamentation but rarely measured in a form that might promote better understanding and remediation. This paper is a notable exception in that it measured and displayed in a convincing graphical form these differences in two key dimension - the priority afforded to budget integrity on one axis and to standardized pathways or processes of care on the other. This clearly demonstrates marked differences between clinicians and general managers and medical administrators falling somewhere in between	347

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2023-07-25	Southon G, Perkins R, Galler D. Networks: a key to the future of health services. Australian Health Review. 2005;29(3):317-326	Link	Review /Overview	Groups	Communties /networks	Networks - occupational	In any organisation reliant on the expertise and experience of a cadre of professional staff whether engineers or medical specialists there will always be a tension between managers who exert their influence and control through vertical hierarchies and professional who exert theirs through horizontal networks or communities of practice. This paper describes the increasing role of various forms of clinical networks and their strengths and weaknesses; and the fundamental differences of the two models of governance and work practices. Quote: "In general, the differences between hierarchical and network relations can be summarised as follows:In hierarchies, people look to their superior for authority; in networks, people look to the most competent colleagues, wherever they may be. Hierarchies are focused on organisational coherence and viability, while networks are focused on expert achievement. Hierarchies are based on formal control, accountability and extrinsic motivation, while networks are based on expertise, collegial values and intrinsic motiation. Hierarchies bring structure, control and accountability, while networks bring knowledge, innovation and capability. Managers, politicians, and policymakers tend to be more comfortable with hierarchies while professionals gain more from networks"	57
2023-07-25	Teaching smart people how to learn Argyris C 1991 Harvard Business Review	Link	Essay /Article	Individuals	In general	Learning	The healthcare services industry is well supplied with a workforce of highly intelligent and highly educated healthcare professionals and other staff. This paper points out however that such individuals are not always as adept at learning new information or adapting to new circumstances as might be expected. It is reckoned that this is because they have usually had successful careers with not much opportunity to learn from failure, are therefore more adept at "single loop" learning which may serve them well enough for direct problem solving but less of at the sort of "double loop" learning that is needed when the assumptions that have been used to frame the problem need to be reconsidered.	
2023-07-23	Cameron KS, Quinn RE. Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework. John Wiley & Sons; 2011	Link	Book	Groups	Staff	Cultures - organisational	There is an extensive descriptive literature on the varieties, functions and dysfunctions of organizational cultures, but a less abundant one on practicable methods of measurement and management. This book is an honorable exception as it contains a wealth of useful information and advice on the classification, diagnosis and the management of four basic types of 'competing values;	

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-07-23	Gaba DM, Singer SJ, Sinaiko AD, Bowen JD, Ciavarelli AP. Differences in safety climate between hospital personnel and naval aviators. Human Factors: The Journal of the Human Factors and Ergonomics Society. 2003;45(2):173	Link	Empirical study	Groups	Staff - healthcare	Cultures - organisational	An interesting and disconcerting comparison of the safety climate between naval aviators and hospital staff - mostly consultants and managers but including other staff groups, and showing that the health care staff worked in environments and / or had attitudes to safety that were significantly more risky than those experienced by or manifest by aviators. This report is now 2 decades old and things may have improved in healthcare, but probably not as much as they should. The greater autonomy granted to healthcare professionals especially to medical consultants compared to those in military hierarchies may account for some of the differences.	262
2023-07-22	Wenger EC, Snyder WM. Communities of practice: The organizational frontier. Harvard business review. 2000;78(1):139-146	Link	Review /Overview	Groups	Communties /networks	Communities of practice	How and why some groups form and perform at high levels simply because they are bound together by the pleasures of pursuing and achieving shared goals, and how they are fundamentally different from teams and other more easily identified and constructed organisational work groups	7,598
2023-07-22	McDaniel Jr RR, Driebe DJ. Complexity science and health care management. Advances in health care management. 2001;2:11-36	Link	Review /Overview	Groups	Organisations - hospitals	Complex adaptive systems	Many problems can be understood and solved as simple linear cause and effect relationships, but many more in large organisations such as health care services arise from complex non-linear interactions among multiple factors and often conflicting objectives. Such interactions often manifest unexpected, ill-understood and usually unwanted emergent properties. This paper provides a good overview of these complex adaptive systems in health care services and how they need to be managed.	418
2023-07-22	Duckett SJ, Breadon P, Weidmann, B, Nicola I. Controlling Costly Care - a Billion Dollar Opportunity. Grattan Institute, Melbourne	Link	Report /White paper	Groups	Organisations - hospitals	Variation - unjustified	A comprehensive and detailed report on the widespread and often very wide variation in usage and costs of hospital services in Australia and the potential national saving at that time of around 2 Billion dollars	
2023-07-22	Mant J. Process versus outcome indicators in the assessment of quality of health care. International Journal for Quality in Health Care. 2001;13(6):475.	Link	Theory /Hypothesis	Groups	Organisations - hospitals	Outcomes	In comparisons of performance between clinical services it is natural and entirely justified to pay most attention to outcomes such as mortality in heart disease. The problem with this however is that adverse outcome are relatively rare which means that very large numbers of cases must be collected before valid comparisons can be made. Also final outcomes are sensitive to other variables such as demographic and casemix severity. Comparisons of the processes of care, provided these are of evidence based efficacy, can be made much more quickly as they are or should be used in all cases thus giving larger numbers as denominators. They are also not subject to casemix and other environmental confounding factors.	749

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2023-07-12	Woolley AW, Chabris CF, Pentland A, Hashmi N, Malone TW. Evidence for a collective intelligence factor in the performance of human groups. Science. 2010;330(6004):686-688.	Link	Empirical study	Groups	Teams	Intelligence - collective	It is well known that in health care as in many other human activities and endeavors, some teams or groups perform better together than others. This study showed that in small groups successful accomplishment of a variety of tasks was much more closely related to a new measure of collective intelligence than to the average or maximal intelligence of the individuals that constituted the group, Collective intelligence was found to be related to the average social sensitivity of group members, the equality in distribution of conversational turn-taking, and the proportion of females in the group.	3,036
2023-07-11	Priesmeyer HR, Sharp LF, Wammack L, Mabrey JD. Chaos theory and clinical pathways: a practical application. Quality Management in Healthcare. 1996;4(4):63.	Link	Review /Overview	Groups	Organisations - hospitals	Complex adaptive systems	Although much has been written about the nature of many healthcare services as complex adaptive systems and the consequent 'wicked' problems and unexpected emergent properties, not a great deal of this literature gives much practical guidance in the development and use of useful analytical tools. This paper is an exception in that it explores the possible application of a very simple form of analysis and data display - the phase map.	16
2023-07-11	Priesmeyer HR. Organizations and Chaos : Defining the Methods of Nonlinear Management. Quorum Books; 1992.	Link	Book	Groups	Organisations	Complex adaptive systems	A lucid account with descriptions of several interesting and practicable analytical methods for investigating and managing non-linear phenomena in commercial environments. Expands on the paper on the use of phase maps by Priesmeyer and Sharp (Ref no 608)	
2023-07-11	Ludeman K, Erlandson E. Coaching the Alpha Male. Harvard Business Review. 2004;(May 2004).	Link	Review /Overview	Individuals	Leaders	Coaching	The highly competitive environment of hospital specialist training and recruitment inevitably leads to a disproportionate number of highly driven and competitive 'alpha' males ending up in these positions. This may be advantageous where bold innovation and boundary extending courage are required. Few ground breaking surgical techniques are introduced and nursed through the early learning curves of frequent failures by shrinking violets. We need this type of alpha males (and females, fewer in number tho' no less courageous or turbulent) for progress to be made. The down side ot 'alphadom' is that such individuals may not be easy to work with or be good team leaders or builders. At the extreme they can verge on dangerous narcissism disruptive to their colleagues and dangerous to their patients because of their unshakable self confidence and over estimates of their own abilities. This paper gives some useful and practical advice for managing these individuals at the milder end of the spectrum.	124

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2023-07-10	Simon HA. Bounded rationality and organizational learning. Organization science. 1991;2(1):125-134.	Link	Review /Overview	Groups	Organisations	Learning	A very readable essay by a polymath and Nobel prize winner on how organisations do or don't learn what they need to know. One of the most interesting and intriguing sections refers to Bavelas networks - studies of how groups communicate when configured in different ways and how one study purportedly shows that once particular patterns of using centralized or peripheral communications routines are established they persist despite complete changes of all staff involved. This is probably why some organizational cultures can be so hard to change.	5,815
2023-07-09	Simon HA. A behavioral model of rational choice. The quarterly journal of economics. 1955;69(1):99-118.	Link	Theory /Hypothesis	Individuals	In general	Rationality - bounded	A landmark paper that shifted thinking away from the traditional models of economic decision-making through rational quantitative assessment of all the relevant factors, and towards the reality that we cannot possibly take into account and integrate all the myriad pieces of information. We therefore 'bound' our scope of attention and decision-making to fit our limited cognitive abilities. This 'satisficing' model applies wherever complex decisions involving many factors have to be made such as in specialist medicine. The resultant narrowing of attention is unavoidable but can result in sub optimal and uncoordinated decision making where several specialists have to work together	24,293
2023-07-09	Hickson GB, Pichert JW, Webb LE, Gabbe SG. A complementary approach to promoting professionalism: identifying, measuring, and addressing unprofessional behaviors. Academic Medicine. 2007;82(11):1040.	Link	Empirical study	Individuals	Doctors	Behaviour - aberrant	A comprehensive and well validated model for addressing disruptive behaviour in medical staff. It uses specific training for staff delivering a program with a 4 four level graduated intervention: 1 informal conversations for single incidents, 2 non-punitive "awareness" interventions when data reveal patterns, 3 leader-developed action plans if patterns persist, and imposition of disciplinary processes if all else fails	413
2023-07-09	Haynes AB, Weiser TG, Berry WR, et al. A surgical safety checklist to reduce morbidity and mortality in a global population. New England Journal of Medicine. 2009;360(5):491-499	Link	Empirical study	Groups	Teams	Safety	This was the first major study to showing significant reductions in surgical mortality and complication rates in a wide range of hospital settings through the use of checklists Although the value of this approach has since been widely accepted some surgeons still are still reluctant to embed it in routine practice. Might this be a flag for other behavioral / performance issues?	6,655

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-07-09	Westrum R. A typology of organisational cultures. BMJ Quality & Safety. 2004;13(suppl 2):ii22-ii27.	Link	Theory /Hypothesis	Groups	Organisations	Cultures - organisational	An important classification of organizational cultures based upon their management of aberrations. The differences reflect in large part leadership styles. The focus is upon the quality and safety of healthcare services but illustrations from other industries are given. Three categories of response are identified: Pathological, Bureaucratic and Generative which will be recognized by anyone called upon to investigate poorly performing or unsafe healthcare teams and services. The essence of the distinguishing features are neatly summarised in Table 1 and Figure 1	630
2023-07-09	Noblet JP, Simon E, Parent R. Absorptive capacity: a proposed operationalization. Knowl Manage Res Pract. 2011;9(4):367-377. doi:10.1057/kmrp.2011.26	Link	Review /Overview	Groups	Organisations	Learning	The concept of organisational learning has rather strangely received more attention in the commercial sector as an important driver of performance and innovation than in academic and healthcare institutions. In essence this paper builds upon and clarifies an earlier classification of this process into four stages: Acquisition, Assimilation, Transformation and Exploitation, stages that obviously mirror similar mechanisms of individual learning. It is clear that the capacity to absorb and effectively use information originating externally is much more important in performance enhancement both quantitatively and qualitatively than internal research and development. This website was developed in part to provide one set of tools to facilitate both organisational and individual learning from important but often overlooked external sources. As in most other human activities we learn and act more by copying the ideas and activities of others than though our own creative endeavours.	177
2023-07-09	Wennberg JE. Tracking Medicine: A Researcher's Quest to Understand Health Care. Oxford University Press; 2010.	Link	Book	Groups	Organisations - hospitals	Variation	Should be required reading for any clinician or manager wanting to increase the value of the services they provide either by improving quality or reducing costs or both. The author has been a pioneer and leading researcher of unjustified variation in these variables for several decades, His major contributions include the development of the USA Dartmouth Atlas of geographic variation, and a tripartite classification of health care services into Effective, Supply-sensitive and Preference-sensitive categories as aid to aid to improvement.	

Entry Date	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2023-07-09	Sterman JD. All models are wrong: reflections on becoming a systems scientist. System Dynamics Review. 2002;18(4):501-531	Link	Review /Overview	Systems	Systems dynamics	Complex adaptive systems	As diagnostic and therapeutic options continue to multiply, and health care services become more and more specialized, they begin to manifest the properties of complex adaptive systems including unforeseen interactions and emergent properties. The consequent risks are often not understood by clinicians and managers, and as this review of Sterman's contributions nicely illustrates, high intelligence and educational achievements are no guarantee of effective problem solving, especially in standard stock and flow problems of a type encountered in bed management on a regular basis in large acute hospitals. The need for specific education in this domain is very clear.	1,477
2023-07-09	Coory M, Scott I. Analysing low-risk patient populations allows better discrimination between high-performing and low-performing hospitals: a case study using inhospital mortality from acute myocardial infarction. Quality and Safety in Health Care. 2007;16(5):324	Link	Empirical study	Groups	Patients	Statistical methods	For assessing clinical performance in hospital mortality from acute myocardial infarction, comparing low risk groups of patients provides better discrimination than those at higher risk. This seems worth exploring in hospital mortality of other causes, a possibility that thus far this does not seem to have attracted much attention	8
2023-07-09	Thor J, Lundberg J, Ask J, et al. Application of statistical process control in healthcare improvement: systematic review. Quality and Safety in Health Care. 2007;16(5):387	Link	Review /Overview	Groups	Patients	Stat. process control	A review based on a meta- analysis of the use of statistical process control in healthcare - or perhaps more precisely of the under use of this valuable form of analysis,	476
2023-07-09	Australian Atlas of Healthcare Variation Series Australian Commission on Safety and Quality in Health Care. Accessed July 9 2023.	Link	Report /White paper	Groups	Organisations - hospitals	Variation	A gold mine of national information about the startlingly high levels of variation in various conditions and processes of care - with ranges from the highest to lowest of differing many fold indicating areas of both under use and overuse of care. In its published from it is given at state and SA3 statistical (regional) area but finer grain detail down to a hospital level is apparently available and that should the known and if necessary acted upon by senior clinicians and managers	
2023-05-22	Blastland M, Freeman ALJ, van der Linden S, Marteau TM, Spiegelhalter D. Five rules for evidence communication. Nature. 2020;587(7834):362-364.	Link	Review /Overview	Groups	Patients	Communication	A shorter and more concise version of the advice in van der Bles paper <u>Link</u>	109
2023-05-21	Dörner D. The Logic of Failure : Recognizing and Avoiding Error in Complex Situations. Addison-Wesley Pub.; 1997	Link	Book	Individuals	In general	Error	An exploration of how different people have different capacities for system thinking especially in stock and flow or other problems of complex origin. Relevant to hospital patient flow and bed management. As with other studies of system thinking abilities, high intelligence is no guarantee of success in solving these sorts of problems, nor is it related to any particular personalty type,	
2021-02-03	Kruger, J. & Dunning, D. Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments. Journal of personality and social psychology 77, 1121 (1999).	Link	Empirical study	Individuals	In general	Behaviour - aberrant	People who are most ignorant about a topics are often the most confident of their knowledge - the "Dunning Kruger" effect	6,575
2021-02-02	van der Bles, A. M. et al. Communicating uncertainty about facts, numbers and science. Royal Society Open Science 6, 181870 (2019).	Link	Review /Overview	Groups	Patients	Communication	An overview of the rationale of, and techniques for, communicating uncertainty about scientific findings and other important public issues	81

Entry	Source	Link	Source Type	Domain	Subdomain1	Subdomain2	Key Points	Citns
2021-02-01	Mercier, H. & Sperber, D. The enigma of reason: a new theory of human understanding. (2018)	Link	Theory /Hypothesis	Individuals	In general	Beliefs / attitudes	Convincingly argues that reasoning is used mainly to justify our internal pre-existing beliefs, and to persuade others to our adopt our beliefs, rather than to follow the pathways suggested by cool logic and empirically derived and demostrably unequivocal facts.	820
2021-01-27	Berns, G. S. et al. Neurobiological correlates of social conformity and independence during mental rotation. Biol. Psychiatry 58, 245–253 (2005).	Link	Empirical study	Individuals	In general	Neuroscience	Study similar in design to that used by Solomon Asch to study social conformity but using functional MRI showed that this may activate areas of the brain involved in perception rather than prefrontal 'judgement' areas. This would seem to suggest that in some folk, pressure of this sort changes what they actually see, not just how they think they should respond	385
2021-01-27	Asch, S. E. (1952). Group forces in the modification and distortion of judgments. In S. E. Asch, Social psychology (pp. 450–501).	Link	Empirical study	Individuals	In general	Behaviour - aberrant	The classic study of effects of group pressure in which subjects were shown lines of clearly different length. Some subjects in these groups however were required to give false answers that they were the same. About 30% of the test subjects (who were in ignorance of this collusion) followed group pressure and agreed with the false opinions of the majority. Although Asch's original study population were male USA college students, and from an era of very different socio-political conditions, similar results have been found in different countries, and cultures.	2,726
2021-01-27	Granovetter, M. Threshold models of collective behavior. The American Journal of Sociology 83, 1420-1443 (1978).	Link	Theory /Hypothesis	Groups	In general	Behaviour	An interesting conceptual model suggesting that collective actions such as rioting may spread in a group based on chance interactions between individuals with different thresholds for this type of behaviour. Rioting starts when these connections occur in combinations favourable for the development of a cascade. It seems plausible that this may also occur in less dramatic forms of contagious human behaviour such as stock market ans social media frenzies and other 'madness of crowds' Author references Solomon Asch's famous studies of group pressure to generate social conformity even in the face of clear objective evidence to the contrary	6,402