

Managing long-term conditions through redesigning the care pathways and integrating telehealth



I would definitely encourage other patients to get telehealth. It's literally changed my life. After I was admitted to hospital last year I realised I had to re-evaluate my lifestyle completely and telehealth has made the whole thing seem much easier and given me the confidence to manage my illness.

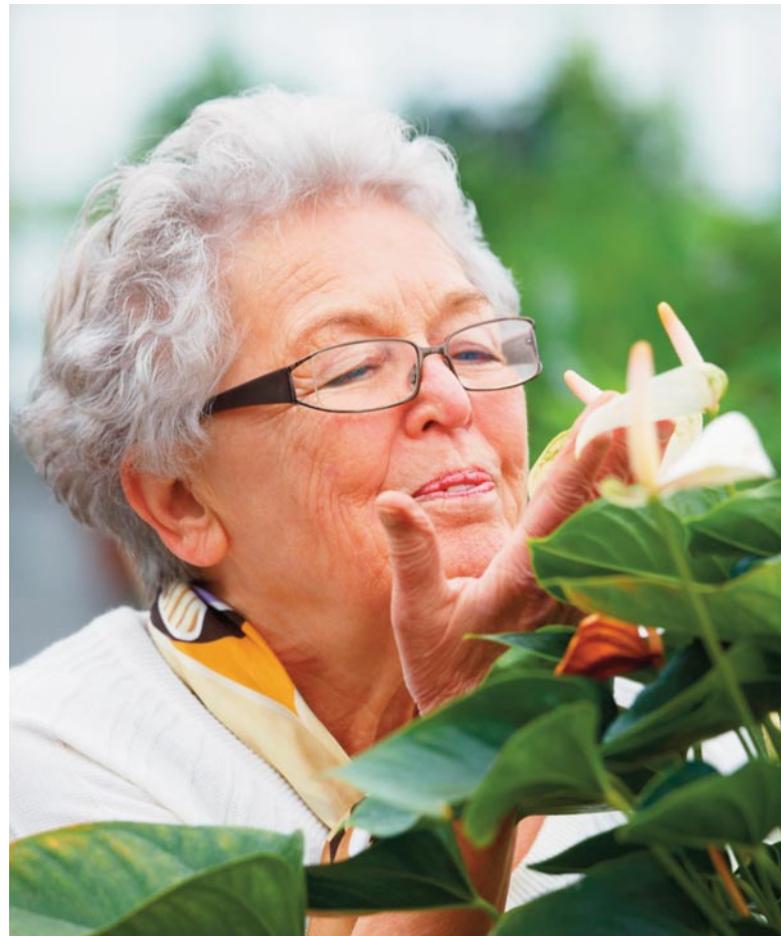
Pauline Waite, Respiratory patient

The challenge

NHS North Yorkshire & York (NHS NYY) covers a population base of 794,532, with an estimated 4,000 severe Chronic Obstructive Pulmonary Disease (COPD) and Heart Failure (HF) patients. The PCT estimates

- A 14% increase in the population by 2020, with more people living longer
- An estimated 22% increase in those aged 65+ years by 2020
- 6,705 Heart Failure patients and 11,505 COPD patients and a forecast of an extra 4,000 undiagnosed
- Non-elective admissions are increasing by 5-10% per year

The Better Health Analysis undertaken by the PCT on data for 08/09 highlighted 3,405 patients were admitted to hospital as an emergency with respiratory conditions, costing £7.3 million. The same analysis showed that 3,313 patients were admitted with emergency cardiac problems costing the NHS a further £5.2 million. Coupled with the local geography which holds significant areas of rurality leading to issues regarding access to services, NHS NYY faces significant challenges over the next few years.





NHS North Yorkshire & York has identified the need to look at the management of patients with a long term condition in a different way, through the development of robust pathways of care and the use of telehealth technology within these. Over the next year, a strategy for the management of long term condition patients will include how telehealth can support patients in the community, through the use of a multi-disciplinary approach with all agencies. Patients can then be managed more effectively in the place they want to be i.e. in their own homes.

**Kerry Wheeler, Assistant Director of Strategy,
NHS North Yorkshire & York**



Strategic plans

The PCT has prioritised seven strategic initiatives from the five-year Strategic Plan 'Healthier Lives', to support delivery of the Quality and Productivity (Q&P) opportunities across the whole health economy in 2011/12.

The development of care pathways for long term conditions and the associated implementation of the telehealth programme is a key priority within the PCT's Strategic Plan.

The project is planned to make a significant contribution to Q&P savings and the new pathways will underpin commissioning arrangements for 2011/12 with partner Acute Trusts.

As an enabler to this work, the PCT is in the process of deploying 2,000 telehealth systems from Tunstall, which will be rolled out across all localities in NYY. This will make NYY the largest telehealth site in the UK.

Care pathway principles

The overall objective of redesigning the care pathways is to optimise the care of patients with long term conditions.

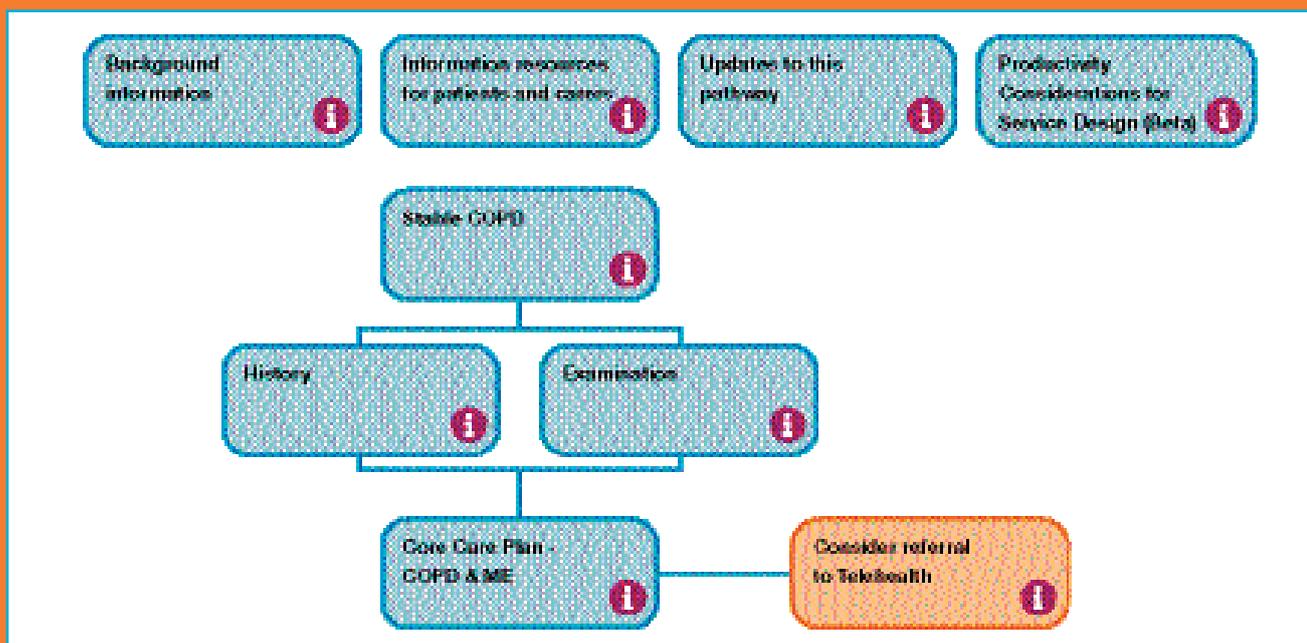
- Technology is an enabler for the optimisation but not the whole solution

- The pathways have been developed in conjunction with published NICE guidelines and national strategies for the management of long term conditions, where available
- The pathways were further informed by Map of Medicine and have gone through systematic reviews with clinicians across North Yorkshire, where front-line primary, community and secondary care practitioners were consulted in order to draw on their local expertise

Key principles were followed throughout the process of developing the new pathways:

- Patient centred
- Conforms to NICE Guidelines (published summer 2010 for CHF and COPD)
- Uses innovation and technology (particularly telehealth) appropriately to support the patient
- Care is provided as close to home as appropriate
- Focus on self management
- Focus on education and prevention
- Outcomes focused
- Integration of care across the Health Economy
- Uses resources efficiently
- Delivers national COPD strategy and diabetes national service framework

The localised Map of Medicine pathways can be viewed via ATHENS: <http://nyorks.mapofmedicine.com>. For those with SystemOne, access to the Map this can be accessed through a drop down menu from the 'Clinical Tools' tab on the toolbar. For non clinicians visit www.nytelehealth.co.uk/contact_us to request a copy.



The telehealth programme

NHS North Yorkshire & York's (NHS NYY) strategy for long term conditions involves the introduction of telehealth to help patients manage their condition from the comfort of their own home and reduce the risk of unplanned hospital admissions. The introduction of telehealth is providing real benefits to patients and clinicians working within the field of long term conditions at a time when alternative care provision is required.

The telehealth journey

Following a positive six month Phase 1 trial, NHS NYY issued a tender for the procurement of a further 2,000 telehealth systems set for deployment across the PCT area. This three-year contract was awarded to Tunstall Healthcare and commenced in April 2010. This marked the beginning of what will make NHS North Yorkshire and York the largest scale telehealth project in the UK.

The project is focussing on three main disease areas:

- Chronic Obstructive Pulmonary Disease (COPD)
- Chronic Heart Failure (CHF)
- Chronic Diabetes

It was identified early in the project that in order to get the most from telehealth, it was not enough to simply install units in patients' homes without first determining whether the existing care pathways would enable the benefits of telehealth to be fully realised.

An intense process of clinical engagement ensued to critique existing pathways and develop new versions that embraced the technology and ensured that enhanced clinical outcomes could be achieved.

Commissioning new care pathways

Together with the clinical team, the telehealth project team set about specifying and commissioning standardised pathways across North Yorkshire and York to support improved partnership working and self management.

Changes to provider contracts were agreed, commencing in 2011/12 to reflect implementation of new pathways and shift resources around the health economy to release efficiency savings.

Specified phasing of pathway changes:

- Implement CHF diagnosis pathway in line with NICE guidelines (eg BNP and Echos)
- Agree with providers the shift of oxygen prescribing savings to be re-invested in specialist oxygen assessment services.
- In acute trusts, provide specialist opinion within 24 hours through tariff savings on shorter length of stay.
- Provide early supported discharge through tariff savings on shorter length of stay.
- Include the new pathways and telehealth as core business in all service specifications.
- Explore implications with Acute Trusts of new commissioning guide on cardiac rehabilitation.

Outcome

To date the telehealth project has been well received, particularly by patients. A patient survey of 200 patients showed:

- 98% were satisfied or highly satisfied with the telehealth service
- 96% would recommend telehealth to family and friends
- 82% thought they had some or high improvement in quality of life
- 72% felt telehealth had benefitted their partner/family
- 59% thought telehealth has helped them avoid a hospital admission

Whilst the evaluation is still ongoing there are strong signs that the results experienced from phase 1, namely a 40% reduction in non-elective hospital admissions and a further drop of 28% in A&E attendances, are being continued and indeed, being improved upon in some areas.

Perhaps even more beneficial is the fact that only c. 3% of telehealth patients whose readings were received daily, required an escalation to a clinician.

Summary achievements

- Performance data shows real acute based activity reductions for patients using telehealth for longer than 6 months.
- Clinical alert rate less than c. 4% across North Yorkshire
- Community services staff perceive they have reduced travel
- Case managers feel they are better able to prioritise workloads



Now and next steps

Contracting the new pathways:

- Currently in contract negotiation for secondary, community care and primary care for implementation of pathways in 2011/12

Publication and wider communication of new pathways:

- Pathways distributed to GP practices, community teams, secondary care teams and other stakeholders
- Continue with GP practice visit programme to present new pathways to primary care clinicians
- Review pathways with patients and representatives of the Voluntary Sector and / or LINK
- Communicate / facilitate MoM access arrangements to primary care

Performance and evaluation:

- Compliance to the pathways by clinical audits and performance KPIs
- Independently evaluate the project including quantitative and qualitative measurements



Patient's perspective

Heart Failure patient:

"I know if I'm not having a good day, I can do a test and the information gets sent through to somebody and they are generally in touch with me quite quickly, which is very, very reassuring to me."

Wife and carer to husband with severe COPD
"I would recommend telehealth to anybody because it's made our lives completely different. It's just like the dark clouds have rolled back and there's nice sunshine and blue skies, so we have no worries now."

A GP's perspective

Dr Marcus Van Dam, GP NHS North Yorkshire & York

"The main role for telehealth is to help patients monitor and understand their conditions thus helping them to stay well and ultimately at home. People wonder whether it means a lot of work, the simple answer is no.

Very occasionally an alarm means a visit. But then I would have had to visit the patient anyway because they were obviously poorly and needed a visit.

My practice is in a very rural area. Access to patients is difficult, especially in winter. Telehealth is ideal for monitoring them and reassuring to me that they're okay even if I can't get to see them."

A Respiratory Consultant's perspective

Dr Justin Tuggey, Consultant Respiratory Physician, Airedale NHS Foundation Trust

"I'm sure we're all familiar with revolving door patients that come in and out of hospital on a regular basis. I see that telehealth could be at the centre of managing these sorts of patients, giving reassurance to both the patient and the medical and nursing staff involved in their care that they can be managed in the community."



**Community nurse's perspective
Julie Walters, Heart Failure**

Telehealth can provide valuable reassurance and that in itself can help symptom management. I think in terms of titrating heart failure medication and monitoring vital signs symptoms, it has been very helpful. And I can see that telehealth may well reduce the number of clinic visits that a patient needs to make or indeed the number of home visits that I need to make.

Dawn Watson, Case Manager

Telehealth has enabled me to manage my caseload effectively - I can spend more time with my patients who need me most, and I don't need to visit patients who are managing fine because I can check they're ok remotely via my PC. All of my patients have responded really positively to telehealth; it's given a lot of them a new lease of life.



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