

Health Services Transformation Bulletin

2nd March 2023



Artificial intelligence

Using Machine Learning to Improve Patient Safety in the Home or Remote Setting for Adults [Institute for Healthcare Improvement]

[The primary aim of the IHI innovation project described in this report was to assess the use of predictive analytics, specifically machine learning, to improve patient safety through emerging and existing approaches to predict risk, such as technologies and decision support tools. Specific attention was given to how predictive analytics and machine learning can assist in monitoring patient deterioration in the home setting for adults ages 18 and older.]

Available [here](#)

Using AI responsibly in people management [Chartered Institute of Personnel and Development]

[What use of artificial intelligence is 'acceptable' in people management and how can this be done responsibly?]

Available [here](#)

Artificial Intelligence in Healthcare: Review, Ethics, Trust Challenges & Future Research Directions

[Kumar P. *Engineering Applications of Artificial Intelligence*]

[The objective of this work is to introduce researchers to AI and its medical applications, along with their potential pitfalls, in a comprehensive manner.]

Available [here](#)

Demand and capacity

Reducing did not attends (DNAs) in outpatient services [NHS England]

[This guidance builds on experience from providers and systems and previous work by quality, service improvement and redesign. It outlines initial steps providers should take to reduce their DNA rates. This document focusses on acute settings, although many of the same principles apply in other settings including diagnostics, primary, community and mental health.]

Available [here](#)

One year on from the backlog recovery plan: what next for NHS waiting lists? [Institute for Fiscal Studies]

[This report examines whether the NHS is on track to achieve the challenging ambitions laid out in its backlog recovery plan and presents a number of different scenarios for waiting lists over the next two years.]

Available [here](#)

Design of care pathways

Why do diagnostics matter? Maximising the potential of diagnostics services [The King's Fund]

[The Covid-19 pandemic has increased awareness of the role that diagnostics play in disease detection, prevention and management. Policy-makers have also singled out diagnostics for focus in recent years, particularly given their pivotal role in supporting system recovery from the pandemic, including reducing waiting times for hospital treatment and earlier cancer diagnosis. This report has revealed scope for innovation through new technologies, widening access and changes to patient pathways.]

Available [here](#)

Digital healthcare

Machine learning for enhanced healthcare: an overview for operational and clinical leads [Roberts L. *British Journal of Healthcare Management*]

[Machine learning has the potential to transform how healthcare is delivered, supporting clinical decision making, determine risk, presence and prognosis of disease and optimising patient pathways. Digital health records mean implementing machine learning models is quicker and easier than ever. Clinical and operational need to understand the principles to evaluate how it may be helpful. This article provides an overview of machine learning and how it can be used.]

[Request a copy](#)

NHS App to gain new features and functionality in 2023 [Digital Health]

[The Department for Health and Social Care (DHSC), NHS England and NHS Digital have revealed plans for a number of new features to be added to the NHS App. Some new features are already in the early stages of being rolled out. Currently, patients under 20 NHS trusts, including in York, Scarborough and Cornwall, have the ability to view referrals and hospital appointments, book appointments and find supporting information ahead of their appointments, such as hospital maps.]

Available [here](#)

Making the most of your electronic patient record system [NHS Providers]

[This guide has been prepared jointly by NHS Providers and Public Digital as part of the Digital Boards programme. Through good practice sharing and peer learning, the programme aims to build board understanding of the potential and implications of the digital agenda and increase the confidence and capability of boards to harness the opportunities it provides. Alongside our guide series, a number of webinars and events are available to trust leaders.]

Available [here](#)

Benefits of electronic charts in intensive care and during a world health pandemic: advantages of the technology age [Pankhurst T. *BMJ Open Quality*]

[This study sets out to describe benefits from the implementation of electronic observation charting in intensive care units (ICU). Electronic ICU charts have been successfully introduced into our institution with benefits in terms of patient safety through error reduction and improved care through release of nursing time. Costs have been reduced. Staff feel supported by the digital system and report it to be helpful even during redeployment and in the unfamiliar environment of intensive care.]

Available [here](#)

Evaluating digital competencies for pharmacists [Lee G. *Research in Social and Administrative Pharmacy*]

[The aim of this study was to explore the views of pharmacists on digital competency in the workplace and evaluate the suitability of the Digital Capabilities Framework for the Pharmacy Workforce for use within clinical practice.]

Available [here](#)

Education and training

Retrospective evaluation of an intervention based on training sessions to increase the use of control charts in hospitals [Kudrna L. *BMJ Quality & Safety*]

[The results suggest that a scalable educational training initiative to improve use of SPCs within organisations can be effective. Future research could aim to overcome the limitations of observational research with an experimental design or seek to better understand mechanisms, decision-making and patient outcomes.]

Available [here](#)

Implementation and evaluation of an elective quality improvement curriculum for preclinical students: a prospective controlled study [Aredo JV. *BMC Medical Education*]

[Quality improvement (QI) is a systematic approach to improving healthcare delivery with applications across all fields of medicine. However, exposure to QI is minimal in early medical education. We evaluated the effectiveness of an elective QI curriculum in teaching preclinical health professional students foundational QI concepts.]

Available [here](#)

Harnessing digital technologies for workforce development, education and training: an overview

[Health Education England]

[This paper shines a light on how the Directorate of Innovations, Digital and Transformation is making a difference now, re-shaping the world of education, training and workforce redesign, putting in place the building blocks which will enable the system to solve its wicked problems. It is helping to build digital capability, maximizing the benefits of new technologies, developing a culture of 'digital first'.]

Available [here](#)

Falls

QI initiative to reduce the number of inpatient falls in an acute hospital Trust [Boot M. *BMJ Open Quality*]

[Despite a multitude of studies focusing on various aspects of falls risks and prevention, no single definitive method is known to reduce falls in hospitals. This study demonstrates a quality improvement approach to achieve locally sustained improvement. A visible falls practitioner focusing on prevention work in the clinical setting leads to a reduction in falls. Findings highlight the need to address cultural working practices. Organisations should consider the role of the therapist.]

Available [here](#)

Genomics

The Cancer Research UK Stratified Medicine Programme as a model for delivering personalised cancer care [British Journal of Cancer]

[Genomic screening is routinely used to guide the treatment of cancer patients in many countries. However, several multi-layered factors make this effort difficult to deliver within a clinically relevant timeframe. Here we share the learnings from the CRUK-funded Stratified Medicine Programme for advanced NSCLC patients, which could be useful to better plan future studies.]

Available [here](#)

Improvement

Implementing health system improvement: resources and strategies for interprofessional teams [Eljiz K. *BMJ Open Quality*]

[Health system improvement (HSI) is focused on systematic changes to organisational processes and practices to improve the efficient delivery of safe care and quality outcomes. Guidelines that specify how interprofessional teams conduct HSI and knowledge translation are needed. We address this urgent requirement providing health professional teams with resources and strategies to investigate, analyse and implement system-level improvements.]

Available [here](#)

Characteristics promoting behaviour change: physician experience with a coalition-led quality improvement initiative to reduce excessive laboratory test ordering [Mathura P. *BMJ Open Quality*]

[Based on physicians' described perceptions and experiences, coalition characteristics that influenced their QI leadership and participation, and appropriate BUN-test ordering behaviours were revealed; these characteristics aligned to several TDF domains. The findings suggest that these behaviours are multidimensional, requiring a multistrategy approach to change behaviour.]

Available [here](#)

Integrated care

People, partnerships and place: How can ICSs turn the rhetoric into reality? [Nuffield Trust]

[Integrated care systems are now legally responsible for leading the charge on using a localised approach to bring multiple aspects of the health care system closer together, and for working better with social care and other public services. But this is far from a new aspiration - why should it be any different this time? Nuffield Trust hosted a series of roundtables to discuss concerns with stakeholders and experts and understand how to ensure the aims are achieved.]

Available [here](#)

Patient experience

Routine measurement of patient experience [Benson T. *BMJ Open Quality*]

[This paper describes three generic patient-reported measures of Patient Experience, Result Satisfaction and Service Integration, which together cover relational, functional and integration aspects of patient experience. All three measures are generic and share a common format and scoring scheme. They are shorter and have a lower reading age than measures used in national surveys.]

Available [here](#)

Remote and telehealth service provision

Patient satisfaction with a virtual multidisciplinary team balance clinic: a pilot study [Chew D. *British Journal of Healthcare Management*]

[Virtual clinics can be an acceptable adjunct to traditional clinical consultations in an ear, nose and throat outpatient department for balance disorders and should be continued in future.]

[Request a copy](#)

Greater Manchester launches remote-monitoring service for heart patients [Digital Health]

[Greater Manchester and Eastern Cheshire Cardiac Clinical Network, Manchester University NHS Foundation Trust and FCMS, a community healthcare provider, have launched a new home monitoring service for patients waiting for cardiac surgery. Using equipment provided by Docobo, patients can monitor their health on a daily basis, with a direct link to a team of clinicians to help spot any potential deterioration. Patients will be supported to manage their condition ahead of planned surgery, while at the same time be able to get on with their lives.]

Available [here](#)

Use of Telehealth During the COVID-19 Era [Agency for Healthcare Research and Quality]

[We found that the use of telehealth may be comparable to in-person care across different clinical and process outcomes. Telehealth implementation has addressed the needs of both patients and providers to some extent, even as clinical conditions, patient and provider characteristics, and type of assessment varied. Telehealth has provided a viable alternative mode of care delivery during the pandemic and holds promise for the future.]

Available [here](#)

Virtual wards

The impact of virtual care in an Emergency Department observation unit [Abiri A. *Annals of Emergency Medicine*]

[Using tele-obs to manage observation patients in an ED observation unit was not associated with significant differences in length of stay, admission status, measured adverse events, or total direct cost.]

Available [here](#)

Workforce

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]

[A step by step guide for line managers to ensure fair processes are set up to attract a more diverse talent pool.]

Available [here](#)

Supporting international colleagues [Foster S. *British Journal of Nursing*]

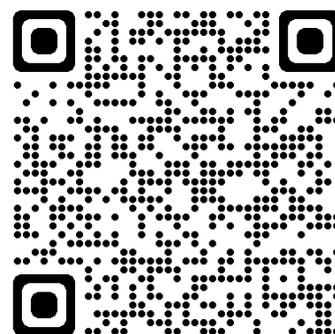
[The NHS People Plan and the NHS Long Term Plan described the ethical recruitment of internationally educated nurses (IENs) as an important part of the workforce supply strategy of NHS organisations for the next 10 years. The Nursing and Midwifery Council (NMC) (2022) reported that, overall, the number of nursing professionals on the register increased by more than 13 000 between April and September 2022 to a record 771 445. This growth was driven largely by nurses trained outside the UK.]

Available [here](#) [NHS OpenAthens account required]

About this bulletin

The Health Services Transformation Bulletin is prepared by Shrewsbury and Telford Health Libraries. Links to the full-text of items listed is provided where available, but if you need copies of any items where no full-text is available, please request them via the [Article Request](#) form. Some items may require an [NHS OpenAthens account](#).

For previous editions, or to access this bulletin online with full-text links, visit www.library.sath.nhs.uk/health-services-transformation or scan the QR code.



For more information, please contact

Jason Curtis
Site Librarian
Shrewsbury Health Library
Learning Centre
Royal Shrewsbury Hospital
jason.curtis1@nhs.net
01743 492511

Louise Stevens
Site Librarian
Telford Health Library
Education Centre
Princess Royal Hospital
l.stevens@nhs.net
01952 641222 Ext. 4694



Our Vision To provide excellent care
for the communities we serve

