Surrey County Council and the Surrey clinical commissioning groups (CCGs), in partnership with Medvivo, have invested in telehealth - a technology they believe can make health and social care a lot more sustainable when managing an ageing population and rising numbers of people with long-term conditions.

Andrew Sharpe, GP and Surrey Downs CCG governing body member, says: “The scheme is starting to prove very popular with the doctors who are using it. Initially it is quite a culture change but they soon discover this represents an extra layer of care for their patient, and does help to improve their overall management.”

The partners embarked on the telehealth programme almost two years ago, supporting patients with conditions such as chronic obstructive pulmonary disease and chronic heart failure.

The number of patients enrolled on the programme has steadily increased with more than 400 people across Surrey now using the service daily. The programme involves the identification of suitable patients against criteria agreed by the patient’s GP or specialist nurse and a simple referral into Medvivo.

Medvivo then manages the whole installation process that includes patient education and use of the equipment. Patients are supplied with a tablet computer installed with Medvivo’s user friendly telehealth software. Also provided are Bluetooth devices for measuring vital signs such as blood pressure, temperature, weight and pulse oximetry.

Core to the service is the partnership between Surrey’s GPs and nurses, who retain the overall responsibility for their patients, and the Medvivo telehealth team. Integral is the clinical case management provided by Medvivo to achieve the programme’s objectives and to offer reassurance to the local clinical teams that their patients are being well managed with minimal input needed.

Karen Williams, clinical lead for the Medvivo telehealth team, says: “Our management of the patients under our care goes so much further than the simple triage many people believe telehealth provides. The technology allows us to monitor patients at a distance. However, once we are alerted that a patient’s condition may be deteriorating or exacerbating, we embark on a comprehensive case management process with the aim of achieving the best possible outcomes for the patient and local health services. Communication with the lead clinician is maintained. At all times the patient remains at the centre of their care.”

Telehealth aims
- A reduction in unplanned A&E visits and admissions.
- A reduction in the use of GP and specialist nurse time.
- Supporting early discharges from hospital.
- Improving patients’ quality of life.
The telehealth team became familiar with the patients they support and many of the patients reported feeling more nurtured by the telehealth service. This close contact allows them to sometimes identify additional health concerns, with appropriate and timely referrals back to the GP.

A separate evaluation of a similar service in Dorset reported patients often used the telehealth equipment beyond the parameters of the formal telehealth scheme to develop effective self-management techniques. Over time telehealth patients and their carers become very familiar with the significance of vital sign readings and symptoms and are able to predict the advice they will be offered. This higher level of knowledge allows patients to become more central in their own care and empowered to seek support when needed.

In addition to these core contracted functions, the telehealth team performs a wider role which includes social, emotional and psychological management. The team will schedule regular reassurance and review calls to patients who need them, ensuring all users are contacted regularly even if their condition is well managed and

The core responsibilities of the telehealth team within the contracted service include:

- patient-centred referral management tailored to their condition and needs;
- agreement of management plans with the patient and local clinicians supported by NICE and local guidelines. Daily monitoring and triage of alerts raised by the system against the agreed threshold;
- clinical reviews for changes in trends in oxygen, weight, blood pressure, pulse and disease specific assessment questions;
- phone calls to patients to review responses and make decisions with the patient on the next steps – for example medication and recommendations for them to follow;
- review and follow up;
- patient and carer condition education;
- medicines management and compliance monitoring;
- health education;
- communication and joint working with GPs and community teams.

Mr P, a 67 year-old man with very severe chronic obstructive pulmonary disease (FEV1 17 per cent), hypertension, excessive alcohol consumption and recently diagnosed atrial fibrillation, was under the care of a virtual ward community matron for more than 40 weeks. He was referred to the respiratory service, which enabled all of his respiratory medication to be optimised. Mr P was unable to go to pulmonary rehabilitation due to his irregular tachycardia and he was referred to the breathlessness class at a local hospice. He was also referred to the Medvivo telehealth service for Monday to Friday monitoring.

In the six weeks before he started on telehealth monitoring, Mr P was seen by the community matron and respiratory service eight times, he called the ambulance out three times and was taken to hospital twice with one hospital admission.

In the six weeks following usage of telehealth monitoring, Mr P was seen only once by the community matron and respiratory service eight times, he called the ambulance out three times and was taken to hospital twice with one hospital admission.

Mr P still requires regular support from the respiratory services but telehealth has enabled the virtual ward to discharge him and reduce the input from a number of other services.
alerts are not being generated. The service also offers benefits to carers who report improved confidence and reassurance their loved one is safe and well looked after.2

This high level of case management has been seen as being fundamental to the success of the programme with patients reporting high levels of service satisfaction and an enhancement in their overall wellbeing, despite suffering from conditions that will result in an ongoing and inevitable deterioration. Local clinicians have also seen the benefit of the service. The additional clinical support helps them manage their ever-growing caseloads better, offering confidence patients are being closely monitored and referrals back to them from the service have been qualified and assessed, giving them time for those patients needing a face-to-face assessment.

Detailed evaluation of the success of the programme against the core objectives is being done. However, current evidence points to a reduction in admissions or, when admissions do occur, more timely admissions of a shorter duration. The utilisation of GP and specialist nurses’ time has also improved, with some staff reporting an ability to manage a larger caseload than was possible before the implementation of the telehealth service, while providing a more measured and less reactive service.

Mel Few, Surrey County Council’s cabinet member for adult social care, says: “This innovative programme is a great way of helping people with serious conditions to monitor their health with expert support. Giving patients dedicated care that reduces their need to visit hospital spares both them and the public purse.”

Pauline Jervis, Surrey County Council’s senior commissioning manager, Mid Surrey, says: “Anything that enables improved use of clinical resources and supports improved outcomes for patients is to be welcomed.”

Andrew Sharpe, GP and Surrey Downs CCG governing body member, says: “The scheme is starting to prove very popular with the doctors who are using it. Initially it is quite a culture change but they soon discover that this represents an extra layer of care for their patient, and does help to improve their overall management.”

References