



CASE STUDY: **Mobile Data-Driven Command Centre** **Real-time COVID-19 tracking**

The Challenge

Nottingham University Hospitals NHS Trust (NUH) provide services to over 2.5 million residents of Nottingham and its surrounding communities. The Coronavirus pandemic hit the UK in February 2020, causing an increase in demand on an already busy NHS still dealing with winter pressures. NUH turned to Nervecentre as their key mobile technology partner to rapidly develop tools to support implementation and iteration of new clinical and operational processes.

NUH were already an extensive user of Nervecentre, especially in their central command room - which gives clinical and operations teams real-time visibility of patient status, bed inventory and potential bottlenecks across the trust. With this already in place, NUH were able to utilise the existing

technology to see the COVID status of patients and their distribution throughout wards and critical care. As for all trusts across the country, the need to identify and isolate all patients who were either positive or suspected positive with COVID became vital. This information needed to be updated in real-time and accessible from a centralised up-to-date source across the whole trust, it also had to accurately report on all COVID activity on a daily basis.

The Solution

The Trust's clinical leadership team were at the heart of devising patient-centred pathways that could be operationalised through Nervecentre.

The Trust's interface team were able to rapidly develop an integration to feed COVID results directly into Nervecentre.

This included both a task (via push notification) to the patient's assigned clinician(s) to alert them to this critical result and the automated updating of COVID Swab result and COVID Status handover notes. Patient 'Tags' were also configured to ensure that anyone with access to view the record was able to quickly identify suspected or confirmed COVID patients. The clinical information entered at the patient's bedside drives the Nervecentre bed management solution. This was immediately updated to enable bed managers to see a patient's COVID Status in order to ensure correct bed allocation.

"What has really stood out about Nervecentre during the pandemic is how flexible and adaptable the system has been, as well as its ability to support innovation and make further changes as the situation evolves"

Dr Jeremy Lewis, Consultant in Acute Medicine and CCIO

Live Patient Flow is a configurable dashboard tool that allows flow diagrams to be created locally, and integrates with "Live Queries" allowing all data to be up-to-the-second accurate. This also allows clinicians to click-through from the dashboard to access and update the patient record. This feature is accessible on both desktop and mobile devices.

At NUH the Live Patient Flow dashboard displays in real-time the swab status for all COVID positive and suspected COVID patients, and also shows real time bed stock for beds on all wards including critical care across the whole trust. The

accuracy of this level of information is crucial to operational planning and patient cohorting.

The Outcome

Nervecentre enabled the trust to maintain a real-time overview of the COVID pathways driven by data collected by clinicians on mobile devices at the patient bedside. There was never any need to collect information on clipboards or phone around wards for their bedstates.

The integration with laboratory reports to drive handover updates and tasks allowed for any suspected patients to be identified and isolated as soon as possible.

The wider functionality in Nervecentre (including eObservations, assessments, tasks and photography) enabled clinicians to make high-quality, data-driven clinical decisions remotely.

"Having the COVID status profile on Nervecentre, has meant that we have been able to keep our medically safe patients and those coming up to becoming medically safe in sharp focus. This has undoubtedly enabled us to promote far more timelier discharges to our care homes and community beds than would have been the case if we hadn't had this information at our fingertips."

Amanda Blackshaw, Discharge Lead for Medicine Division

