Technology and Innovation in the NHS

Royal College of Nursing Scotland

Background

In the health care sector having the right technology in the right place has enormous potential for both staff and patients. It can make it easier to share knowledge and information with patients and peers. When used appropriately technology can help to deliver better, safer care.

In its manifesto ahead of the 2016 Scottish Parliament elections, *Nursing Scotland's Future: professional voices, practical solutions ,* the Royal College of Nursing (RCN) asked that 'Digital technologies are used to open up new, smarter ways of working for health care teams, especially those operating in the community'.

Informed by two RCN Digital Summits held in 2015 and a resolution at RCN Congress 2016, RCN has undertaken a programme of work which aims to ensure that by 2020 every UK nurse is an e-nurse. The concept can take many forms. It includes involving nursing and midwifery staff in the design and implementation of information technology, increasing access to education and training, and using data to improve care. As a first stage, RCN has produced a publication jointly with Health Education England, *Improving Digital Literacy*, which describes the digital capabilities nursing staff will need for the future.

What do you consider have been the main successes of the existing Scottish Government's eHealth and telecare/telehealth strategies and why?

Since the publication of the Scottish Government's eHealth Strategy 2014-2017 there has been some improvement, particularly for patients. Many of the successes are highlighted in the case studies section of the eHealth website.

The last strategy emphasised the importance of eHealth leadership, and this has been successfully followed through in the development of the eNMAHP leadership programme. By equipping nurses, midwives and allied health professionals to be leaders and champions for technology enabled care, this programme has helped to embed expertise and confidence in the workforce and enhance safe and effective person centred care. This is an important work stream which must continue.

Whilst mobile technologies are increasingly important for nursing teams, supporting them to deliver effective and more responsive care, and improved outcomes for service users, the development of fit-for-purpose technology for community nursing is still in its early stages. Given that, success of existing strategies in nursing terms has been limited.

What can be seen as a success is that nursing teams recognise the need for technology and innovation to deliver more effective care for patients, and the efficiencies which this can have in terms of staff time. The results of the NMAHP eHealth Survey in 2015 reported that although staff are increasingly realising the benefits and efficiencies around managing demand and capacity through eHealth clinical and admin systems, 8 NHS boards reported having NMAHP staff with 'poor access to clinical and admin systems'.

The survey found, for example, that video conferencing and webex were being used widely, but that the use of mobile devices was limited, and was not systematically rolled out across all services and areas.

What do you consider have been the main failures of the existing Scottish Government's eHealth and telecare/telehealth strategies and why?

The RCN believes that the general direction of, and thinking behind, Scottish Government eHealth and telecare/telehealth strategies to date has been correct for the most part. The challenge is, however, ensuring that the strategic direction is mirrored in delivery on the ground. To date, change on the ground has been limited.

Projects which have been tested and rolled out are already making a real difference to health care staff and patients. But the scale and pace of change has not been sufficient.

RCN members, particularly those who work in remote and rural areas, are frustrated with the limitations of IT systems and connectivity: something as simple as calling a colleague for advice is impossible without a mobile signal.

That is why in its 2016 manifesto the RCN stated that 'Scotland-wide connectivity is key if we are to use technology to its full potential to support health care.' Whilst we appreciate that work is underway to improve Scotland's digital infrastructure, there are parts of the country in which basic connectivity is still a challenge.

Other RCN members say that they need additional knowledge and skills to use new technologies safely and effectively and to support their patients to do the same. To make the most of the technologies available to support better health and better care all stakeholders must work together to address these challenges.

Whilst Scottish Government eHealth and telecare/telehealth strategies have aimed to improve some of the issues highlighted above, the scale of implementation has been slow. Implementation has also been piecemeal, in part at least, as a result of it having been left to individual NHS boards as employers rather than being organised centrally. Likewise, the picture across Integration Authorities is mixed, with some having embraced strategies more fully than others. It is important that Integration Authorities and NHS boards work together to develop a systematic approach to technologies for community teams, ensuring that these are interoperable with other systems, such as GP patient records.

A chronic lack of investment has had a significant impact on the rollout of the strategy. The ability of employers/local authorities to fund investment in digital technologies, as well as the training and development required to ensure that staff have the necessary skills to use new technologies, and to enable patients to do the same, has understandably been limited given budget constraints and demand pressures. In its 2016 manifesto the RCN stated that:

"To embed new digital technologies into the way health care professionals work, the right infrastructure, support and skills must be in place for them, their patients and the communities they serve. This will need those responsible for funding, planning and delivering care to invest in both people and systems, as well as a strong push from all stakeholders, including MSPs, to maintain the pace of innovation and roll it out at scale."

The above will be crucial in ensuring that the new *Digital Health and Social Care Strategy 2017-2022* is delivered.

How well does the Scottish Government's *draft Digital Health and Social Care Strategy 2017-2022* address the future requirements of the NHS and social care sector?

Given that there is, as yet, no full draft *Digital Health and Social Care Strategy 2017-2022* it is difficult to make meaningful observations on it.

From the brief overview of what will be considered within the strategy the RCN would make the following comments:

- It is essential that any digital technologies and innovative ways to deliver services take into consideration digital inclusion and the needs of hard to reach and marginalised communities. As such they should not be seen as a means by which to simply replace existing services.

- Digital technology can enable care which is more effective, efficient and sustainable, and RCN members can see its potential in releasing time for staff to deliver care. But technology and innovation must not be seen as a quick fix to cut costs, and free up staff time.

- Services should work for staff and service users and should complement existing ways of working and modes of service delivery. Technological solutions must work across systems, be connected, agile, and secure. The *Digital Health and Social Care Strategy* must take into consideration the fact that some staff do not, as yet, have the basic kit in terms of technology which they require. Some RCN members working in the community have, for example, reported that they do not have access to a work phone with a camera. This poses a problem where they need to take pictures of a wound for records, or for a more senior nursing team colleague to offer advice.

The RCN does not doubt that there is significant potential in innovation and digital technology to enhance the service which healthcare professionals are able to offer,

and which service users receive. This potential must, however, be viewed within the context of budget constraints.

Do you think there are any significant omissions in the Scottish Government's *draft Digital Health and Social Care Strategy 2017-2022*?

As stated in response to question three, it is difficult to comment on omissions when the draft strategy has not yet been published.

Whilst the RCN agrees with the section which sets out the Scottish Government's vision for citizens, it is also important that health professionals know what they can expect from the Scottish Government in terms of the vision which they will be expected to work under and deliver to.

The new strategy must also align with delivery of relevant aspects of the wider Scottish Government *Digital Strategy*. For example, the Digital Strategy includes an action to ensure that community health workers have remote access to up to date information. To support this, the *Digital Health and Social Care Strategy* must therefore prioritise and allocate funding for mobile technologies for district nursing teams. This includes mobile devices, ongoing training and development and mobile access to clinical decision making applications providing tools and information to support evidence-based and timely decision making.

What key opportunities exist for the use of technology in health and social care over the next 10 years?

Digital technology can enable care which is more effective, efficient and sustainable, and the RCN and its members can see its potential in releasing time for staff to deliver care.

In order for digital technologies to aid healthcare professionals and service users, technological solutions must work across systems, be connected, agile, and secure. Without shared electronic records, for example, staff cannot access timely information about what care has been provided to patients through other services or in different care settings.

Timely access to the right information can improve care quality and safety, reduce error and help patients and professionals make better informed decisions. The Independent Review of Primary Care Out of Hours Services includes helpful recommendations to secure best use of electronic records and consistent data sharing.

Work is already underway to develop solutions to join the dots between what is already in place. For example, NHS boards are continuing to develop portals that provide health professionals with a single point of access to key health information such as patient records and medication management systems. Despite this work to develop integrated solutions, at the point of care our members still experience large gaps in access to appropriate and connected equipment and systems.

There is a need to equip our community services with the smart technology, connectivity and technologically-capable workforce to deliver more effective and person-centred care in people's own homes. Mobile technologies can enable district nursing teams, a core community workforce, to deliver more effective and person-centred care, however use of mobile technologies by Scotland's district nursing teams is still low. In the latest evidence from Queens Nursing Institute (2020 Vision: Five years on published 2014), only 26% of UK district nurses reported using mobile technology to record patient care whilst in their home. The 2015 NMAHP Survey also reported limited access to WiFi within community based environments in six territorial NHS boards.

The RCN Scotland report *Enhanced Care in the Palm of their Hand*, to be published at the end of July 2017, explores and makes recommendations on how the *Digital Health and Social Care Strategy* can support an increase in appropriate mobile technologies for district nursing teams.

As Scotland moves towards the Scottish Government's 2020 Vision, self-management and community organisation will become key organising principles for care. As described in the Alliance's 2015 report 'Realising the Benefits of Digital Technology',and community members and groups in Scotland are already developing innovative, technology-driven health tools.

It must be recognised that some members of the community, particularly older people and socially disadvantaged individuals, do have limited access to digital services as well as limited digital literacy and skills which must be taken into consideration. There are, however, opportunities for health and social care providers to work with their communities to improve engagement with health enabling technologies.

Staff must be confident in using relevant software, devices and systems. For this to happen, care providers and those making decisions about funding and commissioning bodies need to provide time, training and support.

What actions are needed to improve the accessibility and sharing of the electronic patient record?

The RCN has joined with the other professional bodies working in primary care, to publish and put to the Health and Sport Committee, *Principles for a technology-enabled health and social care service.* That document sets out very clearly the actions which primary care professionals, working together, believe are necessary to improve the accessibility and sharing of electronic patient records.

The RCN is aware that some staff see information governance as a barrier to sharing patient information with other members of the health and social care team. There is a need to support staff to better understand how the recommendations of the 2013 and 2016 Caldicott Review reports, which form the foundation of information governance in Scotland's NHS, enable improved information sharing between those involved in a person's direct care, including carers and patients themselves, as well as the primary health and social care team.

What are the barriers to innovation in health and social care?

Budget pressures is one of the biggest barriers to innovation in the health sector. If digital technologies are to be used more widely and to better effect, there needs to be agreed and sustainable arrangements for funding infrastructure, devices, software and staff training on an ongoing basis. It is crucial that health and social care staff, who will be required to use new technologies, are included in discussions as the Scottish Government develops its *new Digital Health and Social Care Strategy 2017-22*.