Exploring the benefits and challenges of telehealth

The potential benefits
Numerous pilot small and medium scale projects in recent years have tested different aspects of telehealth:

- A pilot in Kent with patients with chronic obstructive pulmonary disease who were given monitoring equipment at home led to a 50% fall in hospital admissions and an 80% reduction in home visits, freeing up professionals’ time for other patients (Hall, 2011);
- A pilot in Kirklees using laptops so staff do not have to return to base for

In this article...
- The benefits of technology for patients
- Challenges in using technology for nurses
- Resources to help meet the challenges

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Using a laptop holding patient information can save time and travel costs

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Abstract

Although the vast majority of people use technology and enjoy its benefits, it does not have a good reputation in healthcare. We remember problems with the national IT programme, or bewail the lack of human contact in touch-screen systems.

To counter this, the Queen’s Nursing Institute published a report, Smart New World, describing how technology can help people at home and in the community (QNI, 2012). It aims to explore the vision and identify issues that hold professionals back from exploiting high-tech healthcare.

What patients say
Improving patients’ experience is the main reason to use technology in healthcare.

A woman in North Yorkshire, who uses equipment in her home to monitor her blood pressure and other observations, then transmits it to a central point for review and response, if necessary, said:

“I was struggling to cope with my health before telehealth was fitted, either waking up or going to sleep feeling uneasy or ill. Telehealth gives me a sense of reassurance to know somebody is keeping a check on me every day. It feels like a godsend. I feel much more at ease with the different aspects of coping with my illness. If I don’t feel quite right, I can take measurements at any time in the day and the majority of the time everything is OK” (NHS North Yorkshire and York, undated).

A parent who regularly uses a support website wrote:

“The site makes me feel there is always support and on-hand information readily available from a credible medical team that I can trust and access whatever the time of day. It gives a great insight into the ongoing research and trials that otherwise I would have little knowledge of, thus reminding me there is a true window of hope” (QNI, 2012).

As well as benefits, these stories illustrate some of the domains of technology in community healthcare: it is not just about computers instead of diaries, or electronic records instead of paper ones. It is a combination of: a practical kit, or tools for practice; new ways of organising services; new approaches to handling, sharing and managing information and knowledge; and balancing entirely new professional issues for safe practice (Box 1).

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5 key points

1. Improving patients’ experience of care is the main reason to use technology in healthcare
2. Patient stories illustrate the benefits of using technology in terms of how it affects their experiences
3. Numerous pilot projects have shown other benefits of telehealth
4. Telehealth can reduce A&E attendance and hospital admission
5. Power, identity, trust and equity are key issues health teams find difficult as they adapt to a more digital world
Evaluation showed that, when used piecemeal rather than universally, telehealth could make a significant difference to what difference telehealth could make (DH, 2011), and that three million people could benefit.

**Attitudes to technology**

With major gains possible from the adoption and spread of well-tested forms of telehealth, health professionals need to understand and value what it can do.

However, in the Royal College of Nursing’s eHealth survey of more than 1,300 members, one in five regarded electronic patient records as “a threat to the nurse-patient relationship”. More than half had not heard of “telehealth”, and did not know whether it would improve patient safety or threaten confidentiality. Some 82% did not think it would change nursing practice (RCN, 2011).

A nurse involved in a QNI-funded project to develop a database to match district nurse skills with patients found the introduction of the new method difficult:

“I felt like a student nurse on my first day of placement once again. As with medicine, IT has its own language. The nurse in me kept saying to myself ‘I’m a nurse not an IT expert’, then I realised nursing had become reliant on IT, it was time to embrace it, not fear it. Gradually I got used to the new system and even made a few suggestions on how to make it easier to use and prettier to look at. That was about six months ago. I now feel less like that student nurse and more like my old self” (QNI, 2012).

Nurses are not the only professionals to be challenged. The NHS Confederation (2010) reported on the key issues that all health teams find difficult:

**Power and identity** – having direct access to information about conditions and treatments can increase patient control and autonomy; this improves discussions between patient and professional, and changes the traditional relationship where patients are passive.

Conversely, being monitored at home can make patients feel less in control;

**Trust** – both patient and professional must trust the technology to be safe and effective. In some cases, decisions made by an unseen professional via telemedicine are seen as less trustworthy than those made face to face;

**Equity** – variations in access to technology can translate into inequity in service provision. Older people, those with physical disabilities and those on lower incomes use the internet less than others (NHS Confederation, 2010).

A nursing group debating telehealth in Northern Ireland described the main issue for nurses and nursing:

“Nursing practice is rooted in individualised care for the patient, based on establishing a nurse-patient relationship. Nursing literature, the popular press and patient advocacy groups support and value this element of nursing and therefore the challenge is the ability to balance the fundamental practice of ‘hands-on, face-to-face’ care with new methods of technology-assisted nursing practice such as telephonic and remote nursing” (RCN Northern Ireland, 2010).

**Meeting the challenges**

Numerous resources are available to help nurses (Box 2). The QNI (2012) asks some key questions of nurses, managers and employers. Nurses should consider:

- Could e-health improve your practice, and patient experience and outcomes – do you know enough about it to tell?
- Do you have the confidence to help patients use knowledge and technology?
- Are you prepared to learn and sustain new ways of working?
- What could you do as part of your professional development to build your knowledge, skills and confidence?

**Conclusion**

Increasing the amounts of care at home and in the community, with limited resources, will require a partnership between staff and service users that exploits technology to the full. There is evidence of effectiveness, and tools to help nurses develop skills. Patients can play an important part in their care, given the knowledge and tools. The QNI (2012) encourages nurses to grasp the challenge of using technology to improve care in the home and community.

**References**


NHS North Yorkshire and York (undated) Benefits and Patient Stories. tinyurl.com/NHS-york
