The role of technology-enabled care in high-quality patient care

It is essential that the NHS drives improvement in technology to improve patient care. This article discusses how practice nurses can play their part

Over the past 20 years there have been radical advances in the development and use of technology—it supports everything people do from booking a holiday, to buying and reading books, to banking. So that the NHS continues to develop and evolve in line with this pace, it is essential that the NHS takes its nursing workforce on the same journey.

At the same time, the NHS is facing its greatest ever challenge in terms of capacity and sustainability, with demand far exceeding available resources and patient expectation continuing to increase.

In 2016, Professor Jane Cummings, Chief Nursing Officer for England launched a 5 year framework for nursing, midwifery and care staff entitled *Leading Change, Adding Value* (NHS England, 2016a), which for the first time provided a clear framework for health and social care staff to improve and modernise care, while bringing all key partners together. Within *Leading Change, Adding Value*, there are a number of key actions intended to drive this improvement and one of these focuses on technological advances. Technology-enabled care is a good example of how we can use technology to drive forward these recommendations:

> '*We need to be prepared for routine tasks we currently undertake to be replaced by technological developments and to use the advances to improve outcomes, promote self-management and increase efficiency and productivity.*' (NHS England, 2016a: 33)

This was supported by the Royal College of Nursing (RCN) which at its Congress in 2016 launched a campaign

ABSTRACT

Using technology-enabled care to deliver high-quality patient care aligns to the triple aim of *Leading Change, Adding Value*: better outcomes, better experiences for people and better use of resources. This article focuses on the need to support practice nurses in becoming digitally proficient and explores shared learning from an innovative project that enables nurses to become digital champions.

Key words | Technology | Mobile applications | Self-care

to 'make every nurse an e-nurse'. The RCN has a target date of 2020 for all nurses to be involved in some aspect of digital healthcare, from education and training to using data to drive improvements (RCN, 2016).

In order to ensure that the challenges outlined above can be managed and that the key components of *Leading Change, Adding Value* are achieved, it is essential that all nurses are supported and encouraged to develop their use and understanding of how technology can support clinical practice. At the same time, it is equally essential that nurses are assisted to let go of some traditional practices and embrace the opportunity that technological developments in care can bring.

The advances in clinical technology can be intimidating for some nurses, especially for those whose training was not technologically focused. Nurses who lack this confidence can be more reticent to promote digital opportunities to patients (Queen's Nursing Institute (QNI), 2018).

A report by Ipsos MORI (2016) highlighted an ageing practice nursing workforce, with many employees approaching retirement. General practices are now experiencing the benefits of student nurse placements and through training commissioned by Health Education England (HEE), including the 'Fundamentals of General Practice Nursing', are able to capitalise on the skills of nurses classed as 'Generation Z' (termed as the 'digital natives') who can easily understand and maximise on the use of technology in improving patient health (HEE, 2015).

It is imperative that alternative care options are promoted to patients to enable informed choice, especially as the increase in internet and social media usage continues across all age ranges: 51% of 65–74 year olds and 30% of

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> ❛ **For general practice nurses the opportunities to be at the forefront of technological advances are countless.** ❜

over 75s now own a tablet, while smartphone ownership has increased by 39% and 15%, respectively (QNI, 2018).

According to the Health Tech Newspaper (2017), it is estimated that nurses provide 80% of patient care in many healthcare settings. This vital resource could benefit significantly from implementing technology-enabled care in many different ways. The most obvious of these would be the releasing of time, but reducing face-to-face consultations by using innovative technology is not the only benefit.

Data collection and analysis to highlight areas of concern and to aid targeted improvement all benefit the patient and most of these tasks can be automated.

For general practice nurses, the opportunities to be at the forefront of technological advances are countless. General practice nurses are known to have established relationships with their practice populations. Patients with long-term conditions fill a large number of appointment slots and often with matters that could be managed remotely. Patients with hypertension or diabetes, for example, can be equipped with the tools and techniques to monitor their own physical health and, supported by technology, can report these directly to the practice system, which can review reported data and advise on appropriate next steps.

In the same way that we no longer queue outside the bank to pay in cash, technological advances in healthcare can change the way we manage care—patients do not have to be physically seen in order for nurses to know how they are progressing. General practice nurses have a major role to play in leading this change and must be supported to have the courage to change their practice to enable this to happen.

General practice nurses: Playing their part

A key element of the *General Practice Forward View* (NHS England, 2016b) is the need to reduce workload pressures. It is positive that the plan highlights not only the need to invest in technology but also in creating innovative opportunities for workforce adoption. Action 6 of the 'Ten point action plan for General Practice Nursing' (NHS England, 2017) addresses the effect that digital nurse champions can have on preventing ill-health and promoting wellbeing.

As we move towards a sustainable NHS, a 'lean-thinking' approach can be used to benefit patients as well as health professionals, and a significant reduction in consultation time can result from assisting patients to manage their health conditions.

Lean thinking identifies the least wasteful way to provide better, safer healthcare to patients—with no delays. It is about being able to do more with the resources available (NHS Institute for Innovation and Improvement, 2007).

Embracing technology-enabled care as part of a practice-wide approach will ensure that teams are working towards common goals (The King's Fund, 2015). Working as part of a cohesive team is second nature to nurses and their leadership ability is crucial.

General practice nurses are able to identify the benefits to patients, discuss how barriers can be overcome, and lead positive change to enable a culture of delivering high quality and digitalised patient care. Providing consistency will enhance the patient experience and enable all staff, both clinical and non-clinical, to play their part. This will support improved communications, shared values and enable workforce efficiencies by using staff with the right skills (NHS Improving Quality, 2014).

A pilot approach: General practice nurses as digital champions

There is a need to create opportunities to engage nurses in technology-based projects to enable them to embrace and normalise technology as part of their role. Health organisations at both national and local level have a duty to support nurses to become proficient in digital technology and as such promote a positive image of the 'modern nurse'. There is a need to capture new approaches in nurse education to ensure that nurses have the confidence and capability to deliver healthcare that supports national priorities.

NHS Stoke-on-Trent and North Staffordshire Clinical Commissioning Groups (CCGs) have been heralded as innovators in digital solutions that enable self-care and shared care approaches to be used to support patients with varying levels of digital proficiency.

The wide scale adoption of technology-enabled health care in Staffordshire is funded and supported by the Staffordshire Sustainability and Transformation Partnership (STP), West Midlands Academic Health Science Network, North Staffordshire CCG, Stoke-on-Trent CCG and Keele University (NHS North Staffordshire Clinical Commissioning Group, 2018).

To continue the progress of technology-enabled care in the Staffordshire STP area, funding from NHS England has been secured to deliver a pilot project, 'General Practice Nursing—Developing confidence, capability and capacity for delivery of technology enabled care'. The 6-month programme commenced in March 2018 and will promote the development of general practice nurses to become digital nurse champions.

The pilot has a practical focus and includes the use of action learning sets to enable shared learning and sharing of good practice as the pilot progresses. General practice nurses enrolled on the project are encouraged to adopt two modes of technology-enabled care service and through detailed action plans can evidence their predicted outcomes.

The attention is on patients with common long term conditions and the prevalence of lifestyle/long term condition indicators are quantified for the practice and

benchmarked against the CCG and national averages. These data support nurses to provide a rationale for their project areas and a baseline to monitor progress.

The chosen modes of technology-enabled healthcare have included the use of apps, closed Facebook groups, Flo simple telehealth, Skype consultations and encouraging patients to sign up to Patient Online.

How can I get started now?

The full pilot evaluation will be shared on completion; however, the aim is to look at best-practice solutions that all nurses can benefit from.

NHS Stoke-on-Trent and North Staffordshire CCG continue to promote a wide range of their resources to support general practice nurses nationally. These resources are free and able to be readily used.

'Manage Your Health' is a collection of apps where patients can learn about a range of long-term conditions. This has been particularly favoured by nurses on the pilot due to its ease of use. Nurses are able to optimise consultation time and can be assured by signposting patients to a reputable and trusted site. The 'Manage Your Health' app is a free resource that can be advocated to patients, families and carers. Supporting patients through the simple steps to download the app in practice encourages patient participation (*Box 1*).

The CliniTECS website, developed with support from Redmoor Health, is a practical website where health professionals can seek resources that will support them when starting to use different modes of technology. Here nurses can find good examples of technology-enabled care through video case studies as well as supportive documentation to address governance issues. Easy step guides range from setting up Facebook pages to downloading protocols, management plans and patient information leaflets (www.clinitecs.uk).

Conclusion

As the NHS marks its 70th birthday, we need to celebrate the vital contribution that nurses have made to its success, and how the profession has evolved over the decades. It is important to ensure that we are fit for the future challenges that face the NHS.

Shaping a consistently positive image of nursing is recognised as being crucial to help attract and retain staff, but will also ensure nurses are in a position to influence policy decisions that affect the health and wellbeing of people, not least at a time of change and reform in the NHS. **PN**

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Box 1. Manage Your Health app

The free Manage Your Health app can be found on the following sites:
- Google Play Store: https://goo.gl/n1WswP
- Apple App Store: https://appsto.re/gb/nNL-9.i
- Amazon App Store: http://goo.gl/oyiou1

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KEY POINTS

- The NHS is facing its greatest ever challenge in terms of capacity and sustainability, with demand far exceeding available resources and patient expectation continuing to increase
- Focusing on technological advances could provide huge benefits to patients and free up time for clinicians
- It is essential that all nurses are supported and encouraged to develop their use and understanding of how technology can support clinical practice

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