Tallaght University Hospital upgrades pathology systems and goes live with the CliniSys Integrated Clinical Environment (ICE)

Major Dublin teaching hospital rolls out order communications and results reporting as part of a digital transformation project

Development will enable phlebotomists to collect blood and order tests at the patient bedside, improving efficiency and safety

One of Ireland's largest acute teaching hospitals has rolled out order communications and results reporting from CliniSys as part of an upgrade to its pathology systems.

Tallaght University Hospital (TUH) went live with the Integrated Clinical Environment or ICE in November 2021, at the end of a project that forms part of a wider strategy to put modern, digital technology into the hands of clinicians.

The hospital has also introduced an electronic patient record (EPR), replacing legacy ICT systems and paper-based records and processes. The two deployments are part of an ongoing plan to provide a single source of patient information for medical professionals.

The ICE implementation integrated the ordering and reporting of tests with the EPR and was supported by Medical Supply Company (MSC), the CliniSys partner in Ireland, in conjunction with hospital ICT experts and clinical teams in TUH determined to improve the service they can deliver to clinical colleagues as the hospital runs during a COVID-19 pandemic. It is the first deployment of ICE in a hospital in Ireland.

Chief Information Officer David Wall said: "This has been a massive project to deliver and it's a tribute to everybody involved that it has been delivered against the backdrop of the pandemic and the challenges of a cyber-attack on our health system this year.

"Everybody working at our hospital over the past 18-months has been incredibly busy, but with strong support from MSC and CliniSys, we have managed a seamless go-live with a system that will support positive and significant change."

MSC has been providing local support to TUH since the hospital opened and their local knowledge and expertise proved invaluable to the success of the project.

Chief Clinical Information Officer Dr Jason Carty said: "Our staff are loving using ICE and the success of the project is testament to all the preparations, training and its intuitive nature. It is saving time, reducing duplication and improving outcomes. We are all excited to see ICE live, working, and delivering success. In the first week of going live with ICE we've gone from approximately 50% electronic orders to 90%, and we're aiming for 100% in the very near future."

TUH in Dublin is a public, voluntary teaching hospital, funded by the Health Service Executive. It opened in 1998 and at the time was the largest healthcare building project ever undertaken by

the state. The opening of the hospital brought over 600 years of medical and nursing care and education from different traditions with a strong ethos of innovation that has continued in the hospital to the present day.

The hospital is currently implementing its Digital Enabled Care Strategy that will make it paperlight, and give clinicians faster, easier access - "Any Time, Any Where, Any Device" - to information about their patients. Digital Enable Care is a main strand of a five-year strategic development of hospital services.

The deployment of ICE will enable clinicians to order vital tests from its laboratory and non laboratory areas electronically, and to receive the results alongside other patient information, to support diagnosis and treatment. Its successful introduction after its first week saw clinicians' use of ICE rocket fourfold to more than 3,700 daily requests.

ICE will also support mobile phlebotomy. Blood taking experts will be able to visit patients on the wards, collect samples, and book tests using computers on mobile carts at the bedside – there is a currently a fleet of 100 workstations on wheels throughout the hospital. They will even be able to link samples to patient wristbands using scanners, improving efficiency and safety.

Noel Campbell, IT director of Medical Supply Company Ltd. (MSC), said: "Tallaght University Hospital is once again leading the way with this first deployment of ICE in a hospital in Ireland.

"What this project does is to put software into the hands of clinicians. It can be launched with a single click from the EPR, which is the software that brings together patient information and documents and can be used by phlebotomists on the wards.

"Integration with the other ICT investments that the Hospital is making is a big part of this project, and we are delighted to have been able to play a significant part in delivering on an idea that will pay huge dividends for staff and patients."

The contract for the pathology refresh was placed in 2019 and implementation has been challenging because of the COVID-19 pandemic and the recent cyber-attack on Ireland's health system.

Lucy Nugent, chief executive at Tallaght University Hospital, said: "We have an ambitious long term plan to enhance the care services our hospital delivers both on-site and within the community. The highly successful implementation of the ICE project is a clear demonstration of what can be achieved for the future, drawing on innovative digital technology to drive integrated care and that supports clinicians more efficiently care for their patients."

Richard Craven, chief executive of CliniSys, said: "ICE the market leading OCS covering over 75% of the UK and is extending its reach in hospitals, community care and diagnostic hubs.

"It's great to see this first of kind deployment in Ireland, and we look forward to seeing ICE in use at an innovative institution that is determined to put modern technology at the heart of further improvement for clinicians and patients."

About Medical Supply Company and the CliniSys Group:

Based in Dublin, Medical Supply Company (MSC) are an Irish owned Company celebrating 50 years in business this year, the MSC/CliniSys partnership was formed in 1990 and for more than 30 years MSC have been successfully implementing and supporting comprehensive clinical management solutions, providing local support and expertise in the Republic of Ireland with a team of highly qualified professionals.

CliniSys Group is the largest laboratory diagnostic IT vendor in Europe, with leading country market shares and an innovative and wide-reaching suite of end-to-end diagnostic solutions.

Headquartered in England, with local offices in six European countries, it has for more than 40 years been at the forefront of diagnostics workflow, order communications and information management solutions supporting radiology, cardiology and all pathology disciplines including anatomical or cellular, molecular and genetics.

These encompass the complete workflow from order, clinical decision support, collection, processing, analysis, results and reporting, through integration into the clinical workflow. CliniSys Group has built an unrivalled reputation for the deployment of complex diagnostics networks and academic centres – and is the only vendor repeatably delivering across all disciplines end to end – at scale.

About Tallaght University Hospital

Tallaght University Hospital is one of Ireland's largest acute teaching hospitals with adult, psychiatric and age-related healthcare on one site. The hospital has 3,000 people on staff. The hospital is a provider of local, regional, and national specialties. It is also a national urology centre, the second largest provider of dialysis services in the country, a regional orthopaedic trauma centre and a designated trauma unit.

TUH is one of the two main teaching hospitals of Trinity College Dublin - specialising in the training and professional development of staff in areas such as nursing, health & social care professionals, emergency medicine and surgery, amongst many others. TUH is part of the Dublin Midlands Hospital Group which serves a population of over 1.2M across seven counties.