

NHS England – TECS CASE STUDY 002: Using telemedicine to reduce hospital admissions

Location: Airedale Hospital NHS Foundation Trust, West Yorkshire

Commissioners: Airedale NHSFT, Wharfedale and Craven CCG, East Lancashire CCG, Bradford District and Bradford City CCGs, Calderdale and Huddersfield NHS

Foundation Trust, Cumbria CCG, Queen Elizabeth Hospital NHS Trust (King's Lynn), Hardwick CCG, University Hospitals Coventry and Warwickshire NHS Trust, Coventry and Rugby CCG, Dartford and Gravesham NHS Trust, Lincolnshire Community Health Services NHS Trust, East Cheshire NHS Trust

Provider: Immedicare, Involve Visual, V-Connect

Ambition level: 6

Background – what the project hopes to achieve:

Airedale NHS Foundation Trust (ANHSFT) has deployed telemedicine in a number of settings – including prisons, care homes and patients in their own homes. The aim was the same in all cases – to reduce the numbers of vulnerable people and people with one or more long term condition being admitted unnecessarily to hospital. Where used in offender environments, the added objective is to reduce the need for escorts and bed watches. The at home deployment was originally set up for patients with diabetes and has been extended to people with COPD, heart failure, complex diabetes and those who are near end of life.

How does it work?

The system works as a two-way secure video link between patients and a clinician – in the first instance a senior nurse - which can then be escalated to a doctor as required. The clinicians are all based at a Telehealth Hub centred at Airedale Hospital.

There are two technology platforms in use: 75 patients choose to have a bespoke set top box on their TV at home. If they feel unwell or are concerned, they can access the box via a button, which links them to the nurse-led monitoring centre. It is also possible for a clinician to contact the patient through the same channel if they are concerned for any reason. An increasing number of patients are now provided with a software package (Cisco Jabber) that allows secure two or multi-way contact on mobile devices such as tablets or laptops. The video link system is also used in 160 nursing and residential care homes across England.

What was achieved?

13 prisons across England access telemedicine at Airedale Hospital.

Around 100 patients with LTCs or who are near end of life now use the at home service with a further 150 in implementation.

160 nursing and residential care homes also use the system – in all 5,000 people have access to the service to date.

At home, results for patients with COPD are as follows:

- 45% reduction in hospital admissions
- 60% reduction in A&E attendances
- 50% reduction in overall bed days
- 9% reduction in length of stay

Nursing and residential care home results show:

- 35% reduction in hospital admissions
- 59% reduction in total use of bed days
- 53% reduction of use of A&E

Yorkshire Health Economics Consortium is due to publish 2-year results in autumn 2014.

Economic Case

A COPD patient in his or her own home with telemedicine was admitted to Airedale Hospital once in a 12-month period. In the year prior to telemedicine, the same patient was admitted 15 times. The single admission was appropriate, facilitated by the Telehealth Hub team and the length of stay was shorter as the patient could return home and continue to be supported by telemedicine. A typical urgent admission costs around £2500. It costs approximately £2400 for telemedicine to support a patient in their own home for a year thus the return on investment saving is delivered from just one admission. For care homes the return is even greater given, we have demonstrated a 35% reduction in hospital admissions

Commissioning, procurement, information governance challenges:

The team at ANHSFT have been using telemedicine for over 8 years. The issues they face are:

A perverse tariff system – secondary care providers continue to be paid more for a hospital admission than delivering an avoided admission.

Clinical engagement and traditional boundaries between primary and secondary care

– clinical engagement is variable across primary and secondary care. Some embrace telemedicine, others are actively against it. Some feel having a secondary care provider delivering this service “crosses the boundary” into primary care

A specific challenge is in offender health telemedicine. Following initial telemedicine consultation, it may be necessary to refer the patient for diagnostics. In such cases, a referral is made by the ANSHFT consultant, which can occasionally be rejected by the receiving consultant due to perceived geographical boundaries. The pathway has to be started again resulting in poor patient experience and additional cost.

Evidence – while many stakeholders anecdotally accept telemedicine is the ‘right thing to do’ many challenge the lack of evidence in the UK. Many countries across the world have been using telemedicine for a number of years however; ANHSFT is generating evidence of use in the UK. The lack of homegrown evidence however, should not be a barrier.

Confused guidance on information governance – NHSE advises that Skype, Facetime etc. cannot be used due to information governance risk. However, there are many NHS providers using such free technologies to deliver clinical consultations. Clarity is required.

Scale – significant benefits are realised once telemedicine is delivered at scale. For example, reducing hospital admissions from a handful of care homes with telemedicine does not enable mass change. The service must be delivered at scale in order to achieve change across the whole health system.

Funding – contracts to date have been based on non-recurrent funding. Funding could be incorporated within recurrent contracts to ensure continued funding for all parties.

Prescribing concerns – if a care home resident requires a prescription following a telemedicine consultation then the telemedicine nurse will task/request a GP (local to the care home) to issue the prescription. This concerns some GPs as they are being asked to prescribe without seeing the patient. Qualified nurse prescribers within the Telehealth Hub would be willing and able to prescribe medicines. The challenge is exacerbated by lack of

clarity about who pays; primary or secondary care – which further highlights the barriers between primary and secondary care.

What does the future hold?

ANHSFT's experience is well publicised and they have received visits from all senior NHS England administrators and parliamentarians – many who have expressed admiration for what they have achieved but frustration that the service is not being rolled out elsewhere. Other regions have expressed interest in copying the technology to use in their geographic regions. In terms of further expansion of the service in ANHSFT, please refer to the section on challenges (above).

Relation to other transformational programmes:

The experience in ANHSFT relates to national programmes of integration, primary care transformation and new models of care. The technology that ANHSFT has developed has been adopted as part of the Prime Minister's Challenge Prize by one other region.

Links to related information on the programme:

www.immedicare.co.uk

<http://www.airedale-trust.nhs.uk/services/telemedicine/>