Tunstall

Quest for Quality in Care Homes – using telehealthcare to enable integrated, anticipatory and sustainable health and care services

The challenge

NHS Calderdale Clinical Commissioning Group (CCG) serves a population of 213,000 people, almost 17,000 of whom are currently living with a long-term condition (LTC). As with many regions of the UK, Calderdale has an ageing population and by 2018 it is estimated that 18% of the population will be aged 65 or above. Calderdale also has a higher rate of older people living in care homes compared to other regions across England, expected to rise from 982 in 2012 to 1,205 by 2020.

This ageing population and the increasing number of people with LTCs is likely to have a considerable impact on health and social care services. In anticipation of these increasing demands on resources, NHS Calderdale CCG developed a commissioning plan for 2012/13 with a clear objective to establish a more consistent and sustainable model of care for older and vulnerable individuals in Calderdale; a truly person-centred approach which would best meet the needs of people with long-term health and care needs, and help to make efficient use of NHS resources.

The Quest for Quality in Care Homes pilot was developed, which combined a Multi-Disciplinary Team, real-time access to live clinical records for GPs and Quest for Quality in Care Homes Matrons, and telecare and telehealth systems to improve the quality of care and help to reduce avoidable hospital and GP visits.

How has this new approach helped NHS Calderdale CCG achieve the goals set out in it's commissioning plan.

Highlights

- Residents benefit from avoiding **unnecessary hospital admission**
- Care home staff feel more supported and empowered

For year two of the pilot 2015/16:
- The cost of hospital stays has reduced, **saving £799,561 in a year**
- Emergency admissions down **33% year-on-year**
- Hospital stays down **26% year-on-year**
- Hospital bed days used decreased by **30% year-on-year**
- GP care home visits have reduced **45% compared to non-Quest homes**

> As part of our Commissioning Plan for 2012/13, we set out a clear objective to transform health within Calderdale by looking to improve patient care and safety, whilst also addressing some of the challenges faced by clinicians in primary care. Telehealth and telecare provide us with the opportunity to encourage self-management and offer better care and support. In turn this can help reduce costs on the NHS caused in part by unnecessary hospital and GP visits, and enhance the quality of life for local people.

Dr Steven Cleasby, Clinical Lead for Care Homes and Safeguarding, NHS Calderdale Clinical Commissioning Group

NHS
Calderdale
Clinical Commissioning Group

Telecare

Using telecare in care homes gives users continuous support, offers additional reassurance to carers and family members, and supports safeguarding. Managing risk and increasing support in this way helps to improve the confidence and independence of individuals.

Achievements so far:

- 25 homes have been given telecare systems to support the needs of over 1,000 residents

- Care home staff have attended training on telecare

- There are a number of telecare 'Champions' across the care homes, who have received specialist training and help colleagues by providing advice and knowledge, sharing their experience and spreading good practice

> We check on our residents every hour as a matter of course, but the telecare system means we will be immediately alerted if a resident may have fallen in between visits. Unfortunately we can't prevent residents falling, but using the bed sensors and mats means we can be there straight away to assist which can make a huge difference to the outcome. We also use the door sensors in situations where a resident might be at risk if they leave their room or the building. Telecare gives the staff great peace of mind that we're doing all we can to keep residents safe and out of hospital.

**Ruth Collins, Manager,
Lands House Care Home**

What we did

The Quest for Quality in Care Homes pilot aims to address the variations in practice across care homes, supporting the delivery of consistent, efficient, proactive care by upskilling and empowering staff. More than half of the care homes in the area (twenty four) have signed up to be part of the pilot so far.

A key focus for the pilot has been to reduce admissions to hospital from the residents of care homes, typically for urinary tract infections, respiratory infections, falls and fractures. The pilot provides additional support to care home staff to help improve outcomes and prevent unnecessary hospital admissions.

The project has been implemented in three key phases:

1) Providing access for GPs and Quest Matrons to real time clinical records through the provision of an IT system in the care homes. This enables GPs and Quest Matrons to access their patients' medical records, enabling 'joined up' care and informed decision making.

2) Development of telecare and telehealth systems to support prevention, diagnosis and treatment. Tunstall has provided advanced telecare and telehealth solutions to support homes to improve the quality of care provided and proactively deliver care to residents to help prevent deterioration and exacerbation of chronic.

3) Investment in a Multi Disciplinary Team (MDT), providing an integrated social and clinical approach to support anticipatory care planning. As part of the Quest for Quality in Care Homes model, NHS Calderdale CCG has commissioned Calderdale and Huddersfield NHS Foundation Trust (CHFT) to provide an integrated professional and clinical Multi-Disciplinary Team.

About the solutions

Telecare consists of a range of sensors which can automatically detect incidents such as someone falling, having an epileptic seizure or leaving their bed, chair or room and alert staff to these events via a pager. Residents are assessed and sensors chosen according to their individual needs.

Telehealth enables residents' vital signs such as temperature, blood oxygen levels, blood pressure and weight to be measured and recorded on a regular basis so that any changes can be quickly identified.

Tunstall manages the delivery of the telecare and telehealth solutions, including the following areas:

Telecare	Telehealth	
Installation	Storage	Maintenance
Training	Stock Control	Technical support
Repair	Patient registration	Review
Maintenance	Content provision	Decommissioning
Review	Installation	Decontamination
Decommissioning	Training	
Decontamination	Repair	

About the Multi-Disciplinary Team

The MDT supports GPs and care home staff – advising care home staff on prevention and proactive management to ensure the needs of residents are met and that care standards are applied consistently across all care homes. This includes a focus on both falls prevention and medication optimisation and concordance. The MDT model includes dedicated Quest Matrons; Consultant Geriatrician; Pharmacist; Clinical Psychologist; links to Palliative Care and links to other areas such as tissue viability. The MDT works with the key stakeholders including care homes, Calderdale Council and primary care staff to minimise the need for residents to access unplanned care services and ensure patients are proactively managed to keep them within the care home setting. The team also works with secondary care staff to support the early discharge of care home residents who have been admitted to hospital where appropriate.

Tunstall has worked closely with the MDT and care homes, developing processes and delivering a comprehensive training programme for both telecare and telehealth. In addition to training staff and stakeholders on the operation of the equipment, trainers also explain the applications and benefits of the solutions, and in the case of telehealth give an insight into vital signs readings and what they mean. The aim is that each care home will also have a champion for telecare and for telehealth, to help other staff with any ongoing queries and work with the MDT to ensure the systems are embedded into everyday practice.

Telehealth

Telehealth monitoring is available to residents of care homes taking part in the Quest for Quality in Care Homes pilot. Care plans for appropriate existing residents have been adjusted to include telehealth, and telehealth will also form part of the assessment for some new residents. For these residents, the Quest Matrons will take baseline readings, are able to set parameters for the readings appropriate to the individual, and decide on the frequency of monitoring depending upon the resident's individual needs.

Using Tunstall's portable myclinic multi-user telehealth system, care staff will take readings such as blood pressure, temperature and oxygen saturation. These results are then transmitted to the Tunstall Response Centre and results outside of the parameters set will raise an alert on the system, resulting in the Quest Matron being informed. The Quest Matron can then review the results and take any action required, they have secure access to residents' readings at any time, giving them the opportunity to identify trends. Care home staff are also becoming accustomed to taking readings and can refer to the MDT if they have any concerns.

Telehealth case studies

Emily*

Emily is 90 years old, has a history of agitation and was unresponsive for up to 6 hours during the day. She had attended A&E and been admitted to hospital twice in one month as a result of falls. Emily was assessed by the Quest Matron who put an emergency care plan in place and initiated telehealth monitoring. The Quest Matron also ensured that care staff were familiar with nursing an unresponsive adult e.g. airway safety, positioning of patient. Emily was referred to the MDT who discussed in detail past events, medical history and previous test results with the care home staff. The MDT concluded the daily episodes of unresponsiveness were caused by recurrent seizures with no obvious trigger.

The MDT suggested to titrate the medication for the seizures; continue telehealth monitoring; start an episode/ seizure chart to monitor response; stop non-essential medications and review progress weekly. The Quest Matron liaised with the relevant GP to agree medication changes. Seizures continued so medication was titrated for a further week. After this no further episodes were reported, and Emily is much improved and mobilising well. Positive feedback has been received from Emily's family and care home staff feel much more confident in supporting her.

Norman*

Norman is 67 and a smoker with COPD. He was refusing to eat and was rapidly losing weight as a result. Norman has moved care homes several times and has seen a psychiatrist regarding possible self neglect. He was referred to the Quest Matron who initiated telehealth to monitor Norman's weight and respiratory function. The MDT reviewed Norman's physical and mental health, requesting urgent blood tests and chest xray; discontinued non-essential medications; had a trial of treatment with steroids; continued telehealth; then had a further psychiatric review. The Quest Matron liaised with the relevant GP to agree medication changes.

The results of Norman's blood tests showed a physical illness which is being treated. He is responding well to steroids and is gaining weight. He has also received psychiatric input and the MDT continues to support Norman and monitor his progress.

Benefits

Emily and Norman's stories demonstrate a number of quality and safety benefits:

- Hospital admissions and unnecessary A&E attendances were avoided for both individuals

- Care home staff received education in how to recognise issues at an early stage, how to manage to an unresponsive adult and how to complete episode/seizure charts

- Comprehensive assessments completed by Quest Matrons enabled identification of root causes of problems

- Telehealth monitoring helps to identify changes at an early stage, and enabled trends to be identified

- Timely referral to, and input by, a Multi-Disciplinary Team of professionals, followed by regular reviews

- Comprehensive medication reviews completed, resulting in discontinuing non-essential medications (after liaising with relevant GP)

- Positive involvement of and feedback from individuals and family

- Positive partnership working other services, including GPs and psychiatry

Results in care homes

The Quest for Quality uses technology as part of a multidisciplinary approach to help maximise efficiencies across health and social care economy, and enable people to live healthier and happier lives, with greater control of their own care.

Results for the second year of the Quest for Quality in care homes pilot (2015/16) showed:

- The cost of hospital stays has reduced saving **£799,561** year-on-year

- Emergency admissions are down **26%** year-on year

- Hospital stays are down **72%** year-on-year

- Hospital bed days used has decreased by **68%** year-on-year

- GP care home visits have reduced, with Quest for Quality care homes requiring **45%** fewer visits than non-Quest homes
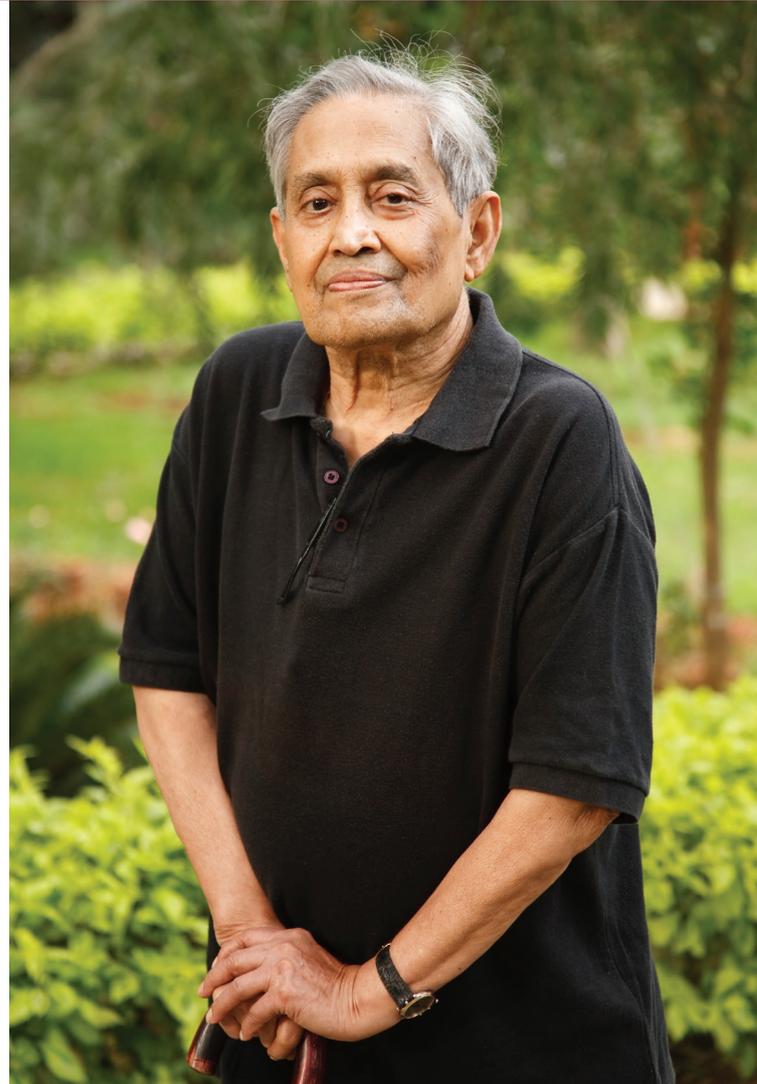
> This proactive, pioneering approach is making a positive difference to people's lives. Already the links between care homes, GPs and community nursing teams, including pharmacy, are much stronger, and there is a real recognition that homes involved in Quest for Quality in Care Homes are providing improved levels of care. Care home staff tell us they feel empowered and confident, GP workload is reduced and we've seen significant reductions in emergency admissions.

Rhona Radley, Senior Service Improvement Manager, NHS Calderdale CCG

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