Good Governance Institute

Better care for people with long-term conditions: the quality and good governance of telehealth services

A report from the Good Governance Institute

English Community Care Association

July 2011

Andrew Corbett-Nolan, Dr. John Bullivant, Martin Green and Michael Parker

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This report is part of a growing series of reports developed by the Good Governance Institute that consider issues contributing to the better governance of healthcare organisations. We would especially like to thank Tunstall Healthcare (UK) Limited for making available by an educational grant the resources to enable this report to be developed and distributed as well as the many colleagues working in healthcare who have who have contributed ideas and input and helped review the report. Within the report, the Maturity Matrix uses the style readers will be familiar with from our work and is used under licence from the Benchmarking Institute, **www.benchmarkinginstitute.co.uk** who originated this approach. We have made our best efforts to ensure the quoted case studies are accurate and reflect genuine better practice, but we cannot be responsible for any inaccuracies or errors, or for actions taken based on these case studies or our report. The names associated with the case studies are contact points and not authors.

Our recent Good Governance Institute reports have considered clinical audit, patient safety, the principles of governance, the governance of community services provider units, hospices, diabetes services, better practice in treatment decision-making, productive diversity, the board assurance framework, integrated governance, governance between organisations and quality.

This report is accompanied by various GGI improvement tools, including two board assurance prompts that focus on long-term conditions and implementing telehealth services. These are described in further details in Appendix 4.

We would like to thank the English Community Care Association for their support with this report. The English Community Care Association (ECCA) is the leading representative body for independent community care providers in England. We represent providers of care services for adult with long-term conditions. We seek to create an environment in which providers work with their service users to co-produce a range of high-quality personalised care services, and our priorities are funding for quality, proportionate regulation, workforce development and service innovation. You can find out more about ECCA at www.ecca.org.uk

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Executive summary

> "*Sticking with the status quo and hoping we can get by with a bit more money is simply not a serious option. There's only one option we've got and that is to change and modernise the NHS, to make it more efficient and more effective and above all, more focused on prevention, on health, not just sickness. We save the NHS by changing it.*"[1]

In this section we discuss what this report is about, and why you should read it

This report is about telehealth services, and our recommendations for how telehealth should be implemented. We describe how telehealth provides the potential to help health services address the main focus of the new health reforms: the known expansion in care needs for the future. It is a 'White Paper' in style, taking the reader through the challenges for all Western healthcare services and then explaining the role that telehealth will have in providing a realistic means of meeting future care needs within a sustainable financial envelope; and how those implementing new services will need to think through the governance, quality and safety issues. We include a series of recommendations for those leading healthcare providers, those commissioning services and for policy makers to ensure that as telehealth rolls out across the country its potential to transform the care of patients is fully grasped.

The past year has been subsumed by discussion around the structural changes in the NHS that were anticipated in the White Paper "Equity and Excellence'[2]. Less attention was paid to the underlying reasons for the reforms, and in section 2: The Challenge we outline the central challenge for all Western health systems: expanding and changing demand, and the need to provide quality care that is affordable to society. In particular, we focus on the main area of increase: ensuring people with long-term conditions receive appropriate services that can be managed outside traditional healthcare settings. We describe the significant shift in service thinking that will need to take place to meet these needs, and how the concept of telehealth holds the potential of being a breakthrough stepped-change.

We explore some of the common myths, preconceptions and confusions around telehealth held by local healthcare leaders that we have interviewed during preparing this report, and describe what telehealth actually is and how it works to support people with long-term conditions. We discuss some of the foundation work now being done in pilot form and the whole systems demonstrators. We then identify the first areas to start to develop telehealth at scale, and what this means in terms of changing patterns of work, relationships between professionals and the need to empower patients. Telehealth is not just the application of new technology to old service modalities but a revolutionising of the care pathway, and ultimately what it means to be a patient.

1 Cameron, David MP, *Speech on NHS Reforms,* BBC news 16th May, 2011 http://www.bbc.co.uk/news/uk-politics-13408021
2 Department of Health, *'Equity and Excellence: Liberating the NHS',* Department of Health 2009

Drawing on the early lessons from the pilots, we examine the emerging governance, quality and safety issues that are being encountered, and provide tools and guidance about how healthcare leaders can address these issues.

To aid implementation, this report provides a series of tools to help boards and executives leading healthcare organisations understand and be assured around how they are implementing the matters raised in this report. We have also developed two Board Assurance Prompts (BAPs) as companions to this report, one focussing on long term conditions and the other on telehealth. We have also developed an auditor briefing to help local internal audit teams pick up the issues raised in this report, and provide boards with assurance around implementation.

Finally, we describe the work of the Good Governance Institute, and how this report should be used by boards and service planners.

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Chief Executive
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Good Governance Institute

July 2011

2 The challenge

"There's only one corner of the universe you can be certain of improving, and that's your own self. So you have to begin there, not outside, not on other people. That comes afterward, when you've worked on your own corner." [3]

In this section we explore the nature and scale of what healthcare services will have to do to address the needs of people with long-term conditions. This includes the potential for providing more personalised care that genuinely empowers patients and produces outcomes that matter to those using services. Additionally, we discuss how services need to meet these new needs but within expected resources, and how all this has to be achieved with an eye to the sustainability agenda. The accompanying GGI board assurance prompt 'Managing long term conditions' provides further details, and contains example assurance questions and a maturity matrix that are reproduced in appendix 4 of this report.

Commissioners and providers have transformed the NHS over the past few years. Never has so much been provided to so many. The care model has, in three decades, been shifted from a model of acute in-patient care to one where much larger numbers of patients are being cared for in a service where beds diminish year on year. But none of this is enough to address the known problems of the coming years.

The burden of disease in Western societies is changing, and even today 75% of NHS resources[4] in England are devoted to supporting the lives of the 15.4 million people who live with one or more chronic condition. As medicine saves lives from acute episodes of illness and as lifestyles change, the population has become older, sicker and fatter. Increasingly, people live on their own, separated from family and dependent on themselves or professional care givers. New medicines and technologies mean that conditions that in former years needed hospital care and high intensity nursing can now be managed on an outpatient basis, or entirely in the community. Pharmaceutical care has transformed the opportunities of millions, and has enabled many former life-threatening illnesses to be managed and contained. Expectations from patients have accordingly changed, and many people are able to live longer lives after the onset of serious conditions such as diabetes, dementia or congestive heart failure. The challenge of the health service in the 21st century is to live with the results of its own success in the 20th.

3 Huxley A, '*Time must have a stop*', Harper and Bros, London, 1944
4 Healthy Lives, Healthy People: the government's strategy for public health in England, HMGCM7985 Nov 2010

The numbers associated with LTCs are so enormous as to be practically meaningless, and the predictions for future trends dwarf current efforts to contain the costs of care. For example, since 1996 the number of people diagnosed with diabetes in the UK has increased from 1.4 million to 2.6 million. By 2025 it is estimated that over four million people will have diabetes. One in three people over 65 will die with dementia, and currently 700,000 people in the UK have a form of dementia. Indeed, one in six people over 80 have dementia. Numbers will continue to rise and in less than 20 years nearly a million people will be living with a dementia illness. All this means that by 2025, unless the care model has dramatically altered, the percentage of national wealth devoted to healthcare will need to increase from 9% to 20%. If the USA is ahead of the curve then the predictions for the years ahead set a significant challenge, as their care costs will need to rise to some 50% of their GDP in the same time frame just to contain changes that are known will happen. This is unaffordable and services must develop different strategies to ensure that known challenges are effectively managed.

The change in the use of technology and in particular the management by humans of information gives some hope. In 1750 the entire canon of published works amounted to somewhat less than the number of words published in two weeks by the Times newspaper today. In 1850, perhaps 20 facts were permanently recorded about an individual's life. Today, with modern banking transactions, emails and even transport arrangements that number is exceeded in a single day. In 1950, dialling direct across the UK was eight years in the future. Now a click of a mouse bounces a video of one's child from Aberdeen to Auckland in seconds. The application of advanced technology to healthcare is well-understood in terms of diagnostic imaging or new forms of surgery, but still in the main the most basic of medical tools with the greatest predictive use in terms of minimising risk for patients is recorded and managed using methods that would be familiar to Florence Nightingale.

Vital signs[5] provide a unique and effective gauge to an individual's health and likelihood of deterioration. A patient's pulse, temperature, blood pressure, breathing rate, weight, fluid intake and loss and general cognitive alertness provide a trained clinician with a simple algorithm that still guides the majority of care. Yet in our healthcare system we value this information less than almost any other data. The least experienced, empowered and trained member of the care team is required to collect this information. Harvesting this information is also organised around hospital routine, not patient need – classically every four hours. The use of this critical data is even more quaint. The information is recorded by hand in notes, to be left until the next time a senior clinician is due to attend the patient. In the pattern of hospital life this can be after several days, by which time the information is out of time and possibly devoid of use. At a recent international symposium focussed on patient safety one speaker stated 'over 24 hours the notes elegantly recorded the demise of the patient'.[6]

But the situation is worse still for patients out of the hospital loop. Though they live with complex and risky illnesses controlled by drugs and other potent means, their vital signs may only be taken when they present for an outpatient visit – perhaps every three or six months. Any day-on-day change in their health outside the timetable of clinic appointments is unseen, unless it leads to a catastrophic failure and an emergency visit to a hospital. Yet the technology for taking, validating

5 Vital signs are measures of various physiological statistics, often taken by health professionals, in order to assess the most basic body functions.
6 International Society for Quality in Healthcare, 2010

and making sense of this data is no more complex than deriving a credit score or a quote for motor insurance. A patient can be quickly trained to read all their vital signs on a routine and planned basis. The pattern of information derived can help rapidly build up an individual and personalised picture of what is normal and abnormal for the person concerned. The 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. All this is very simple, yet services are framed around a model of service designed in another age, and dependent on visits, appointments and postal communications.

But not only is this system inefficient to the service, but also to the patient and to society in general. The current approach to care depends on the service's time being of more value than the patient's. The service sees the patients when it suits the service, and the patient is expected to frame the rest of their life around this. The patient needs to travel to the care-giver, during usual working hours in the main, and make any transport, family or work arrangements around this. In around a sixth of cases at an outpatient appointment, it is not possible to bring the patient, the clinician and the clinical notes into the same room at the same time and so tests, case histories and advice are repeated again and again, with the risk of something being lost on each occasion. The time and cost lost for the patient can be enormous. But multiplied up across society these costs are vast. Days of lost productivity, years lost out of a working life and the green costs of transporting millions of patients around and between clinics is unsustainable in a world where people will need to work longer to fund their old age, where resources grow increasingly scarce and where transport becomes more ecologically costly. The UK economy stands to lose £16 billion over the next 10 years through premature deaths due to heart disease, stroke and diabetes. We also have had recent warnings about the quality of care for vulnerable patients seeking to maintain life at home, but whose care needs are significant[7]. A better, more reliable way of caring for the known unwell has to be found.

7 Davies C, '*Home care of elderly 'abuses basic human rights'*, report claims', The Guardian 20th June 2011

Key recommendations from section 2: The challenge

1 Boards need to understand how the changing demography and morbidity will effect their services and the lives of their service users over the coming decade. Boards should devote time to understanding these changes, including 'blue-sky' thinking and scenario planning for change

2 Boards should understand the route for collecting, analysing and reviewing the most basic of care data: vital signs. The risks to patients and organisations arising from poor collection, review and consequent action from basic patient information should be properly understood.

3 Boards should understand the risks and costs arising from failure to properly escalate the care of vulnerable patients. Boards should have a robust understanding around how they are assured that their most vulnerable patients receive the appropriate level of care; and that changes in condition are quickly identified and managed

4 Boards should bring together a comprehensive strategy around how they will transform services in order to meet the changing healthcare needs of their populations. This should be agreed by partner organisations

5 Boards should demonstrate a leadership role by helping to build an understanding of the up and coming healthcare service changes that lie ahead amongst the local population

3 Innovation

"Every patient carries her or his own doctor inside" [8]

In this section we examine what telehealth is, how it developed and how it is now used. We discuss the local and national pilot studies, and the Whole Systems Demonstrators. We examine the first at scale applications of telehealth services.

Telehealth, telecare and telemetry are related but critically different approaches to using modern technology to provide improved care services.

Telemetry is the transmission of clinical information in order that a specialist clinician can remotely provide care advice. An example would be sending cardiac readings for a critically ill patient from an ambulance to a cardiologist in order to decide whether or not to initiate anti-thrombolytic drugs prior to arrival at hospital. Another example would be transmitting a CAT scan to a radiologist at a specialist centre for a second opinion. Telemetry concerns the contained transmission of information in order to access advice and opinion.

Telecare is familiar to most, and it is important to appreciate that it differs significantly from telehealth. There are a variety of telecare solutions that support daily living for vulnerable and older people. The most well known are pendant alarms, which when activated allow an individual to summon help by pressing an alarm that is either wrist worn or attached to a neck cord. A variety of other technological solutions are available, such as smoke or heat detectors, alarms that sense when a bed has become wet or that can alert a carer to when an individual with memory/cognition problems leaves the house at unusual hours. Put simply, telecare systems are preset to summon help when activated by a user or a set of circumstances that indicate that the user is at risk and in need of assistance. Telecare solutions are very widely used and at scale both in the home and in supported living/residential care settings and have been commissioned as mainstream services for social care by local councils for many years. There are 1.72 telecare connections in the UK.

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. Some might be direct physical measurements such as blood pressure, weight or pulse. Other clinical readings may be the response to branching logic questions such as 'were you out of breath after walking upstairs this morning?'; 'do you believe your ankles are more swollen today than yesterday?'

8 Schweitzer, Albert

or 'have you taken your medication this evening?' These various data items and readings are collected by the patient and fed into the telehealth system, where they are recorded for trend purposes and a risk score is assessed for the patient on that day. 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 possibly ask the patient to re-take readings, provide further information or simply provide 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.

Telehealth thus lends itself to supporting patients who live with potentially significant health conditions, but for the majority of time are able to manage these and maintain an ordinary home life. Good telehealth reduces the risk of these patients gradually deteriorating and developing acute care needs and thus deferring to unscheduled care. It provides patient and clinician with a strong data source to help better manage chronic illness. Because the patient is intimately involved in taking the vital signs readings it helps patients better understand their own condition and be aware of the significance of changes in symptoms or feelings. Telehealth is suitable to assist patients with either somatic or mental healthcare needs.

Prior to the current reforms, the obvious focus for telehealth systems were Primary Care Trusts (PCTs) with their role in terms of supporting healthcare within their local populations. With developing models of risk sharing and care pathway management, telehealth can be useful to either Clinical Commissioning Groups (CCGs), primary healthcare teams or any other healthcare provider (both community and acute). Around 100 PCTs currently use limited telehealth systems, mainly in pilot form and to small scale.

Sheffield[9] has been using telehealth to support patients with chronic obstructive pulmonary disease (COPD). This is one of the most common respiratory diseases in the UK, and is unique internationally as being the one mayor cause of death whose incidence is rising. The annual cost of treating it is £818m annually, and is increasing year on year. Sheffield's local population has a high prevalence of COPD and in some parts of the city up to 8% of patients have the condition. This is due to the area's history of occupational exposure from the steel industry. Likewise Doncaster has a high incidence of smoking and, as an ex-mining community, has a high incidence of respiratory related patients with chronic illness. In both areas, commissioners and clinicians were keen to help patients maintain a healthy life at home and reduce the risks and costs associated with unnecessary care interventions and admissions to hospitals.

Sheffield hospitals receive some 2,000 COPD related admissions annually. The PCT decided that a proactive approach was necessary to minimise avoidable admissions.

9 The Sheffield and Doncaster case studies are also identified in Corbett-Nolan A et al, *Cost savings in healthcare organisations: the contribution of patient safety'*, GGI November 2010

An assessment of COPD services revealed that health outcomes could be improved and usage of secondary care reduced by using telehealth to monitor patients in their own homes within an early discharge scheme. This required greater collaboration between primary and secondary care teams, with improved access to secondary care clinicians skilled in advanced COPD care. The secondary care clinicians were also used for their specialist knowledge of governance and risk.

The objectives of the pilot scheme were:

- To support early discharge of the patient
- To reduce the risks and costs of both elective and non elective admissions
- To hit key performance indicator targets – reduce A&E figures and discharge early
- To support community care with virtual wards
- To reduce possibility of infection by keeping patients out of hospital.

Telehealth monitors were given to 30 high-risk patients for a period of five months, during which time they measured their own vital signs including heart rate, weight, blood pressure and oxygen saturation levels. The monitor was also capable of asking a series of clinical questions to further determine their current condition. Once measured, the data is transmitted to the public health development respiratory nurses and/or the COPD nurses' office within secondary care. The COPD nurse triages the patients against agreed criteria and applies an order of priority to the visitation schedule, whilst those patients in need of urgent treatment are referred to the appropriate care facility.

Key benefits to patients were:

- Earlier discharge
- Improved confidence as they know their condition is being closely monitored
- Rapid response to any change in the condition
- Better clinical risk management for a group of patients known to the service
- Fewer unplanned admissions
- The convenience of being monitored at home

This innovative approach to managing the condition saw COPD-related hospital admissions decrease by 50%, releasing a saving of around £35,000 and £40,000, which enabled the purchase of 15 more monitors. On the basis that the PCT could potentially avoid 50 admissions a month, the total saving could amount to £1.2m annually.

Being able to remotely triage patients helped staff to prioritise visits. During the pilot, home visits were reduced by 80% resulting in more effective use of staff time. Initially nurses saw telehealth as a direct threat to their role. However, since its implementation there has been a complete turn-around in staff attitudes and perception.

Another similar pilot programme has been running in Doncaster. Over the past four years, significant success has been achieved by embedding telehealth and telecare (social care) systems. A planned collaborative approach has been developed between NHS Doncaster and Doncaster Council.

The development of telesystems in Doncaster has been led from a multi-agency strategic steering group, who have delegated implementation management to a delivery group and full-time clinical manager. This built on a history of collaborative planning developed under the auspices of a respiratory working group that was initially asthma-focussed, but over time prioritised the development of better services for patients with COPD.

A cadre of 50 high risk COPD and heart failure patients are currently cared for by the telesystem, and this is planned to increase to 180. NHS Doncaster has been working to develop the profile of patients who will best benefit form the telesystem support.

In rolling out the system, issues included the need for thorough patient and staff training at all levels, including both clinical and administrative staff involved. The telehealth system enabled tolerances to be calibrated to individual patients too, so that each patient's care package, goals and care profile was truly individual. This sometimes means going outside NICE guidelines but in a way that is more meaningful to achieving the right care for individual patients.

The implementation of the system is thoroughly audited to both develop an evidence base for future learning, and to help support better patient compliance, ensure that alerts are meaningful and that the system evolves and improves over time. It has enabled patients to understand their condition better, and has helped reduce hospital admissions and has better focussed expert clinical attention. Earlier deterioration has also been picked up in individual patients, fast-tracking some to intervention and reducing risk.

These small-scale uses of telehealth are typical of programmes being run in many local areas. Because the numbers are contained they have not set local managers and clinicians the challenge of dramatically re-crafting the care pathway, but neither are they bringing about large-scale transformation to the lives of patients. In the Sheffield example 30 patients from a potential 2,000 are benefiting from the scheme. 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.

The WSD programme is a two-year research project funded by the Department of Health to find out how technology can help people manage their own health while maintaining their independence. The WSD programme is believed to be the largest randomised control trial of telecare and telehealth in the world to date. By piloting such new models of care the aim is to confidently confirm that these systems will meet the challenges posed by an ageing population and the associated increase in the prevalence of long-term conditions. There are three WSD sites – Kent, Cornwall and Newham – which were announced in 2007, and have since been involved in detailed planning and implementation.

The sites all differ in terms of their demographics and locations:

Cornwall	dispersed rural population of over 500,000 with more than 10% of people aged 65+
Newham	one of the most deprived areas in the UK with a small but diverse population of 300,000
Kent	population of 1.37m with over 200 existing telehealth users

The WSD Programme is driven by the need to understand the true benefit of integrated health and social care supported by advanced assistive technology (telehealth and telecare). The resulting evaluation will be extremely robust. It has been designed as a randomised control trial, focusing on individuals with chronic obstructive pulmonary disease (COPD), heart failure and diabetes, and adults with social care or health and social care needs at risk of hospital admission. The evaluation will look at the extent to which these assistive technologies:

- promote individuals' long term well-being and independence
- improve individuals' and their carers' quality of life
- improve the working lives of staff
- are cost effective
- are clinically effective

The evaluation results are planned for publication during 2011 and will be complemented by structured lessons learnt to help inform future mainstreaming of this activity.

With the pressing need to develop better care for people living with long-term conditions and with other examples of at scale[10] use of telehealth available internationally, a number of significant at scale programmes have been started in the United Kingdom. NHS North Yorkshire and York are progressing a scheme that will enrol 2,000 uses in telehealth care. NHS Gloucestershire and the Department of Health, Social Care and Public Safety in Northern Ireland have recently committed to also running telehealth systems at scale. In Northern Ireland, the scheme will ultimately support 15,000 people with long-term conditions.

10 Cruickshank J, *'Healthcare without walls: A framework for delivering telehealth at scale'*, 2020 health.Recommendationsorg November 2010

Ninety six percent of North Yorkshire patients would recommend telehealth

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

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.

The survey, conducted by NHS North Yorkshire and York and Tunstall Response, the service provider for telehealth, is one of the largest ever to be undertaken to capture patients' experiences and perceptions of telehealth.

Kerry Wheeler, Assistant Director of Strategy at NHS North Yorkshire and York, said: "The results of the survey speak for themselves and are further evidence of the huge positive impact telehealth is having on local patients' lives."

Over 400 patients in North Yorkshire and York have now been referred to telehealth by their doctor or nurse. One of the main benefits of telehealth is that it helps reduce the number of unplanned hospital admissions by allowing clinicians to monitor patients' vital signs more closely – allowing them to identify and act on problems before they become serious.

The survey also showed that almost 60 percent of patients surveyed felt that telehealth had helped them avoid an admission to hospital. One patient said: "I went into hospital four times last year. Since using telehealth I haven't been in once."

North Yorkshire & York NHS Media Release 19 April 2011

www.nyypct.nhs.uk/ListeningToYou/MediaReleases/index.htm

www.nyytelehealth.co.uk

Recommendations

6 Boards should be well informed about telehealth and telecare services, and have appraised their own future use of telehealth solutions

7 Local service planners should understand the national pilots on telehealth, and also other local small-scale pilot programmes

8 Given the inevitable use of telehealth in future years, boards should have an agreed strategy for implementing telehealth with the aim of maximising patient benefit and including all those living with a long-term condition who might benefit from telehealth services

9 Boards should be building a common understanding around telehealth with local populations, patients living with long term conditions, staff and clinical partners

10 Commissioners and providers should have joint plans in place to organise investment in telehealth, managing the development of care pathways to successfully maximise the benefits form telehealth and to share costs, risks and benefits

4 Implementing a telehealth service

"Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives." [11]

The value for money argument for telehealth services is well rehearsed elsewhere, and indeed on analysing the board papers of PCTs purchasing telehealth services the economic case seems to predominate decision-making. We have examined where telecare and telehealth services have been set up, and undertaken focus group investigation with those directly involved in implementing telehealth services. A number of common governance, quality and safety issues arise which we address in this section. The accompanying GGI board assurance prompt 'Implementing telehealth services'[12] provides further details, including the assurance questions and maturity matrix produced in appendix 4 of this report.

This section is drawn from experience derived by those who have been involved with commissioning and implementing telehealth and telecare services.[13] Though this is early days in terms for telehealth, on the Pareto basis, the many small-scale and the up and coming at scale implementations identify a number of common governance, quality and safety issues that need to be understood and addressed. We have also considered those services that have started to initiate telehealth at scale, such as in Gloucestershire.

a. Telehealth and the local strategy

Telehealth is a means to an end – a solution for a given problem. In order to be useful, the issues that telehealth is seeking to address need to be identified and understood, and the role that telehealth has in addressing these problems realistically articulated. To be successfully implemented, introducing telehealth needs to be explained and brought in as the solution to existing strategic commitments (such as empowering patients to maintain active lives, to reduce dependence on hospital services and to promote continuity of care). In a care systems going through major change this is particularly critical in terms of laying the foundations for success. We found that in the main telehealth was being introduced as a cost containment tactic, rather than being seen as a strategically significant step that had implications across many of the longer-term aims that health economies have agreed.

11 Ruskin, John
12 Corbett-Nolan A, Bullivant J et al, *'Board Assurance Prompt – implementing telehealth services',* GGI 2011
13 Joseph V, *Key challenges in the development and implementation of telehealth projects,* Journal of Telemedicine and Telecare 2011; 17 (2): 71-77

We also found significant but largely predictable barriers that those introducing telehealth services need to overcome. These include the perceived initial cost and issues with payback, misplaced conceptions about telehealth (see below) and failure to grasp that telehealth unlocks benefits as part of a wholesale reorganisation of the care pathway. Additionally, who actually commissions telehealth is currently a movable feast. To date, it has mainly been PCT commissioners that have set up telehealth services. We expect this to broaden out and include both the new commissioners of care (the emerging CCGs and Clusters) but also providers of care, who will increasingly become responsible for the whole pathway of patient care and be incentivised to focus the care of patients with LTCs away from the hospital.

Strategic planners and service development leads, in both commissioning and provider organisations, will therefore need to:

- Look across the range of strategic agreements they have in place, and bring these together under the lens of telehealth services. These include:
  - commitments to patient engagement
  - needs identified in the local Joint Strategic Needs Assessment (JSNA)
  - public health data around the local patterns for LTCs in the future
  - contractual arrangements about care pathway responsibilities
  - partnership arrangements between health, social care and the third sector
  - local savings and investment plans.

The Joint Strategic Needs Assessment (JSNA) is a critical source to underpin the commissioning of telehealth services, as this should identify those patients within the population who will benefit from telehealth care programmes. Within providers, the Integrated Business Plan (IBP) and other strategic development documents will include a market analysis that should provide similar information.

The ground for telehealth needs laying carefully, as it is critical to 'size' the issue correctly in the minds of commissioner and provider managers, as well as clinicians, in order to identify and address preconceptions or misunderstandings. The WSD and local projects found that common myths included:[14]

- Telehealth is an emergency service
- It's like 'Big Brother'
- Telehealth leads to greater isolation
- It creates additional workload for staff
- It can lead to redundancies
- It replaces clinical professionalism
- You need to be good at computers to use telehealth
- Telehealth is not confidential

14 Department of Health, *'Whole Systems Demonstrators – An overview of telehealth and telecare'*, Department of Health June 2009

Specific strategies need to be put in place to work through these common perceptions. The use of case studies, evidence and patient stories is a useful means of building an accurate understanding of what telehealth is and isn't.

b. Implementing a telehealth programme

Experience from those who have introduced telehealth services identify the main implementation issues as including:[15]

- An understanding by all about what telehealth is intended to improve
- The wrong patients have been selected
- Patients have been poorly prepared for the new service
- Relevant clinicians have not been involved from the earliest stages
- The scale of new working is not understood
- Communication issues have not been addressed
- Expected benefits have not been articulated
- Implementation issues, as they arise, have not been addressed
- Responsibilities and accountabilities have not been thought through and communicated

As in any successful programme to change the pattern of work, the earlier those involved are engaged and the more ownership they feel about the process, the more successful and rapid change will be. Clinicians are no less likely than others to harbour the common misconceptions about telehealth than others, and a comprehensive and thorough education programme needs to be put in place so that clinicians understand the programme, what it intends to achieve and how this will impact on new ways of working. Clinicians need to be brought up to the level of understanding that enables them to act as advocates for telehealth with their own patients, and able to answer and address questions and concerns.

The redesign of the care pathway[16] is an ideal means of securing clinical engagement. Telehealth is a new way of working, not a bolt-on to the old. As in any care pathway implementation the approach to pathway redesign needs to be based on:

- Mapping out the current pathway of care as it is planned (if at all)
- Mapping out the current care pathway as it usually works in practice (which is usually different from as it has been planned)
- Identifying failure points, opportunities for improvement, duplications and elements that add little value to the patient and the system

15 Joseph V, *Key challenges in the development and implementation of telehealth projects,* Journal of Telemedicine and Telecare 2011; 17 (2): 71-77
16 Middleton S and Roberts A, '*Integrated Care Pathways: A practical Guide To Implementation*', Elsevier Health Sciences July 2000

- Mapping out the new care pathway as it is intended to run

All those involved in delivering the care pathway should be involved in this work.

This should generate:

- Success criteria and expectations for the new service. In light of the new health and wellbeing strategies this could usefully include telehealth as a practical and tangible means of better joining up health and social care services
- A process map describing the new pathway of care
- New referral criteria and methods
- Decisions points, and agreements about who should be responsible for these
- Issues for monitoring and audit
- Information issues to be addressed with clinicians and patients

The new care pathway will need managing in both its implementation and operation, with all concerned having clear briefing about what is expected and who to contact in case of issues.

Finally, it is important to understand the incentives that will drive telehealth. We have already identified that the potential cost savings a telehealth service can bring a local healthcare economy have persuaded some PCT commissioners to adopt telehealth. Put crudely, successful telehealth can reduce hospital admissions. However, to introduce telehealth across a whole healthcare economy the provider services will equally need incentivising through risk and benefits sharing. Reducing the payment by results income of a provider through reduced admissions will not incentivise commitment to service change, and so introducing telehealth will need to be aligned to local QIPP programmes, formal risk and benefits sharing systems and arrangements to encourage providers to take overall responsibility for whole care pathways.

c. Working with patients

Telehealth services can potentially support care for significant numbers of patients. It is not, however, a 'rescue' service for those patients with the most complex problems nor is it only suitable for patients least inconvenienced by their ill-health. The WSD developed eligibility criteria that included:

- Diagnosis with one or more of the following LTCs:
  - Heart failure
  - Type 1 or 2 diabetes, with an HbA1C of 7.5 or greater in the previous 15 months

  - COPD, with diagnosis confirmed by spirometry and FEV1 less than 70% of predicted normal and FEV1/FVC ratio less than 70%

- Having had at least one of the following unplanned events in the previous 12 months:
  - Unplanned hospital admission
  - Intermediate care/rapid response service use
  - Treatment following call out of ambulance services
  - Accident and emergency visit

In other words, a narrow category of patients with an LTC who had defaulted to unscheduled care recently.

It needs to be remembered that the WSD has been designed as a test of telehealth services, rather than be a comprehensive showcase. Other local pilot programmes have expanded these patient categories outwards.

On selecting an appropriate category of patients, telehealth implementation requires that patients' expectations and concerns are understood and addressed. Then an active programme to recruit patients into the scheme needs to be put in place. This is ideally a combination of raising awareness for referral from primary healthcare teams, specialist services for people with LTCs and from the patient group themselves.

Empowered patients who understand telehealth are the keystone to a successful programme, and building an appreciation of how patients will need to take control of their own care is critical. The primary health clinician's role is pivotal in doing this, but other forms of communication support have been effectively used to aid successful implementation, such as the NHS North Yorkshire and York website section, leaflets and Q and A briefings and telephone support. Patients need educating into their new role as their own caregivers, and ongoing support to address issues as they arise with initial use of telehealth.

We found that in most cases the predominant rationale for selecting telehealth services was expected economic benefits, and patient and outcome benefits were thought of afterwards almost like a 'fig-leaf'. The potential economic benefits are important, but we recommend that a holistic view of benefits are identified at the outset as a means of supporting effective implementation, and for subsequent transparency around added value. The European Foundation for Quality Management (EFQM) framework provides a holistic framework for understanding benefits.[17] These are categorised as:

- Customer results – outcomes expected for patients such as improved daily living functionality, relief from anxiety, ability to remain at home, alleviation of pain, sense of control over own life, years to life and life to years

17 Hakes C and Wilkinson J, *'The EFQM Excellence Model'*, Van Haren 2007

- Staff results – benefits for staff caring for patients, such as professional satisfaction, ability to focus skills where they are most needed, increase in patient satisfaction, manageable work volume, professional development
- Society results – benefits for society, such as citizens with LTCs able to remain at home and return to work, reduced social isolation, green benefits from fewer journeys to clinics, successful compression of morbidity, reduced burden on carers
- Business results – benefits for the NHS or local healthcare commissioner/provider, such as value for money, achievement of targets, enhanced reputation, fewer patients lost to service, reduction in emergency presentations, patient and staff satisfaction

d. Using telehealth to maintain a healthy lifestyle

There are a variety of aspects to personalising telehealth to individual patients, but success in this area is critical to delivering benefits. Every individual's normal vital signs profile will have subtle differences, as will their tolerances and safe variation from their own expected norms. Additionally, each patient will have unique personal and home lives, and also their own beliefs and expectations. These factors will impact on their care. Likewise, clinicians will have different degrees of knowledge and confidence with using telehealth systems, and their own expectations as to setting norms, parameters and an appetite for risk.

National guidelines will not always help. For example, the NICE guidance sets Sp02 levels at 95%, but few chronically ill COPD patients will achieve this. The expected safe norm for each individual patient will need to be found, and both clinician and patient will need to feel confident that whatever tolerances are set are safe, valid and useful. Experience shows that some clinicians will be more risk adverse than others in agreeing tolerances, and it is useful to undertake a period of blind monitoring in order to help establish the expected set of vital signs norms for a given patient, and compare these with other – often patient-reported – observations. Patients will need to be consented to telehealth and a signed consent form obtained after risks and benefits have been explained, and organisations commissioning telehealth will need to ensure that these arrangements and their local policies are taken through the local clinical governance mechanism.

e. Regulation and assurance

The board is the front-line regulator. For telehealth services, the board of the commissioning organisation will need to secure a range of assurances from the provider(s) of telehealth services. It is critical to understand who is managing the decision-taking clinician, and who will refer patients to the telehealth service, agree and set their care plans and have the authority to vary care from these plans. The organisation that sets care plans or changes care plans will need to be registered with the Care Quality Commission.

Telehealth is arguably on the cusp of being a regulated activity in its own right, with the role of the monitoring centre being pivotal as a means of controlling the significance of calls to the clinical team. It is important that audit activity provides the registered organisation and the telehealth provider with ongoing assurance that the care provided remains within the registration status of each organisation concerned (whether registered or unregistered).

Telehealth services, as part of the ongoing quality assurance, improvement and clinical audit programme, will need to be involved with clinical audit activity. It may additionally form the basis of internal audit plans. The selection of audit activity for the telehealth service should be part of the overall audit programme agreed by the audit committee for materiality in regard to significance and consequence (high volume, high cost and high risk activities).[18]

In instituting the new care pathways, variations will need to be monitored. Variation reporting and analysis needs to be prospectively thought through, and clinical audit/quality improvement used to refine and develop the care pathway over time. In settings where the care pathway is across a number of different organisations, it will be particularly important to ensure that all concerned have one central point where they can report variations so that the pathway overall is properly quality managed.

It is also important to think through what will constitute a reportable incident or near miss, and amend local reporting system(s) to collect and act on these. Reported incidents should always be copied to the referring clinician.[19] It is part of good practice to additionally identify the estimated harm caused to patients by the system prior to telehealth, and see whether the development of the care pathway and the introduction of telehealth reduces this level of harm. Trigger tools can be a useful means of establishing this above and beyond incident reporting. The admission to hospital by a patient known to the service for a reason where telehealth should triggered an intervention could be regarded as an incident. We have suggested this approach to promoting better quality in previous work on long-term conditions.[20]

18 Bullivant J and Corbett-Nolan A, *'Clinical audit: a simple guide for NHS boards and partners'*, Healthcare Quality Improvement Partnership 2010
19 Corbett-Nolan A and Hazan J, *'What every healthcare board needs to understand about patient safety'*, GGI February 2010
20 Bulivant J, Corbett-Nolan A, Heald A and Thomas S, *'Pathway Governance Guide No. 2: Diabetes Care'*, GGI April 2010

Recommendations

11 Telehealth should be identified and evaluated as part of the overall strategy for developing care services

12 Development plans should have as their prime base the Joint Strategic Needs assessment, and should identify in global terms those patients within the area who would benefit from telehealth services

13 Those leading clinical engagement and public liaison should ensure that an accurate picture of telehealth is understood, and that lessons around perception from the Whole Systems Demonstrators have been picked up on

14 Implementation plans for telehealth are holistic, properly led and include an overall review and recasting of relevant local care pathways. Pathway redevelopment should be managed with comprehensive involvement from all those concerned with delivering the care pathway

15 There should be specific plans to understand and address patient concerns around implementing telehealth services. This should include plans for empowering patients who are to be users of telehealth services

16 Implementing telehealth services should be considered by whatever local forum oversees clinical governance and patient safety issues

17 The audit committee should receive a value for money report to examine whether the potential for savings obtainable from implementing and integrating telehealth has been fully explored?

Appendix 1: The Good Governance Institute and using this report

"Nid da lle gellir gwell (good is only good until you find better)"[21]

Governance developed as a means of ensuring fairness to all stakeholders as commerce developed over the past two centuries. In the complex world of health and social care, understanding and respecting the perspectives of all stakeholders and then ensuring fairness and openness is both core to mission and complex to achieve. As demand for care services increases, but the resource envelope does not, never has the need for good governance been more pressing.

The Good Governance Institute (GGI) traces its roots back to the NHS Clinical Governance Support Team (NHS CGST) and the clinical governance movement. Now developing as an independent reference centre, GGI helps individual organisations develop their own governance and board arrangements, and promotes forward thinking and better practice nationally in governance, quality and safety. Each year we work with partners from industry, and colleagues from the NHS, local authorities, Universities and the third sector to push governance thinking on. We are currently working on various projects with individual NHS Trusts, NHS Foundation Trusts, Clinical Commissioning Pathfinders, third sector organisations and others to develop their boards and governance arrangements. We also are developing new thinking through a series of national studies that together are building into the national Good Governance Body of Knowledge. These include:

- Developing the foundation principles of governance, to guide putting in place useful and proportionate governance arrangements in new health and social care organisations
- A study of governance for the use of flexible workers and working in healthcare organisations
- Further work in our series on patient safety, including an update to our 2010 work on what every board member needs to understand about patient safety[22]
- Guidance on the governance of services for people with dementia
- Support materials for those developing Health and Wellbeing Boards
- Guidance for NHS Foundation Trust governors on their new responsibilities under the proposed Health and Social Care Bill
- Templates turning governance concepts into practice for the new CCGs and PCT clusters, as these new bodies emerge and develop, including example cycles of commissioning business and advice on proportionate governance arrangements
- Translating the reforms for the benefit of hospices and other third sector providers of care.

At the heart of the current health service reforms is the need to address the coming tidal wave of need from pressures that lie deep within the demography and morbidity of the population, and the up and coming enhancements to care that innovation and medical advancement brings. Though much attention has been given to the proposed changes to NHS structure and accountability, the

21 Welsh proverb and motto of the Benchmarking Institute
22 Corbett-Nolan A and Hazan J, *'What every healthcare board needs to understand about patient safety', GGI February 2010*

rationale for the proposed changes is that they will produce a new NHS that will be able to continue to give the UK population the assurance of healthcare for all, based on individual needs and free at the point of delivery. Achieving this means understanding the new challenges that healthcare services are facing internationally, and recasting service arrangements to match future needs but within the means of a Government that is working to rebalance the nation's economy. We further recognise the very different ways that policy and services are being developed and delivered in the four nations of the UK

This new report from GGI, supported by an educational grant from Tunstall Healthcare (UK) Limited, is a little different from previous publications from GGI. It is a White Paper aimed at briefing decision takers and raising debate about one of the most promising opportunities that technology brings to healthcare: telehealth. As a means of delivering patient-centred, effective, efficient and economical packages of care to those requiring the largest slice of NHS resources, telehealth has to be on the agenda of all NHS organisations, whether they are commissioning or providing services. It would be difficult to imagine a health service in even the near future that did not increasingly depend on technological support for patients living with long-term illness in their own homes. Technology can now help clinicians provide safer, more personalised, reliable and economical care – and at scale – to vulnerable patients who have to manage their lives while living with a significant chronic illness. It can deliver to both clinician and patient real-time clinical data on vital signs and other patient experienced symptoms, and with new advances in communication and data processing this can be individually personalised to help identify changes in the risk profiles of patients and help maintain a safer, more empowered life at home for millions.

But introducing telehealth is in its own way as significant as introducing the concept of the hospital, clinicians or medication itself was in previous 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. For these reasons, GGI felt we needed to be the first to develop thoughts and guidance on how organisations will need to govern telehealth services, and what will need to be done in order to ensure that people with long-term illness reliant of NHS support continue to receive safe, quality care.

Accordingly, this report needs to be used by commissioners and providers in a number of ways. Firstly, we encourage service planners to use the report to bring themselves up to date on what telehealth can deliver and to reconcile some of the assumptions about when and where telehealth will be used. Telehealth is no longer a means of providing care in remote or geographically inaccessible communities. Telehealth is about delivering empowerment to the majority of those

using the NHS, whether this is in the very centre of our major cities or in a Shire county. Telehealth lifts the bar about what it is possible to deliver in terms of an improved life to all living with a long-term condition. Secondly, on understanding this, those leading healthcare organisations need to grasp the potential use that telehealth can have for their own patient populations. Thirdly, on appreciating the potential benefits locally healthcare leaders will need to understand how to implement change and recast the care pathway. This will change the care value chain, significantly realign ways of working and revolutionise the expectations of patients. In doing this those responsible for healthcare organisations will need to be well versed in the safety and quality issues that will need to be addressed and assured.

This report provides this basic core of information for those on boards, for commissioners and for planners of service. It will brief others who need to be assured about service change such as the new Health and Wellbeing Boards and patient advocate groups. We describe the issues a healthcare organisation should consider when implementing telehealth services, and how the governance, quality and safety issues need to be understood and included from the very start. The report includes various tools that will be familiar to those who have encountered GGI work previously. We include a companion Board Assurance Prompt (BAP) drawn from this report to help board members hold their own organisations accountable. We also include two new maturity matrices that provide a developmental picture of how the organisation or service is progressing in terms of instituting change and improvement. Finally we offer initial guidance to auditors, who will increasingly need to understand telehealth services and support local boards be assured that new service configurations deliver quality for patients and value for money for the taxpayer.

Appendix 2
Those involved in developing this report

This report was written by:

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As part of the development process for this work we brought together workshops and focus groups, undertook interviews and shared drafts or sections of this report with various colleagues to help shape our thinking. We would like to particularly thank:

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Appendix 3
Further reading

Bullivant J and Corbett-Nolan A, *'Clinical audit: a simple guide for NHS boards and partners'*, Healthcare Quality Improvement Partnership 2010

Bulivant J, Corbett-Nolan A, Heald A and Thomas S, *'Pathway Governance Guide No. 2: Diabetes Care'*, GGI April 2010

Corbett-Nolan A and Hazan J, *'What every healthcare board needs to understand about patient safety'*, GGI February 2010

Corbett-Nolan A , Hazan J and Bullivant J, 'Cost savings *'Cost savings in healthcare organisations: the contribution of patient safety'*, GGI November 2010

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

Department of Health, *'Whole Systems Demonstrators: an overview of telecare and telehealth'*, Department of Health 2009

Expert Patients Programme, *'Healthy lives equal healthy communities – the social impact of self-management'* Expert Patients Programme CIC 2010

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Middleton S and Roberts A, *'Integrated Care Pathways: A practical Guide To Implementation'*, Elsevier Health Sciences July 2000

Sarhan, F. *'Get yourself connected'*, Nursing Standard 11th May 2011

Storey J, Bullivant J and Corbett-Nolan A, 'Governing the new NHS : issues and tensions in health service management', Routledge 2011

Appendix 4 – Accompanying GGI improvement tools

a Transforming care for people with Long Term Conditions – maturity matrix

Good Governance Institute

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
Building local understanding and support		Our JSNA is up to date, and we have been ensuring that local pathfinder CCGs and any nascent HWBB properly understands the JSNA and any local LTCs services. LTCs have been considered for inclusion on our board assurance framework	We have mapped out expectations of future local morbidity and service needs for the main LTCs and have shared this with partner organisations. Our plans dovetail with the commissioning of independent care services has been considered	Local plans for all main partners in the area address the future needs of people with LTCs. We have common service trajectories and demand projections	Year on year, partner organisations are checking actual service demands against predictions and triangulating future expectations with peers	As new partner organisations emerge, they routinely are accepting local predictions and plans for LTC services
Clinical engagement		We have mapped out those local clinicians who need to be involved and have discussed this with all relevant local organisations. LTCs are on the agenda of our local clinical senate/similar clinical advisory groups	Joint planning groups with significant clinical input from across the entire care pathway and membership have developed or endorsed strategies for change. Clinicians shape identifying what success means	We can identify service changes that have resulted from ideas generated or supported by local clinicians. Plans have been supported by the local clinical senate/similar clinical advisory group	Contract specification and monitoring routinely involves clinicians, as does the QIPP programme	Local clinicians are active in pushing forward national thinking, and our local service developments are being adopted and adapted by others
Engaging service users and patient experience		We know the relevant local patient groups interested in LTCs and there is a forum by which we can engage with them. We are working with patients on their perceptions of service success	We know of all local patient registers and have other systematic means of communicating with patients with LTCs. New patients with an LTC receive thorough information about their condition and care	Our planning approach has involved local patient groups, and is informed by sound social science methods of gaining wider patient views. Patients are uniformly involved in their own care and we seek feedback on their experience	We have an active patient advocate system in place, with patients acting as peers support as part of formal local schemes. Our patients with LTCs are knowledgeable about their own individual vital signs and report positive experience of the service	Our understanding of our local patients is helping shape regional and national thinking on services for people with LTCs. Our patients report sustained achievement of their own health and wellbeing goals
Care pathway transformation		We understand and have mapped out the current pathway of care – both planned and actual. We re working on a sustainable and genuine QIPP programme	We have engaged clinicians, planners and patients in critiquing the current pathway of care. Our QIPP programme is supporting this work. We have identified the outcomes we feel we can improve	We have recast at least two pathways of care for people with LTCs and are measuring adherence and outcomes. We track variations	We are confident that changes to pathways have changed outcomes, patient experience and resource use beneficially	We promote our pathways of care, and have attracted interest in these from elsewhere. Commissioners are funding future pathway development. Our outcomes benchmark in the upper quartile
Introducing change at scale		We know what small scale pilots programmes for LTCs are going on locally, and have modelled the implications of scaling these up	We have live plans for investing in up-scaling at least one transformation pilot (either local or other) to cater for all our suitable patients in that category	We have introduced at least one at scale service transformation for people with LTCs, and understand the benefits this has accrued	Providers are incentivised through formal risk and benefits sharing schemes to invest effort into at scale service transformation for LTCs	All local partners have gained from service transformation at scale, and for whole categories of patients with LTCs we have improved outcome and patient experience

b The key assurance questions (and their answers) on LTCs – Extract from Board Assurance Prompt

	Example assurance question	Plausible answer	Insufficient answer
1	**Is there a common understanding in this healthcare economy amongst service planners of the scale of need around LTCs in the coming years, and a forum to discuss how we are going to change the way we work to address this?**	Our Joint Strategic Needs Assessment (JSNA) has identified the scale of current challenges, and we have a local joint planning forum at which we are working through the implications of managing LTCs in future years. GPs, local providers, the local authority and the PCT are all active participants. We have agreed a holistic outcomes framework	We have appointed an LTC lead in the PCT who is developing plans to address this issue. Our contracts require local providers to reduce admissions for people with LTCs.
2	**Where we feel service changes hold the potential to address LTC capacity issues in the coming years, are we now investing to build this capacity?**	We have set our cost improvement programme (CIP) at a level that will allow real investment in new services, as well as achieving the savings needed today. We are working up local programmes for providing better home care for people with LTCs at scale now. LTCs appear on our board assurance framework (BAF), with identified risks, controls and assurances	We understand there are a number of pilot programmes going on currently and when these report we will make decisions then.
3	**Are we engaging all our clinical teams in identifying improvement opportunities as part of their everyday work?**	We understand we have to be proactive in not tolerating any barriers that deter GPs and hospital-based clinicians from actively engaging in transforming local services. We are supporting and investing in clinically-led care pathway redesign work around LTCs.	This is a matter for the new pathfinder CCGs and clinical senates, who will manage clinical leadership locally.
4	**Do we reward those who institute adapted solutions identified from elsewhere, rather than simply value local innovation?**	We support clinicians and service planners network nationally with their peers, and learn from programmes that work elsewhere and could be useful here. As part of this we benchmark ourselves with others in order to learn where we need to improve our service performance.	We have a robust QIPP programme locally. Our healthcare economy is unique and so we like to pilot ideas ourselves first. It is too risky to just adopt ideas from elsewhere. We have made useful savings from reducing trips to external conferences and that sort of thing.
5	**Where we are using technological solutions to support patient care, are we making the required changes in clinical behaviour and care pathways to get the best?**	The large scale adaptors of technological solutions supporting change in patient care advise us that we need to re-think the entire care pathway to successfully introduce change. For this reason we have involved clinicians from the start of our service transformation, and have put resources into supporting sustainable change in how patients are cared for.	Our procurement team deal with buying in new technology. This ensures we achieve best value for money.
6	**Are we incentivising providers, through means such as sharing benefits and creating investment strategies, to dramatically change their use of services?**	We recognise the tariff provides short-term incentives for local providers to fill capacity, and little reward for creating long term change. For this reason we are working up joint risk and benefits sharing strategies so that savings made can be channelled into new ways of working without destabilising our current providers.	This is a matter for providers within QIPP. The tariff provides them with adequate incentive for change. Where a provider is unable to change we will tender out the service and obtain best value.

Good Governance Institute

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

d The key assurance questions (and their answers) on telehealth – Extract from Board Assurance Prompt

	Example assurance question	Plausible answer	Insufficient answer
1	**Do we have a strategy for dealing with increases in demand for long-term conditions?**	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
2	**Does telehealth work?**	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
3	**Does telehealth lead to patient isolation?**	Actually no. The evidence indicates the daily routine of taking the readings and the feedback from the monitoring center 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
4	**Will clinicians work with telehealth?**	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
5	**Why isn't telehealth being used more widely**	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
6	**Will telehealth save money?**	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

e Telehealth services – audit guide

Establishing an audit programme for telehealth

This briefing sets out proposals for local audit of the cost and impact of telehealth services locally in England and Wales. It is based on work currently being undertaken by Audit Scotland

Why is GGI recommending this audit?

Local audit services are in a position to review telehealth services across England & Wales and provide an independent overview of the economy, efficiency and effectiveness of these services. The audit should focus on value for money and assess the costs of telehealth services and the opportunities that telehealth offers to provide more responsive, flexible and efficient services that allow patients to receive treatment and care closer to home. The approach also provides support to carry out economic modeling to forecast the potential for cash releasing (doing things at less cost) and/or time releasing (freeing up staff time) efficiency gains for the NHS if telehealth was adopted more widely.

Scale of activity and number of people affected

Telehealth has the potential to benefit a number of clinical specialties and has already had an impact on treatments such as diabetes, cardiology and neurology. We have also identified a range of long-term conditions including stroke, chronic obstructive pulmonary disease (COPD) and mental health as priority areas for the continuing development of telehealth. It is estimated that nearly a third of households have at least one person with a long-term condition. Further expansion of telehealth to support people with long-term conditions therefore has the potential to impact on significant sections of the population.

Importance

This audit provides an important opportunity to assess the costs and the range of benefits that telehealth offers to both patients and clinicians, such as improved access to clinical specialists and reduced travel time for patients and staff. In the current economic climate, it is important that the NHS takes every opportunity to achieve the maximum value for money. Telehealth is an area where there may be scope for both efficiency savings and service improvement. As part of this process, NHS organisations may work in partnership with each other to achieve the maximum benefit from telehealth and deliver services more economically.

Within the NHS there are some examples of successful pilot projects that have demonstrated the potential of telehealth to improve healthcare. However, there are considerably fewer examples of NHS organisations rolling out telehealth initiatives more widely as part of their routine services, yet this is important to achieving long-term savings and effecting change. This audit provides a timely opportunity to assess why telehealth has not become a mainstream option for delivering healthcare within the NHS and consider what barriers the NHS must overcome if telehealth is to be rolled out more widely in the future.

Aims and objectives

The overall aim of the audit is to assess the cost and impact of telehealth and how effectively it is being rolled out locally within the NHS. We can do this by:

- assessing whether there is strategic leadership, direction and support for telehealth
- evaluating the impact of telehealth initiatives on the economy, efficiency and effectiveness of services.

To support improvement, audit reports should make recommendations for local NHS boards based on the key findings and will provide examples of good practice where possible.

Scope, methodology and potential impact

An audit programme for telehealth should cover:

- the structural and organisational arrangements to support the development and delivery of telehealth across the local health economy
- how telehealth initiatives are being implemented and what benefits are being delivered
- how boards are working in partnership with each other, and eg commissioner and provider; acute and community, to deliver telehealth initiatives. This should include consideration of any risk and benefits sharing agreements
- whether telehealth can offer more efficient ways of providing patient care compared to more traditional options
- The clinical governance and patient safety arrangements for telehealth services

Methodology

We recommend four main elements to the audit:

1 **Desk research** – Auditors should draw on existing information, such as research on the costs and benefits of telehealth and patient satisfaction surveys for telehealth initiatives. This could also assess existing evaluations of completed telehealth initiatives and the outputs form the Whole Systems Demonstrators

2 **Interviews with strategic bodies** – Auditors should interview a range of strategic bodies, such as PCT clusters, to assess the direction, support and leadership that have been provided for telehealth over the last five years

3 **Survey of the local health economy** – Auditors should undertake a short survey of NHS board medical directors and other service development leads, to assess how telehealth has been implemented in individual boards, and the extent to which it has been mainstreamed and is encompassed in their wider capacity planning. Auditors should liaise with directors of finance in NHS organisations to gather more detailed financial information in relation to their expenditure on telehealth

4 **Fieldwork** – Auditors should interview key staff in the local NHS organisations (commissioners and providers; clinicians and managers) to explore in depth the types of telehealth initiatives that are being adopted and what benefits are being realised. Auditors should explore what barriers may exist to rolling out telehealth initiatives more widely within the local NHS economy

Economic modelling

Auditors should co-operate on modelling work to forecast the potential for cash releasing and/or time releasing efficiency gains for the NHS in rolling out telehealth initiaitives more widely, beyond the audit stage. The modelling work should be based around one or two clinical specialties, which can be selected on the basis of evidence of good cost information and other data being available.

Sustainability issues

The NHS has found it challenging to sustain telehealth initiatives beyond pilots. Auditors should explore the reasons for this and give recommendations as to how these could be addressed.

Telehealth can contribute to the green agenda and lead to reductions in carbon dioxide emissions, by reducing the need for patients and clinicians to travel long distances. Auditors should identify the potential environmental benefits associated with telehealth, where such information has been included within existing evaluations. Where it has not auditors should establish why

Equality issues

There are a number of equality issues related to telehealth services. Auditors should explore whether telehealth is offering improved access to clinical services for individuals, for example where patients find it difficult to come into clinics for regular vital signs readings. It should also consider whether there is equity of access for patients to participate in telehealth pilots and programmes.

Audit Control Objectives and Expected Controls

1 The NHS organisation is committed to ensure a system of telehealth is in place, integrated and aligned to traditional practice

a Consistent guidance is included in clinical, corporate, financial, HR and health and safety strategies/policies/procedures, and clear targets set for implementation

b The organisation has a consistent mechanism for bringing assessed telehealth initiatives to the attention of the board

c Each directorate has a nominated lead responsible for dealing with issued telehealth guidance

d The Audit Committee has a clear role in scrutinising the procedures and implementation progress. Regular reports are made to the Company Secretary, board and appropriate committees of actions to be taken and implementation progress

e Overall corporate responsibility for implementing telehealth policy and recommendations from audit has been allocated

f Resources are made available where required to facilitate implementation and monitoring

2 To ensure that the NHS organisation is sensitive to innovation and risk and delivers care and use of resources to recognised best practice. And that practice is changed as a result of audits

a The organisation has clearly allocated responsibility for dealing with issued guidance on telehealth both at corporate and directorate level

b There is a mechanism in place for formally reviewing guidance/reports from elsewhere and determining which aspects are applicable to the organisation

c Relevant guidance reports, trends and are assessed, and compared to current practice within the organisation

d Where the organisation is already innovative, evidence for reaching this status should be documented and retained

e Action plans are drawn up wherever changes are required, with responsibilities allocated and timescales set

3 **To ensure the organisation complies to the relevant standards**

a There is an ongoing programme of audit and review against the current clinical standards

b Where non-compliance is identified, this is acted upon by the organisation

c Central records are maintained of the organisation's compliance, and any actions taken as a result of issues that arise on compliance

4 **To ensure that the organisation has in place effective assurance systems to confirm telehealth is safe and cost-effective and, where not brought to the attention of the board in order that they may carry out their obligations to ensure the safety of patients, visitors and staff; and in respect of the effective use of resources**

a There is clear corporate accountability and responsibility for identification and actions within the organisation's governance framework

b There is a clear mechanism for assessing the benefit realisation of telehealth and a protocol for bringing lapses to the attention of senior officers and the board

c There are clear project planning and operational mechanisms in place for telehealth implementation, monitoring and reporting

d Project plans include documented objectives, action, milestones, and lead responsibilities.

e Designate lead officers for telehealth coordination and implementation are identified

Board Assurance Prompts (Baps)

This report is accompanied by two board assurance prompts (BAPs) on Long Term Conditions and implementing telehealth. BAPs are simple instruments usually 4-sided which aim to assist Boards in understanding the key issues and to ask the right questions as well as what a good response to the questions might look like and, perhaps uniquely, also identify the sort of fob-off answers too often provided to explain away challenging questions. Typically they include a maturity matrix to assess performance and plan improvements. The BAPs are available in each case from the publisher identified or from the GGI website. Any difficulties or if you are interested in developing a new board assurance prompt contact john.bullivant@good-governance.org.uk

Long Term Conditions

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 and suggests the only way the system can cope is by creative thinking, integrated services and coordinated locality approaches, which harness the resources of both Health and Social Care.

Implementing telehealth services

The guide emphasises the impending crisis of demand in long-term conditions and suggests strategies consistent with QIPP and good practice in patient-centred care.

Flexible Workers

Produced with NHS Professionals the guide identifies the ways in which trusts achieve flexibility and statutory compliance in their workforce to meet fluctuations in demand for services by using temporary staff, sometimes referred to as contingent workforce planning. Many of the assurance issues raised also have application for permanent staff and GGI advises boards to be assured they have in place a trust wide strategy, budget and audit mechanisms in relation to all their staff.

Quality and Cost Reductions

How do we exploit the opportunities for improving quality whilst saving costs? Produced with the UK Quality Collaboration

Patient Safety

Developed with DATIX Ltd
Intended to support debate around service quality, operations and planning in a precise and informed manner.

Board Development

Developed with NHS London
Accompanying the How To Do It Guide, this BAP provides a quick overview of the process and snapshot of the different types of intervention available.

Diabetes Care

Developed with FD Sante and supported by a grant from Bristol Myers Squibb, this prompt is intended to support debate around Diabetes service development. It includes key questions with plausible and unacceptable answers and includes a Maturity Matrix covering treatment decision making.

Community Acquired Pneumonia

Encouraging debate around Community Acquired Pneumonia service development it is intended to improve the quality of care by reducing variation and increasing reliability of timely, cost effective treatment when patients transfer from one part of the healthcare system to another. It was developed with the RCPE and NHS Tayside. This was the first GGI clinically focused board assurance prompt.

Scrutinising Governance Between Organisations

Produced by GGI with the Centre for Public Scrutiny the guide identifies key questions for health boards and local authority overview and scrutiny committees (OSC) to ask when scrutinizing governance between organisations; the guide also includes a set of likely scenarios for boards to engage with.

Challenges to Board Level Objectives for health and social care organisations

Produced by the Northern Ireland Clinical and Social Care Governance Support Team together with the Northern Ireland Confederation

Standards

Board Assurance Prompts were first developed by the NHS Clinical Governance Support Team with the support of the Healthcare and Appointments Commissions in 2004 as a series of challenges for boards to encourage adoption of the Standards for Better Health. The format similar to a set of ‘playing cards’ was deliberately imaginative and tactile to encourage retention and use.

Further information from **www.good-governance.org.uk**

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