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The Shrewsbury and Telford Hospital NHS Trust

Health Services Transformation Bulletin

13th January 2023

Artificial intelligence

AI in healthcare: The road to acceptance, trust and adoption [Open Access Government]
[How will a better understanding of AI and machine learning help build trust in a new generation of diagnostic tools? Technology matures. Nothing springs fully formed into the world; it takes time, effort and ingenuity to produce the marvels we benefit from today. And yet, as they become embedded in everyday life, we begin to take them for granted. Strange new technologies become part of the furniture, and perceived threats dissolve away.]
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Collaborative working

Realising the benefits of provider collaboratives [NHS Providers]
[Trust leaders see significant opportunities in working collaboratively to benefit patients and service users. They know that no single organisation can tackle the systemic challenges facing the health and care sector alone and want to build on the success of collaboration during the COVID-19 response to deliver high quality, joined up and more efficient care for local communities.]
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Multidisciplinary teams: integrating care in places and neighbourhoods [Social Care Institute for Excellence]
[Multidisciplinary teams (MDTs) are central to achieving the vision of Integrated Care Systems (ICSs) as they are a structured forum in which practitioners from across health and social care can come together around the needs of individuals and communities. MDTs need to have a clear role and purpose, be well led and organised, have sufficient diversity of professions and disciplines, and be supported by an enabling infrastructure.]
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Demand and capacity

Strategies to reduce waiting times for elective care [The King's Fund]
[the report explores the approaches that have been used in England and elsewhere to reduce waits for elective care through an extensive review of published literature. Spanning the past 20 years across 15 countries, the literature afforded an enhanced understanding of the underlying features and overarching principles of waiting list and waiting time management as well as the specific approaches that have been used to reduce waiting times in a wide range of contexts.]
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Perioperative time-management methods to reduce waiting times for elective surgery: a systematic review [Rathnayake D. *British Journal of Healthcare Management*]
[This review shows that a number of issues can cause delays in operating theatres, including staff-, patient- and facility-related factors. Although these issues are multi-faceted, managing perioperative time in isolation could reduce overall patient waiting time for elective surgery. This study had implications for overall performance improvement in hospitals across the world. However, more research is needed to determine the effects of these interventions and their cost-effectiveness.]
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Re-envisioning urgent and emergency care [NHS Confederation]
[Five measures that could reimagine urgent and emergency care, manage demand and improve patient care, experience and outcomes.]
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Design of care pathways

Community Network: Making the most of urgent community response services [NHS Providers]
[A new case study briefing by Siobhan Melia, chair of the Community Network (jointly hosted by NHS Confederation and NHS Providers) explores how urgent community response (UCR) services can play a key role in addressing winter pressures and supporting urgent and emergency care (UEC) pathways, and highlights five examples of good practice.]
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Implementing the intensity of care model in a surgical department: an evaluation [Mulloni G. *British Journal of Healthcare Management*]
[The intensity of care model and the use of a short-stay unit can lead to benefits for surgical care, but further research is needed to determine its effects on all aspects of care quality and, especially, staff satisfaction.]
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GIRFT diagnostics delivery guide: a guide for systems in delivering effective diagnostic services to support elective recovery [NHS England]
[This guide collates key findings and recommendations from the GIRFT programme which address priorities for diagnostics and elective recovery in the NHS. This document is a practical guide, providing actions for diagnostic services directly, as well as ways for primary care and acute services to help free up diagnostic capacity by reducing unnecessary diagnostic referrals.]
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Digital healthcare

Getting IT right: the case for urgent investment in safe, modern technology and data sharing in the UK's health services [British Medical Association]
[This report sets out the key areas where more needs to be done to ensure the recovery and resilience of UK health services and the safe delivery of care: infrastructure – hardware, software and connectivity; interoperability – standards and security; involvement – digital leadership, user involvement and skills development; inclusion – digital access and literacy for patients; and investment – prioritise existing funding, protect against budget cuts and increase funding.]
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Education and training

Development and implementation of a quick reference (QR) code linked online education tool in anaesthesiology practice [Diczbalis M. *BMJ Open Quality*]
[This feasibility study demonstrated that an online anaesthetic educational tool has utility in promoting patient education about the anaesthetic experience and was well received by both patients and anaesthesiologists. QR codes are not feasible as the sole method for linking our patient population to an online education resource.]
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Harnessing digital technologies for workforce development, education and training: an overview [Health Education England]
[Expanding on the legacy of the Topol Review, this report delves deeper into ensuring our health and care workforce is digitally ready for the future. It explores how HEE is investing and making a difference by developing a continuous learning environment and enabling new ways of working, as well as highlighting how improved technology can help health and care services to be organised and delivered more efficiently.]
Available here

The perceived value and impact of virtual simulation-based education on students' learning: a mixed methods study [Edgar AK. *BMC Medical Education*]
[Virtual simulations are used throughout healthcare training programs to enable development of clinical skills, however the potential for virtual simulation to enhance cognitive and affective skills is less well understood. This study explored pre-clinical optometry students' perceptions of the impact of virtual simulation on the development of core competency skills including patient-centred care, communication, scientific literacy, and evidence-based practice.]
Available here

Health literacy

Health literacy interventions for reducing the use of primary and emergency services for minor health problems: a systematic review [O'Cathain A et al. *Health and Social Care Delivery Research*]
[The review included 64 studies, evaluating seven types of intervention. These included booklets, leaflets and websites about how to look after minor health problems, as well as websites that ask questions about symptoms and then offer a solution (digital self-triage). People found these helpful. Though health literacy interventions have potential to affect emergency and primary care use, the evidence base is inconsistent.]
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Improvement

Grand rounds in methodology: four critical decision points in statistical process control evaluations of quality improvement initiatives [Marang-van de Mheen PJ. *BMJ Quality & Safety*]
[Quality improvement projects often employ statistical process control charts to monitor process or outcomes. This paper suggests a process for using SPC in QI projects, highlighting four critical decision points that are often missed, (1) need for stable baselines, (2) choice of outcome measures, (3) design features to improve quality and (4) choice of SPC analysis. These decision points should be explicitly reported for readers to interpret and judge the results]
Available here [NHS OpenAthens account required]

Using quality improvement to deliver a systematic organisational approach to enjoying work in healthcare [British Journal of Healthcare Management]
[Staff wellbeing is increasingly linked to good outcomes for service users in healthcare. Therefore, it is important for organisations to find ways to focus on wellbeing and staff experience at work. This article shares learning from 5 years of using the Institute for Healthcare Improvement's joy in work framework, coupled with quality improvement methods to enhance staff experience and wellbeing. This demonstrates how teams were brought together in a collaborative learning system to apply quality improvement to enhance joy in work. Key steps are shared for other organisations wanting to undertake this work, including the application of improvement methods to empower teams locally to develop, design and test change ideas, and measure their impact. The design of systems and structures required to meaningfully bring teams together and the type of leadership that enhances this work are also considered. Key learning points for other organisations include the need for improvement principles to iterate the organisational approach, make measurement simple, encourage a bias to action and make the work fun.]
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Integrated care

Integrating care: policy, principles and practice for places [CIPFA]
[This publication provides an overview of the changes as a result of the Health and Care Act 2022 and what integration is seeking to achieve. It considers the wider health and care landscape and addresses the remaining challenges at place level. The recommendations and case studies it contains, are intended to influence the development of further policy and guidance by central government, and to support practitioners at a local level.]
Available here [PDF file]

Will it ever be possible to look out, not up? Learning from past reviews of local and national NHS relationships [Nuffield Trust]
[The upcoming review into integrated care systems will not in any way be the first time that the relationship between national organisations and local NHS trusts and commissioners has been assessed. Helen Buckingham considers the lessons that need to be learned from the past, and suggests some important questions that the review may want to think about.]
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Leadership

Employee silence in health care: Charting new avenues for leadership and management [Health Care Management Review]
[Health care management is faced with a basic conundrum about organizational behavior; why do professionals who are highly dedicated to their work choose to remain silent on critical issues that they recognize as being professionally and organizationally significant? Speaking-up interventions in health care achieve disappointing outcomes because of a professional and organizational culture that is not supportive. Critical Theoretical Analysis: Our understanding of the different types of employee silence is in its infancy, and more ethnographic and qualitative work is needed to reveal the complex nature of silence in health care. We use the sensemaking theory to elucidate how the difficulties to overcoming silence in health care are interwoven in health care culture. Insight/Advance: The relationship between withholding information and patient safety is complex, highlighting the need for differentiated conceptualizations of silence in health care. We present three Critical Challenge points to advance our understanding of silence and its roots by (1) challenging the predominance of psychological safety, (2) explaining how we operationalize sensemaking, and (3) transforming the role of clinical leaders as sensemakers who can recognize and reshape employee silence. These challenges also point to how employee silence can also

result in a form of dysfunctional professionalism that supports maladaptive health care structures in practice. Practice Implications: Delineating the contextual factors that prompt employee silence and encourage speaking up among health care workers is crucial to addressing this issue in health care organizations. For clinical leaders, the challenge is to valorize behaviors that enhance adaptive and deep psychological safety among teams and within professions while modeling the sharing of information that leads to improvements in patient safety and quality of care.]
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Organisation development

How do we measure organisational wellness? Development of a comprehensive patient-centred and employee-centred visual analytical solution [Watkins SC. *BMJ Open Quality*]
[The current study attempts to provide insight into the development of a broad, system-level visual analytical solution that affords an overview of the performance of the entire organisation while preserving the ability to drill down on specific locations. This may offer valuable insight into how organisations can leverage existing siloed data streams into a unified, system level metrics for monitoring organisation health and to guide decision making at the organisational level.]
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Patient-centred care

Hearing the client voice [While A. *British Journal of Community Nursing*]
[While's Words, surveying patient satisfaction and involvement in the UK. Discusses whether patients can be seen as consumers, the deficiencies of satisfaction surveys, patient complaints and how the patient voice might be heard, and shared decision-making.]
Available here [NHS OpenAthens account required]

Patient-initiated follow-up: findings from phase 1 of a mixed-methods evaluation [Nuffield Trust]
[With a growing elective care backlog following the Covid-19 pandemic and outpatient appointment numbers on a fast upward trajectory more generally, patient-initiated follow-up (PIFU) on appointments has been put forward as a potential solution, for appropriate cases. But can it free up much-needed capacity while maintaining quality of patient experience and outcomes? The research team at NIHR RSET were asked to evaluate PIFU's effectiveness from a variety of aspects.]
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Urgent and Emergency Care: acting on patient and public perspectives [Eastern AHSN]
[This report sets out to understand the problem of Urgent Emergency Care (UEC) from the perspective of patients who had engaged with that care, including how they might be supported by digital solutions. The intention was to gather and present their personal views, using people's own words to describe how UEC is used. The project built on previous research into the public's experience of UEC, and focused on where people go for urgent care, gathering positive and negative patient experiences, and using engaging methods to explore patients' knowledge of existing digital services.]
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Patient Flow

Use of Artificial Intelligence to Manage Patient Flow in Emergency Department during the COVID-19 Pandemic: A Prospective, Single-Center Study.
[During the coronavirus disease 2019 (COVID-19) pandemic, calculation of the number of emergency department (ED) beds required for patients with vs. without suspected COVID-19 represented a real public health problem. In France, Amiens Picardy University Hospital (APUH) developed an Artificial

Intelligence (AI) project called "Prediction of the Patient Pathway in the Emergency Department" (3P-U) to predict patient outcomes. Materials: Using the 3P-U model, we performed a prospective, single-center study of patients attending APUH's ED in 2020 and 2021. The objective was to determine the minimum and maximum numbers of beds required in real-time, according to the 3P-U model. Results A total of 105,457 patients were included. The area under the receiver operating characteristic curve (AUROC) for the 3P-U was 0.82 for all of the patients and 0.90 for the unambiguous cases. Specifically, 38,353 (36.4%) patients were flagged as "likely to be discharged", 18,815 (17.8%) were flagged as "likely to be admitted", and 48,297 (45.8%) patients could not be flagged. Based on the predicted minimum number of beds (for unambiguous cases only) and the maximum number of beds (all patients), the hospital management coordinated the conversion of wards into dedicated COVID-19 units. Discussion and conclusions: The 3P-U model's AUROC is in the middle of range reported in the literature for similar classifiers. By considering the range of required bed numbers, the waste of resources (e.g., time and beds) could be reduced. The study concludes that the application of AI could help considerably improve the management of hospital resources during global pandemics, such as COVID-19.]
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Remote and telehealth service provision

Telehealth provision across allied health professions (AHP): An investigation of reimbursement considerations for its successful implementation in England [Eddison N. *Health Science Reports*]
[The key factor which might potentially prevent the widespread adoption and implementation of telehealth consultations is the payment structure from CCGs for non-face-to-face consultations.]
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Do UK Allied Health Professionals (AHPs) have sufficient guidelines and training to provide telehealth patient consultations? [Leone E. *Human Resources for Health*]
[A cross-sectional online survey exploring available telehealth guidelines and staff training was distributed among UK AHPs and AHP service managers between May and June 2021. UK NHS AHP services are not fully equipped with clear and comprehensive guidelines and the skills to deliver telehealth. Vulnerable people are excluded from current guidelines, which may widen health inequalities and hinder the success of the NHS digital transformation.]
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Asynchronous telemedicine is coming and here is why it's the future of remote care [The Medical Futurist]
[Asynchronous telemedicine is one of those terms we will need to get used to in the coming years. Although it may sound alien, chances are you have been using some form of it for a while.]
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Workforce

What influences the organisation of nurse staffing in intensive care? [NIHR Evidence]
[The study was set up to explore how closely nurse to patient ratios are followed in intensive care units, and whether this is the best way to organise nurse staffing. The researchers found that nurse to patient ratios were seen as a recommendation rather than a rule. Nurse staffing changed throughout the day to respond to patient and staff needs. Teams of different professions worked together to respond to situations as they arose.]
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A guide to inclusive recruitment for employers [Chartered Institute of Personnel and Development]
[A step by step guide for employers to ensure fair processes are set up to attract a more diverse talent pool.]
Available here

A guide to inclusive recruitment for line managers [Chartered Institute of Personnel and Development]
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