Board Assurance Prompt – Implementing telehealth services

July 2011

What is this guide? Who is it for?

This briefing is targeted at Clinical Commissioning Groups (CCGs), NHS and Health and Wellbeing Board members and others planning healthcare improvement. It is intended to support debate around service quality, operations and planning in a precise and informed manner. The contents are drawn from the Good Governance Institute report "Better care for people with long-term conditions: the quality and good governance of telehealth services"[1]. The report emphasises the impending crisis of demand in long-term conditions and suggests strategies consistent with QIPP and good practice in patient-centred care.

Telehealth services

Vital signs[2] provide a unique and effective gauge to an individual's health and likelihood of deterioration. Yet in our healthcare system we value this information less than almost any other data. Vital signs data can be collected and analysed in real time, and if found to be significant and to suggest risk a clinician can be alerted and is able to step up the attention that individual gets. This is especially useful for patients living with a long-term condition.

Telehealth solutions are about maintaining a real-time flow of information from patient to clinical team in order that an individual's care needs can be continuously risk stratified, and interventions appropriate to that particular unique patient can be brought to bear at the right time; ideally to avoid crisis or needless deterioration. Telehealth is targeted towards patients living in their own homes as well as those under continuous formal nursing oversight . For suitable telehealth candidates, a suite of clinical readings will be identified and calibrated to the individual patient. Against a predetermined risk algorithm, should the risk score identify a potential issue then a monitoring centre is alerted and possibly the patient is contacted. The monitoring centre will review the information and ask the patient to re-take readings, provide further information or simply provide them with assurance. The monitoring centre will then, in the light of further information obtained, either update the patient records and deem no further action required at that point (in around 97% of cases) or escalate the case to the clinical team caring for the patients (in around 3% of cases). Telehealth is thus not about summoning immediate or emergency help, but adds value by enriching the data source about patients as they live their lives, providing clinicians with ongoing vital signs measurements and, where appropriate, identifying changes in risk to individual patients.

Around 80 PCTs currently use limited telehealth systems, mainly in pilot form and to small scale. The Whole Systems Demonstrators (WSD), an evaluation being overseen by the Department of Health (DH), has been testing telehealth systems with a view to providing an evidence base for more wide-scale uptake of systems and confidence to local NHS organisations interested in using telehealth at scale. Some areas such as Cornwall, Gloucestershire, North Yorkshire and York and Northern Ireland are implementing telehealth solutions at scale to benefit the majority of suitable patients.

Beneficial outcomes for patients with telehealth include:

- Better individual risk management, and maintaining stable health and better patient confidence
- Fewer hospital admissions, with more planned escalations of care where needed
- Fewer routine clinic visits
- Increased knowledge about their condition as it pertains to themselves, and how to spot and avoid deterioration
- Increased opportunity to live an independent life, including staying at home and maintaining social and work lives

Telehealth services have, for significant categories of patients, been shown to provide better outcomes and much more efficient service use.

[1]Corbett-Nolan A, Bullivant J, Green M and Parker M , "Better care for people with long-term conditions: the quality and good governance of telehealth services", GGI June 2011

[2]Vital signs are measures of various physiological statistics, often taken by health professionals, in order to assess the most basic body functions.

The rest of this guide

Overleaf is a series of assurance questions that board members and others developing services might ask to ensure that the local service development is progressing along sustainable lines to meeting the known needs of patients in the future and is focussed on better population outcomes. These assurance questions are examples only, and are intended to provoke thought in those holding service planners and commissioners to account. We also provide our view about what an adequate and thoughtful answer to these questions would look like, and also what an unsatisfactory response would be.

This guide was edited by Andrew Corbett-Nolan and Dr. John Bullivant, with thanks to Don Redding, Director of Policy, National Voices

"Properly scaled up, the use of telehealth across the NHS could lead to up to £1 billion in annual savings with hundreds of thousands of patients' lives improved significantly. However, despite many pilots and pockets of interest around the NHS, there is as yet no strategic drive for telehealth at scale."[1]

"Introducing telehealth is in its own way as significant as introducing the concept of the hospital, clinicians or medication itself was for many centuries. The opportunities of technology provide complex issues for those planning, managing and delivering care within an increasingly inter-connected society. The technology itself is in many ways the most straight-forward element of this revolution in care. Success will depend on morphing the whole way in which the public thinks about their health and healthcare, and the means by which clinicians work, into a new care paradigm. For each local pathway of care supporting patients with a chronic illness, a wholesale redesign will be needed if the new technology is to deliver the benefits it promises. Managing these changes at a time of structural change within the NHS itself is critical to maintaining and developing care for patients."[2]

[1]Cruickshank J, 'Healthcare without walls: A framework for delivering telehealth at scale', 2020health.org November 2010

[2]Corbett-Nolan A et al, 2011, ibid

	Example assurance question
1	**Do we have a strategy for dealing with increases in demand for long-term conditions?**
2	**Does telehealth work?**
3	**Does telehealth lead to patient isolation?**
4	**Will clinicians work with telehealth?**
5	**Why isn't telehealth being used more widely**
6	**Will telehealth save money?**

Key acts about telehealth

Telehealth services were initially seen as ways of supporting isolated rural communities, but their modern application and the work of the DH's Whole System Demonstrator shows their wholesale use for all populations as part of supporting people with a long term condition

In Newham, around 2,000 local people have the opportunity of using either the telehealth or telehealth systems in their home. telehealth is aimed at people with long term health conditions such as diabetes, heart failure and/or COPD

A survey of 200 patients currently using telehealth in North Yorkshire and York shows that 96% of them would recommend the technology to others, with 98% being either 'satisfied' or 'highly satisfied' with how it's helping them manage their long term health condition.

In Sheffield, COPD-related hospital admissions decreased by 50% amongst telehealth patients. If introduced to all COPD patients the PCT could potentially avoid 50 admissions a month, the total saving could amount to £1.2m annually

Plausible answer	Insufficient answer
We have drawn up a comprehensive strategy, are investing in alternative but aligned approaches, observing best practice elsewhere and have plans to prioritise investment in these areas	We are constantly making cost savings and seeking to redeploy resources but it is very difficult
We are working through our own local, holistic success criteria encompassing outcomes, patient reported benefits as well as economic and value for money considerations. We are impressed with the potential reported elsewhere and encouraged that the WSD pilots are reporting they will step up their telehealth services	We are running a small pilot and will consider the results in due course. It certainly looks like there is a lot of money to be had from telehealth and we want some of it
Actually no. The evidence indicates the daily routine of taking the readings and the feedback from the monitoring centre is building confidence with our patients, and creating a feeling of ownership of the condition with support when needed as they know that every day their health is being monitored	Patients will just have to learn to live with technology replacing clinicians. It's the way of the world. More and more will have to be automated
We've been working with clinicians from the outset and building their understanding and commitment to telehealth. There were initial misgivings. Looking at areas where telehealth is up and running has been useful to securing clinical buy-in, as has the promise of daily vital-signs data from their most at risk patients	Our clinicians are very patient-centred and won't want to reduce their contact with patients. You don't train a doctor for over a decade and then replace them with a machine
This is a very new way of working and actually the expansion in the use of telehealth has been pretty rapid. We are now able to look at the experience of other areas and services, and its encouraging to see the first at scale examples being started	Telehealth is suitable for rural and isolated communities such as Australia and Wales and that's why it isn't catching on here
It has the potential to save money as we scale up and develop integrated services. As part of a proper care pathway redesign telehealth has been shown to dramatically reduce emergency hospital admissions and indeed save money. But there are further resource savings to society as a whole as well as the families of our patients	It's a large up front investment to buy all those machines, and our experience is that when we introduce new ideas, they simply unearth unmet demand, not save real cash

NHS Doncaster has invested in 180 telehealth systems which are being installed between March 2010 and March 2012, an investment of £385,000 over three years

In Cornwall, over 780 patients now have telehealth equipment with over 650 being monitored every day. These include referrals for breathing problems, heart failure and diabetes

Northern Ireland's government has signed a six year contract for telehealth technology, covering patients with heart and respiratory conditions, diabetes and those who have suffered a stroke

In North Yorkshire and York, telehealth has already accounted for a 50% reduction in the number of unplanned hospital admissions amongst those patients currently using telehealth

Implementing telehealth services:
A maturity matrix to support development and improvement

Version 1.1 July 2011

To use the matrix: identify with a circle the level you believe your organisation has reached and then draw an arrow to the right to the level you intend to reach in the next 12 months. 0 ----> ?

Progress levels / Key elements	0 No	1 Basic level Principle accepted and commitment to action	2 Early progress Early progress in development	3 Results Initial achievements evident	4 Maturity Comprehensive assurance in place	5 Exemplar Others learning from our consistent achievements
Telehealth and local health strategy		Our plans to use telehealth matches existing strategic goals and our QIPP programme. We have been working with clinicians to frame telehealth plans	We have worked up holistic success criteria for our use of telehealth. We understand anticipated changes to local contracts this will secure and are discussing implications with providers. Telehealth is include in our QIPP	We have evidence that we are starting to secure our goals from telehealth services. Clinicians' feedback is positive. We have evidence that care pathway changes are working	We have made a stepped change in service use for those using telehealth services, and have mainstreamed telehealth use where we have evidence it is benefitting patients and we are meeting our success criteria	Our patients using telehealth services are achieving outcomes in the upper quartile nationally. We are introducing telehealth solutions to other categories of patients
Implementing a telehealth programme		We understand the existing care pathway as planned and as it actually operates. Partners and clinicians have been involved in doing this. Programme management is defined. Investment has been identified as part of QIPP	With local clinicians, we have designed new care pathways using telehealth. We have adopted referral criteria for telehealth patients and are building awareness and confidence with these groups	The telehealth programme is launched and we are auditing process and analysing variations	Most patients suitable for referral to telehealth have been identified. We have improved the care pathway as a result of audit	Other partners in our local healthcare economy are instituting telehealth and we are seen as a leader in telehealth innovation locally. We encourage clinicians to foster telehealth services elsewhere
Working with patients		We know the patients who will benefit from telehealth and are raising awareness with them. Patients are contributing to care pathway development. Information governance issues are identified	We are working with individual patients to establish their personalised use of telehealth, blind running where necessary. We have an active patient education programme in place. Information governance for telehealth is secured	Patient use of telehealth is to plan, and we are following up with patients falling out of the telehealth programme. Patient reported outcomes match success targets	Patients are acting as peer advocates to others using telehealth. Feedback from patients has helped improve the care pathway	As we introduce further telehealth usage current patients are acting as advocates for change, and helping educate new categories of patients around risks and benefits
Using telehealth to maintain a healthy life		From our JSNA and other sources, we understand current service usage, morbidity and daily living problems for patients we plan to use telehealth services for	Working with local clinicians, we have identified those patients who will benefit from telehealth and are working up at scale plans	Our patients on telehealth are avoiding crisis points and decreasing their use of emergency care services. Patient reported outcomes are demonstrating increased confidence and return to ordinary daily living	Our programme budget for patients in telehealth shows a change in how resources are used from acute to at home services. We have been able to scale up those we support on telehealth services	We are now using telehealth to support our patients across the full range of chronic illness, including those with mental health needs
Regulation and assurance		Our plans for telehealth have been worked through our local governance system, and safeguarding, clinical and information governance issues have been discussed and addressed	As part of our continual assurance against the Standards for Quality and Safety, we have established the care team responsible for telehealth services is properly CQC compliant	Telehealth services are part of our annual clinical audit programme as part of ongoing quality improvement. We systematically examine incidents and near misses	Our audit committee, informed by internal audit, has focussed on telehealth services and is assured that our involvement with telehealth is properly governed	Our telehealth services are involved in peer review and audit processes with others, and we are confident we are contributing to national learning about quality in telehealth services

 ISBN 978-1-907610-08-0