

NHSX is partnering with regional teams across England and the AHSN Network to create an Innovation Collaborative that will support the rapid deployment of innovative technologies to enable care to be delivered to people at home.

Regional blog: North East December 2020

The North East region is deploying Cardiology Virtual Wards as part of the programme. In the first of our regional blog series, Charlotte Fox, Digital Transformation Programme Lead, shares more about what the project entails and how they are using the technology in practice.

Digital transformation has accelerated at unprecedented speed because of COVID-19 and this has increased the need for an agile mindset to embrace change and learn new ways of working.

Healthcare providers and clinicians are having to assess how best to meet the needs of patients who may have COVID-19, or who are shielding due to the high risk of contracting COVID-19. Apart from delivering acute care in hospitals, the clinicians needed to continue to provide ongoing support, advice and treatments in the community safely and effectively whilst minimising face-to-face consultations. This has led to healthcare professionals embracing digital technologies to streamline the triage, support and treatment of patients remotely, where appropriate, which in turn helps clinicians work more effectively.

One such example we've been supporting is the work of Dr M Santhana Krishnan, Consultant in Old Age Psychiatry/ Senior Clinical Director, and Lauren Bennett, Innovations Coordinator, both from Tees, Esk and Wear Valleys NHS Foundation Trust, who have recently piloted the use of the KardiaMobile 6L – the world's only six-lead only CE marked and FDA cleared personal six-lead ECG.

An ECG device records the electrical activities of the heart. In addition to using the device to detect heart attacks and monitoring patients in an ICU setting, there are specific clinical reasons one needs monitoring of this in the community including for those patients who are on certain types of psychiatric medications. One of the medications in particular (hydroxylchloriquin) has been found in the USA to cause some side effects that could impact the heart rhythm, so the clinical team opted to use the mobile ECG device to monitor patients who were on or due to start psychiatric medication.

In a nutshell, although patients have been isolating and shielding, there was a fear of increasing footfall and the spread of infection by calling patients into clinic, so routine ECGs were very difficult. Maintaining physical wellbeing of psychiatric patients is very important especially for people who are vulnerable, so using mobile ECG devices provided a great solution.

It's been quite a journey to get to the point of using the devices in practice and we have learned lessons along the way - 30 devices were procured for use in a real world evaluation for antipsychotic monitoring and initiating therapy, and key has been gaining the support from key boards and clinical leaders. Dr Krishnan personally ran webinars for staff and

In partnership with:

*The***AHSN***Network*

recorded a step-by-step video guide on how to operate, record and transmit the ECG safely following all the Trust guidelines. So visible clinical leadership has been key.

The team have now performed in excess of 200 ECGs with the six-lead device. We're continuing to monitor results as they come in and patient satisfaction to date is overwhelmingly positive, as is staff feedback. We are gathering qualitative feedback from both patients and clinicians on the use of this technology as well as quantifying time saved and efficiencies in the system. Dr Krishnan and Lauren are taking the results back to the Trust management and digital transformation and safety board to consider this to be added to the Trust's medical devices.

The next steps in this project will be to assess how we can use collective assets, expertise and resources across the region, through the Innovation Collaborative and wider AHSN Network so that we can effectively support the wider scale-up of this technology-enabled patient pathway.

We are excited to work with mHabitat (<https://wearemhabitat.com/>) to further develop this pathway in partnership with citizens and service users to improve personal outcomes for patients.

As we continue to develop and scale up technology-enabled care it's worth remembering this isn't about the technology; it's about improving services and rethinking the way we provide them based on the perspective of the user.

Please get in touch if you have any questions: charlotte.fox@ahsn-nenc.org.uk

In partnership with:

*The***AHSN***Network*